



Essential Standards Extended Guide

Grade 1 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:

Dr. Catherine Beals cbeals@sde.idaho.gov
Idaho Department of Education
650 W State Street, Boise, ID 83702
208 332 6800 | www.sde.idaho.gov

Instructional Grouping 1: Addition and Subtraction in Context

Mathematical Big Ideas:

- 1.OA.A. Represent and solve problems involving addition and subtraction.
- 1.OA.B. Understand and apply properties of operations and the relationship between addition and subtraction.
- 1.OA.D. Work with addition and subtraction equations.

Essential Standards
Standards to be explicitly taught, assessed more than once, and intervened upon.
<i>Teacher Note: Students use a progression of physical, visual, and symbolic representations to explain their reasoning strategies. Relate students' physical and visual representations to verbalized and written equations.</i>
1.OA.A.1. Solve addition and subtraction word problems within 20 involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, by using physical, visual, and symbolic representations.
1.OA.B.4. Restate a subtraction problem as a missing addend problem using the relationship between addition and subtraction.
1.OA.D.8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers, with the unknown in any position.

Supporting Standards
Standards that support the learning of essential standards and may or may not be formally assessed.
1.OA.A.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 by using physical, visual, and symbolic representations.
1.OA.B.3. Apply properties of operations to add.
1.OA.C.5. Relate counting to addition and subtraction.
1.OA.D.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.
<i>Teacher Note: This geometry standard can reinforce the concept of decomposing and composing numbers by first kinesthetically composing shapes from other shapes and decomposing shapes into smaller shapes.</i>
1.G.A.2. Compose two-dimensional (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

Instructional Grouping 2: Addition with Two-digit Numbers

Mathematical Big Ideas:

- 1.OA.C. Add and subtract within 20.

Essential Standards

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

1.NBT.C.4. Add whole numbers within 100 by using physical, visual, and symbolic representations, with an emphasis on place value, properties of operations, and/or the relationship between addition and subtraction.

Supporting Standards

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

1.OA.C.6. Demonstrate fluency for addition and subtraction within ten, use strategies to add and subtract within 20.

1.NBT.B.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

1.NBT.B.2. Understand that the two digits of a two-digit number represent amounts of tens and ones.

1.NBT.B.2c. Understand: The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and zero ones).

1.NBT.C.6. Subtract multiples of ten in the range 10 – 90 from multiples of ten in the range 10 – 90 by using physical, visual, and symbolic representations, with an emphasis on place value, properties of operations, and/or the relationships between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Instructional Grouping 3: Place Value in Addition

Mathematical Big Ideas:

- 1.NBT.A. Extend the counting sequence.
- 1.NBT.B. Understand place value.
- 1.NBT.C. Use place value understanding and properties of operations to add and subtract.
- 1.MD.D. Work with money.

Essential Standards
Standards to be explicitly taught, assessed more than once, and intervened upon.
1.NBT.C.4a. Add a two-digit number and a one-digit number.
1.NBT.C.4b. Add a two-digit number and a multiple of ten.

Supporting Standards
Standards that support the learning of essential standards and may or may not be formally assessed.
1.NBT.A.1. Starting at a given number, count forward and backwards within 120 by ones. Skip count by twos to 20, by fives to 100, and by tens to 120. In this range, read and write numerals and represent a number of objects with a written numeral.
1.NBT.B.2. Understand that the two digits of a two-digit number represent amounts of tens and ones
1.NBT.B.2a. Understand: 10 can be thought of as a bundle of ten ones — called a “ten.”
1.NBT.B.2b. Understand: The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
1.NBT.B.2c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and zero ones).
1.NBT.C.4c. Understand that when adding two-digit numbers, combine like base-ten units such as tens and tens, ones and ones, and sometimes it is necessary to compose a ten.
1.NBT.C.5. Given a two-digit number, mentally find ten more or ten less than the number, without having to count; explain the reasoning used.
1.MD.D.5. Identify quarters, dimes, and nickels and relate their values to pennies. Find equivalent values (e.g., a nickel is equivalent to five pennies).

Instructional Grouping 4: Measuring Length

Mathematical Big Ideas:

- 1.MD.A. Measure lengths indirectly and by iterating (repeating) length units.

Essential Standards

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

Teacher note: This standard builds conceptual understandings of number lines, which is an important representational tool for addition and subtraction operations. Integrating measuring length into Instructional Grouping 1, 2 and 3 will help build both conceptual understanding and spatial visualization of addition and subtraction.

1.MD.A.2. Express the length of an object as a whole number of length units by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.

Supporting Standards

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

1.MD.A.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object.

Instructional Grouping 5: Working with Data

Mathematical Big Ideas:

- \triangle 1.MD.C. Represent and interpret data.
- \circ 1.MD.B. Tell and write time.

Essential Standards

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

Teacher Note: This standard can be integrated into other instructional groupings and into other content areas to help students see and represent their world in mathematical ways.

1.MD.C.4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Supporting Standards

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

1.OA.C.6. Demonstrate fluency for addition and subtraction within ten, use strategies to add and subtract within 20.

1.NBT.B.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks.

Instructional Grouping 6: Fractions through Geometry

Mathematical Big Ideas:

- ○ **1.G.A. Reason with shapes and their attributes.**

Essential Standards

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

1.G.A.3. Partition circles and rectangles into two and four equal shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

Supporting Standards

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

Teacher Note: This standard is an extension of K.G.B.4. Deep conceptual understanding of shape attributes spans several years rather than the focus of one grade level.

1.G.A.1. Compare defining attributes and non-defining attributes of two- and three-dimensional shapes; build and draw shapes that possess defining attributes.

Teacher Note: Composing and decomposing shapes builds conceptual understandings that are transferred to compositions and decompositions of numbers. These understandings are used in addition and subtraction computational strategies and reasoning.

1.G.A.2. Compose two-dimensional (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

1.G.A.3a. Describe the shares using the words “halves,” “fourths,” and “quarters,” and use the phrases “half of,” “a fourth of,” and “a quarter of.”

1.G.A.3b. Describe the whole as two of, or four of, the shares.

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	
May	

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: <i>How many instructional days do you plan to spend on this topic?</i>	
Learning Activities: <i>What common lessons will we teach from our curricular resources?</i>	
Common Assessments: <i>What common assessments will we give?</i> <i>Consider IAB and FIAB assessments in the ISAT portal if appropriate and common teacher created assessments.</i>	
Team Collaboration Notes: <i>What did we learn about teaching this topic from analyzing our student work samples?</i> <i>What intervention do we need to do on essential standards? Who is ready for learning additional standards?</i>	