



# Mathematics Evaluation Tool

## 2022 Curricular Materials Review

### PUBLISHER INFORMATION

- Publisher Name:
- Title:
- ISBN #:
- Author:
- Copyright:
- Most Recently Published Edition or Website:
- Materials provided for evaluation:
- Intended Teacher Audiences:
- Intended Student Audiences:
- Math content or course addressed in material:
- In the space below explain the focus or intended use of the materials:
- Is this curriculum in a digital format, print format or both?

### INSTRUCTIONS:

#### Publishing Company:

- Complete the course evaluation form below. Please provide written justification as to how the material meets the criterion along with location references. If a justification requires additional space, please submit response on an additional document.

## Review Team Member:

- Please use information and attachments to complete the course evaluation form.
- Explain any discrepancies between your findings and those provided information. Explanations and comments should directly reflect the rubric.
- Further, explain any findings.

## INTRODUCTION

The State Department of Education (SDE) desires to support Idaho school districts in the selection of high-quality instructional materials for mathematics instruction. The SDE curriculum review process provides an Adoption Guide which can be used by Idaho school districts to guide curriculum decisions. Idaho is a local control state. Curriculum is chosen by local school districts to best meet the needs of their communities. The SDE provides resources and support to assist school districts choosing high-quality mathematics instructional materials.

This evaluation tool is designed to evaluate curriculum based on its alignment to four criteria:

Criterion 1: Alignment to the Idaho Content Standards in Mathematics

Criterion 2: Alignment to the research-based mathematics teaching practices.

Criterion 3: Alignment to Idaho Multi-tiered System of Support

Criterion 4: Alignment to Indicators of Quality

Based upon the findings of the review team, curricular materials evaluated will be recommended for use as a comprehensive, basic, component or intervention program according to the definitions in Table 1

**Table 1: Recommendation Guidelines**

Recommendation	Definition	Guideline
Comprehensive Program	A program which consistently meets the focus, coherence, depth, and rigor of the Idaho Content Standards with minimal or no need for instructional adaptations and/or supplemental materials. A comprehensive program provides effective content progressions within and between grade levels.	Learning materials must receive at least 80% with no “no alignment” designations.

Recommendation	Definition	Guideline
Basic Program	A program which meets the focus, coherence, depth, and rigor of the Idaho Content Standards at a substantial level with some need for supplemental material. A basic program provides content progressions within and between grade levels, though they may be uneven.	Learning materials must receive at least 80%.
Component Program	A program designed and intended to be used to supplement a comprehensive or basic program. A Component Program will support and/or enhance the focus, coherence, depth, and rigor of a comprehensive or basic program.	Learning materials must meet the focus of intended standards within the content area OR receive at least 65% and be useful as support to another program.
Intervention Program	A program designed and intended to target and support students' specific needs.	Learning materials must receive at least 80% within the intended use.

**Criterion 1: Idaho Content Standards in Mathematics**

Idaho has newly adopted 2022 Content Standards in Mathematics. Each grade level has Standards for Mathematical Practice as well as content standards. The standards document identifies the major work of the grade level as well as supporting and additional work. The high school standards integrate mathematical modeling into each conceptual category. The curricular evaluation process will evaluate how well materials submitted for review align to the 2022 Content Standards in Mathematics found on the SDE website here:

<https://www.sde.idaho.gov/academic/standards>

**Standards vs. Curriculum**

No specific curriculum or strategies are required by the State of Idaho to be used to teach the Idaho Content Standards in Mathematics. Local schools and districts make decisions about what

resources will be used to teach the standards and assign the standards to courses at the high school level.

### Criterion 2: Mathematics Teaching Practices

Research in mathematics education identifies teaching practices which engage students in the Idaho Content Standards for Mathematics. Ideally, curricular materials provided to mathematics teachers by local districts will assist teachers in implementing these high-leverage teaching practices.

### Criterion 3: Multi-tiered System of Support

SDE guidance for Idaho school districts provides a framework for the implementation of a Multi-tiered System of Support (MTSS). High-quality mathematics curricular materials assist schools in the implementation of multi-tiered instruction. The curricular evaluation process will evaluate how well materials submitted provide high-quality curricular materials as well as alignment between Tier 1, Tier 2 and Tier 3 instruction. More information about the MTSS instructional framework can be found on the SDE website here:

<https://www.sde.idaho.gov/topics/mtss/>

### Criterion 4: Indicators of Quality

The preamble to the Idaho Content Standards in Mathematics, the Danielson Framework for Teaching and other nationally recognized sources describe additional desired features in high-quality instructional materials that would effectively support students in developing depth of conceptual understanding on important mathematical concepts. High-quality instructional materials support teachers in the implementation of mathematics instruction that is focused, coherent, and rigorous.

## CRITERION 1: ALIGNMENT TO IDAHO CONTENT STANDARDS IN MATHEMATICS

### Standards for Mathematical Practice

High-quality curricular materials engage students in the Standards for Mathematical Practices (SMP) described in the Idaho Content Standards for Mathematics. High-quality instructional materials support the intentional development of the SMP for students, in connection to the grade-level content standards.

### Scoring for Standards Mathematical Practices:

<b>0 Points</b> <b>No Alignment</b>	<b>1 point</b> <b>Partial Alignment</b>	<b>2 points</b> <b>High Alignment</b>	<b>NA</b> <b>Not Applicable</b>
Standard for Mathematical Practice is not evident.	There is some evidence of the Standard for Mathematical Practice.	Materials explicitly align to and support the Standard for Mathematical Practice through regular and authentic engagement opportunities for students.	

<b>SMP</b>	<b>Justification: Provide as evidence examples tasks or lessons from materials that engage students in each SMP. Provide descriptions, not just page numbers.</b>	<b>Rating (Reviewer Only):</b>
1. Make sense of problems and persevere in solving them.		
2. Reason abstractly and quantitatively.		
3. Construct viable arguments and critique the reasoning of others.		
4. Model with mathematics.		

SMP	Justification: Provide as evidence examples tasks or lessons from materials that engage students in each SMP. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
5. Use appropriate tools strategically.		
6. Attend to precision.		
7. Look for and make use of structure.		
8. Look for an express regularity in repeated reasoning.		

## Content Domains and Conceptual Categories

### Progression of K-8 Domains

The kindergarten through grade eight content standards in this Framework are organized by grade level. Within each grade level, standards are group first by domain. Each domain is further subdivided into clusters of related standards. Table 2 shows the progression of domains in grades Kindergarten through grade 8.

**Table 2: Recommendation Guidelines**

Domain	Grade Level								
	K	1	2	3	4	5	6	7	8
Counting and Cardinality	x								
Operations and Algebraic Thinking	x	x	x	x	x	x			
Number and Operations in Base Ten	x	x	x	x	x	x			
Number and Operations – Fractions				x	x	x			
The Number System							x	x	x
Ratios and Proportional Relationships							x	x	

Expressions and Equations							X	X	X
Functions									X
Measurement and Data	X	X	X	X	X	X			
Geometry	X	X	X	X	X	X	X	X	X
Statistics and Probability							X	X	X

This section is to be used for the review of curricular materials submitted for Grades Kindergarten through Grade 8.

### Scoring for K-8 Content Domains:

<b>0 Points</b> <b>No Alignment</b>	<b>1 point</b> <b>Partial Alignment</b>	<b>2 points</b> <b>High Alignment</b>	<b>NA</b> <b>Not Applicable</b>
No standards in the content domain are evident.	Some standards in the content domain are evident.	Materials are closely aligned with all of the Idaho Content Standard of Mathematics in the domain and provide opportunities for students to engage with content that meets the full intent of grade-level standards.	

<b>Content Domain</b>	<b>Justification: Provide evidence that materials align to the content standard domain taught at the intended grade level. Provide descriptions, not just page numbers.</b>	<b>Rating (Reviewer Only):</b>
1. Counting and Cardinality		
2. Operations and Algebraic Thinking		

Content Domain	Justification: Provide evidence that materials align to the content standard domain taught at the intended grade level. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
3. Number and Operations in Base Ten		
4. Number and Operations – Fractions		
5. The Number System		
6. Ratios and Proportional Relationships		
7. Expressions and Equations		
8. Functions		
9. Measurement and Data		
10. Geometry		
11. Statistics and Probability		



## Grades 9 – 12 Conceptual Categories

The content standards in grades 9-12 are organized by conceptual categories built on mathematical learning progressions informed by research on cognitive development and by the logical structure of mathematics. These progressions provide the foundation for the grades 9–12 content standards.

The Conceptual Categories are:

- Number and Quantity
- Algebra
- Functions
- Modeling
- Geometry
- Statistics and Probability

High school mathematics curricular materials may be focused on one or more conceptual category.

This section is to be used for the review of curricular materials submitted for Grades 9 - 12.

### Scoring for 9-12 Conceptual Categories:

<b>0 Points</b> <b>No Alignment</b>	<b>1 point</b> <b>Partial Alignment</b>	<b>2 points</b> <b>High Alignment</b>	<b>NA</b> <b>Not Applicable</b>
No standards in the conceptual category are evident.	Some standards in the conceptual category are evident.	Materials are closely aligned with all of the Idaho Content Standard of Mathematics in the conceptual category and provide opportunities for students to engage with content that meets the full intent of grade-level standards.	

Content Domain	Justification: Provide evidence that materials align to the content standard domains taught in the intended high school course. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. Number and Quantity		
2. Algebra		
3. Functions		
4. Modeling		
5. Geometry		
6. Statistics and Probability		

**CRITERION 2: MATHEMATICS INSTRUCTIONAL PRACTICES**

This section evaluates curricular materials for mathematics instruction based on high-leverage mathematics teaching practices supported by educational research. High-quality instructional materials in mathematics should support teachers in the implementation of these instructional practices in Idaho mathematics classrooms.

Scoring for Mathematical Teaching Practices:

0 Points No Alignment	1 point Partial Alignment	2 points High Alignment	NA Not Applicable
There is no evidence of the teaching practice.	The teaching practice is embedded in some lessons.	Materials regularly embed supports for teachers to implement this instructional practice.	

Instructional Practice	Justification: Provide evidence that materials support teachers in the implementation for this teaching practice. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. Clearly communicate mathematics learning goals to students.		
2. Engage students in high-level thinking through challenging mathematical tasks.		
3. Support students in connecting mathematical representations.		
4. Facilitate meaningful discourse about mathematics among students.		
5. Provide opportunities for student success in procedural fluency from conceptual understanding.		
6. Build procedural fluency from conceptual understanding.		
7. Encouraged student effort and perseverance in learning.		
8. Use evidence of student thinking to guide instruction.		

### CRITERION 3: ALIGNMENT TO IDAHO MULTI-TIERED SYSTEM OF SUPPORT

This section evaluates curricular materials for mathematics instruction based on some of the components of a responsive system designed to support educators in delivering effective multi-tiered mathematics instruction.

#### Scoring for Multi-Tiered System of Support:

<b>0 Points</b> <b>No Alignment</b>	<b>1 point</b>	<b>2 points</b> <b>High Alignment</b>	<b>NA</b> <b>Not Applicable</b>
There is no evidence of the feature.	The feature is included and partially aligned to Tier 1 instruction.	The feature is included and fully aligned to Tier 1 instruction.	

#### Assessment:

<b>Type of Assessment</b>	<b>Justification: Provide evidence that materials support teachers in the implementation for this teaching practice. Provide descriptions, not just page numbers.</b>
1. The materials include a diagnostic assessment that can be given at any time, and extract precise information about students' specific skill sets to inform instructional interventions.	
2. The materials include formative assessments that can be used by all students to elicit and use evidence of student learning to improve student understanding of intended learning outcomes and support students to become self-directed learners.	

Type of Assessment	Justification: Provide evidence that materials support teachers in the implementation for this teaching practice. Provide descriptions, not just page numbers.
<p>3. The materials include interim assessments that can be administered at various points throughout the learning process to determine whether students are on track toward proficiency of the content standards and to provide teachers with information to refine their instructional practices.</p>	
<p>4. The materials include progress monitoring assessments that can be administered frequently to closely monitor student growth toward proficiency of concepts, skills, and grade level content and to inform teachers in the effectiveness of instructional practices.</p>	
<p>5. The materials include a screener assessment that can be given before instruction to inform educators of where students are beginning their learning and help teachers plan and differentiate core instruction for small groups and individual students</p>	
<p>6. The materials include summative assessments generally given at the end of the learning process and allow students to demonstrate what they know and can do and provide teachers with information related to proficiency of claims and targets.</p>	

**Multi-tiered Instruction:**

<b>Considerations</b>	<b>Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.</b>	<b>Rating (Reviewer Only):</b>
7. The materials provide resources for small group instruction that can be used to differentiate mathematics instruction within the general education classroom.		
8. The materials provide resources for supplemental instruction that support instruction provided in general education classroom and provide more frequent and varied learning opportunities to support acquisition of identified skills.		
9. The materials provide resources that increase duration, frequency, and intensity to individuals or small groups to ensure students have the necessary skills to access and make adequate growth toward high standards and grade level outcomes		

### Family and Community:

<b>Considerations</b>	<b>Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.</b>	<b>Rating (Reviewer Only):</b>
1. The materials include resources for facilitating a partnership between educators, families and the greater school community to support achievement of the Idaho Content Standards in Mathematics.		

## CRITERION 4: ALIGNMENT TO INDICATORS OF QUALITY

### Scoring for Indicators of Quality:

<b>0 Points</b> <b>No Alignment</b>	<b>1 point</b> <b>Partial Alignment</b>	<b>2 points</b> <b>High Alignment</b>	<b>NA</b> <b>Not Applicable</b>
There is no evidence of the indicator.	Materials partially embed this throughout the curriculum.	Materials embed this indicator throughout the curriculum.	

### Mathematics Instruction

The preamble to the Idaho Content Standards in Mathematics describes additional desired features in high-quality instructional materials that would effectively support students in developing depth of conceptual understanding on important mathematical concepts.

Feature	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
<b>FOCUS</b>		
1. The materials develop depth in conceptual understanding on the major mathematical topics of the grade?		
<b>COHERENCE</b>		
2. The materials connect mathematical topics within and across grades.		
3. The materials connect additional and supporting topics to the major work of the grade.		
<b>RIGOR</b>		
4. The materials support students in understanding why a mathematical idea is important and the contexts in which it is useful?		
5. The materials support students in connecting prior knowledge to new ideas and concepts?		
<b>PROCEDURAL SKILLS AND FLUENCY</b>		
6. The materials help students develop the ability to apply procedures accurately, efficiently and flexibly?		



Feature	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
7. The materials provide students the opportunity to practice basic calculation skills while developing number sense.		
<b>APPLICATION</b>		
8. The materials provide students with meaningful opportunities to apply and build mathematics skills through solving relevant and meaningful problems.		
9. The materials include opportunities for students to formulate strategies when representing concepts, solving problems, and/or analyzing data.		
10. The materials include opportunities for students to extend mathematical reasoning when investigating scenarios, researching topics, solving problems, as well as utilizing non-routine manipulations across multiple disciplines, and/or reasoning with data.		

## Literacy Connections Across All Content Areas:

Feature	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. The materials identify and directly embed key vocabulary within the lessons. and offer opportunities for students to use vocabulary.		
2. The materials engage students in using digital and other visual tools to communicate about mathematical contexts.		
3. Materials provide supports for different reading levels to ensure accessibility for students.		
4. Materials include tasks that provide students opportunities to engage in the process of learning collaboratively, as well opportunities to express their learning individually.		

## Student Engagement:

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. Materials include relevant topics of student interest with authentic contexts and tools that give students an opportunity to make connections to their experiences, goals and interests.		
2. Materials support the value of mathematics as sensible, useful and worthwhile.		
3. Materials include opportunities for students to develop comprehension of mathematical concepts, operations, and relations using concrete materials and visual models to understand math as more than isolated facts and methods.		
4. Materials provide students with appropriate choices with each grade-level, or course, in one or more of the following areas: content, product, process, or mathematical too.		
5. Materials include instructional strategies for supporting unfinished learning from prior grade-levels and extensions for students who are ready to deepen their understanding of grade level content. (Individual student		

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
adaptability)		
6. Materials and assessments are free from bias, inclusive and non-discriminatory, and offered in a way that ensures all students have the opportunity to achieve success in the program of study.		
7. Contains guidance and resources to support culturally and linguistically diverse students.		
8. Contains guidance and resources to support students with disabilities.		

**Presentation and Design:**

Features	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. The material has an aesthetically appealing appearance.		
2. Digital and print materials are consistently formatted, visually focused, and uncluttered for efficient use.		

Features	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
3. The material has a reasonable and appropriate balance between text and illustration. The material has grade-appropriate font size.		
4. The illustrations clearly cross-reference the text, are directly relevant to the content (not simply decorative), and promote thinking, discussion, and problem solving.		
5. Non-text content (performance clips, images, graphs, pictures, charts, databases, and models) are accurate and well-integrated into the text.		
6. The material gives clear and concise instruction to teachers and students. It is easy to navigate and understand.		
7. Materials contain adult-level explanations and examples so that teachers can improve their own knowledge of the subject.		
8. The materials include opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.		

Features	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
9. Allows teachers to access, revise, and print from digital resources to allow a teacher the ability to differentiate content within lessons, tasks, or other activities for students.		
10. Includes editable and aligned worksheets, assessments, rubrics, scoring guidelines, and exemplars that provide guidance for assessing student performance and to support teachers in planning instruction and providing ongoing feedback to students.		
11. Materials are designed to provide resources for students that are editable and allow for communication of understanding and thinking.		
12. Provides multiple opportunities for students to demonstrate and receive feedback on performance of practices connected with their understanding of concepts.		
13. Materials come in multiple language formats.		

## Technology:

Features	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. Technology and digital media support, extend, and enhance learning experiences.		
2. The material has “platform neutral” technology (i.e., cloud based) and availability for networking.		
3. The material has a user-friendly and interactive interface allowing the user to control (shift among activities).		

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### For Questions Contact

<< Academics >>

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