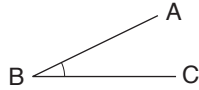


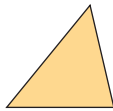
Illustrated Glossary

A.M.: A time between midnight and just before noon.

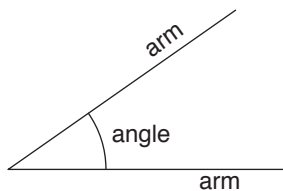
Acute angle: An angle that measures less than 90° .



Acute triangle: A triangle with all angles less than 90° . All angles are acute.



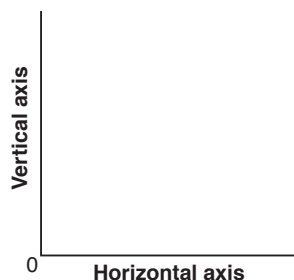
Angle: Two lines meet to form an angle. Each side of an angle is called an arm. We show an angle by drawing an arc.



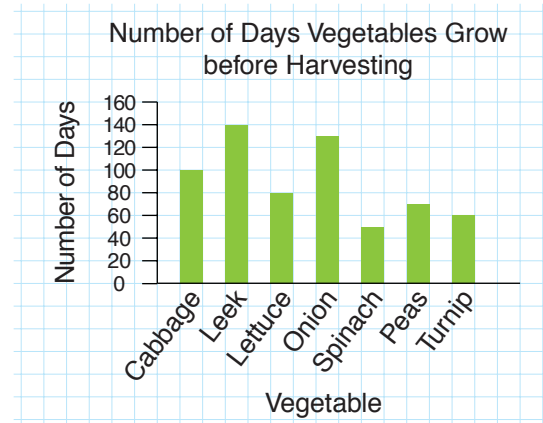
Area: The amount of surface a shape or region covers. We measure area in square units, such as **square centimetres** or **square metres**.

At random: In a probability experiment, when picking at random, each outcome has an equal chance of being picked.

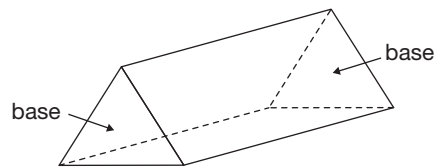
Axis (plural: axes): A number line along the edge of a graph. We label each axis to tell what data it displays. The **horizontal axis** goes across the page. The **vertical axis** goes up the page.



Bar graph: A graph that displays data by using bars of equal width on a grid. The bars may be **vertical** or **horizontal**.

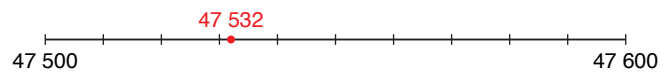


Base: The **face** that names an object. For example, in this **triangular prism**, the bases are triangles.

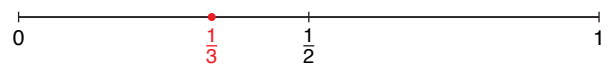


Benchmark: Used for estimating by writing a number to its closest benchmark; for example,

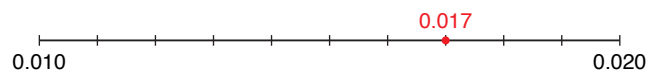
1. For whole numbers: 47 532 is closer to the benchmark 47 500 than to the benchmark 47 600.



2. For fractions: $\frac{1}{3}$ is closer to $\frac{1}{2}$ than to 0 or to 1.



3. For decimals: 0.017 is closer to 0.020 than to 0.010.



Biased question: In questionnaires, a question that might lead a person to answer a certain way; for example, *Is blue your favourite colour?*

Billion: One thousand million.

Capacity: A measure of how much a container holds. We measure capacity in **litres (L)** or **millilitres (mL)**; for example, this carton has a capacity of 1 L.



Carroll diagram: A diagram used to sort numbers or attributes.

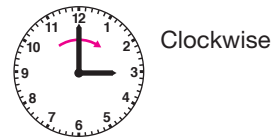
	Even		Odd	
Multiples of 3	6	36	9	21
	12	42	27	39
Not multiples of 3	8	16	35	53
	44	74	67	17

Cartesian plane: Another name for a coordinate grid.
See **Coordinate grid**.

Centimetre: A unit used to measure length.
We write one centimetre as 1 cm.
1 cm = 0.01 m
1 cm = 10 mm
100 cm = 1 m

Certain event: An event that always happens; for example, the month that follows June is July.

Clockwise: The hands on a clock turn in a clockwise direction.



Common factor: A number that is a **factor** of each of the given numbers; for example, 3 is a common factor of 15, 9, and 21.

Common multiple: A number that is a **multiple** of two or more numbers; for example, 6 is a common multiple of 2 and 3.

Commutative property of addition: A property that states that numbers can be added in any order without affecting the **sum**; for example, $24 + 13 = 13 + 24$.

Commutative property of multiplication: A property that states that numbers can be multiplied in any order without affecting the **product**; for example, $7 \times 11 = 11 \times 7$.

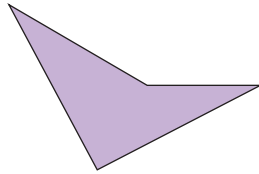
Compatible numbers: Pairs of numbers that are easy to work with; for example,

1. The numbers 340 + 160 are compatible for adding because $40 + 60 = 100$.
2. **Multiples** of 10 or 100 are compatible for estimating products because they are easy to multiply.

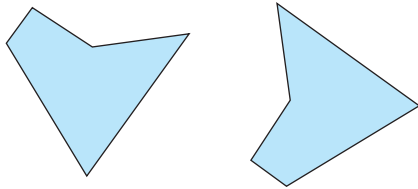
Compensation: A strategy for estimating; rounding one number up and rounding the other number down when the numbers are added. For example, to estimate $2180 + 3432$, round 2180 *up* to 2200 and 3432 *down* to 3400; $2200 + 3400 = 5600$

Composite number: A number with more than 2 **factors**; for example, 4, 6, 8, and 9 are composite numbers.

Concave polygon: A **polygon** that has at least one angle greater than 180° .



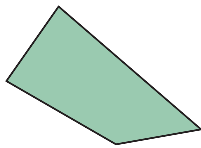
Congruent shapes: Two shapes that match exactly.



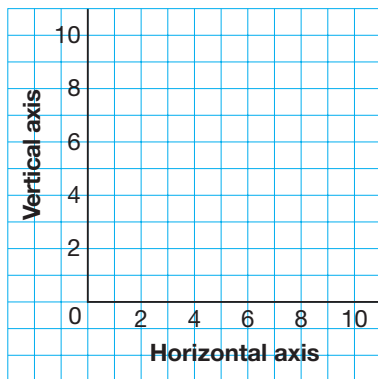
Consecutive numbers: Numbers that follow in order; for example, 4, 5, 6, 7, ...

Continuous data: Data that can include any value between data points; for example, time, temperature, and mass are continuous.

Convex polygon: A **polygon** that has all angles less than 180° .



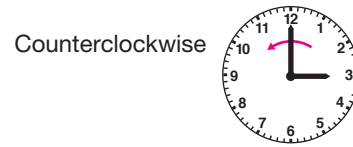
Coordinate grid: A two-dimensional surface on which a coordinate system has been set up.



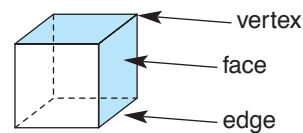
Coordinates: The numbers in an ordered pair that locate a point on the grid. See **Ordered pair**.

Core: See **Repeating pattern**.

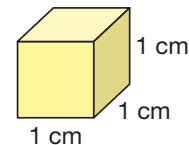
Counterclockwise: A turn in the opposite direction to the direction the hands on a clock turn.



Cube: An object with 6 **faces** that are **congruent** squares. Two **faces** meet at an **edge**. Three or more **edges** meet at a **vertex**.



Cubic centimetre (cm³): A unit to measure **volume**. A centimetre cube has a volume of one cubic centimetre. We write one cubic centimetre as 1 cm^3 .

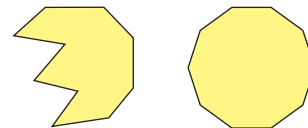


Cubic metre: A unit to measure **volume**. One cubic metre is the volume of a cube with edge length 1 m. We write one cubic metre as 1 m^3 .

Data: Information collected from a survey or experiment.

Database: An organized collection of data. There are two database formats: print and electronic.

Decagon: A **polygon** with 10 sides.

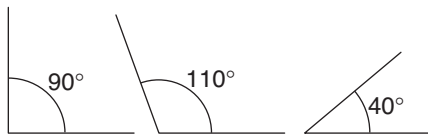


Decimal: A way to write a fraction. For example, the fraction $\frac{2}{10}$ can be written as the decimal 0.2.

Decimal point: Separates the whole number part and the fraction part in a decimal. We read the decimal point as “and.” We say 3.2 as “three **and** two-tenths.”

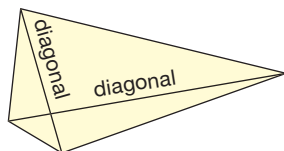
Degree:

1. A unit to measure temperature. We write one degree Celsius as 1°C.
2. A unit used to measure the size of an angle; the symbol for degree is °.



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. For example, in the fraction $\frac{3}{5}$, the denominator is 5. There are 5 parts in one whole.

Diagonal: A line segment that joins 2 vertices of a shape, but is not a side.



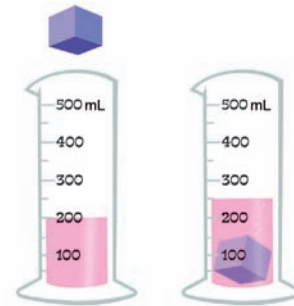
Difference: The result of a subtraction. For example, the difference of 3.5 and 2 is $3.5 - 2 = 1.5$

Dimensions:

1. The measurements of a shape or an object. A **rectangle** has 2 dimensions, length and width. A **cube** has 3 dimensions, length, width, and height.
2. For an array, the dimensions tell the number of rows and the number of columns.

Discrete data: Data that can be counted; for example, the number of students in a class.

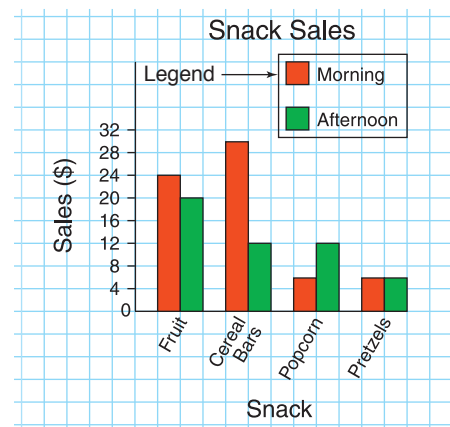
Displacement: The volume of water moved or displaced by an object put in the water. The displacement of this cube is 50 mL or 50 cm³.



Dividend: The number to be divided. For example, in the division sentence $2.4 \div 6 = 0.4$, the dividend is 2.4.

Divisor: The number by which another number is divided. For example, in the division sentence $2.4 \div 6 = 0.4$, the divisor is 6.

Double bar graph: A graph that displays two sets of data at once.



Edge: Two faces of an object meet at an edge. See also **Cube**, **Prism**, and **Pyramid**.

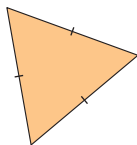
Equally likely events: Two or more events, each of which is as likely to happen as the other. For example, if you toss a coin, it is equally likely that the coin will land heads up as tails up.

Equally probable: See **Equally likely events**.

Equation:

1. Uses the = symbol to show two things that represent the same amount; for example, $5 + 2 = 7$ is an equation.
2. Uses the = symbol with a **variable**, an operation such as +, −, ×, or ÷, and numbers to show two things that represent the same amount; for example, $20 = p + 6$. See **Solution of an equation**.

Equilateral triangle: A triangle with 3 equal sides and 3 equal angles.



Equivalent decimals: Decimals that name the same amount. For example, 0.4, 0.40, and 0.400 are equivalent decimals.

Equivalent form of an equation: The equation produced when each side of an equation is changed in the same way. For example, $8 + 4 = 2n + 4$ and $8 - 3 = 2n - 3$ are equivalent forms of the equation $8 = 2n$.

Equivalent fractions: Fractions that name the same amount; for example, $\frac{1}{3}, \frac{2}{6}, \frac{3}{9}, \frac{10}{30}$ are equivalent fractions.

Equivalent ratios: Ratios that represent the same comparison; for example, 2 : 3 and 6 : 9 are equivalent ratios.

Estimate: Close to an amount or value, but not exact.

Event: The **outcomes** or a set of outcomes from a probability experiment. For example, when a die labelled 1 to 6 is rolled, some events are: rolling a number greater than 3, rolling an even number, rolling a 6.

Expanded form: Shows a number as a sum of the values of its digits.

For example,

1. For whole numbers:

$$123\,456 = 100\,000 + 20\,000 + 3000 + 400 + 50 + 6$$

2. For decimals:

$$5.0713 = 5 + 0.07 + 0.001 + 0.0003$$

Experiment: In probability, a test or trial used to investigate an idea.

Experimental probability: The likelihood that something occurs based on the results of an experiment.

Experimental probability =

$$\frac{\text{Number of times an outcome occurs}}{\text{Number of times the experiment is conducted}}$$

Expression:

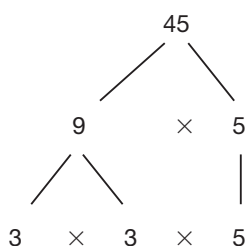
1. A mathematical statement with numbers and operations; for example, $3 \times 4 - 2$ is an expression.
2. Uses a **variable** and numbers to represent a pattern; for example, $d + 2$ represents the number of dots on Figure d in the pattern shown in the table below.

Figure Number	Number of Dots
1	3
2	4
3	5
4	6
5	7

Face: Part of an object. See also **Cube**, **Prism**, and **Pyramid**.

Factor: Numbers that are multiplied to get a **product** are factors. For example, in the multiplication sentence $3 \times 7 = 21$, the factors of 21 are 3 and 7.

Factor tree: A diagram used to find **factors** of a number; for example, 3, 5, and 9 are factors of 45.



Fair game: A game where all players have the same chance of winning.

Fair question: In questionnaires, a question that does not influence a person's answer.

First-hand data: Data you collect yourself.

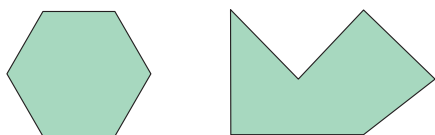
Formula: A short way to state a rule. For example, a formula for the area of a rectangle is $A = \ell \times w$, where ℓ represents the length of the rectangle and w represents its width.

Front-end estimation: Using only the first one or two digits of each number to get an estimate. For example,

1. For adding: $23\ 056 + 42\ 982$ is about $23\ 000 + 42\ 000 = 65\ 000$
2. For multiplying: 72×23 is about $70 \times 20 = 1400$

Gram: A unit to measure **mass**. We write one gram as 1 g.
 $1000\text{ g} = 1\text{ kg}$

Hexagon: A **polygon** with 6 sides.



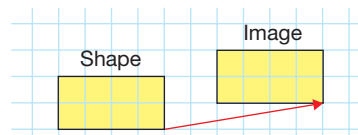
Horizontal axis: See **Axis**.

Horizontal line: A line that is **parallel** to the horizon.

Hundredth: A fraction that is one part of a whole when it is divided into 100 equal parts. We write one-hundredth as $\frac{1}{100}$, or 0.01.

Hundred-thousandth: A fraction that is one part of a whole when it is divided into 100 000 equal parts. We write one hundred-thousandth as $\frac{1}{100\ 000}$, or 0.000 01.

Image: The shape that is the result of a **transformation**. For example, this is a rectangle and its image after a **translation** of 6 squares right and 1 square up.



Impossible event: An event that cannot happen; for example, an earthworm can talk.

Improbable event: An event that is unlikely to happen, but not impossible. For example, you will go for a hot air balloon ride today.

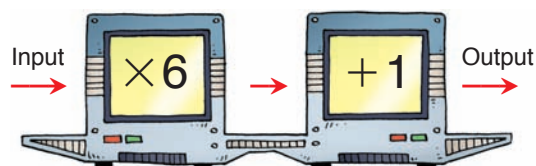
Improper fraction: A fraction that shows an amount greater than one whole. The **numerator** is greater than the **denominator**. For example, $\frac{3}{2}$ is an improper fraction.

Increasing pattern: A pattern where each frame or term is greater than the previous frame or term.



1, 3, 8, 10, 15, 17, 23, ...

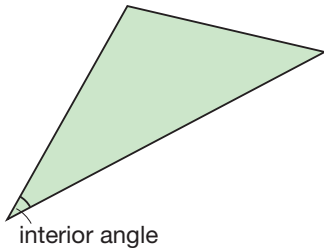
Input/Output machine: Performs operations on a number (the input) to produce another number (the output).



Inspection: To solve an equation by inspection, find the value of the unknown by using addition, subtraction, multiplication, and division facts.

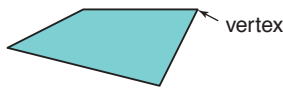
Integers: The set of numbers
 ... -3, -2, -1, 0, +1, +2, +3, ...

Interior angle: An angle inside a triangle or other polygon.



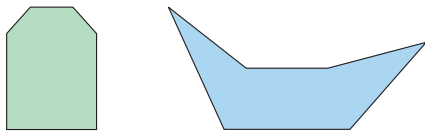
Intersect:

1. For shapes, when two sides meet, they intersect at a point called the **vertex**.

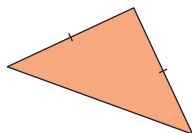


2. For objects, when three or more **edges** meet, they intersect at a point called the **vertex**. When two **faces** meet, they intersect at an **edge**. See **Cube**.

Irregular polygon: A polygon that does not have all sides equal or all angles equal. Here are two irregular hexagons.



Isosceles triangle: A triangle with 2 equal sides and 2 equal angles.

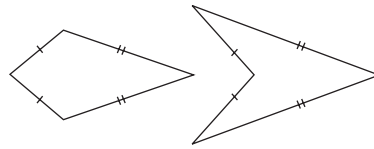


Key: See **Pictograph**.

Kilogram: A unit to measure **mass**.
 We write one kilogram as 1 kg.
 1 kg = 1000 g

Kilometre: A unit to measure long distances. We write one kilometre as 1 km. 1 km = 1000 m

Kite: A quadrilateral with two pairs of adjacent sides equal.

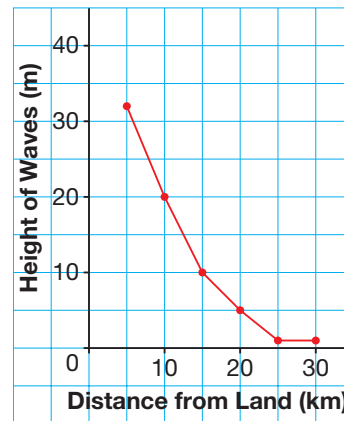


Legend: Tells the **scale** on a **double bar graph** and what each bar represents. See **Double bar graph**.

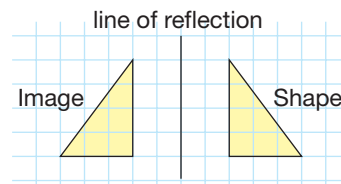
Likely event: An event that will probably happen; for example, you will talk to someone tomorrow.

Line graph: A graph used to show **continuous data**. Consecutive points are joined by line segments.

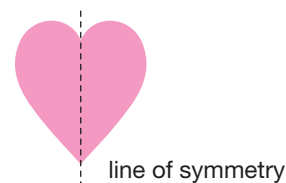
Height of Waves in a Tsunami



Line of reflection: A line in which a shape is reflected. See **Reflection**.



Line of symmetry: Divides a shape into two congruent parts. If we fold the shape along its line of symmetry, the parts match.



Linear dimension: Length, width, depth, height, thickness.

Litre: A unit to measure the **capacity** of a container. We write one litre as 1 L.
1 L = 1000 mL

Mass: A unit to measure how much matter is in an object. We measure mass in grams or kilograms.

Metre: A unit to measure length.
We write one metre as 1 m.
1 m = 100 cm
1 m = 1000 mm

Milligram: A unit to measure **mass**.
We write one milligram as 1 mg.
1000 mg = 1 g

Millilitre: A unit to measure the **capacity** of a container. We write one millilitre as 1 mL.
1000 mL = 1 L
1 mL = 1 cm³

Millimetre: A unit to measure length.
We write one millimetre as 1 mm.
One millimetre is one-tenth of a **centimetre**:
1 mm = 0.1 cm
10 mm = 1 cm
One millimetre is one-thousandth of a **metre**:
1 mm = 0.001 m
1000 mm = 1 m

Millionth: A fraction that is one part of a whole when it is divided into 1 000 000 equal parts. We write one-millionth as $\frac{1}{1\,000\,000}$, or 0.000 001.

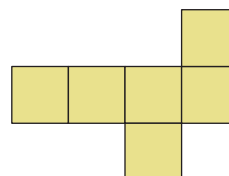
Mixed number: A number that has a whole number part and a fraction part; for example, $1\frac{1}{6}$ is a mixed number.

Multiple: Start at a number, then count on by that number to get the multiples of that number. For example, to get the multiples of 3, start at 3 and count on by 3:
3, 6, 9, 12, 15, ...

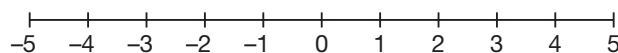
Multiplication fact: A sentence that relates **factors** to a **product**. For example, $3 \times 7 = 21$ is a multiplication fact.

Negative integer: An **integer** less than 0; for example, -3 and -14 are negative integers.

Net: An arrangement that shows all the faces of an object, joined in one piece. It can be folded to form the object.



Number line: Has numbers in order from least to greatest. The spaces between pairs of consecutive numbers are equal.

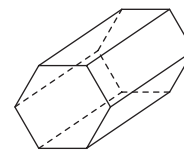


Numerator: The part of a fraction that tells how many equal parts to count. The numerator is the top number in a fraction. For example, in the fraction $\frac{2}{3}$, the numerator is 2. We count 2 thirds of the whole.

Object: Has length, width, and height. Objects have faces, edges, vertices, and bases. We name some objects by the number and shape of their bases.



Pentagonal pyramid

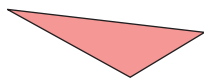


Hexagonal prism

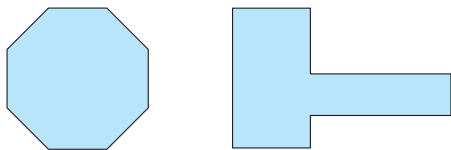
Obtuse angle: An angle that measures between 90° and 180° .



Obtuse triangle: A triangle with one angle greater than 90° and less than 180° .

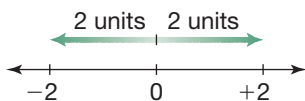


Octagon: A polygon with 8 sides.



Operation: Something done to a number or quantity. Addition, subtraction, multiplication, and division are operations.

Opposite integers: Two integers that are the same distance from 0 but are on opposite sides of 0; for example, +2 and -2 are opposite integers.



Order of operations: The rules that are followed when evaluating an expression.

- Do the operations in brackets.
- Multiply and divide, in order, from left to right.
- Then add and subtract, in order, from left to right.

Ordered pair: Two numbers that describe a point on a coordinate grid. The first number tells how far you move right from the origin. The second number tells how far you move up from the origin.

Origin: The point of intersection of the axes on a coordinate grid.

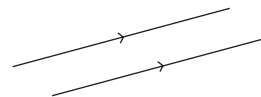
Outcome: One result of an event or experiment. Tossing a coin has two possible outcomes, heads or tails.

P.M.: A time between noon and just before midnight.

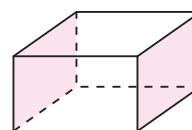
Palindrome: A word, phrase, or number that reads the same from both directions; for example, noon and 636 are palindromes.

Parallel:

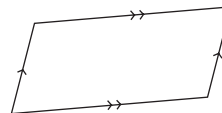
1. Two lines that are always the same distance apart are parallel.



2. Two faces of an object that are always the same distance apart are parallel; for example, the shaded faces on the rectangular prism below are parallel.



Parallelogram: A quadrilateral with 2 pairs of opposite sides parallel.



Partial products: Used as a strategy for multiplying 2-digit numbers; for example,

$$\begin{aligned} 42 \times 57 &= (40 + 2) \times (50 + 7) \\ &= (40 \times 50) + (40 \times 7) + (2 \times 50) \\ &\quad + (2 \times 7) \\ &= 2000 + 280 + 100 + 14 \\ &= 2394 \end{aligned}$$

There are 4 partial products.

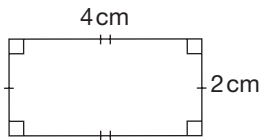
Part-to-part ratio: A ratio that compares a part of the whole to another part of the whole. For example, there are 11 boys and 14 girls in the class. The ratio of boys to girls is 11 : 14.

Part-to-whole ratio: A ratio that compares a part of the whole to the whole. For example, there are 11 boys and 14 girls in the class. The ratio of boys to students is 11 : 25.

Pattern rule: Describes how to make a pattern. For example, for the pattern 1, 2, 4, 8, 16, ..., the pattern rule is: Start at 1. Multiply by 2 each time.

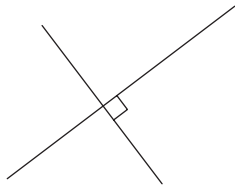
Percent: The number of parts per hundred. The numerator of a fraction with denominator 100; for example, $\frac{31}{100}$ is 31%.

Perimeter: The distance around a shape. It is the sum of the side lengths. For example, the perimeter of this rectangle is: $2\text{ cm} + 4\text{ cm} + 2\text{ cm} + 4\text{ cm} = 12\text{ cm}$

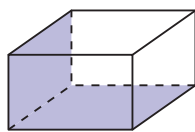


Perpendicular:

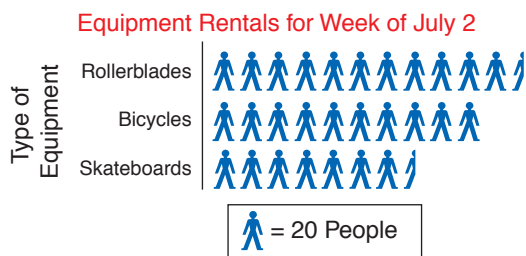
- Two lines that intersect at a right angle are perpendicular.



- Two faces that intersect on a rectangular prism or a cube are perpendicular.



Pictograph: Uses pictures and symbols to display data. Each picture or symbol can represent more than one object. A key tells what each picture represents.

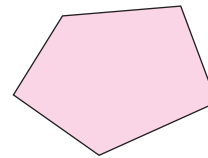


Place-value chart: It shows how the value of each digit in a number depends on its place in the number; see page 47 for whole numbers and page 89 for decimals.

Placeholder: A zero used to hold the place value of the digits in a number. For example, the number 603 has 0 tens. The digit 0 is a placeholder.

Point of rotation: The point about which a shape is rotated. See **Rotation**.

Polygon: A shape with three or more sides. We name a polygon by the number of its sides. For example, a five-sided polygon is a pentagon.



Positive integer: An integer greater than 0; for example, +2 and 17 are positive integers.

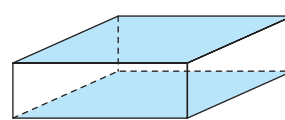
Possible event: An event that may happen; for example, rolling a 6 on a die labelled 1 to 6.

Prediction: You make a prediction when you decide how likely or unlikely it is that an event will happen.

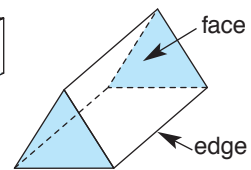
Preservation of equality: When each side of an equation is changed in the same way, the values remain equal.

Prime number: A whole number with exactly 2 factors, 1 and itself; for example, 7, 13, 19, and 23 are prime numbers.

Prism: An object with 2 bases.



Rectangular prism



Triangular prism

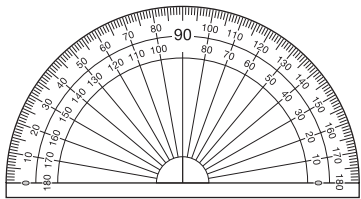
Probability: Tells how likely it is that an event will occur.

Probable event: An event that is likely, but not certain to happen; for example, it will rain in April.

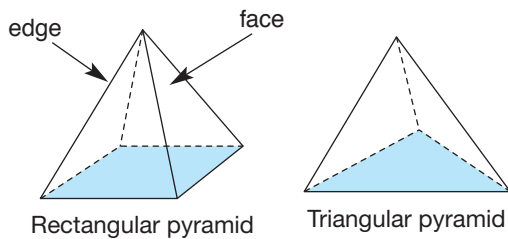
Product: The result of a multiplication. For example, the product of 1.5 and 2 is $1.5 \times 2 = 3$

Proper fraction: Describes an amount less than one. A proper fraction has a **numerator** that is less than its **denominator**. For example, $\frac{5}{7}$ is a proper fraction.

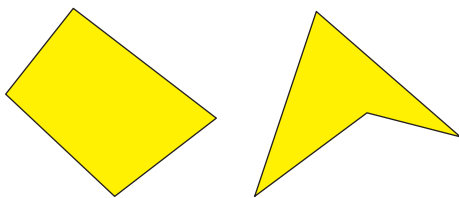
Protractor: An instrument used to measure the number of degrees in an angle.



Pyramid: An object with 1 base.



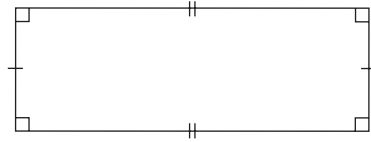
Quadrilateral: A shape with 4 sides.



Quotient: The number obtained by dividing one number into another. For example, in the division sentence $2.4 \div 6 = 0.4$, the quotient is 0.4.

Ratio: A comparison of 2 quantities measured with the same unit.

Rectangle: A quadrilateral, where 2 pairs of opposite sides are equal and each angle is a **right angle**.



Rectangular prism: See **Prism**.

Rectangular pyramid: See **Pyramid**.

Referent: Used to estimate a measure; for example, a referent for:
a length of 1 mm is the thickness of a dime.
a length of 1 m is the width of a doorway.
a volume of 1 cm^3 is the tip of a finger.
a volume of 1 m^3 is the space taken up by a playpen.
a capacity of 1 L is a milk pitcher.
a capacity of 1 mL is an eyedropper.

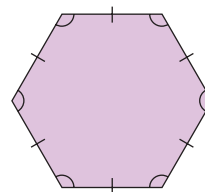
Reflection: Reflects a shape in a **line of reflection** to create a **reflection image**. See **Line of reflection**.

Reflection image: The shape that results from a **reflection**. See **Reflection**.

Reflex angle: An angle that measures between 180° and 360° .



Regular polygon: A regular polygon has all sides equal and all angles equal. Here is a regular hexagon.



Regular shape: See **Regular polygon**.

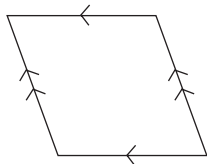
Related facts: Sets of addition and subtraction facts or multiplication and division facts that have the same numbers. Here are two sets of related facts:

$$\begin{array}{ll} 2 + 3 = 5 & 5 \times 6 = 30 \\ 3 + 2 = 5 & 6 \times 5 = 30 \\ 5 - 3 = 2 & 30 \div 6 = 5 \\ 5 - 2 = 3 & 30 \div 5 = 6 \end{array}$$

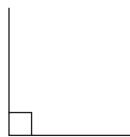
Remainder: What is left over when one number does not divide exactly into another number. For example, in the quotient $13 \div 5 = 2 \text{ R}3$, the remainder is 3.

Repeating pattern: A pattern with a core that repeats. The core is the smallest part of the pattern that repeats. In the pattern: 1, 8, 2, 1, 8, 2, 1, 8, 2, ..., the core is 1, 8, 2.

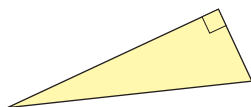
Rhombus: A **quadrilateral** with all sides equal and 2 pairs of opposite sides **parallel**.



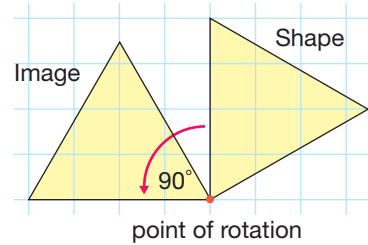
Right angle: An angle that measures 90° .



Right triangle: A triangle with one 90° angle.



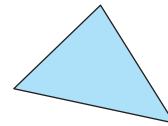
Rotation: Turns a shape about a **point of rotation** in a given direction. For example, this is a triangle and its image after a rotation of 90° **counterclockwise** about one **vertex**:



Rotation image: The shape that results from a **rotation**. See **Rotation**.

Scale: The numbers on the **axis** of a graph show the scale.

Scalene triangle: A triangle with no equal sides and no equal angles.



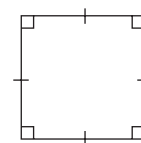
Second: A small unit of time. There are 60 seconds in 1 minute.
 $60 \text{ s} = 1 \text{ min}$

Second-hand data: Data collected by someone else.

Solution of an equation: The value of a **variable** that makes the equation true; for example, $p = 14$ is the solution of the equation $20 = p + 6$.

Speed: A measure of how fast an object is moving.

Square: A quadrilateral with all sides equal and 4 right angles.



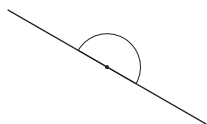
Square centimetre: A unit of **area** that is a **square** with 1-cm sides. We write one square centimetre as 1 cm^2 .

Square metre: A unit of **area** that is a **square** with 1-m sides. We write one square metre as 1 m^2 .

Standard form: The number 579 328 is in standard form; it has a space between the thousands digit and the hundreds digit. See **Place-value chart**.

Standard units: Metres, square metres, cubic metres, kilograms, and seconds are some standard units.

Straight angle: An angle that measures 180° .



Successive reflections: A shape that is reflected two or more times.

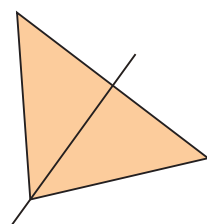
Successive rotations: A shape that is rotated two or more times.

Successive translations: A shape that is translated two or more times.

Sum: The result of addition. For example, the sum of 3.5 and 2 is $3.5 + 2 = 5.5$

Survey: Used to collect **data**. You can survey your classmates by asking them which is their favourite ice-cream flavour.

Symmetrical: A shape is symmetrical if it has one or more **lines of symmetry**. For example, an isosceles triangle has one line of symmetry, so it is symmetrical.



Tenth: A fraction that is one part of a whole when it is divided into 10 equal parts. We write one-tenth as $\frac{1}{10}$, or 0.1.

Ten-thousandth: A fraction that is one part of a whole when it is divided into 10 000 equal parts. We write one ten-thousandth as $\frac{1}{10\,000}$, or 0.0001.

Term: One number in a number pattern. For example, the number 4 is the third term in the pattern 1, 2, 4, 8, 16, ...

Terms of a ratio: The quantities that make up a ratio; for example, in the ratio 2 : 3, 2 and 3 are the terms of the ratio.

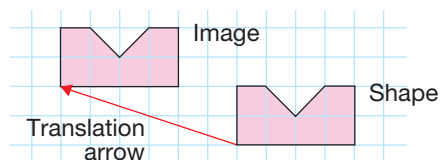
Theoretical probability: The likelihood that an outcome will happen.
Theoretical probability =
$$\frac{\text{Number of favourable outcomes}}{\text{Number of possible outcomes}}$$

Thousandth: A fraction that is one part of a whole when it is divided into 1000 equal parts. We write one-thousandth as $\frac{1}{1000}$, or 0.001.

Tonne: A unit used to measure a very large **mass**. We write one tonne as 1 t.
 $1 \text{ t} = 1000 \text{ kg}$

Transformation: A **translation** (slide), a **reflection** (flip), and a **rotation** (turn) are transformations.

Translation: Slides a shape from one location to another. A translation arrow joins matching points on the shape and its image. For example, this shape has been translated 6 squares left and 2 squares up.

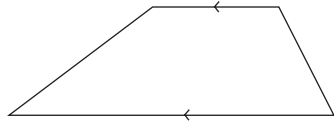


Translation arrow: See **Translation**.

Translation image: The shape that results from a **translation**.

See **Translation**.

Trapezoid: A **quadrilateral** with exactly 1 pair of sides **parallel**.



Triangular prism: See **Prism**.

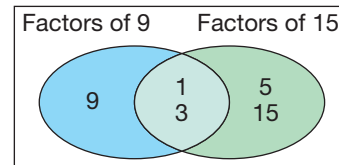
Triangular pyramid: See **Pyramid**.

Trillion: One thousand billion.

Unlikely event: An event that will probably not happen; for example, you will win a trip to Australia.

Variable: A letter, in italics, that is used to represent a number in an equation, or a set of numbers in a pattern.
See **Equation** and **Expression**.

Venn diagram: A diagram that is used to sort numbers, shapes, or objects.



Vertex (plural: vertices):

1. The point where two sides of a shape meet.
2. The point where three or more **edges** of an object meet.

Vertical axis: See **Axis**.

Vertical line: A line that is perpendicular to the horizon.

Volume: The amount of space occupied by an object or the amount of space inside an object. Volume can be measured in **cubic centimetres** or in **cubic metres**.

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