

4th Grade MCCRS Curriculum Map**First Nine Weeks****Unit 1: Geometry**

- 4.G.1

Unit 2: Measurement and Data

- 4.MD.5a
- 4.MD.5b
- 4.MD.6
- 4.MD.7

Unit 3: Numbers and Base Ten

- 4.NBT.2
- 4.NBT.1
- 4.NBT.3
- 4.NBT.4
- 4.NBT.5

Unit 4: Operations and Algebraic Thinking

- 4.OA.4
- 4.OA.1
- 4.OA.2 (multiplication)

4th Grade MCCRS Curriculum Map**Second Nine Weeks****Unit 3: Numbers and Base Ten**

- 4.NBT.6

Unit 4: Operations and Algebraic Thinking

- 4.OA.2 (Division)
- 4.OA.3
- 4.OA.5

Unit 2: Measurement and Data

- 4.MD.3

Unit 5: Fractions

- 4.NF.1
- 4.NF.2
- 4.NF.3a
- 4.NF.3b
- 4.NF.3c
- 4.NF.3d
- 4.NF.4a
- 4.NF.4b
- 4.NF.4c

4th Grade MCCRS Curriculum Map

Third Nine Weeks

Unit 5: Fractions

- 4.NF.5
- 4.NF.6
- 4.NF.7

Unit 2: Measurement and Data

- 4.MD.1
- 4.MD.2
- 4.MD.4

Unit 1: Geometry

- 4.G.2
- 4.G.3

4th Grade MCCRS Curriculum Map**First Nine Weeks****Unit 1: Geometry**

Module 1: Draw and identify lines and angles, and classify shapes by properties of their lines and angles	
Standards	Mathematical Practices
<p>4.G.1</p> <ul style="list-style-type: none"> Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
Student Learning Target(s)	Essential Vocabulary
<ul style="list-style-type: none"> Define and recognize examples of the following: point, line, line segment, ray, angle, acute angle, right angle, obtuse angle, perpendicular, and parallel lines. Construct examples of angles and triangles that are acute, right, or obtuse. Construct examples of points, lines, line segments, and parallel and perpendicular lines. Recognize and identify points, lines, line segments, types of angles, and parallel and perpendicular lines in two-dimensional figures. 	<ul style="list-style-type: none"> classify shapes/figures properties of shapes Point line segment ray Angle vertex/vertices right angle acute angle obtuse angle Perpendicular Parallel right triangle isosceles triangle equilateral triangle scalene triangle two-dimensional

4th Grade MCCRS Curriculum Map

Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.G.1	Lesson 31	Lesson 31

Unit 2: Measurement and Data

Module 3: Geometric measurement: understand concepts of angle and measure angles	
Standards	Mathematical Practices
4.MD.5a <ul style="list-style-type: none"> 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 $\frac{1}{360}$ of a circle is called a "one-degree angle," and can be used to measure angles. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
4.MD.5b <ul style="list-style-type: none"> An angle that turns through n one degree angles is said to have an angle measure of n degrees. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.

4th Grade MCCRS Curriculum Map

<p>4.MD.6</p> <ul style="list-style-type: none"> Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.MD.7</p> <ul style="list-style-type: none"> 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. Example: Find the missing angle using an equation. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>Student Learning Target(s)</p>	<p>Essential Vocabulary</p>
<ul style="list-style-type: none"> Identify an angle. Identify benchmark angles (90°, 180°, 270°, 360°). Recognize that angles are measured within degrees of a circle. Write an angle's measurement as a fraction. Explain that an angle measurement is a fraction of a circle. Categorize angles based on their measurement (acute, obtuse, right, straight, reflex). Construct examples of an angle with a specific measurement using a protractor. Measure a given angle using a protractor. Find the measurement of an angle in a diagram when given the angle's complimentary or supplementary measurement. 	<ul style="list-style-type: none"> Measure Point end point geometric shapes Ray Angle Circle Fraction Intersect one-degree angle Protractor Decompose Addition

4th Grade MCCRS Curriculum Map

<ul style="list-style-type: none"> Find the measurement of the other three angles formed by intersecting lines when given the measurement of one angle. Write an equation to find the missing measurement of one angle when given the measurement of the second angle for complimentary and supplementary angles and find the measurement of it. Write an equation to find the missing measurement of an angle inside a larger angle when the larger angle measurement and one measurement part of the larger angle is known and find the measurement of it. 	<ul style="list-style-type: none"> Subtraction Unknown Obtuse acute 	
Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.MD.5a 4.MD.5b 4.MD.6 4.MD.7	Lessons 28, 29, and 30	Lessons 28, 29, and 30

Unit 3: Number and Base Ten

Module 1: Generalize place value understanding for multi-digit numbers	
Standards	Mathematical Practices
4.NBT.2 <ul style="list-style-type: none"> 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. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
4.NBT.1 <ul style="list-style-type: none"> Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics.

4th Grade MCCRS Curriculum Map

<p>to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.</p>	<p>MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.NBT.3</p> <ul style="list-style-type: none"> Use place value understanding to round multi-digit whole numbers to any place 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>Student Learning Target(s)</p>	<p>Essential Vocabulary</p>
<ul style="list-style-type: none"> Multiply and divide by multiples of 10. Show understanding of the relationship between place values by decomposing equations. Model place value relationships using base-ten blocks in the place value frame (ex: 10 x 50 represented as 5 tens each taken 10 times). Justify understandings by writing statements using “times as many.” Say multi-digit whole numbers (up to 1,000,000). Write multi-digit whole numbers in expanded form (ex: $2,436 = 2,000 + 400 + 30 + 6$ and $2,436 = (1,000 \times 2) + (100 \times 4) + (10 \times 3) + (1 \times 6)$). Write the whole number that is being represented by expanded notation. Write multi-digit whole numbers from place names of digits (ex: 2 thousands + 4 hundreds + 3 tens + 6 ones = 2,436). • Write whole numbers from word form to standard form and standard form to word form. Round multi-digit whole numbers up to the millions place. Use an open number line to show reasoning and understanding of rounding up to the millions place. 	<ul style="list-style-type: none"> place value greater than less than equal to <, >, =, comparisons/compare round

4th Grade MCCRS Curriculum Map

<ul style="list-style-type: none"> Identify the greatest and least number that rounds to a specified number. 		
Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.NBT.2 4.NBT.1 4.NBT.3	Lessons 1, 2, and 4	Lessons 1,2, and 4

Module 2: Use place value understanding and properties of operations to perform multi-digit arithmetic	
Standards	Mathematical Practices
4.NBT.4 <ul style="list-style-type: none"> Fluently add and subtract multi-digit whole numbers using the standard algorithm. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
Student Learning Target(s)	Essential Vocabulary
<ul style="list-style-type: none"> Add numbers up to 1,000,000 using the standard algorithm for addition. Subtract numbers up to 1,000,000 using the standard algorithm for subtraction. Regroup in order to add or subtract. Explain the steps of the addition standard algorithm and the subtraction standard algorithm. 	<ul style="list-style-type: none"> Add Addend Sum Subtract Difference Equation Strategies properties (rules about how numbers work) Reasonableness rectangular arrays Tape diagram

4th Grade MCCRS Curriculum Map

Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.NBT.4	Lesson 3	Lesson 3

Unit 4: Operations and Algebraic Thinking

Module 2: Gain familiarity with factors and multiples	
Standards	Mathematical Practices
4.OA.4 <ul style="list-style-type: none"> 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. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
Student Learning Target(s)	Essential Vocabulary
<ul style="list-style-type: none"> List factors for a given whole number. Classify numbers as prime or composite. List multiples of a given single digit number. Decide if a number is a multiple of a given one-digit number. 	<ul style="list-style-type: none"> multiplication/multiply division/divide factor pairs Factor Multiple Prime composite

4th Grade MCCRS Curriculum Map

Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.OA.4	Lesson 7	Lesson 7

Module 2: Use the four operations with whole numbers to solve problems	
Standards	Mathematical Practices
4.OA.1 <ul style="list-style-type: none"> 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. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
4.OA.2 (multiplication) <ul style="list-style-type: none"> 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. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
Student Learning Target(s)	Essential Vocabulary
<ul style="list-style-type: none"> Use a tape diagram model to make and illustrate multiplicative comparisons. Write an equation to represent a multiplicative comparison. Identify unknown quantities in multiplicative comparison equations. 	multiplication/multiply division/divide Addition Add subtraction/subtract

4th Grade MCCRS Curriculum Map

<ul style="list-style-type: none"> • Use a symbol for an unknown number. • Identify which number is being multiplied and which number tells “how many times as much.” • Solve multiplication and division problems that involve the following comparison situations: unknown product, group size unknown, number of groups unknown. • Use a tape diagram model to make and illustrate multiplicative comparisons. • Write an equation to represent a multiplicative comparison using a symbol to represent the unknown. • Determine if a word problem is additive comparison or multiplicative comparison. • Identify differences among additive comparison and multiplicative comparison word problems. 	<p>Equations Unknown Remainders Reasonableness</p>	
Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.OA.1 4.OA.2	Lesson 5 and 6	Lesson 5 and 6

Unit 3: Number and Base Ten (revisited)

Module 2: Use place value understanding and properties of operations to perform multi-digit arithmetic	
Standards	Mathematical Practices
<p>4.NBT.5</p> <ul style="list-style-type: none"> • 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. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
Student Learning Target(s)	Essential Vocabulary

4th Grade MCCRS Curriculum Map

<ul style="list-style-type: none"> ● Model multiplication by using base-ten blocks, area model, and rectangular arrays. ● Find the product of up to a four-digit by a one-digit number. ● Explain how to find the product of up to a four-digit number by a one-digit number and a two—digit number by a two— digit number. ● Find the product of a two-digit number by two-digit number and explain the strategy that was used. 	<ul style="list-style-type: none"> ● Equation ● Strategies ● properties (rules about how numbers work) ● Multiple ● Factor ● Product ● Reasonableness ● area model ● rectangular arrays
--	--

Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.NBT.5	Lesson 11	Lesson 11

4th Grade MCCRS Curriculum Map**Second Nine Weeks****Unit 3: Number and Base Ten (revisited)**

Module 2 (revisited): Use place value understanding and properties of operations to perform multi-digit arithmetic		
Standards	Mathematical Practices	
4.NBT.6 <ul style="list-style-type: none"> 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 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.	
Student Learning Target(s)	Essential Vocabulary	
<ul style="list-style-type: none"> Decompose numbers based on place value to find the quotient of a greater number divided by a one-digit number. Divide up to four-digit numbers that will result in whole numbers and remainders. Interpret remainders and how they affect the quotient. Model division by using the area model, rectangular arrays, and writing equations. Write an explanation describing how the quotient was found. 	<ul style="list-style-type: none"> Divide Divisor Dividend Quotient Reasonableness area model rectangular arrays 	
Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.NBT.6	Lesson 12	Lesson 12

Unit 4: Operations and Algebraic Thinking (revisited)

4th Grade MCCRS Curriculum Map

Module 1: Use the four operations with whole numbers to solve problems	
Standards	Mathematical Practices
<p>4.OA.2 (Division)</p> <ul style="list-style-type: none"> 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 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.OA.3</p> <ul style="list-style-type: none"> Solve multistep (two or more operational steps) 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. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
Student Learning Target(s)	Essential Vocabulary
<ul style="list-style-type: none"> Solve division problems that involve the following comparison situations: unknown product, group size unknown, number of groups unknown. Use a tape diagram model to make and illustrate multiplicative comparisons. Write an equation to represent a multiplicative comparison using a symbol to represent the unknown. Determine if a word problem is additive comparison or multiplicative comparison. 	<ul style="list-style-type: none"> division/divide Addition Add subtraction/subtract Equations Unknown Remainders Reasonableness mental math Estimation

4th Grade MCCRS Curriculum Map

<ul style="list-style-type: none"> • Identify differences among additive comparison and multiplicative comparison word problems. • Identify the differences among addition, subtraction, multiplication, and division word problems. • Perform addition, subtraction, division, and multiplication with whole numbers. • Interpret remainders and how they affect the whole number answer in a division problem. • Write equations using variables to represent the unknown for multi-step word problems. • Evaluate the reasonableness of an answer by using estimation strategies or mental math strategies. • Write an equation consisting of multiple operations to reflect the situation(s) in a word problem. • Select a word problem that matches a specific equation. 	<ul style="list-style-type: none"> • rounding
---	--

Supplement Resources Correlation

MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.OA.2 (division) 4.OA.3	Lesson 6 and 10	Lesson 6 and 10

Module 3: Generate and analyze patterns

Standards	Mathematical Practices
<p>4.OA.5</p> <ul style="list-style-type: none"> • 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. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>

4th Grade MCCRS Curriculum Map

Student Learning Target(s)		Essential Vocabulary
<ul style="list-style-type: none"> Construct shape patterns that express a given rule. Construct number patterns that express a given rule. Connect a rule for a given pattern with its sequence of numbers or shapes. Extend a given pattern after determining the rule that the pattern follows. Make generalizations about patterns that are not apparent within the given rule. Determine the rule for a given pattern that can be used to find the “n^{th}” number or object in the pattern. Look for and make use of structure. 		<ul style="list-style-type: none"> pattern (number or shape) pattern rule
Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.OA.5	Lesson 8	Lesson 8

Unit 2: Measurement and Data

Module 1: Solve problems using measurement and conversions of measurements from a larger unit to a smaller unit	
Standards	Mathematical Practices
4.MD.3 <ul style="list-style-type: none"> 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. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
Student Learning Target(s)	Essential Vocabulary

4th Grade MCCRS Curriculum Map

<ul style="list-style-type: none"> ● Find the area and perimeter of rectangular figures in real world situations. ● Find the unknown length of a rectangular figure when one side length and the area of the rectangle are known or when one side length and the perimeter are known. ● Find the length and width of a rectangle that has a specific perimeter or a specific area or a specific perimeter and area together. ● Write a “situation equation” that can be used to find the missing length of a rectangle when the length of one side and area of the rectangle is known or the length of one side and perimeter of the rectangle is known. 	<ul style="list-style-type: none"> ● Operations ● Add ● Subtract ● Multiply ● Divide ● Area ● perimeter 	
<p>Supplement Resources Correlation</p>		
<p style="text-align: center;">MCCRS</p>	<p style="text-align: center;">Ready Mathematics Instruction</p>	<p style="text-align: center;">Ready Practice and Problem Solving</p>
<p>4.MD.3</p>	<p style="text-align: center;">Lesson 26</p>	<p style="text-align: center;">Lesson 26</p>

Unit 5: Fractions

<p>Module 1: Extend understanding of fraction equivalence and ordering</p>	
<p style="text-align: center;">Standards</p>	<p style="text-align: center;">Mathematical Practices</p>
<p>4.NF.1</p> <ul style="list-style-type: none"> ● Recognizing that the value of “n” cannot be 0, Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ 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 	<p>MP.1. Make sense of problems and persevere in solving them.</p> <p>MP.2. Reason abstractly and quantitatively.</p> <p>MP.3. Construct viable arguments and critique the reasoning of others.</p> <p>MP.4. Model with mathematics.</p> <p>MP.5. Use appropriate tools strategically.</p> <p>MP.6. Attend to precision.</p> <p>MP.7. Look for and make use of structure.</p> <p>MP.8. Look for and express regularity in repeated reasoning.</p>

4th Grade MCCRS Curriculum Map

<p>4.NF.2</p> <ul style="list-style-type: none"> 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 $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>	
Student Learning Target(s)	Essential Vocabulary	
<ul style="list-style-type: none"> Plot, label, and identify fractions on a number line. Use a variety of visual fraction models (tape diagram, number line diagram, or area model). Write 1 and other whole numbers as a fraction. Partition a whole into smaller parts to model a fraction that is equivalent to the fraction that is already being represented. Create an equivalent fraction for a given fraction by partitioning a whole into smaller parts or by combining parts to make larger parts. Use writing to justify why two fractions are or are not equivalent. Make comparisons of fractions by using a variety of visual fraction models (tape diagram, number line diagram, or area model). Create equivalent fractions by finding common denominators. Decompose fractions with the same denominator to justify comparisons. Draw a model to justify conclusions when comparing two fractions. Evaluate the reasonableness of a conclusion based on the benchmark fractions of 0, $\frac{1}{2}$, and 1. 	<ul style="list-style-type: none"> equivalent fractions Denominator Numerator comparison/compare $<$, $>$, $=$ benchmark fractions 	
Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving

4th Grade MCCRS Curriculum Map

4.NF.1 4.NF.2	Lesson 13 and 14	Lesson 13 and 14
------------------	------------------	------------------

Module 2: Build fractions from unit fractions by applying and extending previous understanding of operations of whole numbers	
Standards	Mathematical Practices
<p>4.NF.3a</p> <ul style="list-style-type: none"> Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.NF.3b</p> <ul style="list-style-type: none"> 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 (including, but not limited to: concrete models, illustrations, tape diagram, number line, area model, etc.). Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$ 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.NF.3c</p> <ul style="list-style-type: none"> 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. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>

4th Grade MCCRS Curriculum Map

<p>4.NF.3d</p> <ul style="list-style-type: none"> 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. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.NF.4a</p> <ul style="list-style-type: none"> Understand a fraction a/b as a multiple of $1/b$ 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.NF.4b</p> <ul style="list-style-type: none"> Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. For ex., use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.) 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.NF.4c</p> <ul style="list-style-type: none"> 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. For example, if each person at a party will eat $3/8$ of a pound 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 do you expect your answer to lie? 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision.</p>

4th Grade MCCRS Curriculum Map

	MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
Student Learning Target(s)	Essential Vocabulary
<ul style="list-style-type: none"> ● Plot and label a fraction on a number line. ● Decompose a fraction into its sufficient number of unit fractions. ● Compose a fraction by combining unit fractions. ● Add and subtract fractions with like denominators. ● Convert a mixed number to a fraction by representing the whole number as an equivalent fraction and finding their sum. ● Decompose a fraction into a sum of a whole number and a number less than 1 in order to convert to a mixed number. ● Decompose a fraction into parts. ● Write an equation that represents a specific fraction with its decomposed parts that equal that fraction. ● Determine if the sum of a set of fractions equals a given fraction. ● Use a variety of visual fraction models (tape diagram, number line diagram, or area model) to justify decompositions. ● Use a variety of visual fraction models (tape diagram, number line diagram, or area model). ● Create an equivalent fraction for a mixed number (write it as an improper fraction) in order to add or subtract. ● Represent the sum as a mixed number by joining a sufficient number of unit fractions together to make as many wholes as possible, and create the fraction by joining together the left over unit fractions. ● Express a multiple of a/b as a multiple of $1/b$. ● Solve word problems which include situations where the product is unknown and situations that include a whole number of fractional quantities—not a fraction of a whole-number quantity. 	<ul style="list-style-type: none"> ● unit fraction ● equivalent fractions ● Denominator ● like/unlike denominators ● Numerator ● mixed numbers,

4th Grade MCCRS Curriculum Map

MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.NF.3a 4.NF.3b 4.NF.3c 4.NF.3d 4.NF.4a 4.NF.4b 4.NF.4c	Lessons 15, 16, 17, 18, and 19	Lessons 15, 16, 17, 18, and 19

4th Grade MCCRS Curriculum Map

Third Nine Weeks

Unit 5: Fractions (continued)

Module 3: Understand decimal notation for fractions, and compare decimal fractions	
Standards	Mathematical Practices
<p>4.NF.5</p> <ul style="list-style-type: none"> 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 $\frac{1}{10}$ as $\frac{10}{100}$, and add $\frac{1}{10} + \frac{1}{100} = \frac{10}{100} + \frac{1}{100}$. Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.NF.6</p> <ul style="list-style-type: none"> Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.NF.7</p> <ul style="list-style-type: none"> 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. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
Student Learning Target(s)	Essential Vocabulary

4th Grade MCCRS Curriculum Map

<ul style="list-style-type: none"> ● Use a variety of visual models (number line and base ten blocks) to represent a decimal. ● Create an equivalent fraction with 100 as the denominator for a fraction that has a denominator of 10. ● Add fractions with like denominators. ● Write a fraction with a denominator of 10 or 100 as a decimal. ● Write a decimal number as a fraction with a denominator of 10 or 100. ● Locate and label a decimal number on a number line. ● Look for and make use of structure. ● Represent a decimal with a visual model (number line or base-ten blocks). ● Make comparisons of decimals by using a variety of visual models (number line or base ten blocks). ● Justify comparisons with a visual model. 	<ul style="list-style-type: none"> ● Fraction ● Numerator ● Denominator ● equivalent fractions ● Tenths ● Hundredths ● comparison/compare ● <, >, =
---	---

Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.NF.5 4.NF.6 4.NF.7	Lessons 28, 29, and 30	Lessons 28,29, and 30

Unit 2: Measurement and Data (revisited)

Module 1: Solve problems using measurement and conversions of measurements from a larger unit to a smaller unit	
Standards	Mathematical Practices
4.MD.1 <ul style="list-style-type: none"> ● Know relative sizes of measurement units within one system of units including km, m, cm, mm; kg, g, mg; lb, oz; l, ml; hr, min, sec. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others.

4th Grade MCCRS Curriculum Map

<p>Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2,24), (3, 36),...</p>	<p>MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.MD.2</p> <ul style="list-style-type: none"> ● Use the four operations to solve word problems involving • intervals of time, • money • distances • liquid volumes • masses of objects 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. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
Student Learning Target(s)	Essential Vocabulary
<ul style="list-style-type: none"> ● Recognize and identify units of measurements used to measure length, capacity, weight, and time. ● Relate the size of a unit to a benchmark or mental image. ● Convert greater units of measurement to lesser units of measurement within a single system. ● Create a two-column table of measurement equivalents. ● Write an equation to represent a multiplication comparison of two different units ● Convert larger units of measurement to smaller units of measurement within a single system. ● Recognize and identify units of measurements used to measure length, capacity, weight, and time. ● Relate the size of a unit to a benchmark or mental image. ● Construct a number line diagram, marked in whole numbers and fractions or decimals, to represent a measurement scale. ● Read a measurement scale. 	<ul style="list-style-type: none"> ● Measure ● Metric ● Customary ● convert/conversion ● relative size ● liquid volume ● Mass ● Length ● Distance ● kilometer (km) ● meter (m) ● centimeter (cm) ● millimeter (mm) ● kilogram (kg) ● gram (g) ● milligram (mg) ● liter (l)

4th Grade MCCRS Curriculum Map

	<ul style="list-style-type: none"> ● milliliter (ml) ● cubic centimeter ● inch (in) ● foot (ft) ● yard (yd) ● mile (mi) ● ounce (oz) ● pound (lb) ● cup © ● pint (pt) ● quart (qt) ● gallon (gal) ● Time ● Hour ● Minute ● Second ● Equivalent ● Operations ● Multiply ● Fractions
--	--

Supplement Resources Correlation

MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.MD.1 4.MD.2	Lessons 23, 24, and 25	Lessons 23, 24, and 25

4th Grade MCCRS Curriculum Map

Module 2: Represent and interpret data		
Standards	Mathematical Practices	
4.MD.4 <ul style="list-style-type: none"> 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. 	MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.	
Student Learning Target(s)	Essential Vocabulary	
<ul style="list-style-type: none"> Use a ruler to gather measurement data (halves, fourths, eighths) and construct a line plot using the data. Construct a line plot from a given data set and mark off the appropriate units (denominators limited to 2, 4, and 8). Analyze and read a line plot. Add and subtract fractions and/or mixed numbers with like denominators to solve problems involving data on a line plot. Compare fractions by reasoning about their size. Use the data in the line plot to answer questions about the data. 	<ul style="list-style-type: none"> Data line plot Length fractions 	
Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.MD.4	Lesson 27	Lesson 27

Unit 1: Geometry (revisited)

Module 1 (revisited): Draw and identify lines and angles, and classify shapes by properties of their lines and angles	
Standards	Mathematical Practices

4th Grade MCCRS Curriculum Map

<p>4.G.2</p> <ul style="list-style-type: none"> 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. 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>4.G.3</p> <ul style="list-style-type: none"> 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 	<p>MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
<p>Student Learning Target(s)</p>	<p>Essential Vocabulary</p>
<ul style="list-style-type: none"> Identify shapes that have parallel or perpendicular lines. Use parallel lines and perpendicular lines to categorize two-dimensional shapes. Categorize shapes based on similar attributes. Identify two-dimensional shapes that contain angles with a specific measurement. Identify and recognize right triangles. Measure a given angle Create a symmetrical figure by drawing in the missing half of the figure. Draw in all the lines of symmetry in a figure. Identify symmetrical figures. 	<ul style="list-style-type: none"> classify shapes/figures properties of shapes Point line segment ray angle vertex/vertices right angle acute angle obtuse angle Perpendicular Parallel right triangle isosceles triangle equilateral triangle scalene triangle line of symmetry

4th Grade MCCRS Curriculum Map

- symmetric figures
- Two-dimensional
- Regular
- irregular, sides

Supplement Resources Correlation		
MCCRS	Ready Mathematics Instruction	Ready Practice and Problem Solving
4.G.2 4.G.3	Lessons 32 and 33	Lessons 32 and 33