

Course Name:	5th Grade Math		
Credits:	N/A		
Prerequisites:	N/A		
Description:	In Grade 5, instructional time focuses on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	Unit Length:	Unit Standards:	Unit Outcomes:
Addition and Subtraction with Fractions	20 days	CC.5.NF.1, CC.5.NF.2, CC.5.MD.2	Fractions and decimals represent a relationship between two numbers. Fractions are division models. The use of area models, fraction strips, and number lines are effective strategies to model sums and differences. Use equivalent fractions as a strategy to add and subtract fractions. Use number sense of fractions to estimate and assess reasonableness of answers to word problems.
Addition and Subtraction with Decimals	17 days	CC.5.NBT.1, CC.5.NBT.3, CC.5.NBT.3a, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.7, CC.5.MD.1	The number system is based on a well-defined system. In a multidigit number, a number in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. Multiplying by a power of 10 shifts the digits of a whole number or decimal that many places to the left. The exponent not only indicates how many places the decimal is moving, but also that you are multiplying or making the number 10 times greater, three times, when you multiply 10. Convert like measurement units within a given measurement system.
Multiplication and Division with Fractions	23 days	CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c, CC.5.MD.2	Fractions can be used to aid in explaining real world problems. The use of area models, fraction strips, and number lines are effective strategies to model products and quotients. Multiply a fraction or whole number by a fraction. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by fractions.

Multiplication with Whole Numbers and Decimals	18 days	CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.3, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.7	Perform operations with multi-digit whole numbers and with decimals to hundredths. Apply and extend previous understandings of multiplication and division to multiply and divide fractions. Understand and explain patterns in whole numbers and decimals.
Division with Whole Numbers and Decimals	16 days	CC.5.NBT.2, CC.5.NBT.3b, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.5, CC.5.NF.5a	Find whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is divided or multiplied by a power of 10. Interpret multiplication as scaling.
Operations and Word Problems	18 days	CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c	Fluently multiply multidigit whole numbers using the standard algorithm. Write and interpret numerical expressions. Solve real world problems involving addition, subtraction, multiplication, division, fractions, and decimals problems. Use models or drawings and strategies based on place value, properties of operations,
Algebra, Patterns, and Coordinate Graphs	12 days	CC.5.OA.1, CC.5.OA.2, CC.5.OA.3, CC.5.G.1, CC.5.G.2	Write and interpret numerical expressions. Analyze patterns and relationships. Graph points on the coordinate plane to solve real-world mathematical problems. There is an order of operations that must be followed in all mathematical expressions. Parentheses, brackets, or braces are used to guide the order of operations when simplifying expressions. An algebraic expression or equation can be represented in a variety of ways that have the same value. On the coordinate plane, a point represents the two facets of information associated with an ordered pair. In a coordinate plane, the first number indicates how far to travel from the origin in the direction of the x-axis and the second number indicates how far to travel in the direction of the y-axis.
Measurement and Geometry	26 days	CC.5.MD.1, CC.5.MD.2, CC.5.MD.3, CC.5.MD.3a, CC.5.MD.3b, CC.5.MD.4, CC.5.MD.5, CC.5.MD.5a, CC.5.MD.5b, CC.5.MD.5c, CC.5.G.3, CC.5.G.4, CC.5.NF.4b	Measurement processes are used in everyday life to describe and quantify the world. Measurement problems can be solved using the appropriate tools. Volume is an attribute of three-dimensional space and is measured in cubic units. Multiple rectangular prisms can have the same volume. Volume can be found by repeatedly adding the area of the base or by multiplying all three dimensions. Data analysis is formulating questions that can be addressed, explored, and synthesized with relevant information. Two-dimensional shapes can be described and classified by their properties. Two-dimensional shapes are composed of various parts that are described with precise vocabulary.

Unit Name: Addition and Subtraction with Fractions	Length: 20 days
Standards: CC.5.NF.1, CC.5.NF.2, CC.5.MD.2	Outcomes: Fractions and decimals represent a relationship between two numbers. Fractions are division models. The use of area models, fraction strips, and number lines are effective strategies to model sums and differences. Use equivalent fractions as a strategy to add and subtract fractions. Use number sense of fractions to estimate and assess reasonableness of answers to word problems.
Essential Questions: How is computation with fractional numbers similar or different to whole number computation? What does it mean to add and subtract fractions with unlike denominators? How do you add and subtract fractional parts with like and unlike denominators? What does it mean to add and subtract mixed numbers? What is a standard procedure for adding and subtracting fractions?	Learning Targets: Students will be able to add and subtract fractions and mixed numbers. Students will be able to represent the addition and subtraction of fractions with unlike denominators as equivalent problems with like denominators.
Topic 1: Equivalent Fractions	Length: 8 days
Standard(s): CC.5.NF.1, CC.5.NF.2	Academic Vocabulary: denominator, fraction, numerator, unit fraction, equivalent fractions, multiplier, n-split, simplify, unsimplify, benchmark, common denominator, common factor, greater than, >, less than, <, mixed number
Lesson Frame: Introduce the MathBoard	I can use the MathBoard fraction bars to discuss basic fraction ideas.
Lesson Frame: Explain Equivalent Fractions	I can generate and explain simple equivalent fractions.
Lesson Frame: Equivalent Fractions and Multipliers	I can understand the role of the multiplier in equivalent fractions.
Lesson Frame: Strategies for Comparing Fractions	I can use a variety of strategies to compare fractions.
Lesson Frame: Fractions Greater Than One	I can convert between fractions and mixed numbers.
Performance Tasks: Quick Quiz 1, Math Challenges to start class, differentiated online practice through games, check understanding	Notes: Teach GCF (Greatest Common Factor) during Lesson 4.
Topic 2: Addition and Subtraction with Fractions	Length: 12 days
Standard(s): CC.5.NF.1, CC.5.NF.2, CC.5.MD.2	Academic Vocabulary: add on, regroup, ungroup, line plot, benchmark, estimate, round, situation equation, solution equation
Lesson Frame: Add and Subtract Like Mixed Numbers	I can add and subtract mixed numbers with like denominators.
Lesson Frame: Add Unlike Fractions	I can add fractions with different denominators.
Lesson Frame: Subtract Unlike Fractions	I can subtract fractions with different denominators.
Lesson Frame: Solve with Unlike Mixed Numbers	I can add and subtract mixed numbers with unlike denominators.

Lesson Frame: Practice with Unlike Mixed Numbers	I can add and subtract mixed numbers with unlike denominators.
Lesson Frame: Reasonable Answers	I can estimate sums and differences of fractions and mixed numbers and decide whether answers are reasonable.
Lesson Frame: Real World Problems	I can use estimates to determine whether answers to word problems are reasonable.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 2, Math Challenges to start class, differentiated online practice through games, check understanding, Unit Review and Test	Notes:

Unit Name: Addition and Subtraction with Decimals	Length: 17 days
Standards: CC.5.NBT.1, CC.5.NBT.3, CC.5.NBT.3a, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.7, CC.5.MD.1	Outcomes: The number system is based on a well-defined system. In a multidigit number, a number in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. Multiplying by a power of 10 shifts the digits of a whole number or decimal that many places to the left. The exponent not only indicates how many places the decimal is moving, but also that you are multiplying or making the number 10 times greater, three times, when you multiply 10. Convert like measurement units within a given measurement system.
Essential Questions: How does understanding the structure of the number system help you solve problems? How can you represent decimal numbers in multiple ways? How can sums and differences of decimals be estimated? What are the standard procedures for adding and subtracting whole numbers and decimals?	Learning Targets: Students will be able to extend their understanding of the base-ten system to decimals. Students will observe that the process of composing and decomposing a base-ten unit is the same for decimals as for whole numbers. Students will observe the same methods of recording operations work can be used with decimals.
Topic 1: Read and Write Whole Numbers and Decimals	Length: 5 days
Standard(s): CC.5.NBT.1, CC.5.NBT.3, CC.5.NBT.3a, CC.5.NBT.3b	Academic Vocabulary: decimal, tenth, hundredth, thousandth, notation, standard form, word form, expanded form, power of ten, equivalent decimal
Lesson Frame: Decimals as Equal Divisions	I can understand decimals as equal divisions of a whole.
Lesson Frame: Thousands to Thousandths	I can read, write, and model whole and decimal numbers.
Lesson Frame: Equate and Compare Thousandths	I can model and identify equivalent decimals.
Performance Tasks: Quick Quiz 1, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: Addition and Subtraction	Length: 6 days
Standard(s): CC.5.NBT.7, CC.5.MD.1	Academic Vocabulary: meter (m), decimeter (dm), centimeter (cm), millimeter (mm), grouping, ungrouping, break apart drawing, ungroup, Commutative Property of Addition, Associative Property of Addition, Distributive Property of Multiplication over Addition
Lesson Frame: Adding and Subtracting Decimals	I can model adding and subtracting decimals.
Lesson Frame: Add Whole Numbers and Decimals	I can add whole numbers and decimals.
Lesson Frame: Subtract Whole and Decimal Numbers	I can subtract whole and decimal numbers to hundredths.
Lesson Frame: Properties and Strategies	I can use the Commutative, Associative, and Distributive Properties to compute mentally.
Performance Tasks: Quick Quiz 2, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:

Topic 3: Round and Estimate with Decimals	Length: 6 days
Standard(s): CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.7	Academic Vocabulary: round, estimate
Lesson Frame: Round and Estimate with Decimals	I can estimate decimal sums and differences.
Lesson Frame: Graph with Decimal Numbers	I can read and construct graphs with decimal scales and decimal numbers.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 3, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 2 Review and Test	Notes:

Unit Name: Multiplication and Division with Fractions	Length: 23 days
Standards: CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c, CC.5.MD.2	Outcomes: Fractions can be used to aid in explaining real world problems. The use of area models, fraction strips, and number lines are effective strategies to model products and quotients. Multiply a fraction or whole number by a fraction. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by fractions.
Essential Questions: How do you use previous understandings of multiplication and division to multiply or divide fractions? How does multiplication and division of fractions help to solve real world problems? What does it mean to multiply a number by a fraction? What are the standard procedures for estimating and finding products and quotients of fractions and mixed numbers?	Learning Targets: Students will be able to extend work with multiplication and fractions and explore fractions and division. Students will be able to interact with visual models and read world situations to illustrate important fraction concepts.
Topic 1: Multiplication with Fractions	Length: 9 days
Standard(s): CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6	Academic Vocabulary: comparison bar, multiplicative comparison, factor, product, area model for multiplication, fraction-bar model for multiplication, multiply and simplify method, simplify and multiply method, unit fraction method
Lesson Frame: Basic Multiplication Concepts	I can connect multiplying by $1/n$ to dividing by n , and use this idea to make multiplicative comparisons.
Lesson Frame: Multiplication with Non-Unit Fractions	I can interpret a/b times a quantity as a of b equal parts of that quantity.
Lesson Frame: Multiplication with Fractional Solutions	I can multiply a whole number by a fraction to produce a fraction.
Lesson Frame: Multiply a Fraction by a Fraction	I can multiply any two fractions.
Lesson Frame: Multiplication Strategies	I can compare and apply strategies for multiplying fractions.
Lesson Frame: Multiply Mixed Numbers	I can multiply with mixed numbers.
Performance Tasks: Quick Quiz 1, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: Multiplication Links	Length: 4 days
Standard(s): CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6	Academic Vocabulary: Associative Property, Commutative Property, Distributive Property
Lesson Frame: Relate Fraction Operations	I can relate operations with fractions and whole numbers, and discuss properties of arithmetic.
Lesson Frame: Solve Real World Problems	I can add, subtract, compare, and multiply fractions to solve word problems.

Lesson Frame: Make Generalizations	I can predict the size of a product relative to the size of one factor based on the size of the other factor.
Performance Tasks: Quick Quiz 2, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 3: Division with Fractions	Length: 10 days
Standard(s): CC.5.NF.1, CC.5.NF.2, CC.5.NF.3, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c, CC.5.MD.2	Academic Vocabulary: decimal fraction, dividend, divisor, quotient
Lesson Frame: When Dividing is also Multiplying	I can relate division by a unit fraction or whole number to multiplication.
Lesson Frame: Solve Division Problems	I can write and solve division word problems.
Lesson Frame: Distinguish Multiplication from Division	I can determine whether solving a word problem requires multiplication or division.
Lesson Frame: Review Operations with Fractions	I can solve numerical and word problems involving all four operations with fractions.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 3, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 3 Review and Test	Notes:

Unit Name: Multiplication with Whole Numbers and Decimals	Length: 18 days
Standards: CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.3, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.7	Outcomes: Perform operations with multi-digit whole numbers and with decimals to hundredths. Apply and extend previous understandings of multiplication and division to multiply and divide fractions. Understand and explain patterns in whole numbers and decimals.
Essential Questions: How can we use models/aides to help understand decimals? How do you compare decimals using place value? What patterns can we identify in the base ten system? What are the standard procedures for estimating and finding products involving decimals?	Learning Targets: Students will be able to shift the decimal when multiplying decimals. Students will be able to multiply with numbers greater than 1 and less than 1 using the traditional algorithm. Students will begin to develop fluency for multiplying multidigit whole numbers.
Topic 1: Multiplication with Whole Numbers	Length: 7 days
Standard(s): CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.5, CC.5.NBT.7	Academic Vocabulary: shift, base, exponent, exponential form, power of ten, odd, even, partial products, Place Value Sections, Expanded Notation, New Groups Below, Place Value Rows, Short Cut
Lesson Frame: Shift Patterns in Multiplication	I can understand the shift pattern when multiplying by 10, 100, or 1,000.
Lesson Frame: Patterns with Fives and Zeros	I can understand that multiples of 5 need extra attention in the zeros pattern.
Lesson Frame: Sharing Methods for Multiplication	I can understand how a place value model can be used to solve multidigit multiplication problems.
Lesson Frame: Multiply Two-Digit Numbers	I can solve two-digit multiplication problems using various methods.
Lesson Frame: Practice Multiplication	I can practice multiplying multidigit numbers.
Performance Tasks: Quick Quiz 1, Fluency Check 1, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: Multiplication with Decimal Numbers	Length: 11 days
Standard(s): CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.3, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.7	Academic Vocabulary: Commutative Property of Multiplication, Associative Property of Multiplication, Distributive Property of Multiplication over Addition
Lesson Frame: Multiply Decimals by Whole Numbers	I can solve multiplication problems in which one factor is a decimal number.
Lesson Frame: Multiply by Decimals	I can solve multiplication problems in which at least one factor is a decimal number.
Lesson Frame: Multiply with Decimals Greater Than 1	I can multiply with decimal numbers greater than 1.

Lesson Frame: Compare Shift Patterns	I can understand and apply shift patterns when multiplying by 10,100, 1000, 0.1, or 0.01.
Lesson Frame: Estimate Products	I can round whole numbers and decimal numbers to estimate the product in a multiplication problem.
Lesson Frame: Multiplication Practice	I can perform multidigit multiplication with decimal numbers.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 2, Fluency Check 2, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 4 Review and Test	Notes:

Unit Name: Division with Whole Numbers and Decimals	Length: 16 days
Standards: CC.5.NBT.2, CC.5.NBT.3b, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.5, CC.5.NF.5a	Outcomes: Find whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is divided or multiplied by a power of 10. Interpret multiplication as scaling.
Essential Questions: What occurs when decimals are multiplied, divided, or ordered by 10 or powers of 10? What are the standard procedures for estimating and finding quotients involving decimals?	Learning Targets: Students will extend their understanding of division to include 2-digit divisors. Students will explore dividing with decimal numbers. Students will solve real world problems and interpret the remainders in the context of the problem.
Topic 1: Division with Whole Numbers	Length: 6 days
Standard(s): CC.5.NBT.6	Academic Vocabulary: Digit-by-Digit Method, dividend, divisor, Expanded Notation Method, Place Value Sections Method, quotient, remainder, overestimate, underestimate
Lesson Frame: Divide Whole Numbers by One Digit	I can divide multidigit numbers by single-digit divisors.
Lesson Frame: Explore Dividing by Two-Digit by Two-Digit Whole Numbers	I can solve division problems having two-digit divisors.
Lesson Frame: Too Large, Too Small, or Just Right?	I can understand several ways to adjust the estimated divisor when it is too small.
Lesson Frame: Interpret Remainders	I can express and interpret remainders for a variety of problem types.
Lesson Frame: Division Practice	I can practice dividing whole numbers.
Performance Tasks: Quick Quiz 1, Fluency Check 3, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: Division with Decimal Numbers	Length: 10 days
Standard(s): CC.5.NBT.2, CC.5.NBT.3b, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.5, CC.5.NF.5a	Academic Vocabulary: no new vocabulary for this topic
Lesson Frame: Divide Decimal Numbers by Whole Numbers	I can divide decimal numbers by one- and two-digit whole numbers.
Lesson Frame: Divide Whole Numbers by Decimal Numbers	I can solve division problems that have decimal divisors.
Lesson Frame: Divide with Two Decimal Numbers	I can solve division problems in which both numbers are decimals.
Lesson Frame: Division Practice	I can solve division problems involving whole numbers and decimals numbers.
Lesson Frame: Distinguish Between Multiplication and Division	I can solve problems that require multiplying or dividing whole numbers and decimal numbers.

Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 2, Fluency Check 4, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 5 Review and Test	Notes:

Unit Name: Operations and Word Problems	Length: 18 days
Standards: CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c	Outcomes: Fluently multiply multi-digit whole numbers using the standard algorithm. Write and interpret numerical expressions. Solve real world problems involving addition, subtraction, multiplication, division, fractions, and decimals problems. Use models or drawings and strategies based on place value and properties of operations.
Essential Questions: How do numbers allow people to communicate? How can you apply addition, subtraction, multiplication, and division to real life situations? How does knowing how to compute fraction and decimal problems connect to real life?	Learning Targets: Students will be able to interpret problems and represent them. Students will engage in the problem solving process, emphasizing problem types utilizing whole numbers, fractions, and decimals.
Topic 1: Equations and Problem Solving	Length: 5 days
Standard(s): CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c	Academic Vocabulary: situation equation, solution equation, break apart drawing, rectangle model, benchmark
Lesson Frame: Situation and Solution Equations for Addition and Subtraction	I can write situation and solution equations to solve addition and subtraction problems.
Lesson Frame: Situation and Solution Equations for Multiplication and Division	I can write situation and solution equations to solve multiplication and division problems.
Lesson Frame: Write Word Problems	I can write word problems for equations involving fractions and decimals and model the product.
Lesson Frame: Determine Reasonable Answers	I can use a variety of methods to determine reasonable answers.
Performance Tasks: Quick Quiz 1, Fluency Check 5, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: Comparison Word Problems	Length: 5 days
Standard(s): CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.2, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7c	Academic Vocabulary: comparison, leading language, misleading language, scaling, additive, multiplicative
Lesson Frame: Language of Comparison Problems	I can understand and apply comparison language.
Lesson Frame: Multiplicative Comparison Problems	I can model and solve multiplicative comparison problems.
Lesson Frame: Types of Comparison Problems	I can solve comparison problems.
Performance Tasks: Quick Quiz 2, Fluency Check 6, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 3: Problems with More Than One Step	Length: 10 days
Standard(s): CC.5.OA.1, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.2, CC.5.NF.3, CC.5.NF.6, CC.5.NF.7c	Academic Vocabulary: parentheses, equation
Lesson Frame: Equations and Parentheses	I can solve two-step problems.
Lesson Frame: Multistep Word Problems	I can solve multistep problems.

Lesson Frame: Practice Problem Solving	I can practice solving multistep problems.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 3, Fluency Check 7, Math Challenges to start class, differentiated online practice	Notes:

Unit Name: Algebra, Patterns, and Coordinate Graphs	Length: 12 days
Standards: CC.5.OA.1, CC.5.OA.2, CC.5.OA.3, CC.5.G.1, CC.5.G.2	Outcomes: Write and interpret numerical expressions. Analyze patterns and relationships. Graph points on the coordinate plane to solve real-world and mathematical problems. There is an order of operations that must be followed in all mathematical expressions. Parentheses, brackets, or braces are used to guide the order of operations when simplifying expressions. An algebraic expression or equation can be represented in a variety of ways that have the same value. On the coordinate plane, a point represents the two facets of information associated with an ordered pair. In a coordinate plane, the first number indicates how far to travel from the origin in the direction of the x-axis and the second number indicates how far to travel in the direction of the y-axis.
Essential Questions: How can patterns help us problem solve? How are the values of an algebraic expression and numerical expression found? How is the order of an expression determined? What is the purpose of a coordinate plane? How do you plot a point on a coordinate plane? How can graphing points on a coordinate plane help you predict and interpret a given situation?	Learning Targets: Students will read, write, simplify, and evaluate algebraic expressions using the Order of Operations. Students will explore patterns and relationships. Students will plot and locate points in the coordinate plane.
Topic 1: Algebraic Reasoning and Expressions	Length: 4 days
Standard(s): CC.5.OA.1, CC.5.OA.2	Academic Vocabulary: expression, Order of Operations, simplify, evaluate, variable
Lesson Frame: Read and Write Expressions	I can read and write expressions.
Lesson Frame: Simplify Expressions	I can simplify numerical expressions.
Lesson Frame: Evaluate Expressions	I can write and evaluate expressions that contain variables.
Performance Tasks: Quick Quiz 1, Fluency Check 8, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: Patterns and Graphs	Length: 8 days
Standard(s): CC.5.OA.1, CC.5.OA.2, CC.5.OA.3, CC.5.G.1, CC.5.G.2	Academic Vocabulary: numerical pattern, term, coordinate plane, ordered pair, origin, x-coordinate, y-coordinate, x-axis, y-axis
Lesson Frame: Patterns and Relationships	I can generate and extend numerical patterns and identify relationships of corresponding terms.
Lesson Frame: The Coordinate Plane	I can locate and plot points in the first quadrant of the coordinate plane.
Lesson Frame: Graph Ordered Pairs	I can graph ordered pairs and use them to represent and solve real world problems.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.

Performance Tasks:

Quick Quiz 2, Fluency Check 9, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 7 Review and Test

Notes:

Unit Name: Measurement and Geometry	Length: 26 days
Standards: CC.5.MD.1, CC.5.MD.2, CC.5.MD.3, CC.5.MD.3a, CC.5.MD.3b, CC.5.MD.4, CC.5.MD.5, CC.5.MD.5a, CC.5.MD.5b, CC.5.MD.5c, CC.5.G.3, CC.5.G.4, CC.5.NF.4b	Outcomes: Measurement processes are used in everyday life to describe and quantify the world. Measurement problems can be solved using the appropriate tools. Volume is an attribute of three-dimensional space and is measured in cubic units. Multiple rectangular prisms can have the same volume. Volume can be found by repeatedly adding the area of the base or by multiplying all three dimensions. Data analysis is formulating questions that can be addressed, explored, and synthesized with relevant information. Two-dimensional shapes can be described and classified by their properties. Two-dimensional shapes are composed of various parts that are described with precise vocabulary.
Essential Questions: In the real world, how do you solve problems relating to measurement? What is volume and how is it used in real life? How do you determine the volume of a cube or rectangular prism? How can three-dimensional shapes be represented and analyzed? How do you compare and convert units of measure using the metric system? What are the metric measurement units and how are they related? What occurs when whole numbers are multiplied or divided by 10 or a power of 10? How can problems be solved using information represented in a line plot? How can we describe, classify, and name different shapes (polygons, triangles, and quadrilaterals)? How can angles be measured and classified? Why is it important to use precise language and mathematical tools in the study of two-dimensional shapes?	Learning Targets: Students will convert units within the same measurement system using both multiplication and division. Students will review perimeter and area and explore the concept of volume of a rectangular prism. Students will classify and draw polygons according to properties. Students will begin to formulate the idea of a hierarchy of quadrilateral properties.
Topic 1: Measurements and Data	Length: 9 days
Standard(s): CC.5.MD.1, CC.5.MD.2	Academic Vocabulary: meter, millimeter, centimeter, decimeter, dekameter, hectometer, kilometer, liter, milliliter, centiliter, deciliter, dekaliter, hectoliter, kiloliter, mass, gram, milligram, centigram, decigram, dekagram, hectogram, kilogram, mile (mi), ton, frequency table, line plot
Lesson Frame: Convert Metric Units of Length	I can convert among metric units of length.
Lesson Frame: Metric Units of Liquid Volume	I can convert among metric units of liquid volume.
Lesson Frame: Metric Units of Mass	I can convert among metric units of mass.
Lesson Frame: Customary Units of Length	I can convert among customary units of length.
Lesson Frame: Customary Units of Liquid Volume	I can convert among customary measures of liquid volume.
Lesson Frame: Customary Units of Weight	I can convert among customary measures of weight.
Lesson Frame: Read and Make Line Plots	I can make and analyze line plots.

Performance Tasks: Quick Quiz 1, Fluency Check 10, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: Area and Volume	Length: 8 days
Standard(s): CC.5.NF.4b, CC.5.MD.3, CC.5.MD.3a, CC.5.MD.3b, CC.5.MD.4, CC.5.MD.5, CC.5.MD.5a, CC.5.MD.5b, CC.5.MD.5c	Academic Vocabulary: perimeter, area, square centimeter, square unit, face, edge, rectangular prism, cube, unit cube, volume, cubic unit, one-dimensional, two-dimensional, three-dimensional, composite
Lesson Frame: Perimeter and Area of Rectangles	I can use a formula to find the perimeter and area of a rectangle with fractional side lengths.
Lesson Frame: Cubic Units and Volume	I can use a formula to find the volume of a rectangular prism.
Lesson Frame: Visualize Volume	I can compute the volume of a rectangular prism.
Lesson Frame: Introduce Volume Formulas	I can use a formula to find the volume of a rectangular prism.
Lesson Frame: Relate Length, Area, and Volume	I can identify whether a situation involves length, area, or volume.
Lesson Frame: Volume of Composite Solid Figures	I can find the volume of a composite solid figure.
Performance Tasks: Quick Quiz 2, Fluency Check 11 Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 3: Classify Geometric Figures	Length: 9 days
Standard(s): CC.5.MD.3, CC.5.MD.5, CC.5.MD.5b, CC.5.G.3, CC.5.G.4	Academic Vocabulary: acute angle, adjacent angle, adjacent sides, congruent, counterexample, line of symmetry, opposite angle, opposite sides, parallel, parallelogram, perpendicular, quadrilateral, rectangle, rhombus, right angle, square, trapezoid, acute triangle, congruent angles, congruent sides, equilateral triangle, isosceles triangle, obtuse angle, obtuse triangle, perpendicular sides, right triangle, scalene triangle, closed, concave, convex, open, polygon, reflex angle, regular polygon
Lesson Frame: Attributes of Quadrilaterals	I can understand attributes of different types of quadrilaterals.
Lesson Frame: Attributes of Triangles	I can understand attributes of different types of triangles.
Lesson Frame: Attributes of Two-Dimensional Shapes	I can understand attributes of polygons and other two-dimensional shapes.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 3, Fluency Check 12, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 8 Review and Test	Notes: