

# Fourth Grade Compacted Mathematics Newsletter

Marking Period 1, Part 1



MT	<b>Learning Goals by Measurement Topic (MT)</b> <u>Students will be able to . . .</u>	
<b>Number and Operations in Base Ten</b>	<ul style="list-style-type: none"> <li>• demonstrate an understanding of place value of whole numbers up to one million.</li> <li>• read and write whole numbers from zero to one million using numbers, words, and expanded form.</li> <li>• compare whole numbers using the symbols, <math>&lt;</math>, <math>&gt;</math>, or <math>=</math>.</li> <li>• explain the value of a digit based on its position in a number using the base-ten system.</li> <li>• round whole numbers to any place (tens, hundreds, thousands, etc.).</li> </ul>	
<b>Operations and Algebraic Thinking</b>	<ul style="list-style-type: none"> <li>• solve multiple step word problems that include addition/subtraction and determine if the answers are reasonable.</li> <li>• recognize that situations can be multiplication and addition comparisons.</li> <li>• represent and solve addition comparison word problems.</li> <li>• represent and solve multiplication comparison word problems.</li> <li>• use variables to represent unknown numbers.</li> </ul>	

<b>Thinking and Academic Success Skills (TASS)</b>		
	<u>It is . . .</u>	<u>In mathematics, students will . . .</u>
<b>Synthesis</b>	putting parts together to build understanding of a whole concept or to form a new or unique whole.	<ul style="list-style-type: none"> <li>• use knowledge of the mathematical operations (<math>+</math>, <math>-</math>, <math>\times</math>, <math>\div</math>) to solve word problems.</li> <li>• connect previous knowledge of basic facts to solve addition and subtraction problems using numbers up to one million.</li> <li>• demonstrate an understanding of the various parts of the base-ten system.</li> </ul>
<b>Collaboration</b>	working effectively and respectfully to reach a group goal.	<ul style="list-style-type: none"> <li>• participate in small group discussions of multiplication and addition comparisons.</li> <li>• determine reasonable answers in pairs and small groups.</li> <li>• discover when to compromise and when to stick to ideas when problem solving.</li> </ul>

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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>Number and Operations in Base Ten</b>	<ul style="list-style-type: none"> <li>add and subtract with whole numbers up to one million using the standard algorithm.</li> </ul> <p style="text-align: center;"><u>Example:</u></p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <math display="block">\begin{array}{r} \quad + 759,063 = 800,204 \\ 800,204 \\ - 759,063 \\ \hline 41,141 \end{array}</math> </div> <ul style="list-style-type: none"> <li>explain the value of a digit based on its position in a number.</li> <li>round whole numbers by using a number line and other strategies.</li> <li>read and write numbers using standard, word, and expanded form.</li> </ul>	<ul style="list-style-type: none"> <li>work collaboratively to make a place value game using cards, dice, spinners, coins and other household objects.</li> <li>find examples of numbers such as prices, populations and distances in books. Use this information to compare, order, and round to any place (ten, hundred, thousand, etc.).</li> <li>practice multiplication and division facts from 0 – 10.</li> </ul>
<b>Operations and Algebraic Thinking</b>	<ul style="list-style-type: none"> <li>solve two-step word problems.</li> <li>decide whether to multiply or add to solve a word problem.</li> <li>solve multiplication comparisons. <u>Example:</u> Sam has 4 times as many marbles as Miguel. Miguel has 8 marbles. How many marbles does Sam have?</li> <li>solve equations using a variable to represent an unknown number. <u>Example:</u> <math>8 \times n = 32</math></li> </ul>	<ul style="list-style-type: none"> <li>create and solve word problems involving familiar objects from home. Explain why the answer is correct and reasonable.</li> <li>engage in discussions about how and when to use multiplication to compare numbers. <u>Example:</u> Mei has twice as many pennies as quarters in her piggy bank.</li> </ul>

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