## **Southern York County School District**

## One Warrior at a Time

Course/Subjec	t: Math Comp	rehensive	Grade Level: 3						
Textbook(s)/Materials Used: Ready Pennsylvania Math Instruction, Practice Problem Solving, Assessment, i-Ready Diagnostic & Instruction									
Month(s): Septem	Month(s): September/October Unit 1								
Operations and Al	gebraic Thinking								
<u>Big Idea</u>	<u>Standard</u>	<u>Eligible</u> <u>Content</u>	Essential Questions & Lesson Essential Question	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>			
Mathematical relationships among numbers can be represented, compared, and communicated. Mathematical relationships can be represented as expressions, equations and inequalities in mathematical situations.	Lesson 0 1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. 2.NBT.B.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations,	M03.B- O.1.1.1 Interpret and/or describe products of whole numbers. (Lesson 1, 6) M03.B- O.1.1.2 Interpret and/or describe whole number quotients of whole numbers. (Lesson 4, 6) M03.B- O.1.2.2 Determine the unknown whole number in a	Unit 1 EQs: How is mathematics used to quantify, compare, represent, and model numbers? How can mathematics support effective communication? How are relationships represented mathematically? How can expressions, equations and inequalities be used to quantify, solve, model, and/or analyze mathematical situations? Lesson 0: • Use best practices during a Ready mathematics lesson. • Identify and explain models or strategies used to solve problems. • Critique and compare solution strategies of others and those provided in Ready.	Multiplication and Division	Lesson 0: Associative Property of Addition when the grouping of 3 or more addends is changed, the total does not change addend - a number being added 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. sum - the result of addition	Demonstrate an understanding of properties of multiplication. Demonstrate an understanding of the relationship between multiplication and division. Demonstrate fluency.			

and/or the relationship between addition and subtraction. 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. 2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 columns; write an equation to express an even number as a sum of equal addends. 2.NBT.A.2 Count within 1000; skip- count by 5s, 10s, and 100s. Lesson 1 CC.2.2.3.A.1 Represent and	multiplication (up to and including 10 X 10) or division (limit dividends and quotients through 10) equation relating three whole numbers. (Lesson 5) M03.B- 0.2.1.1 Apply the commutative property of multiplication. (Lesson 2, 3) M03.B- 0.2.1.2 Apply the associative property of multiplication. (Lesson 2, 3) M03.B- 0.2.2.1 Interpret and/or model division as a multiplication equation with an unknown factor.	<ul> <li>Use math talk practices to efficiently share and compare strategies for solving problems.</li> <li>Apply math knowledge and modeling techniques to new, similar problems.</li> <li>Find the total of three addends, using strategies such as making a ten and using doubles.</li> <li>Lesson 1:</li> <li>LEQ: How do I represent and solve problems involving multiplication and division?</li> <li>Content Objectives</li> <li>Understand that the symbol X means "groups of," and problems such as 5 X 7 refer to 5 groups of 7.</li> <li>Interpret a multiplication problem situation using pictures, objects, words, numbers, and equations.</li> <li>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.</li> <li>Language Objectives</li> <li>Read aloud a multiplication equation such as 3 X 2 = 6 as 3 groups of 2 equals 6.</li> <li>Draw an array to represent a</li> </ul>	array - a set of objects arranged in equal rows and equal columns row - the horizontal groups of objects in an array column - the vertical groups of objects in an array Lesson 1: equation - a mathematical statement that uses an equal sign (=) to show that two expressions have the same value. multiply - to repeatedly add the same number a certain number of times; used to find the total number of items in equal-sized groups. factor - a number that is multiplied. product - the	
Lesson 1 CC.2.2.3.A.1 Represent and solve problems	equation with an unknown factor. (Lesson 5)	<ul> <li>equation such as 3 X 2 = 6 as 3 groups of 2 equals 6.</li> <li>Draw an array to represent a given multiplication equation.</li> </ul>	factor - a number that is multiplied. product - the result of multiplication	

properties of multiplication and the relationshipaddition table or multiplication table) and/or table) and/or table) and/or explain the operations.addition table product, and times to communicate precisely.equal columns. There is no new vocabulary.Lesson 1explain the operations.using operations.Lesson 2: Lesson 1: the relationship between operations.Lesson 2: Lesson 2: Lesson 2: Lesson 2: Lesson 2: Lesson 2: Lesson 2: Core Standards (C2.2.3.3.8.1, (C2.2.3.8.1, (C2.2.3.8.1.1 Apply place- value understanding and division properties of operations to perform multi- digit Arithmetic.Content Objectives objects arranged to relationship between multiplication and division?array - a set of objects arranged objects arranged to equal columns. the product will be the same (commutative property of multiplication).array - a set of objects arranged equal columns. the roduct will be the same (commutative property of multiplication). • Apply the commutative property of multiplication as a strategy to solve multiplication problem.array - a set of objects arranged equal columns. the roduct will be the same objectives • Understand that three or number of titems 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.product - the result of multiplication. • Apply the associative property to solve problems.Standard CC 2.2.3.A.2 Understand properties ofLanguage Objectives • Rewrite a multiplication • Rewrite a multiplication • Rewrite a m	involving multiplication and division. Lesson 2 CC.2.2.3.A.2 Understand	M03-B- O.3.1.5 Identify arithmetic patterns (including patterns in the	<ul> <li>Write an equation to represent an array or equal groups using the X symbol.</li> <li>Describe a problem situation that could be represented by a given multiplication equation.</li> <li>Use the key vocabulary terms</li> </ul>	Review the following key term. array - a set of objects arranged in equal rows and	
and the relationship relationship between multiplication and division. Additional PA Core Standards CC 2.1.3.B.1, CC 2.2.3.A.1multiplication table between properties of cores Standard full text.Lesson 7Lesson 2: tree is no new vocabulary. LEO: How can I use properties of multiplication to understand to multiplication and division?Lesson 2: tree is no new vocabulary.Lesson 3 CC 2.1.3.B.1 full text.Content Objectives • Understand that numbers can be multiplication.array - a set of objects arranged • Understand that numbers can be multiplication.objects arranged • objects arranged • Understand the product will be the same (commutative property of multiplication as a strategy to solve multiplication as a trategy to solve multiplication • Apply the commutative problems.multiply - to repeatedly add the same number a certain number of times; used to in equal-sized groups.Standard CC.2.2.3.A.2 understand digit Arithmetic.Standard CC.2.3.3.2.2Language Objectives • Number of items more factors in a problems.product - the result of multiplication.Standard CC.2.2.3.A.2 understand properties of properties ofLanguage Objectives • Rewrite a multiplication problems.product - the result of multiplication.Standard CC.2.2.3.A.2 Understand properties ofLanguage Objectives 	properties of 	addition table	array, factor, multiplication, multiply, product, and times to	equal columns.	
multiplication and division. Additional PA Core Standards 	and the relationship between	multiplication table) and/or explain them	communicate precisely.	Lesson 2: There is no new vocabulary.	
Add division. Additional PA Core Standards C.2.1.3.B.1, C.2.2.3.A.1Inderstand operations. (Lesson 7Inderstand the relationship between multiplication and division?Inderstand array - a set of objects arranged in equal rows and equal columns.Lesson 3 C.2.1.3.B.1, (C.2.1.3.B.1, (Lesson 3)Content Objectives · Understand that numbers can be multiplication) order and the product will be the same 	multiplication	using	LEQ: How can I use properties	Review the	
Core Standards CC.2.1.3.B.1, (See page B1 for full text.)(Lesson 7multiplication and division? multiplicationarray - a set of objects arranged in equal rows and equal columns.Lesson 3 CC.2.1.3.B.1 Apply place- value understanding and properties of operations to perform multi- digit Arithmetic.Content Objectives objects arranged in equal rows and be multiplication multiplication of multiplication problems.array - a set of objects arranged in equal rows and equal columns.Lesson 3 CC.2.1.3.B.1 Apply place- value understanding and properties of operations to perform multi- digit Arithmetic.Content Objectives objects arranged in equal rows and be multiplication as a strategy to solve multiplication of times; used to in equal-sized groups.Standard Area Algebraic CC.2.2.3.A.2Standard Area Apply the associative property of solve problems.factor - a number that is multiplied.Standard CC.2.2.3.A.2Language Objectives problem with the order of the factors reversed and solve.product - the result of multiplication.	Additional PA	operations.	the relationship between	terms.	
CC.2.13.A.1 (See page B1 for full text.)Content Objectives • Understand that numbers can be multiplied in any order and the product will be the same (commutative property of multiplication).Content Objectives objects arranged in equal rows and equal columns.Lesson 3 CC.2.13.B.1 Apply place- value understanding and properties of operations to perform multi- digit Arithmetic.Content Objectives • Understand that numbers can be multiplication).multiply con repeatedly add of times; used to find the total number of titems in equal-sized groups.Standard Area Algebraic CC.2.2.3.A.2Standard Area Algebraic CC.2.2.3.A.2Standard Property to solve problems.factor - a number result of multiplication problems.Standard CC.2.2.3.A.2Language Objectives Property to solve problems.product - the result of multiplication.Standard CC.2.2.3.A.2Language Objectives Properties of Problem with the order of the factors reversed and solve.Lesson 3:	Core Standards	(Lesson 7	multiplication and division?	array - a set of	
(See page B1 for full text.)• Understand that numbers can be multiplied in any order and the product will be the same (commutative property of multiplication).in equal rows and equal columns.Lesson 3 CC.2.1.3.B.1 Apply place- value understanding and properties of operations to perform multi- digit Arithmetic.• Apply the commutative property of multiplication as a strategy to solve multiplication of times; used to in equal-sized find the total mumber of items in equal-sized groups.Standard Area Algebraic Concepts• Understand that three or multiplication).number of items in equal-sized groups.Standard CC.2.2.3.A.2 Understand Properties of opretries of• Understand the three or multiplication more factors in a problem can be grouped in different ways and the product will be the same (associative property of multiplication).factor - a number that is multiplied.Standard CC.2.2.3.A.2 Understand properties of opretries of AlgebraicLanguage Objectives • Rewrite a multiplication • Rewrite a multiplication problem with the order of the factors reversed and solve.Lesson 3:	CC.2.2.3.A.1		Content Objectives	objects arranged	
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Lesson 3 CC.2.1.3.B.1 Apply place- value understanding and properties of operations to perform multi- digit Arithmetic.(commutative property of multiplication).multiply - to repeatedly add the same number a certain number of times; used to find the totalStandard CC.2.2.3.A.2 Understand properties of operation• Apply the commutative property of multiplication as a problems.multiply - to repeatedly add the same number a certain number of times; used to find the totalStandard CC.2.2.3.A.2• Apply the commutiplication property of saturative property of multiplication product will be the same (associative property to solve problems.multiplication in equal-sized groups.Standard CC.2.2.3.A.2• Apply the associative property to solve problems.product - the result of result of multiplicationStandard properties of properties of• Rewrite a multiplication problem with the order of the factors reversed and solve.Easson 3:	full text.)		be multiplied in any order and the product will be the same	equal columns.	
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Apply place- value• Apply the commutativethe same numbervalueproperty of multiplication as a understandinga certain numberunderstandingstrategy to solve multiplicationof times; used to find the totaland properties of operations toproblems.find the totaloperations to digit Arithmetic.• Understand that three or more factors in a problem can and the product will be thein equal-sizedStandard Area Algebraic Conceptssame (associative property of multiplication).factor - a number that is multiplied.Standard CC.2.2.3.A.2Language Objectives property to solve problems.product - the result of multiplicationStandard CC.2.2.3.A.2Language Objectives property to solve problems.product - the result of multiplication.Properties of properties ofproblem with the order of the factors reversed and solve.Lesson 3:	CC.2.1.3.B.1		multiplication).	repeatedly add	
Valueproperty of multiplication as aa certain numberunderstandingstrategy to solve multiplicationof times; used toand properties ofproblems.find the totaloperations to• Understand that three ornumber of itemsgeform multi-more factors in a problem canin equal-sizeddigit Arithmetic.be grouped in different waysgroups.Standard Areasame (associative property offactor - a numberAlgebraic• Apply the associativeproduct - theConcepts• Apply the associativeproperty to solve problems.product - theStandard• Rewrite a multiplication• Rewrite a multiplicationmultiplication.Understandproperties ofproblem with the order of theLesson 3:	Apply place-		Apply the commutative	the same number	
and properties of operations to perform multi- digit Arithmetic.outlety' to solve multiplicationfind the total number of items in equal-sized groups.digit Arithmetic.• Understand that three or more factors in a problem can be grouped in different ways and the product will be the Standard Area Algebraic Concepts• 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).factor - a number that is multiplied.Standard CC.2.2.3.A.2 Understand properties of• Apply the associative property to solve problems.product - the result of multiplication • Rewrite a multiplication problem with the order of the factors reversed and solve.product is the solution	value understanding		strategy to solve multiplication	of times: used to	
operations to perform multi- digit Arithmetic.• Understand that three or more factors in a problem can 	and properties of		problems.	find the total	
perform multi- digit Arithmetic.more factors in a problem can be grouped in different ways and the product will be the same (associative property of multiplication).in equal-sized groups.Standard Area Algebraic Conceptssame (associative property of multiplication).factor - a number that is multiplied.Standard CC.2.2.3.A.2 Understand properties of• Apply the associative problem with the order of the factors reversed and solve.product - the result of multiplication.	operations to		<ul> <li>Understand that three or</li> </ul>	number of items	
digit Arithmetic.be grouped in different ways and the product will be the same (associative property of Mlgebraic Conceptsgroups.Algebraic Conceptsmultiplication).factor - a number that is multiplied.Standard CC.2.2.3.A.2• Apply the associative property to solve problems.product - the result of multiplication.Standard CC.2.2.3.A.2Language Objectives • Rewrite a multiplication properties ofmultiplication problem with the order of the factors reversed and solve.Lesson 3:	perform multi-		more factors in a problem can	in equal-sized	
Standard Area Algebraic Conceptssame (associative property of multiplication).factor - a number that is multiplied.Standard CC.2.2.3.A.2• Apply the associative property to solve problems.product - the result of multiplication.Understand properties of• Rewrite a multiplication problem with the order of the factors reversed and solve.multiplication.	digit Arithmetic.		be grouped in different ways and the product will be the	groups.	
Algebraic Conceptsmultiplication). • Apply the associative property to solve problems.that is multiplied.Standard 	Standard Area		same (associative property of	factor - a number	
Concepts• Apply the associative property to solve problems.product - the result ofStandard CC.2.2.3.A.2Language Objectives • Rewrite a multiplication properties ofmultiplication.Understand properties of• Rewrite a multiplication factors reversed and solve.Lesson 3:	Algebraic		multiplication).	that is multiplied.	
Standardproperty to solve problems.product - the result ofCC.2.2.3.A.2Language Objectivesmultiplication.Understand• Rewrite a multiplicationLesson 3:properties offactors reversed and solve.Lesson 3:	Concepts		Apply the associative	product the	
CC.2.2.3.A.2Language Objectivesmultiplication.Understand• Rewrite a multiplication-properties ofproblem with the order of the factors reversed and solve.Lesson 3:	Standard		property to solve problems.	result of	
Understand properties of• Rewrite a multiplication problem with the order of the factors reversed and solve.Lesson 3:	CC.2.2.3.A.2		Language Objectives	multiplication.	
properties of problem with the order of the Lesson 3: factors reversed and solve.	Understand		Rewrite a multiplication		
	properties of		factors reversed and solve.	Lesson 3:	

multiplication and the relationship between multiplication and division. Additional PA Core Standa CC.2.2.3.A.1 (See page B full text.) Lesson 4 CC.2.2.3.A.1 Represent at solve problems involving multiplication and division. Lesson 6 CC.2.2.3.A.1 Represent at solve problem involving multiplication and division. CC.2.2.3.A.3 Demonstrate multiplication and division	A A rd 1 for nd nd ms	<ul> <li>Rewrite a multiplication problem with parentheses in a different position and solve.</li> <li>Lesson 3:</li> <li>LEQ: How can I use place value and properties of operations to perform multi- digit arithmetic?</li> <li>Content Objectives <ul> <li>Break apart a factor as a strategy for multiplying (distributive property of multiplication).</li> <li>Apply the distributive property of multiplication as a strategy to learn multiplication facts and to solve multiplication problems.</li> </ul> </li> <li>Language Objectives <ul> <li>Draw arrays to demonstrate the distributive property.</li> <li>Write multiplication expressions to represent word problems and visual models.</li> <li>Justify conclusions and communicate the conclusions to others.</li> </ul> </li> <li>Lesson 4: LEQ: How do I represent and solve problems involving</li> </ul>	There is no new vocabulary. Review the following key terms. array - a set of objects arranged in equal rows and equal columns. multiply - to repeatedly add the same number a certain number of times; used to find the total number of items in equal-sized groups. factor - a number that is multiplied. product - the result of multiplication. Lesson 4: division - an operation used to separate a number of items into equal-sized	
multiplication and division fluency.		LEQ: How do I represent and solve problems involving multiplication and division?	number of items into equal-sized groups.	
Additional PA Core Standa CC.2.2.3.A.2 (See page B full text.)	A rd 1 for	Content Objectives • Understand division as sharing, knowing the number of equal shares and finding the	divide - to separate into equal groups and find the number in each group or	

	number in each share or	the number of	
Lesson 7	group.	groups.	
CC.2.2.3.A.4	<ul> <li>Understand division as</li> </ul>	Review the	
Solve problems	separating equal shares or	following key	
involving the four	groups and finding the number	term.	
operations, and	of shares.		
identify and	<ul> <li>Describe stories or contexts</li> </ul>	array - a set of	
explain patterns	for division expressions, such	objects arranged	
in arithmetic.	as 24 ÷ 4.	in equal rows and	
		equal columns.	
CC.2.1.3.C.1	Language Objectives		
	<ul> <li>Read the division symbol, ÷,</li> </ul>	Lesson 5:	
	as divided by.	dividend - the	
CC.2.2.3.A.2	<ul> <li>Explain division as sharing</li> </ul>	number that is	
CC.2.2.3.A.3	equally.	divided by	
	<ul> <li>Tell stories or describe</li> </ul>	another number.	
	contexts for a given division		
	expression.	divisor - the	
		number by which	
	Lesson 5:	another number is	
	LEQ: How can I use properties	divided.	
	of multiplication to understand	quotient - the	
	the relationship between	result of division	
	multiplication and division?		
		Review the	
	Content Objectives:	following key	
	Understand the relationship	terms:	
	between multiplication and	multiply - to	
	division.	repeatedly add	
	Demonstrate the fact families	the same number	
	are related multiplication and	a certain number	
	division equations.	of times;	
	Find the unknown number in a	Used to find the	
	whole number multiplication or	total number of	
	division equation.	items in equal-	
	Language Objectives	sizea groups.	
	Language Objectives:	division on	
	Describe the relationship	uivision used to	
	division using words or		
	diagrams	separate à	
	ulayianis.		

Correctly use the terms array, divide, divided by, times,	into equal-sized groups.
factor, and product when	
discussing multiplication and	factor - a number
division.	that is multiplied
Lesson 6:	Product - the
LEQ: How do I represent and	result of
solve problems involving	multiplication.
multiplication and division?	
, , , , , , , , , , , , , , , , , , ,	Lesson 6:
LEQ: How do I show fact	There is no new
fluency for multiplication and	vocabularv.
division?	Review the
	following key
Content Objectives	terms.
<ul> <li>Fluently multiply and divide</li> </ul>	fact family - a
within 100.	group of related
<ul> <li>Use fact families and the</li> </ul>	facts (equations)
relationship between	that use the same
multiplication and division to	numbers, but in a
find unknown whole numbers	different order.
in multiplication and division	
equations.	multiply - to
<ul> <li>Solve word problems using</li> </ul>	repeatedly add
equations with the unknown	the same number
whole number in different	a certain number
places in the equations.	of times; used to
Language Objectives	find the total
<ul> <li>Write multiplication and</li> </ul>	number of items
division fact families.	in equal-sized
<ul> <li>Write related facts to find the</li> </ul>	groups.
unknown number in a	
multiplication or division	factor - a number
equation.	that is multiplied.
<ul> <li>Tell which multiplication or</li> </ul>	
division facts can represent a	product - the
particular word problem.	result of
	multiplication.
Lesson 7:	

	LEQ: How can I solve problems using the four operations? LEQ: How can I identify and explain patterns in mathematics? Content Objectives • 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. Language Objectives • Describe number patterns. • Use the key vocabulary terms pattern, rule, even number, and odd number when discussing patterns	division - an operation used to separate a number of items into equal-sized groups. dividend - the number that is divided by another number. divisor - the number by which another number is divided. quotient - the result of division. Lesson 7: pattern - a series of numbers or shapes that follow a rule to repeat or change. rule - a procedure that is followed to go from one number or shape to the next in a pattern. Review the following key terms.	
		Review the following key terms. even number - an even number of objects can be put into pairs or	

		Denominator Division Equivalent Fractions Estimate Fraction Linear Liquid Volume Mass Numerator Pattern Pentagon Perimeter Pictograph Polygon Quadrilateral Rhombus Round Square Unit Tally Chart Temperature	
		Denominator Division Equivalent Fractions Estimate Fraction Linear Liquid Volume Mass Numerator Pattern Pentagon Perimeter	
		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.	
		into two equal groups without any leftovers; an even number always has 0, 2, 4, 6, or 8 in the ones place.	

Numbers and Operations in Base Ten								
Big Idea	Standard	<u>Eligible</u> <u>Content</u>	Essential Questions & Lesson Essential Question	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>		
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. Patterns exhibit relationships that can be extended, described, and generalized	Lesson 8 CC.2.1.3.B.1 Apply place- value understanding and properties of operations to perform multi- digit arithmetic. Lesson 9 CC.2.1.3.B.1 Apply place- value understanding and properties of operations to perform multi- digit Arithmetic. Lesson 10 CC.2.1.3.B.1 Apply place- value understanding and properties of operations to perform multi- digit arithmetic. Standard Area Algebraic Concepts Standard	M03.A-T.1.1.1 Round two and three digit whole numbers to the nearest ten or hundred, respectively. (Lesson 8) 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) M03.A-T.1.1.3 Multiply one digit whole numbers by two digit multiples of 10 (from 10 through 90).	Unit 2 EQs: How is mathematics used to quantify, compare, represent, and model numbers? How can mathematics support effective communication? How are relationships represented mathematically? What does it mean to estimate or analyze numerical quantities? What makes a tool and/or strategy appropriate for a given task? When is it is appropriate to estimate versus calculate? How can patterns be used to describe relationships in mathematical situations? Lesson 8: LEQ: How can I use place value and properties of operations to perform multi- digit arithmetic? Content Objectives • Round two- and three-digit numbers to the nearest ten. • Round three-digit numbers to the nearest hundred.	Place Value and Properties of Operations	Lesson 8: round - to approximate the value of a number by finding the nearest ten, hundred, or other place value. Review the following key terms. to estimate - to give an approximate number or answer based on mathematical thinking. an estimate - a close guess made using mathematical thinking. compare - to decide if one number is greater than, less than, or equal to another number. Lesson 9: There is no new vocabulary.	Perform multi-digit arithmetic. Demonstrate fluency of addition and subtraction. Round whole numbers to the nearest ten or hundred.		

Represent and solve problems involving multiplication and division. Additional PA Core Standards CC.2.2.3.A.2, CC.2.2.3.A.3 (See page B1 for full text.) CC.2.1.3.B.1	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)	<ul> <li>numbers to the nearest ten and to the nearest hundred.</li> <li>Compare three- and four-digit numbers.</li> <li>Order numbers through the thousands from least to greatest or greatest to least.</li> <li>Express inequalities using proper notation.</li> <li>Language Objectives</li> <li>Summarize what rounding is.</li> <li>Tell why rounding is useful for estimating.</li> <li>Tell which of two numbers is greater and which is lesser.</li> <li>Write inequalities to compare and order numbers using &gt; symbols and &lt; symbols.</li> <li>Lesson 9:</li> <li>LEQ: How can I use place value and properties of operations to perform multi- digit arithmetic?</li> <li>Content Objectives</li> <li>Use a variety of strategies to add two- and three-digit numbers.</li> <li>Use a variety of strategies to subtract two- and three-digit numbers.</li> <li>Language Objectives</li> <li>Add two- or three-digit numbers.</li> <li>Language Objectives</li> <li>Add two- or three-digit numbers.</li> </ul>		Review the following key terms. sum - the result of addition. difference - the result of subtraction. 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. 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. Lesson 10: There is no new vocabulary. Review the following key terms. multiply - to repeatedly add	
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<ul> <li>Subtract two- or three-digit numbers using place-value reasoning, and describe any necessary regroupings.</li> <li>Draw an open number line to find the difference of two numbers.</li> <li>Summarize word problems involving addition or subtraction.</li> <li>Compare the different approaches to solving a word problem used by others and identify connections among the approaches.</li> <li>Lesson 10: LEQ: How can I use place value and properties of operations to perform multi- digit arithmetic?</li> <li>Content Objectives</li> <li>Understand the meaning of a multiplication expression.</li> <li>Use place value understanding to multiply a one-digit number by multiples of 10.</li> <li>Use properties of operations to multiply a one-digit number</li> </ul>	the same number a certain number of times; used to find the total number of items in equal-sized groups. factor - a number that is multiplied. product - the result of multiplication.
by multiples of 10. Language Objectives • 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.	

			• Record the steps used to find the product of a one-digit number and a multiple of ten.			
Month(s): Novemb	er/December	_	Unit 3	_		
Operations and Al	gebraic Thinking					
<u>Big Idea</u>	<u>Standard</u>	<u>Eligible</u> <u>Content</u>	Essential Questions & Lesson Essential Question	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>
Mathematical relationships among numbers can be represented, compared, and communicated. Patterns exhibit relationships that can be extended, described, and generalized. Mathematical relations and functions can be modeled through multiple representations and analyzed to raise and answer questions.	Lesson 11 CC.2.2.3.A.1 Represent and solve problems involving multiplication and division. 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.) Lesson 12 CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.	M03.B- O.1.2.1 Use multiplication (up to and including 10 x 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) M03.B- O.3.1.1 Solve two- step word problems	<ul> <li>Unit 3 EQs:</li> <li>How is mathematics used to quantify, compare, represent, and model numbers?</li> <li>How can mathematics support effective communication?</li> <li>How can patterns be used to describe relationships in mathematical situations?</li> <li>How can recognizing repetition or regularity assist in solving problems more efficiently?</li> <li>How can data be organized and represented to provide insight into the relationship between quantities?</li> <li>How can probability and data analysis be used to make predictions?</li> <li>Lesson 11:</li> </ul>	Patterns	Lesson 11: There is no new vocabulary. Review the following key terms. array - a set of objects arranged in equal rows and equal columns. multiply - to repeatedly add the same number a certain number of times; used to find the total number of items in equal-sized groups. division - an operation used to separate a number of items into equal-sized groups.	Represent and solve problems. Identify and explain patterns in arithmetic (including addition and subtraction).

	using the four	LEQ: How do I represent and	equation - a	
CC.2.2.3.A.4	operations	solve problems involving	mathematical	
Solve problems	(expressions	multiplication and division?	statement that	
involving the four	are not		uses an equal	
operations, and	explicitly	LEQ. How can I solve	sign (=) to show	
identify and	stated) Limit	problems using the four	that two	
explain patterns	to problems	operations?	expressions have	
in arithmetic	with whole		the same value	
in antimiono.	numbers and	LEO: How can Lidentify and		
Additional PA	having whole	explain patterns in	Lesson 12	
Core Standards	number	mathematics?	operation - any	
	answers	mathematics:	mathematical	
CC 2 2 3 A 3	(Losson 12	Contant Objectives	nrocoss such as	
(Soo page B1 for	(LESSOIT 12, 13)	Solve multiplication and	addition subtract	
(See page DT IOI full toxt )	13)	division word problems	tion multiplication	
		involving equal groups	or division	
Loccon 12	0.212	<ul> <li>Solve multiplication and</li> </ul>		
	O.J. 1.2 Poprosont two	division word problems	Poviow the	
Solvo problomo	stop word	involving arrays	following kov	
Solve problems	step word	Solve multiplication and	torm	
involving the loui	problems	• Solve multiplication and	lenn.	
operations, and	using	involving area models	equation - a	
		involving area models.	atotomont that	
explain patients	a symbol	Languaga Obiastivas		
in arithmetic.	standing for	Language Objectives	uses an equal	
	the unknown	• Draw an array or other	Sign (=) to show	
Additional PA	quantity. Limit	diagram to represent		
Core Standards	to problems	multiplication or division word	expressions nave	
CC.2.1.3.B.1,	with whole	problems, and explain now the	the same value.	
CC.2.2.3.A.1,	numbers and	diagram relates to the	1 10	
CC.2.2.3.A.2,	having whole	problem.	Lesson 13	
00.2.2.3.A.3	number	• vvrite equations to represent	i nere is no new	
(See page B1	answers.	multiplication and division word	vocabulary.	
for full text.)	(Lesson 12,	problems and explain how the		
	13)	equation relates to the	Review the	
CC.2.2.3.A.4		problem.	following key	
	M03.B-	<ul> <li>Compare the different</li> </ul>	terms.	
	0.3.1.3	approaches used by others	round - to	
	Assess the	and identify connections	approximate the	
	reasonableness	among the approaches.	value of a number	
	or answers.		by finding the	
	LIMIT	Lesson 12:	nearest ten,	

problems posed with whole numbers and having whole number answers. (Lesson 13) M03.B- 0.3.1.4 Solve two step equations using order of operations (equation is explicitly stated with no grouping symbols). (Lesson 13) M03.B- 0.3.1.6 Create or match a story to a given combination of symbols (+, -, X, ÷, <,>, and =) and numbers. (Lesson 12) M03.B- 0.3.1.7 Ideatify the	LEQ: How do I represent and solve problems involving multiplication and division? LEQ: How can I solve problems using the four operations? LEQ: How can I identify and explain patterns in mathematics? Content Objectives • 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. Language Objectives • 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	hundred, or other place value. to estimate - to give an approximate number or answer based on mathematical thinking. an estimate - a close guess made using mathematical thinking. equation - a mathematical statement that uses an equal sign (=) to show that two expressions have the same value.	
M03.B- O.3.1.7 Identify the missing symbol (+, -, X, ÷, <,>, and	variable as the unknown to represent a two-step word problem and explain how the equation relates to the problem.		

	=) that makes a number sentence true. (Lesson 12,13)	<ul> <li>Create or match a story to a given mathematical expression or equation.</li> <li>Lesson 13: LEQ: How can I solve problems using the four operations?</li> <li>LEQ: How can I identify and explain patterns in mathematics?</li> <li>Content Objectives</li> <li>Determine operations needed to solve two-step word problems.</li> <li>Model two-step problems with four operations using a variety of representations, including equations with a variable.</li> <li>Solve two-step problems with four operations.</li> <li>Identify the operations needed to solve two-step problems with four operations.</li> <li>Identify the operations needed to solve two-step problems with four operations.</li> <li>Identify the operations needed to solve word problems.</li> <li>Assess the reasonableness of answers.</li> <li>Language Objectives</li> <li>Restate a two-step word problem to understand what a reasonable answer might be.</li> <li>Model and solve two-step.</li> </ul>		
		<ul> <li>reasonable answer might be.</li> <li>Model and solve two-step word problems.</li> <li>Compare an answer for a word problem with an estimate and judge the reasonableness of the answer.</li> </ul>		

			• Communicate ideas of solving problems to others and compare differences in thinking.			
Month(s): January/February		Unit 4				

## Numbers and Operations

Big Idea	Standard	<u>Eligible</u> <u>Content</u>	Essential Questions & Lesson Essential Question	<u>Concepts</u>	Vocabulary	<u>Competencies</u>
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.	CC.2.1.3.C.1 Explore and develop an understanding of fractions as numbers.	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	<ul> <li>How is mathematics used to quantify, compare, represent, and model numbers?</li> <li>How can mathematics support effective communication?</li> <li>How are relationships represented mathematically?</li> <li>What does it mean to estimate or analyze numerical quantities?</li> <li>What makes a tool and/or strategy appropriate for a given task?</li> <li>Lesson 14:</li> <li>LEQ: How can I explore and develop an understanding of fractions as numbers?</li> <li>Content Objectives</li> <li>Understand that a fraction is a whole divided into some</li> </ul>	Fractions	Lesson 14: • 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.	Develop an understanding of fractions as numbers. Represent fractions on a number line. Represent and generate equivalent fractions. Compare fractions with the same numerator or same denominator.
		necessary).	number of equal parts.		• unit fraction - a	

	(Lesson 14) 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	<ul> <li>Understand and recognize the parts of a fraction.</li> <li>Understand that unit fractions are the building blocks of fractions in the same way that 1 is the building block of whole numbers.</li> <li>Language Objectives</li> <li>Write the fraction shown by an area model.</li> <li>Shade an area model to represent a given unit fraction.</li> <li>Shade area models to represent a variety of fractions.</li> <li>Orally define and use the key</li> </ul>	fraction with a numerator of 1; other fractions are built from unit fractions. equivalent fractions – two or more fractions that name the same part of a whole or the same point on a number line Compare to	
	simplification necessary). (Lesson 15) M03.A-F.1.1.3 Recognize and generate simple equivalent fractions (limit	mathematical terms denominator, fraction, numerator, and unit fraction when describing reasoning to a partner. Lesson 15: LEQ: How can I explore and develop an understanding of fractions as numbers?	decide if one number is greater than, less than, or equal to another number.	
	denominators to 1, 2, 3, 4, 6, and 8 and limit numerators to whole numbers less than the denominator). (Lesson 16,17) M03.A-F.1.1.4	<ul> <li>Content Objectives</li> <li>Understand that, in addition to whole numbers, number lines can show equal parts of a whole, or fractions.</li> <li>Understand fractions as numbers on a number line.</li> <li>Understand how to use number lines to count and identify fractional parts.</li> <li>Represent fractions on a number line that are less than, equal to, or greater than one.</li> </ul>		

	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) 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)	Language Objectives • 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. Lesson 16: LEQ: How can I explore and develop an understanding of fractions as numbers? Content Objectives • 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. Language Objectives • 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. Lesson 17: LEQ: How can I explore and develop an understanding of			
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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.		
	<ul> <li>Language Objectives</li> <li>Write equivalent fractions for numbers greater than one.</li> <li>Write whole numbers as fractions and justify using area models or number lines.</li> <li>Write a fraction that can represent a whole number.</li> <li>Tell why a fraction with a denominator of 1 is equivalent to a whole number.</li> </ul>		
	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.		
	<ul> <li>Language Objectives</li> <li>Draw area models and number line models to compare fractions.</li> <li>Communicate ideas about comparing fractions to others, including use of terms numerator, denominator, more than, and less than.</li> <li>Listen to and critique others' ideas about comparing fractions.</li> </ul>		
	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.		
	<ul> <li>Language Objectives</li> <li>Draw area models and number lines to justify fraction comparisons.</li> <li>Write comparison statements using symbols &lt;, &gt;, and = to compare fractions.</li> <li>Orally describe how to compare</li> </ul>		

			fractions to one another.			
Month(s): February/March		Unit 5				
Measurement and	Data					
Big Idea	<u>Standard</u>	<u>Eligible</u> Content	Essential Questions & Lesson Essential Question	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>
Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools. Measurement attributes can be quantified, and estimated using customary and non-customary units of measure. Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.	CC.2.4.3.A.1 Solve problems involving measurement and estimation of temperature, liquid volume, mass and length. CC.2.4.3.A.2 Tell and write time to the nearest minute and solve problems by calculating time intervals. CC.2.4.3.A.3 Solve problems involving money using a combination of coins and bills. CC.2.4.3.A.4 Represent and interpret data using tally charts, tables,	M03.D- M.1.1.1 Tell, show, and/or write time (analog) to the nearest minute. (Lesson 20) 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) M03.D- M.1.2.1 Measure and estimate liquid volumes and masses of objects using	<ul> <li>What does it mean to estimate or analyze numerical quantities?</li> <li>When is it is appropriate to estimate versus calculate?</li> <li>What makes a tool and/or strategy appropriate for a given task?</li> <li>Why does "what" we measure influence "how" we measure?</li> <li>In what ways are the mathematical attributes of objects or processes measured, calculated and/or interpreted?</li> <li>How precise do measurements and calculations need to be?</li> <li>What does it mean to estimate or analyze numerical quantities?</li> <li>When is it is appropriate to estimate versus calculate?</li> </ul>	Measurement Time Data Displays	<ul> <li>hour a unit of time equal to 60 minutes.</li> <li>minutes a unit of time equal to 60 seconds.</li> <li>hour hand the shorter indicator (or hand) on an analog clock, which shows the hours.</li> <li>minute hand the longer indicator (or hand) on an analog clock, which shows the minutes.</li> <li>minute hand the longer indicator (or hand) on an analog clock, which shows the minutes.</li> <li>am the time from midnight until before Noon.</li> <li>pm the time from noon until before Midnight.</li> </ul>	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.

quantified, and estimated using customary and noncustomary units of measure. Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools. Measurement attributes can be quantified, and estimated using customary and non-customary units of measure. Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.	pictographs, line plots, and bar graphs. CC.2.4.3.A.5 Determine the area of a rectangle and apply the concept to multiplication and to addition. CC.2.4.3.A.6 Solve problems involving perimeters of polygons and distinguish between linear and area measures.	standard units (cups [c], pints [pt], quarts [qt], gallons [gal], ounces [oz.], and pounds [lb]) and metric units (liters [I], grams [g], and kilograms [kg]). (Lesson 22A, 23) 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) M03.D- M.1.2.3 Use a ruler to measure lengths to the nearest	<ul> <li>How precise do measurements and calculations need to be?</li> <li>What does it mean to estimate or analyze numerical quantities?</li> <li>When is it is appropriate to estimate versus calculate?</li> <li>How can data be organized and represented to provide insight into the relationship between quantities?</li> <li>How does the type of data influence the choice of display?</li> <li>How can probability and data analysis be used to make predictions?</li> <li>What makes a tool and/or strategy appropriate for a given task?</li> <li>Lesson 20: LEQ: How can I write time to the nearest minute?</li> <li>LEQ: How can I solve problems by calculating time intervals?</li> <li>Content Objectives</li> <li>Use an analog clock to tell</li> </ul>	<ul> <li>elapsed time the time that has passed between a start time and an end time.</li> <li>cent the smallest unit of money in the U.S. One penny is one cent.</li> <li>penny a coin that has a value of 1 cent.</li> <li>nickel a coin that has a value of 5 cents.</li> <li>dime a coin that has a value of 10 cents.</li> <li>quarter a coin that has a value of 25 cents.</li> <li>dollar a unit of money in the U.S. equal to 100 cents.</li> <li>liquid volume the amount of space a liquid takes up.</li> </ul>	Represent and interpret data using various displays.
Mathematical relations and functions can be modeled through multiple representations and analyzed to		measure lengths to the nearest quarter inch or centimeter. (Lesson 26)	Content Objectives • Use an analog clock to tell and write time to the nearest minute. • Relate time on analog and digital clocks.	<ul><li>the amount of space a liquid takes up.</li><li>liter a unit used to measure liquid volume in the</li></ul>	

raise and answer questions. Data can be modeled and used to make inferences.	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) 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, auoter and	<ul> <li>Express time as the number of minutes before the hour.</li> <li>Language Objectives <ul> <li>Tell the time shown on a digital clock.</li> <li>Tell the time on an analog clock to the minute.</li> <li>Tell the time shown on an analog clock as minutes before the next hour.</li> <li>Draw hands on an analog clock to show a given time.</li> <li>Use the terms am and pm appropriately in writing and in speaking.</li> </ul> </li> <li>Lesson 21: LEQ: How can I write time to the nearest minute?</li> <li>LEQ: How can I solve problems by calculating time intervals?</li> </ul>	<ul> <li>metric system; 1</li> <li>liter is equivalent to 1,000 milliliters.</li> <li>cup a unit of liquid volume in the standard measurement system. Four cups is equivalent to 1 quart.</li> <li>pint a unit of liquid volume in the standard measurement system. One pint is equivalent to 2 cups.</li> <li>quart a unit of liquid volume in the standard measurement system. One pint is equivalent to 2 cups.</li> </ul>	
	quarter, and dollar). (Lesson 21A)	Content Objectives • Measure time intervals in minutes using clock models	system. One quart is equivalent to 4 cups	
	M03.D- M.1.3.3 Round amounts of money to the nearest dollar. (Lesson 21A)	<ul> <li>and number lines.</li> <li>Solve word problems involving addition of time intervals in minutes.</li> <li>Solve word problems involving subtraction of time intervals in minutes.</li> </ul>	• gallon a unit of liquid volume in the standard measurement system. One gallon is	
	M03.D- M.2.1.1 Complete a scaled pictograph	<ul> <li>Language Objectives</li> <li>Find elapsed time.</li> <li>Tell how to find the ending time when the start time and total elapsed time are given.</li> </ul>	<ul> <li>• liquid volume</li> <li>the amount of</li> <li>space a liquid</li> </ul>	

	and a scaled	<ul> <li>Tell how to find the start time</li> </ul>	takes up.	
	bar graph to	when the ending time and total	·	
	represent a	elapsed time are given.	mass the amount	
	data set with	Restate a word problem to	of matter in an	
	several	tell whether it is asking for	obiect: measuring	
	categories	elapsed time, start time, or	the mass of an	
	(scales limited	ending time, and choose an	object is one	
	to 1 2 5 and	appropriate strategy for	way to measure	
	101,2,0,414	solving	how heavy it is	
	(1  esson  25)	Solving.	Linits of mass	
	M03 D-	Lesson 21a	include the gram	
	M 2 1 2	LEO: How can Leolve	and kilogram	
	Solvo ono-	problems involving monov	and kilogram.	
	and two-stop	using a combination of coins	• gram a unit of	
	and two-step	and hills?	mass in the	
	problems		matria avetam:	
	using	Contant Objectives	nieuric system,	
	interpret date	Count and compare the value	a paper clip rias a	
	nierprei dala	• Count and compare the value	arem 1 000	
	presented in		gram. 1,000	
	scaled	coins.	grams is	
	pictographs	• Make change using	equivalent to 1	
	and scaled	combinations of bills and	Kilogram.	
	bar graphs	coins.		
	(scales	Solve problems by comparing	• kilogram a unit	
	limited to $1, 2,$	the value of coins and bills and	of mass in the	
	5, and 10).	making change.	metric system; 1	
	(Lesson 24)	Round amounts of money to	kilogram is	
	M03.D-	the nearest dollar.	equivalent to	
	M.2.1.3		1,000 grams.	
	Generate	Language Objectives		
	measurement	<ul> <li>Record the value of a</li> </ul>	<ul> <li>weight the</li> </ul>	
	data by	combination of bills and coins.	measurement that	
	measuring	<ul> <li>Write an equation to solve a</li> </ul>	tells how heavy	
	lengths using	problem involving money.	an object is. Units	
	rulers	<ul> <li>Describe a set of bills and</li> </ul>	of weight include	
	marked with	coins.	ounces and	
	halves and		pounds.	
	fourths of an	Lesson 22:		
	inch. Display	LEQ: How can I solve	<ul> <li>ounce a unit of</li> </ul>	
	the data by	problems involving	weight in the	
	making a line	measurement?	customary	

plot, where the horizontal scale is marked in appropriate units					i
Image: constraint of the horizontal scale is in appropriate units-whole units-whole numbers, end is appropriate units-whole numbers, end is appropriate indofrmation from one type of display to another. Limit to protographs, and tables, end tables, <br< td=""><td></td><td>plot, where</td><td></td><td>system. A slice of</td><td></td></br<>		plot, where		system. A slice of	
scale is marked marked in appropriate units		the horizontal	LEQ. How can Lestimate	bread weighs	
marked in appropriate unitswhole numbers, halves, or quarters. (Lesson 26)mass, and length?Sixteen ounces is equivalent to 1 pound.Markes, or quarters. (Lesson 26)Content Objectives: • Identify items that can be measured in liquid volume units.• pound a unit of weight in the customary system. One pound is time/vision in liquid volume (capacity). equivalent to 16 liquid volume (capacity). equivalent to 16 liquid volume (capacity). equivalent to 16 liquid volume (capacity). equivalent to 16 looking liquid volume (capacity). terms. Language Objectives: • List everyday containers that can hold about 1 liter of liquid. • list everyday containers and justify volume by counting unit the estimate. • Orally define and use the key volume and liter in discussions. • Nestate word problems involving measuring liquid volume with liters.• to estimate to give an approximate approximate approximate approximate and tables. • Restate word problems involving measuring liquid volume with liters.• to estimate a discussions. give an approximate approximate and tables. • looking measuring liquid volume with liters.• to estimate a discussions. give an antematical the measurement?M03.D- (Lesson 27, 29)LEQ: How can 1 solve problems involving measurement?• an estimate a mathematical thinking. LEQ: How can 1 solve m		scale is	temperature, liquid volume.	about one ounce.	
in appropriate units—whole numbers, halves, or quarters. (Lesson 26) of 1 liter, Translate information from one type of display to bar graphs, and tables. (Lesson 25) M03.D- M03.D- M2.1.4 Translate information from one type of display to bar graphs, and tables. (Lesson 27, 29) M03.D-		marked	mass, and length?	Sixteen ounces is	
unitswhole numbers, halves, or quarters. (Lesson 26)Content Objectives: halves, or i lidentify items that can be measured in liquid volume units.pound.(Lesson 26) M03.D- M03.D- M03.D- for one type of display to another. Limit to mother. Limit to mother. Limit to another. Limit to another. Limit to another. Limit to mother. Limit to another. Limit to mother. Limit t		in appropriate		equivalent to 1	
numbers, halves, or quarters.• Identify items that can be measured in liquid volume units.• pound a unit of weight in the customary system. One pound is equivalent to 16 Solve one-step word problems of 1 liter.M03.D- of display to of display to to another. Limit to to mostowards.• Understand the relative size (capacity).• pound a unit of weight in the customary system. One pound is equivalent to 16 Solve one-step word problems ounces.of display to of display to to another. Limit to to another. Limit to to another. Limit to to another. Limit to to another. Limit to to another. Limit to to another. Limit to to another. Limit to to exercise.• reasure to terms.Language Objectives: * List everyday containers that can hold about 1 liter of liquid various containers, and justify the estimate. * Orally define and use the key various containers, and justify the estimate. * to estimate to give an areas by counting unit squares (square cm, square m, square m, sq		units—whole	Content Objectives:	nound	
<ul> <li>halves, or quarters.</li> <li>(Lesson 26)</li> <li>• Understand the relative size (Gasacity).</li> <li>• Understand the relative size of liter.</li> <li>• Understand the relative size of liter.</li> <li>• Understand the relative size of liter.</li> <li>• Use unit size to estimate liquid volume (capacity).</li> <li>• Solve one-step word problems from one type of display to another. Limit to</li> <li>• Language Objectives:</li> <li>• List everyday containers that can hold about 1 liter of liquid.</li> <li>• Letermine length, various containers, and justify volume and liter in weasure m, square m, square m, square ft, and non-standar</li> <li>• Restate word problems involving measuring liquid volume and liter in weasure to discussions.</li> <li>• Restimate to give an approximate involving measuring liquid volume and liter in weasure ft, and non-standar</li> <li>• Restate word problems involving measuring liquid volume and liter in weasure m, square m, square m, square ft, aguare ft, and non-standar</li> <li>• Mo3.D-</li> <li>• Mo3.D-</li> <li>• Lesson 22a: LEQ: How can I solve problems involving measurement?</li> <li>• Constitute and logid: volume, mathematical</li> <li>• Leximate ta temperature, liquid volume, mathematical</li> <li>• thermometer a tool used to</li> </ul>		numbers	Identify items that can be	pound.	
InductionInductionInductionInductionInductionquarters. (Lesson 28)Understand the relative size of 1 liter.weight in the customaryM3.D- M.2.1.4Use unit size to estimate liquid volume (capacity). solve one-step word problems information of display to volume (capacity). solve one-step word problems involving liquid volume (capacity). to another. Limit to another. Limit to another. Limit to (Lesson 27).Vise one-step word problems involving liquid volume (capacity). to another. Limit to and tables. (Lesson 27).Solve one-step word problems involving liquid volume (capacity). to another. Limit to and tables. (Lesson 27).measure to to another. List everyday containers that can hold about 1 liter of liquid. various containers, and justify volume by volume and liter in volume and liter in volume and liter in volume and liter.• to estimate to give an approximate number or answer volume with liters.M3.D- square m, square m, square ft, and non-standat square tin.• Lesson 22a: LEQ: How can 1 solve problems involving measurent?• an estimate a close guess made using mathematical thinking.M3.D- M3.1.2Content Objectives• an estimate tamperature, liquid volume, mass, and length?• thermometer a tool used to		halves or	measured in liquid volume	• nound a unit of	
QuescoUnderstand the relative size of 1 liter.OutgentM.2.1.4• Use unit size to estimate liquid volume (capacity).gound is equivalent to 16 ounces.M.2.1.4• Use unit size to estimate liquid volume (capacity).gound is equivalent to 16 ounces.from one type of display to another. Limit to pictographs, and tables.Solve one-step word problems involving liquid volume (capacity).equivalent to 16 ounces.bar graphs, and tables.Language Objectives: • List everyday containers that can hold about 1 liter of liquid. various containers, and justify volume of various containers, and justify volume solutions oung comparing to a• measure to determine length, mass, or liquid volume by comparing to aM03.D- (guare cm, square in, square i		quarters	unite	weight in the	
M03.D- M03.D-of filter.Support volume (apacity).Support volume (apacity).M03.D- M03.D-of filter.Use unit size to estimate liquid volume (apacity).pound is equivalent to 16 ounces.M03.D- M03.D-Solve one-step word problems involving liquid volume (apacity).equivalent to 16 ounces.Normation from one type of display.Solve one-step word problems involving liquid volume (apacity).equivalent to 16 ounces.information from one type of display.Campacity).following key terms.information of display Estimate the liquid volume of various containers, and justify various containers, and justify various containers measure to determine length, mass, or liquid volume by comparing to a Standard.M03.D- mathematical terms liquid volume with liters to estimate to give an approximate approximate problems involving measuring liquid volume with liters to estimate to give an approximate approximate approximate approximate problems involving measurement?- an estimate a close guess made using - an estimate a close guess made usingM03.D- M03.D-M03.D- M.3.1.2Content Objectives- thermometer a tool used to		(Lesson 26)	Inderstand the relative size	customary	
M.2.1.4 • Use unit size to estimate information from one type of display to another. Limit to pictographs, and tables. M.3.1.2 M.3.1.2 M.3.1.2 M.3.1.2 bior unit size to estimate liquid volume (capacity). terms. pound is pound is pound is pound is equivalent to 16 ounces. Review the (capacity). terms. to 10 ounces. Review the (capacity). terms.		M03 D-	of 1 liter	system One	
InstantForse inductionPosteriorPosteriorTranslateliquid volume (capacity). Solve one-step word problems information from on type of display to another. LimitSolve one-step word problems informationequivalent to 16 ounces. Review the following key terms.1Language Objectives: pictographs, tally charts, bar graphs, and tables. (Lesson 25): List everyday containers that can hold about 1 liter of liquid. various containers, and justify various containers, and justify volume and liter in discussions.: measure to determine length, mass, or liquid various containers, and justify volume and liter in discussions.: measure to determine length, mass, or liquid volume and liter.M03.D- (square m, square m, square m, 200.: Lesson 22a: LEO: How can I solve problems involving measurement?: an estimate a mathematical timiting.LC:How can I estimate temperature, liquid volume, mass, and length?: an estimate a temperature, liquid volume, mass, and length?M03.D- M.3.1.2M03.D- M.3.1.2Content Objectives: thermometer a tool used to		M 2 1 4	• I lse unit size to estimate	nound is	
Information information from one type of display to another. Limit to bit of pictographs, and tables.Induct volume (capacity). involving liquid volume (capacity).Equivalent to To ounces.information of display to another. Limit to pictographs, and tables.Language Objectives: • List everyday containers that can hold about 1 liter of liquid.Induct wolume of mass, or liquid volume by volume by volume by the estimate.• measure to determine length, mass, or liquid volume by volume by the estimate.M03.D- mares areas by counting unit square m, square m, s		Translato	liquid volume (capacity)	oquivalent to 16	
InformationSolve an estep with your potentialOutroitsfrom one type of display to another. Limit toEaguage Objectives: Language Objectives: List everyday containers that can hold about 1 liter of liquid. determine length, determine length, and tables.• Ites everyday containers that can hold about 1 liter of liquid. determine length, mass, or liquid various containers, and justify volume by the estimate. • Orally define and use the key mathematical terms liquid volume and liter in volume with liters.• measure to mass, and ength?M03.D- square m, square m, square m, square m, square m, square ft, and non-standard• Lesson 22a: LEQ: How can 1 solve problems involving measurement?then estimate a close guess made using the estimate thinking.M03.D- M03.D-M03.D- mathematical square ft, and non-standard square ft, 29)LEQ: How can 1 estimate temperature, liquid volume, mass, and length?• an estimate a close guess made using thermometer a tool used toM03.D- M03.D-M03.D- M.3.1.2Content Objectives• thermometer a tool used to		information	Solve one-step word problems		
of display to another. Limit to pictographs, tally charts, tally charts, 		from one type	involving liquid volume	Review the	
another, Limit to pictographs, tally charts, bar graphs, and tables. (Lesson 25) M03.D- square in, square in,		of display to		following kov	
and the iter iterLanguage Objectives: 		another Limit	(capacity).	torme	
bitList everyday containers that can hold about 1 liter of liquid.• measure to determine length, mass, or liquid various containers, and justify the estimate the liquid volume of various containers, and justify the estimate.• measure to determine length, mass, or liquid volume by comparing to aM03.D- M03.D- M03.D-• Orally define and use the key mathematical terms liquid volume and liter in involving measuring liquid volume with liters.• to estimate to give an approximate paper or answer volume with liters.Gauge cm, square m, square m, square ft, and non-standard square units).• Lesson 22a: LEQ: How can I solve problems involving measurement?• an estimate a cose guess made using • an estimate a cose guess made using • thermometer a tool used toM03.D- M03.D-M03.D- M03.D-LEQ: How can I estimate temperature, liquid volume, mass, and length?• thermometer a tool used to			Languago Objectivos:	lenns.	
tally charts, bar graphs, and tables. (Lesson 25)Late very doly dou't 1 liter of liquid. can hold about 1 liter of liquid. warious containers, and justify the estimate. • Orally define and use the key mathematical terms liquid volume and liter in volume		nictographs	• List everyday containers that	• measure to	
<ul> <li>bar graphs, and tables.</li> <li>bar graphs, and tables.</li> <li>cEstimate the liquid volume of various containers, and justify (Lesson 25)</li> <li>W03.D- mathematical terms liquid</li> <li>M03.1.1</li> <li>volume and liter in Measure</li> <li>discussions.</li> <li>estate word problems involving measuring liquid</li> <li>volume with liters.</li> <li>based on square cm, square m, square m,</li> <li>clesson 22a:</li> <li>LEQ: How can I solve problems involving</li> <li>estimate a close guess made using</li> <li>LEQ: How can I estimate</li> <li>LEQ: How can I estimate</li> <li>terms ratue, inquid</li> <li>terms ratue, inquid</li> <li>terms ratue, inquid</li> <li>terms ratue, inquid</li> <li>to estimate to give an approximate</li> <li>to estimate an easurement?</li> <li>terms ratue, liquid volume, mass, and length?</li> <li>thermometer a tool used to</li> </ul>		tally charts	con hold about 1 liter of liquid	dotorming longth	
and tablesvarious containers, and justify volume by comparing to a(Lesson 25)the estimate.(Lesson 25)• Orally define and use the key mathematical terms liquidM03.D- Measuremathematical terms liquid volume and liter in discussions.Measure areas by counting unit squares• Restate word problems involving measuring liquid volume with liters.Square cm, square in., square ft, and square units).• Lesson 22a: LEQ: How can I solve problems involving measurement?Lesson 27, 29)LEQ: How can I estimate temperature, liquid volume, mass, and length?M03.D- M03.D- M.3.1.2M03.D- Content Objectives		bar graphs	• Estimate the liquid volume of	mass or liquid	
and tables.various containers, and justify the estimate.volume by comparing to a(Lesson 25)(M3.D- Measuremathematical terms liquid volume and liter in discussionsMeasure counting unit squares square m, square in, square ft, and non-standard square units)LEQ: (Lesson 27, 29)M03.D- mathematical square in, square i		and tables	• Estimate the liquid volume of	volumo by	
(Lesson 25)(Lesson 25)(Lesson 26)(Companing to a standard.M03.D- M.3.1.1wathematical terms liquid M.3.1.1• to estimate to give an approximate involving measuring liquid• to estimate to give an approximate number or answerareas by counting unit squares square cm, square ft, and non-standard square ft, and non-standard• Lesson 22a: LEQ: How can I solve problems involving measurement?• thinking.LEQ: How can I estimate temperature, liquid volume, mass, and length?• Lesson 21 using• an estimate a thinking.M03.D- M.3.1.2Content Objectives• thermometer a tool used to		(1  and  100  and  25)	the estimate	voluine by	
M03.D- M.3.1.1Wolthe and use the key woltme and use the keyStandard.M.3.1.1volume and liter in discussions.• to estimate to give an approximate number or answer based on wathematicalareas by counting unit squares (square cm, square ft, and non-standard square units).• Restate word problems involving measuring liquid volume with liters.approximate number or answer based on mathematical thinking.LEQ: How can I solve square tilt.• Lesson 22a: thinking.thinking.LEQ: How can I solve square units).• an estimate a close guess made using temperature, liquid volume, mass, and length?• an estimate a thinking.M03.D- M.3.1.2Content Objectives• thermometer a tool used to		(Lesson 25)	Orally define and use the key	Stondard	
M03.D-Mathematical terms injuid• to estimate toM.3.1.1volume and liter in• to estimate toMeasurediscussions.give anareas by• Restate word problemsapproximatecounting unitinvolving measuring liquidnumber or answersquaresvolume with liters.based on(square cm,• Lesson 22a:thinking.square fit, andproblems involving• an estimate asquare fit, andproblems involving• an estimate asquare units).(Lesson 27,LEQ: How can I estimate(Lesson 27,LEQ: How can I estimatemathematicaltemperature, liquid volume, mass, and length?• thermometer a tool used to			• Orally define and use the key	Stanuaru.	
Measure discussions.Volume and mentionFito estimate to give an approximate number or answer based on mathematical thinking.Measure areas by counting unit squares (square cm, square m, square in., square in., <br< td=""><td></td><td>M 2 1 1</td><td>mathematical terms liquid</td><td>• to optimate to</td><td></td></br<>		M 2 1 1	mathematical terms liquid	• to optimate to	
Measurediscussions.give anareas by• Restate word problemsapproximatecounting unitinvolving measuring liquidnumber or answersquaresvolume with liters.based on(square cm,• Lesson 22a:thinking.square ft, andproblems involving• an estimate anon-standardproblems involving• an estimate asquare units).LEQ: How can I solveusing(Lesson 27,LEQ: How can I estimateusing29)LEQ: How can I estimatemathematicalM03.D-M03.D-• thermometer aM.3.1.2Content Objectivestool used to		Nooouro			
alread by counting unit squares• Restate word problems problemsapproximate number or answer based on mathematical thinking.square cm, square in., square in., square ft, and non-standard square units).• Lesson 22a: the construction of the construction problems involving measurement?thinking.• Lesson 27, 29)LEQ: How can I estimate temperature, liquid volume, mass, and length?• an estimate a close guess made using thinking.• M03.D- M.3.1.2Content Objectives• thermometer a tool used to			a Destate word problems	give all	
Counting unitinvolving measuring induitinvolving measuring induitinvolving measuring induitsquaresvolume with liters.based on(square cm,•Lesson 22a:mathematicalsquare in.,LEQ: How can I solve• an estimate asquare ft, andproblems involving• an estimate anon-standardmeasurement?close guess madesquare units).LEQ: How can I estimateusing(Lesson 27,LEQ: How can I estimatemathematical29)temperature, liquid volume, mass, and length?• thermometer a tool used to		aleas by	• Restate word problems	approximate	
Squares (square cm, square m, square in., square ft, and non-standard square units).Volume with litels.Dased on mathematical thinking.LEQ: How can I solve problems involving measurement?• an estimate a close guess made usingLEQ: How can I estimate square units).• an estimate a usingLEQ: How can I estimate temperature, liquid volume, mass, and length?• an estimate a usingM03.D- M.3.1.2Content Objectives• thermometer a tool used to			Involving measuring liquid		
Imathematical square m, square in., square ft, and non-standard square units).•Lesson 22a: LEQ: How can I solve problems involving measurement?thinking.• an estimate a close guess made using (Lesson 27, 29)• an estimate a close guess made usingM03.D- M.3.1.2M03.D- M.3.1.2• thermometer a tool used to		squares	volume with itters.	Dased on	
Square m, square in., square in., square ft, and non-standard square units). (Lesson 27, 29)• Lesson 22a: LEQ: How can I solve problems involving measurement?• an estimate a close guess made using mathematical thinking.M03.D- M.3.1.2M03.D- M.3.1.2• thermometer a tool used to		(square cm,		mainemalical	
Square In., square ft, and non-standard square units). (Lesson 27, 29)LEQ: How can I solve problems involving measurement?• an estimate a close guess made using mathematical thinking.M03.D- M.3.1.2M03.D- M.3.1.2• thermometer a tool used to		square m,	•Lesson 22a:	thinking.	
square it, and non-standard square units). (Lesson 27, 29)problems involving measurement?• an estimate a close guess made using mathematical thinking.M03.D- M.3.1.2M03.D- M.3.1.2• thermometer a tool used to		square in.,	LEQ: How can I solve	timeta	
Non-standard square units). (Lesson 27, 29)measurement?close guess made using mathematical thinking.M03.D- M.3.1.2LEQ: How can I estimate temperature, liquid volume, mass, and length?mathematical thinking.		square it, and	problems involving	• an estimate a	
square units).       LEQ: How can I estimate       mathematical         (Lesson 27,       LEQ: How can I estimate       mathematical         29)       temperature, liquid volume,       thinking.         M03.D-       M.3.1.2       Content Objectives       tool used to		non-standard	measurement?	close guess made	
(Lesson 27, 29)LEQ: How can restimate temperature, liquid volume, mass, and length?mathematical thinking.M03.D- M.3.1.2Content Objectives• thermometer a tool used to		square units).		using	
29)     temperature, liquid volume, mass, and length?     thinking.       M03.D-     • thermometer a tool used to			LEQ: HOW CAN I ESTIMATE	mathematical	
M03.D- M.3.1.2• thermometer a tool used to		29)	temperature, liquid volume,	minking.	
M03.D- M.3.1.2 Content Objectives • thermometer a tool used to			mass, and length?	41	
MI.3.1.2 CONTENT ODJECTIVES TOOI USED TO		IVIU3.D-	Contant Objectives	• inermometer a	
		IVI.3.1.2		tool used to	

	Multiply side	Understand relative sizes of 1	measure	
	lengths to	cup.1 pint. 1 quart. and 1	temperature in	
	find areas of	gallon.	dearees Celsius	
	rectangles	Use benchmarks to estimate	or degrees	
	with whole-	liquid volume.	Fahrenheit.	
	number side	Measure to the nearest cup		
	lengths in the	pint quart or gallon	• temperature a	
	context of	pini, quanțer ganem	measurement that	
	solving real-	Language Objectives	tells how hot or	
	world and	• List everyday containers that	cold something is	
	mathematical	can hold about 1 cup 1 pint 1	cold something is.	
	nrohlems and	quart and 1 gallon of liquid	• tick mark thin	
	roprosont	• Orally define and use the key	solid line or mark	
	whole-number	mathematical terms liquid	used to represent	
	producte as	volume and cup pint quart	numbers on a	
	products as	and gellen in discussions	number line or	
		and gallon in discussions.	thormomotor	
	areas in mothematical	L 00000 22:	mermometer.	
	rooconing	LESSUITZS.	• degree	
	leasoning.	LEQ. HOW Call I Solve	• degree	
	(LESSON 20,	problems involving		
	29)	measurement?		
		LEO: How can Leastimate	tomporature in	
	W03.D-	LEQ: How can resumate		
	1VI.4. I. I Calva real	temperature, liquid volume,		
	Solve real-	mass, and length?	scale.	
	world and		Dames Oalaba	
	mathematical		Degree Ceisius	
	problems	Understand that one way	the unit for	
	involving	objects can be measured is by	measuring	
	perimeters of	now heavy or light they are.	temperature in	
	polygons,	Understand relative masses	the metric scale.	
	including	of gram and kilogram and		
	finding	relative weights of ounce and	Data a set of	
	the perimeter	pound.	collected	
	given the side	Use unit size to estimate	information; often	
	lengths,	mass and weight.	numerical	
	tinding an	<ul> <li>Solve one-step word</li> </ul>	information such	
	unknown side	problems involving mass.	as a list of	
	length,		measurements.	
	exhibiting	Language Objectives:	_	
	rectangles	<ul> <li>List everyday objects that</li> </ul>	Bar graph a data	

				· · · · · · · · · · · · · · · · · · ·
with the	same have a mass of about 1 grai	n	display in which	
perimete	er and or 1 kilogram or a weight of		bars are used to	
different	about 1 ounce or 1 pound.		represent the	
areas. a	nd • Estimate the mass or weig	nt	number of items	
exhibitin	a of various objects and justif	/	in each category	
rectande	es the estimate	,	in outin outlogery.	
with the	same • Tell what mass is shown in		Pictograph a data	
	h nictures of balance scales a	bd	dieplay in which	
different	spring scales		nictures are used	
	spillig scales.		to represent the	
	anna Llassan 22a:		number of items	
Use life	Sallie Lessoli 23a.			
	LEQ: How can I solve		in each category.	
through	but the problems involving		I - 4l	
problem.	. measurement?		• scale the	
(Lesson	30)		increment by	
	LEQ: How can I estimate		which the	
	temperature, liquid volume,		numbers along	
	mass, and length?		the axes of a	
			graph change.	
	Content Objectives			
	Use appropriate units and		<ul> <li>key an</li> </ul>	
	tools to measure temperatu	е.	explanation of	
	<ul> <li>Estimate and measure</li> </ul>		what each symbol	
	temperature in degrees		in a pictograph	
	Celsius and Fahrenheit.		represents.	
	<ul> <li>Solve problems involving</li> </ul>			
	estimating and measuring		area the amount	
	temperature.		of space inside a	
			closed two-	
	Language Objectives		dimensional	
	Describe temperature usin	a	figure.	
	the key terms dearees	,		
	Fahrenheit and degrees		souare unit a	
	Celsius to communicate		square with side	
	effectively		lengths of 1 unit	
	Read and state the		that is used to	
	temperature shown on		measure the area	
	thermometers with Fabrenh	sit	of a figure	
	and Colsius scales			
	Fynlain and solve word		• perimeter the	
	nrohlems involving estimatin	a	distance around a	
		9		

and measuring temperature.	two-dimensional
	shape; found by
Lesson 24:	adding the
LEQ: How do I represent and	lengths of the
interpret data using tally	sides.
charts, tables, pictographs, line	
plots, and bar graphs?	Data a set of
	collected
Content Objectives	information; often
<ul> <li>Interpret data displayed in a</li> </ul>	numerical
bar graph to solve one- and	information such
two-step problems involving	as a list of
addition and subtraction.	measurements.
<ul> <li>Interpret data displayed in a</li> </ul>	
pictograph to solve one- and	Line plot a data
two-step problems involving	display that
addition, subtraction, and	shows the
multiplication.	frequencies of the
<ul> <li>Recognize that data</li> </ul>	data as marks
displayed in pictographs and	above a number
bar graphs can be represented	line.
by a scale other than 1.	
Use multiplication to	To estimate to
determine the number of items	give an
in data categories on graphs	approximate
with a scale other than 1.	number or answer
	based on
Language Objectives	mathematical
<ul> <li>Restate information given by</li> </ul>	thinking.
the key in a pictograph.	
<ul> <li>Analyze scaled graphs using</li> </ul>	Inch the smallest
multiplication to find values.	unit of length in
Use the key vocabulary terms	the U.S.
bar, graph, key, pictograph.	customary
scale, and data to	system.
communicate precisely.	
· · · · · · · · · · · · · · · · · · ·	Centimeter a unit
Lesson 25:	of length in the
LEQ: How do I represent and	metric system.
interpret data using tally	Your little finger is
charts tables pictographs line	about 1

<ul> <li>plots, and bar graphs?</li> <li>Content Objectives</li> <li>Draw a scaled pictograph.</li> <li>Draw a scaled bar graph.</li> <li>Language Objectives</li> <li>Read data listed in a table.</li> <li>Make connections between</li> <li>ideas about graphs shared by others.</li> </ul>	centimeter across. 100 centimeters in equivalent to 1 meter. Factor a number that is multiplied Product the result of multiplication.
Lesson 26: LEQ: How can I solve problems involving measurement?	
temperature, liquid volume, mass, and length? LEQ: How do I represent and interpret data using tally charts, tables, pictographs, line	
<ul> <li>charts, tables, pictographs, line</li> <li>plots, and bar graphs?</li> <li>Content Objectives</li> <li>Estimate and measure</li> <li>length.</li> <li>Use a ruler to measure</li> <li>objects to the nearest 1/2 inch.</li> </ul>	
<ul> <li>Ose a ruler to measure objects to the nearest 1/4 inch.</li> <li>Use a ruler to measure objects to the nearest centimeter.</li> <li>Display measurement data in a line plot.</li> <li>Answer questions about data in a line plot.</li> </ul>	
	plots, and bar graphs?Content Objectives Draw a scaled pictograph.Draw a scaled bar graph.Language Objectives Read data listed in a table. Make connections between ideas about graphs shared by others.Lesson 26: LEQ: How can I solve problems involving measurement?LEQ: How can I estimate temperature, liquid volume, mass, and length?LEQ: How do I represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs?Content Objectives • 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.

	<ul> <li>Language Objectives</li> <li>Explain how to estimate length.</li> <li>Record results of measurement in a table.</li> <li>Read measurement data in a table.</li> <li>Write labels on a line plot.</li> <li>Lesson 27:</li> <li>LEQ: How can I determine the area of a rectangle and apply the concept to multiplication and addition?</li> </ul>		
	<ul> <li>Content Objectives</li> <li>Understand what a square unit is and the fact that it can be different sizes.</li> <li>Understand that a square unit is used to measure area.</li> <li>Understand how to measure area by covering a shape with square units and counting the squares.</li> <li>Find the area of shapes using different-sized square units, including square centimeters and meters, square inches and feet.</li> </ul>		
	<ul> <li>Language Objectives</li> <li>Record the number of square units in a given rectangle.</li> <li>Draw a rectangle with a given area.</li> <li>Orally define and use the key mathematical terms area and square unit to describe determining area to a partner.</li> </ul>		

	Lesson 28: LEQ: How can I determine the area of a rectangle and apply the concept to multiplication and addition? Content Objectives		
	<ul> <li>Understand that multiplying side lengths of a rectangle provides the same results as tiling it and counting the units.</li> <li>Use the area formula for rectangles to solve mathematical problems.</li> <li>Use the area formula for rectangles to solve real-world problems.</li> <li>Use area models to solve</li> </ul>		
	area problems involving combining two rectangles		
	<ul> <li>Language Objectives</li> <li>Write an equation for the area of a given rectangle.</li> <li>Label area measurements with square units.</li> <li>Draw a picture to represent and solve a word problem about area.</li> </ul>		
	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.		

<ul> <li>Decompose shapes formed by rectangles, find the area of each rectangle, and add the areas to find the total area of the shape.</li> <li>Understand that area is additive.</li> <li>Count unit squares to determine the area of a figure.</li> <li>Language Objectives</li> <li>Draw lines in rectangles to break them into smaller rectangles.</li> <li>Tell how to find the area of a shape made from rectangles.</li> </ul>		
LEQ: How can I solve problems involving perimeters of polygons?		
LEQ: How can I distinguish between linear and area measures?		
<ul> <li>Content Objectives:</li> <li>Understand the difference between area and perimeter.</li> <li>Use side lengths to find the perimeter of a shape.</li> <li>Find an unknown side length given the perimeter of a shape.</li> <li>Understand that rectangles with the same area can have different perimeters.</li> <li>Understand that rectangles with the same perimeter can have different areas.</li> </ul>		
Language Objectives:		

			<ul> <li>Tell the difference between area and perimeter.</li> <li>Write an addition equation to represent the perimeter of a polygon.</li> <li>Use the key vocabulary term perimeter when discussing area and perimeter with a partner.</li> <li>Draw two rectangles with the same perimeter but different areas.</li> <li>Draw two rectangles with the same area but different perimeters.</li> </ul>			
Month(s): March/A	pril		Unit 6			
Geometry						
Big Idea	Standard	Eligible Content	Essential Questions & Lesson Essential Question	<u>Concepts</u>	Vocabulary	Competencies

can be extended,	quadrilaterals	G.1.1.2 Recognize	situations?	same length.	
generalized.	belong to any	rhombi.	How can patterns be used to	rhombus a	
5	of these	rectangles,	describe relationships in	parallelogram	
Geometric	subcategories.	and squares	mathematical situations?	with four sides	
relationships can	5	as examples		equal in length.	
be described,		of	How can recognizing repetition		
analyzed, and		quadrilaterals	or regularity assist in solving	pentagon a two-	
classified based		and/or draw	problems more efficiently?	dimensional	
on spatial		examples of		closed shape with	
reasoning and/or		quadrilaterals	How are spatial relationships,	exactly five sides	
visualization.		that do not	including shape and	and five Angles.	
		belong to any	dimension, used to draw,	-	
		of these	construct, model, and	<ul> <li>hexagon a two-</li> </ul>	
		subcategories	represent real situations or	dimensional	
		(Lesson 32)	solve problems?	closed shape with	
				exactly six sides	
		M03.C-	How can the application of the	and six angles.	
		G.1.1.3	attributes of geometric shapes		
		Partition	support mathematical	<ul> <li>attribute any</li> </ul>	
		shapes into	reasoning and problem	characteristic of	
		parts with	solving?	an object or	
		equal areas.		shape, like	
		Express the	How can geometric properties	number of sides,	
		area of each	and theorems be used to	color, angle	
		part as a unit	describe, model, and analyze	measure, etc.	
		fraction of the	situations?		
		whole.		• parallel always	
		(1	Lesson 31	the same	
		(Lesson 33)	LEQ: How can I identify,	distance apart.	
			compare, and classify snapes		
				• parallelogram a	
			Contant Objectives		
			Identify two dimensional	opposite sides	
			chappe and their attributes	in longth	
			• Draw two-dimensional		
			shanes given attributes	• rectangle a	
			Compare and contrast	auadrilatoral with	
			attributes of two-dimensional	four square	
			shanes	corners: onnosite	
			311apes.	comers, opposite	

	Categorize two-dimensional	sides of a	
	shapes according to attributes	rectangle are the	
	Identify and draw two-	same length	
	dimensional shapes that do	Same length.	
	not belong to a given category	• rhombus a	
	not belong to a given category.	o mornibus a	
	Languaga Objectives	with four sides	
	Draw change with particular		
	ottributoo	equal in lengin.	
	allibules.	a guadrilataral a	
	• Tell the names of shapes		
	with particular attributes.	two-dimensional	
	• Use the key vocabulary terms	ciosed snape with	
	rectangle, mombus, pentagon,		
	and venn diagram to	and four angles.	
	communicate effectively with a	*	
	partner.	"area the amount	
		of space inside a	
	Lesson 32:	closed two-	
	LEQ: How can I identify,	dimensional	
	compare, and classify shapes	figure.	
	and their attributes?		
		<ul> <li>rectangle a</li> </ul>	
	Content Objectives	quadrilateral with	
	<ul> <li>Identify quadrilaterals and</li> </ul>	four square	
	their attributes.	corners; opposite	
	<ul> <li>Draw quadrilaterals, given</li> </ul>	sides of a	
	attributes.	rectangle are the	
	<ul> <li>Compare and contrast</li> </ul>	same length.	
	attributes of quadrilaterals.		
	<ul> <li>Identify shared attributes of</li> </ul>	<ul> <li>fraction a</li> </ul>	
	different quadrilaterals.	number that	
	<ul> <li>Categorize quadrilaterals</li> </ul>	names equal	
	according to attributes.	parts of a whole;	
	<ul> <li>Identify and draw</li> </ul>	a fraction names	
	quadrilaterals that do not	a point on the	
	belong to a given category.	number line.	
	Language Objectives		
	<ul> <li>Define the key vocabulary</li> </ul>		
	terms attribute, parallel,		
	parallelogram, quadrilateral,		
	= •		

	rectangle, and rhombus to discuss reasoning. • Draw a quadrilateral with given attributes.		
	Lesson 33: LEQ: How can I use the understanding of fractions to partition shapes into parts with equal areas?		
	LEQ: How can I express the area of each part as a unit fraction of the whole?		
	Content Objectives * 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.		
	<ul> <li>Language Objectives</li> <li>Draw lines to separate a rectangle into same-sized smaller rectangles.</li> <li>Shade a given fraction of a rectangle that has been divided into equal parts.</li> </ul>		