

# First Grade Mathematics Newsletter

Marking Period 2, Part 2

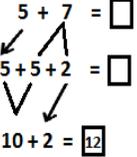
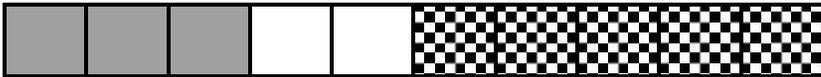
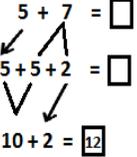
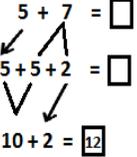
MT	<b>Learning Goals by Measurement Topic (MT)</b> <u>Students will be able to . . .</u>	
<b>Operations and Algebraic Thinking</b>	<ul style="list-style-type: none"> <li>• explain the meaning of the equal sign (=).</li> <li>• use counting strategies to add and subtract.</li> <li>• add and subtract within 20 using multiple strategies.</li> <li>• add and subtract within 20 to solve word problems by using objects, drawings, and equations.</li> <li>• solve word problems with three addends (sum less than 20) using objects, drawing, and equations.</li> </ul>	<div data-bbox="911 338 1401 554" style="border: 1px solid black; padding: 5px;"> <p>The equal sign means that the quantity on the left is the same as the quantity on the right. <i>Understanding the meaning of the equal sign serves as a foundation for early algebraic thinking.</i></p> </div> <div data-bbox="537 695 1200 940" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>addition equation with three addends</p> <p style="margin-left: 100px;">addends</p> <p style="margin-left: 100px;"> <math>\swarrow \quad \downarrow \quad \searrow</math>  <math>7 + 2 + 1 = \textcircled{10} \leftarrow \text{sum}</math> </p> </div>

<b>Thinking and Academic Success Skills (TASS)</b>		
	<u>It is . . .</u>	<u>In mathematics, students will . . .</u>
<b>Fluency</b>	<p>generating multiple responses to a problem or an idea.</p> 	<ul style="list-style-type: none"> <li>• solve addition and subtraction equations and word problems using multiple strategies.</li> <li>• actively participate in math discussions by asking questions about the strategies used by both the teacher and peers.</li> <li>• identify many combinations of three addends for a given sum.</li> </ul>
<b>Intellectual Risk Taking</b>	<p>accepting uncertainty or challenging the norm to reach a goal.</p> 	<ul style="list-style-type: none"> <li>• volunteer an answer even if there is a possibility of being incorrect.</li> <li>• ask for help and make changes in thinking when a strategy or problem is confusing.</li> <li>• create and solve original word problems.</li> </ul>

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Marking Period 2, Part 2

## Learning Experiences by Measurement Topic (MT)

MT	 <u>In school, your child will . . .</u>	 <u>At home, your child can . . .</u>																				
<b>Operations and Algebraic Thinking</b>	<ul style="list-style-type: none"> <li>practice adding and subtracting by playing math games.</li> <li>write equations with a symbol to represent the unknown (a missing number) when solving word problems.</li> </ul> <table border="1" data-bbox="247 496 1068 850"> <thead> <tr> <th colspan="2">Examples of Problem Solving Strategies</th> </tr> <tr> <th>counting on/back</th> <th>making a ten</th> </tr> </thead> <tbody> <tr> <td> <math>8+3=\square</math> Say 8. Then say the next three numbers.                      The sum (the number resulting from adding numbers) is 11.                      </td> <td>                     A strategy in which students add two numbers to make a sum of 10.                      </td> </tr> </tbody> </table> <p data-bbox="579 854 741 878">drawing a picture</p> <p data-bbox="260 898 1052 946">Two bunnies sat on the grass. Three more bunnies hopped there. How many bunnies are on the grass now?</p> <p data-bbox="260 963 600 987">Equation: <math>\square = 2 + 3</math> Answer: 5 bunnies</p>  <p data-bbox="260 1003 1024 1052">Five apples were on the table. I ate two apples. How many apples are on the table now?</p> <p data-bbox="260 1068 600 1092">Equation: <math>5 - 2 = \square</math> Answer: 3 apples</p>  <ul style="list-style-type: none"> <li>add three whole numbers with a sum less than 20 by using objects, drawings, and equations.</li> <li>identify three possible addends for a given sum.</li> </ul> <p data-bbox="247 1252 1037 1276">For example: <math>10 = \square + \square + \square</math> One possible answer: <math>10 = 3 + 2 + 5</math></p> 	Examples of Problem Solving Strategies		counting on/back	making a ten	$8+3=\square$ Say 8. Then say the next three numbers. The sum (the number resulting from adding numbers) is 11. 	A strategy in which students add two numbers to make a sum of 10. 	<ul style="list-style-type: none"> <li>play an addition game to practice adding. Collect a small pile of objects (cereal, pennies, toys, etc.). Split the objects into three groups. Say or write an equation to represent the groupings of objects. For example, “I have 16 beans. I can split the beans into groups of 5, 7, and 4. So, <math>5+7+4=16</math>.” Put the piles back together and split the objects again in a different way. Repeat until all possible combinations are found.</li> <li>practice making 10.                     <table border="1" data-bbox="1262 711 1793 1032"> <thead> <tr> <th colspan="2">Ways to Make 10</th> </tr> </thead> <tbody> <tr> <td><math>0 + 10 = 10</math></td> <td><math>6 + 4 = 10</math></td> </tr> <tr> <td><math>1 + 9 = 10</math></td> <td><math>7 + 3 = 10</math></td> </tr> <tr> <td><math>2 + 8 = 10</math></td> <td><math>8 + 2 = 10</math></td> </tr> <tr> <td><math>3 + 7 = 10</math></td> <td><math>9 + 1 = 10</math></td> </tr> <tr> <td><math>4 + 6 = 10</math></td> <td><math>10 + 0 = 10</math></td> </tr> <tr> <td><math>5 + 5 = 10</math></td> <td></td> </tr> </tbody> </table> </li> <li>create and solve addition and subtraction word problems about personal interests or everyday life. For example, “I had 8 chicken nuggets on my plate. I ate some and now I have 4 left. How many chicken nuggets did I eat?”</li> <li>take an intellectual risk by practicing multiple ways to make the same sum using three addends on an online resource: <a href="http://www.curriculumsupport.education.nsw.gov.au/countmein/children_addition_wheel.html">http://www.curriculumsupport.education.nsw.gov.au/countmein/children_addition_wheel.html</a></li> </ul>	Ways to Make 10		$0 + 10 = 10$	$6 + 4 = 10$	$1 + 9 = 10$	$7 + 3 = 10$	$2 + 8 = 10$	$8 + 2 = 10$	$3 + 7 = 10$	$9 + 1 = 10$	$4 + 6 = 10$	$10 + 0 = 10$	$5 + 5 = 10$	
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