Vocabulary Cards and Word Walls
Revised: March 5, 2012

Important Notes for Teachers:

- The vocabulary cards in this file match the Common Core, the math curriculum adopted by the Utah State Board of Education, August 2010.
- The cards are arranged alphabetically.
- Each card has three sections.
  - Section 1 is only the word. This is to be used as a visual aid in spelling and pronunciation. It is also used when students are writing their own “kid-friendly” definition and drawing their own graphic.
  - Section 2 has the word and a graphic. This graphic is available to be used as a model by the teacher.
  - Section 3 has the word, a graphic, and a definition. This is to be used for the Word Wall in the classroom. For more information on using a Word Wall for Daily Review – see “Vocabulary – Word Wall Ideas” on this website.
- These cards are designed to help all students with math content vocabulary, including ELL, Gifted and Talented, Special Education, and Regular Education students.

For possible additions or corrections to the vocabulary cards, please contact the Granite School District Math Department at 385-646-4239.

Bibliography of Definition Sources:

absolute value

| -5 | = 5

The distance of a number from zero on the number line. Always positive.
A triangle with no angle measuring 90° or more.
Any number being added.

33 + 4.7 + 0.9 = 38.6
Additive Identity
Property of 0

Adding zero to a number gives a sum identical to the given number.

\[ a + 0 = a \]
additive inverses

additive inverses \[ 5 + (-5) = 0 \]

additive inverses \[ 5 + (-5) = 0 \]

Two numbers whose sum is 0 are additive inverses of one another.
algebraic expression

A group of numbers, symbols, and variables that express an operation or a series of operations.
Partial Product Example

555  
\times 7

\[ \begin{array}{c|c}
35 & \text{Step 1: Multiply the ones.} \\
350 & \text{Step 2: Multiply the tens.} \\
3500 & \text{Step 3: Multiply the hundreds.} \\
3885 & \text{Step 4: Add the partial products.} \\
\end{array} \]
The perpendicular distance from a vertex to the opposite side of a plane figure.

- altitude or height
- base
- altitude or height
- base
- The perpendicular distance from a vertex to the opposite side of a plane figure.
The measure, in square units, of the interior region of a 2-dimensional figure or the surface of a 3-dimensional figure.
Associative Property of Addition

Associative Property of Addition

$(5 + 7) + 3 = 5 + (7 + 3)$

$12 + 3 = 5 + 10$

$15 = 15$

The sum stays the same when the grouping of addends is changed. $(a + b) + c = a + (b + c)$, where $a$, $b$, and $c$ stand for any real numbers.
The product stays the same when the grouping of factors is changed. \((a \times b) \times c = a \times (b \times c)\), where \(a\), \(b\), and \(c\) stand for any real numbers.
attribute

A characteristic.

E.g. size, shape or color.
A reference line from which distances or angles are measured in a coordinate grid. (plural – axes)
The side of a polygon that is perpendicular to the altitude or height.
A diagram that shows the five number summary of a distribution. (Five number summary includes lowest value, lower quartile, median, upper quartile, and highest value.)
A group of the same or similar elements gathered or occurring closely together on a graph.
A numerical factor in a term of an algebraic expression.
common denominator

12 is a common denominator for \( \frac{2}{3} \) and \( \frac{3}{4} \)

For two or more fractions, a common denominator is a common multiple of the denominators.
Any common factor of two or more numbers.

Common Factors of 12 and 18: 1, 2, 3, 6
A common multiple of two or more numbers is a number that is a multiple of each of them. For example, the common multiples of 4 and 6 are 12, 24, 36, ...
Commutative Property of Addition

5 + 3 = 3 + 5

The sum stays the same when the order of the addends is changed. 
\[a + b = b + a\], where \(a\) and \(b\) are any real numbers.
Commutative Property of Multiplication

The product stays the same when the order of the factors is changed. $a \times b = b \times a$, where $a$ and $b$ are any real numbers.
2 triangles can form a rectangle.

To put together, as in numbers or shapes.
constant

$5x + 4$

A number with a value that is always the same.
constant speed

Movement at a fixed (constant) distance per unit of time.
coordinate pair

(-5, 2)  
(x, y)

A pair of numbers that gives the coordinates of a point on a grid in this order (horizontal coordinate, vertical coordinate). Also known as an ordered pair.
A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes. (Also called coordinate grid or coordinate system.)
coordinate system

Also known as a coordinate grid. A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes.
coordinates

coordinates

coordinates

(3, -5)

(x, y)

An ordered pair of numbers that identify a point on a coordinate plane.
cube

A rectangular solid having six congruent square faces.
A system of measurement used in the U.S. The system includes units for measuring length, capacity, and weight.
<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Tickets Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>22</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Grade</td>
<td>15</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Grade</td>
<td>34</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; Grade</td>
<td>9</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; Grade</td>
<td>16</td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; Grade</td>
<td>29</td>
</tr>
<tr>
<td>6&lt;sup&gt;th&lt;/sup&gt; Grade</td>
<td>11</td>
</tr>
</tbody>
</table>

Information, especially numerical information. Usually organized for analysis.
To separate into components or basic elements.
The quantity below the line in a fraction. It tells the number of equal parts into which a whole is divided.
In a function, a variable whose value is determined by the value of the related independent variable.

<table>
<thead>
<tr>
<th># Bikes</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheels</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>
The amount that remains after one quantity is subtracted from another.

\[49.75 - 13.9 = 35.85\]
A table that shows how many there are of each type of data.

<table>
<thead>
<tr>
<th>Age Ranges</th>
<th>Tally</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 9</td>
<td>I I I</td>
<td>3</td>
</tr>
<tr>
<td>10 - 19</td>
<td>I I I I</td>
<td>4</td>
</tr>
<tr>
<td>20 - 29</td>
<td>I I I I I</td>
<td>6</td>
</tr>
<tr>
<td>30 - 39</td>
<td>I I I I I I</td>
<td>8</td>
</tr>
<tr>
<td>40 - 49</td>
<td>I I I I I</td>
<td>0</td>
</tr>
<tr>
<td>50 - 59</td>
<td>I</td>
<td>1</td>
</tr>
<tr>
<td>60-69</td>
<td>I</td>
<td>2</td>
</tr>
</tbody>
</table>
Distributive Property

Example:

\[ 5(6 + 8) = (5 \times 6) + (5 \times 8) \]

Example:

\[ a \times (b + c) = (a \times b) + (a \times c) \]
and
\[ a \times (b - c) = (a \times b) - (a \times c) \], where \( a, b, \) and \( c \) stand for any real numbers.
dividend

A quantity to be divided.
The quantity by which another quantity is to be divided.
Also known as a line plot. A diagram showing frequency of data on a number line.
double number line diagram

A graphic diagram that shows a proportional relationship between two quantities.
A statement that two mathematical expressions are equal.

$9 \times 3 = 20 + 7$
equilateral triangle

A triangle whose sides are all the same length.
equivalent

$9 + 12 = 1 + 20$

Naming the same number.
equivalent ratio

Both ratios simplify to \( \frac{1}{2} \).

If two ratios have the same value when simplified, then they are called equivalent ratios.

\[
\frac{6}{12} = \frac{2}{4}
\]
To find the value of a mathematical expression.

\[ 42 - 13 = n \]

\[ n = 29 \]
The number that tells how many equal factors there are.
A variable or combination of variables, numbers, and symbols that represents a mathematical relationship.
An integer that divides evenly into another.
The first quartile is the middle (the median) of the lower half of the data on a box plot. One-fourth of the data lies below the first quartile and three-fourths lies above. Also known as Q1.
Volume of a cube is \( V = s^3 \)
A way of representing part of a whole or part of a group by telling the number of equal parts in the whole and the number of parts you are describing.
A place on a graph where no data values are present.
A pictorial device used to show a numerical relationship.
Greater than is used to compare two numbers when the first number is larger than the second number.
greatest common factor

12 (1, 2, 3, 4, 6, 12)  
18 (1, 2, 3, 6, 9, 18)  

GCF = 6

GCF. The largest factor of two or more numbers.
The perpendicular distance from a vertex to the opposite side of a plane figure.
A bar graph in which the labels for the bars are numerical intervals.
improper fraction

A fraction with a numerator greater than (or equal to) its denominator.
A variable in a mathematical equation whose value determines that of a dependent variable.
An inequality is a mathematical sentence that compares two unequal expressions using one of the symbols <, >, ≤, ≥, or ≠.

Example: $5x + 6 < 20 - 2x$
infinite

infinite

Having no boundaries or limits.
The set of whole numbers and their opposites.
The difference between the upper quartile and the lower quartile.
isosceles triangle

A triangle that has at least two congruent sides.
The least common multiple (LCM) of a set of two or more numbers is the smallest number that is a multiple of all the numbers in the set.

For example, consider the numbers 6 and 8:
- Multiples of 6: 6, 12, 18, 24, 30, 36, 42, ...
- Multiples of 8: 8, 16, 24, 32, 40, 48, 56, ...

The smallest number that appears in both lists is 24, so the LCM of 6 and 8 is 24.
Less than is used to compare two numbers when the first number is smaller than the second number.
line plot

Also known as a dot plot. A diagram showing frequency of data on a number line.
The smallest or least number out of a data set, usually farther away from interquartile range than other data in set. (Also known as minimum.)