

**Course/Subject: : Math Comprehensive Units                      Grade Level: 2**

**Textbook(s)/Materials Used:** Ready Pennsylvania Math Instruction, Practice Problem Solving, Assessment, i-Ready Diagnostic & Instruction  
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**Month(s): August - September – October                      Unit 1**

**Operations and Algebraic Thinking**

<u>Big Idea</u>	<u>Standard</u>	<u>Eligible Content</u>	<u>Essential Questions &amp; Lesson Essential Question</u>	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>
<p>Mathematical relationships among numbers can be represented, compared, and communicated.</p> <p>Mathematical relationships can be represented as expressions, equations and inequalities in mathematical situations.</p> <p>Patterns exhibit relationships that can be extended, described, and generalized.</p> <p>Add and subtraction with 20</p>	<p>CC 2.2.2.A.1 CC.2.2.2.A.2 CC.2.2.2.A.3 CC.2.1.2.B.2</p> <p>Lesson 0 1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., <math>8 + 6 = 8 + 2 + 4 = 10 + 4 = 14</math>); decomposing a number leading to a ten (e.g., 13</p>		<p>How is mathematics used to quantify, compare, represent, and model numbers?</p> <p>How can mathematics support effective communication?</p> <p>How are relationships represented mathematically?</p> <p>How can expressions, equations and inequalities be used to quantify, solve, model, and/or analyze mathematical situations?</p> <p>How can recognizing repetition or regularity assist in solving problems more efficiently?</p> <p>Lesson 0 Use best practices during a <i>Ready</i> mathematics lesson.</p>	<p>Addition and Subtraction</p> <p>Properties of Operations</p> <p>Equal Groups of Object</p> <p>Make ten</p> <p>Counting on</p>	<p>A.M. Addend Analog/digital Angles Bar graph Centimeter Compose Decompose Dime Dollar Equation Equivalent Estimate Even Expanded form Faces Feet Fractions thirds Hexagon Hundreds Inch Line plot Meter Money Nickel Odd P.M.</p>	<p>Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.</p> <p>Understand subtraction as an unknown-addend problem. For example, subtract <math>10 - 8</math> by finding</p>

<p>Fluency practice of adding and subtracting within 10</p>	<p>- 4 = 13 - 3 - 1 = 10 - 1 = 9); using the relationship between addition and subtraction (e.g., knowing that <math>8 + 4 = 12</math>, one knows <math>12 - 8 = 4</math>); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent <math>6 + 6 + 1 = 12 + 1 = 13</math>).</p> <p>Lesson 1 CC.2.2.2.A.2 Use mental strategies to add and subtract within 20.</p> <p>Lesson 2 CC.2.2.2.A.1 Represent and solve problems involving addition and subtraction within 100.</p> <p>Lesson 3 CC.2.2.2.A.2 Use mental strategies to add and subtract within 20.</p>		<p>Identify and explain models or strategies used to solve problems.</p> <p>Critique and compare solution strategies of others and those provided in <i>Ready</i>.</p> <p>Use math talk practices to efficiently share and compare strategies for solving problems.</p> <p>Apply math knowledge and modeling techniques to new, similar problems.</p> <p>Mathematical Objectives Fluently add and subtract within 10. (<i>Reviews Grade 1 Lesson 9</i>)</p> <p>Use the strategy of making ten to add numbers within 20. (<i>Reviews Grade 1 Lesson 14</i>)</p> <p>Use the make a ten strategy to subtract single-digit numbers from teen numbers. (<i>Reviews Grade 1 Lesson 16</i>)</p> <p>Lesson 1 Content Objectives Identify the three related numbers that form number sentences as part of a fact family.</p> <p>Apply counting strategies to find an unknown addend or difference.</p>		<p>Penny Pentagon Picture graph Place value Quadrilateral Quarter</p> <p>Lesson 0 Number bond Fact family Make a ten - a strategy that uses combinations of numbers that add to or subtract to ten when adding and subtracting.</p> <p>Teen number - a ten and some number of ones from 1 to 9; the numbers 11-19</p> <p>Lesson 1 Sum - the result of addition.</p> <p>Difference – the result of subtraction.</p> <p>Review the following key terms:</p>	<p>the number that makes 10 when added to 8.</p> <p>Add and subtract within 20. Use strategies such as counting on; making ten; decomposing a number leading to a ten; number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier of known sums.</p> <p>Fluently add and subtract within 20 using mental strategies.</p> <p>Apply properties of operations as strategies to add and subtract (commutative property of addition; associative property of addition).</p> <p>Determine whether a group of objects (up to 20) has an</p>
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	<p>Lesson 4 CC.2.2.2.A.3 Work with equal groups of objects to gain foundations for multiplication.</p>		<p>Use inverse operations to find an unknown addend or difference.</p> <p>Language Objectives Record addition and subtraction facts in number bonds.</p> <p>Draw an open number line to show addition and subtraction facts.</p> <p>Lesson 2 Analyze one-step problems and write equations that can be used to solve them. Apply the use of fact families as a strategy to solve one-step problems and build number sense.</p> <p>Interpret models that represent one-step problems.</p> <p>Language Objectives Draw a tape diagram to represent and solve a word problem.</p> <p>Write an addition or subtraction fact to represent a word problem.</p>		<p>Fact family - a group of related number sentences that use the same numbers, but in a different order.</p> <p>Add - to combine or find the total of two or more quantities. Addend - a number being added.</p> <p>Subtract - to take away or separate one quantity from another, or to compare two quantities.</p> <p>Lesson 2 Equation - a mathematical sentence that uses an equal sign (=) to show that two expressions have the same value.</p> <p>Equal sign (=) a symbol used to compare numbers</p>	<p>odd or even number of members and write an equation to express an even number as a sum of two equal addends.</p> <p>Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p>
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					<p>that have the same value.</p> <p>Lesson 4 even number - an even number of objects can be put into pairs or into two equal groups without any leftovers. An even number always has 0, 2, 4, 6, or 8 in the ones place.</p> <p>odd number - an odd number of objects cannot be put into pairs or into two equal groups without a leftover. An odd number always has 1, 3, 5, 7, or 9 in the ones place.</p> <p>Lesson 5 Rows Columns Array</p>	
Month(s): November – December – January			Unit 2			
Numbers and Operations in Base Ten						

<b><u>Big Idea</u></b>	<b><u>Standard</u></b>	<b><u>Eligible Content</u></b>	<b><u>Essential Questions &amp; Lesson Essential Question</u></b>	<b><u>Concepts</u></b>	<b><u>Vocabulary</u></b>	<b><u>Competencies</u></b>
<p>Mathematical relationships among numbers can be represented, compared, and communicated.</p> <p>Mathematical relationships can be represented as expressions, equations and inequalities in mathematical situations.</p> <p>Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.</p> <p>Patterns exhibit relationships that can be extended, described, and generalized.</p> <p>Mathematical relationships among numbers can be represented,</p>	<p>CC.2.1.2.B.1</p> <p>CC.2.1.2.B.2</p> <p>CC.2.1.2.B.3</p> <p>Lesson 7 CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1000.</p> <p>Lesson 8 CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1000.</p> <p>Lesson 9 CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1000.</p> <p>CC.2.2.2.A.1 Represent and solve problems involving addition</p>		<p>How is mathematics used to quantify, compare, represent, and model numbers?</p> <p>How can mathematics support effective communication?</p> <p>How are relationships represented mathematically?</p> <p>What does it mean to estimate or analyze numerical quantities?</p> <p>What makes a tool and/or strategy appropriate for a given task?</p> <p>Lesson 7 Content Objectives Break apart two-digit numbers as a place-value strategy for adding.</p> <p>Recognize that in adding, tens are added to tens and ones to ones.</p> <p>Determine when regrouping a ten is necessary and carry out the regrouping to find a sum. Language Objectives</p> <p>Record sums found by modeling addition with base ten blocks.</p>	<p>Place value</p> <p>Addition and Subtraction</p>	<p>Lesson 7 Regroup - to compose or decompose ones, tens, or hundreds. For example, 10 ones can be regrouped as 1 ten, or 1 hundred can be regrouped as 10 tens.</p> <p>Sum - the result of addition.</p> <p>Lesson 11 • digit any one of the ten symbols used to write numbers: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9. Review the following key term. • 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</p>	<p>Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.</p> <p>Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</p> <p>Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p>Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p>Add up to four two-digit numbers using strategies based on place value and properties of operations.</p>

<p>compared, and communicated.</p>	<p>and subtraction within 100.</p> <p>Lesson 10 C.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers. CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1000.</p> <p>Lesson 11 CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1000.</p> <p>Lesson 12 CC.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers.</p> <p>Lesson 13 CC.2.1.2.B.3 Use place-value</p>		<p>Draw an open number line to model adding two-digit numbers.</p> <p>Make a quick drawing to model adding two-digit numbers.</p> <p>Write an addition problem to solve a word problem involving two-digit Addition.</p> <p>Lesson 8 Content Objectives Decompose a ten as a strategy for subtracting.</p> <p>Recognize that addition can be used to solve a subtraction problem.</p> <p>Evaluate mental strategies for subtracting a number from a two-digit number.</p> <p>Language Objectives Orally describe how to add up to solve subtraction problems.</p> <p>Draw an open number line to model subtracting two-digit numbers.</p> <p>Write a subtraction problem to solve a word problem.</p> <p>Lesson 9 Content Objectives</p> <p>Analyze word problems to determine the operation needed to solve them.</p>		<p>place and has a value of 2 tens or twenty.</p> <ul style="list-style-type: none"> <li>• Hundreds</li> <li>• Tens</li> <li>• Ones</li> </ul> <p>Lesson 12 There is no new vocabulary. Review the following key terms. compare - to decide if one number is greater than, less than, or equal to another number.</p> <p>greater than symbol (<math>&gt;</math>) a symbol used to compare two numbers when the first is greater than the second.</p> <p>less than symbol (<math>&lt;</math>) a symbol used to compare two numbers when the first is less than the second.</p>	<p>Add and subtract within 1000.</p> <p>Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>Explain why addition and subtraction strategies work, using place value and the properties of operations.</p>
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	<p>understanding and properties of operations to add and subtract within 1000.</p> <p>Lesson 14 CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1000.</p> <p>Lesson 15 CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1000.</p>		<p>Apply the use of fact families as a strategy to solve one-step problems and build number sense.</p> <p>Interpret models that represent a one-step problem with two-digit Numbers.</p> <p>Language Objectives Write an equation to represent a word problem.</p> <p>Talk with a partner about strategies used to solve a problem.</p> <p>Compare two models for solving a problem and tell how they are the same or different.</p> <p>Lesson 10 Content Objectives Identify ones, tens, and hundreds in a three-digit number.</p> <p>Interpret models to determine the combinations of hundreds, tens, and ones in a number.</p> <p>Write a three-digit number in terms of varied combinations of hundreds, tens, and ones.</p> <p>Language Objectives Tell how many hundreds, tens, and ones are in a given three-digit number.</p>		<p>equal sign (=) - a symbol used to compare two numbers that have the same value.</p> <p>Lesson 13 There is no new vocabulary. Review the following key terms.</p> <p>regroup - to compose or decompose ones, tens, or hundreds. For example, 10 ones can be regrouped as 1 ten, or 1 hundred can be regrouped as 10 tens.</p> <p>sum - the result of addition.</p> <p>Lesson 14 There is no new vocabulary. Review the following key terms.</p>	
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			<p>Tell how many tens are in 100 and in 200.</p> <p>Lesson 11 Content Objectives Identify the place value of each digit in a three-digit number.</p> <p>Model three-digit numbers.</p> <p>Interpret a model and write the number value.</p> <p>Language Objectives Read aloud three-digit numbers.</p> <p>Write three-digit numbers in expanded form.</p> <p>Write a three-digit number shown with base ten blocks.</p> <p>Lesson 12 Content Objectives Evaluate models of three-digit numbers to determine whether numbers are greater than, less than, or equal to each other.</p> <p>Express equalities and inequalities using proper notation.</p> <p>Solve problems involving inequalities and justify solutions.</p> <p>Language Objectives</p>		<p>regroup - to compose or decompose ones, tens, or hundreds. For example, 10 ones can be regrouped as 1 ten, or 1 hundred can be regrouped as 10 tens.</p> <p>difference - the result of subtraction.</p>	
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		<p>Tell which of two three-digit numbers is greater and which is lesser.</p> <p>Write inequalities to compare three-digit numbers using and symbols.</p> <p>Listen to the ideas of others and ask questions to clarify.</p> <p>Lesson 13 Content Objectives Break apart three-digit numbers as a place-value strategy for adding.</p> <p>Recognize that in adding, hundreds are added to hundreds, tens to tens, and ones to ones.</p> <p>Determine when regrouping a hundred or a ten is necessary, and carry out the regrouping to find the sum.</p> <p>Language Objectives Write two numbers in a place value chart to find their sum.</p> <p>Write two numbers in expanded notation to find their sum.</p> <p>Record partial sums as a step toward finding the sum of two numbers.</p> <p>Lesson 14 Content Objectives</p>			
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			<p>Determine when regrouping a ten and/or a hundred is necessary to subtract, and carry out the regrouping to find the difference.</p> <p>Recognize that in subtracting, hundreds are subtracted from hundreds, tens from tens, and ones from ones.</p> <p>Explore subtraction as a process of taking away or adding up.</p> <p>Language Objectives Write two numbers in a place-value chart to find their difference.</p> <p>Write two numbers in expanded notation to find their difference.</p> <p>Record the steps for adding up to subtract on an open number line.</p> <p>Compare two approaches to subtraction to describe how they are alike and different.</p> <p>Lesson 15 Content Objectives Break apart three or more two-digit numbers as a place-value strategy for than two numbers.</p> <p>Apply the commutative and associative properties of addition.</p>			
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			<p>Language Objectives</p> <p>Rewrite two-digit numbers in expanded notation to add three or more numbers.</p> <p>Draw lines to group addends that are easy to add.</p> <p>Describe a mental math strategy used to add three or more numbers.</p> <p>Justify conclusions and communicate the conclusions to others.</p> <p>Adding</p> <p>Develop strategies for adding more</p>			
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<b>Month(s): February – March</b>	<b>Unit 3</b>
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**Measurement and Data**

<u>Big Idea</u>	<u>Standard</u>	<u>Eligible Content</u>	<u>Essential Questions &amp; Lesson Essential Question</u>	<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.	CC.2.4.2.A.1 CC.2.4.2.A.2 CC.2.4.2.A.3 CC.2.4.2.A.4 Lesson 16 CC.2.4.2.A.1 Measure and		<p>What does it mean to estimate or analyze numerical quantities?</p> <p>When is it appropriate to estimate versus calculate?</p> <p>What makes a tool and/or strategy appropriate for a given task?</p>	Time and Money  Represent and Interpret Data  Addition and Subtraction	Lesson 16 standard unit - a unit of measure, such as a centimeter or a foot that has a defined length, as compared to a	<p>Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p>Measure the same length with</p>

<p>Measurement attributes can be quantified, and estimated using customary and noncustomary units of measure.</p> <p>Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.</p> <p>Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.</p>	<p>estimate lengths in standard units using appropriate tools.</p> <p>Lesson 17 CC.2.4.2.A.1 Measure and estimate lengths in standard units using appropriate tools.</p> <p>Lesson 18 CC.2.4.2.A.1 Measure and estimate lengths in standard units using appropriate tools.</p> <p>Lesson 19 CC.2.4.2.A.1 Measure and estimate lengths in standard units using appropriate tools.</p> <p>Lesson 20 CC.2.4.2.A.1 Measure and estimate lengths in standard units using appropriate tools.</p>		<p>Why does “what” we measure influence “how” we measure?</p> <p>In what ways are the mathematical attributes of objects or processes measured calculated and/or interpreted?</p> <p>How precise do measurements and calculations need to be?</p> <p>What does it mean to estimate or analyze numerical quantities?</p> <p>When is it is appropriate to estimate versus calculate?</p> <p>What makes a tool and/or strategy appropriate for a given task?</p> <p>What does it mean to estimate or analyze numerical quantities?</p> <p>What makes a tool and/or strategy appropriate for a given task?</p> <p>How can data be organized and represented to provide insight into the relationship between quantities?</p> <p>How does the type of data influence the choice of display?</p>		<p>non-standard unit such as a shoe-length.</p> <p>inch - the smallest unit of length in the U.S. customary system. A quarter is about 1 inch across. 12 inches is equivalent to 1 foot.</p> <p>centimeter - a unit of length in the metric system. Your little finger is about 1 centimeter across. 100 centimeters is equivalent to 1 meter.</p> <p>Review the following key terms.</p> <p>length - a measurement that tells the distance from one point to another.</p> <p>measure - to determine the</p>	<p>different-sized units then discuss the measurement made with the smaller unit is more than the measurement made with the larger unit and vice versa.</p> <p>Estimate lengths using units of inches, feet, centimeters, and meters.</p> <p>Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p>Make a line plot to show measurement data of the lengths of several objects to the nearest whole-number unit.</p> <p>Draw a picture graph and a bar graph (with single-unit scale) to</p>
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	<p>:Lesson 21 CC.2.4.2.A.1 Measure and estimate lengths in standard units using appropriate tools.</p> <p>CC.2.4.2.A.6 Extend the concepts of addition and subtraction to problems involving length.</p> <p>CC.2.2.2.A.1 Represent and solve problems involving addition and subtraction within 20.</p> <p>Lesson 22 CC.2.4.2.A.4 Represent and interpret data using line plots, picture graphs, and bar graphs.</p> <p>Lesson 23 CC.2.4.2.A.4 Represent and interpret data using line plots, picture graphs, and bar graphs.</p>		<p>How can probability and data analysis be used to make predictions?</p> <p>What does it mean to estimate or analyze numerical quantities?</p> <p>What makes a tool and/or strategy appropriate for a given task?</p> <p>In what ways are the mathematical attributes of objects or processes measured, calculated and/or interpreted?</p> <p>How precise do measurements and calculations need to be?</p> <p>Lesson 16 Content Objectives Understand that objects can be measured using different units.</p> <p>Understand that measuring with standard units makes comparing lengths easier.</p> <p>Represent and measure the length of an object using tiles and a ruler.</p> <p>Language Objectives Describe how to use a ruler to measure an object by lining up one end of the object with the zero mark on the ruler.</p>		<p>length of an object by comparing it to a standard.</p> <p>Lesson 17 foot - a unit of length in the U.S. customary system. 1 foot is equal to 12 inches.</p> <p>yard - a unit of length in the U.S. customary system. 1 yard is equal to 3 feet or 36 inches.</p> <p>meter - a unit of length in the metric system. 1 meter is equal to 100 centimeters.</p> <p>Review the following key terms.</p> <p>inch - the smallest unit of length in the U.S. customary system. A quarter is about 1 inch across. 12 inches is</p>	<p>represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems using information presented in the graph.</p> <p>Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, and represent whole-number sums and differences within 100 on a number line diagram.</p>
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	<p>Lesson 24 CC.2.4.2.A.2 Tell and write time to the nearest five minutes using both analog and digital clocks.</p> <p>Lesson 25 CC.2.4.2.A.3 Solve problems and make change using coins and paper currency with appropriate symbols.</p>		<p>Tell the reason for using standard units of measure.</p> <p>Create an inch ruler using a strip of paper and 1-inch tiles.</p> <p>Lesson 17 Content Objectives Learn about rulers, yardsticks, meter sticks, and tape measures.</p> <p>Measure lengths using different tools.</p> <p>Learn how to use a ruler repeatedly to measure a length.</p> <p>Choose a tool for measuring the length of a given object.</p> <p>Language Objectives Record the lengths of objects measured with a ruler, tape measure, or meter stick.</p> <p>Tell which measuring tool would be best for measuring a particular object.</p> <p>Justify answers and communicate the results to others.</p> <p>Lesson 18 Compare lengths measured in different units.</p> <p>Understand the relationship between feet and inches.</p>		<p>equivalent to 1 foot.</p> <p>centimeter - a unit of length in the metric system. Your little finger is about 1 centimeter across. 100 centimeters is equivalent to 1 meter.</p> <p>Lesson 18 There is no new vocabulary.</p> <p>Review the following key terms.</p> <p>inch - the smallest unit of length in the U.S. customary system. A quarter is about 1 inch across. 12 inches is equivalent to 1 foot.</p> <p>foot - a unit of length in the U.S. customary system. 1 foot</p>	
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		<p>Understand the relationship between centimeters and meters.</p> <p>Explore how the number of units in a measurement is related to the size of the units used.</p> <p>Language Objectives Compare given lengths measured in different units.</p> <p>Predict whether a given object would be more inches in length or more feet in length.</p> <p>Describe the relationship between centimeters and meters.</p> <p>Lesson 19</p> <p>Content Objectives Estimate lengths in inches, centimeters, feet, and meters.</p> <p>Use benchmark objects when estimating.</p> <p>Language Objectives Define the key vocabulary term estimate when discussing measurement with a partner.</p> <p>Justify conclusions and communicate conclusions to others.</p> <p>Lesson 20</p>	<p>is equal to 12 inches.</p> <p>yard - a unit of length in the U.S. customary system. 1 yard is equal to 3 feet or 36 inches.</p> <p>centimeter - a unit of length in the metric system. Your little finger is about 1 centimeter across. 100 centimeters is equivalent to 1 meter.</p> <p>meter - a unit of length in the metric system. 1 meter is equal to 100 centimeters.</p> <p>Lesson 19 to estimate - to give an approximate number or answer based on mathematical thinking.</p>	
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			<p>Content Objectives Compare the lengths of objects by determining which measure is greater than or less than the other.</p> <p>Use addition and subtraction to compare lengths, finding how much greater or less the measure of one object is than the other.</p> <p>Language Objectives Tell how to compare the lengths of two objects that are not lined up next to each other.</p> <p>Record the lengths of two objects and subtract to tell how much longer or shorter one is than the other.</p> <p>Lesson 21 Content Objectives Use addition and subtraction to solve problems involving lengths.</p> <p>Recognize the importance of working within a single unit when adding or subtracting lengths.</p> <p>Interpret and apply models that represent measurement problems involving addition and subtraction.</p> <p>Language Objectives</p>		<p>an estimate - a close guess made using mathematical thinking.</p> <p>Lesson 22 data - a set of collected information; often numerical information such as a list of measurements .</p> <p>line plot - a data display that shows the frequencies of the data as marks above a number line.</p> <p>Lesson 23 data - a set of collected information; often numerical information such as a list of measurements .</p> <p>picture graph - a data display in which pictures are used to represent the</p>	
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		<p>Restate the essential information in a measurement word problem.</p> <p>Draw a bar model to represent a measurement word problem.</p> <p>Discuss with a partner strategies used to solve a problem.</p> <p>Lesson 22 Content Objectives Interpret marks on a line plot as data.</p> <p>Understand that the numbers on a ruler or number line can be used to represent a given length.</p> <p>Represent data on a line plot.</p> <p>Language Objectives Describe how the number line on a line plot is like a ruler.</p> <p>Label the number line on a line plot with numbers to represent given data.</p> <p>Tell what each X on a line plot represents.</p> <p>Lesson 23 Content Objectives Collect data to display in a bar graph or picture graph.</p>	<p>number of items in each category.</p> <p>bar graph - a data display in which bars are used to represent the number of items in each category.</p> <p>Lesson 25 cent - the smallest unit of money in the U.S.</p> <p>penny - a coin that has a value of 1 cent.</p> <p>nickel - a coin that has a value of 5 cents.</p> <p>dime - a coin that has a value of 10 cents.</p> <p>quarter - a coin that has a value of 25 cents.</p> <p>dollar - a unit of money in the</p>
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			<p>Compare data in a tally chart, table, picture graph, and bar graph.</p> <p>Interpret graphs by reading and comparing the data shown in the graph.</p> <p>Complete a picture graph and bar graph.</p> <p>Create a bar graph from a given set of data.</p> <p>Language Objectives Compare a bar graph and a picture graph for the same data.</p> <p>Use key mathematical vocabulary terms picture graph, bar graph, and data in discussions.</p> <p>Lesson 24 Content Objectives Read time to the nearest 5-minute interval.</p> <p>Write time using proper notation.</p> <p>Show time on an analog clock using proper hour-hand and minute-hand placement.</p> <p>Determine when a digital clock should read am or pm.</p> <p>Language Objectives</p>		<p>U.S. equal to 100 cents.</p> <p>Lesson 24 am - the time from midnight until before noon.</p> <p>pm - the time from noon until before midnight. Review the following key terms hour - a unit of time equal to 60 minutes.</p> <p>minute - a unit of time equal to 60 seconds.</p> <p>hour hand - the shorter indicator (or hand) on an analog clock, which shows the hours.</p> <p>minute hand - the longer indicator (or hand) on an analog clock, which shows the minutes.</p>	
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			<p>Skip count by 5s to read time on an analog clock.</p> <p>Use the terms am and pm correctly in discussions.</p> <p>Lesson 25 Content Objectives Recognize and name the coins penny, nickel, dime, and quarter.</p> <p>Know the value of coins and paper denominations.</p> <p>Count the amount of money represented by a set of coins or bills.</p> <p>Language Objectives Write the value of a set of coins.</p> <p>Write the value of a set of bills.</p> <p>List coins that have a given total value.</p>		<p>analog clock - a clock that uses hour and minute hand positions to show time.</p> <p>digital clock - a clock that uses digits to display the time.</p>	
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<b>Month(s): April – May</b>	<b>Unit 4</b>
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**Geometry**

<u>Big Idea</u>	<u>Standard</u>	<u>Eligible Content</u>	<u>Essential Questions &amp; Lesson Essential Question</u>	<u>Concepts</u>	<u>Vocabulary</u>	<u>Competencies</u>
Patterns exhibit relationships that can be extended,	CC.2.3.2.A.1 CC.2.3.2.A.2		How can patterns be used to describe relationships in mathematical situations?	Attributes Fractions	Lesson 26 side - a line segment that forms part of	Recognize and draw shapes having specified attributes. Identify

<p>described, and generalized.</p> <p>Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization.</p> <p>Patterns exhibit relationships that can be extended, described, and generalized.</p> <p>Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization.</p>	<p>Lesson 26 CC.2.3.2.A.1 Analyze and draw two- and three-dimensional shapes having specified attributes.</p> <p>Lesson 27 CC.2.3.2.A.1 Analyze and draw two- and three-dimensional shapes having specified attributes.</p> <p>Lesson 28 CC.2.3.2.A.2 Use the understanding of fractions to partition shapes into halves, quarters, and thirds.</p>		<p>How can recognizing repetition or regularity assist in solving problems more efficiently?</p> <p>How are spatial relationships, including shape and dimension, used to draw, construct, model, and represent real situations or solve problems?</p> <p>How can patterns be used to describe relationships in mathematical situations?</p> <p>How can recognizing repetition or regularity assist in solving problems more efficiently?</p> <p>How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving?</p> <p>How can geometric properties and theorems be used to describe, model, and analyze situations?</p> <p>Lesson 26 Content Objectives Identify triangles, quadrilaterals, pentagons, and hexagons based on the number of sides and angles they have.</p> <p>Recognize that one shape can be formed from a composite of other shapes.</p>		<p>a two-dimensional shape.</p> <p>angle - one of the corners of a shape where two sides meet.</p> <p>triangle - a two-dimensional shape with three straight sides and three angles.</p> <p>quadrilateral - a two-dimensional closed shape with exactly four sides and four angles.</p> <p>rectangle - a quadrilateral with four square corners. Opposite sides of a rectangle are the same length.</p> <p>rhombus - a quadrilateral with all sides the same length.</p>	<p>triangles, quadrilaterals, pentagons, hexagons, and cubes.</p> <p>Partition circles and rectangles into two, three, or four equal shares, recognize that equal shares of identical wholes need not have the same shape.</p>
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			<p>Distinguish among triangles, quadrilaterals, pentagons, and hexagons based on their attributes.</p> <p>Identify spheres, cubes, cones, cylinders, and pyramids based on the number of faces, edges, and vertices they have.</p> <p>Draw a shape based on specific attributes.</p> <p>Language Objectives Write the names of shapes based on the number of sides and angles.</p> <p>Draw shapes given a set of attributes.</p> <p>Draw lines in a shape to show different ways it can be made from other shapes.</p> <p>Write the number of faces, edges, and vertices of a shape based on drawings.</p> <p>Write the names of shapes based on key attributes.</p> <p>Lesson 27 Content Objectives Analyze a tiling as an array of squares with no gaps or overlaps.</p>		<p>pentagon - a two-dimensional closed shape with exactly five sides and five angles.</p> <p>hexagon- a two-dimensional shape with exactly six sides and six angles.</p> <p>sphere - a solid shape like a ball.</p> <p>cylinder - a solid shape like a can.</p> <p>cube - a solid shape like a box, with 6 square surfaces (faces) and all edges of equal length.</p> <p>cone - a solid shape that slopes from a circular base to a point.</p>	
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			<p>Determine the number of squares used to tile a rectangle.</p> <p>Create a tiling of squares to fit a rectangular shape.</p> <p>Language Objectives Draw lines in a rectangle to make rows of same-sized squares.</p> <p>Tell how many same-sized squares of a certain size will tile a rectangle.</p> <p>Lesson 28 Content Objectives Identify and name halves, thirds, and fourths as parts into which a shape is divided.</p> <p>Recognize that fractional parts are equal in size.</p> <p>Understand that the more parts a whole is divided into, the smaller the size of each part.</p> <p>Language Objectives Divide a shape into halves, thirds, and fourths.</p> <p>Draw lines in a shape to show 4 equal parts in different ways.</p> <p>Label parts of shapes that are cut into same-size pieces with the words half, third, or fourth.</p>		<p>pyramid - a three-dimensional figure whose base is a polygon and whose other faces are triangles.</p> <p>face - the flat surface of a solid shape.</p> <p>edge - the part of a shape where two faces meet.</p> <p>vertex - the point where two edges meet or the point of a cone.</p> <p>Lesson 28 one third - one of three equal parts of a whole.</p> <p>thirds - the parts formed when a whole is divided into three equal parts.</p> <p>Review the following key terms.</p>	
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