

Idaho Extended Standards Draft
Extended Content Indicators
Grade 3
Mathematics

Standard 1: Number and Operation: Students in Grade 3 read, write, compare, and order whole numbers to 10,000 and identify place value through 9,999. Students count the value of a collection of bills and coins up to \$10.00. Students use concrete material to recognize and represent commonly used fractions. Students add and subtract whole numbers with and without regrouping through 999 and students recall basic addition and subtraction facts through 18. Students multiply whole numbers through 10 x 10.

Extended Standard 1: 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.

Topic	GR	Goals	Objectives	Essence	Extended Content Indicators
	3.M.1.1	Understand and use numbers.	3.M.1.1.1 Read, write, compare, and order whole numbers to 10,000. (287.01.a)	Students identify and order whole numbers and identify place value of whole numbers. Students sort by identity or value the collection of bills and coins up to \$10.00. Students use concrete materials to recognize or represent commonly used fractions.	3.M.1.1.1 A Identify whole numbers in order up to 30, using a number line when necessary
			3.M.1.1.2 Identify place value through 9,999. (287.01.b)		3.M.1.1.2A Identify place value of numbers through 30.
			3.M.1.1.3 Count the value of a collection of bills and coins up to \$10.00. (287.01.c)		3.M.1.1.3 A Sort coins and one dollar bill by identity and value.
			3.M.1.1.4 Recognize, name, and represent commonly used fractions using concrete materials. (287.01.a)		3.M.1.1.4 A Recognize commonly used fractions using concrete materials.
			3.M.1.1.5 Recognize mathematical information and select strategies appropriate for solving a multi-step problem. (288.01.a)		3.M.1.1.5 A Recognize and demonstrate the appropriate problem solving strategy to solve problems.

			3.M.1.1.6 Use appropriate vocabulary. (287.01.f)		3.M.1.1.6 A Recognize appropriate math vocabulary terms.
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Extended Standard 1: 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.

Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	3.M.1.2	Perform computations accurately.	3.M.1.2.1 Recall basic addition and subtraction facts through 18. (287.02.b)	Students add and subtract whole numbers and students recall basic addition and subtraction facts. Students multiply whole numbers.	3.M.1.2.1 A Use objects, pictures, or symbolic systems to solve addition or subtraction problems up to 18
			3.M.1.2.2 Add and subtract whole numbers with and without regrouping through 999. (287.02.a)		3.M.1.2.2 A Explore adding and subtracting with regrouping using manipulatives.
			3.M.1.2.3 Add three one- and two- digit addends. (287.02.c)		3.M.1.2.3 A Count three groups of objects, pictures or symbolic system to identify total quantity up to ten.
			3.M.1.2.4 Multiply whole numbers through 10 x 10. (287.02.d)		3.M.1.2.4 A Explore multiplication through the manipulation of adding repeated sets
			3.M.1.2.5 Select and use an appropriate method of computation from mental math, paper and pencil, calculator, or a combination of the three. (287.02.f)		3.M.1.2.5 A Use concrete objects, a symbolic systems, and or calculator to solve addition and subtractions problems
			3.M.1.2.6 Use appropriate operations to solve word problems and show or explain work. (288.01.b)		3.M.1.2.6 A Select appropriate operations to solve one step addition or subtraction word or symbolic problems.

			3.M.1.2.7 Use appropriate vocabulary. (287.02.g)		3.M.1.2.7 A Recognize appropriate math vocabulary terms
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Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	3.M.1.3	Estimate and judge reasonableness of results.	3.M.1.3.1 Estimate to predict sums and differences. (287.03.a)	Estimate and judge reasonableness of sum or difference.	3.M.1.3.1 A Estimate to predict sums
			3.M.1.3.2 Use estimation to evaluate the reasonableness of a sum or difference. (287.03.b)		3.M.1.3.2 A Use estimation to evaluate the reasonableness of a sum.
			3.M.1.3.3 Investigate the use of a four-function calculator to solve complex grade-level problems. (288.03.a)		3.M.1.3.3 A Investigate the use of a calculator to solve simple problems.
			3.M.1.3.4 Use appropriate vocabulary. (287.03.c)		3.M.1.3.4 A Recognize appropriate vocabulary.

Standard 2: Concepts and Principles of Measurement - Students in Grade 3 select and use appropriate units and tools to make formal measurements of time, length, temperature, and perimeter in both systems. Students estimate measurements in real-world problems using standard units. Students tell time using digital and analog clocks using five-minute intervals.

Extended Standard 2: 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.

Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	3.M.2.1	Understand and use U.S. customary and metric measurements.	3.M.2.1.1 Select and use appropriate units and tools to make formal measurements of length and temperature in both systems. (289.01.a)		3.M.2.1.1 A Use appropriate tools or non-standard units to measure length or temperature.
			3.M.2.1.2 Estimate length, time, and weight in real-world problems using standard units. (289.01.b)		3.M.2.1.2 A Estimate time and weight using non-standard or standard units in real world problems.
			3.M.2.1.3 Tell time using digital and analog clocks using quarter hour and five minute intervals. (289.01.e)		3.M.2.1.3 A Identify time of day by activity – e.g. morning before school, schooltime, after school, after dinner
			3.M.2.1.4 Solve real world problems related to time.		3.M.2.1.4 A Identify real world problems related to time.
			3.M.2.1.5 Identify relationships of length and time within the U.S. customary system and within the metric system. (289.01.c, 289.01.d)		3.M.2.1.5 A Identify a unit of measurement of length and time within the U.S. customary system or within the metric system.
			3.M.2.1.6 State that there are 24 hours in a day, 7 days in a week, and 12 months in a year.		3.M.2.1.6 A Identify equivalent units of time in days, weeks, or months.
			3.M.2.1.7 Use appropriate vocabulary. (289.01.g)		3.M.2.1.7 A Recognize appropriate vocabulary.

Standard 2: Concepts and Principles of Measurement - Students in Grade 3 select and use appropriate units and tools to make formal measurements of time, length, temperature, and perimeter in both systems. Students estimate measurements in real-world problems using standard units. Students tell time using digital and analog clocks using five-minute intervals.

Extended Standard 2: 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.

Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	3.M.2.2	Goal 2.2: Apply the concepts of rates, ratios, and proportions.	No objectives at this grade level.		No objectives at this grade level.

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Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.2.3	Apply dimensional analysis.	No objectives at this grade level.		No objectives at this grade level.

Standard 3: Concepts and Language of Algebra and Functions - Students in Grade 3 write a multiplication problem vertically and horizontally. Students read and use the symbols of “<,” “>,” and “=” to express relationships with numbers through 9,999. Students use the commutative property of multiplication. Students extend a growing arithmetic, numerical pattern when given a rule with a single operation of one digit addition.

Extended Standard 3: 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.

Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	3.M.3.1	Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships.	3.M.3.1.1 Write a multiplication problem vertically and horizontally. (290.01.a)		3.M.3.1.1 A Use concrete objects to symbolize multiple sets that would be reflected in a simple multiplication problem.
			3.M.3.1.2 Write a number sentence using simple geometric shapes as symbols to represent an unknown number. (290.01.b)		3.M.3.1.2 A Using a geometric shape to represent a missing number, express an addition or subtraction problem with concrete objects, pictures, or numerals.
			3.M.3.1.3 Write a fact family when given two addends.		3.M.3.1.3 A Express addition or subtraction statements for a fact family given two addends.
			3.M.3.1.4 Read and use symbols (<, >, =) to express relationships with numbers through 9,999. (290.01.c)		3.M.3.1.4 A Compare objects or pictures using the vocabulary or symbols for (<, >, =) to express relationships with quantity.

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Extended Standard 3: 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 commutative property. Students identify a growing arithmetic, numerical pattern which has a given rule.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.3.2	Goal 3.2: Evaluate algebraic expressions	3.M.3.2.1 Use the commutative property of multiplication. (290.02.a)		3.M.3.2.1 A Copy the commutative property of multiplication with products up to 6
			3.M.3.2.2 Solve multiplication problems using the commutative property (e.g., If $24 \times 38 = 912$, then what is 38×24 ?).		3.M.3.2.2 A Identify math problems with the commutative property (e.g., If $1+2 = 3$, then $2+1=3$ or $1 \times 2=2$ or $2 \times 1=2$).

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Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.3.3	Goal 3.3: Solve algebraic equations and inequalities	3.M.3.3.1 Solve missing addend equations. (290.03.a)		3.M.3.3.1 A Solve missing addend equations, using concrete objects when necessary.

Standard 3: Concepts and Language of Algebra and Functions - Students in Grade 3 write a multiplication problem vertically and horizontally. Students read and use the symbols of “<,” “>,” and “=” to express relationships with numbers through 9,999. Students use the commutative property of multiplication. Students extend a growing arithmetic, numerical pattern when given a rule with a single operation of one digit addition.

Extended Standard 3: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.3.4	Goal 3.4: Understand the concept of functions.	3.M.3.4.1 Extend a growing arithmetic, numerical pattern when given a rule with a single operation of one digit addition (e.g., add 3). (293.01.a)		3.M.3.4.1 A Replicate a numerical pattern when given the +1 rule with addition (e.g. 1, 1+1, 2+1, 3+1, 4+1,...)
			3.M.3.4.2 Use appropriate vocabulary. (293.01.c)		3.M.3.4.2 A Recognize appropriate vocabulary.

Standard 3: Concepts and Language of Algebra and Functions - Students in Grade 3 write a multiplication problem vertically and horizontally. Students read and use the symbols of “<,” “>,” and “=” to express relationships with numbers through 9,999. Students use the commutative property of multiplication. Students extend a growing arithmetic, numerical pattern when given a rule with a single operation of one digit addition.

Extended Standard 3: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.3.5	Goal 3.5: Represent equations, inequalities and functions in a variety of formats.	No objectives at this grade level.		No objectives at this grade level.

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Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.3.6	Goal 3.6: Apply functions to a variety of problems	No objectives at this grade level.		No objectives at this grade level.

Standard 4: Concepts and Principles of Geometry - Students in Grade 3 identify, compare, and analyze attributes of two- and three- dimensional shapes, including right angles, squares, and three-dimensional shapes in the environment, and students develop vocabulary to describe the attributes. Students identify vertical and horizontal lines of symmetry.

Extended Standard 4: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.4.1	Goal 4.1: Apply concepts of size, shape, and spatial relationships.	3.M.4.1.1 Identify, compare, and analyze attributes of two- and three- dimensional shapes, including right angles, squares, and three-dimensional shapes in environment, and develop vocabulary to describe the attributes.		3.M.4.1.1.A Compare two- and three- dimensional shapes in the environment, and develop vocabulary to describe the attributes
			3.M.4.1.2 Discuss sliding and flipping of two-dimensional shapes.		3.M.4.1.2 A Recognize sliding and flipping of two-dimensional shapes.
			3.M.4.1.3 Identify vertical and horizontal lines of symmetry.		3.M.4.1.3.A Identify vertical or horizontal lines of symmetry.
			3.M.4.1.4 Use appropriate vocabulary.		3.M.4.1.4 A Recognize appropriate vocabulary

Standard 4: Concepts and Principles of Geometry - Students in Grade 3 identify, compare, and analyze attributes of two- and three- dimensional shapes, including right angles, squares, and three-dimensional shapes in the environment, and students develop vocabulary to describe the attributes. Students identify vertical and horizontal lines of symmetry.

Extended Standard 4: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.4.2	Goal 4.2: Apply the geometry of right triangles.	No objectives at this grade level.		No objectives at this grade level.

Standard 4: Concepts and Principles of Geometry - Students in Grade 3 identify, compare, and analyze attributes of two- and three- dimensional shapes, including right angles, squares, and three-dimensional shapes in the environment, and students develop vocabulary to describe the attributes. Students identify vertical and horizontal lines of symmetry.

Extended Standard 4: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.4.3	Goal 4.3: Apply graphing in two dimensions.	3.M.4.3.1 Identify the point of final destination given directions for movement on a positive number line.		3.M.4.3.1.A Identify the point of final destination given directions for movement using 1 to 5 on a horizontal positive number line.

Standard 5: Data Analysis, Probability, and Statistics - Students in Grade 3 interpret information found in simple tables, bar graphs, and charts. Students collect, organize, and display data in tables, charts, or bar graphs in order to answer a question.

Extended Standard 5: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.5.1	Goal 5.1: Understand data analysis.	3.M.5.1.1 Interpret information found in tables, bar graphs, and charts. (292.01.a)		3.M.5.1.1.A Interpret information found in simple bar graphs or circle graphs
			3.M.5.1.2 Use appropriate vocabulary. (292.01.c)		3.M.5.1.2 A Recognize appropriate vocabulary.

Standard 5: Data Analysis, Probability, and Statistics - Students in Grade 3 interpret information found in tables, bar graphs, and charts. Students collect, organize, and display data in tables, charts, or bar graphs in order to answer a question.

Extended Standard 5: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.5.2	Goal 5.2 Collect, organize, and display data.	3.M.5.2.1 Collect, organize, and display data in tables, charts, or bar graphs in order to answer a question. (292.02.a)		3.M.5.2.1.A Organize and display data in bar graphs or circle graphs in order to answer a question.

Standard 5: Data Analysis, Probability, and Statistics - Students in Grade 3 interpret information found in tables, bar graphs, and charts. Students collect, organize, and display data in tables, charts, or bar graphs in order to answer a question.

Extended Standard 5: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.5.3	Goal 5.3: Apply simple statistical measurements.	No objectives at this grade level.		No objectives at this grade level.

Standard 5: Data Analysis, Probability, and Statistics - Students in Grade 3 interpret information found in tables, bar graphs, and charts. Students collect, organize, and display data in tables, charts, or bar graphs in order to answer a question.

Extended Standard 5: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.5.4	Goal 5.4: Understand basic concepts of probability.	No objectives at this grade level.		No objectives at this grade level.

Standard 5: Data Analysis, Probability, and Statistics - Students in Grade 3 interpret information found in tables, bar graphs, and charts. Students collect, organize, and display data in tables, charts, or bar graphs in order to answer a question.

Extended Standard 5: 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.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.M.5.5	Goal 5.5: Make predictions or decisions based on data.	3.M.5.5.1 Make predictions based on data.		3.M.5.5.1A Make predictions based on data.