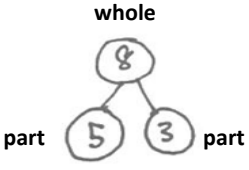
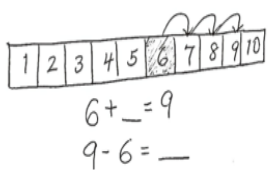
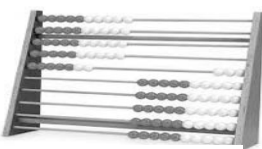
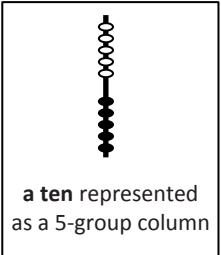


## Grade **K** Vocabulary/ Representation

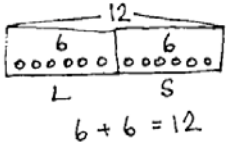
Vocabulary	Description	Representation																																																																																																				
<b>Number Bonds</b>	Number bond uses a part-whole-part concept to present the relation between the 3 numbers.	<p>whole</p>  <p style="text-align: center;"><math>5 + 3 = 8</math></p>																																																																																																				
<b>Number Path</b>	Number Paths are from 1-10 and represent addition and subtraction. For example 6 and 3 more is 9 or 9 and 6 less is 3.	 <p style="text-align: center;"><math>6 + \_ = 9</math> <math>9 - 6 = \_</math></p>																																																																																																				
<b>Rekenrek</b>	Rekenreks represent 10 more or 10 less used in addition and subtraction for base 10.	 <p style="text-align: center;">Rekenrek</p>																																																																																																				
<b>Addition Chart</b>	Addition Charts represent patterns in addition such as doubles one more one less, and 10 more and 10 less.	<table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td>1+0</td><td>1+1</td><td>1+2</td><td>1+3</td><td>1+4</td><td>1+5</td><td>1+6</td><td>1+7</td><td>1+8</td><td>1+9</td></tr> <tr><td>2+0</td><td>2+1</td><td>2+2</td><td>2+3</td><td>2+4</td><td>2+5</td><td>2+6</td><td>2+7</td><td>2+8</td><td></td></tr> <tr><td>3+0</td><td>3+1</td><td>3+2</td><td>3+3</td><td>3+4</td><td>3+5</td><td>3+6</td><td>3+7</td><td></td><td></td></tr> <tr><td>4+0</td><td>4+1</td><td>4+2</td><td>4+3</td><td>4+4</td><td>4+5</td><td>4+6</td><td></td><td></td><td></td></tr> <tr><td>5+0</td><td>5+1</td><td>5+2</td><td>5+3</td><td>5+4</td><td>5+5</td><td></td><td></td><td></td><td></td></tr> <tr><td>6+0</td><td>6+1</td><td>6+2</td><td>6+3</td><td>6+4</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>7+0</td><td>7+1</td><td>7+2</td><td>7+3</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>8+0</td><td>8+1</td><td>8+2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>9+0</td><td>9+1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10+0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8		3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7			4+0	4+1	4+2	4+3	4+4	4+5	4+6				5+0	5+1	5+2	5+3	5+4	5+5					6+0	6+1	6+2	6+3	6+4						7+0	7+1	7+2	7+3							8+0	8+1	8+2								9+0	9+1									10+0									
1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9																																																																																													
2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8																																																																																														
3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7																																																																																															
4+0	4+1	4+2	4+3	4+4	4+5	4+6																																																																																																
5+0	5+1	5+2	5+3	5+4	5+5																																																																																																	
6+0	6+1	6+2	6+3	6+4																																																																																																		
7+0	7+1	7+2	7+3																																																																																																			
8+0	8+1	8+2																																																																																																				
9+0	9+1																																																																																																					
10+0																																																																																																						
<b>Expression</b>	Expression represent a mathematical equation.	<p style="text-align: center;"><math>6 + 3 = 9</math></p> <p style="text-align: center;"><math>9 - 6 = 3</math></p>																																																																																																				
<b>5 Group Columns</b>	5 group columns represent 5 more or 5 less.	 <p style="text-align: center;">a ten represented as a 5-group column</p>																																																																																																				

## Grade 1 Vocabulary/ Representation

Vocabulary	Description	Representation				
<p><b>Compose And Decompose (Addition &amp; Subtraction)</b></p>	<p>Composing Numbers are number that are put together to create one number. For example;</p> <p><math>300 + 30 + 3 = 331</math>. Decomposing means to take apart a number for example; <math>333 = 300 + 30 + 3</math>.</p>					
<p>Level 1: Count all                      Level 2: Count on                      Level 3: Decompose an addend to compose</p>						
<p><b>Comparison</b></p>	<p>Comparing numbers that are greater than or less than and representing the numbers using a 5 group column.</p>	<p>18 is less than 21</p> <p>18  21</p>				
<p><b>Arrow Notation</b></p>	<p>Greater than and less a number represented by an arrow and 10 more or 10 less.</p>	<p><math>26 \xrightarrow{+10} 36</math></p> <p>26 is ten more than 36</p>				
<p><b>Place Value Chart</b></p>	<p>The value of a number according to the place it holds.</p>	<table border="1" style="margin: auto;"> <tr> <td style="padding: 5px;">tens</td> <td style="padding: 5px;">ones</td> </tr> <tr> <td style="font-size: 2em; text-align: center;">3</td> <td style="font-size: 2em; text-align: center;">4</td> </tr> </table>	tens	ones	3	4
tens	ones					
3	4					



## Grade 1 Vocabulary/ Representation

Vocabulary	Description	Representation
<b>Tape Diagram</b>	Tape diagrams show the relationship between two quantities.	
<b>Commutative Property</b>	Commutative property means order does not matter the expression is equivalent.	$6 + 3 = 9$ $3 + 6 = 9$ $9 = 6 + 3$ $9 = 3 + 6$
<b>Centimeter Cubes and String</b>	Centimeter cubes and string measure the length of objects.	

