## Idaho Extended Standards Draft Extended Content Indicators Grade 2 Mathematics

Standard 1: Number and Operation-Students in Grade 2 demonstrate knowledge of our numeration system by counting forward by twos, fives, and tens to 100 and by counting forward and backward by ones from any given number less than 100. Students read, write, compare, and order whole numbers to 1,000 and students identify place value through 999. Students count the value of a collection of pennies, nickels, dimes, and quarters up to a dollar. Students use strategies for addition and subtraction combinations through 18 and students add whole numbers with and without regrouping through 99.

Extended Standard 1: 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.

Topic	GR	Goals	Objectives	Essence	Extended Content Indicators
	2.M.1.1	Goal 1.1: Understand and use	2.M.1.1.1 Demonstrate knowledge		2.M.1.1.1A
		numbers.	of our numeration system by		Demonstrate knowledge of the numeration system by counting forward by 1's
			counting forward by twos, fives,		
			and tens to 100 and by counting		
			forward and backward by ones		
			from any given number less than		
			100. (277.01.a)		
			2.M.1.1.2 Read, write, compare,		2.M.1.1.2A
			and order whole numbers to 1,000.		Communicate and demonstrate whole numbers in order up to 10
			(277.01.b)		
			2.M.1.1.3 Identify place value		2.M.1.1.3A
			through 999. (277.01.c)		Show the symbolic representation of the tens place value.
			2.M.1.1.4 Count the value of a		2.M.1.1.4 A
			collection of pennies, nickels,		Identify and demonstrate the value of pennies and nickels
			dimes, and quarters up to \$1.00.		
			(277.01.d)		
			2.M.1.1.5 Recognize mathematical		2.M.1.1.5 A
			information and select strategies		Demonstrate the ability to solve simple problems.
			appropriate for solving a problem.		
			(278.01.a)		
			2.M.1.1.6 Use appropriate		1.M.1.1.6A
			vocabulary. (277.01.f)		Attend to appropriate math vocabulary terms.

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<u>Extended Standard 1</u>: 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.

Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	2.M.1.2	Goal 1.2: Perform	2.M.1.2.1 Use strategies for		2.M.1.2.1A
		computations accurately.	addition and subtraction		Use objects, pictures, or symbolic systems to explore addition or subtraction problems to 10
			combinations through 18.		
			(277.02.a)		
			2.M.1.2.2 Add whole		2.M.1.2.2 A
			numbers with and without		Count two groups of objects, pictures or symbolic system to identify total quantity up to ten.
			regrouping through 99.		
			(277.02.b)		
			2.M.1.2.3 Add three one-digit		2.M.1.2.3A
			addends. (277.02.c)		Count three groups of objects, pictures or symbolic system to identify total quantity up to five.
			2.M.1.2.4 Choose addition or		2.M.1.2.4 A
			subtraction to solve word		Use manipulatives for adding/subtracting.
			problems and explain the		
			choice. (278.01.b)		
			2.M.1.2.5 Use appropriate		2.M.1.2.5 A
			vocabulary. (277.02.e)		Attend to appropriate math vocabulary terms

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Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	2.M.1.3	Goal 1.3: Estimate and judge	2.M.1.3.1 Estimate to predict		2.M.1.3.A
		reasonableness of results.	the sum of numbers through		Estimate a quantity of objects when shown a set of 10.
	99. (277.03.a)				
			2.M.1.3.2 Use estimation to		2.M.1.3.2 A
			evaluate the reasonableness of		Use estimation skills and determine reasonableness across daily activities.
			the sum of numbers through		
			99. (277.03.b)		
			2.M.1.3.3 Use appropriate		2.M.1.3.3A
			vocabulary. (277.03.c)		Attend to appropriate vocabulary.

<u>Standard 2: Concepts and Principles of Measurement</u> - Students in Grade 2 measure time, length, weight and temperature using standard and non-standard units and tools. Students tell time using both digital and analog clocks to the half hour.

Extended Standard 2: 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.

Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	2.M.2.1	Goal 2.1: Understand and use	2.M.2.1.1 Select a tool that		2.M.2.1.1 A
		U.S. customary and metric	can measure a given attribute		Compare objects given and attribute, eg. lengths sizes, weight, time
		measurements.	(ruler – length, cup – volume,		
			balance – weight, clock –		
			time, thermometer –		
			temperature). (279.01.a)		
			2.M.2.1.2 Estimate length		2.M.2.1.2A
			and time using standard units.		Estimate time using non-standard or standard units.
			(279.01.b)		
			2.M.2.1.2 Estimate length		2.M.2.1.3 A
			and time using standard units.		Identify time of day by activity – e.g. morning before school, schooltime, after school, after
			(279.01.b)		dinner
			2.M.2.1.4 Select the most		2.M.2.1.4 A
			appropriate unit to measure		Select the most appropriate activity given the time of the day.
			the time of a given situation		
			(minutes, hours). (279.01.d)		
			2.M.2.1.5 Recite the months		2.M.2.1.5
			of the year, in order.		Identify a calendar and how the days of the week are represented.
			2.M.2.1.6 Use appropriate		2.M.2.1.6 A
			vocabulary. (279.01.e)		Attend to appropriate vocabulary.

Standard 2: Concepts and Principles of Measurement - Students in Grade 2 measure time, length, weight and temperature using standard and nonstandard units and tools. Students tell time using both digital and analog clocks to the half hour.

Extended Standard 2: 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.

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

Standard 2: Concepts and Principles of Measurement - Students in Grade 2 measure time, length, weight and temperature using standard and nonstandard units and tools. Students tell time using both digital and analog clocks to the half hour.

Extended Standard 2: 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.

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

Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	2.M.3.1	Goal 3.1: Use algebraic	2.M.3.1.1 Write addition and		2.M.3.1.1A
		symbolism as a tool to	subtraction problems		Express addition & subtraction problems using a concrete system.
		represent mathematical	vertically and horizontally.		
		relationships.	(280.01.a)		
			2.M.3.1.2 Write a number		2.M.3.1.2A
			sentence from an addition or		Use concrete objects or pictures to symbolize a number sentence when given an addition word
			subtraction problem-solving		problem.
			situation. (278.02.a)		
			2.M.3.1.3 Show the		2.M.3.1.3 A
			relationship between addition		Show the relationship between addends in fact families using concrete objects or pictures up to
			and subtraction using fact		sums of 5.
			families. (280.01.d)		
			2.M.3.1.4 Compare numbers		2.M.3.1.4 A
			to 999 using the vocabulary		Compare objects or pictures using the vocabulary (less than, more than, equal to, more, less,
			words/phrases of less than,		same, bigger, smaller, etc).
			greater than, equal to.		
			(280.01.c)		

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	2.M.3.2	Goal 3.2: Evaluate algebraic	2.M.3.2.1 Use the		2.M.3.2.1 A
		expressions.	commutative property of		Use the commutative property of addition with concrete objects or pictures to solve simple
			addition.		problems
					(e.g. 3+1=4 then 1+3=?.
			2.M.3.2.2 Solve addition		2.M.3.2.2 A
			problems using the		Match corresponding addition problems (e.g., $1 + 2 = 3$ , then
			commutative property (e.g., If		2 + 1=3).
			7 + 5 = 12, then what is 5 +		
			7?).		

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	2.M.3.3	Goal 3.3: Solve algebraic	No objectives at this grade		No objectives at this grade level.
		equations and inequalities.	level.		

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	2.M.3.4	Goal 3.4: Understand the	2.M.3.4.1 Translate a		2.M.3.4.1A
		concept of functions.	repeating pattern from one		Extend a simple repeating pattern (e.g. ABCABC).
			representation to another		
			(e.g., even, odd, even, odd		
			translates to ABAB).		
			(283.01.a)		
			2.M.3.4.2 Use appropriate		2.M.3.4.2 A
			vocabulary. (283.01.c)		Attend to appropriate vocabulary.

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

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

Standard 4: Concepts and Principles of Geometry - Students in Grade 2, recognize, name, build, compare and sort the two- and three-dimensional shapes of triangles, squares, circles, rectangles, cones, cubes, spheres, and cylinders. Students draw a line of symmetry.

Extended Standard 4: Students in Grade 2, recognize, name, and sort simple dimensional shapes, such as triangles, squares, circles. Students identify a line of symmetry.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	2.M.4.1	Goal 4.1: Apply concepts of	2.M.4.1.1 Recognize, name,		2.M.4.1.1.A
		size, shape, and spatial	build, compare, and sort the		Recognize, name, and sort the two dimensional shapes of triangles, squares, and circles
		relationships.	two- and three-dimensional		
			shapes of triangles,		
			rectangles, squares, circles,		
			cones, cubes, spheres,		
			cylinders, and pyramids.		
			(281.01.a)		
			2.M.4.1.2 Sort and classify		2. M.4.1.2 A Sort or classify objects by more than one attribute.
			objects by more than one		
			attribute. (283.01.b)		
			2.M.4.1.3 Draw a line of		2.M.4.1.3.A
			symmetry. (281.01.b)		Indicate a line of symmetry.
			2.M.4.1.4 Use appropriate		2.M.4.1.4 A
			vocabulary. (281.01.d)		Attend to appropriate vocabulary.

Standard 4: Concepts and Principles of Geometry - Students in Grade 2, recognize, name, build, compare and sort the two- and three-dimensional shapes of triangles, squares, circles, rectangles, cones, cubes, spheres, and cylinders. Students draw a line of symmetry.

Extended Standard 4: Students in Grade 2, recognize, name, and sort simple dimensional shapes, such as triangles, squares, circles. Students identify a line of symmetry.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	2M.4.2	Goal 4.2: Apply the geometry	No objectives at this grade		No objectives at this grade level.
		of right triangles.	level.		

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Extended Standard 4: Students in Grade 2, recognize, name, and sort simple dimensional shapes, such as triangles, squares, circles. Students identify a line of symmetry.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	2.M.4.	Goal 4.3: Apply graphing in	2.M.4.3.1 Indicate whether		2.M.4.3.1.A
	3	two dimensions.	a number is above or below		Indicate whether a number is above or below a benchmark (number of 10 or less on a
			a benchmark number of		number line.
			1000 or less on a number		
			line.		

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	2.M.5.1	Goal 5.1: Understand data	2.M.5.1.1 Interpret information		2.M.5.1.1.A
		analysis.	found in simple tables, charts,		Identify information found in simple bar graphs or pictographs.
			bar graphs, and pictographs.		
			(282.01.a)		
			2.M.5.1.2 Use appropriate		2.M.5.1.2 A
			vocabulary. (282.01.b)		Attend to appropriate vocabulary.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	2.M.5.2	Goal 5.2: Collect, organize,	2.M.5.2.1 Gather and display		2.M.5.2.1.A
		and display data.	data in tables, charts, and bar		Use data in bar graphs in order to answer a question.
			graphs in order to answer a		
			question. (282.02.a)		
					2.M.5.2.2.A
					Use tally marks, pictures, or objects to represent data.

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

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

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	2.M.5.5	Goal 5.5: Make predictions or decisions based on data.	No objectives at this grade level.		