# English $4^{\text {th }}$ 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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## 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.

## meter (m)

## meter (m)



A baseball bat is about $\mathbf{1}$ 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


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

## mile

## mile



Two times around the average roller coaster is about 1 mile.


> A customary unit of length.
> 1 mile $=5,280$ feet

Two times around the average roller coaster is about 1 mile.

## milliliter (mL)

# milliliter 

This holds about 10 drops or 1 milliliter.

## (mL)



This holds about 10 drops or 1 milliliter.

## milliliter (mL)



A metric unit of capacity. 1,000 milliliters $=1$ liter

## millimeter (mm)

# millimeter 

(mm)


The dot on a ladybug is about 1 millimeter wide.

## millimeter

(mm)


## minute (min)

minute

## (min)


minute (min)


A unit used to measure a short amount of time; there are 60 minutes
in one hour.

## mixed number

## mixed number <br> 

mixed number


A number that has a counting number and a fraction.

## month

## month

| September |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sun. | Mon. | Tues. | Wed. | Thurs. | Fri. | Sat. |  |
| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ |  |
| $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ | $\mathbf{1 2}$ | $\mathbf{1 3}$ | $\mathbf{1 4}$ |  |
| $\mathbf{1 5}$ | $\mathbf{1 6}$ | $\mathbf{1 7}$ | $\mathbf{1 8}$ | $\mathbf{1 9}$ | $\mathbf{2 0}$ | $\mathbf{2 1}$ |  |
| $\mathbf{2 2}$ | $\mathbf{2 3}$ | $\mathbf{2 4}$ | $\mathbf{2 5}$ | $\mathbf{2 6}$ | $\mathbf{2 7}$ | $\mathbf{2 8}$ |  |
| $\mathbf{2 9}$ | $\mathbf{3 0}$ |  |  |  |  |  |  |

September is the ninth month of the year.

| September |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sun. | Mon. | Tues. | Wed. | Thurs. | Fri. | Sat. |  |
| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ |  |
| $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ | $\mathbf{1 2}$ | $\mathbf{1 3}$ | $\mathbf{1 4}$ |  |
| $\mathbf{1 5}$ | $\mathbf{1 6}$ | $\mathbf{1 7}$ | $\mathbf{1 8}$ | $\mathbf{1 9}$ | $\mathbf{2 0}$ | $\mathbf{2 1}$ |  |
| $\mathbf{2 2}$ | $\mathbf{2 3}$ | $\mathbf{2 4}$ | $\mathbf{2 5}$ | $\mathbf{2 6}$ | $\mathbf{2 7}$ | $\mathbf{2 8}$ |  |
| $\mathbf{2 9}$ | $\mathbf{3 0}$ |  |  |  |  |  |  |

A length of time equal to 28,30 , or 31 days.
12 months $=1$ year

September is the ninth month of the year.

## multiple

## multiple

## Multiples of <br> 3 <br> $3,6,9,12,15,18,21 \ldots$


$3,6,9,12,15,18,21 \ldots$

The product of
a whole number and any other whole number.

## multiplicative comparison

## multiplicative <br> comparison



Amy had 5 baseball cards. Jeff had 3 times
as many cards as Amy. How many baseball cards did they have altogether?

## multiplicative comparison



Amy had 5 baseball cards. Jeff had 3 times as many cards as Amy. How many baseball cards did they have altogether?

Compare by asking or telling how many times more one amount is than another. e.g., 3 times as many as

# Multiplicative Identity Property of 1 

# Multiplicative Identity <br> Property of 1 



## Multiplicative Identity Property of 1



Multiplying a factor by one gives a product identical to the given factor.

## multiply

## multiply


$3 \times 5=5+5+5$

## multiply



The operation of repeated addition of the same number.

$$
3 \times 5=5+5+5
$$

## number line

## number

 line
number line

A diagram that represents numbers as points on a line.

## number name

number
name

The number name of 12,345
is twelve thousand, three hundred forty-five.
number name

The number name of

## 12,345

is twelve thousand, three hundred forty-five.

A way of using words to write a number.
(also known as word form)

## numerator

## numerator



$\frac{1}{3}$

- Equal parts described in fraction
- Equal parts in the whole


## numerator



- Equal parts described in fraction
- Equal parts in the whole

The number written above the line in a fraction. It tells how many equal parts are described in the fraction.

## obtuse angle

## obtuse angle




An angle with a measure greater than $90^{\circ}$ but less than $180^{\circ}$.

## obtuse triangle

## obtuse triangle


obtuse triangle


A triangle that contains 1 angle with a measure greater than $90^{\circ}$ (obtuse angle) and 2 acute angles.

## octagon

## octagon

## octagon

A polygon with
8 sides.

## ones

## ones



| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| 2 | $\mathbf{4}$ | $\mathbf{3}$ |



| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{3}$ |

The value of a digit that is farthest to the right when describing whole number place value.

## order

# order 



In order from least to greatest.


A sequence or arrangement of things.

To order fractions, compare two fractions at a time.

In order from least to greatest.

## Order of Operations

## Order of Operations

Order of Operations

1. Do operations in parentheses.
2. Multiply and divide in order from left to right.
3. Add and subtract in order from left to right.

## Order of Operations

1. Do operations in parentheses.
2. Multiply and divide in order from left to right.
3. Add and subtract in order from left to right.

A set of rules that tells the order in which to compute.

## 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.

## p.m.

## p.m.



The time between
12:00 noon and
12:00 midnight.

## parallel lines

## parallel lines


parallel lines


Lines that are always the same distance apart.
They do not intersect.

## parallelogram

## parallelogram




A quadrilateral with 2 pairs of parallel and congruent sides.

## parentheses

## parentheses <br> $(2+3) \times 4$ <br> $5 \times 4$ 20

$$
\begin{aligned}
& \text { partial product } \\
& \text { partial } \\
& \text { product }
\end{aligned}
$$

## partial quotient

## partial quotient

## partitive division

(sharing division)

# partitive division <br> (sharing division) 



Justin has 12 balloons. He wants to share them evenly among 3 friends. How many balloons should he give each friend? $12 \div 3=4$

# partitive division 

(sharing division)


A division problem where the number of objects in each group is unknown. How many in each group?

## pattern

## pattern



The pattern is all odd numbers. It follows the rule "add 4."
$\underline{1}_{+4} \underline{5}_{+4} \underline{9}_{+4} \underline{13}$
The pattern is all odd numbers. It follows the rule "add 4."

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

## pattern

## pattern



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

## pentagon

## pentagon




A polygon with 5 sides.

## perimeter

## perimeter



$$
\begin{aligned}
\text { Perimeter } & =4 \mathrm{~cm}+6 \mathrm{~cm}+4 \mathrm{~cm}+3 \mathrm{~cm} \\
& =17 \mathrm{~cm}
\end{aligned}
$$



The distance around the outside of a figure.

$$
\text { Perimeter }=4 \mathrm{~cm}+6 \mathrm{~cm}+4 \mathrm{~cm}+3 \mathrm{~cm}
$$

$$
=17 \mathrm{~cm}
$$

## period

## period




In a large number, periods are groups of 3 digits separated by commas or by spaces.

## perpendicular lines

perpendicular lines


## pint (pt)

## pint (pt)



The orange juice carton holds 1 pint.



| The orange |
| :--- |
| juice carton |
| holds 1 pint. |

A customary unit of capacity.
1 pint = 2 cups

## place value

# place value 

| MILLIONS |  |  | THOUSANDS |  |  | ONES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| hundred millions | $\begin{gathered} \text { tenn } \\ \text { millitions } \end{gathered}$ | millions | hundred thousands | $\begin{array}{\|c\|} \hline \text { ten } \\ \text { thousands } \end{array}$ | thousands | hundreds | tens | ones |
| 7 | 4 | 5 | 3 | 0 | 9 | 2 | 8 | 1 |

place value

| MILLIONS |  |  | THOUSANDS |  |  | ONES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| hundred millions | $\begin{gathered} \text { ten } \\ \text { millilions } \end{gathered}$ | millions | hundred thousands | $\begin{array}{\|c\|} \hline \text { ten } \\ \text { thousands } \end{array}$ | thousands | hundreds | tens | ones |
| 7 | 4 | 5 | 3 | 0 | 9 | 2 | 8 | 1 |

The value of the place of a digit in a number.

## point

A
point


D point

The exact location in space represented by a dot.

## polygon

## polygon




A closed plane figure made by line segments.

## pound <br> (lb)

## pound (lb)

A loaf of bread weighs about 1 pound.

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

A loaf of bread weighs about 1 pound.

## prime number

## prime number



5 is a prime number.


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

5 is a prime number.

## product

## product

## $5 \times 3=15$

$$
5 \times 3=15
$$

The answer to a multiplication problem.

## protractor

## protractor




A tool used to measure and draw angles.

## quadrilateral

## quadrilateral




A polygon with 4 sides.

## quart <br> (qt)

## quart (qt)




A customary unit of capacity.

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

## quotative division <br> (measurement division)

# quotative division (measurement division) 



Justin has 12 balloons. If he gives $\mathbf{3}$ balloons to each friend, how many friends will get balloons? $12 \div 3=4$

## quotative division

(measurement division)


Justin has 12 balloons. If he gives $\mathbf{3}$ balloons to each friend, how many friends will get balloons? $12 \div 3=4$

A division problem where the number of groups is unknown. How many groups?

## quotient

## quotient




The answer to a
division problem.

## ray

## ray

## ray

A part of a line that has one endpoint and goes on forever in one direction.

## reasonableness

## reasonableness

What is the product of 57 and 34?
A. 1,938
C. 5,738
B. $\mathbf{3 , 2 0 8}$
D. $\mathbf{8 , 6 9 8}$


Use estimation to eliminate unreasonable choices. $60 \times 30=1,800$
$B, C$, and $D$ are not close to

1,800 .
The answer is $A$.

What is the product of 57 and 34?
A. 1,938
B. $\mathbf{3 , 2 0 8}$
C. $\mathbf{5 , 7 3 8}$
D. 8,698
reasonableness


Use estimation to eliminate unreasonable choices. $60 \times 30=1,800$
$B, C$, and $D$ are not close to 1,800 .
The answer is $\mathbf{A}$.

An answer that is based on good number sense.

## rectangle

## rectangle



## rectangle

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

## regroup



Regroup 18 ones as 1 ten and 8 ones.


To rearrange the formation of a group.

Regroup 18 ones as 1 ten and 8 ones.

## regular polygon

## regular polygon


regular polygon


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

## related facts

related facts

## Related Facts for 3, 5, 8

$$
\begin{array}{ll}
3+5=8 & 8-5=3 \\
5+3=8 & 8-3=5
\end{array}
$$

related facts

## Related Facts for 3, 5, 8

$$
\begin{array}{ll}
3+5=8 & 8-5=3 \\
5+3=8 & 8-3=5
\end{array}
$$

Related addition and subtraction facts or related multiplication and division facts. (also known as fact family)

## remainder

There are 32 students going on a field trip. Each chaperone can supervise 5 students.

## remainder

 How many chaperones are needed?$$
32 \div 5=6 r 2
$$

## 7 chaperones are needed.

There are 32 students going on a field trip. Each chaperone can supervise 5 students.

How many chaperones are needed?

$$
32 \div 5=6 \mathrm{r} 2
$$

The amount left over when one number is divided by another.

7 chaperones are needed.

## repeated subtraction

## repeated subtraction

$$
\begin{array}{r}
12-4=8 \\
8-4=4 \\
4-4=0
\end{array}
$$


repeated

$$
\begin{array}{r}
12-4=8 \\
8-4=4 \\
4-4=0
\end{array}
$$



Subtracting equal groups to find the total amount of groups.

## rhombus

## rhombus

A quadrilateral with all
4 sides equal in length.

## right angle

## right angle


right angle


An angle that measures exactly $90^{\circ}$.

## right triangle

## right <br> triangle



> right triangle


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

## round a whole number

## round a whole number


round a whole number


To find the nearest ten, hundred, thousand, (and so on).

## scalene triangle

# scalene triangle 




A triangle that has no equal sides.

## second (sec) (unit of time)

# second (sec) 

 (unit of time)

## 60 seconds $=1$ minute

second (sec)
(unit of time)


60 seconds = 1 minute

A unit used to measure a very short amount of time; there are 60 seconds in one minute.

## sequence

## sequence

## $2,5,8,11,14,17 \ldots$

## What is the pattern?

## sequence

$2,5,8,11,14,17 \ldots$
What is the pattern?

A set of numbers arranged in a special order or pattern.

## simplest form

simplest form

$\frac{4}{8}$ in simplest form is $\frac{1}{2}$.
simplest form

$\frac{4}{8}$ in simplest form is $\frac{1}{2}$.

When a fraction is expressed with the fewest possible pieces, it is in simplest form.
(also known as lowest terms)

## simplify

## simplify




To express a fraction in simplest form.

## square

## square

## square

A parallelogram with
4 equal angles
AND 4 equal sides.

## square unit

## square unit



1 square unit $\longrightarrow \square$
square unit


A unit, such as square centimeter or square inch, used to measure area.

## standard form

## standard form



## standard form <br> 

A common or usual way of writing a number using digits.
(also known as base-ten numeral form)

## straight angle

## straight angle


straight angle


An angle that measures exactly $180^{\circ}$.

## subtract

## subtract


$8-3=5$

$8-3=5$
subtract

$8-3=5 \quad 8-3=5$

An operation that gives the difference between two numbers.
Subtraction can be used to compare two numbers, or to find out how much is left after some is taken away.

## sum

## sum

## $453+929=1,382$ <br> sum

## $\mathbf{4 5 3}+\mathbf{9 2 9}=1,382$ <br> The answer to an addition problem.

## tens

## tens



| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{3}$ |

## tens



Hundreds Tens Ones | $\mathbf{2}$ | $\mathbf{4}$ | 3 |
| :--- | :--- | :--- | :--- |

## tenth

## tenth



## 

One of the equal parts when a whole is divided into 10 equal parts.

## tenths

## tenths

## tenths



In the decimal numeration, tenths is the name of the place to the right of the decimal point.

## term

## term

## $3,5,7,9 \ldots$ terms

## term

## $3,5,7,9 \ldots$ terms

A component of a sequence.
A term in a sequence is any number in that sequence.

## thousands

## thousands

| Thousands | Humdreds | Tens | Ones |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ |

## thousands

| Thousands | Hundreds | Tens | Ones |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ |

The value of a digit that is the fourth position from the right when describing whole number place value.

## time interval

## time

## interval


time

## interval

A duration of a segment of time.
(also known as elapsed time)

## 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.

## triangle

## triangle



## triangle



A polygon with 3 sides and 3 angles.

## two-dimensional

## figure

two-
dimensional figure

two-

## dimensional

figure


A plane, flat figure that has length and width.

## unit fraction

## unit <br> fraction <br> 

unit
fraction


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

## unlike denominators

# unlike <br> denominators <br>  


unlike
denominators

## unlike numerators

## unlike

## numerators


unlike numerators


Numerators that are not equal.

## variable

## variable <br> $5 \times b=10$ <br> $b$ is a variable worth 2 .

# variable $5 \times b=10$ 

$b$ is a variable worth 2 .

A letter or symbol that represents a number.

## Venn diagram

## Venn <br> diagram <br> 

Venn<br>diagram



Rectangles Rhombuses

A drawing with circles or rings to show how sets of objects are related.

## vertex

## vertex



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

## vertical

## vertical



Perpendicular to the horizon. Vertical lines go up and down.

## volume

## (liquid)

# volume (liquid) 


liquid volume

# volume <br> (liquid) 



The number of cubic units it takes to fill a figure.
liquid volume

## week

## week

| September |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sun. | Mon. | Tues. | Wed. | Thurs. | Fri. | Sat. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 |  |  |  |  |  |
| 7 days = 1 week |  |  |  |  |  |  |


| September |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sun. | Mon. | Tues. | Wed. | Thurs. | Fri. | Sat. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 |  |  |  |  |  |
| 7 days = 1 week |  |  |  |  |  |  |

There are seven days in a week: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.

7 days = 1 week

## weight

## weight




The measure of how heavy something is.

## whole

## whole



1 whole pie

All of an object, whole


1 whole pie
1 whole rectangle


1 whole rectangle a group of objects, shape, or quantity.

## whole numbers

# whole numbers 


whole numbers

Whole numbers are
0 and the counting numbers $1,2,3,4,5,6$, and so on.

## width (w)



## word form

# word form 

The word form of
12,345
is twelve thousand, three hundred forty-five.

A way of using words to write a number. (also known as number name)

# yard (yd) 

## yard (yd)



A door is about 1 yard wide.

## yard (yd)

A customary unit of length. 1 yard $=3$ feet or 36 inches

A door is about 1 yard wide.

## year

## year




The length of time it takes
the Earth to revolve
around the sun.
12 months = 1year
365 days $=1$ year
366 days $=1$ leap year

# Zero Property of Multiplication 

## Zero Property of Multiplication

# Zero Property of Multiplication <br>  <br> The product of any factor and zero is 0 . 

