

# Glossary for Early Childhood



**addend** Any one of a set of numbers that are added. For example, in  $5 + 3 + 1$ , the addends are 5, 3, and 1.

**analog clock** A clock that shows the time by the positions of the hour and minute hands. Compare to *digital clock*.



**array** An arrangement of objects in a regular *pattern*, usually in rows and columns.

**attribute** A feature of an object or a common feature of a set of objects. Example of attributes include size, shape, color, and number of sides.

**bar graph** A graph that uses horizontal or vertical bars to represent data.

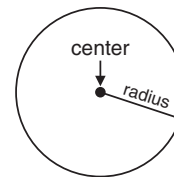


**calendar** (1) A *reference frame* to keep track of the passage of time. Many different calendars exist, including the Gregorian calendar currently used by most of the Western world, the Hebrew calendar, the Islamic calendar, and others. (2) A practical model of the reference frame, such as the large reusable Class Calendar in *Kindergarten Everyday Mathematics*. (3) A schedule or listing of events.

**centimeter (cm)** A metric unit of length equivalent to 10 millimeters,  $\frac{1}{10}$  of a decimeter, and  $\frac{1}{100}$  of a meter.

**chance** The possibility of an outcome occurring in an uncertain event. For example, in tossing a coin there is an equal chance of getting HEADS or TAILS.

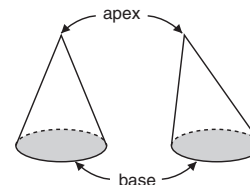
**circle** The set of all points in a plane that are equally distant from a fixed point in the plane called the center of the circle. The distance from the center to the circle is the radius of a circle.



**column** A vertical arrangement of objects or numbers in an *array* or a table.

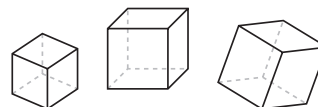


**cone** A geometric solid that has a circular base and a curved surface that ends at a point called the apex.



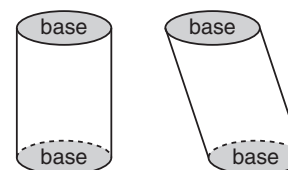
**counting numbers** The numbers used to count things. The set of counting numbers is  $\{1, 2, 3, 4, \dots\}$ . Sometimes 0 is included, but not in *Everyday Mathematics*.

**cube** A regular polyhedron with 6 square faces. A cube has 8 vertices and 12 edges.



**cup (c)** In the U.S. customary system, a unit of capacity equal to 8 fluid ounces;  $\frac{1}{2}$  pint.

**cylinder** A solid that has two circular *bases* that are parallel and the same size. The bases are connected by a curved surface. A soup can is shaped like a cylinder.



**data** Information that is gathered by counting, measuring, questioning or observing.

**degree Celsius (°C)** The unit interval on Celsius thermometers and a metric unit for comparing temperatures. Pure water at sea level freezes at 0°C and boils at 100°C.

**degree Fahrenheit (°F)** The unit interval on Fahrenheit thermometers and a U.S. customary unit for comparing temperatures. Pure water at sea level freezes at 32°F and boils at 212°F.

**difference** The result of subtracting one number from another. For example, the difference of 12 and 5 is  $12 - 5 = 7$ .

**digit** Any one of the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 in the base-ten numeration system. For example, the numeral 145 is made up of the digits 1, 4, and 5.

**digital clock** A clock that shows the time with numbers of hours and minutes, usually separated by a colon. Compare to *analog clock*.



**equivalent** Equal in value but possibly in a different form. For example,  $\frac{1}{2}$ , 0.5, and 50% are all equivalent.

**equivalent names** Different ways of naming the same number. For example;  $2 + 6$ ,  $4 + 4$ ,  $12 - 4$ ,  $18 - 10$ ,  $100 - 92$ ,  $5 + 1 + 2$ , eight, VIII, and *####* are all equivalent names for 8.

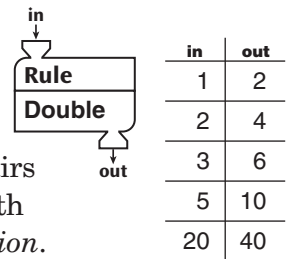
**estimate** (1) An answer close to, or approximating, an exact answer. (2) To make an estimate.

**foot (ft)** A U.S. customary unit of length equivalent to 12 inches or  $\frac{1}{3}$  of a yard.

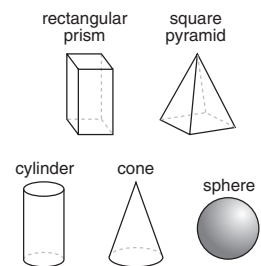
**fraction** A number in the form  $\frac{a}{b}$  or  $a / b$ , where  $a$  and  $b$  are whole numbers and  $b$  is not 0. A fraction may be used: to name part of an object or part of a collection of objects; to compare two quantities; or to represent division.

**function** A set of ordered pairs of input and output numbers created by a specific rule. The same input cannot lead to more than one output. The pairs can be shown in a table, as points on a coordinate graph, or by the rule that creates them.

**function machine** In *Everyday Mathematics*, an imaginary device that receives inputs and pairs them with outputs. For example, this function machine pairs an input number with its double. See *function*.

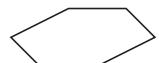


**geometric solid** A 3-dimensional shape bounded by surfaces. Common geometric solids include rectangular prisms, square-based pyramids, cylinders, cones, and spheres.



**height** In *Everyday Mathematics*, same as altitude.

**hexagon** A 6-sided polygon.

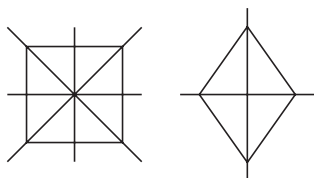


**Home Link** In *Kindergarten Everyday Mathematics*, a suggested follow-up or enrichment activity to be done at home.

**inch (in.)** A U.S. customary unit of length equal to  $\frac{1}{12}$  of a foot is equal to 2.54 centimeters.

**line of symmetry** A line that divides a figure into two halves that are mirror images of each other. Each point in one of the halves of the figure is the same distance from the line of symmetry as the corresponding point in the other half. A figure may have any number of lines of symmetry. For example, a parallelogram that is not a rectangle or a rhombus

has no lines of symmetry. A square has four lines of symmetry.



**meter (m)** The basic metric unit of length from which other metric units of length are derived. One meter is equal to 10 decimeters, 100 centimeters, and 1,000 millimeters.

**name collection** A collection of equivalent names for a number. A name collection for 5 might include  $4 + 1$ ,  $3 + 2$ , and so on.

**negative numbers** Numbers less than 0; numbers to the left of 0 on a horizontal number line or below 0 on a vertical number line.

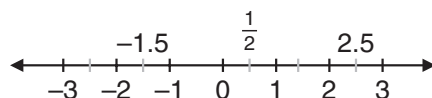
**number grid**

In *Everyday Mathematics*, a table in which consecutive numbers are arranged in rows, usually 10 columns per row. A move

									0
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
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110

from one number to the next within a row is a change of 1; a move from one number to the next within a column is a change of 10.

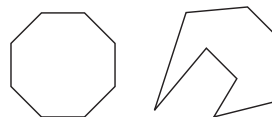
**number line** A line on which points correspond to numbers, used as a frame of reference for counting and numeration activities. Every number has a point on the line, and every point has a number.



**number model** A number sentence that models or fits a situation. For example, the story *Sally had \$5, and then she earned \$8* can be modeled as the number sentence  $5 + 8 = 13$ .

**numeration** A method of numbering or of reading and writing numbers. In *Everyday Mathematics*, numeration activities include counting, writing numbers, identifying equivalent names for numbers in *name-collection boxes*, exchanging coins such as 5 pennies for 1 nickel, and renaming numbers in computation.

**octagon** An 8-sided *polygon*.



**operation** A rule performed on one or more mathematical objects such as numbers, variables, or expressions, to produce another mathematical object.

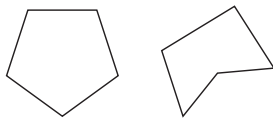
**ordinal number** The position or order of something in a sequence, such as first, third, or tenth. Ordinal numbers are commonly used in dates, as in “May fifth” instead of “May five.”

**parallelogram** A *quadrilateral* with two pairs of parallel sides. Opposite sides of a parallelogram have the same length and opposite angles have the same measure. All rectangles are parallelograms, but not all parallelograms are rectangles because parallelograms do not necessarily have right angles.

**pattern** A repetitive order or arrangement. In *Everyday Mathematics*, children mainly explore visual and number patterns in which elements are arranged so that what comes next can be predicted.

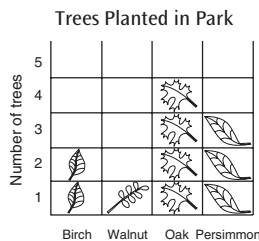
**Pattern-Block Template** In *Kindergarten Everyday Mathematics*, a sheet of plastic with geometric shapes cut out, used to draw patterns and designs.

**pentagon** A 5-sided *polygon*.



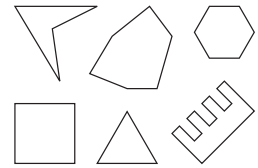
**perimeter** The distance around a polygon or other shape. *Peri-* comes from the Greek word for “around” and *-meter* comes from the Greek word for “measure”, *perimeter* means “around measure.”

**pictograph** A graph constructed with pictures or symbols.

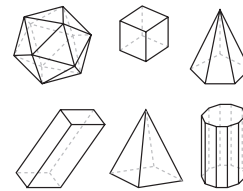


**place value** The relative worth of each digit in a number which is determined by its position. Each place has a value 10 times that of the place to its right and  $\frac{1}{10}$  the value of the place to its left.

**polygon** A 2-dimensional figure formed by three or more line segments (sides) that meet only at their endpoints (vertices) to make a closed path. The sides may not cross one another.



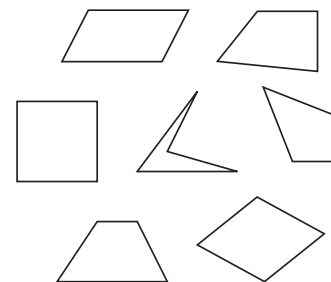
**polyhedron** A closed 3-dimensional shape, all of whose surfaces (faces) are flat. Each face consists of a polygon and the interior of the polygon.



**positive numbers** Numbers greater than 0; numbers to the right of 0 on a horizontal number line or above 0 on a vertical number line.

**quadrangle** Same as *quadrilateral*.

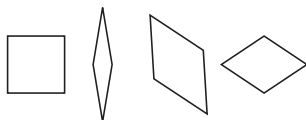
**quadrilateral** A 4-sided *polygon*. Same as *quadrangle*.



**rectangle** A *parallelogram* with all right angles.

**reference frame** A system for locating numbers within a given context, usually with reference to an origin or zero point. For examples, number lines, clocks, calendars, temperature scales, and maps are reference frames.

**rhombus** A *parallelogram* with all sides the same length. The angles may be right angles, in which case the rhombus is a *square*.



**scale** (1) The relative size of something. (2) A tool for measuring *weight*.

**second (s)** (1) A unit of time. There are 60 seconds in a minute. (2) An ordinal number in the sequence *first, second, third, ...*

**skip count** Counting by certain regular intervals, such as 2s, 5s, or 10s. For example, 2, 4, 6, 8, 10, 12, and so on.

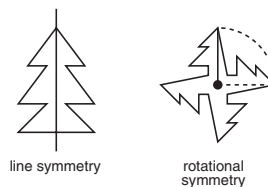
**speed** A rate that compares distance traveled with the time taken to travel that distance.

**square** A *rectangle* with all sides of equal length. All angles in a square are right angles.

**standard unit** A unit of measure that has been defined by a recognized authority, such as a government or a standards organization. For example, meters, inches, miles, seconds, pounds, and grams are all standard units.

**survey** A study that collects *data*. Surveys are commonly used to study “demographics” such as people’s characteristics, behaviors, interests, and opinions

**symmetry** The property of exact balance in a figure; having the same size and shape across a dividing line or around a point.

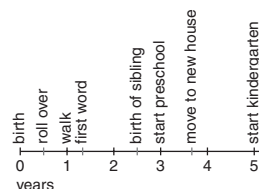


**tally** Marks used to keep track of a count.



**3-dimensional (3-D) figure** A figure whose points are not all in a single plane. Examples include prisms, pyramids, and spheres, all of which have length, width, and height.

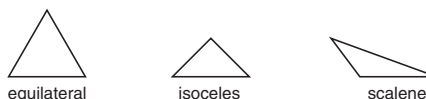
**timeline** A *number line* showing when events took place.



**trapezoid** A *quadrilateral* that has exactly one pair of parallel sides. In *Everyday Mathematics*, both pairs of sides cannot be parallel, that is, a parallelogram is not a trapezoid.



**triangle** A 3-sided polygon.



**2-dimensional (2-D) figure** A figure whose points are all in one plane but not all on one line. Examples include polygons and circles, all of which have length and width but no height.

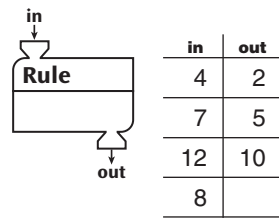
**volume** The amount of space occupied by a *3-dimensional* figure. Volume is often measured in cubic units, such as  $\text{cm}^3$ , cubic inches, or cubic feet.

**weight** A measure of how heavy something is; the force of gravity on an object. An object's mass is constant, but it weighs less in weak gravity than in strong gravity. For example, a person who weighs 150 pounds in San Diego weighs about 23 pounds on the moon.

### “What’s My Rule?” problem

In *Everyday*

*Mathematics*, a problem in which two of the three parts of a *function* (input, output, and rule) are known, and the third is to be found out.



**yard (yd)** A U.S. customary unit of length equal to 3 feet or 36 inches. Historically, a yard was the distance from the tip of the nose to the tip of the middle finger. In *Everyday Mathematics*, it is from the center of the chest to the tip of the middle finger.