

	<p>and/or the relationship between addition and subtraction.</p> <p>2.NBT.B.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p>2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express an even number as a sum of equal addends.</p> <p>2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p>Lesson 1 CC.2.2.3.A.1 Represent and solve problems</p>	<p>multiplication (up to and including 10 X 10) or division (limit dividends and quotients through 10) equation relating three whole numbers. (Lesson 5)</p> <p>M03.B-O.2.1.1 Apply the commutative property of multiplication. (Lesson 2, 3)</p> <p>M03.B-O.2.1.2 Apply the associative property of multiplication. (Lesson 2, 3)</p> <p>M03.B-O.2.2.1 Interpret and/or model division as a multiplication equation with an unknown factor. (Lesson 5)</p>	<ul style="list-style-type: none"> • Use math talk practices to efficiently share and compare strategies for solving problems. • Apply math knowledge and modeling techniques to new, similar problems. • Find the total of three addends, using strategies such as making a ten and using doubles. <p>Lesson 1: LEQ: How do I represent and solve problems involving multiplication and division?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Understand that the symbol X means “groups of,” and problems such as 5 X 7 refer to 5 groups of 7. • Interpret a multiplication problem situation using pictures, objects, words, numbers, and equations. • Understand that repeated addition and skip counting are strategies for finding a product, but the meaning of multiplication is finding the total number of items in equal-sized groups. <p>Language Objectives</p> <ul style="list-style-type: none"> • Read aloud a multiplication equation such as $3 \times 2 = 6$ as 3 groups of 2 equals 6. • Draw an array to represent a given multiplication equation. 		<p>array - a set of objects arranged in equal rows and equal columns</p> <p>row - the horizontal groups of objects in an array</p> <p>column - the vertical groups of objects in an array</p> <p>Lesson 1: equation - a mathematical statement that uses an equal sign (=) to show that two expressions have the same value.</p> <p>multiply - to repeatedly add the same number a certain number of times; used to find the total number of items in equal-sized groups.</p> <p>factor - a number that is multiplied. product - the result of multiplication</p>	
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	<p>involving multiplication and division.</p> <p>Lesson 2 CC.2.2.3.A.2 Understand properties of multiplication and the relationship between multiplication and division. Additional PA Core Standards CC.2.1.3.B.1, CC.2.2.3.A.1 (See page B1 for full text.)</p> <p>Lesson 3 CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit Arithmetic.</p> <p>Standard Area Algebraic Concepts</p> <p>Standard CC.2.2.3.A.2 Understand properties of</p>	<p>M03-B-O.3.1.5 Identify arithmetic patterns (including patterns in the addition table or multiplication table) and/or explain them using properties of operations. (Lesson 7</p>	<ul style="list-style-type: none"> • Write an equation to represent an array or equal groups using the X symbol. • Describe a problem situation that could be represented by a given multiplication equation. • Use the key vocabulary terms array, factor, multiplication, multiply, product, and times to communicate precisely. <p>Lesson 2: LEQ: How can I use properties of multiplication to understand the relationship between multiplication and division?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Understand that numbers can be multiplied in any order and the product will be the same (commutative property of multiplication). • Apply the commutative property of multiplication as a strategy to solve multiplication problems. • Understand that three or more factors in a problem can be grouped in different ways and the product will be the same (associative property of multiplication). • Apply the associative property to solve problems. <p>Language Objectives</p> <ul style="list-style-type: none"> • Rewrite a multiplication problem with the order of the factors reversed and solve. 		<p>Review the following key term.</p> <p>array - a set of objects arranged in equal rows and equal columns.</p> <p>Lesson 2: There is no new vocabulary. Review the following key terms.</p> <p>array - a set of objects arranged in equal rows and equal columns.</p> <p>multiply - to repeatedly add the same number a certain number of times; used to find the total number of items in equal-sized groups.</p> <p>factor - a number that is multiplied.</p> <p>product - the result of multiplication.</p> <p>Lesson 3:</p>	
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	<p>multiplication and the relationship between multiplication and division.</p> <p>Additional PA Core Standard CC.2.2.3.A.1 (See page B1 for full text.)</p> <p>Lesson 4 CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.</p> <p>Lesson 6 CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.</p> <p>CC.2.2.3.A.3 Demonstrate multiplication and division fluency.</p> <p>Additional PA Core Standard CC.2.2.3.A.2 (See page B1 for full text.)</p>		<ul style="list-style-type: none"> • Rewrite a multiplication problem with parentheses in a different position and solve. <p>Lesson 3: LEQ: How can I use place value and properties of operations to perform multi-digit arithmetic?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Break apart a factor as a strategy for multiplying (distributive property of multiplication). • Apply the distributive property of multiplication as a strategy to learn multiplication facts and to solve multiplication problems. <p>Language Objectives</p> <ul style="list-style-type: none"> • Draw arrays to demonstrate the distributive property. • Write multiplication expressions to represent word problems and visual models. • Justify conclusions and communicate the conclusions to others. <p>Lesson 4: LEQ: How do I represent and solve problems involving multiplication and division?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Understand division as sharing, knowing the number of equal shares and finding the 		<p>There is no new vocabulary. Review the following key terms.</p> <p>array - a set of objects arranged in equal rows and equal columns.</p> <p>multiply - to repeatedly add the same number a certain number of times; used to find the total number of items in equal-sized groups.</p> <p>factor - a number that is multiplied.</p> <p>product - the result of multiplication.</p> <p>Lesson 4: division - an operation used to separate a number of items into equal-sized groups.</p> <p>divide - to separate into equal groups and find the number in each group or</p>	
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	<p>Lesson 7 CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p> <p>CC.2.1.3.C.1</p> <p>CC.2.2.3.A.2 CC.2.2.3.A.3</p>		<p>number in each share or group.</p> <ul style="list-style-type: none"> • Understand division as separating equal shares or groups and finding the number of shares. • Describe stories or contexts for division expressions, such as $24 \div 4$. <p>Language Objectives</p> <ul style="list-style-type: none"> • Read the division symbol, \div, as divided by. • Explain division as sharing equally. • Tell stories or describe contexts for a given division expression. <p>Lesson 5: LEQ: How can I use properties of multiplication to understand the relationship between multiplication and division?</p> <p>Content Objectives: Understand the relationship between multiplication and division. Demonstrate the fact families are related multiplication and division equations. Find the unknown number in a whole number multiplication or division equation.</p> <p>Language Objectives: Describe the relationship between multiplication and division using words or diagrams.</p>	<p>the number of groups. Review the following key term.</p> <p>array - a set of objects arranged in equal rows and equal columns.</p> <p>Lesson 5: dividend - the number that is divided by another number.</p> <p>divisor - the number by which another number is divided. quotient - the result of division</p> <p>Review the following key terms: multiply - to repeatedly add the same number a certain number of times; Used to find the total number of items in equal-sized groups.</p> <p>division - an operation used to separate a number of items</p>	
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			<p>Correctly use the terms array, divide, divided by, times, factor, and product when discussing multiplication and division.</p> <p>Lesson 6: LEQ: How do I represent and solve problems involving multiplication and division?</p> <p>LEQ: How do I show fact fluency for multiplication and division?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Fluently multiply and divide within 100. • Use fact families and the relationship between multiplication and division to find unknown whole numbers in multiplication and division equations. • Solve word problems using equations with the unknown whole number in different places in the equations. <p>Language Objectives</p> <ul style="list-style-type: none"> • Write multiplication and division fact families. • Write related facts to find the unknown number in a multiplication or division equation. • Tell which multiplication or division facts can represent a particular word problem. <p>Lesson 7:</p>		<p>into equal-sized groups.</p> <p>factor - a number that is multiplied</p> <p>Product - the result of multiplication.</p> <p>Lesson 6: There is no new vocabulary. Review the following key terms.</p> <p>fact family - a group of related facts (equations) that use the same numbers, but in a different order.</p> <p>multiply - to repeatedly add the same number a certain number of times; used to find the total number of items in equal-sized groups.</p> <p>factor - a number that is multiplied.</p> <p>product - the result of multiplication.</p>	
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			<p>LEQ: How can I solve problems using the four operations?</p> <p>LEQ: How can I identify and explain patterns in mathematics?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Use hundreds charts, addition tables, and multiplication tables to model addition and multiplication patterns and explain why the patterns make sense. • Use number properties (informally) to find and explain patterns. • Use knowledge of even and odd numbers to find and explain patterns. <p>Language Objectives</p> <ul style="list-style-type: none"> • Describe number patterns. • Use the key vocabulary terms pattern, rule, even number, and odd number when discussing patterns 	<p>division - an operation used to separate a number of items into equal-sized groups.</p> <p>dividend - the number that is divided by another number.</p> <p>divisor - the number by which another number is divided.</p> <p>quotient - the result of division.</p> <p>Lesson 7: pattern - a series of numbers or shapes that follow a rule to repeat or change.</p> <p>rule - a procedure that is followed to go from one number or shape to the next in a pattern.</p> <p>Review the following key terms. even number - an even number of objects can be put into pairs or</p>	
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					<p>into two equal groups without any leftovers; an even number always has 0, 2, 4, 6, or 8 in the ones place.</p> <p>odd number - an odd number of objects cannot be put into pairs or into two equal groups without a leftover; an odd number always has 1, 3, 5, 7, or 9 in the ones place.</p> <p>Area Denominator Division Equivalent Fractions Estimate Fraction Linear Liquid Volume Mass Numerator Pattern Pentagon Perimeter Pictograph Polygon Quadrilateral Rhombus Round Square Unit Tally Chart Temperature</p>	
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Numbers and Operations in Base Ten

<u>Big Idea</u>	<u>Standard</u>	<u>Eligible Content</u>	<u>Essential Questions & Lesson Essential Question</u>	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>
<p>Mathematical relationships among numbers can be represented, compared, and communicated.</p> <p>Mathematical relationships can be represented as expressions, equations and inequalities in mathematical situations.</p> <p>Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.</p> <p>Patterns exhibit relationships that can be extended, described, and generalized</p>	<p>Lesson 8 CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.</p> <p>Lesson 9 CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit Arithmetic.</p> <p>Lesson 10 CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.</p> <p>Standard Area Algebraic Concepts</p> <p>Standard</p>	<p>M03.A-T.1.1.1 Round two and three digit whole numbers to the nearest ten or hundred, respectively. (Lesson 8)</p> <p>M03.A-T.1.1.2 Add two and three digit whole numbers (limit sums from 100 through 1000) and/or subtract two and three digit numbers from three digit whole numbers. (Lesson 9)</p> <p>M03.A-T.1.1.3 Multiply one digit whole numbers by two digit multiples of 10 (from 10 through 90).</p>	<p>Unit 2 EQs: How is mathematics used to quantify, compare, represent, and model numbers? How can mathematics support effective communication?</p> <p>How are relationships represented mathematically?</p> <p>What does it mean to estimate or analyze numerical quantities?</p> <p>What makes a tool and/or strategy appropriate for a given task?</p> <p>When is it appropriate to estimate versus calculate? How can patterns be used to describe relationships in mathematical situations?</p> <p>Lesson 8: LEQ: How can I use place value and properties of operations to perform multi-digit arithmetic?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Round two- and three-digit numbers to the nearest ten. • Round three-digit numbers to the nearest hundred. 	<p>Place Value and Properties of Operations</p>	<p>Lesson 8: round - to approximate the value of a number by finding the nearest ten, hundred, or other place value.</p> <p>Review the following key terms. to estimate - to give an approximate number or answer based on mathematical thinking.</p> <p>an estimate - a close guess made using mathematical thinking.</p> <p>compare - to decide if one number is greater than, less than, or equal to another number.</p> <p>Lesson 9: There is no new vocabulary.</p>	<p>Perform multi-digit arithmetic.</p> <p>Demonstrate fluency of addition and subtraction.</p> <p>Round whole numbers to the nearest ten or hundred.</p>

	<p>CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.</p> <p>Additional PA Core Standards CC.2.2.3.A.2, CC.2.2.3.A.3 (See page B1 for full text.)</p> <p>CC.2.1.3.B.1</p>	<p>(Lesson 10)</p> <p>M03.A-T.1.1.4 Order a set of whole numbers from least to greatest or greatest to least (up through 9,999, and limit sets to no more than four numbers). (Lesson 8)</p>	<ul style="list-style-type: none"> • Explain how to round numbers to the nearest ten and to the nearest hundred. • Compare three- and four-digit numbers. • Order numbers through the thousands from least to greatest or greatest to least. • Express inequalities using proper notation. <p>Language Objectives</p> <ul style="list-style-type: none"> • Summarize what rounding is. • Tell why rounding is useful for estimating. • Tell which of two numbers is greater and which is lesser. • Write inequalities to compare and order numbers using > symbols and < symbols. <p>Lesson 9: LEQ: How can I use place value and properties of operations to perform multi-digit arithmetic?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Use a variety of strategies to add two- and three-digit numbers. • Use a variety of strategies to subtract two- and three-digit numbers. <p>Language Objectives</p> <ul style="list-style-type: none"> • Add two- or three-digit numbers using place-value reasoning, and describe any necessary regroupings. 		<p>Review the following key terms.</p> <p>sum - the result of addition.</p> <p>difference - the result of subtraction.</p> <p>place value - the value assigned to a digit based on its position in a number; for example, the 2 in 324 is in the tens place and has a value of 2 tens or twenty.</p> <p>regroup - to compose or decompose ones, tens, or hundreds; For example, 10 ones can be regrouped as 1 ten, or 1 hundred can be regrouped as 10 tens.</p> <p>Lesson 10: There is no new vocabulary.</p> <p>Review the following key terms.</p> <p>multiply - to repeatedly add</p>	
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			<ul style="list-style-type: none"> • Subtract two- or three-digit numbers using place-value reasoning, and describe any necessary regroupings. • Draw an open number line to find the difference of two numbers. • Summarize word problems involving addition or subtraction. • Compare the different approaches to solving a word problem used by others and identify connections among the approaches. <p>Lesson 10: LEQ: How can I use place value and properties of operations to perform multi-digit arithmetic?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Understand the meaning of a multiplication expression. • Use place value understanding to multiply a one-digit number by multiples of 10. • Use properties of operations to multiply a one-digit number by multiples of 10. <p>Language Objectives</p> <ul style="list-style-type: none"> • Describe patterns in products of one-digit numbers and multiples of 10. • Skip count by tens. • Rewrite multiples of ten as 10 times a number. 		<p>the same number a certain number of times; used to find the total number of items in equal-sized groups.</p> <p>factor - a number that is multiplied.</p> <p>product - the result of multiplication.</p>	
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			<ul style="list-style-type: none"> Record the steps used to find the product of a one-digit number and a multiple of ten. 			
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Month(s): November/December	Unit 3
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Operations and Algebraic Thinking

<u>Big Idea</u>	<u>Standard</u>	<u>Eligible Content</u>	<u>Essential Questions & Lesson Essential Question</u>	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>
<p>Mathematical relationships among numbers can be represented, compared, and communicated.</p> <p>Patterns exhibit relationships that can be extended, described, and generalized.</p> <p>Mathematical relations and functions can be modeled through multiple representations and analyzed to raise and answer questions.</p>	<p>Lesson 11 CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.</p> <p>CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic. Additional PA Core Standards CC.2.2.3.A.2, CC.2.2.3.A.3 (See page B1 for full text.)</p> <p>Lesson 12 CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.</p>	<p>M03.B-O.1.2.1 Use multiplication (up to and including 10×10) and/or division (limit dividends through 50 and limit divisors and quotients through 10) to solve word problems in situations involving equal groups, arrays, and/or measurement quantities (Lesson 11)</p> <p>M03.B-O.3.1.1 Solve two-step word problems</p>	<p>Unit 3 EQs:</p> <p>How is mathematics used to quantify, compare, represent, and model numbers?</p> <p>How can mathematics support effective communication?</p> <p>How can patterns be used to describe relationships in mathematical situations?</p> <p>How can recognizing repetition or regularity assist in solving problems more efficiently?</p> <p>How can data be organized and represented to provide insight into the relationship between quantities?</p> <p>How can probability and data analysis be used to make predictions?</p> <p>Lesson 11:</p>	<p>Patterns</p>	<p>Lesson 11: There is no new vocabulary.</p> <p>Review the following key terms. array - a set of objects arranged in equal rows and equal columns.</p> <p>multiply - to repeatedly add the same number a certain number of times; used to find the total number of items in equal-sized groups.</p> <p>division - an operation used to separate a number of items into equal-sized groups.</p>	<p>Represent and solve problems. Identify and explain patterns in arithmetic (including addition and subtraction).</p>

	<p>CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p> <p>Additional PA Core Standards CC.2.1.3.B.1, CC.2.2.3.A.3 (See page B1 for full text.)</p> <p>Lesson 13 CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p> <p>Additional PA Core Standards CC.2.1.3.B.1, CC.2.2.3.A.1, CC.2.2.3.A.2, CC.2.2.3.A.3 (See page B1 for full text.)</p> <p>CC.2.2.3.A.4</p>	<p>using the four operations (expressions are not explicitly stated). Limit to problems with whole numbers and having whole number answers. (Lesson 12, 13)</p> <p>M03.B-O.3.1.2 Represent two step word problems using equations with a symbol standing for the unknown quantity. Limit to problems with whole numbers and having whole number answers. (Lesson 12, 13)</p> <p>M03.B-O.3.1.3 Assess the reasonableness of answers. Limit</p>	<p>LEQ: How do I represent and solve problems involving multiplication and division?</p> <p>LEQ: How can I solve problems using the four operations?</p> <p>LEQ: How can I identify and explain patterns in mathematics?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Solve multiplication and division word problems involving equal groups. • Solve multiplication and division word problems involving arrays. • Solve multiplication and division word problems involving area models. <p>Language Objectives</p> <ul style="list-style-type: none"> • Draw an array or other diagram to represent multiplication or division word problems, and explain how the diagram relates to the problem. • Write equations to represent multiplication and division word problems and explain how the equation relates to the problem. • Compare the different approaches used by others and identify connections among the approaches. <p>Lesson 12:</p>		<p>equation - a mathematical statement that uses an equal sign (=) to show that two expressions have the same value.</p> <p>Lesson 12 operation - any mathematical process, such as addition, subtraction, multiplication or division.</p> <p>Review the following key term. equation - a mathematical statement that uses an equal sign (=) to show that two expressions have the same value.</p> <p>Lesson 13 There is no new vocabulary.</p> <p>Review the following key terms. round - to approximate the value of a number by finding the nearest ten,</p>	
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		<p>problems posed with whole numbers and having whole number answers. (Lesson 13)</p> <p>M03.B-O.3.1.4 Solve two step equations using order of operations (equation is explicitly stated with no grouping symbols). (Lesson 13)</p> <p>M03.B-O.3.1.6 Create or match a story to a given combination of symbols (+, -, X, ÷, <, >, and =) and numbers. (Lesson 12)</p> <p>M03.B-O.3.1.7 Identify the missing symbol (+, -, X, ÷, <, >, and</p>	<p>LEQ: How do I represent and solve problems involving multiplication and division?</p> <p>LEQ: How can I solve problems using the four operations?</p> <p>LEQ: How can I identify and explain patterns in mathematics?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Determine operations needed to solve two-step word problems. • Model two-step problems with four operations using a variety of representations, including equations with variables. • Solve two-step problems with four operations. <p>Language Objectives</p> <ul style="list-style-type: none"> • Summarize two-step word problems and choose which of the four operations are needed to solve the problem. • Draw a diagram to represent two-step word problems and explain how the diagram relates to the problem. • Write an equation with a variable as the unknown to represent a two-step word problem and explain how the equation relates to the problem. 		<p>hundred, or other place value.</p> <p>to estimate - to give an approximate number or answer based on mathematical thinking.</p> <p>an estimate - a close guess made using mathematical thinking.</p> <p>equation - a mathematical statement that uses an equal sign (=) to show that two expressions have the same value.</p>	
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		<p>=) that makes a number sentence true. (Lesson 12,13)</p>	<ul style="list-style-type: none"> • Create or match a story to a given mathematical expression or equation. <p>Lesson 13: LEQ: How can I solve problems using the four operations?</p> <p>LEQ: How can I identify and explain patterns in mathematics?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Determine operations needed to solve two-step word problems. • Model two-step problems with four operations using a variety of representations, including equations with a variable. • Solve two-step problems with four operations. • Identify the operations needed to solve word problems. • Assess the reasonableness of answers. <p>Language Objectives</p> <ul style="list-style-type: none"> • Restate a two-step word problem to understand what a reasonable answer might be. • Model and solve two-step word problems. • Compare an answer for a word problem with an estimate and judge the reasonableness of the answer. 			
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			<ul style="list-style-type: none"> • Communicate ideas of solving problems to others and compare differences in thinking. 			
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Month(s): January/February	Unit 4
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Numbers and Operations

<u>Big Idea</u>	<u>Standard</u>	<u>Eligible Content</u>	<u>Essential Questions & Lesson Essential Question</u>	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>
<p>Mathematical relationships among numbers can be represented, compared, and communicated. Mathematical relationships can be represented as expressions, equations and inequalities in mathematical situations. Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.</p>	<p>CC.2.1.3.C.1 Explore and develop an understanding of fractions as numbers.</p>	<p>M03.A-F.1.1.1 Demonstrate that when a whole or set is partitioned into y equal parts, the fraction $1/y$ represents 1 part of the whole and/or the fraction x/y represents x equal parts of the whole (limit denominators to 2, 3, 4, 6, and 8; limit numerators to whole numbers less than the denominator; and no simplification necessary).</p>	<p>How is mathematics used to quantify, compare, represent, and model numbers?</p> <p>How can mathematics support effective communication?</p> <p>How are relationships represented mathematically?</p> <p>What does it mean to estimate or analyze numerical quantities?</p> <p>What makes a tool and/or strategy appropriate for a given task?</p> <p>Lesson 14: LEQ: How can I explore and develop an understanding of fractions as numbers?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Understand that a fraction is a whole divided into some number of equal parts. 	<p>Fractions</p>	<p>Lesson 14:</p> <ul style="list-style-type: none"> • fraction - a number that names equal parts of a whole; a fraction names a point on the number line. • numerator - the number above the fraction bar in a fraction that tells the number of equal parts that are being described. • denominator - the number below the fraction bar in a fraction that tells the number of equal parts in the whole. • unit fraction - a 	<p>Develop an understanding of fractions as numbers.</p> <p>Represent fractions on a number line.</p> <p>Represent and generate equivalent fractions.</p> <p>Compare fractions with the same numerator or same denominator.</p>

		<p>(Lesson 14)</p> <p>M03.A-F.1.1.2 Represent fractions on a number line (limit denominators to 2, 3, 4, 6, and 8; limit numerators to whole numbers less than the denominator; and no simplification necessary). (Lesson 15)</p> <p>M03.A-F.1.1.3 Recognize and generate simple equivalent fractions (limit the denominators to 1, 2, 3, 4, 6, and 8 and limit numerators to whole numbers less than the denominator). (Lesson 16,17)</p> <p>M03.A-F.1.1.4</p>	<ul style="list-style-type: none"> • Understand and recognize the parts of a fraction. • Understand that unit fractions are the building blocks of fractions in the same way that 1 is the building block of whole numbers. <p>Language Objectives</p> <ul style="list-style-type: none"> • Write the fraction shown by an area model. • Shade an area model to represent a given unit fraction. • Shade area models to represent a variety of fractions. • Orally define and use the key mathematical terms denominator, fraction, numerator, and unit fraction when describing reasoning to a partner. <p>Lesson 15: LEQ: How can I explore and develop an understanding of fractions as numbers?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Understand that, in addition to whole numbers, number lines can show equal parts of a whole, or fractions. • Understand fractions as numbers on a number line. • Understand how to use number lines to count and identify fractional parts. • Represent fractions on a number line that are less than, equal to, or greater than one. 		<p>fraction with a numerator of 1; other fractions are built from unit fractions.</p> <p>equivalent fractions – two or more fractions that name the same part of a whole or the same point on a number line</p> <p>Compare to decide if one number is greater than, less than, or equal to another number.</p>	
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		<p>Express whole numbers as fractions, and/or generate fractions that are equivalent to whole numbers (limit denominators to 1, 2, 3, 4, 6, and 8). (Lesson 17)</p> <p>M03.A-F.1.1.5 Compare two fractions with the same denominator (limit denominators to 1, 2, 3, 4, 6, and 8), using the symbols $>$, $=$, or $<$, and/or justify the conclusions. (Lesson 18)</p>	<p>Language Objectives</p> <ul style="list-style-type: none"> • Label points on a number line with the appropriate fraction. • Describe how the denominator of a fraction is related to the number of sections between the whole numbers on a number line. <p>Lesson 16: LEQ: How can I explore and develop an understanding of fractions as numbers?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Understand that two fractions are equivalent if they are the same size, cover the same area, or are on the same point on a number line. • Recognize and generate equivalent fractions using fraction models and number lines. • Explain why two fractions are equivalent by using a fraction model or number line. <p>Language Objectives</p> <ul style="list-style-type: none"> • Draw an area model or a number line to show equivalent fractions. • Orally define and use the key mathematical term equivalent fraction when reasoning about equivalent fractions with a partner. <p>Lesson 17: LEQ: How can I explore and develop an understanding of</p>			
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fractions as numbers?

Content Objectives

- Use fraction models and number lines to identify and create equivalent fractions, including those that are greater than or equal to one whole.
- Identify, model, and write equivalent fractions for whole numbers.

Language Objectives

- Write equivalent fractions for numbers greater than one.
- Write whole numbers as fractions and justify using area models or number lines.
- Write a fraction that can represent a whole number.
- Tell why a fraction with a denominator of 1 is equivalent to a whole number.

Lesson 18:

LEQ: How can I explore and develop an understanding of fractions as numbers?

Content Objectives

- Reason about unit fractions to compare two fractions using the sizes of the unit fractions shown by the denominators and the number of parts shown by the numerators.
- Determine if fractions to be compared have the same numerators or denominators.
- Use models or number lines to explain why one fraction is

greater than or less than another.

Language Objectives

- Draw area models and number line models to compare fractions.
- Communicate ideas about comparing fractions to others, including use of terms numerator, denominator, more than, and less than.
- Listen to and critique others' ideas about comparing fractions.

Lesson 19:

LEQ: How can I explore and develop an understanding of fractions as numbers?

Content Objectives

- Use symbols to record the results of comparing fractions with the same numerator or the same denominator.
- Read comparison statements fluently and accurately.
- Use models and number lines to explain and justify fraction comparisons.

Language Objectives

- Draw area models and number lines to justify fraction comparisons.
- Write comparison statements using symbols $<$, $>$, and $=$ to compare fractions.
- Orally describe how to compare

			fractions to one another.			
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Month(s): February/March	Unit 5
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Measurement and Data

<u>Big Idea</u>	<u>Standard</u>	<u>Eligible Content</u>	<u>Essential Questions & Lesson Essential Question</u>	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>
<p>Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.</p> <p>Measurement attributes can be quantified, and estimated using customary and non-customary units of measure.</p> <p>Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.</p> <p>Measurement attributes can be</p>	<p>CC.2.4.3.A.1 Solve problems involving measurement and estimation of temperature, liquid volume, mass and length.</p> <p>CC.2.4.3.A.2 Tell and write time to the nearest minute and solve problems by calculating time intervals.</p> <p>CC.2.4.3.A.3 Solve problems involving money using a combination of coins and bills.</p> <p>CC.2.4.3.A.4 Represent and interpret data using tally charts, tables,</p>	<p>M03.D-M.1.1.1 Tell, show, and/or write time (analog) to the nearest minute. (Lesson 20)</p> <p>M03.D-M.1.1.2 Calculate elapsed time to the minute in a given situation (total elapsed time limited to 60 minutes or less) (Lesson 21)</p> <p>M03.D-M.1.2.1 Measure and estimate liquid volumes and masses of objects using</p>	<p>What does it mean to estimate or analyze numerical quantities?</p> <p>When is it is appropriate to estimate versus calculate?</p> <p>What makes a tool and/or strategy appropriate for a given task?</p> <p>Why does “what” we measure influence “how” we measure?</p> <p>In what ways are the mathematical attributes of objects or processes measured, calculated and/or interpreted?</p> <p>How precise do measurements and calculations need to be?</p> <p>What does it mean to estimate or analyze numerical quantities?</p> <p>When is it is appropriate to estimate versus calculate?</p>	<p>Measurement Time Data Displays</p>	<p>hour a unit of time equal to 60 minutes.</p> <ul style="list-style-type: none"> • minute a unit of time equal to 60 seconds. • hour hand the shorter indicator (or hand) on an analog clock, which shows the hours. • minute hand the longer indicator (or hand) on an analog clock, which shows the minutes. • am the time from midnight until before Noon. • pm the time from noon until before Midnight. 	<p>Solve problems. Make estimations. Determine the area of a rectangle as it relates to multiplication and addition. Determine perimeter or side lengths of various polygons. Distinguish between linear and area measurements. Solve problems. Make estimations. Tell and write time to nearest minute. Calculate time intervals.</p>

<p>quantified, and estimated using customary and noncustomary units of measure.</p> <p>Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.</p> <p>Measurement attributes can be quantified, and estimated using customary and non-customary units of measure.</p> <p>Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.</p> <p>Mathematical relations and functions can be modeled through multiple representations and analyzed to</p>	<p>pictographs, line plots, and bar graphs.</p> <p>CC.2.4.3.A.5 Determine the area of a rectangle and apply the concept to multiplication and to addition.</p> <p>CC.2.4.3.A.6 Solve problems involving perimeters of polygons and distinguish between linear and area measures.</p>	<p>standard units (cups [c], pints [pt], quarts [qt], gallons [gal], ounces [oz.], and pounds [lb]) and metric units (liters [l], grams [g], and kilograms [kg]). (Lesson 22A, 23)</p> <p>M03.D-M.1.2.2 Add, subtract, multiply, and divide to solve one-step word problems involving masses or liquid volumes that are given in the same units. (Lesson 22, 22A, 23)</p> <p>M03.D-M.1.2.3 Use a ruler to measure lengths to the nearest quarter inch or centimeter. (Lesson 26)</p>	<p>How precise do measurements and calculations need to be?</p> <p>What does it mean to estimate or analyze numerical quantities?</p> <p>When is it appropriate to estimate versus calculate?</p> <p>How can data be organized and represented to provide insight into the relationship between quantities?</p> <p>How does the type of data influence the choice of display?</p> <p>How can probability and data analysis be used to make predictions?</p> <p>What makes a tool and/or strategy appropriate for a given task?</p> <p>Lesson 20: LEQ: How can I write time to the nearest minute?</p> <p>LEQ: How can I solve problems by calculating time intervals?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Use an analog clock to tell and write time to the nearest minute. • Relate time on analog and digital clocks. 		<p>elapsed time the time that has passed between a start time and an end time.</p> <p>cent the smallest unit of money in the U.S. One penny is one cent.</p> <ul style="list-style-type: none"> • penny a coin that has a value of 1 cent. • nickel a coin that has a value of 5 cents. • dime a coin that has a value of 10 cents. • quarter a coin that has a value of 25 cents. • dollar a unit of money in the U.S. equal to 100 cents. • liquid volume the amount of space a liquid takes up. • liter a unit used to measure liquid volume in the 	<p>Represent and interpret data using various displays.</p>
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<p>raise and answer questions.</p> <p>Data can be modeled and used to make inferences.</p>		<p>M03.D-M.1.3.1 Compare total values of combinations of coins (penny, nickel, dime, and quarter) and/or dollar bills less than \$5.00. (Lesson 21A)</p> <p>M03.D-M.1.3.2 Make change for an amount up to \$5.00 with no more than \$2.00 change given (penny, nickel, dime, quarter, and dollar). (Lesson 21A)</p> <p>M03.D-M.1.3.3 Round amounts of money to the nearest dollar. (Lesson 21A)</p> <p>M03.D-M.2.1.1 Complete a scaled pictograph</p>	<ul style="list-style-type: none"> Express time as the number of minutes before the hour. <p>Language Objectives</p> <ul style="list-style-type: none"> Tell the time shown on a digital clock. Tell the time on an analog clock to the minute. Tell the time shown on an analog clock as minutes before the next hour. Draw hands on an analog clock to show a given time. Use the terms am and pm appropriately in writing and in speaking. <p>Lesson 21: LEQ: How can I write time to the nearest minute?</p> <p>LEQ: How can I solve problems by calculating time intervals?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> Measure time intervals in minutes using clock models and number lines. Solve word problems involving addition of time intervals in minutes. Solve word problems involving subtraction of time intervals in minutes. <p>Language Objectives</p> <ul style="list-style-type: none"> Find elapsed time. Tell how to find the ending time when the start time and total elapsed time are given. 	<p>metric system; 1 liter is equivalent to 1,000 milliliters.</p> <ul style="list-style-type: none"> cup a unit of liquid volume in the standard measurement system. Four cups is equivalent to 1 quart. pint a unit of liquid volume in the standard measurement system. One pint is equivalent to 2 cups. quart a unit of liquid volume in the standard measurement system. One quart is equivalent to 4 cups. gallon a unit of liquid volume in the standard measurement system. One gallon is equivalent to 4 quarts. liquid volume the amount of space a liquid 	
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		<p>and a scaled bar graph to represent a data set with several categories (scales limited to 1,2,5,and 10). (Lesson 25) M03.D-M.2.1.2 Solve one- and two-step problems using information to interpret data presented in scaled pictographs and scaled bar graphs (scales limited to 1, 2, 5, and 10). (Lesson 24) M03.D-M.2.1.3 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Display the data by making a line</p>	<ul style="list-style-type: none"> • Tell how to find the start time when the ending time and total elapsed time are given. • Restate a word problem to tell whether it is asking for elapsed time, start time, or ending time, and choose an appropriate strategy for solving. <p>Lesson 21a: LEQ: How can I solve problems involving money using a combination of coins and bills?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Count and compare the value of combinations of bills and coins. • Make change using combinations of bills and coins. • Solve problems by comparing the value of coins and bills and making change. • Round amounts of money to the nearest dollar. <p>Language Objectives</p> <ul style="list-style-type: none"> • Record the value of a combination of bills and coins. • Write an equation to solve a problem involving money. • Describe a set of bills and coins. <p>Lesson 22: LEQ: How can I solve problems involving measurement?</p>		<p>takes up.</p> <p>mass the amount of matter in an object; measuring the mass of an object is one way to measure how heavy it is. Units of mass include the gram and kilogram.</p> <ul style="list-style-type: none"> • gram a unit of mass in the metric system; a paper clip has a mass of about 1 gram. 1,000 grams is equivalent to 1 kilogram. • kilogram a unit of mass in the metric system; 1 kilogram is equivalent to 1,000 grams. • weight the measurement that tells how heavy an object is. Units of weight include ounces and pounds. • ounce a unit of weight in the customary 	
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		<p>plot, where the horizontal scale is marked in appropriate units—whole numbers, halves, or quarters. (Lesson 26)</p> <p>M03.D-M.2.1.4 Translate information from one type of display to another. Limit to pictographs, tally charts, bar graphs, and tables. (Lesson 25)</p> <p>M03.D-M.3.1.1 Measure areas by counting unit squares (square cm, square m, square in., square ft, and non-standard square units). (Lesson 27, 29)</p> <p>M03.D-M.3.1.2</p>	<p>LEQ: How can I estimate temperature, liquid volume, mass, and length?</p> <p>Content Objectives:</p> <ul style="list-style-type: none"> • Identify items that can be measured in liquid volume units. • Understand the relative size of 1 liter. • Use unit size to estimate liquid volume (capacity). <p>Solve one-step word problems involving liquid volume (capacity).</p> <p>Language Objectives:</p> <ul style="list-style-type: none"> • List everyday containers that can hold about 1 liter of liquid. • Estimate the liquid volume of various containers, and justify the estimate. • Orally define and use the key mathematical terms liquid volume and liter in discussions. • Restate word problems involving measuring liquid volume with liters. <p>•Lesson 22a: LEQ: How can I solve problems involving measurement?</p> <p>LEQ: How can I estimate temperature, liquid volume, mass, and length?</p> <p>Content Objectives</p>		<p>system. A slice of bread weighs about one ounce. Sixteen ounces is equivalent to 1 pound.</p> <ul style="list-style-type: none"> • pound a unit of weight in the customary system. One pound is equivalent to 16 ounces. Review the following key terms. • measure to determine length, mass, or liquid volume by comparing to a Standard. • to estimate to give an approximate number or answer based on mathematical thinking. • an estimate a close guess made using mathematical thinking. • thermometer a tool used to 	
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		<p>Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. (Lesson 28, 29)</p> <p>M03.D-M.4.1.1 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, exhibiting rectangles</p>	<ul style="list-style-type: none"> • Understand relative sizes of 1 cup, 1 pint, 1 quart, and 1 gallon. • Use benchmarks to estimate liquid volume. • Measure to the nearest cup, pint, quart, or gallon. <p>Language Objectives</p> <ul style="list-style-type: none"> • List everyday containers that can hold about 1 cup, 1 pint, 1 quart, and 1 gallon of liquid. • Orally define and use the key mathematical terms liquid volume and cup, pint, quart, and gallon in discussions. <p>Lesson 23: LEQ: How can I solve problems involving measurement?</p> <p>LEQ: How can I estimate temperature, liquid volume, mass, and length?</p> <p>Content Objectives:</p> <ul style="list-style-type: none"> • Understand that one way objects can be measured is by how heavy or light they are. • Understand relative masses of gram and kilogram and relative weights of ounce and pound. • Use unit size to estimate mass and weight. • Solve one-step word problems involving mass. <p>Language Objectives:</p> <ul style="list-style-type: none"> • List everyday objects that 		<p>measure temperature in degrees Celsius or degrees Fahrenheit.</p> <ul style="list-style-type: none"> • temperature a measurement that tells how hot or cold something is. • tick mark thin, solid line or mark used to represent numbers on a number line or thermometer. • degree Fahrenheit the unit for measuring temperature in the customary scale. • Degree Celsius the unit for measuring temperature in the metric scale. <p>Data a set of collected information; often numerical information such as a list of measurements.</p> <p>Bar graph a data</p>	
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		<p>with the same perimeter and different areas, and exhibiting rectangles with the same area and different perimeters. Use the same units throughout the problem. (Lesson 30)</p>	<p>have a mass of about 1 gram or 1 kilogram or a weight of about 1 ounce or 1 pound.</p> <ul style="list-style-type: none"> • Estimate the mass or weight of various objects, and justify the estimate. • Tell what mass is shown in pictures of balance scales and spring scales. <p>Lesson 23a: LEQ: How can I solve problems involving measurement?</p> <p>LEQ: How can I estimate temperature, liquid volume, mass, and length?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Use appropriate units and tools to measure temperature. • Estimate and measure temperature in degrees Celsius and Fahrenheit. • Solve problems involving estimating and measuring temperature. <p>Language Objectives</p> <ul style="list-style-type: none"> • Describe temperature using the key terms degrees Fahrenheit and degrees Celsius to communicate effectively. • Read and state the temperature shown on thermometers with Fahrenheit and Celsius scales. • Explain and solve word problems involving estimating 		<p>display in which bars are used to represent the number of items in each category.</p> <p>Pictograph a data display in which pictures are used to represent the number of items in each category.</p> <ul style="list-style-type: none"> • scale the increment by which the numbers along the axes of a graph change. • key an explanation of what each symbol in a pictograph represents. • area the amount of space inside a closed two-dimensional figure. • square unit a square with side lengths of 1 unit that is used to measure the area of a figure. • perimeter the distance around a 	
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			<p>and measuring temperature.</p> <p>Lesson 24: LEQ: How do I represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Interpret data displayed in a bar graph to solve one- and two-step problems involving addition and subtraction. • Interpret data displayed in a pictograph to solve one- and two-step problems involving addition, subtraction, and multiplication. • Recognize that data displayed in pictographs and bar graphs can be represented by a scale other than 1. • Use multiplication to determine the number of items in data categories on graphs with a scale other than 1. <p>Language Objectives</p> <ul style="list-style-type: none"> • Restate information given by the key in a pictograph. • Analyze scaled graphs using multiplication to find values. • Use the key vocabulary terms bar, graph, key, pictograph, scale, and data to communicate precisely. <p>Lesson 25: LEQ: How do I represent and interpret data using tally charts, tables, pictographs, line</p>		<p>two-dimensional shape; found by adding the lengths of the sides.</p> <p>Data a set of collected information; often numerical information such as a list of measurements.</p> <p>Line plot a data display that shows the frequencies of the data as marks above a number line.</p> <p>To estimate to give an approximate number or answer based on mathematical thinking.</p> <p>Inch the smallest unit of length in the U.S. customary system.</p> <p>Centimeter a unit of length in the metric system. Your little finger is about 1</p>	
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			<p>plots, and bar graphs?</p> <p>Content Objectives Draw a scaled pictograph. Draw a scaled bar graph.</p> <p>Language Objectives Read data listed in a table. Make connections between ideas about graphs shared by others.</p> <p>Lesson 26: LEQ: How can I solve problems involving measurement?</p> <p>LEQ: How can I estimate temperature, liquid volume, mass, and length?</p> <p>LEQ: How do I represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Estimate and measure length. • Use a ruler to measure objects to the nearest 1/2 inch. • Use a ruler to measure objects to the nearest 1/4 inch. • Use a ruler to measure objects to the nearest centimeter. • Display measurement data in a line plot. • Answer questions about data in a line plot. 		<p>centimeter across. 100 centimeters in equivalent to 1 meter.</p> <p>Factor a number that is multiplied</p> <p>Product the result of multiplication.</p>	
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Language Objectives

- Explain how to estimate length.
- Record results of measurement in a table.
- Read measurement data in a table.
- Write labels on a line plot.

Lesson 27:

LEQ: How can I determine the area of a rectangle and apply the concept to multiplication and addition?

Content Objectives

- Understand what a square unit is and the fact that it can be different sizes.
- Understand that a square unit is used to measure area.
- Understand how to measure area by covering a shape with square units and counting the squares.
- Find the area of shapes using different-sized square units, including square centimeters and meters, square inches and feet.

Language Objectives

- Record the number of square units in a given rectangle.
- Draw a rectangle with a given area.
- Orally define and use the key mathematical terms area and square unit to describe determining area to a partner.

Lesson 28:
LEQ: How can I determine the area of a rectangle and apply the concept to multiplication and addition?

Content Objectives

- Understand that multiplying side lengths of a rectangle provides the same results as tiling it and counting the units.
- Use the area formula for rectangles to solve mathematical problems.
- Use the area formula for rectangles to solve real-world problems.
- Use area models to solve area problems involving combining two rectangles

Language Objectives

- Write an equation for the area of a given rectangle.
- Label area measurements with square units.
- Draw a picture to represent and solve a word problem about area.

Lesson 29:
LEQ: How can I determine the area of a rectangle and apply the concept to multiplication and addition?

Content Objectives

- Use area models to show how the distributive property can be used to find the area of combined rectangles.

- Decompose shapes formed by rectangles, find the area of each rectangle, and add the areas to find the total area of the shape.
- Understand that area is additive.
- Count unit squares to determine the area of a figure.

Language Objectives

- Draw lines in rectangles to break them into smaller rectangles.
- Tell how to find the area of a shape made from rectangles.

Lesson 30:

LEQ: How can I solve problems involving perimeters of polygons?

LEQ: How can I distinguish between linear and area measures?

Content Objectives:

- Understand the difference between area and perimeter.
- Use side lengths to find the perimeter of a shape.
- Find an unknown side length given the perimeter of a shape.
- Understand that rectangles with the same area can have different perimeters.
- Understand that rectangles with the same perimeter can have different areas.

Language Objectives:

			<ul style="list-style-type: none"> • Tell the difference between area and perimeter. • Write an addition equation to represent the perimeter of a polygon. • Use the key vocabulary term perimeter when discussing area and perimeter with a partner. • Draw two rectangles with the same perimeter but different areas. • Draw two rectangles with the same area but different perimeters. 			
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Month(s): March/April	Unit 6
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Geometry

<u>Big Idea</u>	<u>Standard</u>	<u>Eligible Content</u>	<u>Essential Questions & Lesson Essential Question</u>	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>
<p>Patterns exhibit relationships that can be extended, described, and generalized.</p> <p>Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization.</p> <p>Patterns exhibit relationships that</p>	<p>CC.2.3.3.A.1 Identify, compare, and classify shapes and their attributes.</p> <p>CC.2.3.3.A.2 Recognize rhombi, rectangles, and squares as examples of quadrilaterals and/or draw examples of</p>	<p>M03.C-G.1.1.1 Explain that shapes in different categories may share attributes and that the shared attributes can define a larger category. (Lesson 31, 32)</p> <p>M03.C-</p>	<p>How can patterns be used to describe relationships in mathematical situations?</p> <p>How can recognizing repetition or regularity assist in solving problems more efficiently?</p> <p>How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving?</p> <p>How can geometric properties and theorems be used to describe, model, and analyze</p>	<p>Two and Three Dimensional Figures Fractions and Area</p>	<ul style="list-style-type: none"> • Venn diagram a drawing that shows relationships among groups. • angle one of the corners of a shape where two sides meet. • rectangle a quadrilateral with four square corners; opposite sides of a rectangle are the 	<p>Identify and classify shapes and their attributes. Compare shapes.</p> <p>Partition two-dimensional shapes into equal parts.</p> <p>Express the area of a partition as a unit fraction of the whole.</p>

<p>can be extended, described, and generalized.</p> <p>Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization.</p>	<p>quadrilaterals that do not belong to any of these subcategories.</p>	<p>G.1.1.2 Recognize rhombi, rectangles, and squares as examples of quadrilaterals and/or draw examples of quadrilaterals that do not belong to any of these subcategories (Lesson 32)</p> <p>M03.C-G.1.1.3 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. (Lesson 33)</p>	<p>situations?</p> <p>How can patterns be used to describe relationships in mathematical situations?</p> <p>How can recognizing repetition or regularity assist in solving problems more efficiently?</p> <p>How are spatial relationships, including shape and dimension, used to draw, construct, model, and represent real situations or solve problems?</p> <p>How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving?</p> <p>How can geometric properties and theorems be used to describe, model, and analyze situations?</p> <p>Lesson 31 LEQ: How can I identify, compare, and classify shapes and their attributes?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Identify two-dimensional shapes and their attributes. • Draw two-dimensional shapes, given attributes. • Compare and contrast attributes of two-dimensional shapes. 		<p>same length.</p> <ul style="list-style-type: none"> • rhombus a parallelogram with four sides equal in length. • pentagon a two-dimensional closed shape with exactly five sides and five Angles. • hexagon a two-dimensional closed shape with exactly six sides and six angles. • attribute any characteristic of an object or shape, like number of sides, color, angle measure, etc. • parallel always the same distance apart. • parallelogram a quadrilateral with opposite sides parallel and equal in length. • rectangle a quadrilateral with four square corners; opposite 	
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		<ul style="list-style-type: none"> • Categorize two-dimensional shapes according to attributes. • Identify and draw two-dimensional shapes that do not belong to a given category. <p>Language Objectives</p> <ul style="list-style-type: none"> • Draw shapes with particular attributes. • Tell the names of shapes with particular attributes. • Use the key vocabulary terms rectangle, rhombus, pentagon, and Venn diagram to communicate effectively with a partner. <p>Lesson 32: LEQ: How can I identify, compare, and classify shapes and their attributes?</p> <p>Content Objectives</p> <ul style="list-style-type: none"> • Identify quadrilaterals and their attributes. • Draw quadrilaterals, given attributes. • Compare and contrast attributes of quadrilaterals. • Identify shared attributes of different quadrilaterals. • Categorize quadrilaterals according to attributes. • Identify and draw quadrilaterals that do not belong to a given category. <p>Language Objectives</p> <ul style="list-style-type: none"> • Define the key vocabulary terms attribute, parallel, parallelogram, quadrilateral, 	<p>sides of a rectangle are the same length.</p> <ul style="list-style-type: none"> • rhombus a parallelogram with four sides equal in length. • quadrilateral a two-dimensional closed shape with exactly four sides and four angles. <p>*area the amount of space inside a closed two-dimensional figure.</p> <ul style="list-style-type: none"> • rectangle a quadrilateral with four square corners; opposite sides of a rectangle are the same length. • fraction a number that names equal parts of a whole; a fraction names a point on the number line. 	
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			<p>rectangle, and rhombus to discuss reasoning.</p> <ul style="list-style-type: none">• Draw a quadrilateral with given attributes. <p>Lesson 33: LEQ: How can I use the understanding of fractions to partition shapes into parts with equal areas?</p> <p>LEQ: How can I express the area of each part as a unit fraction of the whole?</p> <p>Content Objectives</p> <ul style="list-style-type: none">* Partition a shape into equal areas.• Express the area of each equal part as a unit fraction of the whole shape.• Partition the same shape in different ways. <p>Language Objectives</p> <ul style="list-style-type: none">• Draw lines to separate a rectangle into same-sized smaller rectangles.• Shade a given fraction of a rectangle that has been divided into equal parts.			
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