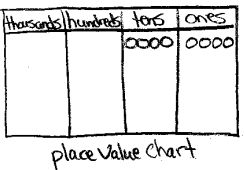
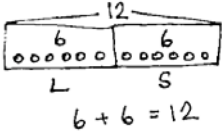
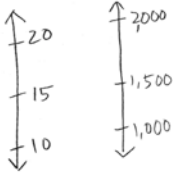
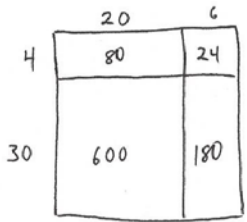
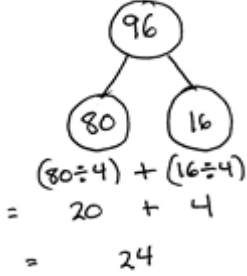
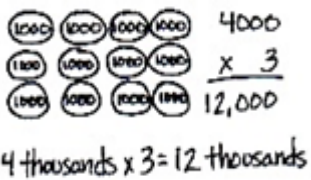
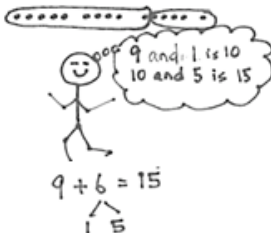
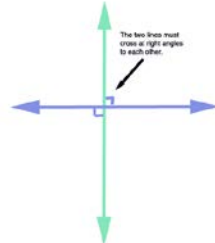
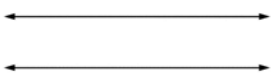
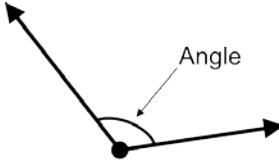
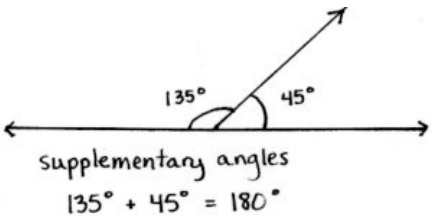


Grade 4 Vocabulary/ Representation		
Vocabulary	Description	Representation
<b>Place Value</b>	The numerical value that a digit has by virtue of its position in a number.	 <p>place value chart</p>
<b>Tape Diagram</b>	Tape diagrams show the relationship between two quantities.	 <p><math>6 + 6 = 12</math></p>
<b>Number Lines</b>	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.	
<b>Convert</b>	To express a measurement in a different unit.	<p><b>1000g = 1 kilogram</b>  <b>1000ml = 1 litre</b>  <b>100cm = 1 metre</b></p>
<b>Area Models</b>	A model for multiplication problems, in which the length and width of a rectangle represents the factors.	
<b>Number Bond</b>	Number bond uses a part-whole-part concept to present the relation between the 3 numbers.	 <p><math>(80 \div 4) + (16 \div 4)</math>  <math>= 20 + 4</math>  <math>= 24</math></p>

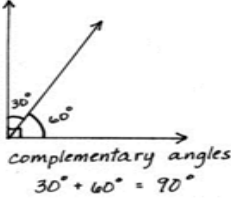
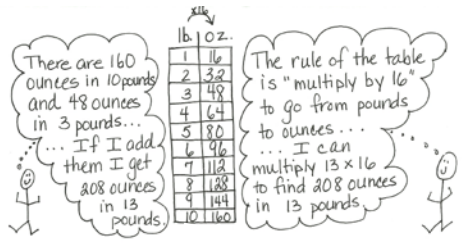


## Grade 4 Vocabulary/ Representation

Vocabulary	Description	Representation
<b>Array</b>	An arrangement of a set of objects into equal rows and equal columns.	
<b>Decompose</b>	Decomposing means to take apart a number for example; $333 = 300 + 30 + 3$	
<b>Perpendicular</b>	Two lines are <i>perpendicular</i> if they intersect, and any of the angles formed between the lines are $90^\circ$ angles.	
<b>Parallel</b>	Two lines in a plane that do not intersect.	
<b>Angle</b>	Union of two different rays sharing a common vertex.	
<b>Supplementary Angles</b>	Two angles with a sum of 180 degrees.	



## Grade 4 Vocabulary/ Representation

Vocabulary	Description	Representation
<p><b>Complementary Angles</b></p>	<p>Two angles with a sum of 90 degrees.</p>	
<p><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>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>                 X             X   X   X   X         X X X X X X X X         X X X X X X X X X X         -----         11 12 13 14 15 16 17 18 19 20 21 22 23     </pre>
<p><b>Decimal Expanded Form</b></p>	<p>The expanded form of a decimal number is the number written as the sum of its whole number and decimal place values.</p>	<p><math>(2 \times 10) + (4 \times 1) + (5 \times 0.1) + (9 \times 0.01) = 24.59</math></p>
<p><b>Fraction Expanded Form</b></p>	<p>The expanded form of a fraction is the number written as the sum of its whole number and fractional place values.</p>	<p><math>(2 \times 10) + (4 \times 1) + \left(5 \times \frac{1}{10}\right) + \left(9 \times \frac{1}{100}\right) = 24 \frac{59}{100}</math></p>
<p><b>Two-column Table</b></p>	<p>A two-column table shows the relationship between two values.</p>	
<p><b>Bundling</b></p>	<p>Bundling ten ones to make 1 ten or 10 tens to make 100</p>	