

Idaho Extended Standards Statements
Kindergarten
Mathematics

Extended Standard 1: Number and Operation

Students in Kindergarten demonstrate knowledge of our numeration system by a one to one correspondence and counting forward. Students show the verbal, symbolic, or physical representations of a number.

Extended Standard 2: Concepts and Principles of Measurement

Students respond to grade appropriate vocabulary related to concepts and principles of measurement.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Kindergarten compare sets of objects to understand the words/phrases of less than, greater than, and same as. Students replicate simple repeating patterns.

Extended Standard 4: Concepts and Principles of Geometry

Students in Kindergarten recognize, name, compare, or sort simple dimensional shapes, such as triangles, squares, circles. Students respond to appropriate vocabulary for position and size.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Kindergarten identify information about real object graphs and simple pictographs

Idaho Extended Standards Statements
Grade 1
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 1 demonstrate knowledge of our numeration system by counting and the recognition of numbers. Students read, write, compare, or order whole numbers. Students sort the coins - pennies, nickels, and dimes. Students use objects and pictures to explore more by adding and less by subtracting.

Extended Standard 2: Concepts and Principles of Measurement

Students in Grade 1 use non-standard tools and units for measuring time, length, weight, or temperature.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 1 compare numbers using the vocabulary words/phrases such as less than, greater than, equal to, more, less, same, fewer. Students express numbers with a symbolic system, picture, object, numeral symbol. Students repeat patterns.

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 1 recognize, name, build, draw, or sort the dimensional shapes, such as of triangles, squares, circles, rectangles, blocks, cones.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Grade 1 identify information found in real object graphs and in pictographs to answer questions. Students use data in graphs to answer a question.

Idaho Extended Standards Statements
Grade 2
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 2 demonstrate knowledge of our numeration system by counting forward by ones from any given number less than 10. Students read, write, compare, and order whole numbers and identify place value of ones and tens. Students identify and demonstrate the value of a collection of simple coins. Students use manipulatives and strategies for addition and subtraction combinations.

Extended Standard 2: Concepts and Principles of Measurement

Students in Grade 2 identify, measure, or compare time, length, and weight using standard or non-standard units and tools. Students identify time of the day by association to routines.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 2 show the relationship between addition and subtraction with fact families and models. Using templates and or models, Students write or symbolize a number sentence from a problem-solving situation. Students identify addition problems with the commutative property of addition. Students extend a repeating pattern.

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 2, recognize, name, and sort simple dimensional shapes, such as triangles, squares, circles. Students identify a line of symmetry.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Grade 2 identify information found in simple tables, charts, or graphs. Students use data in tables, charts and graphs in order to answer a question.

Idaho Extended Standards Statements
Grade 3
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 3 read, write, compare, and order whole numbers and identify simple place value. Students identify and sort the value of coins and dollars. Students use concrete materials to recognize commonly used fractions. Using manipulatives, symbolic symbols, or calculator, students add and subtract whole numbers with or without regrouping and students identify basic math fact families. Students explore multiplication through repeated sets.

Extended Standard 2: Concepts and Principles of Measurement

Students in Grade 3 identify and use appropriate formal tools or nonstandard units to make measurements of time, length, and temperature. Students use estimation of measurements in real world problems. Students tell time using digital and/or analog clocks.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 3 write multiplication problems symbolized either vertically or horizontally. Students identify the symbols of “<,” “>,” and “=” to indicate relationships with numbers. Students identify problems with the communicative property. Students extend a growing pattern when given a rule.

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 3 write multiplication problems symbolized either vertically or horizontally. Students identify the symbols of “<,” “>,” and “=” to indicate relationships with numbers. Students identify problems with the communicative property. Students identify a growing arithmetic, numerical pattern which has a given rule.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Grade 3 identify information found in tables, bar graphs, or charts. Students collect, organize, and display data in simple formats in order to answer a question.

Idaho Extended Standards Statements
Grade 4
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 4 read, write, compare, and order whole numbers and identify commonly used fractions with pictorial representations. Students identify place value in whole numbers. With the use of a calculator, abacus, or manipulatives, students add and subtract whole numbers, simple, common fractions with like denominators, and common decimals using money. Students recognize multiplication through the addition of repeated sets of whole numbers, and division by separating sets into equal parts. Students estimate size of quantity to predict computation results and then determine reasonableness of the answer.

Extended Standard 2: Concepts and Principles of Measurement

Students in Grade 4 use appropriate units and tools to make the formal measurements of time, length, temperature, and weight. Estimate measurement in real-world problems using standard or nonstandard units. Students match units of length and time within the U. S. Customary system. Students tell time using digital and analog clocks and associating daily routines to the time of the day.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 4 express a division problem using manipulatives and/or common division symbols. Students express basic number sentences using simple geometric shapes or letters of the alphabet as symbols to represent an unknown number. Students identify and use the symbols of “<,” “>,” and “=” to express relationships with whole numbers. Students use the identity and zero properties of multiplication to solve problems. Students identify the rule for a pattern and extend the pattern.

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 4 identify attributes of two- and three- dimensional shapes, including parallel and intersecting perpendicular lines, and students develop vocabulary to describe the attributes. Students identify a line of symmetry in two-dimensional shapes and students recognize perimeters and areas of rectangles and squares, using concrete objects. Students recognize the results of sliding and flipping two-dimensional shapes.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Grade 4 collect, identify, or display data in tables, charts, and graphs, including bar graphs, tally charts, and pictographs, in order to answer a question. Students identify the mode of a set of whole numbers using manipulatives.

Idaho Extended Standards Statements
Grade 5
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 5 read, write, compare, or order whole numbers and simple decimal numbers. Students identify commonly used fractions as a part of a whole. Students use objects or pictures to explore adding and subtract fractions with like denominators and decimals using money. Students compute basic multiplication and division facts with or without a calculator. Students follow the appropriate method of computation using paper and pencil or calculator or combination. Students use simple estimation skills.

Extended Standard 2: Concepts and Principles of Measurement

Students in Grade 5 select the appropriate units and tools for measurements. Students identify the spatial concept of perimeter and area. Students solve basic problems involving elapsed time and length and students match equivalent units of length.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 5 compare objects or pictures using vocabulary or symbols of “<,” “>,” and “=” to express relationships. Students solve missing addend or factor equations, using concrete objects or calculator when necessary. Students identify a pattern and use concrete manipulatives to represent a simple rule for a pattern.0

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 5 identify and compare attributes of polygons and develop vocabulary to describe the attributes. Students identify points, lines, and angles. Students identify the difference between perimeter and area. Students identify a grid and indicate where points on a grid are located.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Grade 5 read and display data in simple tables, charts, bar graphs, and line graphs. Students make predictions based on data.

Idaho Extended Standards Statements
Grade 6
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 6 read, write compare, and order whole numbers. Students recognize the use of fractions and decimals and their relationship to whole numbers. Students add, subtract, multiply, and divide whole numbers and simple decimals with or without a calculator. Students add simple fractions. Students estimate to predict simple computation results.

Extended Standard 2: Concepts and Principles of Measurement

Students in Grade 6 select and use appropriate units and tools to make formal measurements. Students recognize the perimeter and area of triangles, circles, and parallelograms, and the circumference and area of circles. Students identify equivalent unit of measurements in one step problems.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 6 identify the vocabulary and/or symbols of “<,” “>,” and “=” to express relationships. Students identify a variable as an unknown quantity in simple algebraic expressions. Students identify simple patterns and match a rule that generates the pattern using whole numbers or fractions as inputs. Students use patterns to solve simple problems.

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 6 classify relationships among types of one-, two- or three-dimensional geometric figures using their defining properties. Students recognize congruence, similarities, and symmetry of shapes. Students identify the first quadrant on a coordinate plane.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Grade 6 read and interpret charts and graphs, including line graphs, bar graphs, and circle graphs. Students collect, organize, and display the data with appropriate notation in charts and graphs. Students find measures of central tendency – median or mode – with simple sets of data and students identify the range of a set of data. Students participate in simple probability experiments.

Idaho Extended Standards Statements
Grade 7
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 7 read, write, compare, order, and place on a number line: positive and negative whole numbers, fractions, and decimals. With or without the use of a calculator, students solve problems with simple decimals, fractions, and percents and evaluate numerical expressions using the order of operations with whole numbers. Students determine when estimation is appropriate.

Extended Standard 2: Concepts and Principles of Measurement

Students in Grade 7 select and use appropriate units and tools to make formal measurements. Students indicate perimeter, circumference, or area of triangles, circles, and quadrilaterals. Students solve simple problems involving perimeter or area of rectangles and squares. Students compare units and their relationship to one another and to real world applications.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 7 use variables in simple expressions and equations and students use the vocabulary and/or symbols of “<,” “>,” and “=” to express relationships. With or without the use of a calculator, students follow the order of operations in evaluating simple algebraic expressions and students solve one-step equations. Students identify simple patterns and match a rule that generates the pattern.

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 7 identify relationships among types of one-, two-, and three-dimensional geometric figures using their defining properties. Students recognize angles and shapes and students identify congruence, similarities, and line symmetry of shapes. Students identify a point on a coordinate plane.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in the Grade 7 read and interpret simple tables, charts, and graphs. Using models or templates, students collect, organize and display data in tables, charts and graphs. Students determine simple measures of central tendency – median and mode – with sets of data and students perform and record results of simple probability experiments.

Idaho Extended Standards Statements
Grade 8
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 8 read, write, order, or place on a number line rational numbers. With or without the calculator, students use numbers to solve problems. Students identify standard form, scientific notation, and exponential forms. Students add, subtract, multiply, and divide numbers with or without the use of a calculator or manipulatives. Students recall common equivalent fractions and percents. Students evaluate simple numerical expressions using the order of operations. Students estimate to predict simple computation results.

Extended Standard 2: Concepts and Principles of Measurement

Students in Grade 8 select and use appropriate units and tools to make formal measurements. Students apply given formulas for perimeter and area. With or without the use of a calculator, students solve problems involving area and perimeter of simple shapes. Students use rates, proportions, and ratios in problem solving situations.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 8 translate simple word statements into numeric expressions and equations. Students follow the order of operations in evaluating basic one and two step equations. Students display a set of data in a table or a graph.

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 8 classify one-, two-, and three dimensional geometric figures using their defining properties. Students differentiate the concepts, properties, and relationships among points, lines, rays, angles, and shapes. Students identify congruence, similarities, or line symmetry of shapes.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Grade 8 read and interpret tables, charts, or graphs. Students collect, organize, and display a simple set of data in tables, charts, or graphs. Students identify simple measures of central tendency – median and mode. Students recognize outcomes and make predictions with simple probability experiments.

Idaho Extended Standards Statements
Grade 9
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 9 identify properties of real numbers and exponents. Students use simple positive and negative numbers, absolute value, fractions, decimals, percentages, with or without manipulatives. With or without calculators or manipulatives, students use the proper order of operations and perform operations with rational numbers. Students use number sense in everyday situations and judge reasonableness.

Extended Standard 2: Concepts and Principles of Measurement

Students in Grade 9 use proportions and ratios. Students apply concepts of rates. Students evaluate given measurement formulas for two- and three- dimensional objects.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 9 use procedures to solve simple algebraic expressions, involving multi-steps. Students understand the concept of a variable in equations and inequalities.

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 9 represent and interpret simple tables and graphs. Students identify attributes of linear relationships such as slope, rate of change, or intercepts.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Grade 9 identify basic statistical concepts including mean, median, mode, range or distribution of data. Students make predications and draw conclusions based on chance, equally likely events, and simple probability.

Idaho Extended Standards Statements
Grade 10
Mathematics

Extended Standard 1: Number and Operation

Students in Grade 10 deepen their knowledge about the properties of real numbers and exponents. Students use simple positive and negative numbers, absolute value, fractions, decimals, percentages, with or without manipulatives. With or without calculators or manipulatives, students use the proper order of operations and perform operations with rational numbers. Students use number sense in everyday situations and judge reasonableness.

Extended Standard 2: Concepts and Principles of Measurement

Students in grade 10, given simple formulas, determine length, distance, area, or weight with appropriate unit labels. Students identify and use proportions and ratios. Students apply concepts of rates. Students compare similarities and differences as it relates to size variations in two- and three- dimensional objects.

Extended Standard 3: Concepts and Language of Algebra and Functions

Students in Grade 10 use procedures to solve simple algebraic expressions, involving multi-steps. Students understand the concept of a variable in equations and inequalities.

Extended Standard 4: Concepts and Principles of Geometry

Students in Grade 10 recognize congruency and similarities of shapes. Students compare size variations in two- and three- dimensional objects. Given the Pythagorean Theorem, students identify the hypotenuse and the right angle. Students represent and interpret simple tables and graphs. Students identify attributes of linear relationships such as slope, rate of change, or intercepts.

Extended Standard 5: Data Analysis, Probability, and Statistics

Students in Grade 10 read and interpret tables, charts, and graphs, Students identify basic statistical concepts including mean, median, mode, range or distribution of data. Students make predications and draw conclusions based on chance, equally likely events, and simple probability.