

Idaho Content Standards with Limits Math- 5th Grade

Standard 1: Number and Operation

Read, write, compare, and order whole numbers through millions and decimal numbers through thousandths.
Content Limit: Numbers may be ordered least to greatest or greatest to least.

Identify and apply place value in whole numbers and decimal numbers to thousandths.
Content Limit: Whole numbers through millions and decimal numbers through thousandths.

Compare and order commonly used fractions and their equivalents.
Content Limit: Fraction denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, and 25.

Identify decimal equivalents of commonly used fractions.
Fraction denominators limited to 2, 4, 5, 8, 10, 20, and 25.

Apply the number theory concepts of primes, composites, multiples, and factors.
Content Limit: Whole numbers less than 100.

Add and subtract decimal numbers through thousandths.
Content Limit: Decimal numbers through thousandths. Differences must be greater than zero. Expression must be clearly stated.

Multiply and divide whole numbers.
Content Limit: Multiplication items have at most two-digit factors. Division items have only a one-digit divisor and at most a three-digit dividend. Answers can be terminating decimals to the tenths place. Expression must be clearly stated.

Add and subtract fractions with like denominators without simplification.
Content Limit: Fraction denominators are limited to 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, and 25. Improper fractions allowed in answer options. Expression must be clearly stated.

Evaluate numerical expressions that include parentheses.
Content Limit: Whole numbers. No more than three operations. Expression must be clearly stated.

Use a variety of strategies to solve real life problems.
Content limits for objectives 1.2.2, 1.2.3, and 1.2.4 apply. Expression should not be stated.

Standard 2: Concepts and Principles of Measurement

Select and use appropriate units and tools to make formal measurements of length, temperature, weight, and volume (capacity) in both systems.

Content Limit: Select appropriate units and tools only. Units for length are inches, feet, yards, miles; millimeters, centimeters, and meters. Units for time are seconds, minutes, hours, days, and years. Units for weight are ounces, pounds, tons, grams, and kilograms. Units for volume (capacity) are cups, quarts, gallons, milliliter, and liter.

Estimate length, time, weight, temperature, and volume (capacity) in real-world problems using standard units.
Content Limit:

Lengths are measured in inches, feet, and yards. Time is measured in seconds, minutes, hours, and days. Weight is measured in ounces, pounds, and tons. Capacity is measured in cups, quarts, and gallons. May select estimate of size from among list of different numbers with same units (e.g., 1 inch, 1 foot, 10 inches, 10 feet).

Tell time to the nearest second.

Content Limit: Items must show a digital stopwatch. Time on stopwatch uses the format HH:MM:SS (e.g., 00:05:20 would be 5 minutes and 20 seconds; 01:10:40 would be 1 hour, 10 minutes, and 40 seconds). May not use an analog clock face.

Solve real world problems related to elapsed time.
Content Limit: Times given in hours and minutes

Calculate the perimeter of polygons and the area of rectangles and squares.
Content Limit: For perimeter items, shapes are limited to triangle, quadrilateral, pentagon, and hexagon. Dimensions given in whole numbers.

Convert units of length within each system.
Content Limit: Conversions between centimeters and meters or between inches, feet, and yards.

Convert days into weeks and years and years into decades and centuries.
Content Limit: Remainders should be expressed as additional units not as fractions (e.g., 51 days is 7 weeks and 2 days not $7\frac{2}{7}$ weeks).

Recall length, volume (capacity), and mass equivalences involving millimeters, centimeters, meters, milliliters, liters, grams, and kilograms in the metric system.

Content Limit:

Equivalences include:

1,000 mm = 1 m

10 mm = 1 cm

100 cm = 1 m

1,000 mL = 1 L

1,000 g = 1 kg. No conversions.

Standard 3: Concepts and Language of Algebra and Functions

Write a division problem as a proper and an improper fraction.

Content Limit: Given a division situation choose the appropriate division expression that uses the fraction bar as a division sign. Whole numbers less than 50. Answers will be either a proper or an improper fraction

Translate simple word statements for addition and multiplication into numeric expressions.

Content Limit: Whole numbers less than 50. One operation per expression

Write a fact family when given two factors.

Content Limit: Whole number factors between 1 and 10, inclusive.

Read and use symbols of “<,” “>,” and “=” to express relationships

Content Limit: May compare results of expressions. Use whole numbers less than 50 and expressions with no more than one operation. ‘Read’ means to express in words.

Use the following properties as they relate to addition and multiplication: commutative, associative, and distributive.

Content Limit: Whole numbers less than 100.

Solve missing factor equations.

Content Limit: Whole numbers less than 100. Geometric symbols (include squares, rectangles, and triangles) used to represent missing factor.

Identify the rule for a pattern using whole numbers and extend the pattern.

Content Limit: Numbers less than 100. Items can ask for a rule, an extension of the pattern, or both.

Use patterns to represent problems.

Content Limit: Numbers less than 100. May include decimals to tenths, fractions with denominators 2, 4, or 8.

Standard 4: Concepts and Principles of Geometry

Identify, compare and analyze attributes of polygons and polyhedra and develop vocabulary to describe the attributes.

Content Limit: Polygons limited to triangles, quadrilaterals (including square, rectangle, parallelogram, trapezoid, and rhombus), hexagons, and octagons. Polyhedra limited to cubes, triangular prisms, rectangular prisms, and pyramids.

Classify angles without formal measures as acute, right, obtuse, and/or straight.
Content Limit: Pictures or diagrams must be included. Angle measures are limited to increments of 15° .

Identify and label points, lines, line segments, rays, and angles.
Content Limit: Symbols that may be used include: capital letter for points, two-headed arrow above two capital letters for lines, line segment above two capital letters for line segments, one-headed arrow above two capital letters for rays, angle symbol with one capital letter or angle symbol with three capital letters for angles. All letters are non-italics.

Discuss and predict the results of sliding, flipping, and turning two-dimensional shapes.
Content Limit: Use diagrams showing non-regular polygons on grid. Items may include a given description and a graphic shown for each answer option.

Identify shapes as congruent, similar, or symmetrical
Content Limit: Shapes limited to triangles, rectangles, squares, pentagons, and hexagons. Symmetry limited to line symmetry.

Use ordered pairs to identify and plot points in the first quadrant on a coordinate grid.
Content Limit: Coordinates are whole numbers. Point may be on positive x- or y-axis.

Standard 5: Data Analysis, Probability, and Statistics

Read and interpret tables, charts, bar graphs, and line graphs.
Content Limit: Graphics may have at most ten data categories. Scales are in increments of 1, 2, 5, or 10, or must be consistent with real-world applications. Bar graphs may be vertical or horizontal.

Collect, organize, and display the data with appropriate notation in tables, charts, bar graphs, and line graphs.
Content Limit: Given data, choose a display.

Find measures of central tendency - median and mode - with simple sets of data using whole numbers.
Content Limit: At most nine numbers are used to calculate median (must be an odd number of items in data set given in numeric order). At most ten numbers are used to find the mode. Numbers used are less than 100. When determining the mode, the data set must contain a unique mode.

Predict, perform, and record results of simple probability experiments using fraction notation.
Content Limit: Predict only. Situation may involve up to two coins, spinners divided into up to six equal sections, or multi-colored items drawn from a container.

Make predictions and decisions based on data.
Content Limit: Data given in tables, bar graphs, or line graphs.