

Essential Standards Extended Guide Kindergarten Mathematics

GUIDING INFORMATION

In response to requests from schools and districts for guidance on essential standards, committees of educators from around Idaho collaborated in the summer of 2024 to categorize mathematics standards into four groups:

- Essential standards are explicitly taught, assessed multiple times, and receive targeted interventions for students who have not yet reached proficiency.
- Supporting standards are taught to reinforce essential standards and may or may not be formally assessed.
- Additional standards extend learning and are incorporated as time allows within course units, with assessment being optional.
- Mathematical Big Ideas are overarching mathematical concepts that are central to the learning of mathematics and link numerous mathematical understandings into a coherent whole. They are difficult to assess.

This guidance helps LEAs prioritize the most critical standards, recognizing that not all standards are of equal importance. This document serves as a resource—not a mandate—to assist local efforts. Importantly, this work did not remove or revise any of the adopted Idaho Content Standards and is intended to refocus time and effort.

The 2022 Idaho Content Standards for Mathematics list the standards for each grade level by domain and provide clarification statements and examples of individual standards. This Essential Standards Extended Guide provides examples of how teachers can group standards for mathematics instruction. Appendix A provides planning templates for using these instructional groupings to plan instructional calendars and units.

For Questions Contact:

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Instructional Grouping 1: Shapes in Our World

Mathematical Big Ideas:

- O K.G.A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
- \triangle K.G.B. Analyze, compare, create, and compose shapes.

Essential Standards

Standards to be explicitly taught, assessed more than once, and intervened upon.

Teacher Note: Composing and decomposing shapes builds spatial visualization and conceptual understandings that are transferred to compositions and decompositions of numbers. These understandings are used in addition and subtraction computational strategies and reasoning. K.G.B.5. Model shapes in the world by building shapes from components/materials and drawing shapes.

K.G.B.6. Compose simple shapes to form larger two-dimensional shapes.

Supporting Standards

Standards that support the learning of essential standards and may or may not be formally assessed.

K.G.A.1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as "above," "below," beside, "in front of," "behind," and "next to."

K.G.A.2. Correctly name shapes regardless of their orientations or overall size.

K.G.B.4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts, and other attributes.

K.G.A.3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Instructional Grouping 2: Counting and Cardinality

Mathematical Big Ideas:

- **I** K.CC.A. Know number names and the count sequence.
- **I** K.CC.B. Count to tell the number of objects.

Essential Standards

Standards to be explicitly taught, assessed more than once, and intervened upon.

K.CC.A.1. Count to 100 by ones and by tens

K.CC.A.2. Starting at a given number, count forward within 100 and backward within 20.

K.CC.A.3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).

K.CC.B.4a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Teacher Note: This standard supports developing understanding of counting as children need to understand the relationship between numbers and quantities in order to connect counting to cardinality. It is also the essential standard for Instructional Grouping 4, which expands upon the understanding of magnitude.

K.CC.C.6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group for groups with up to ten objects.

Supporting Standards

Standards that support the learning of essential standards and may or may not be formally assessed.

K.CC.B.4. Understand the relationship between numbers and quantities; connect counting to cardinality

K.CC.B.4b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

K.CC.B.4c. Understand that each successive number name refers to a quantity that is one larger. Recognize the "one more" pattern of counting using objects.

K.MD.B.3. Classify objects into given categories; count the numbers of objects in each category (up to and including ten) and sort the categories by count.

Instructional Grouping 3: Sorting and Classifying

Mathematical Big Ideas:

- \triangle K.MD.B. Classify objects and count the number of objects in each category.
- O K.MD.A. Describe and compare measurable attributes.

Essential Standards

Standards to be explicitly taught, assessed more than once, and intervened upon.

K.CC.B.5. Given a group of up to 20 objects, count the number of objects in that group and state the number of objects in a rearrangement of that group without recounting. Given a verbal or written number from zero to 20, count out that many objects.

Supporting Standards

Standards that support the learning of essential standards and may or may not be formally assessed.

K.MD.A.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.G.B.4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts, and other attributes.

K.MD.B.3. Classify objects into given categories; count the numbers of objects in each category (up to and including ten) and sort the categories by count.

Instructional Grouping 4: Magnitude

Mathematical Big Ideas:

- **C** K.CC.C. Compare numbers.
- **C** K.NBT.A. Work with numbers 11 19 to gain foundations for place value.

Essential Standards

Standards to be explicitly taught, assessed more than once, and intervened upon.

Teacher Note: This essential standard is intricately connected to Instructional Grouping 2: Counting and Cardinality. The conceptual idea of greater than and less than comparisons can be explored with size before use of number symbols.

K.CC.C.6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group for groups with up to ten objects.

Supporting Standards

Standards that support the learning of essential standards and may or may not be formally assessed.

K.CC.C.7. Compare two numbers between one and ten presented as written numerals.

K.OA.A.3. Decompose whole numbers from one to ten into pairs in more than one way by using physical, visual, or symbolic representations.

K.NBT.A.1. Compose (put together) and decompose (break apart) numbers from 11 to 19 into ten ones and some further ones, and record each composition or decomposition by using physical, visual, or symbolic representations; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

K.MD.A.2. Directly compare two objects with a measurable attribute in common, to see which object has "more of"/ "less of" the attribute and describe the difference.

K.MD.B.3. Classify objects into given categories; count the numbers of objects in each category (up to and including ten) and sort the categories by count.

Instructional Grouping 5: Addition and Subtraction

Mathematical Big Ideas:

• **C** K.OA.A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Essential Standards

Standards to be explicitly taught, assessed more than once, and intervened upon.

K.OA.A.1. Represent addition and subtraction of two whole numbers within ten. Use objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

K.OA.A.2. Solve addition and subtraction word problems within ten by using physical, visual, and symbolic representations.

Supporting Standards

Standards that support the learning of essential standards and may or may not be formally assessed.

K.OA.A.4. For a given whole number from one to nine, find the number that makes ten when added to the number by using physical, visual, or symbolic representations.

K.OA.A.5. Fluently add and subtract within five, including zero.

K.NBT.A.1. Compose (put together) and decompose (break apart) numbers from 11 to 19 into ten ones and some further ones, and record each composition or decomposition by using physical, visual, or symbolic representations; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

K.G.B.6. Compose simple shapes to form larger two-dimensional shapes.

Appendix A: Planning Templates

Instructional Calendar Template

Use this template to sequence your instructional units onto a Year At-A-Glance calendar. This template can be adapted to show semesters or trimesters.

Month	Instructional Grouping
August	
September	
October	
November	
December	
January	
February	
March	
April	
Мау	

Unit Planning Template

Use this template to plan and collaborate around an instructional grouping. This template facilitates identifying curricular and assessment resources to teach and assess the content in one instructional grouping.

Instructional Grouping #: Unit Topic:
Time Allotment:
How many instructional days do you plan to spend on this topic?
Learning Activities:
What common lessons will we teach from our curricular resources?
Common Assessments:
What common assessments will we give?
Consider IAB and FIAB assessments in the ISAT portal if appropriate and common teacher
created assessments
Team Callaboration Notes:
Team conaboration Notes.
What are we rearn about teaching this topic from analyzing our student Work samples?
what intervention ao we need to do on essential standards? Who is ready for learning
additional standards?