

## 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  $0^\circ$  and  $90^\circ$

**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.

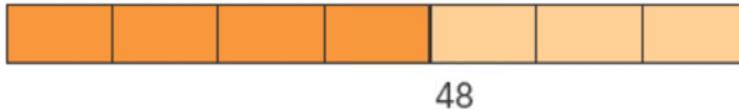
**\*Associative Property of Addition** When three or more numbers are added, the sum is the same regardless of the grouping of the addends. For example  $(2 + 3) + 4 = 2 + (3 + 4)$

**\*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

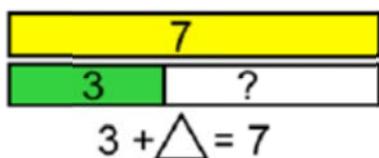
**\*Commutative Property of Addition** When two numbers are added, the sum is the same regardless of the order of the addends. For example  $4 + 2 = 2 + 4$

**\*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

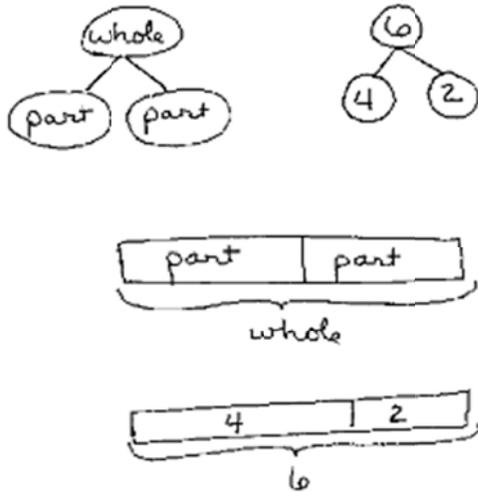
**Multiple** the product of that number and any other whole number. Zero is a multiple

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