

Fourth Grade CCSS Math Vocabulary Word List

***Terms with an asterisk are meant for teacher knowledge only—students need to learn the concept but not necessarily the term.**

Acute angle The measure of an angle with a measure between 0° and 90°

Add To combine; put together two or more quantities

Addend Any number being added

***Additive comparison** a situation that compares by asking or telling how much more (how much less) one amount is than another.

Algorithm set of steps used to solve a mathematical computation

Angle is formed by two rays with a common endpoint (called the vertex).

Angle measure The size of an angle is measured in degrees

Arc a curved line that is a part of a circle

Area The number of square units that covers a shape or figure

Area model a pictorial way of representing multiplication. In the area model, the length and width of a rectangle represent factors, and the area of the rectangle represents their product.

Array an orderly arrangement in rows and columns used in multiplication and division to show how multiplication can be shown as repeated addition and division can be shown as fair shares.

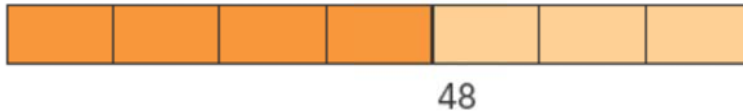
***Associative Property of Addition** When three or more numbers are added, the sum is the same regardless of the grouping of the addends. For example $(2 + 3) + 4 = 2 + (3 + 4)$

***Associative Property of Multiplication** When three or more numbers are multiplied, the product is the same regardless of the grouping of the factors. For example $(2 \times 3) \times 4 = 2 \times (3 \times 4)$

Attribute A characteristic of an object such as color, shape, size, etc

Bar Model a visual model used to solve word problems in the place of guess and check. Example:

*Vincent spent $\frac{4}{7}$ of his money on a pair of shoes. The shoes cost \$48.
How much money did he have at first?*



Benchmark fractions common fractions that you can judge other numbers against

Capacity the amount of liquid a container can hold

Centimeter A measure of length. There are 100 centimeters in a meter

Classify to sort shapes according to the definitions of various terms

Common denominator A common multiple of the denominators of two or more fractions

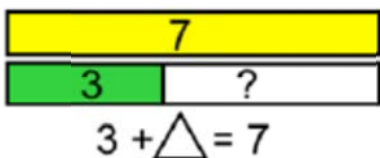
***Commutative Property of Addition** When two numbers are added, the sum is the same regardless of the order of the addends. For example $4 + 2 = 2 + 4$

***Commutative Property of Multiplication** When two numbers are multiplied, the product is the same regardless of the order of the factors. For example $4 \times 2 = 2 \times 4$

Compare To decide if one number is greater than, less than, or equal to another number. Can also be used to tell how shapes are alike or different.

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 To put together basic elements. (e.g., Numbers or geometric shapes.)

Composite number numbers which are divisible by another number other than 1 and the number.

Congruent Figures or angles that have the same size and shape

Cup a customary unit of measurement for volume equal to 8 fluid ounces

Customary system the United States standard system of measurement

Data A collection of information

Decimal the expression of a fraction in the base of ten, using a decimal point to separate whole numbers from the fractional value

Decimal fraction a fraction in which the denominator is a power of ten

Decimal notation a number containing a decimal point

Decimal point a printed or written dot in a decimal number that divides the whole numbers from the tenths, hundredths, and smaller divisions of ten

Decompose To separate into basic elements. (e.g., Numbers or geometric shapes.)

Degree (angle measure) the basic unit for measuring the size of an angle.

Denominator The bottom part of a fraction.

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

Difference The result when one number is subtracted from another

***Distributive Property** multiply a sum by multiplying each addend separately and then add the products. Example:

$$4 \times 53$$

$$(4 \times 50) + (4 \times 3)$$

$$200 + 12$$

$$212$$

Divide split into equal parts or groups

Dividend The number that is divided by another number in a division operation

Divisor The quantity by which another quantity is to be divided

Endpoint a point at which a line segment or a ray ends

Equal Having the same amount. (e.g., 4 equals $3 + 1$ means that 4 is the same amount as $3 + 1$.)

Equation A number sentence *with an equal sign*. The amount on one side of the equal sign has the same value as the amount on the other side.

Equivalent fractions different fractions that name the same number or amount

Estimate A close guess of the actual value, usually with some thought or calculation involved

Evaluate To substitute number values into an expression

Expanded form a way to write a number that shows the sum of values of each digit of a number. Example: the expanded form of the number 543 would be $500 + 40 + 3$.

Expression A mathematical phrase *without an equal sign*.

Factor One of two or more expressions that are multiplied together to get a product

Factor pairs A set of two whole numbers when multiplied that will result in a given product. For example, the factor pairs for 6 are (2,3) and (1,6)

***Fluency** efficient, flexible and accurate methods for computing

Foot 12 inches

Formula a standard procedure for solving a class of mathematical problems

Fraction two quantities written one above the other, that shows how much of a

whole is shown

Friendly or Nice numbers numbers that end in 0 or 5 and help with mental math

Function table displays the relationship between the inputs and outputs of a specified function.

Gallon A unit of volume in the U.S. Customary System, used in liquid measure, equal to 4 quarts

Gram A metric unit of mass (weight). 1,000 grams = 1 kilogram

>Greater than is used to compare two numbers when the first number is larger than the second number

Hour a period of 60 minutes

Hundredth One out of one hundred equal parts; the position of the second digit to the right of the decimal point

***Identity Property of Addition** The sum of any number and 0 is that number.

***Identity Property of Multiplication** The product of 1 and any number is that number

Improper fraction a fraction in which the number in the numerator is greater than or equal to the number in the denominator.

Inch a measure of length. There are 12 inches in a foot

Intersecting lines Where lines cross over and have one common point

Inverse operations Two operations that have the opposite effect, such as addition and subtraction.

Kilogram a unit of mass in the metric system. 1,000 grams = one kilogram

Kilometer a unit of length in the metric system. 1,000 meters = 1 kilometer

<Less than is used to compare two numbers when the first number is

smaller than the second number

Like denominators denominators in two or more fractions that are the same

Line In geometry a line is straight (no curves); has no thickness, and extends in both directions without end

Line of symmetry a line that divides a figure into two congruent parts, each of which is the mirror image of the other

Line plot shows data on a number line with x or other marks to show frequency

Line segment Two points on a line, and all the points between those two points

Line symmetric figures a figure whose that can be folded in half so that the two parts match exactly

Liter the basic unit of volume or capacity in the metric system

Lowest terms a fraction expressed in the fewest number of pieces possible (also simplest form)

Mass the quantity of matter in an object

Meter The basic unit of length (or distance) in the Metric System. The abbreviation is m

Metric system A system of measuring based on the meter for length

Mile a customary unit used for measuring length or distance

Milliliter a metric unit used to measure volume or capacity; $1,000 \text{ ml} = 1 \text{ liter}$

Millimeter a metric unit used to measure length; $1,000 \text{ mm} = 1 \text{ meter}$

Minute A period of 60 seconds

Mixed number A number that is the sum of a whole number and a proper fraction

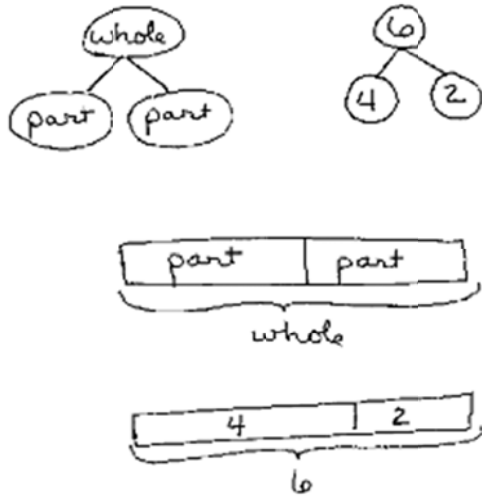
Multiple the product of that number and any other whole number. Zero is a multiple

of every number

***Multiplicative comparison** a situation that compares by asking or telling how many times more (how many times less) one amount is than another.

Multiply to find the product of by multiplication

Number bond a picture of the relationship between a number and the parts that combine to make it. Examples:



Number line A line with numbers placed in their correct position

Numerator The top part of a fraction

Obtuse angle An angle between (but not including) 90 deg and 180 deg.

Open Number Line A number line with no numbers or tick marks

***Order of Operations** is a rule used to clarify which procedures should be performed first in a given mathematical expression.

Ounce a customary unit of weight; 16 oz. = 1 pound

Parallel lines distinct lines lying in the same plane and they never intersect each other

Parentheses the symbols (and) used in grouping

Pattern a set of numbers or objects in which all the members are related with each other by a specific rule

Perimeter The sum of the lengths of the sides of a polygon.

Period groups of three digits in large numbers that help determine place value

Perpendicular lines Two intersecting lines have four right angles formed at the intersection points

Pint A unit of volume or capacity in the U.S. Customary System, used in liquid measure, equal to 16 ounces

Place value The value of where the digit is in the number

Plane figure a 2-dimensional shape

Point A location in a plane or in space, having no dimensions

Pound a customary unit of weight equal to 16 ounces

Prime number a positive whole number with exactly two factors, which are one and itself

Product The result of two numbers being multiplied together

Protractor a tool used to measure the angles

Quart customary unit for measuring capacity or volume equal to two pints

Ray a part of a line that begins at a particular point (called the endpoint) and extends endlessly in one direction

Reasonableness an answer based on good number sense

Related facts addition and/or subtraction number sentences that are alike in some way

Remainder the amount left over after division when one divisor does not divide the dividend exactly

Right angle one whose measure is exactly 90 degrees

Right triangle a triangle with one right angle

Round a whole number A method of approximating a number to its nearest place value

Second an interval of time that is one sixtieth of a minute

Sequence an ordered list of numbers that has a constant difference between every two consecutive numbers

Simplest form when a fraction is expressed with the fewest number of pieces possible (also lowest term)

Simplify to express a fraction in simplest form

Square unit a unit of measurement that determines the area of a plane figure

Standard form the numerical version of a number where each number has a place value

Subtract Take away; remove; compare

Sum The answer to an addition problem

Tenth One out of one ten equal parts; the position of the first digit to the right of the decimal point

Time interval Duration of a segment of time

Two-dimensional Lying in a plane; flat

Unit fraction a fraction with a numerator of one

Unlike denominators two or more fractions that do not have the same denominator

Variable a value that may change within the scope of a given problem or set of operations

Vertex A corner of a figure. (plural - vertices)

Volume (liquid) a measurement of capacity

Whole numbers The set of numbers that includes zero and all of the natural numbers

Word form A way to write the number using words. Example: The word form of the number 9,325 is nine thousand, three hundred twenty-five.

Yard a customary unit of length equal to three feet

***Zero Property of Multiplication** The product of zero and any number is zero