Grade Four

Tecumseh School District
Math Curriculum Map

August/September

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
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.	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.	Major	X		X	Multi- Digit Whole Number Digit
4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Major	X		X	Expanded Form Number names Base Ten numerals
4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.	Round multi-digit whole numbers to any place using place value.	Major	X		X	Round
4.NF.6 Use decimal notation for fractions with denominators 10 or 100.	Explain the values of digits in the decimal places. Read and write decimals through hundredths.	Major	X		X	Fraction Decimal Notation Denominator Numerator

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
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	Rename and recognize a fraction with a denominator of 10 as a fraction with a denominator of 100. Recognize that two fractions with unlike denominators can be equivalent. Use knowledge of renaming tenths to hundredths to add two fractions with denominators 10 and 10	Major	X		X	Equivalent Fraction
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional	x			perpendicular, parallel, obtuse, right, point, line segment, rays, angles,
4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional	X			perpendicular, parallel, obtuse, right, point, line segment, rays, angles,
4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a 2-column table.	Know the metric and standard units of measure	Additional	X			Km,m,cm,kg,g.lb.oz,l,m minute, second

October

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
4.NF.6 Use decimal notation for fractions with denominators 10 or 100	Recognize multiple representations of fractions with denominators 10 or 100. Rename fractions with 10 and 100 in the denominator as decimals. Explain how decimals and fractions relate Represent fractions with denominators 10 or 100 with multiple representations and decimal notation.	Major		X	x	
4.NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.	Recognize that comparisons are valid only when the two decimals refer to the same whole. Compare two decimals to hundredths by reasoning about their size. Record the results of comparisons with the symbols >, =, or <. Justify the conclusions using visual models and other methods.	Major		X		Justify the conclusio Use a visual model
4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.	Fluently add and subtract multi-digit whole numbers less than 100,000,000 using standard algorithm	Major	X		X	Algorithm
4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself	Identify a number or shape pattern. Generate a number or shape pattern that follows a given rule. Analyze a pattern to determine features not apparent in the rule (always odd or even, alternates between odd and even, etc.)	Support	X		X	Rule Pattern Terms Generate

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a 2-column table	Know the metric and standard units of measure	Additional		x		
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x		perpendicular, parallel, obtuse, right, point, line segment, rays, angles,
4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x		perpendicular, parallel, obtuse, right, point, line segment, rays, angles,

November

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
4.OA.1 Interpret a multiplication equation as a comparison, e.g. , interpret 35 = 5 x 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	Know multiplication strategies. Interpret a multiplication equation as a comparison (e.g. 18 = 3 times as many as 6. Represent verbal statements of multiplicative comparisons as multiplication equations	Support	X		X	Times as many Fewer Larger Interpret an Equation Represent Verbal Statements
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	Multiply or divide to solve word problems. Describe multiplicative comparison. Describe additive comparison.	Support	X		X	Symbol for the Unknown Number
4.OA.4 Find all factor pairs for a whole number in the range 1–100. 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.	Define prime and composite numbers. Know strategies to determine whether a whole number is prime or composite. Identify all factor pairs for any given number 1-100. Recognize that a whole number is a multiple of each of its factors. Determine if a given whole number (1-100) is a multiple of a given one-digit number.	Support	X		X	Factor Pairs Factors Multiple Prime Composite

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
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.	Multiply a whole number of up to four digits by a one-digit whole number. Multiply two two-digit numbers.	Major	X		X	Properties of Operations Rectangular Array Area Models
4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a 2-column table	Know the metric and standard units of measure	Additional		x		
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x		perpendicular, parallel, obtuse, right, point, lin segment, rays, angles,
4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x		perpendicular, parallel, obtuse, right, point, line segment, rays, angles,

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.	Know that the formula for the perimeter of a rectangle is 2L + 2W or L+L+W+W. Know that the formula for the area of a rectangle is L x W. Apply the formula for perimeter of a rectangle to solve real world and mathematical problems. Apply the formula for area of a rectangle to solve real world and mathematical problems. Solve area and perimeter problems in which there is an unknown factor (n).	Additional	X		X	Area Perimeter Formula

December

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
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.	Determine appropriate operation and solve word problems involving multiplicative comparison. Determine and use a variety of representations to model a problem involving multiplicative comparison. Distinguish between multiplicative comparison and additive comparison (repeated addition).	Major		X		
4.OA.4 Find all factor pairs for a whole number in the range 1–100. 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.	Determine if a given whole number (1-100) is a multiple of a given one-digit number.	Support		X		
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.	Use strategies based on place value and the properties of operations to multiply whole numbers. Illustrate and explain calculations by using written equations, rectangular arrays, and/or area models.	Major		X	X	
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.	Use the strategies based on place value, the properties of operations, and/or the relationship between multiplication and division .Illustrate and explain the calculation by using written equations, rectangular arrays, and/or area models	Major	X		X	Quotients Remainder Divisors Dividend

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x		perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex
4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x		perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex
4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a 2-column table	Know the metric and standard units of measure	Additional		x		

January

Indicator	Learning Targets	Mojor Contnet	Introduce	Continue	Assess	Vocabulary
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.	Use the strategies based on place value, the properties of operations, and/or the relationship between multiplication and division .Illustrate and explain the calculation by using written equations, rectangular arrays, and/or area models	Major		X	X	

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.	Divide whole numbers including division with remainders.	Major	X			Estimation Multi-step Mental math Reasonableness
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Addition al		x		perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex
4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Addition al		x		perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex
4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a 2-column table	Know the metric and standard units of measure	Addition al		x		

February

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary

Standard	Unpacked Standard		Q1	Q2	Q3	Q4	Vocabulary
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	Represent multi-step word problems using equations with a letter standing for the unknown quantity. Interpret multistep word problems (including problems in which remainders must be interpreted) and determine the appropriate operation(s) to solve. Assess the reasonableness of an answer in solving a multistep word problem using mental math and estimation strategies (including rounding)				X	X	
4.NF.1 Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	Recognize and identify equivalent fractions with unlike denominators Explain why a/b is equal to (nxa)/(nxb) by using fraction models with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. (Ex: Use fraction strips to show why ½=2/4=3/6=4/8) Use visual fraction models to show why fractions are equivalent (ex: ¾ = 6/8) Generate equivalent fractions using visual fraction models and explain why they can be called "equivalent".	Major	X			X	Equivalent Unit Fraction (review)
4.NF.2 Compare two fractions with different numerators and different denominators, e.g. by creating common denominators or numerators, or by comparing to a benchmark fraction such as ½. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols <, >, =, and justify the conclusion, e.g. by using a visual fraction model.	Recognize fractions as being greater than, less than, or equal to other fractions. Record comparison results with symbols: <, >, = Use benchmark fractions such as ½ for comparison purposes. Make comparisons based on parts of the same whole.	Major	X			X	Benchmark Fraction Common Denominator

Standard	Skills	Priority					Vocabulary
4.NF.3b Understand a fraction a/b with a > 1 as a sum of fractions 1/b. b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: 3/8 = 1/8 + 1/8 + 1/8; 3/8 = 1/8 + 2/8; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8.	Add and subtract fractions with like denominators. Recognize multiple representations of one whole using fractions with the same denominator. Using visual fraction models, decompose a fraction into the sum of fractions with the same denominator in more than one way. Record decompositions of fractions as an equation and explain the equation using visual fraction models.	Major	X		X		Justify Decomposition Same Denominator
4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit (1/2, ¼, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots	Add and subtract fractions. Analyze and interpret a line plot to solve problems involving addition and subtraction of fractions.	Additional	X		X		Line Plot Data Set Construct
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x			perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex
4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x			perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex

4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a 2-column table	Know the metric and standard units of measure	Addition al		x		

March

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
4.NF.2 Compare two fractions with different numerators and different denominators, e.g. by creating common denominators or numerators, or by comparing to a benchmark fraction such as ½. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols <, >, =, and justify the conclusion, e.g. by using a visual fraction model	Compare two fractions with different numerators, e.g. by comparing to a benchmark fraction such as ½. Compare two fractions with different denominators, e.g. by creating common denominators, or by comparing to a benchmark fraction such as ½. Justify the results of a comparison of two fractions, e.g. by using a visual fraction model.	Major		X	X	
4.NF.3a Understand a fraction a/b with a>1 as a sum of fractions 1/b. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.	Accumulating unit fractions (1/b) results in a fraction (a/b), where a is greater than 1. From the Introduction: Students extend previous understandings about how fractions are built from unit fractions, composing (joining) fractions from unit fractions, and decomposing (separating) fractions into unit fractions... Using fraction models, reason that addition of fractions is joining parts that are referring to the same whole. Using fraction models, reason that subtraction of fractions is separating parts that are referring to the same whole.	Major	X		X	Mixed Number Like Denominator

4.NF.3c Understand a fraction a/b with a >1 as a sum of fractions 1/b. c. Add and subtract mixed numbers with like denominators, e.g. by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.	Add and subtract mixed numbers with like denominators by using properties of operations and the relationship between addition and subtraction. Replace mixed numbers with equivalent fractions, using visual fraction models. Replace improper fractions with a mixed number, using visual fraction models. Add and subtract mixed numbers by replacing each mixed number with an equivalent fraction.	Major	X		X	
4.NF.3d Understand a fraction a/b with a >1 as a sum of fractions 1/b. d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.	Add and subtract fractions with like denominators. 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.	Major	X		x	

4.NF.4a Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. a. Understand a fraction a/b as a multiple of 1/b. For example, use a visual fraction model to represent 5/4 as the product 5 x ¼, recording the conclusion by equation 5/4 = 5 x (1/4)	Represent a fraction a/b as a multiple of 1/b (unit fractions). For example, represent 5/4 as an accumulation of five ¼'s. From the Introduction: Students extend previous understandings about how fractions are built from unit fractions, using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number. Apply multiplication of whole numbers to multiplication of a fraction by a whole number using visual fraction models. (For example, just as students know that four 3's can be represented by 4x3, students know that five 1/4's is 5 x 1/4 which is 5/4.)	Support	X		X	
4.NF.4b Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. b. Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number.	From the Introduction: Extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply by a whole number. Explain that a multiple of a/b is a multiple of 1/b (unit fraction) using a visual fraction model. Multiply a fraction by a whole number by using the idea that a/b is a multiple of 1/b. For example, use a visual fraction model to express 3 x (2/5) as 6 x (1/5) recognizing this product as (6/5).	Support	X		X	

Standard	Description					
4.NF.4c Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.	Multiply a fraction by a whole number. Use fraction models and equations to represent the problem. Solve word problems involving multiplication of a fraction by a whole number.	Support	X			X	
4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit (1/2, ¼, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots	Add and subtract fractions. Analyze and interpret a line plot to solve problems involving addition and subtraction of fractions.	Additional	X			X	
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x			
4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	Identify geometric terms: perpendicular, parallel, acute, obtuse, right, point, line, line segment, rays, angles, vertex	Additional		x			
4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a 2-column table	Know the metric and standard units of measure	Additional		x			

APRIL

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a 2-column table	Know relative size of measurement units (km, m; kg, g; lb, oz; L, mL; hrs, min, sec) Compare the different units within the same system of measurement (e.g. 1 ft = 12 in; 1 lb = 16 oz) Convert larger units of measurement within the same system to smaller units and record conversions in a 2-column table.	Additional		x	x	

Standard	Learning Targets					
4.MD.2 Use four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	Add, subtract, multiply, and divide fractions and decimals. Express measurements given in a larger unit in terms of a smaller unit. Solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money. Solve word problems involving measurement that include simple fractions or decimals. Solve word problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	Addition		X	x	
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Analyze two-dimensional figures to identify points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines.	Additional		x	x	

4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	Identify parallel or perpendicular lines in two dimensional figures. Recognize acute, obtuse, and right angles. Identify right triangles. Classify two-dimensional figures based on parallel or perpendicular lines and size of angles. Classify triangles as right triangles or not right.	Additional		x	x	

May

Indicator	Learning Targets	Major Content	Introduce	Continue	Assess	Vocabulary
4.MD.5ab Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays 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. An angle that turns through n one-degree angles is said to have an angle measure of n degree.	Define angle. Recognize a circle as a geometric figure that has 360 degrees. Recognize and identify an angle as a geometric shape formed from 2 rays with a common endpoint. Recognize that an angle is a fraction of a 360 degree circle. Explain the angle measurement in terms of degrees. Compare angles to circles with the angles point at the center of the circle to determine the measure of the angle. Calculate angle measurement using the 360 degrees of a circle.	Additional	X		X	Fraction of the circular arcs Common endpoint of the rays Intersect Degrees

4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	Recognize that angles are measured in degrees (°). Read a protractor. Determine which scale on the protractor to use, based on the direction the angle is open. Determine the kind of angle based on the specified measure to decide reasonableness of the sketch. Measure angles in whole number degrees using a protractor. Sketch angles of specified measure	Additional	X		X		Protractor
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 symbol for the unknown angle measure.	Recognize that an angle can be divided into smaller angles Solve addition and subtraction equations to find unknown angle measurements on a diagram. Find an angle measure by adding the measurements of the smaller angles that make up the larger angle. Find an angle measure by subtracting the measurements of the smaller angle from the larger angle.	Additional	X		X		Angle Measurment

4.G.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry	Recognize lines of symmetry for a two-dimensional figure. Recognize a line of symmetry as a line across a figure that when folded along creates matching parts. Draw lines of symmetry for two-dimensional figures. Identify line-symmetric figures.	Additional	X		x	Symmetry