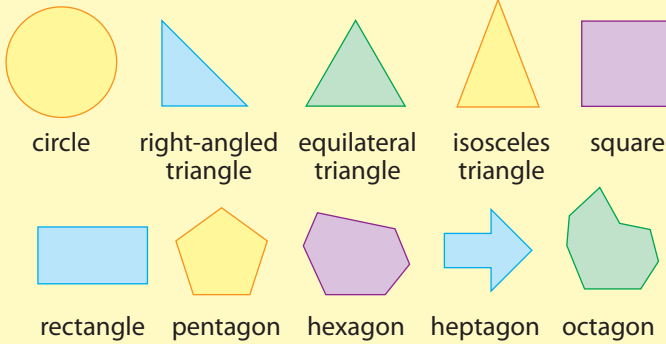
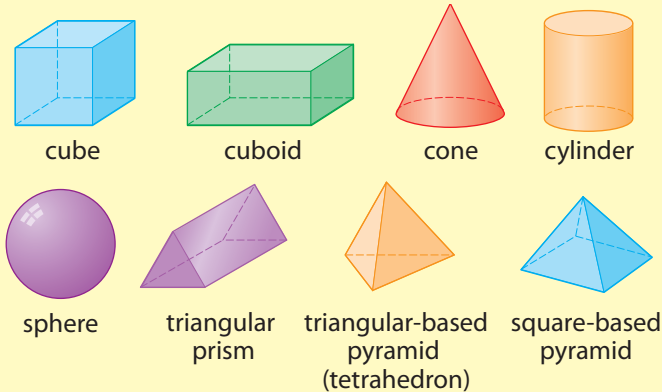


2-dimensional (2-D)

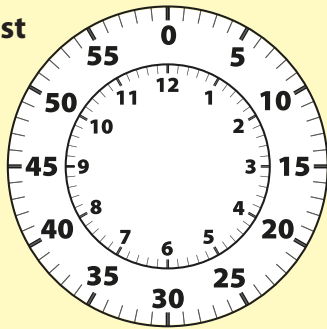


3-dimensional (3-D)



5, 10, 15 ... minutes past

Ways of counting minutes on an analogue clock. The minute hand takes five minutes to move between each hour mark on the clock face. See also *analogue clock*.

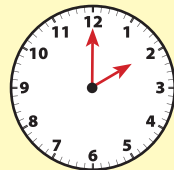
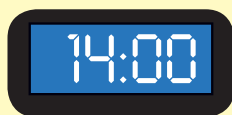


12-hour time

Counting hours of the day in 2 blocks of twelve. 12.01-12 noon as a.m. and 12.01-12 midnight as p.m. Often told on a 12-hour clock with hands and known as analogue time.

24-hour time

Counting hours of the day from 0-24. Used on digital clocks. 2 p.m. is written as 14:00.



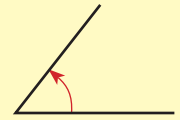
A

above/below zero

Temperatures either above or below freezing point (0°C), e.g. 4° below zero is -4°C. See also *minus*.

acute angle

An angle between 0° and 90°. See also *obtuse*, *reflex angle*.



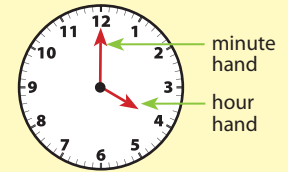
addend

The numbers being added together in an addition calculation. Augend + addend = sum (or total).

$$\begin{array}{c}
 3 + 5 = 8 \\
 \uparrow \quad \uparrow \quad \uparrow \\
 \text{augend} \quad \text{addend} \quad \text{sum/total}
 \end{array}$$

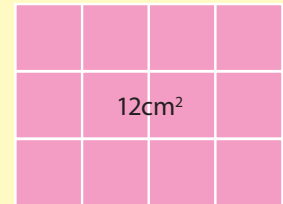
analogue clock

A dial with hands used to show time. The dial shows 12 hours in a full circle. The minute hand moves 1 complete turn every circle.



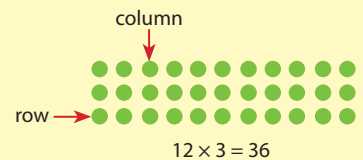
area

The size of a surface. Measured in 'square' units: mm², cm², m², km².



array

An arrangement of numbers, shapes or objects in rows of equal size and columns of equal size, used to find out how many altogether.



augend

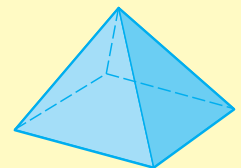
The number being added to in an addition calculation. Augend + addend = sum (or total)

$$\begin{array}{c}
 3 + 5 = 8 \\
 \uparrow \quad \uparrow \quad \uparrow \\
 \text{augend} \quad \text{addend} \quad \text{sum/total}
 \end{array}$$

B

base

The flat surface underneath a 3-D shape, e.g. a square-based pyramid has 1 square base and 4 triangular faces.



breadth

The same as width.

C

calendar

A list of the days of the year, arranged by month, week and day.

capacity

The amount a container holds. It is measured in litres or millilitres, e.g. the capacity of a 2-litre bottle is 2 litres.

Celsius

A scale used to measure temperature. Sometimes called Centigrade. Units are °C.

centre

A point at the exact middle of a shape.

century

100 years.

commutative

Addition and multiplication are commutative. It does not matter which way you add, multiply or divide, the answer is always the same. Same answer, different calculation, e.g. $3 + 4 = 4 + 3$. But subtraction is not commutative, e.g. $7 - 2 \neq 2 - 7$.

consecutive

Numbers which follow each other in order.

13, 14, 15

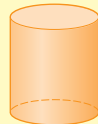
consecutive numbers

24, 26, 28

consecutive even numbers

cylinder, cylindrical

A 3-D object with circular ends and a uniform cross-section. The top is vertically above the base. Like a cylinder.



D

data

Pieces of information usually represented in a special way, e.g. on bar charts and pie charts.

decimal fraction, decimal equivalent

Fractions as tenths or hundredths are represented as digits after a decimal point, e.g. 0.25 is equivalent to $\frac{1}{4}$ and $\frac{25}{100}$.

degree

A unit used to measure the size of an angle. Symbol: °. There are 360° in one complete turn. Also a unit of temperature.

denominator

The number of parts the whole has been divided into. The number underneath the vinculum. Also called the divisor.

diagonal

A straight line inside a shape that goes from one corner to another (but not an edge).



difference

The result of a subtraction. The difference between 12 and 5 is 7. See also *minuend*, *subtrahend*.

digital time

Times displayed as on a digital clock, either as 12-hour or 24-hour time.

dividend

The number that is divided in a division sum, e.g. in $12 \div 6 = 2$, 12 is the dividend. See also *divisor*, *quotient*, *division bracket*.

$$\begin{array}{c} \text{divisor} \\ \downarrow \\ \text{dividend} \rightarrow 12 \div 6 = 2 \leftarrow \text{quotient} \end{array}$$

division bracket

The half box around the dividend in a division.

See also *dividend*.

$$\begin{array}{c} \text{dividend} \\ \leftarrow 16 \overline{) 2112} \\ \uparrow \\ \text{division bracket} \end{array}$$

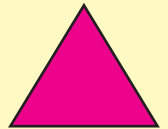
divisor

The number that is used to divide in a division sum, e.g. in $12 \div 6 = 2$, 6 is the divisor. See also *dividend*, *quotient*.

E

equilateral triangle

A triangle with 3 equal sides and 3 equal angles of 60°.



equivalent

Two numbers or expressions that are equal, but which can be in a different form, e.g. £1 is equivalent to 100p. Two fractions are equivalent if they have the same value, e.g. $\frac{2}{6} = \frac{1}{3}$.

F

factor

Numbers that divide exactly into a number are its factors, e.g. the factors of 12 are 1, 2, 3, 4, 6, 12.

frequency table

A table showing how often something occurs.

Type of pet	Tally	Frequency
Dog		11
Cat		6
Goldfish		7
Budgie		3

G

greatest value, least value

The highest or lowest value that can occur.

H

heptagon

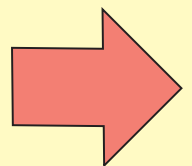
A 2-D shape with seven straight sides.

hundred thousand

100 000.

hundredths

A fraction $\frac{1}{100}$ or 0.01.



I

integer, positive, negative

An integer is a whole number which can be positive or negative, e.g. -4 , -2 , 4 , 100 .

inverse

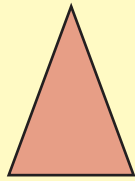
Addition is the inverse of subtraction, e.g. $16 + 24 = 40$, $40 - 24 = 16$. Multiplication is the inverse of division, e.g. $4 \times 12 = 48$, $48 \div 12 = 4$.

irregular

Not regular. A shape with sides and angles that are not equal.

isosceles triangle

A triangle with 2 equal sides and 2 equal base angles.



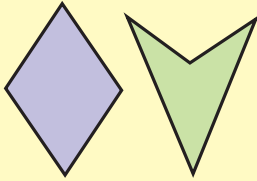
K

kilometre

A metric measure of distance. $1 \text{ km} = 1000 \text{ m}$.

kite

A quadrilateral with adjacent sides that are equal.



M

mass

A measure of the amount of matter in an object. Measured in grams (g), kilograms (kg) or tonnes (t).

measuring cylinder

A graduated cylinder for measuring volume and capacity accurately.

millennium

A thousand years (10 centuries).

millilitre

Symbol: ml. A measure of capacity. $1000 \text{ millilitres} = 1 \text{ litre}$.

millimetre

Symbol: mm. A measure of length. $10 \text{ millimetres} = 1 \text{ centimetres}$.

million

1 000 000.

minuend

The starting number in a subtraction calculation, e.g. 10 (the minuend) $- 3$ (the subtrahend) $= 7$ (the difference). See also *subtrahend*, *difference*.

minus

Another word for subtraction. The symbol $-$ shows a negative number. See also *above/below zero*.

multiple

A multiple is the product of 2 numbers, e.g. the multiples of 7 are 7, 14, 21, 28 and so on.

multiplicand

A number to be multiplied, e.g. in $6 \times 3 = 18$, 6 is the multiplicand. See also *multiplier*.

multiplier

The multiplying number, e.g. in $6 \times 3 = 18$, 3 is the multiplier. See also *multiplicand*.

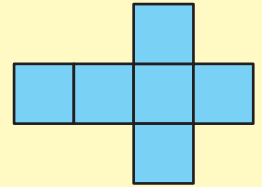
N

negative numbers

Numbers below zero. See also *integer*, *positive*, *negative*.

net

A pattern that you can cut out and fold to make a 3-D shape.



numerator

The number above the vinculum in a fraction. See also *denominator*.

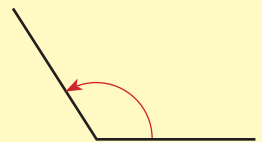
O

oblong

An irregular rectangle. A 2-D shape with 2 pairs of opposite sides that are equal and the angles are 90° .

obtuse angle

An angle between 90° and 180° . See also *acute*, *reflex angle*.



P

parallelogram

A 2-D shape with 2 pairs of opposite sides that are equal and parallel. A rectangle is a special parallelogram with all the angles 90° .



polygon

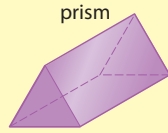
The general name for 2-D shapes with straight sides. Includes triangle (3 sides), quadrilateral (4 sides), pentagon (5 sides) and so on.

polyhedron

The general name for 3-D shapes with straight sides. Plural polyhedra. Includes tetrahedron, prisms, pyramids, and so on.

prism

A 3-D shape with 2 identical and parallel ends, joined by rectangular faces. The cross-section of a prism is always the same as the ends.



product

The result of multiplying 2 numbers. The product of 4 and 3 is $4 \times 3 = 12$.

Q

quadrilateral

A 2-D shape with 4 straight lines.

questionnaire

A set of questions given to people to fill in, in order to collect data for analysis. See also *survey*, *data*.

quotient

The answer to a division calculation, e.g. in $12 \div 6 = 2$, 2 is the quotient. See also *dividend*.

$$\begin{array}{c} \text{dividend} \\ \downarrow \\ 12 \div 6 = 2 \leftarrow \text{quotient} \\ \uparrow \\ \text{divisor} \end{array}$$

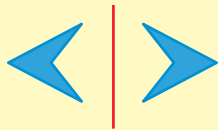
R

rectilinear

When all sides meet at right angles.

reflect, reflection

To transform an object by reflecting it in a mirror line. The image is the same shape and size as the object.

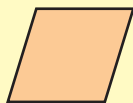


regular

A 2-D shape with all the sides equal length and equal angles.

rhombus

A 2-D shape with 4 equal sides, equal opposite angles.



right-angled triangle

A triangle with 1 right angle. Can be *isosceles* or *scalene*.



rotate, rotation

To transform an object by turning it in a given direction.



S

scalene triangle

A triangle with no equal sides or angles.



sphere, spherical

A sphere has a curved surface, where every point is the same distance from the centre. A ball-shape.



square centimetre (cm²)

A unit of measure of area equivalent to a square 1 cm by 1 cm. Symbol: cm².

square number, squared

A square number is a number that is multiplied by itself, e.g. $1 \times 1 = 1$, $2 \times 2 = 4$, $3 \times 3 = 9$.

subtrahend

The number that is subtracted from the minuend. See also *minuend*, *difference*.

sum

The answer to an addition calculation. The sum of 4 and 5 is 9. See also *total*.

survey

A survey collects data for analysis. See also *questionnaire*, *data*.

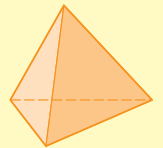
T

ten thousand

10 000.

tetrahedron

A 3-D shape with 4 triangular faces.



thousand less/more

The number one thousand whole units more or less than another number. 9000 is a thousand less than 10 000 and 11 000 is a thousand more than 10 000.

timetable

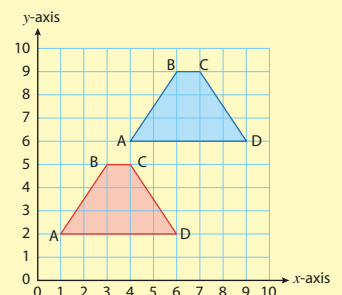
A table listing start and finish or arrival and departure times of activities or events, e.g. a school timetable or a public transport timetable.

total

The answer to an addition calculation. The total of 4, 3 and 5 is 12. See also *sum*.

translate, translation

To transform an object by moving it a given distance and direction. The image is the same shape and size as the object and in the same orientation.



trapezium

A quadrilateral with 1 pair of parallel sides.



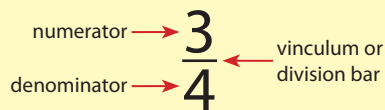
triangular

Like a triangle, a 2-D shape with 3 straight sides.

V

vinculum

The line that separates the numerator and denominator in a fraction.



W

weight

The force exerted on a mass by gravity. The units are units of force (Newtons). Often confused with *mass*.

whole-part relationship

Parts of the whole. In the fraction $\frac{2}{3}$, the whole has been divided into 3 equal parts and we are thinking about 2 of those parts. When thinking of an addition calculation, e.g. $54 + 46 = 100$, 54 and 46 are the parts and 100 is the whole. There are many whole-part relationships in mathematics.

X

x-axis

The horizontal line on a graph or coordinate grid that runs through zero.

Y

y-axis

The vertical line on a graph or coordinate grid that runs through zero.