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Curriculum Management  
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# Glossary

## Common Core Curriculum Maps

### Math/Grade 3 – Grade 5

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# Grade 3 – Grade 5

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**acute angle** Any angle that measures between  $0^\circ$  and  $90^\circ$ .

**add** To combine (numbers) into a single number that has the same total value.

**addition** To join two or more numbers to get one number.

**angle** The shape formed by two rays (called sides of the angle) with the same endpoint (called the vertex of the angle).

**angle (measurement)** Angles are typically measured in degrees.

**area** The measure (usually in square units) of the interior region of a two-dimensional figure.

**array** An arrangement of objects, pictures, or numbers in columns and rows.

**associative property** Addition:  
Grouping the addends in different ways does not change the sum. Example:  $3 + (7 + 5) = (3 + 7) + 5$  Multiplication:  
Grouping the factors in different ways does not change the product. Example:  
 $2 \cdot (5 \cdot 6) = (2 \cdot 5) \cdot 6$

**axes** The plural version of axis. The "x" and "y" lines that cross at right angles to make a graph.

**bar graph** A graph where data is shown in bars that are used to compare amounts. The length of each bar represents the frequency.

**base-ten numerals** The decimal numeral system that has ten as its base

**benchmark fraction** Benchmark fractions are common fractions that you can judge other numbers against. For example,  $1/4$ ,  $1/2$ ,  $3/4$ , and often  $1/10$ .

**brackets** Brackets are symbols used in pairs to group things together. Types of brackets include:

parentheses or "round brackets" ( )

"square brackets" or "box brackets" [ ]

braces or "curly brackets" { }

"angle brackets" < >

**calculation** A mathematical determination of the size or number of something.

**category** A collection of things sharing a common attribute.

**centimeter (cm)** A metric unit of length equal to  $1/100$ th of a meter.

**classify** To sort into categories or to arrange into groups by attribute.

**common denominator** A number divisible by all of the denominators being considered. Example: Common denominators for  $1/15 + 1/6$  include 30, 60, 90, 120, ...

**commutative property of multiplication**  
 $a \times b = b \times a$

**compare** Examine numbers to decide if one is greater/less than another or if numbers are equal.

**compare fractions** Examine fractions to discover which is larger or smaller. There are two easy ways to compare fractions: using decimals; or using the same denominator

**composite number** Numbers that have 3 or more factors. Examples: 6 is composite because it has 4 factors (1, 2, 3, 6); 25 is composite because it has 3 factors (1, 5, 25).

**computation algorithm** A set of predefined steps applicable to a class of problems that gives the correct result in every case when the steps are carried out correctly.

**concrete models** Using concrete objects to model problems.

**convert** To change from one unit to another.

**coordinate** A number that determines the position of a point in one direction on a grid. Example: For the point (3, 5), 3 is the x-coordinate and 5 is the y-coordinate.

**coordinate plane** A two-dimensional plane in which a location is described by its distances to two perpendicular reference lines (axes). The horizontal axis is the x-axis and the vertical axis is the y-axis.

**coordinate system** A two-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes.

**data set** A collection of facts or information from which conclusions may be drawn.

**decimal notation** A representation of a fraction or other real number using the base ten and consisting of any of the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and a decimal point.

**decimal point** A point or dot used to separate the whole number part from the fractional part of a number.

**denominator** The bottom number in a fraction that shows the total number of equal parts in the whole.

**divide** To split into equal parts or groups.

**elapsed time** The time spent while an event is occurring.

**endpoint** A point at which a line segment or ray terminates.

**equal** Having the same amount or value.

**equal to** Having the same amount (e.g. 4 equals  $3 + 1$  means that 4 is the same amount as  $3 + 1$ ).

**equation** A number sentence that shows two or more expressions are equivalent.  
Example:  $4 + 8 = 6 + 6$

**equivalent** Having the same value.

**equivalent fraction** Representing the same number or amount. Fractions that have the same value, even though they may look different. For example,  $\frac{1}{2}$ ,  $\frac{2}{4}$ , and  $\frac{4}{8}$  are all the same. When you multiply or divide both the top and bottom by the same number, the fraction keeps i

**estimate** To find an approximate value or measurement of something.

**evaluate** To find the value of a numerical expression or equivalent for (an equation, formula, or function).

**expanded form** Numbers written in a form that shows the place value of the digits. Two different ways to write expanded numbers are:  $254 = 2$  hundreds + 5 tens + 4 ones,  $254 = 200 + 50 + 4$

**exponent** A numeral written above and to the right of another numeral to indicate how many times the original number is used as a factor.

**factor** One of two or more numbers that are multiplied together to obtain a product; factor  $\times$  factor = product  
Example:  $4 \times 3 = 12$ , 4 and 3 are factors.

**factor pairs (numbers 1-100)** A factor pair is a pair of two numbers that multiply together to be a specific third number. For example, some factor pairs of 30 would be  $\{5, 6\}$   $\{10, 3\}$   $\{15, 2\}$

**figure properties** The number of sides (edges) and vertices (corners) in a figure.

**fold** An old expression for multiplication. Increasing something by 10 fold means to multiply it by 10.

**formula** Numbers and symbols that show how to work something out. For example: The formula for finding the volume of a box is " $V = w \times d \times h$ " (V stands for volume, w for width, d for depth and h for height).

**fraction** Part of a group or whole: A way of representing a part of a whole or part of a group by telling the number of equal parts in the whole and the number of those parts you are describing; it is written in the form numerator/denominator.

**fraction products** To find the product of fractions, you need to multiply.

**geometric shapes** Regular polygons (many-sided geometric figures with equal-length sides and equal angles), including a triangle, square, pentagon, hexagon, heptagon, and octagon.

**gram (g)** A metric unit of mass.

**greater than (>)** Having a value that is more than that of another quantity or expression.

**group** The action or process of classifying something according to shared qualities or characteristics.

**half of** One of two equal parts of a whole.

**hour** Unit for measuring time: 60 minutes = 1 hour.

**hundreds (place value)** In a multi-digit whole number, the digit third from the right is said to be in the "hundreds place". For example, in the number 327, the digit 3 represents 3 "hundreds" or 300.

**hundredth** A unit fraction representing one of one hundred equal parts, written as  $1/100$  or 0.01.

**illustrate** Explain or make something clear by using examples, charts, pictures, etc.

**intersect** Lines intersect when they cross. The point where they cross is called the intersection.

**kilogram (kg)** A unit of mass in the metric system; 1 kilogram=1000 grams.

**kilometer (km)** A unit of length in the metric system; 1 kilometer=1000 meters.

**length** The measure of how long something is or one dimension of a two-dimensional figure.

**less than (<)** Having a value that is less than that of another quantity or expression.

**Line** A straight path that goes on forever in opposite directions.

**line plot** A line plot shows data on a number line with x or other marks to show frequency.

**line segments** A part of a line. A line segment has two endpoints.

**line symmetry** An object has line symmetry when it can be folded to make two parts that are mirror images.

**liquid volume** A unit or system of units for measuring volumes of liquids or their containers.

**liter (L)** A metric unit used to measure capacity.

**mass** The measure of the amount of matter in an object.

**measure** To find size, length, or amount of something.

**mental** Mental math involves solving mathematical problems using only the human brain, with no help from calculators, computers, or pen and paper.

**meter (m)** A metric unit used to measure length.

**milliliter (ml)** A metric unit of volume equal to  $1/1,000$  (one-thousandth) of a liter.

**minute** Unit for measuring time. 60 minutes = 1 hour

**models** A representation of a mathematical problem.

**money** Any article or substance, typically coins or bills, generally accepted as a medium of exchange, as a way to trade value, wealth, or means of payment for goods and services.

**multi-digit number** A numeral made up of two or more digits.

**multiple** Numbers that are products of a given number and whole numbers. Some multiples of 6 are: 6, 12, 18, 24...

**multiplication** The basic idea of multiplying is repeated addition. For example:  $5 \times 3 = 5 + 5 + 5 = 15$

**multiplicative identity property of 1**  $a \times 1 = 1 \times a = a$

**multiply fractions by whole** When a fraction is multiplied by a whole number the numerator of the fraction is multiplied by the whole number. The denominator is multiplied by 1 which does not change the denominator.

**number line** A number line is a diagram of a straight line on which every point represents numbers as points on a line.

**number names** Number names (or numerals) are specific words in a natural language that represent numbers.

**number pattern** A list of numbers that follow a certain sequence or pattern. Example: 1, 4, 7, 10, 13, 16, 19, ... starts at 1 and add 3 each time.

**numerator** The number above the line in a fraction. The numerator represents how many pieces of the whole that are discussed.

**numerical patterns** A numerical pattern is a list of numbers that occur in some predictable way

**obtuse angle** An angle that measures more than 90o but less than 180o.

**ones (place value)** In a multi-digit whole number, the digit on the far right is said to be in the "ones place". For example, in the number 327, the digit 7 represents 7 "ones" or 7.

**operations** An action performed on one or two numbers to produce a resulting number. Operations include addition, subtraction, multiplication, division, square roots, and so on.

**ordered pair** A pair of numbers that shows the position of a point on a coordinate grid.

**origin** In a coordinate plane, the point at the intersection of the x- and y-axes; the point (0, 0).

**ounce (oz)** A customary unit used to measure weight. 16 ounces = 1 pound.

**parallel lines** Lines going in the same direction and always being the same distance apart. If lines are parallel, they never meet or cross each other.

**parenthesis** The single form of parentheses; also known as brackets.

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

**perimeter** The distance around a geometric figure.

**perpendicular lines** Two lines that intersect to form right angles.

**place value** The value of where the digit is in the number, such as units, tens, hundreds, etc.

**point** A single exact location on a plane or in space having no dimensions and often represented by a dot.

**polygon** A simple, closed, plane figure with three or more sides that are line segments.

**pound (lb)** A customary unit used to measure weight. 1 pound = 16 ounces.

**prime** A number, greater than 1, that has exactly 2 factors (1 and itself).

**product** The result of a multiplication expression; factor x factor = product. Example:  $3 \times 4 = 12$ , 12 is the product.

**property** Statements that are accepted as true and are used to prove other statements.

**quantity** A certain amount or number of something

**quarter** A U.S. coin worth 25 cents (25¢ or \$0.25).

**quotient** The answer when you divide numbers. In  $12 \div 3 = 4$ , 4 is the quotient.

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

**reasonableness** Reasonableness means that you can validate the solution by verifying the answer.

**rectangle** A parallelogram with one right angle; a square is a special case of a rectangle with four congruent sides.

**rectangular prism** A solid figure with six faces that are rectangles.

**rectilinear figure** A polygon all angles of which are right angles.

**relationship (division and mult)** The way in which two or more concepts are connected.

**remainder** The number left over when one integer is divided by another.

**rhombus** A parallelogram with four congruent sides.

**right angle** An angle that has exactly  $90^\circ$ .

**right triangle** A triangle that has one  $90^\circ$  angle. The other two angles will add up to  $90^\circ$

**round (to any place value)** To find about how many or how much by expressing a number to the nearest ten, hundred, thousand, and so on.

**rules** A standard method or procedure for solving a problem.

**scale** The distance between two consecutive tick marks on the x- and y-axes of a coordinate grid.

**scaling (resizing)** A transformation that enlarges or diminishes objects.

**second** A basic unit of time. 60 seconds = 1 minute

**sequence** A list of numbers or objects which are in a special order. For example: 2, 4, 8, 16, 32, 64, 128, 256, ... is a sequence (each number is 2 times the number before it).

**shape pattern** An arrangement of shapes following a rule or rules.

**share** To divide something into parts to have with others.

**solid figures** Figures that have three dimensions (length, breadth, and thickness).

**subtraction** Take one quantity away from another.

**sum** The result of addition. In the addition equation,  $3 + 2 = 5$ , 5 is the sum.

**symbol** A pattern or image used instead of words. For example: "+" is the symbol for "plus"

**tens (place value)** In a multi-digit whole number, the digit just to the left of the ones place is said to be in the "tens place". A digit in the tens place represents ten times the value of the digit.

**tenth** A unit fraction representing one of ten equal parts of a whole, written as  $1/10$  or 0.1.

**thousandth** A unit fraction representing one of a thousand equal parts of a whole, written as  $1/1000$  or 0.001.

**time** A moment, hour, day, or year as indicated by a clock or calendar.

**two-dimensional figures** A shape that only has two dimensions (such as width and height) and no thickness. Squares, circles, triangles are examples of two dimensional figures.

**unit** A quantity used as a standard of measurement.

**unit cube** A unit cube is a cube all of whose sides are 1 unit long.

**unit square** A unit square is a square whose sides have length of 1.

**unknown factor** The value represented by a letter in an equation. The unknown is also called the variable.

**visual fraction model** A representation of a fraction using pictures, such as circles or bars.

**volume** The total amount of space inside a three-dimensional object. Volume is measured in cubic units.



**whole** The total or full amount of something.

**whole numbers** Non-negative integers  $\{0, 1, 2, 3 \dots\}$ .

**width** The measure of one side or edge of a figure.

**x-axis** The horizontal axis of a two-dimensional coordinate grid.

**x-coordinate** The first number in an ordered pair. It indicates the distance left or right horizontally from the origin.

**y-axis** The vertical axis of a two-dimensional coordinate grid.

**y-coordinate** The second number in an ordered pair. It indicates the distance up or down vertically from the origin.