#### **Vocabulary Cards and Word Walls**

Revised: June 29, 2011

#### **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:

<u>Algebra to Go</u>, Great Source, 2000. ISBN 0-669-46151-8 <u>Math on Call</u>, Great Source, 2004. ISBN-13: 978-0-669-50819-2 <u>Math at Hand</u>, Great Source, 1999. ISBN 0-669-46922 <u>Math to Know</u>, Great Source, 2000. ISBN 0-669-47153-4 <u>Illustrated Dictionary of Math</u>, Usborne Publishing Ltd., 2003. ISBN 0-7945-0662-3 <u>Math Dictionary</u>, Eula Ewing Monroe, Boyds Mills Press, 2006. ISBN-13: 978-1-59078-413-6 <u>Student Reference Books</u>, Everyday Mathematics, 2007. Houghton-Mifflin eGlossary, http://www.eduplace.com Interactive Math Dictionary, http://www.amathsdictionaryforkids.com/

## acute angle

## acute angle







An angle with a measure less than 90°.

## add

### add



#### add



To combine, put together two or more quantities.

## addend

### addend



#### addend

5 + 3 + 2 = 10

Any number being added.

addends

## additive comparison

### additive comparison



How many more hearts than stars are there?

#### additive comparison



Problems that ask how much more (or less) one amount is than another.

How many more hearts than stars are there?

## algorithm

## algorithm

 $\begin{array}{r}
 24 \\
 \underline{x \ 3} \\
 12 \\
 \underline{60} \\
 72
 \end{array}$ 

Multiply the ones 3 x 4 = 12 Multiply the tens 3 x 20 = 60 Add the partial products

### algorithm

 $\begin{array}{r}
24 \\
\underline{x \ 3} \\
12 \\
\underline{60} \\
72
\end{array}$ 

Multiply the ones  $3 \ge 4 = 12$ Multiply the tens  $3 \ge 20 = 60$ 

Add the partial products

A step-by-step method for computing.

## angle



## angle measure









The measure of the size of an angle. It tells how far one side is turned from the other side.

A one degree angle turns through 1/360 of a full circle.

#### arc



#### area

#### 2 rows of 5 = 10 square units or 2 x 5 = 10 square units



area

#### 2 rows of 5 = 10 square units

or 2 x 5 = 10 square units

The measure, in square units, of the inside of a plane figure.

#### area

## area model



area model  $\begin{array}{c} 20 + 8 \\ 9 \times 20 = 180 \\ 9 \times 8 = 72 \end{array}$   $9 \times 28 = (9 \times 20) + (9 \times 8) = 252 \end{array}$ 

A model of multiplication that shows each place value product.

### array









An arrangement of objects in equal rows.

### Associative Property of Addition

#### Associative Property of Addition

(5+7) + 3 = 5 + (7+3)12 + 3 = 5 + 1015 = 15

Associative Property of Addition

(5+7) + 3 = 5 + (7+3)12 + 3 = 5 + 1015 = 15 Changing the grouping of three or more addends does not change the sum.

## Associative Property of Multiplication

#### Associative Property of Multiplication

(5 x 7) x 3 = 5 x (7 x 3) 35 x 3 = 5 x 21105 = 105

Associative Property of Multiplication

(5 x 7) x 3 = 5 x (7 x 3) 35 x 3 = 5 x 21105 = 105 Changing the grouping of three or more factors does not change the product.

## attribute



## benchmark fractions

#### benchmark fractions

#### benchmark fractions

 $\frac{1}{4} \ \frac{1}{3} \ \frac{1}{2} \ \frac{2}{3} \ \frac{3}{4}$ 

Fractions that are commonly used for estimation.

## capacity









Capacity refers to the amount of liquid a container can hold.

## centimeter (cm)

### centimeter





### centimeter





A metric unit of length equal to 0.01 of a meter.

## circle

### circle



#### circle



A plane figure with all points the same distance from a fixed point called a center.

classify









To sort into categories or to arrange into groups by attributes.

### common denominator

#### common denominator

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

#### 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.

### Commutative Property of Addition

#### Commutative Property of Addition



#### Commutative Property of Addition



Changing the order of the addends does not change the sum.

## **Commutative Property** of Multiplication

#### **Commutative Property of Multiplication**



Commutative Property of Multiplication



Changing the order of the factors does not change the product.

### compare



compare

4 is more than 3

To decide if one number is greater than, less than, or equal to.

## comparison bars

### comparison bars



#### comparison bars



Used to represent larger and smaller amounts in a comparison situation. Can be used to represent all four operations. Different lengths of bars are drawn to represent each number.

### compose



#### compose



To put together components or basic elements.

## composite number

### composite number



composite number



2 x 3 = 6 6 is a composite number

A number greater than 0 that has more than two different factors.

## congruent









Having exactly the same size and shape.

## cup (c)









A customary unit of capacity. 1 cup = 8 fluid ounces.

## customary system

## customary system



customary system



A system of measurement used in the U.S. The system includes units for measuring length, capacity, and weight.

## data





#### data



A collection of information gathered for a purpose.Data may be in the form of either words or numbers.

## decimal

### decimal

#### \$29.45 53.0 0.02

### decimal

\$29.45 53.0 0.02

A number with one or more digits to the right of a decimal point.

## decimal fraction

## decimal fraction



 $0.38 = \frac{38}{100}$ 

decimal fraction



 $0.38 = \frac{38}{100}$ 

A fractional number with a denominator of 10 or a power of 10. Usually written with a decimal point.

## decimal notation

## decimal notation



#### decimal notation



A number containing a decimal point.

## decimal point

# decimal point

#### \$1.55 3.2 † † decimal point

decimal point \$1.55 3.2 † † decimal point

A dot (.) separating the whole number from the fraction in decimal notation.

## decompose

## decompose

Numbers can be 300 decomposed in a variety of ways, depending on 300 the situation.



decompose

Numbers can be decomposed in a variety of ways, depending on the situation.

300 20 20 2 ↓ 300 + 20 + 20 + 2

To separate into components or basic elements.
#### **degree** (angle measure)





degree (angle measure)



A unit for measuring angles. Based on dividing one complete circle into 360 equal parts.

### denominator

### denominator



#### denominator



- Parts in all
- Whole
- Set
- Total

The quantity below the line in a fraction. It tells how many equal parts are in the whole.

### digit

# **01234 56789**

digit

#### digit

# **01234 56789**

Any of the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9.

### difference

#### difference

289 - 146 = 143difference

difference

289 - 146 = 143

The amount that remains after one quantity is subtracted from another.

### **Distributive Property**

#### Distributive Property



Distributive Property



6 x 14 = 6 x (10 + 4) \*Break up the 14 into 10 + 4

24 = 84

When one of the factors of a product is a sum, multiplying each addend before adding does not change the product.

### divide

#### divide



 $15\div 3=5$ 

divide



To separate into equal groups and find the number in each group or the number of groups.

 $15\div 3=5$ 

### dividend

#### dividend



#### dividend



A number that is divided by another number.

### divisor





#### divisor



The number by which another number is divided.

## endpoint





A point at either end of a line segment, or a point at one end of a ray.



These expressions balance the scale because they are equal.

# equation

### equation



sentence with an equals sign. The amount on one side of the equals sign has the same value as the amount on the other side.

A mathematical

#### equation



### equivalent fractions

#### equivalent fractions



#### equivalent fractions



Fractions that have the same value.

### estimate

#### estimate



How many jelly beans are in the jar?

#### estimate



To find a number close to an exact amount; an estimate tells *about* how much or *about* how many.

### evaluate

#### 42 - 13 = n

*n* = 29

#### evaluate

42 - 13 = n

To find the value of a mathematical expression.

evaluate

n = 29

# expanded form

#### expanded form

#### 263 = 200 + 60 + 3

#### expanded form

263 = 200 + 60 + 3

A way to write numbers that shows the place value of each digit.

# expression

### expression



#### expression n+4

A mathematical phrase without an equal sign.

# fact family

### fact family

# Fact Family for 3, 5, 15 $3 \ge 5 = 15$ $15 \div 5 = 3$ $5 \ge 3 = 15$ $15 \div 3 = 5$

fact family

Fact Family for 3, 5, 15  

$$3 \times 5 = 15$$
  $15 \div 5 = 3$   
 $5 \times 3 = 15$   $15 \div 3 = 5$ 

A group of related facts that use the same numbers. Also called *related facts*.

#### factor





factor



The whole numbers that are multiplied to get a product.

# factor pairs

# factor pairs



The factor pairs for 6 are (2,3) and (1,6)

factor pairs



 $1 \ge 6 = 6 \qquad \text{is a set of } 1 \ge 6 = 6$ 

The factor pairs for 6 are (2,3) and (1,6)

A set of two whole numbers when multiplied, will result in a given product.

### foot (ft)



12 inches = 1 foot

a = 1 5 3 + 2 2 2 3 + 2 2 3 10 11 15 inches

foot (ft)

12 inches = 1 foot

A customary unit of length. 1 foot = 12 inches.

### formula

#### formula

To find the area of any rectangle, multiply its length by its width. This rule can be written as an equation,

 $A = l \ge w$ 

#### formula

To find the area of any rectangle, multiply its length by its width. This rule can be written as an equation,

 $A = l \mathbf{x} w$ 

A rule that is written as an equation.

### fraction





Bar Diagram (thickened number line)

O





#### Regional/Array Model



#### fraction

Measurement Model



Bar Diagram (thickened number line)

#### Set Model Regional/Array Model



A way to describe a part of a whole or a part of a group by using equal parts.

### function table

### function table

Steamship		
Puff of Smoke input (p)	Total Blocks output (t)	
1	3	
2	4	
3	5	
Rule: t = p + 2		



Steamship		
Puff of Smoke input (p)	Total Blocks output (t)	
1	3	
2	4	
3	5	
Rule: t = p + 2		

A table that lists pairs of numbers that follow a rule.

# gallon (gal)

#### gallon (gal)



#### gallon (gal)



A customary unit of capacity. 1 gallon = 4 quarts.

# gram (g)

### gram (g)

#### The mass of a paperclip is about 1 gram.



The mass of a paperclip is about 1 gram.

gram (g)



The standard unit of mass in the metric system. 1,000 grams = 1 kilogram

# greater than



### hour (hr)



hour (hr)



A unit of time. 1 hour = 60 minutes. 24 hours = 1 day.

### hundredth

#### hundredth



#### hundredth



One of the equal parts when a whole is divided into 100 equal parts.

### hundredths

#### hundredths



#### hundredths



In the decimal numeration system, hundredths is the name of the next place to the right of tenths.

#### Identity Property of Addition

#### Identity Property of Addition

8 + 0 = 8

#### Identity Property of Addition

8 + 0 = 8

If you add zero to a number, the sum is the same as that number.

#### **Identity Property of Multiplication**

#### **Identity Property of Multiplication**



**Identity Property of Multiplication** 



1 group of 3 = 3 1 x 3 = 3 If you multiply a number by one, the product is the same as that number.

## improper fraction

### improper fraction

 $\frac{15}{6}$   $\frac{6}{3}$   $\frac{1}{3}$ 

improper fraction

<u>15</u> 6

<u>6</u> 3

<u>16</u> 5 A term for a fraction whose numerator is greater than or equal to its denominator.

### inch (in)







A customary unit of length. 12 inches = 1 foot.

## intersecting lines

#### intersecting lines



#### intersecting lines



Lines that cross at a point.

# inverse operations

#### inverse operations

Multiplication and division are inverse operations.

inverse operations Multiplication and division are inverse operations.

Operations that undo each other.

# kilogram (kg)

### kilogram (kg)



Math book About 2 ½ pounds

kilogram (kg)



Math book

About 2<sup>1</sup>/<sub>2</sub> pounds

A metric unit of mass equal to 1000 grams.
# kilometer (km)

#### kilometer





A kilometer (km) is about the length of 4 city blocks.

kilometer





A kilometer (km) is about the length of 4 city blocks.

A metric unit of length equal to 1000 meters.

# length









How long something is. The distance from one point to another. Length is measured in units such as inches, feet, centimeters, etc.

### less than



#### less than



Less than is used to compare two numbers when the first number is smaller than the second number.

### like denominators

# like357denominators888

#### like denominators

Denominators in two or more fractions that are the same.

### line









A set of connected points continuing without end in both directions.

# line of symmetry

### line of symmetry



line of symmetry



A line that divides a figure into two congruent halves that are mirror images of each other.

# line plot



line plot



A diagram showing frequency of data on a number line.

# line segment



segment

segment

A part of a line with two endpoints.

### line symmetric figures

#### line symmetric figures



#### line symmetric figures



Figures that can be folded in half and its two parts match exactly.

## liter (L)

large bottle of soda or bottle of water



1,000 mL = 1 L

large bottle of soda or bottle of water

liter (L)

liter (L)



The basic unit of capacity in the metric system. 1 liter = 1,000 milliliters.

1,000 mL = 1 L

### lowest terms





#### lowest terms



$$\frac{4}{8}$$
 in lowest terms is  $\frac{1}{2}$ 

When a fraction is expressed with the fewest possible pieces, it is in lowest terms. (Also called *simplest form*.) \_\_\_\_\_ ------