

# Third Grade Mathematics Newsletter

Marking Period 2, Part 1

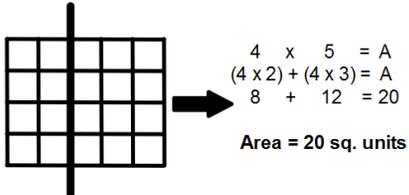
MT	<b>Learning Goals by Measurement Topic (MT)</b> <u>Students will be able to . . .</u>
<b>Operations in Algebraic Thinking</b>	<ul style="list-style-type: none"> <li>• identify and explain patterns in a multiplication table.</li> <li>• fluently multiply and divide using various strategies within 100.</li> <li>• understand division as an unknown factor problem.</li> <li>• determine the unknown whole number in multiplication and division equations.</li> <li>• use multiplication and division to solve word problems.</li> </ul>
<b>Measurement and Data</b>	<ul style="list-style-type: none"> <li>• solve area problems using multiplication strategies.</li> </ul>

<b>Thinking and Academic Success Skills (TASS)</b>		
	<u>It is . . .</u>	<u>In mathematics, students will . . .</u>
<b>Evaluation</b>	weighing evidence, examining claims, and questioning facts to make judgments based upon criteria.	<ul style="list-style-type: none"> <li>• select and test multiple strategies to solve a problem.</li> <li>• judge which strategies are most efficient in solving area problems.</li> </ul> <div data-bbox="657 1165 1161 1333" data-label="Image"> <p>A word cloud centered around the word 'evaluation' in large red letters. Other words include 'argument', 'worthy', 'judge', 'choice', 'good', 'criteria', 'solution', 'option', 'effective', and 'strong'.</p> </div>
<b>Metacognition</b>	knowing and being aware of one's own thinking and having the ability to monitor and evaluate one's own thinking.	<ul style="list-style-type: none"> <li>• think about how multiplication helps one solve division equations.</li> <li>• explain one's own strategy and thinking to learn multiplication and division facts.</li> <li>• think about one's own understanding of the relationship between multiplication and division to decide how to represent and solve a problem.</li> </ul> <div data-bbox="706 1585 1177 1858" data-label="Image"> <p>A word cloud centered around the word 'metacognition' in large green letters. Other words include 'insightful', 'clarify', 'synthesis', 'knowledge', 'self-manage', 'self-monitor', 'decision', 'plan', 'self-talk', 'apply', 'analysis', 'application', 'rational', 'factual', 'comprehension', and 'reason'.</p> </div>

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## Learning Experiences by Measurement Topic (MT)

MT	 <u>In school, your child will . . .</u>	 <u>At home, your child can . . .</u>																														
<b>Operations in Algebraic Thinking</b>	<ul style="list-style-type: none"> <li>develop understanding of factors 4, 8, 9, 3, 6, and 7 by describing patterns on a multiplication table and examining products.                     <div data-bbox="751 349 1050 560" style="text-align: center;"> <p>Circle/Highlight Products of 4</p> <table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td><td>12</td></tr> <tr><td>3</td><td>6</td><td>9</td><td>12</td><td>15</td><td>18</td></tr> <tr><td>4</td><td>8</td><td>12</td><td>16</td><td>20</td><td>24</td></tr> <tr><td>5</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td></tr> </table> </div> </li> <li>use known multiplication facts (2, 5, 10, 0, 1 ) to solve unknown facts.                     <p><u>Example:</u> <math>4 \times 7 = ?</math> I know that <math>2 \times 7 = 14</math>. If doubled, <math>14 + 14 = 28</math>, so <math>4 \times 7 = 28</math>.</p> </li> <li>apply knowledge of multiplication to solve division equations.                     <p><u>Example:</u> <math>32 \div 4 = \underline{\quad}</math>. What number multiplied by 4 will equal 32?</p> </li> <li>determine the unknown in a problem by identifying and using the relationship between multiplication and division (fact families).                     <div data-bbox="520 941 751 1096" style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;"><math>35 = \underline{\quad} \times 7</math></p> <p style="text-align: center;"><math>35 \div 5 = 7</math>    <math>7 \times 5 = 35</math></p> <p style="text-align: center;"><math>35 \div 7 = 5</math>    <math>5 \times 7 = 35</math></p> </div> </li> <li>use and explain drawings and equations to solve multiplication and division word problems.</li> </ul>	1	2	3	4	5	6	2	4	6	8	10	12	3	6	9	12	15	18	4	8	12	16	20	24	5	10	15	20	25	30	<ul style="list-style-type: none"> <li>use flashcards, playing cards, dice, etc. to solve basic multiplication facts of 2, 5, 10, 0, and 1 by memory.</li> <li>play a hop-scotch game to practice skip counting strategies to find the products of given multiplication equations.                     <p><u>Example:</u> To practice products of 5 --&gt; write on the ground all products in order, then after given a multiplication equation, hop-scotch to the correct product while calling out each product along the way.</p> </li> <li>write multiplication or division equations that match drawings or pictures found in magazines or newspapers. Think about and discuss the reasoning as to why the equation matches the drawing or picture.</li> <li>locate objects found around the home (ex: shoes, socks, forks) to create models of multiplication and division equations with an unknown. Monitor and discuss how the model matches the given equation.                     <p><u>Example:</u> Model <math>6 \times f = 18</math> by seeing how many groups of 6 tennis balls make a total of 18 tennis balls.</p> </li> </ul> <p><u>Website to support learning:</u></p> <p><a href="http://www.aplusmath.com/">http://www.aplusmath.com/</a></p>
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2	4	6	8	10	12																											
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<b>Measurement and Data</b>	<ul style="list-style-type: none"> <li>solve area problems using multiplication strategies.                     <div data-bbox="399 1258 808 1453" style="text-align: center;">  <p style="margin-left: 20px;"> <math>4 \times 5 = A</math>  <math>(4 \times 2) + (4 \times 3) = A</math>  <math>8 + 12 = 20</math>  <b>Area = 20 sq. units</b> </p> </div> </li> </ul>	<ul style="list-style-type: none"> <li>locate rectangular plane figures at the grocery store and evaluate addition and multiplication equations to find the total area of the figure.</li> </ul> <p><u>Website to support learning:</u></p> <p><a href="http://www.shodor.org/interactivate/activities/AreaExplorer/">http://www.shodor.org/interactivate/activities/AreaExplorer/</a></p>																														