



1 <sup>st</sup> Nine Weeks		
Chapter	WVCCRS	Dates
1 (Suggested 10 Days)	M.3.10 Use place value understanding to round whole numbers to the nearest 10 or 100.	
	<p><b>Additional Notes for Chapter 1:</b></p> <ul style="list-style-type: none"> <li>• Combine lessons 2&amp;3 comparing and ordering numbers</li> <li>• Combine lessons 4&amp;5 rounding to the nearest 10 and 100.</li> <li>• You will review place value within other chapters as well.</li> </ul>	
2 (Suggested 12 Days)	M.3.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table) and explain those using properties of operations (e.g., observe that 4 times a number is always even and explain why 4 times a number can be decomposed into two equal addends).	
	M.3.11 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	
	<p><b>Additional Notes for Chapter 2:</b></p> <ul style="list-style-type: none"> <li>• Combine lessons 2 &amp;3 patterns with addition</li> <li>• Combine lessons 4&amp;5 mental math and estimating</li> <li>• Combine lessons 7&amp;8 adding 3 and 4 digit numbers.</li> </ul>	
3 (Suggested 12 Days)	M.3.11 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	
	<p><b>Additional Notes for Chapter 3:</b></p> <ul style="list-style-type: none"> <li>• Combine lessons 1&amp;2 mental math and estimating with subtraction,</li> <li>• Combine lessons 5&amp;6 subtracting 3 and 4 digit numbers.</li> </ul>	

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<b>4*</b> <b>(Suggested 11 Days)</b>	<b>*It is likely that some of Chapter 4 will need to be covered at the beginning of the 2<sup>nd</sup> nine weeks</b>	
	<b>M.3.1</b> Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each (e.g., describe context in which a total number of objects can be expressed as $5 \times 7$ ).	
	<b>M.3.3</b> Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays and measurement quantities (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem).	
	<b>Additional Notes for Chapter 4:</b> <ul style="list-style-type: none"><li>• Go through each lesson and add activities from Math in Practice Module 1 to get the understanding of multiplication.</li></ul>	

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2 <sup>nd</sup> Nine Weeks		
Chapter	WVCCRS	Dates
5 (Suggested 8 Days)	<b>M.3.2</b> Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each (e.g., describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ ).	
	<b>M.3.7</b> Learn multiplication tables (facts) with speed and memory in order to fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows that $40 \div 5 = 8$ ) or properties of operations by the end of Grade 3.	
	<p><b>Additional Notes for Chapter 5:</b></p> <ul style="list-style-type: none"> <li>• Teach division using fact families with multiplication.</li> </ul>	
6 (Suggested 12 Days)	<b>M.3.3</b> Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays and measurement quantities (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem).	
	<b>M.3.4</b> Determine the unknown whole number in a multiplication or division equation relating three whole numbers (e.g., determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$ , $5 = ? \div 3$ , $6 \times 6 = ?$ ).	
	<b>M.3.7</b> Learn multiplication tables (facts) with speed and memory in order to fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows that $40 \div 5 = 8$ ) or properties of operations by the end of Grade 3.	
	<b>M.3.9</b> Identify arithmetic patterns (including patterns in the addition table or multiplication table) and explain those using properties of operations (e.g., observe that 4 times a number is always even and explain why 4 times a number can be decomposed into two equal addends).	
	<b>M.3.12</b> Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., $9 \times 80$ , $5 \times 60$ ) using strategies based on place value and properties of operations.	

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7 (Suggested 11 Days)	<p><b>M.3.2</b> Interpret whole-number quotients of whole numbers, e.g., interpret <math>56 \div 8</math> as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each (e.g., describe a context in which a number of shares or a number of groups can be expressed as <math>56 \div 8</math>).</p>
	<p><b>M.3.3</b> Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays and measurement quantities (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem).</p>
	<p><b>M.3.4</b> Determine the unknown whole number in a multiplication or division equation relating three whole numbers (e.g., determine the unknown number that makes the equation true in each of the equations <math>8 \times ? = 48</math>, <math>5 = ? \div 3</math>, <math>6 \times 6 = ?</math>).</p>
	<p><b>M.3.9</b> Identify arithmetic patterns (including patterns in the addition table or multiplication table) and explain those using properties of operations (e.g., observe that 4 times a number is always even and explain why 4 times a number can be decomposed into two equal addends).</p>
	<p><b>Additional Information for Chapter 7:</b></p> <ul style="list-style-type: none"><li>• At conclusion of Chapter 7, you will move to Chapter 13.</li></ul>
13 (Suggested 14 Days)	<p><b>M.3.22a, c, d</b> Relate area to the operations of multiplication and addition.</p> <p>a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.</p> <p>c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths <math>a</math> and <math>b + c</math> is the sum of <math>a \times b</math> and <math>a \times c</math>. Use area models to represent the distributive property in mathematical reasoning.</p> <p>Recognize area as additive and find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.</p>
	<p><b>M.3.23</b> Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.</p>
	<p><b>Additional Information for Chapter 13:</b></p> <ul style="list-style-type: none"><li>• Review the meaning of polygon prefixes to help students with standard M.3.23</li><li>• At conclusion of Chapter 13, you will move to Chapter 8.</li></ul>

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3 <sup>rd</sup> Nine Weeks		
Chapter	WVCCRS	Dates
8 (Suggested 15 days)	<b>M.3.1</b> Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each (e.g., describe context in which a total number of objects can be expressed as $5 \times 7$ ).	
	<b>M.3.2</b> Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each (e.g., describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ ).	
	<b>M.3.3</b> Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays and measurement quantities (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem).	
	<b>M.3.7</b> Learn multiplication tables (facts) with speed and memory in order to fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows that $40 \div 5 = 8$ ) or properties of operations by the end of Grade 3.	
	<b>M.3.9</b> Identify arithmetic patterns (including patterns in the addition table or multiplication table) and explain those using properties of operations (e.g., observe that 4 times a number is always even and explain why 4 times a number can be decomposed into two equal addends).	
	<p><b>Additional Information for Chapter 8:</b></p> <ul style="list-style-type: none"> <li>• Skip lessons 8 and 9 and teach those after testing (because they are not a Third-Grade standard).</li> </ul>	
9 (Suggested 15 days)	<b>M.3.5</b> Apply properties of operations as strategies to multiply and divide (e.g., If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known: Commutative Property of Multiplication. $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$ , then $15 \times 2 = 30$ , or by $5 \times 2 = 10$ , then $3 \times 10 = 30$ : Associative Property of Multiplication. Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$ , one can find $8 \times 7$ as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ : Distributive Property. Instructional Note: Students need not use formal terms for these properties. Students should recognize the terms for the properties (commutative, distributive and associative).	
	<b>M.3.8</b> Solve two-step word problems using the four operations, 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. Instructional Note: This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).	

Teach Standard to Mastery

Introduce/Preview Standard



3 <sup>rd</sup> Nine Weeks		
Chapter	WVCCRS	Dates
<b>10</b> <b>(Suggested</b> <b>15 days)</b>	<b>M.3.13</b> Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$ . Instructional Note: Fractions in this standard are limited to denominators of 2, 3, 4, 6, and 8.	
	<b>M.3.14b</b> Understand a fraction as a number on the number line and represent fractions on a number line diagram. b. Represent a fraction $a/b$ on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size $a/b$ and that its endpoint locates the number $a/b$ on the number line. (e.g., Given that $a/b$ represents $3/4$ or $6/4$ , students partition the number line into fourths and represent these fractions accurately on the same number line; students extend the number line to include the number of wholes required for the given fractions.) <b>Common denominators only.</b> Instructional Note: Fractions in this standard are limited to denominators of 2, 3, 4, 6, and 8.	
	<b>M.3.15b, c, d</b> Explain equivalence of fractions in special cases and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line. b. Recognize and generate simple equivalent fractions (e.g., $1/2 = 2/4$ , $4/6 = 2/3$ ). Explain why the fractions are equivalent (e.g., by using a visual fraction model). c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. (e.g., Express 3 in the form $3 = 3/1$ ; recognize that $6/1 = 6$ ; locate $4/4$ and 1 at the same point of a number line diagram.) d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$ , $=$ or $<$ and justify the conclusions (e.g., by using a visual fraction model). <b>Instructional Note: Fractions in this standard are limited to denominators of 2, 3, 4, 6, and 8.</b>	
	<b>Additional Notes for Chapter 10:</b> <ul style="list-style-type: none"> <li>• <b>Make sure that students know what a fraction is and how it relates to real life.</b></li> <li>• <b>Common denominators only, and fractions in these standards are limited to 2, 3, 4, 6, and 8.</b></li> </ul>	

Teach Standard to Mastery

Introduce/Preview Standard



4 <sup>th</sup> Nine Weeks		
Chapter	WVCCRS	Date
11 (Suggested 10 days)	M.3.16 Tell and write time to the nearest minute, measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes (e.g., by representing the problem on a number line diagram).	
	M.3.17 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg) and liters (l). Add, subtract, multiply or divide to solve one-step word problems involving masses or volumes that are given in the same units (e.g., by using drawings, such as a beaker with a measurement scale) to represent the problem. Instructional Note: Exclude compound units such as cm <sup>3</sup> and finding the geometric volume of a container.	
12 (Suggested 12 days)	M.3.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers (e.g., determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$ , $5 = ? \div 3$ , $6 \times 6 = ?$ ).	
	M.3.18 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs (e.g., draw a bar graph in which each square in the bar graph might represent 5 pets).	
	M.3.19 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves or quarters.	
14 (Suggested 10 days)	M.3.24 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), that the shared attributes can define a larger category (e.g. quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	
	M.3.25 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ or the area of the shape.	

\*Incorporate Math in Practice modules within each chapter.

\*\*Skills taught to mastery should be spiral reviewed throughout the year through bell-ringers and small groups.

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