

## Sequence of Grade 4 Units Aligned with the Common Core State Standards

### Year at a Glance

Unit	Go Math! Textbook Chapters	Dates
B.O.Y.	Prerequisite Skills p. AG1-6 in Assessment Guide (Optional)	8/29/16 - 9/2/16
Unit 1	Ch. 1 Place Value, Addition, and Subtraction to One Million	9/6/16 - 9/21/16
Unit 2	Ch. 2 Multiply by 1 - Digit Numbers	9/22/16 - 10/14/16
	Ch. 3 Multiply by 2 - Digit Numbers	10/17/16 - 10/28/16
	Ch. 4 Divide By 1 - Digit Numbers	10/31/16 - 11/18/16
	Ch. 5 Factors, Multiples, and Patterns (Give Critical Area Performance Task #1 p. AG140 - 143 in Assessment Guide)	11/28/16 - 12/9/16
Unit 3	Ch. 6 Fraction Equivalence and Comparison	12/12/16 - 1/13/17
	Ch. 7 Add and Subtract Fractions	1/17/17 - 2/3/17
	Ch. 8 Multiply Fractions by Whole Numbers	2/6/17 - 2/15/17
Unit 4	Ch. 9 Relate Fractions and Decimals (Give Critical Area Performance Task #2 p. AG167-170 in Assessment Guide)	2/16/17 - 3/10/17
Unit 5	Ch. 10 Two - Dimensional Figures	3/13/17 - 3/24/17
	Ch. 11 Angles	3/27/17 - 4/7/17
Unit 6	Ch. 12 Relative Sizes of Measurement	4/17/17 - 5/19/17
	Ch. 13 Algebra: Perimeter and Area (Give Critical Area Performance Task #3 p. AG194-197 in Assessment Guide)	5/22/17 - 6/2/17

**Critical Areas**

Mathematical Practices In Grade 4, instructional time should focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; and (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry. Key Areas of Focus for 3-5: Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving

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

Unit	Go Math! Textbook Chapters	Dates	Additional Resources	Assessments	
<p><b>1. Place Value with Addition and Subtraction of Whole Numbers</b></p>	<p>Ch. 1 Place Value, Addition, and Subtraction to One Million</p>	<p>9/6/16 – 9/21/16</p>	<p>Eureka: Modules 1, 2</p> <p>Georgia:  <input checked="" type="radio"/> Unit 1  <input type="radio"/> Relative Value of Places  <input type="radio"/> Building 1000 (PT)  <input type="radio"/> Number Scramble  <input type="radio"/> Ticket Master  <input type="radio"/> NFL Salaries (applicable to Unit 2)  <input type="radio"/> Nice Numbers  <input type="radio"/> Estimation as a Check  <input type="radio"/> Reality Check</p>	<p>Illustrative Mathematics:  <a href="#">What's My Number?</a>  <a href="#">Threatened and Endangered Rounding to Nearest 100 &amp; 1,000</a>  <a href="#">Double Plus One</a>  <a href="#">Multiples of 9</a>  <a href="#">Margie Buys Apples</a></p>	<p>GO MATH: Chapter 1 Test</p> <p>Eureka: Unit 1: Mid-Module Assessment Unit 1: Module Assessment</p>

<p><b>2. Multiplication and Division of Whole Numbers</b></p>	<p>Ch. 2 Multiply by 1 - Digit Numbers</p> <p>Ch. 3 Multiply by 2 - Digit Numbers</p> <p>Ch. 4 Divide By 1 - Digit Numbers</p> <p>Ch. 5 Factors, Multiples, and Patterns</p>	<p>9/22/16-12/9/16</p>	<p>Eureka: Module 3</p> <p>Georgia:</p> <ul style="list-style-type: none"> <li>● Unit 2 (Multiplication)             <ul style="list-style-type: none"> <li>○ Factor Findings</li> <li>○ My Son is Naughty</li> <li>○ Investigating Prime and Composite</li> <li>○ Prime vs. Composite</li> <li>○ The Factor Game</li> <li>○ Finding Multiples</li> <li>○ The Sieve of Eratosthenes</li> <li>○ At the Circus</li> <li>○ School Store (Division)</li> <li>○ Finding Products</li> <li>○ Sensible Rounding</li> <li>○ Compatible numbers</li> <li>○ Brain Only (NT)</li> <li>○ What is <math>2500 \div 300</math></li> <li>○ Number Riddles</li> <li>○ School Newspaper (PT)</li> </ul> </li> <li>● Unit 7             <ul style="list-style-type: none"> <li>○ Measuring Mania</li> <li>○ Perimeter and Area</li> <li>○ Too Heavy Too Light</li> <li>○ More punch please</li> </ul> </li> </ul>	<p>Illustrative Mathematics:</p> <ul style="list-style-type: none"> <li><a href="#">Karl's Garden</a></li> <li><a href="#">Comparing Money Raised</a></li> <li><a href="#">Carnival Tickets</a></li> <li><a href="#">Identifying Multiples</a></li> <li><a href="#">Numbers in a Multiplication Table</a></li> <li><a href="#">Multiples of 3, 6, and 7</a></li> <li><a href="#">The Locker Game</a></li> <li><a href="#">Who is the Tallest?</a></li> <li><a href="#">Mental Division</a></li> </ul>	<p>GO MATH:</p> <p>Chapter 2 Test</p> <p>Chapter 3 Test</p> <p>Chapter 4 Test</p> <p>Chapter 5 Test</p>
<p><b>3. Order and Operations with Fractions</b></p>	<p>Ch. 6 Fraction Equivalence and Comparison</p> <p>Ch. 7 Add and Subtract Fractions</p> <p>Ch. 8 Multiply Fractions by Whole Numbers</p>	<p>12/12/16 - 2/15/17</p>	<p>Eureka: Module 5</p> <p>Georgia :</p> <ul style="list-style-type: none"> <li>● Unit 3             <ul style="list-style-type: none"> <li>○ Fraction Kits</li> <li>○ Red Rectangles</li> <li>○ Pattern Block Puzzles</li> <li>○ Benchmark Fractions (solve)</li> <li>○ More or Less</li> <li>○ Closest to 0, <math>\frac{1}{2}</math>, or 1?</li> <li>○ Their Fair Share</li> <li>○ Equivalent Fractions</li> </ul> </li> </ul>	<p>Illustrative Mathematics:</p> <ul style="list-style-type: none"> <li><a href="#">Fraction Equivalence with Pictures</a></li> <li><a href="#">Running Laps</a></li> <li><a href="#">Fractions and Rectangles</a></li> <li><a href="#">Benchmarks to Compare Fractions</a></li> <li><a href="#">Listing Fractions in Increasing Size</a></li> <li><a href="#">Doubling Fraction Parts</a></li> <li><a href="#">Comparing Two Different Pizzas</a></li> <li><a href="#">Comparing Sums of Unit Fractions</a></li> </ul>	<p>GO MATH:</p> <p>Chapter 6 Test</p> <p>Chapter 7 Test</p> <p>Chapter 8 Test</p>

			<ul style="list-style-type: none"> <li><input type="radio"/> Making Fractions</li> <li><input type="radio"/> Write About Fractions</li> <li><input type="radio"/> Pattern Block Puzzles</li>   <li>Primary Resource Extending Children’s Mathematics: Fractions and Decimals, by Susan Empson               <ul style="list-style-type: none"> <li><input type="radio"/> Chapter 1-2, pgs 2-46 (use this to introduce Fractions)</li> <li><input type="radio"/> Chapter 6: Understanding Fraction Equivalence and Order, pgs 114-147</li> </ul> </li>   <li>Extending Children’s Mathematics: Fractions and Decimals, by Susan Empson and Linda Levi               <ul style="list-style-type: none"> <li><input type="radio"/> Chapter 3: Multiple Groups Problems and Children’s Strategies for Solving Them pgs 48-71</li> <li><input type="radio"/> Chapter 4: Relational Thinking pgs 72-91</li> <li><input type="radio"/> Chapter 5: From the Classroom - Making Relational Thinking Explicit pgs 92-113</li> <li><input type="radio"/> Chapter 8: Understanding Operations on Fractions and Decimals pgs 178-222 (There are some decimal problems that can be used in the next unit)</li> </ul> </li>   <li>Georgia:               <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Unit 4</li> <li><input type="radio"/> Eggsactly</li> <li><input type="radio"/> Sweet Fraction Bars</li> <li><input type="radio"/> Fraction Cookie Bakery</li> <li><input type="radio"/> Tile Task</li> <li><input type="radio"/> Rolling Fractions</li> <li><input type="radio"/> Fraction Field Event</li> <li><input type="radio"/> A Bowl of Beans</li> <li><input type="radio"/> Birthday Cake</li> <li><input type="radio"/> Area Models</li> <li><input type="radio"/> Birthday Cookout</li> <li><input type="radio"/> Fraction Pie Game</li> <li><input type="radio"/> Land Grant</li> </ul> </li> </ul>	
<p><b>4. Decimal Fractions</b></p>	<p>Ch. 9 Relate Fractions and Decimals</p>	<p>2/16/17-3/10/17</p>	<p>Eureka: Module 6</p> <p>Georgia:  <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Unit 5</li> <li><input type="radio"/> Decimal Fraction Number Line</li> <li><input type="radio"/> Base 10 decimals</li> </ul> </p> <p>Illustrative Mathematics:  <a href="#">Expanded Fraction and Decimals</a>  <a href="#">Dimes and Pennies</a>  <a href="#">Fraction Equivalence</a>  <a href="#">Using Place Value</a> </p>	<p>GO MATH: Chapter 9 Test</p>

			<ul style="list-style-type: none"> <li><input type="radio"/> Decimal Designs</li> <li><input type="radio"/> Expanding Decimals with Money</li> <li><input type="radio"/> Double Number Line Decimals</li> <li><input type="radio"/> Decimal Line-up</li> </ul> <p>Extending Children’s Mathematics: Fractions and Decimals, by Susan Empson and Linda Levi</p> <ul style="list-style-type: none"> <li><input type="radio"/> Chapter 7: Understanding Decimals pgs 148-178</li> <li><input type="radio"/> Chapter 8: Understanding Operations on Fractions and Decimals pgs 178-222 (Use decimal problems)</li> </ul>		
<b>5. Geometry</b>	Ch. 10 Two – Dimensional Figures Ch. 11 Angles	3/13/17- 4/7/17	<p>Eureka :</p> <p>Module 4</p> <p>Georgia:</p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Unit 7</li> <li><input type="radio"/> Angle Tangle</li> <li><input type="radio"/> Guess My Angle</li> <li><input type="radio"/> Turn, Turn, Turn Circles</li> <li><input type="radio"/> Summing it Up</li> <li><input checked="" type="radio"/> Unit 6</li> <li><input type="radio"/> Sorting Shape</li> <li><input type="radio"/> Sorting Angles</li> <li><input type="radio"/> Is this the Right Angle</li> <li><input type="radio"/> Be an Expert</li> <li><input type="radio"/> My Many Triangles</li> <li><input type="radio"/> Quadrilateral Roundup</li> <li><input type="radio"/> Super Hero Symmetry</li> <li><input type="radio"/> A Quilt of Symmetry</li> <li><input type="radio"/> ABC Symmetry Card</li> </ul>	<p>Illustrative Mathematics:</p> <ul style="list-style-type: none"> <li><a href="#">Measuring Angles</a></li> <li><a href="#">Finding an Unknown Angle</a></li> <li><a href="#">Are These Right?</a></li> <li><a href="#">What shape am I?</a></li> <li><a href="#">Rectangles and Parallelograms</a></li> <li><a href="#">What is a Trapezoid? (Part 1)</a></li> <li><a href="#">Lines of symmetry for triangles</a></li> <li><a href="#">Lines of sym. for quadrilaterals</a></li> <li><a href="#">Finding Lines of Symmetry</a></li> </ul>	<p>GO MATH:</p> <p>Chapter 10 Test</p> <p>Chapter 11 Test</p> <p>Chapter 13 Test</p>
<b>6. Exploring Measurement</b>	Ch. 12 Relative Sizes of Measurement Units Ch. 13 Algebra: Perimeter and Area	4/17/17- 6/2/17	<p>Module 7</p>	<p>Pinterest</p> <ul style="list-style-type: none"> <li><a href="#">Visual of customary length</a></li> <li><a href="#">Visual of gallon Bot for volume</a></li> </ul>	

[m] = major clusters; [s] = supporting clusters; [a] = additional clusters

Unit	Common Core Standards Addressed
<b>1. Place Value with Addition and Subtraction of Whole Numbers</b>	<p>[m] <b>4.OA.A Use the four operations with whole numbers to solve problems.</b></p> <p>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p>[m] <b>4.NBT.A Generalize place value understanding for multi-digit whole numbers.</b></p> <p>4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that <math>700 \div 70 = 10</math> by applying concepts of place value and division.</p> <p>4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</p> <p>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.</p> <p>[m] <b>4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.</b></p> <p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p>
<b>2. Multiplication and Division of Whole Numbers</b>	<p>[m] <b>4.OA.A Use the four operations with whole numbers to solve problems.</b></p> <p>4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret <math>35 = 5 \times 7</math> as a statement that 35 is 5 times as many as 7 and 7 times as many as 5.</p> <p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.</p> <p>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter</p>

	<p>standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p><b>[s]</b> 4.OA.B Gain familiarity with factors and multiples.</p> <p>4.OA.4 Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.</p> <p><b>[m]</b> 4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.</p> <p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>
<p><b>3. Order and Operations with Fractions</b></p>	<p><b>[m]</b> 4.NF.A Extend understanding of fraction equivalence and ordering.</p> <p>4.NF.1 Explain why a fraction <math>a/b</math> is equivalent to a fraction <math>(n \times a)/(n \times b)</math> by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p> <p>4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as <math>1/2</math>. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols <math>&gt;</math>, <math>=</math>, or <math>&lt;</math>, and justify the conclusions, e.g., by using a visual fraction model.</p> <p><b>[m]</b> 4.NF.B Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers.</p> <p>4.NF.3 Understand a fraction <math>a/b</math> with <math>a &gt; 1</math> as a sum of fractions <math>1/b</math>. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: <math>3/8 = 1/8 + 1/8 + 1/8</math>; <math>3/8 = 1/8 + 2/8</math>; <math>2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8</math>. c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. d. Solve word problems involving addition and subtraction of</p>

	<p>fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.</p> <p>4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. a. Understand a fraction <math>a/b</math> as a multiple of <math>1/b</math>. For example, use a visual fraction model to represent <math>5/4</math> as the product <math>5 \times (1/4)</math>, recording the conclusion by the equation <math>5/4 = 5 \times (1/4)</math>. b. Understand a multiple of <math>a/b</math> as a multiple of <math>1/b</math>, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express <math>3 \times (2/5)</math> as <math>6 \times (1/5)</math>, recognizing this product as <math>6/5</math>. (In general, <math>n \times (a/b) = (n \times a)/b</math>.) c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat <math>3/8</math> of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</p> <p><b>[s]</b> 4.MD.A Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</p> <p>4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>
<p><b>4. Decimal Fractions</b></p>	<p><b>[m]</b> 4.NF.C Understand decimal notations for fractions, and compare decimal fractions.</p> <p>4.NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express <math>3/10</math> as <math>30/100</math>, and add <math>3/10 + 4/100 = 34/100</math>.</p> <p>4.NF.6 Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as <math>62/100</math>; describe a length as 0.62 meters; locate 0.62 on a number line diagram. 4.NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, or <math>&lt;</math>, and justify the conclusions, e.g., by using a visual model.</p> <p><b>[s]</b> 4.MD.A Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</p> <p>4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>
<p><b>5. Geometry</b></p>	<p><b>[a]</b> 4.OA.C Generate and analyze patterns.</p>



	<p>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule “Add 3” and the starting number 1 generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. Use the four operations with whole numbers to solve problems.</p> <p><b>[a]</b> 4.MD.C Geometric measurement: understand concepts of angle and measure angles.</p> <p>4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through <math>\frac{1}{360}</math> of a circle is called a “one-degree angle,” and can be used to measure angles. b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.</p> <p>4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p> <p>4.MD.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.</p> <p><b>[a]</b> 4.G.A Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</p> <p>4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.</p> <p>4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.</p> <p>4.G.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.</p>
<p><b>6. Exploring Measurement</b></p>	<p><b>[m]</b> 4.OA.A Use the four operations with whole numbers to solve problems.</p> <p>4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret <math>35 = 5 \times 7</math> as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.</p>

4.OA.3	Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
<b>m</b> 4.NBT.B	Use place value understanding and properties of operations to perform multi-digit arithmetic.
4.NBT.5	Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
<b>s</b> 4.MD.A	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
4.MD.1	Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... 4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
4.MD.3	Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.
<b>s</b> 4.MD.B	Represent and interpret data.
4.MD.4	Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.