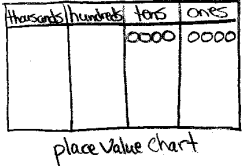
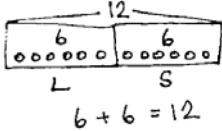
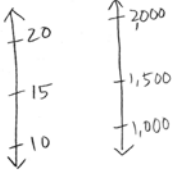
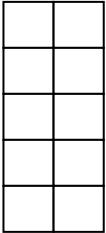
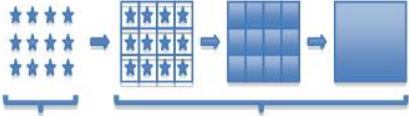
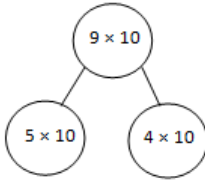
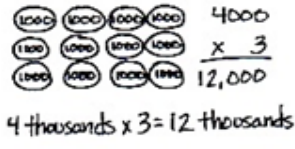
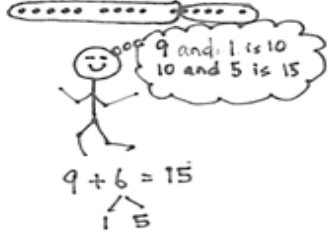
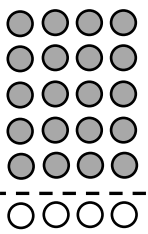

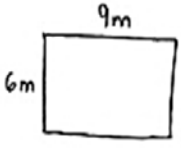


## Grade 3 Vocabulary/ Representation

Vocabulary	Description	Representation
<p><b>Place Value</b></p>	<p>The numerical value that a digit has by virtue of its position in a number.</p>	
<p><b>Tape Diagram</b></p>	<p>Tape diagrams show the relationship between two quantities.</p>	
<p><b>Vertical Number Lines</b></p>	<p>A number line is a picture of a straight line on which every point is assumed to correspond to a real number and every real number to a point.</p>	
<p><b>Ten Frame</b></p>	<p>Ten-frames from show odd and even numbers and easy addition facts within numbers to 10.</p>	
<p><b>Area Models</b></p>	<p>A model for multiplication problems, in which the length and width of a rectangle represents the factors. Relates rectangular arrays to area.</p>	
<p><b>Number Bond</b></p>	<p>Number bond uses a part-whole-part concept to present the relation between the 3 numbers.</p>	


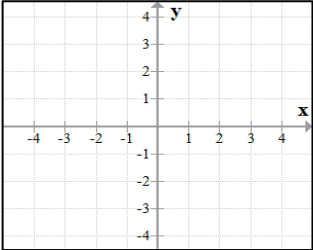
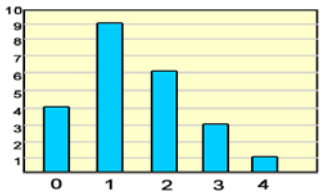

















## Grade 3 Vocabulary/ Representation


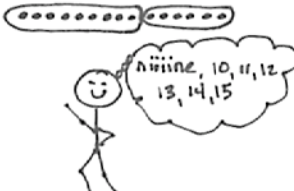
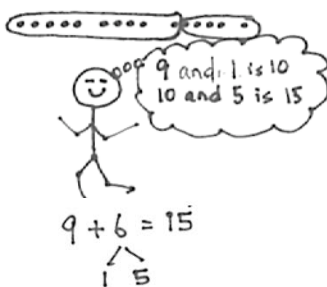
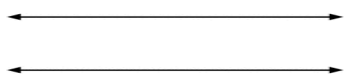
Vocabulary	Description	Representation
<b>Array</b>	An arrangement of a set of objects into equal rows and equal columns.	 <p style="text-align: center;">4 thousands <math>\times</math> 3 = 12 thousands</p>
<b>Decompose</b>	Decomposing means to take apart a number for example; $333 = 300 + 30 + 3$	
<b>The Distributive Property</b>	A multiplication fact can be broken into the sum of two other multiplication facts.	<p style="text-align: center;">The Distributive Property</p> $6 \times 4 = \underline{\quad}$  <p style="text-align: center;"><math>(6 \times 4) = (5 \times 4) + (1 \times 4)</math> <math>= 20 + 4</math></p>
<b>Commutative Property</b>	The property that states when the order of two is changes, the product remains the same.	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">The Commutative Property</p>  <p style="text-align: center;"><math>3 \times 5 = 5 \times 3</math></p> </div>
<b>Area</b>	The amount of two-dimensional space in a bounded region.	 <p style="text-align: right;"><math>6 \times 9 = 54</math> The area of the rectangle is 54 sq. meters</p>



## Grade 3 Vocabulary/ Representation

Vocabulary	Description	Representation												
<p style="text-align: center;"><b>Partition</b></p>	<p>Divide a whole into equal parts.</p>													
<p style="text-align: center;"><b>Axis</b></p>	<p>Vertical or horizontal scale in a graph.</p>													
<p style="text-align: center;"><b>Line Plot</b></p>	<p>A line plot is a graph that shows frequency of data along a number line. It is best to use a line plot when comparing fewer than 25 numbers. It is a quick, simple way to organize data.</p>	<p>The following numbers are the result from a test taken by a class of 24 students:</p> <p style="text-align: center;">16, 14, 17, 11, 14, 19, 11, 17, 12, 21, 22, 18, 11, 16, 15, 14, 18, 12, 13, 16, 17, 15, 13, 17</p> <pre style="text-align: center;"> X ----- 11 12 13 14 15 16 17 18 19 20 21 22 23     </pre>												
<p style="text-align: center;"><b>Bar Graph</b></p>	<p>Graph generated from categorical data with bars to represent a quantity.</p>	<p style="text-align: center;"><b>Number of Siblings of Students in Mr. N's class.</b></p>  <table border="1" style="display: none;"> <caption>Number of Siblings of Students in Mr. N's class</caption> <thead> <tr> <th>Number of Siblings</th> <th>Number of Students</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>4</td> </tr> <tr> <td>1</td> <td>9</td> </tr> <tr> <td>2</td> <td>6</td> </tr> <tr> <td>3</td> <td>3</td> </tr> <tr> <td>4</td> <td>1</td> </tr> </tbody> </table>	Number of Siblings	Number of Students	0	4	1	9	2	6	3	3	4	1
Number of Siblings	Number of Students													
0	4													
1	9													
2	6													
3	3													
4	1													
<p style="text-align: center;"><b>Picture Graph</b></p>	<p>A graph generated from categorical data with graphics to represent a quantity.</p>	<p style="text-align: center;"><b>Favorite Pizza Toppings</b></p> <table border="1" style="width: 100%; text-align: center;"> <tbody> <tr> <td style="width: 30%;">cheese</td> <td></td> </tr> <tr> <td>mushroom</td> <td></td> </tr> <tr> <td>sausage</td> <td></td> </tr> <tr> <td>pepperoni</td> <td></td> </tr> <tr> <td colspan="2">Key  = 5 pizzas</td> </tr> </tbody> </table>	cheese		mushroom		sausage		pepperoni		Key  = 5 pizzas			
cheese														
mushroom														
sausage														
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Key  = 5 pizzas														



Grade 3 Vocabulary/ Representation		
Vocabulary	Description	Representation
<p align="center"><b>Compose And Decompose (Addition &amp; Subtraction)</b></p>	<p>Composing Numbers are numbers that are put together to create one number. For example; <math>300 + 30 + 3 = 333</math></p> <p>Decomposing means to take apart a number. For example; <math>333 = 300 + 30 + 3</math></p>	
<p>Level 1: Count all</p>  <p>Level 2: Count on</p>  <p>Level 3: Decompose an addend to compose</p> 		
<p><b>Parallel Lines</b></p>	<p>Two lines in a plane that do not intersect</p>	
<p><b>Perpendicular</b></p>	<p>Two lines are perpendicular if they intersect, and any of the angles formed between the lines are <math>90^\circ</math> angles.</p>	