

Illustrated Glossary

Add: To combine 2 or more quantities to find how many altogether.

Addition fact: $3 + 4 = 7$ is an addition fact. The sum is 7. See also **Related facts**. The basic addition facts can be shown in an addition chart.

+	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	10
2	3	4	5	6	7	8	9	10	11
3	4	5	6	7	8	9	10	11	12
4	5	6	7	8	9	10	11	12	13
5	6	7	8	9	10	11	12	13	14
6	7	8	9	10	11	12	13	14	15
7	8	9	10	11	12	13	14	15	16
8	9	10	11	12	13	14	15	16	17
9	10	11	12	13	14	15	16	17	18

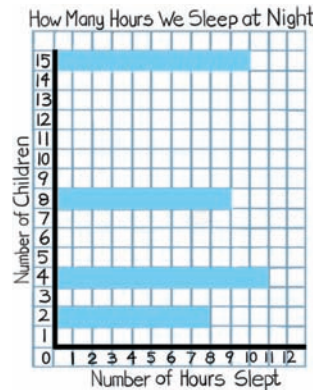
Addition sentence: An equation that shows an addition. $3 + 4 = 7$ is an addition sentence.

Array: A set of objects arranged in equal rows.

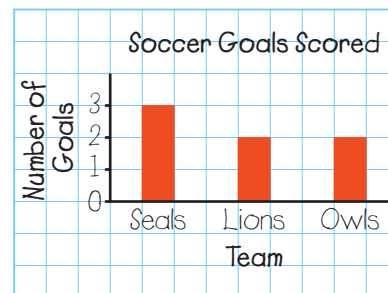


Attribute: A way to describe a shape or object; for example, number of sides, number of vertices.

Axis (plural: axes): A number line along the edge of a graph. We label each axis to tell what data it displays.

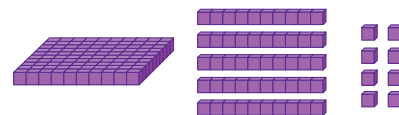


Bar graph: Shows data using bars on a grid. The graph below is a vertical bar graph. See **Axis** for an example of a horizontal bar graph.

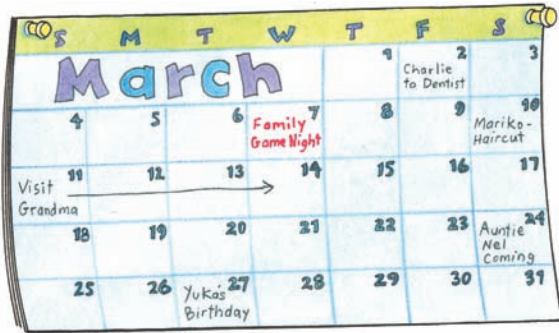


Base: The face that names an object. See **object**.

Base Ten Blocks: Blocks used to model whole numbers. Here is one way to model 158:



Calendar: An organized way to show days, weeks, months, and years. Usually, a calendar page shows one month.



Centimetre: A unit to measure length, width, and height. We write one centimetre as 1 cm.

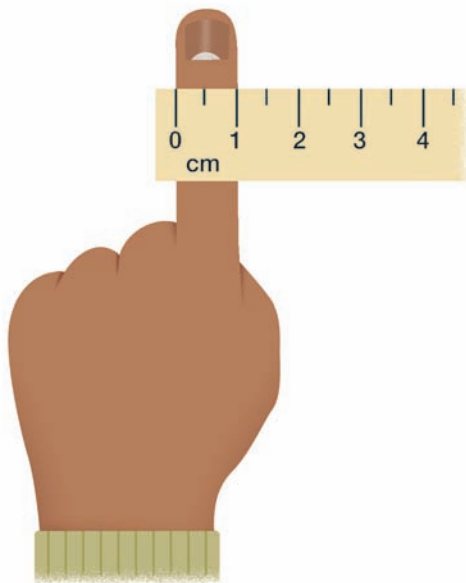


Chart: A way to organize numbers or information.

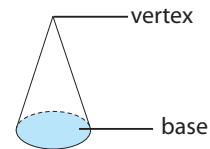
Animal Long Jumps

Animal	Distance
Snowshoe Hare	3 m
Red Kangaroo	5 m
Cougar	9 m
Northern Leopard Frog	1 m

Compare: 1. To look at how items are alike as well as different.

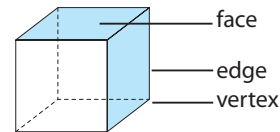
2. With numbers, to look at which is greater or less than the other. When we compare the numbers 5 and 8, we can write $5 < 8$ or $8 > 5$.

Cone: An object with a circular base, a curved surface, and a vertex.

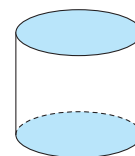


Core: The part of a pattern that repeats. See **Repeating pattern**.

Cube: An object with 6 faces that are all squares. Two faces meet at an edge.

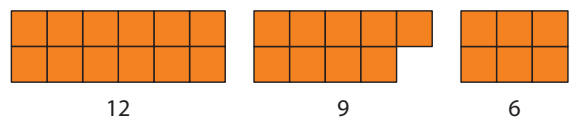


Cylinder: An object with 2 matching circular bases joined by a curved surface.

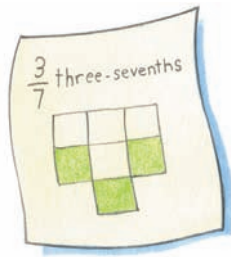


Data: Facts or information collected to learn about people or things.

Decreasing pattern: A pattern that grows smaller at each step.



Denominator: The part of a fraction that tells how many equal parts are in one whole. The denominator is the bottom number in a fraction. Seven is the denominator in the example below.



Diagonal: Means "on a slant."

Difference: The result of a subtraction. The difference of 9 and 5 is 4. We can write: $9 - 5 = 4$

Digit: See **Place value**.

Divide: To separate into equal parts or equal groups.

Divided by: In a division question like $16 \div 4$, we say that we are "dividing 16 by 4" when we create 4 equal groups out of 16 objects.

Division sentence: $6 \div 3 = 2$ is a division sentence. We say: 6 divided by 3 equals 2.

Doubles: The addition of 2 numbers that are the same. Doubles have an even sum.

Edge: When 2 surfaces of an object meet they form an edge. See also **Cube**.

Eighths: The fraction we get when we make 8 equal shares of an item. See also **Fractions**.

Equal groups: Groups that have the same number of things in each group. Equal groups can show a multiplication story.



These equal groups show that $3 \times 4 = 12$.

Equal parts: When we share, we can make equal parts. See also **Fractions**.



The pie is cut into 6 equal parts.

Equation: Uses the = symbol to show 2 things that represent the same amount.

$5 + 2 = 7$ is an equation.

$5 + 2 = 3 + 4$ is an equation.

$3 + \square = 7$ is also an equation.

Estimate: 1. A thoughtful guess that is close to the answer, but not exact. **2.** To think about making a guess that is close but not exact.

Even number: Any number that you can reach when counting by 2s: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, A counting number that ends in 0, 2, 4, 6, or 8 is an even number.

Mass: Measures how much matter is in an object. We measure mass in grams and kilograms.

Mental math: Calculating answers without using materials, or a calculator, or pencil and paper.

Metre: A unit for measuring length, width, and height. We write one metre as 1 m.

Minute: A unit for measuring time. It takes about one minute to button up a jacket. We write one minute as 1 min.

Multiplication fact: $3 \times 4 = 12$ is a multiplication fact. The chart shows some basic multiplication facts.

×	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

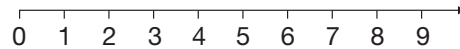
Multiplication sentence: $2 \times 3 = 6$ is a multiplication sentence. For $2 \times 3 = 6$, we say, 2 times 3 equals 6.

Multiply: Finding the total number in a set of equal groups or rows, or finding the total when adding the same number repeatedly.

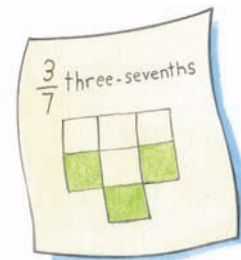
Near doubles: The result of adding a number to the next counting number. For example, $7 + 8 = 15$.

Ninths: The fraction we get when we make 9 equal shares of an item. See also **Fraction**.

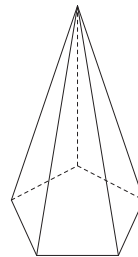
Number line: A line with evenly spaced numbers marked in order.



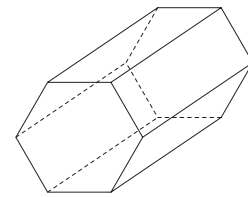
Numerator: The part of a fraction that tells how many equal parts to count. The numerator is the top number in a fraction. Three is the numerator in the fraction below.



Object: Has length, width, and height. When we work with objects we can look for faces, edges, vertices, and bases. We name some objects by the number and shape of the bases.

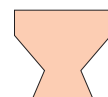
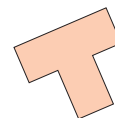
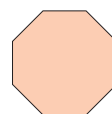


Pentagonal pyramid



Hexagonal prism

Octagon: A polygon with 8 sides.



Odd number: Any number that you would never reach when counting by 2s: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25,

A counting number that ends in 1, 3, 5, 7, or 9 is an odd number.

Operation: Addition, subtraction, multiplication, and division are all operations.

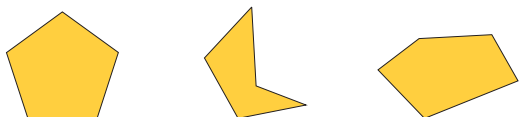
Order: To place numbers in sequence according to some rule.

Pattern rule: Tells about a pattern or tells how to make a pattern.

1, 4, 7, 10, 13, 16, ...

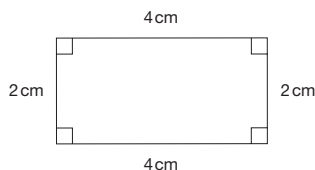
The pattern rule for this pattern is: Start at 1. Add 3 each time.

Pentagon: A polygon with 5 sides.



Perimeter: The distance around a shape. We can find perimeter by measuring and adding side lengths.

The perimeter of this rectangle is:
 $2\text{ cm} + 4\text{ cm} + 2\text{ cm} + 4\text{ cm} = 12\text{ cm}$



Pictograph: Uses pictures or symbols to show data.

Unusual Animals Seen in a Year	
Ostriches	★ ★ ★
Alpacas	★ ★ ★ ★ ★ ★ ★ ★ ★ ★
Bison	★ ★ ★ ★ ★ ★ ★ ★ ★ ★
Llamas	★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Place value: The value of a digit that appears in a number. The value of each digit in a number depends on its place in the number.

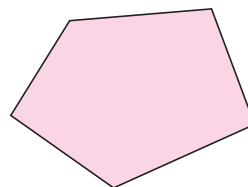
Hundreds	Tens	Ones
4	9	7

The value of this digit is 4 hundreds, or 400. The value of this digit is 9 tens, or 90. The value of this digit is 7 ones, or 7.

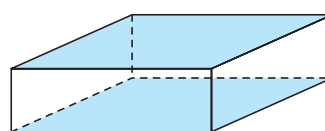
We write: 497

We say: four hundred ninety-seven

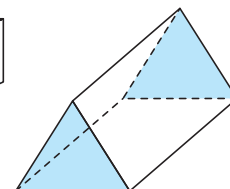
Polygon: A closed shape made up of 3 or more straight sides. We name a polygon by the number of its sides. For example, a 5-sided polygon is a pentagon.



Prism: An object with 2 bases that match. The shape of the bases gives the name to the prism.



Rectangular prism

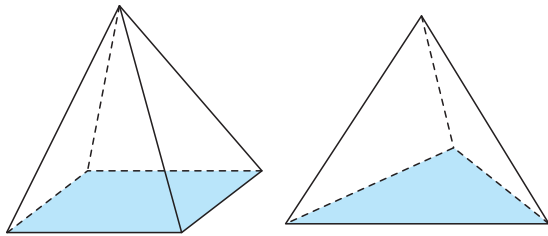


Triangular prism

Product: The result of multiplying numbers together. In the multiplication sentence below, 6 is the product.

$$2 \times 3 = 6$$

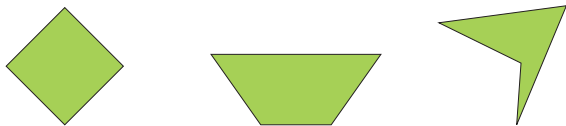
Pyramid: An object with 1 base and triangular faces that meet at a point. The shape of the base gives the name to the pyramid.



Rectangular pyramid

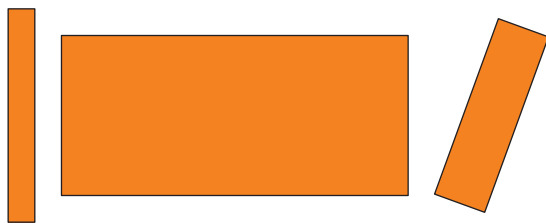
Triangular pyramid

Quadrilateral: A polygon with 4 sides.



Quarters: **1.** The fraction we get when we make 4 equal shares of an item. **2.** The coin for 25 cents.

Rectangle: A quadrilateral with pairs of equal sides opposite to each other, and shaped with square corners.



Referent: Something you can think about to help you estimate a measurement, or a count. Your finger width is a referent for 1 cm. Having 10 counters in your hand can be a referent for estimating the number of counters on your desk.

Related facts: Facts that use the same numbers, but may use different operations. Addition and subtraction have related facts.

$$4 + 3 = 7, 3 + 4 = 7, \\ 7 - 3 = 4, \text{ and } 7 - 4 = 3,$$

are all related facts.

Multiplication and division have related facts.

$$5 \times 2 = 10, 2 \times 5 = 10, \\ 10 \div 5 = 2, \text{ and } 10 \div 2 = 5,$$

are all related facts.

Repeating pattern: A pattern with a core that repeats. The smallest part that repeats is the core.



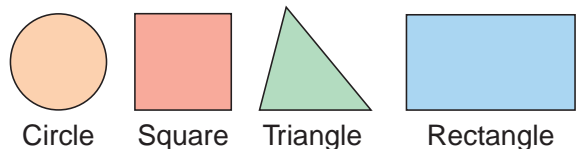
Scale: The numbers written along either axis in a graph.

The number of items each unit on a bar graph represents.

Second: A unit for measuring time. It takes about one second to blink your eyes. There are sixty seconds in one minute. We write one second as 1 s.

Sevenths: The fraction we get when we make 7 equal shares of an item. See also **Fractions**.

Shape: A geometric figure or its diagram.



Circle

Square

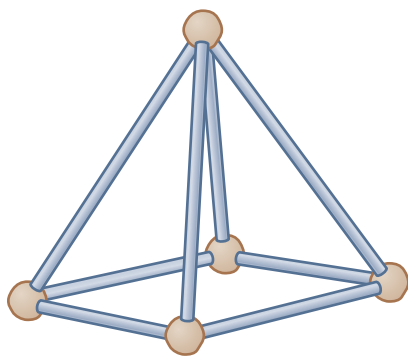
Triangle

Rectangle

Shrinking pattern: A pattern that grows smaller at each step. May also be called **Decreasing pattern**.

Sixths: The fraction we get when we make 6 equal shares of an item. See **Fractions**.

Skeleton: The frame of an object that shows its edges and vertices.



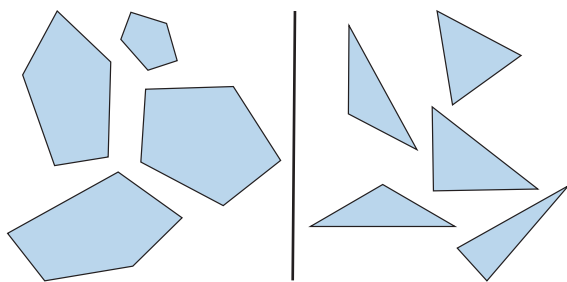
Skip count: To count following a pattern. For example, skip counting by 2s:

2, 4, 6, 8, 10, 12, 14, 16, ...

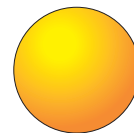
Skip counting by 5s:

5, 10, 15, 20, 25, 30, 35, 40, ...

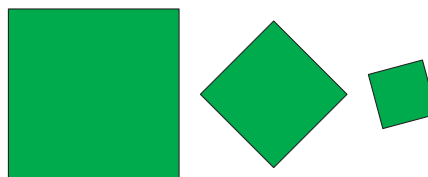
Sorting rule: Names the attribute or attributes used to decide if an item belongs in a group. In this example, the sorting rule is "polygons with 5 sides and polygons with 3 sides."



Sphere: An object shaped like a ball.



Square: A polygon with 4 equal sides and where every corner is a square corner.



Standard form: Numbers written using digits: for example, 37 or 904.

Subtract: To remove one quantity from another to find how many are left, or, to find the missing part in a combination problem.

Subtraction fact: $11 - 7 = 4$ and $11 - 4 = 7$ are subtraction facts. See also **Related facts**.

Sum: The result of an addition. The sum of 2 and 3 is 5, since $2 + 3 = 5$.

Tally chart: A chart on which a count is kept.

Black	###	###
Red	###	###
Orange	###	###
Green	###	###

Tally mark: A way of counting items by making one mark for each item you count, and grouping by 5s as you go. See **Tally chart** for an example of tally marks.

Tenths: The fraction we get when we make 10 equal shares of an item. See also **Fractions**.

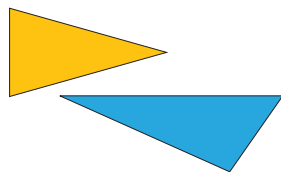
Thirds: The fraction we get when we make 3 equal shares of an item. See also **Fractions**.

Thousand: The number we get by combining 10 groups of 100.

Times: The multiplication sentence $3 \times 4 = 12$ can be read as "3 times 4 is equal to 12."

Title: The part of a graph that tells what the graph is about.

Triangle: A polygon with 3 sides.



Unit: A standard amount used for measuring.

Vertex (plural: vertices): **1.** A point where 2 sides of a shape meet. **2.** A point where 3 or more edges of an object meet. **3.** On a cone, the highest point above the base.

Width: The distance across something; how wide it is. See **Shape**.

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