Fourth Grade Mathematics Scope and Sequence

Quarter	1	
Domain	Operations & Algebraic Thinking	Numbers & Operations In Base Ten
Standard	4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5 . Represent verbal statements of multiplicative comparisons as multiplication equations.	4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right by applying concepts of place value, multiplication, or division.
	 4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. See Table 2, page 96. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.) 4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. 4.OA.4 Find all factor pairs for a whole number in the range 1- 	 4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. 4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
	100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-	
	100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.	
Resource	Bridges – Unit 1 & 2	Bridges – Unit 1 & 2

Quarter 2 Domain	Operations &	Numbers & Operations	Numbers & Operations –Fractions	Measurement and Data
Domain	Algebraic Thinking	In Base Ten	Numbers & Operations –Fractions	ivieasurement and Data
Standard	4.OA.3 Solve multistep	4.NBT.2 Read and write	4.NF.1 Explain why a fraction a /b is equivalent	4.MD.1 Know relative sizes of the
	word problems posed	multi-digit whole	to a fraction $(n \times a) / (n \times b)$ by using visual	metric measurement units within one
	with whole numbers	numbers using standard	fraction models, with attention to how the	system of units. Metric units include
	and having whole-	form, word form, and	number and size of the parts differ even though	kilometer, meter, centimeter, and
	number answers using	expanded form. Compare	the two fractions themselves are the same size.	millimeter; kilogram and gram; and
	the four operations,	two multi-digit numbers	Use this principle to recognize and generate	liter and milliliter. Express a larger
	including problems in	based on meanings of	equivalent fractions.	measurement unit in terms of a
	which remainders	the digits in each place,	·	smaller unit. Record measurement
	must be interpreted.	using >, =, and < symbols	4.NF.2 Compare two fractions with different	conversions in a two-column table.
	Represent these	to record the results of	numerators and different denominators, e.g.,	For example, express the length of a
	problems using	comparisons. Grade 4	by creating common denominators or	4-meter rope in centimeters. Because
	equations with a letter	expectations in this	numerators, or by comparing to a benchmark	1 meter is 100 times as long as a 1
	standing for the	domain are limited to	fraction such as 1 /2. Recognize that	centimeter, a two-column table of
	unknown quantity.	whole numbers less than	comparisons are valid only when the two	meters and centimeters includes the
	Assess the	or equal to 1,000,000.	fractions refer to the same whole. Record the	number pairs 1 and 100, 2 and 200, 3
	reasonableness of		results of comparisons with symbols >, =, or <,	and 300,
	answers using mental	4.NBT.3 Use place value	and justify the conclusions, e.g., by using a	
	computation and	understanding to round	visual fraction model.	4.MD.2 Solve real-world problems
	estimation strategies	multi-digit whole		involving money, time, and metric
	including rounding.	numbers to	4.NF.3 Understand a fraction a /b with a > 1 as	measurement. A. Using models, add
		any place through	a sum of fractions 1 /b.	and subtract money and express the
		1,000,000.	a. Understand addition and subtraction of	answer in decimal notation. B. Using
			fractions as joining and separating parts	number line diagrams, clocks, or
		4.NBT.4 Fluently add and	referring to the same whole.	other models, add and subtract
		subtract multi-digit	b. Decompose a fraction into a sum of fractions	intervals of time in hours and
		whole numbers using a	with the same denominator in more than one	minutes. C. Add, subtract, and
		standard algorithm.	way, recording each decomposition by an	multiply whole numbers to solve
			equation. Justify decompositions, e.g., by using	metric measurement problems
			a visual fraction model. Examples: 3 /8 = 1 /8 +	involving distances, liquid volumes,
				and masses of objects

Fourth Grade

	WHCSD Scope a	nd Sequence	Fourth Grade	Mathematics	2021-2022	
	WHCSD Scope a	nd Sequence	1 /8 + 1 /8; 3 /8 /8 = 8 /8 + 8 /8 + c. Add and subtred denominators, enumber with an using properties relationship between d. Solve word presubtraction of frewhole and having visual fractive represent the present the present the present for the present	= 1 /8 + 2 /8; 2 1 /8 = 1 + 1 -1 /8. act mixed numbers with lings, by replacing each mixing equivalent fraction, and/or of operations and the ween addition and subtractions involving addition actions referring to the saing like denominators, e.g., tion models and equations	I + 1 like ed or by ction. and me by s to with vrite ram. ths by the , =, or	
Resource	Bridges – Unit 3 & 4	Bridges – Unit 3 & 4	Bridges – Unit 3		Bridges – Unit 4	

Quarter					T _
Domain	Operations & Algebraic	Numbers & Operations In	Numbers & Operations –	Measurement and Data	Geometry
	Thinking	Base Ten	Fractions		
Standard	4.OA.3 Solve multistep word	4.NBT.4 Fluently add and	4.NF.4 Apply and extend	4.MD.3 Develop efficient	4.G.1 Draw points,
	problems posed with whole	subtract multi-digit whole	previous understandings of	strategies to determine the	lines, line
	numbers and having whole-	numbers using a standard	multiplication to multiply a	area and perimeter of	segments, rays,
	number answers using the	algorithm.	fraction by a whole number.	rectangles in real-world	angles (right, acute
	four operations, including		a. Understand a fraction a /b	situations and mathematical	and obtuse), and
	problems in which	4.NBT.5 Multiply a whole	as a multiple of 1 /b. For	problems. For example, given	perpendicular and
	remainders must be	number of up to four digits by	example, use a visual fraction	the total area and one side	parallel lines.
	interpreted. Represent these	a one-digit whole number,	model to represent 5 /4 as	length of a rectangle, solve for	Identify these in
	problems using equations	and multiply two two-digit	the product $5 \times (1/4)$,	the unknown factor, and given	two-dimensional
	with a letter standing for the	numbers, using strategies	recording the conclusion by	two adjacent side lengths of a	figures.
	unknown quantity. Assess	based on place value and the	the equation $5/4 = 5 \times (1/4)$	rectangle, find the perimeter.	
	the reasonableness of	properties of operations.	or 5 /4 = (1 /4) + (1 /4) + (1		4.G.2 Classify two-
	answers using mental	Illustrate and explain the	/4) + (1 /4) + (1 /4).	4.MD.4 Display and interpret	dimensional figure
	computation and estimation	calculation by using equations,	b. Understand a multiple of a	data in graphs (picture graphs,	based on the
	strategies including rounding.	rectangular arrays, and/or	/b as a multiple of 1 /b, and	bar graphs, and line plots) to	presence or
		area models.	use this understanding to	solve problems using numbers	absence of parallel
	4.OA.5 Generate a number or		multiply a fraction by a whole	and operations for this grade.	or perpendicular
	shape pattern that follows a	4.NBT.6 Find whole-number	number. For example, use a		lines or the
	given rule. Identify apparent	quotients and remainders	visual fraction model to	4.MD.5 Recognize angles as	presence or
	features of the pattern that	with up to four-digit dividends	express $3 \times (2/5)$ as $6 \times (1$	geometric shapes that are	absence of angles
	were not explicit in the rule	and one-digit divisors, using	/5), recognizing this product	formed wherever two rays	of a specified size.
	itself. For example, given the	strategies based on place	as 6 /5. (In general, n × (a /b)	share a common endpoint,	
	rule "Add 3" and the starting	value, the properties of	= (n × a)/b.)	and understand concepts of	
	number 1, generate terms in	operations, and/or the	c. Solve word problems	angle measurement.	
	the resulting sequence and	relationship between	involving multiplication of a	a. Understand an angle is	
	observe that the terms	multiplication and division.	fraction by a whole number,	measured with reference to a	
	appear to alternate between	Illustrate and explain the	e.g., by using visual fraction	circle with its center at the	
	odd and even numbers.	calculation by using equations,	models and equations to	common endpoint of the rays,	
	Explain informally why the	rectangular arrays, and/or	represent the problem. For	by considering the fraction of	
	numbers will continue to	area models	example, if each person at a	the circular arc between the	
	alternate in this way.		party will eat 3 /8 of a pound	points where the two rays	

			of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie? 4.NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express 3 /10 as 30/100, and add 3 /10 + 4 /100 = 34/100. In general, students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators, but addition and subtraction with unlike denominators is not a requirement at this grade.	intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. b. Understand an angle that turns through n one-degree angles is said to have an angle measure of n degrees. 4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure. 4.MD.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems, e.g., by using an equation with a	
Resource	Bridges – Unit 5 & 6	Bridges – Unit 5 & 6	Bridges – Unit 6	by using an equation with a symbol for the unknown angle measure. Bridges – 5 & 6	Bridges – Unit 5

Fourth Grade

Mathematics

2021-2022

WHCSD Scope and Sequence

Domain	Operations &	Numbers & Operations In	Numbers & Operations –Fractions	Measurement and Data
	Algebraic Thinking	Base Ten		
Standard	4.OA.3 Solve multistep	4.NBT.5 Multiply a whole	4.NF.1 Explain why a fraction a /b is	4.MD.1 Know relative sizes of the
	word problems posed	number of up to four digits	equivalent to a fraction $(n \times a) / (n \times b)$ by	metric measurement units within
	with whole numbers	by a one-digit whole	using visual fraction models, with attention to	one system of units. Metric units
	and having whole-	number, and multiply two	how the number and size of the parts differ	include kilometer, meter,
	number answers using	two-digit numbers, using	even though the two fractions themselves	centimeter, and millimeter;
	the four operations,	strategies based on place	are the same size. Use this principle to	kilogram and gram; and liter and
	including problems in	value and the properties of	recognize and generate equivalent fractions.	milliliter. Express a larger
	which remainders	operations. Illustrate and		measurement unit in terms of a
	must be interpreted.	explain the calculation by	4.NF.2 Compare two fractions with different	smaller unit. Record
	Represent these	using equations,	numerators and different denominators, e.g.,	measurement conversions in a
	problems using	rectangular arrays, and/or	by creating common denominators or	two-column table. For example,
	equations with a letter	area models.	numerators, or by comparing to a benchmark	express the length of a 4-meter
	standing for the		fraction such as 1 /2. Recognize that	rope in centimeters. Because 1
	unknown quantity.	4.NBT.6 Find whole-	comparisons are valid only when the two	meter is 100 times as long as a 1
	Assess the	number quotients and	fractions refer to the same whole. Record the	centimeter, a two-column table
	reasonableness of	remainders with up to four-	results of comparisons with symbols >, =, or	of meters and centimeters
	answers using mental	digit dividends and one-	<, and justify the conclusions, e.g., by using a	includes the number pairs 1 and
	computation and	digit divisors, using	visual fraction model.	100, 2 and 200, 3 and 300,
	estimation strategies	strategies based on place		
	including rounding.	value, the properties of	4.NF.5 Express a fraction with denominator	4.MD.2 Solve real-world
		operations, and/or the	10 as an equivalent fraction with	problems involving money, time,
		relationship between	denominator 100, and use this technique to	and metric measurement. A.
		multiplication and division.	add two fractions with respective	Using models, add and subtract
		Illustrate and explain the	denominators 10 and 100. For example,	money and express the answer in
		calculation by using	express 3 /10 as 30/100, and add 3 /10 + 4	decimal notation. B. Using
		equations, rectangular	/100 = 34/100. In general, students who can	number line diagrams, clocks, or
		arrays, and/or area models.	generate equivalent fractions can develop	other models, add and subtract
			strategies for adding fractions with unlike	intervals of time in hours and
			denominators, but addition and subtraction	minutes. C. Add, subtract, and
			with unlike denominators is not a	multiply whole numbers to solve
			requirement at this grade.	metric measurement problems

	WHCSD Scope	e and Sequence	Fourth Grade	Mathematics	2021-2022
			with denoming rewrite 0.62 at 0.62 meters; diagram. 4.NF.7 Comparisons by reasoning comparisons decimals referesults of comparisons comparisons decimals referesults of comparisons decimals references decimals	ecimal notation for fractions nators 10 or 100. For example, as 62/100; describe a length as locate 0.62 on a number line are two decimals to hundredths about their size. Recognize that are valid only when the two er to the same whole. Record the nparisons with the symbols >, =, ify the conclusions, e.g., by using el.	2
Resource	Bridges – Unit 7	Bridges – Unit 7	Bridges – Uni	t 7	Bridges – Unit 8 (Playground Design); spirals all MD standards

	Quarter 1 Learning Targets	
Ohio Standard	Learning Targets	Notes
	Solve multiplication facts through 10 x 10 and solve related division facts through 100 divided by 10.	This is a 3 rd grade skill, but learning target can be used as a review.
4.OA.1	Interpret a multiplication equation as a comparison.	
	Represent verbal statements of multiplicative comparisons as multiplication equations.	
	Multiply to solve word problems involving multiplicative comparisons by using drawings and equations with a symbol for the unknown to represent the problem.	See table 2 in the Appendix for word problem examples.
4.OA.2	Divide to solve word problems involving multiplicative comparison by using drawings and equations with a symbol for the unknown to represent the problem.	
4.OA.3	Solves multi-step word problems posed with whole numbers and having whole-number answers using addition and subtraction.	
	Represent addition and subtraction word problems using equations with a letter standing for the unknown quantity.	
	Assess the reasonableness of answers using mental computation and estimation strategies.	
	Find all factor pairs for a whole number in the range of 1-100.	
	Recognize that a whole number is a multiple of each of its factors.	
4.OA.4	Determine whether a given whole number in the range of 1-100 is a multiple of a given one-digit number.	
	Use models to explain and justify if a given whole number in the range of 1-100 is prime or composite. ¹	
	Determine whether a given whole-number in the range of 1-100 is prime or composite.	
4.NBT.1	Recognize that in a multi-digit whole number, a digit in the ones place represents ten times what is represents in the place to its right by applying concepts of place value, multiplication or division.	
4.NBT.5	Multiplies 2-and 3-digit whole numbers by 1-digit whole number using strategies based on place value and the properties of operations.	Spirals back in Quarter 3
1.1101.5	Illustrate and explain 2-and 3-digit whole numbers by 1-digit calculation by using equations, rectangular arrays, and/or area models.	
	Find whole number quotients and remainders with up to two-digit dividends and one-digit divisors using strategies based on place value.	
4.NBT.6	Illustrate and explain whole number division calculations by using equations, rectangular arrays, and/or area models (two-digit dividends and one-digit divisors).	

¹ Instructional Focus recommended by the ODE's Mathematics Model Curriculum; Learning Target needed for complete standard mastery

	Quarter 2 Learning Targets	
Ohio Standard	Learning Targets	Notes
	Solves multi-step word problems posed with whole numbers and having whole-number answers using the four operations.	Spirals back in Quarters 3 & 4.
	Interpret and explain the use of remainders with respect to context. 1	Apply to word problems.
4.OA.3	Represent word problems using equations with a letter standing for the unknown quantity.	Spirals back in Quarters 3 & 4.
	Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Spirals back in Quarters 3 & 4.
	Read and write multi-digit whole numbers using standard form.	
	Read and write multi-digit whole numbers using word form.	
	Read and write multi-digit whole numbers using expanded form.	
	Use patterns in the place value system to read and write numbers. 1	
4.NBT.2	Compare two multi-digits numbers based on meanings of the digits in each place, using >, =, and <	Compare with same/different
	symbols to record the results of comparisons (numbers less than or equal to 1,000, 000).	number of digits, same/different leading numbers
	Create numbers given specific criteria. 1	
	Use place value understanding to round multi-digit whole numbers to any place through 1,000,000.	
	Develop and generalize rounding rules for larger numbers ¹	
4.NBT.3	Identify or create numbers that will round to a chosen number. ¹	
	Explore the purposes of rounding. ¹	
4.NBT.4	(Introductory) Fluently add and subtract multi-digit whole numbers using a standard algorithm.	Mastery expected in Quarter 3
	Explain why a fraction a/b is equivalent to fraction (n x b) by using visual fraction models.	Include wholes and values greater
	Recognize equivalent fractions on number lines or using other length models.	than a whole; Use denominators 2,
4.NF.1	Generate equivalent fractions on number lines or using other length models.	3, 4, 5, 6, 8, 10, 12, and 100 ¹ ; spirals back in Quarter 4
	Compare two fractions with different numerators and denominators by creating common denominators	Use the following benchmark
	or numerators or by comparing to a benchmark fraction.	fractions, 0, ½, and 1 to compare
	Recognize that comparisons are valid only when the two fractions refer to the same whole.	
	Represent fractions with different numerators and denominators given pairs of visual models. ¹	Shaded area models can be used
4.NF.2	Record results of fraction comparisons with the symbols >, =, or <.	
	Justify the conclusions of fraction comparisons.	

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	Decompose a fraction into sums of fractions with the same denominator in more than one way,	See standard for examples
	recording each decomposition by an equation.	
4.NF.3	Justify decompositions of fractions.	
	Understand addition of fractions as joining parts referring to the same whole.	
	Understand subtraction of fraction as separating parts referring to the same whole.	
	Add and subtract fractions with like denominators. 1	
	Add and subtract mixed numbers with like denominators by replacing each mixed number with an	
	equivalent fraction, and/or using the relationship between addition and subtraction.	
4.NF.3	Solve word problems involving addition and subtraction of fractions referring to the same whole and	
	having like denominators by using visual fraction models and equations to represent the problem.	
4.NF.6	Use decimal notation for fractions with denominators 10 or 100.	
	Compares two decimals to hundredths by reasoning about their size.	
	Recognize that comparisons are valid only when two decimals refer to the same whole.	
4.NF.7	Record the results of comparisons of decimals through hundredths with the symbols >, =, < and justify	
	the conclusions.	
	Know relative sizes of the metric measurement units within one system of units including metric length	
	(kilometer, meter, centimeter), metric mass (kilogram, gram), and metric volume (liter, milliliter).	
4.MD.1	Express a larger measurement unit in terms of a small unit.	
	Record measurement conversions in a two-column table.	See standard for example
	Solve real-world problems involving metric measurement (distances, mass and volume) by adding,	Teach with 4.MD.1
4.MD.2	subtracting, and multiplying whole numbers.	
	Solve real-world problems involving money by using models to add and subtract. Express the answer in decimal notation.	

¹ Instructional Focus recommended by the ODE's Mathematics Model Curriculum; Learning Target needed for complete standard mastery

	Quarter 3 Learning Targets	
Ohio Standard	Learning Targets	Notes
	Solves multi-step word problems posed with whole numbers and having whole-number answers using the four operations in which remainders must be interpreted.	Spirals back in Quarter 4.
4.OA.3	Represent word problems using equations with a letter standing for the unknown quantity.	
	Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	
	Generate a number pattern that follows a given rule.	Include patterns that repeatedly add and multiply whole numbers ¹
	Identify apparent features of a number pattern that were not explicit in the rule itself.	See standard for examples.
4.OA.5	Generate a shape pattern that follows a given rule.	Growing sequences of designs &
	Identify apparent features of a shape pattern that were not explicit in the rule itself.	repeated sequences should be included
4.NBT.4	Fluently add and subtract multi-digit whole numbers using a standard algorithm.	
	Multiply a whole number of up to four-digits by a one-digit whole number.	
	Illustrate and explain up to four-digit by a one-digit whole number multiplication calculations by using	
	equations, rectangular arrays, and/or area models.	
4.NBT.5	(Introductory) Multiply two two-digit whole numbers using strategies based on place value and properties of operations.	Mastery expected in Quarter 4
	(Introductory) Illustrate and explain two two-digit whole numbers multiplication calculations by using equations, rectangular arrays, and/or area models.	
4.NBT.6	Find whole number quotients and remainders with up to four-digit dividends and one-digit divisors using strategies based on place value, the properties of operation, and/or the relationship between multiplication and division.	
	Illustrate and explain whole number division calculations by using equations, rectangular arrays, and/or area models.	
	Understand a multiple of a/b as a multiple of 1/b.	See standard (part a) for example.
	Use the understanding of a multiple to multiply a fraction by a whole number.	See standard (part b) for example.
	Solves word problems involving multiplication of a fraction by a whole number by using visual fraction	See standard (part c) for problem
4.NF.4	models and equations to represent the problem.	examples.
	Express a fraction with denominator of 10 as an equivalent fraction with denominator of 100.	Convert fractions from 10 to 100 in the denominator

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4.NF.5	Use equivalent fractions to add two fraction with the respective denominators 10 and 100.	See standard for example.
	Develop efficient strategies to determine the area of rectangles in real-world situations and	See standard for examples.
4.MD.3	mathematical problems.	
	Develop efficient strategies to determine the perimeter of rectangles in real-world situations and	
	mathematical problems.	
	Interpret data in picture graphs to solve problems using numbers and operations.	
	Display data in picture graphs to solve problems using numbers and operations.	
	Interpret data in bar graphs to solve problems using numbers and operations.	
4.MD.4	Display data in bar graphs to solve problems using numbers and operations.	
	Interpret data in line plots to solve problems using numbers and operations.	
	Display data in line plots to solve problems using numbers and operations.	
	Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint.	Can be taught with Geometry standards
4.MD.5	Understand an angle is measured with reference to a circle with its center at the common endpoint of	360° in a circle, one degree is
	the rays.	1/360, straight angle = 180°, right
	Understand an angle that turns through n one-degree angles is said to have an angle measure of n	angle = 90°
	degrees.	
4.MD.6	Measure angles in whole-number degrees using a protractor.	
	Sketch angles if a specific measure.	
	Recognize angle measures as additive	
4.MD.7	Solve addition and subtraction problems to find unknown angles on a diagram in real-world and	
	mathematical problems by using an equation with a symbol for the unknown measure.	
	Identify points, lines, line segments, rays, perpendicular and parallel lines. 1	
	Draw points, lines, line segments, rays, perpendicular and parallel lines.	
	Identify points, lines, line segments, rays, perpendicular and parallel lines in two-dimensional figures.	
	Identify right, acute and obtuse angles.	
4.G.1	Draw right, acute and obtuse angles.	
	Identify right, acute and obtuse angles in two-dimensional figures.	
	Use correct language when discussing points, lines, line segments, rays, and angles. 1	
4.G.2	Classify two dimensional figures based on:	
	 Presence or absence of acute, right, and/or obtuse angles; 	
	 Presence or absence of parallel and/or perpendicular sides; and/or 	
	Presence or absence of symmetry	

¹ Instructional Focus recommended by the ODE's Mathematics Model Curriculum; Learning Target needed for complete standard mastery

Quarter 4 Learning Targets			
Ohio Standard	Learning Targets	Notes	
	Know relative sizes of the metric measurement units within one system of units including metric length (kilometer, meter, centimeter), metric mass (kilogram, gram), and metric volume (liter, milliliter).		
4.MD.1	Express a larger measurement unit in terms of a small unit.		
	Record measurement conversions in a two-column table.	See standard for example	
	Solve real-world problems involving metric measurement (distances, mass and volume) by adding, subtracting, and multiplying whole numbers.	Teach with 4.MD.1	
4.MD.2	Solve real-world problems involving time by using number line diagrams, clocks or other models to add and subtract intervals of time in hours and minutes.		
	Solves multi-step word problems posed with whole numbers and having whole-number answers using the four operations in which remainders must be interpreted.		
	Represent word problems using equations with a letter standing for the unknown quantity.		
4.OA.3	Assess the reasonableness of answers using mental computation and estimation strategies including rounding.		
4.NBT.5	Multiply two two-digit whole numbers using strategies based on place value and properties of operations.		
1.1101.3	Illustrate and explain two two-digit whole numbers multiplication calculations by using equations, rectangular arrays, and/or area models.		
4.NBT.6	Find whole number quotients and remainders with up to four-digit dividends and one-digit divisors using strategies based on place value, the properties of operation, and/or the relationship between multiplication and division.		
4.1101.0	Illustrate and explain whole number division calculations by using equations, rectangular arrays, and/or area models.		
	Explain why a fraction a/b is equivalent to fraction (n x b) by using visual fraction models.		
4.NF.1	Recognize equivalent fractions on number lines or using other length models.		
	Generate equivalent fractions on number lines or using other length models.		
	Compare two fractions with different numerators and denominators by creating common denominators	Use the following benchmark	
	or numerators or by comparing to a benchmark fraction.	fractions, 0, ½, and 1 to compare	
	Recognize that comparisons are valid only when the two fractions refer to the same whole.		
	Represent fractions with different numerators and denominators given pairs of visual models. 1	Shaded area models can be used	
4.NF.2	Record results of fraction comparisons with the symbols >, =, or <.		

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	Justify the conclusions of fraction comparisons.	
4.NF.6	Use decimal notation for fractions with denominators 10 or 100.	
	Compares two decimals to hundredths by reasoning about their size.	
	Recognize that comparisons are valid only when two decimals refer to the same whole.	
4.NF.7	Record the results of comparisons of decimals through hundredths with the symbols >, =, < and justify	
	the conclusions.	

¹ Instructional Focus recommended by the ODE's Mathematics Model Curriculum; Learning Target needed for complete standard mastery