# English 6 ${ }^{\text {th }}$ Grade M-Z Vocabulary Cards and Word Walls 

Revised: 4/13/18

## 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:
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## magnitude

## magnitude

Example: If this man owes $\$ 75$ on a bill, that is $-\$ 75$.
The magnitude of his debt is described as:

$$
|-\$ 75|=\$ 75
$$



Example: If this man owes $\$ 75$ on a bill, that is $-\$ 75$.
The magnitude of his debt is described as:
$|-\$ 75|=\$ 75$

Size; a property by which something can be compared as larger or smaller than other objects of the same kind.

## mass

## mass



The amount of matter in an object. Usually measured by comparing with an object of known mass. While gravity influences weight, it does not affect mass.

## maximum

\section*{

## maximum



The largest amount; the greatest number in a data set.

## mean

Data Set: 14, 21, 27, 33, 45, 46, 52
Step 1:
mean

$$
14+21+27+33+45+46+52=238
$$

Step 2:

$$
238 \div 7=34 \longleftarrow \text { mean }
$$

Data Set: 14, 21, 27, 33, 45, 46, 52

Step 1:
$14+21+27+33+45+46+52=238$
Step 2:
$238 \div 7=34 \longleftarrow$ mean

The sum of a set of numbers divided by the number of elements in the set; a type of average.

# mean absolute 

## deviation

# mean absolute deviation 



The weights of the three people are $56 \mathrm{Kgs}, 78 \mathrm{Kgs}$, and 88 Kgs .

Step 1: Find the mean.
$(56+78+88) / 3=74$
Step 2: Determine the deviation of each variable from the mean.
$56-74=-18$
$78-74=4$
$88-74=14$

Step 3: Make the deviation "absolute" by squaring and determining the roots.
(eliminate the negative)
$(18+4+14) / 3=12$ is the
mean absolute deviation.
mean

## absolute

 deviationThe weights of the three people are $56 \mathrm{Kgs}, 78 \mathrm{Kgs}$, and 88 Kgs .

Step 1: Find the mean $(56+78+88) / 3=74$

Step 2: Determine the deviation of each variable from the mean. $56-74=-18$
$78-74=4$
$88-74=14$
Step 3: Make the deviation "absolute" by squaring and determining the roots. (eliminate the negative)
$(18+4+14) / 3=12$ is the mean absolute deviation.

In statistics, the absolute deviation of an element of a data set is the absolute difference between that element and a given point.

## measure of center

## measure of center



Examples:
Mode = 1

Median = 2

Mean $=2.3$
measure of center

Examples:
Mode $=1$
Median $=2$
Mean $=2.3$

An average; a single value that is used to represent a collection of data. Three commonly used types of averages are mode, median, and mean. (also known as measure of central tendency or measure of average)

## measure of variability



 variability



A measure of how much a collection of data is spread out.
Commonly used types include range and quartiles. (also known as spread)

## median

## median

## 14, 21, 27, 33, 45, 46, 52 

## median

## 14, 21, 27, 33, 45, 46, 52

## median

The middle number of a set of numbers when the numbers are arranged from least to greatest, or the mean of two middle numbers middle numbers.

## meter (m)

## meter (m)



A baseball bat is about 1 meter long.

## meter (m)



A standard unit of length in the metric system.

A baseball bat is about 1 meter long.

## metric system

metric
system

$\begin{array}{llllllllllllllllllllllllllllllll}1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 0 & & 1 & & 2 & & 3 & & 4 & & 5 & & 6 & & 7 & & 8 & 9 & & 10 & 11 & & 12 & & 13 & 14 & 15\end{array}$ centimeters
metric system


A system of measurement based on tens. The basic unit of capacity is the liter. The basic unit of length is the meter. The basic unit of mass is the gram.

## minimum

## minimum




The smallest amount; the smallest number in a data set.

## minuend

## minuend

## $43.2-27.9=15.3$ minuend

The quantity from
which another quantity, the
subtrahend, is to be subtracted.

## mixed number

## mixed number


mixed number


A number with an integer and a fraction part.

## mode

## 14, 21, 33, 33, 33, 46, 52 <br>  <br>  <br> mode

14, 21, 33, 33, 33, 46, 52

The number or numbers that occur most often in a data set.

## multiple

## multiple <br> Multiples of <br> $7,14,21,28,35,42,49 \ldots$

## Multiplication Property <br> of Equality

# Multiplication <br> Property of Equality <br> $$
\begin{aligned} \frac{10}{5} & =2 \\ 5 \times \frac{10}{5} & =2 \times 5 \\ 1 \times 10 & =10 \\ 10 & =10 \end{aligned}
$$ 

Multiplication Property of Equality

$$
\begin{aligned}
\frac{10}{5} & =2 \\
5 \times \frac{10}{5} & =2 \times 5 \\
1 \times 10 & =10 \\
10 & =10
\end{aligned}
$$

If you multiply both sides of an equation by the same number, the two sides will remain equal.

## Multiplicative Identity Property of 1

Multiplicative Identity
$a \times 1=1 \times a=a$

## Property of 1

Multiplicative Identity
Property of 1
Multiplying a factor
$a \times 1=1 \times a=a$

## multiplicative inverse

## multiplicative inverse

## $5 \times \frac{1}{5}=1$ multiplicative inverse


multiplicative inverse

One of two numbers whose product is 1 .
(also known as reciprocal)

## negative numbers

## negative numbers



negative numbers



Numbers less
than 0.

## net

## net



## net



A two-dimensional shape that can be folded into a three-dimensional figure is a net of that figure. (also known as a network)

## number line

## number


line
number line

A diagram that represents numbers as points on a line.

## numerator

## numerator




The number or expression written above the line in a fraction.

## numerical expression

## numerical expression <br> 

## numerical expression



A mathematical statement including numbers and operations.

## obtuse triangle

## obtuse <br> triangle



A triangle that contains one angle with a measure greater than $90^{\circ}$ (obtuse angle) and two acute angles.

## opposites

+3 and -3 are opposites.

## opposites


+3 and -3 are opposites.

## opposites

Having a different sign but the same numeral.

## Order of Operations

# Order of <br> Operations 



How to do a math problem with more than one operation in the correct order.
$\mathbf{P}_{\text {arenthesis }}$
$\mathbf{E x p o n e n t s}$
$\mathbf{M u l t i p l y} / \mathbf{D}_{\text {ivide }}$
$\mathbf{A d d}_{\text {dd }} / \mathbf{S u b t r a c t}$

Order of Operations


How to do a math problem with more than one operation in the correct order.

| $\mathbf{P}_{\text {arenthesis }}$ |
| :--- |
| $\mathbf{E}_{\text {xponents }}$ |
| $\mathbf{M}_{\text {ultply }} / \mathbf{D}_{\text {ivide }}$ |
| $\mathbf{A}_{\text {dd }} / \mathbf{S}_{\text {ubtract }}$ |

An order, agreed on by mathematicians,
for performing operations to simplify expressions.

## ordered pair

## ordered pair <br> $(-5,2)$ <br> $(x, y)$

A pair of numbers that gives the ordered pair

##  <br> $(x, y)$

point on a grid in this order (horizontal coordinate, vertical coordinate). (also
known as a
coordinate pair)

## origin

## origin




The intersection of the $x$ - and $y$-axes in a coordinate plane, described by the ordered pair $(0,0)$.

## ounce (oz)

## ounce (oz)



A strawberry weighs about 1 ounce.

## ounce (oz)



A customary unit of weight equal to one sixteenth of a pound. 16 ounces $=1$ pound

A strawberry weighs about 1 ounce.

## outlier

Hours Watching TV in One Week

## outlier



Hours Watching TV in One Week

## outlier



A number in a set of data that is much larger or smaller than most of the other numbers in the set.

## parallelogram

## parallelogram




A quadrilateral with 2 pairs of parallel and congruent sides.

## pattern


pattern

| blue <br> stars | 2 | 4 | 6 | 8 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| red <br> stars | 1 | 2 | 3 | 4 | 5 |



A repeating or growing sequence. An ordered set of numbers arranged according to a rule.

## percent

## percent



## $80 \%$ of the pentagon is shaded.

$80 \%$ of the pentagon is shaded.

A special ratio that compares a number to 100 using the symbol \%.

## pint (pt)

## pint (pt)




The orange juice carton holds 1 pint.

A customary unit of capacity.
1 pint $=2$ cups

## plot

## plot




To place points on a graph or coordinate plane.

## polygon

## polygon




A closed figure formed from line segments that meet only at their endpoints.

## polyhedron

## polyhedron



polyhedron



A three-dimensional figure in which all the faces are polygons. Polyhedrons have no curved surfaces.

## positive numbers

positive numbers


positive numbers



Numbers that are greater than zero.

## pound

pound (lb)


A loaf of bread weighs about 1 pound.

# pound (lb) 

A customary unit of weight.<br>1 pound $=16$ ounces

A loaf of bread weighs about 1 pound.

## prime factorization



18 is equal to $2 \times 3^{2}$.

The expression of a number as the product of its prime factors.

## prime number

## prime number



5 is a prime number.
prime number

$1 \times 5=5$

A whole number greater than 0 that has exactly two different factors, 1 and itself.

## prism

## prism




A three-dimensional figure that has two congruent and parallel faces that are polygons.
The remaining faces are parallelograms.

## product

Sunglasses are \$9.95 a pair.

## product



Sunglasses are \$9.95 a pair.

product

The result of multiplication.

## proportion

#  <br> proportion 



$$
\frac{2}{4}=\frac{4}{8}
$$

An equation
showing that two ratios are equivalent.

## pyramid

## pyramid <br> 



A polyhedron whose base is a polygon and whose other faces are triangles that share a common vertex.

## quadrants

## quadrants



## quadrilateral

## quadrilateral




A polygon with 4 sides.

## quantity

## quantity



## quart <br> (qt)

## quart (qt)



## quart (qt)



A customary unit of capacity.

1 quart $=2$ pints
or
1 quart $=4$ cups

## quotient


quotient

## quotient

The result of the division of one quantity by another.

## range

## range



## range



The difference between the greatest number and the least number in a set of numbers.

## rate



A ratio comparing two different units.

The car was traveling 65 miles per hour on the freeway.

## ratio

# ratio 



The ratio of chocolate bars to boys is 3:2.



A comparison of two numbers using division.

The ratio of chocolate bars to boys is $3: 2$.

## rational number

## rational

 numberRational Numbers:
real numbers that can be expressed as a ratio of two integers
Examples: 2 (because $2=\frac{2}{1}$ ) $,-3, \frac{1}{4}, 0.18$, etc.


## Rational Numbers:

real numbers that can be expressed as a ratio of two integers
Examples: 2 (because $2=\frac{2}{1}$ ) $,-3, \frac{1}{4}, 0.18$, etc.

A number that can be expressed as a ratio of two integers.

## reciprocal

## $5 \times \frac{1}{5}=1$

## reciprocal

## $\uparrow$ <br> reciprocal

$5 \times \frac{1}{5}=1$

reciprocal

One of two numbers whose product is 1 .
(also known as
multiplicative inverse)

## rectangle

## rectangle

A quadrilateral with
2 pairs of congruent, parallel sides and 4 right angles.

## regular polygon

## regular

 polygon

regular polygon



A polygon with all sides the same length and all angles the same measure.

## relative

## frequency table

## relative

 frequency table

| Spelling Test Scores |  |  |
| :---: | :---: | :---: |
| Scores | Frequency | Relative <br> Frequency |
| $\mathbf{0 - 5}$ | $\mathbf{1}$ | $\mathbf{5 \%}$ |
| $\mathbf{6 - 1 0}$ | $\mathbf{3}$ | $\mathbf{1 5 \%}$ |
| $\mathbf{1 1 - 1 5}$ | $\mathbf{7}$ | $\mathbf{3 5 \%}$ |
| $\mathbf{1 6 - 2 0}$ | $\mathbf{9}$ | $\mathbf{4 5 \%}$ |

relative frequency table


A table which shows the percent of time each data item or group of data occurs.

## repeating decimal

$$
\begin{array}{cl}
\text { repeating } & \frac{1}{3}=0.333333333333 \\
\text { decina } & \frac{1}{7}=0.142857142857
\end{array}
$$

repeating $\quad \frac{1}{3}=0.333333333333$ decimal $\quad \frac{1}{7}=0.142857142857$

A decimal which has repeating digits or a repeating pattern of digits.

## right rectangular prism

## right rectangular

 prism

# right rectangular prism 



A prism with 6 rectangular faces where the lateral edge is perpendicular to the plane of the base.

## right triangle

## right triangle

 right triangle


A triangle that has one
$90^{\circ}$ angle.

## scalene triangle

## scalene triangle <br> 

scalene triangle



A triangle that has no congruent sides.

## signed number

# signed <br>  <br> number <br> $+45 \quad-23$ 

signed number
$-5+8$

$$
+45 \quad-23
$$

Positive or
negative number.

## simplest form <br> simplest form <br> form has the fewest possible pieces. <br>  <br> > A fraction in simplest <br> <br> A fraction in simplest

 <br> <br> A fraction in simplest}
## simplest form



A fraction in simplest form has the fewest possible pieces.

A fraction is in simplest form when the greatest common factor of the numerator and denominator is 1 .

## simplify

## simplify


$\frac{4}{8}$


## simplify



To express a fraction in simplest form.

## solid figure

## solid <br> figure <br>  <br> solid <br> figure <br>  <br> Three-dimensional <br> figure that has <br> length, width, and height.

## solution of an equation

## solution of $18=x+11$ an equation <br> $$
x=7
$$

solution of an equation

$$
18=x+11
$$

The value of a variable that

$$
x=7
$$ makes the

equation true.

## solution of an inequality

## solution of an inequality $n>352$ <br> 

solution of an inequality


False
True

The value of a variable that makes the inequality true.

## spread



Number of Weeks on the Top 200 Chart


A measure of how much a collection of data is spread out. Commonly used types include range and quartiles. (also known as measure of variability)

## square

## square

## square

A parallelogram with
4 equal angles AND
4 equal sides.

## statistical question

## statistical

## question

How many pencils does each student in our class have in his or her desk?

## statistical question

How many pencils does each student in our class have in his or her desk?

A question that generates a variety of categorical or numerical answers.

## statistical variability

## statistical variability



## statistical variability



A spread in the distribution of data. An example is the interquartile range.

## statistics

This baseball card shows statistics for a
famous baseball player.

## statistics



This baseball card shows statistics for a famous baseball player.

## statistics



The science of collecting, organizing, representing, and interpreting data.

## substitution

## substitution

$$
\begin{aligned}
& \text { If } x \text { is equal to } 9 \text {, then ... } \\
& \qquad \begin{array}{c}
8 x+4=? \\
8(9)+4=76
\end{array}
\end{aligned}
$$

If $x$ is equal to 9 , then ...

$$
\begin{gathered}
8 x+4=? \\
8(9)+4=76
\end{gathered}
$$

The replacement of the letters in an algebraic expression with known values.

## Subtraction Property

## of Equality

## Subtraction <br> Property of

$$
\begin{aligned}
9+7 & =16 \\
9+7-7 & =16-7 \\
9+0 & =9 \\
9 & =9
\end{aligned}
$$

Subtraction
Property of Equality

$$
\begin{aligned}
9+7 & =16 \\
7-7 & =16 \\
9+0 & =9 \\
9 & =9
\end{aligned}
$$

$$
9+7-7=16-7 \quad \begin{aligned}
& \text { If you subtract the same } \\
& \text { number from both sides }
\end{aligned}
$$

number from both sides of an equation, the two sides will remain equal.

## subtrahend

## subtrahend <br> $$
\begin{gathered} 27.34 \\ -\quad 8.29 \\ \hline 19.05 \end{gathered} \text { subtrahend }
$$

### 27.34 <br> $-8.29 \leftarrow$ <br> In subtraction, the subtrahend <br> is the number being subtracted.

## sum

## sum

## $45.3+92.9=138.2$ sum

## $45.3+92.9=138.2$

The result
of addition.

## surface area

## surface area <br> 

surface area


The total area of the faces
(including the bases) and curved surfaces of a solid figure.

## table

## table

| Student | Number of Books Read <br> in the Summer |
| :---: | :---: |
| Sara | $\mathbf{3}$ |
| Jose | $\mathbf{8}$ |
| Timothy | $\mathbf{2}$ |
| Belinda | $\mathbf{3}$ |
| Gretchen | $\mathbf{1 1}$ |
| Trevor | $\mathbf{7}$ |
|  |  |

## table

| Student | Number of Books Read <br> in the Summer |
| :---: | :---: |
| Sara | 3 |
| Jose | 8 |
| Timothy | 2 |
| Belinda | 3 |
| Gretchen | 11 |
| Trevor | 7 |

An organized way to list data. Tables usually have rows and columns of data.

## tape diagram

156 vehicles drove by the school. There were 3 times as many passenger cars as trucks. How many vehicles were trucks?
passenger cars
trucks

tape
diagram

156 vehicles drove by the school. There were 3 times as many passenger cars as trucks. How many vehicles were trucks?


A drawing that looks like a segment of tape, used to illustrate number relationships. (also known as a strip diagram, bar model, fraction strip, or length model)

## term

## term

## $5 x+14$ terms

## $5 x+14$ <br> term

A number, variable, product, or quotient in an expression. A term is not a sum or difference.

## terminating decimal

terminating decimal

A decimal which has a
finite number of digits.

## third quartile

## third

## quartile



The third quartile is the middle (the median) of the upper half of the data on a box plot. One-fourth of the data lies above the third quartile and three-fourths lies below. (also known as Q3 or upper quartile)

## three-dimensional

## figure

three-
dimensional
 figure
three-
dimensional


A solid figure that has length, width, and height.
figure

## ton (T)

## ton (T)



A small car weighs about 1 ton.

## ton (T)



A small car weighs about 1 ton.
A customary unit of weight.
1 ton $(T)=2,000$ pounds
A metric ton ( $t$ ) is a unit of mass equal to 1,000 kilograms (about 2,200 pounds).

## trapezoid

## trapezoid



## trapezoid



A quadrilateral with at least one pair of parallel sides.

## two-dimensional

## figure

## two- <br> dimensional figure


twodimensional figure


A plane, flat
figure that has
length and width.

## unit cube

## unit cube <br>  <br> Volume of 1 cubic ( $\mathrm{cm}^{3}$ ) centimeter <br> 

## Volume of 1 cubic

(cm ${ }^{3}$ ) centimeter

A precisely fixed quantity used to measure volume.

## unit fraction

# unit <br> <br> fraction 

 <br> <br> fraction}

unit
fraction


A fraction that has 1 as its numerator.
A unit fraction names 1 equal part of a whole.

## unit rate

## unit rate



## Cereal is \$0.43 per 1 ounce.



A rate with a denominator of 1 .

## unit square

## 1 unit <br> unit square <br> 

A square with side
1 unit lengths of 1 unit each. It has an area of 1 square unit.

1 unit

## upper extreme

# upper extreme 

upper extreme


| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 |  |  |  |  |  |

upper extreme


| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 |  |

The greatest or largest number out of a data set, usually farther away from interquartile range than other data in set.
(also known as maximum)

## upper quartile

## upper quartile <br> 

upper quartile


The upper quartile is the middle (the median) of the upper half of the data on a box plot. One-fourth of the data lies above the upper quartile and three-fourths lies below. (also known as Q3 or third quartile)

## value

## $5 x-2=23$ <br> <br> value <br> <br> value <br> The value of $x$ is 5 .

$5 x-2=23$
value

## The value of $x$ is 5 .

The amount
something is worth.

## variable

## $2 n+3=11$ variable <br> variable

# $2 n+3=11$ <br>  <br> variable 

A quantity that changes or can have different values.
A symbol, usually a
letter, that can stand for a variable quantity.

## vertex

## vertex



## VABMAR



The point at which two line segments, lines, or rays meet to form an angle. (plural - vertices)

## volume

## 

volume


3 units

2 units
Volume =
The number
of cubic units
it takes to fill a figure.

## weight

## weight


weight


The measure of how heavy something is.

## whole numbers

## whole numbers <br> 0, <br> 1, <br> 

whole numbers

## 0, 1, 2, 3...

Whole numbers are
0 and the counting numbers $1,2,3$, and so on.

## $\boldsymbol{x}$-axis

## $\boldsymbol{x}$-axis



In a Cartesian grid, the horizontal axis.

## $x$-coordinate

# (7, 2) $x$-coordinate 

In an ordered pair, the value that is always written first.

## $y$-axis

## $y$-axis




In a Cartesian grid, the vertical axis.

## $y$-coordinate

## $y$-coordinate

## $(7,2)$

$y$-coordinate
(7, ${ }^{2}$
In an ordered pair, the value that is always written second.

