Time	Cluster	Standards	Learning Targets	Lesson Topics/Resources
1st 9 Weeks				
1st Nine Weeks	**Numeration, Place Value, and Addition/ Subtraction**	4.NBT.A.1 Recognize that in a multi-digit whole number (less than or equal to 1,000,000), a digit in one place represents 10 times as much as it represents in the place to its right. For example, recognize that 7 in 700 is 10 times bigger than the 7 in 70 because 700 ÷ 70 = 10 and 70 × 10 = 700.	I can read and write numbers up to 1,000,000 place using numbers and words. I can identify the place value of a specific digit in a number and tell the quantity it represents.	1.1, 4.1, 6.1
		4.NBT.A.2 Read and write multi-digit whole numbers (less than or equal to 1,000,000), using standard form, word form, and expanded form (e.g., the expanded form of 4,256 is written as 4 × 1,000 + 2 × 100 + 5 × 10 + 6 × 1). Compare two multi-digit numbers based on meanings of the digits in each place and use the symbols >, =, and < to show the relationship.	I can use the symbols <, >, = to compare numbers. I can solve word problems using whole numbers. I can use letters and symbols to represent unknown numbers and write a simple math equation.	1.2, 1.3, 1.4, 1.6 1.5, 1.6, 2.4, 4.2, 4.10, 5.2, 6.2
		4.NBT.A.3 Round multi-digit whole numbers to any place (up to and including the hundred-thousand place) using understanding of place value.	I can round numbers using place value.	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 5.5
		4.NBT.B.4 Fluently add and subtract within 1,000,000 using appropriate strategies and algorithms.	I can use different strategies to add and subtract to the millions place value.	2.5, 2.6, 2.9, 4.8, 5.5, 6.11, 7.7, 7.9

		4.OA.A.3 Solve multi-step contextual 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.	I can solve problems using addition, subtraction, multiplication, and division. I can interpret remainders. I can show the unknown quantity by using a letter in the equation. I can determine if my answer is reasonable.	
1st Nine Weeks	**Multiplication and Division**	4.NBT.B.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two 2-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.B.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.	I can solve problems using whole number of multi-digit multiplication. I can solve problems using whole number division with one or two-digit divisors.	3.1, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 5.1, 5.2, 5.4, 5.5, 5.6 3.1, 3.2,.6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10

		4.OA.B.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.	I can find factor pairs for numbers 1-100. I can determine if a number is prime or composite.	3.7, 4.1, 6.1, 8.1

2nd 9 Weeks				
2nd Nine Weeks	**Multiplication and Division**	4.OA.A.1 Interpret a multiplication equation as a comparison (e.g., interpret 35 = 5 × 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.	I can interpret a multiplication comparison as a multiplication equation.	3.3
		4.OA.A.2 Multiply or divide to solve contextual problems involving multiplicative comparison, and distinguish multiplicative comparison from additive comparison. For example, school A has 300 students, and school B has 600 students: to say that school B has two times as many students is an example of multiplicative comparison; to say that school B has 300 more students is an example of additive comparison.	I can multiply or divide to solve problems.	3.3, 3.4, 3.8
		4.OA.A.3 Solve multi-step contextual 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	I can solve multi step word problems using the four operations.	2.5, 2.6, 2.9, 4.8, 5.5, 6.11, 7.7, 7.9

		including rounding.		
	Geometry	4.MD.A.3 Know and apply the area and perimeter formulas for rectangles in real- world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor. 4.MD.C.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: ✓ Understand that 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. ✓ Understand an angle that turns through 1/360 of a circle is called a "one-degree angle" and can be used to measure angles. An angle that turns through n one-degree angles is said to have an angle measure of n degrees and represent a fractional portion of	I can use area and perimeter formulas for rectangles. I can recognize angles as shapes that share a common endpoint and rays. I can recognize that an angle is part of a circle. I can understand that an angle turn of one degree is 1/360.	13.1, 13.2, 13.3, 13.4, 13.5 14.3, 14.4, 14.5 14.3, 14.4 14.4 14.5, 14.6

		the circle. 4.MD.C.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure. 4.MD.C.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). 4.G.A.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse, straight, reflex), and perpendicular and parallel lines. Identify these in two-dimensional figures. 4.G.A.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. 4.G.A.3 Recognize and draw lines of	I can measure angles using a protractor. I can sketch angles when given a specific measurement. I can solve problems using angle measures. I recognize that angle measures are additive. I can draw points, lines, line segments, rays, angles, and perpendicular and parallel lines. I can classify 2 D shapes based on their lines. I can classify right triangles based on right angles. I can recognize and draw lines	14.7 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 14.11 14.8, 14.9, 14.11 14.10

		symmetry for two-dimensional figures.	of symmetry.	

3rd 9 Weeks				
3rd Nine Weeks	**Patterns**	4.OA.C.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. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.	I can represent and analyze patterns using words, tables, and graphs.	2.2, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9
	Fractions and Decimals	4.NF .A.1 4.NF .A.2 4.NF .B.3 4.NF .B.4 4.NF .C.5 4.NF .C.6 4.NF.C.7	I can add and subtract fractions with like denominators and simplify the answer. I can create equal forms of common fractions and decimals and use them to compare size. I can solve word problems using fractions and decimals. I can find and place mixed numbers on a number line. I can decompose a fraction as the sum of the fraction.	8.3, 8.4, 8.5 8.6, 8.7, 8.8 8.9, 8.10, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7

		Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{a \times n}{b \times n}$ or $\frac{a \div n}{b \div n}$ 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. *For example,* $\frac{3}{4} = \frac{3 \times 2}{4 \times 2} = \frac{6}{8}$. Compare two fractions with different numerators and different denominators by creating common denominators or common numerators or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Use the symbols >, =, or < to show the relationship and justify the conclusions. Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$. *For example,* $\frac{4}{5} = \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$. ✓ Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. ✓ Decompose a fraction into a sum of fractions with the same denominator in more than one way (e.g., $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$), recording each decomposition by using an equation. Justify decompositions by using a visual fraction model. ✓ Add and subtract mixed numbers with like denominators by replacing each mixed number with an equivalent fraction and/or by using properties of operations and the relationship between addition and subtraction. ✓ Solve contextual problems involving addition and subtraction of fractions referring to the same whole and having like denominators. Apply and extend previous understandings of multiplication as repeated addition to multiply a fraction by a whole number.		8.9, 9.1, 9.2, 9.6, 9.7 9.5, 9.6, 9.7 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7 9.8, 9.9
	Fractions and Decimals	4.NF .A.1 4.NF .A.2 4.NF .B.3 4.NF .B.4 4.NF .C.5 4.NF .C.6 4.NF.C.7	I can use a model to represent improper and proper fractions. I can use a model to multiply a whole number times a fraction. I can solve word problems that involve multiplication of a whole number times a fraction.	

		✓ Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$. *For example, use a visual fraction model to represent $\frac{5}{4}$ as the product $5 \times \frac{1}{4}$, recording the conclusion by the equation $\frac{5}{4} = 5 \times \frac{1}{4}$.* ✓ Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$ and use this understanding to multiply a whole number by a fraction. *For example, use a visual fraction model to express $3 \times \frac{2}{5}$ as $6 \times \frac{1}{5}$, recognizing this product as $\frac{6}{5}$.* (In general, $n \times \frac{a}{b} = \frac{(n \times a)}{b} = (n \times a) \times \frac{1}{b}$. ✓ Solve contextual problems involving multiplication of a whole number by a fraction (e.g., by using visual fraction models and equations to represent the problem). *For example, if each person at a party will eat $\frac{3}{8}$ of a pound of roast beef, and there will be 4 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?* 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 $\frac{3}{10}$ as $\frac{30}{100}$ and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$.* Read and write decimal notation for fractions with denominators 10 or 100. Locate these decimals on a number line. 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. Use the symbols >, =, or < to show the relationship and justify the conclusions.	I can make equivalent fractions using denominators of 10 and 100. I can use equivalent fractions to add fractions with denominators of 10 and 100. I can read and write decimals that have a fractional portion of 10 and 100. I can locate tenths and hundredths on a number line. I can compare two decimals up to the hundredths place value.	9.8, 9.9 9.8, 9.9 9.8, 9.9

	Measurement, Time, Money, Area, and Perimeter	4.MD.A.1 Measure and estimate to determine relative sizes of measurement units within a single system of measurement involving length, liquid volume, and mass/weight of objects using customary and metric units. 4.MD.A.2 Solve one- or two-step real-world problems involving whole number measurements with all four operations within a single system of measurement including problems involving simple fractions. 4.MD.B.4 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.	I can determine the appropriate size of unit of measurement in problem situations involving length, capacity or weight. I can solve problems involving area and/or perimeter of rectangular figures. I can make a line plot to show data.	11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 12.1, 12.2, 12.3, 12.5, 12.6 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 11.9, 11.10, 12.4, 12.5, 12.6 11.8

4th 9 Weeks				
4th Nine Weeks	**Numeration, Place Value, and Addition/ Subtraction**	4.NBT.4 Fluently add and subtract within 1,000,000 using appropriate strategies and algorithms. 4.OA.A.3 Solve multi-step contextual 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.	I can add and subtract to one million. I can solve multi step word problems using addition, subtraction, multiplication or division. I can interpret remainders. I can use mental math to determine if my answer is reasonable.	*ongoing fluency *ongoing