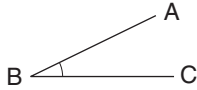


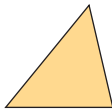
# Illustrated Glossary

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

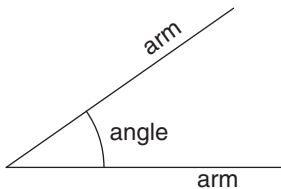
**Acute angle:** An angle that measures less than  $90^\circ$ .



**Acute triangle:** A triangle with all angles less than  $90^\circ$ . All angles are acute.



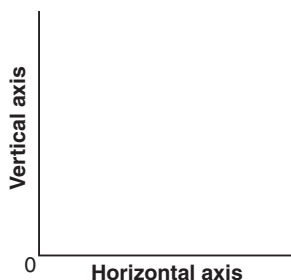
**Angle:** Two lines meet to form an angle. Each side of an angle is called an arm. We show an angle by drawing an arc.



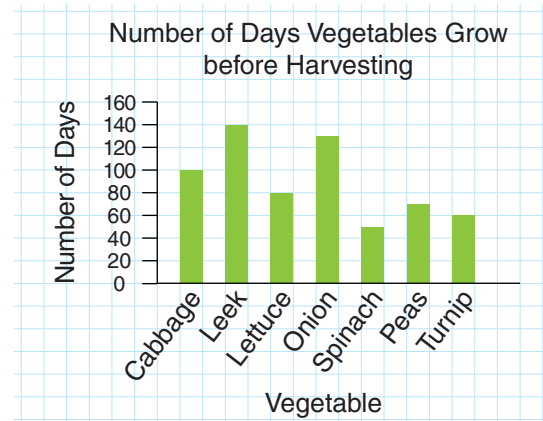
**Area:** The amount of surface a shape or region covers. We measure area in square units, such as **square centimetres** or **square metres**.

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

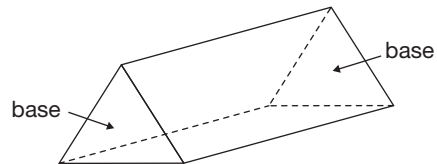
**Axis (plural: axes):** A number line along the edge of a graph. We label each axis of a graph to tell what data it displays. The **horizontal axis** goes across the page. The **vertical axis** goes up the page.



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

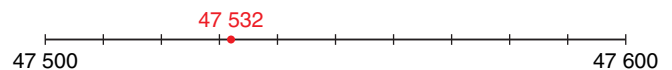


**Base:** The **face** that names an object. For example, in this **triangular prism**, the bases are triangles.

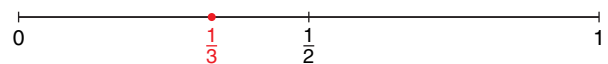


**Benchmark:** Used for estimating by writing a number to its closest benchmark; for example,

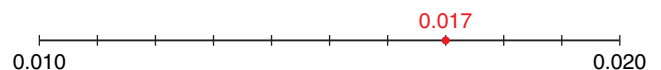
1. For whole numbers: 47 532 is closer to the benchmark 47 500 than to the benchmark 47 600.



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	
<b>Multiples of 3</b>	6	36	9	21
	12	42	27	39
<b>Not multiples of 3</b>	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,  $7 \times 11 = 11 \times 7$ .

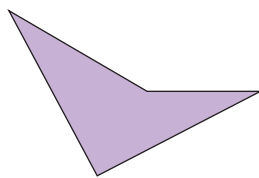
**Compatible numbers:** Pairs of numbers that are easy to work with; for example,

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.

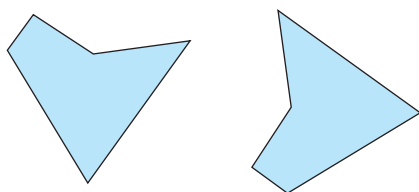
**Compensation:** A strategy for estimating; rounding one number up and rounding the other number down when the numbers are added. For example, to estimate  $2180 + 3432$ , round 2180 *up* to 2200 and 3432 *down* to 3400;  $2200 + 3400 = 5600$

**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  $180^\circ$ .



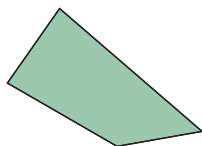
**Congruent shapes:** Two shapes that match exactly.



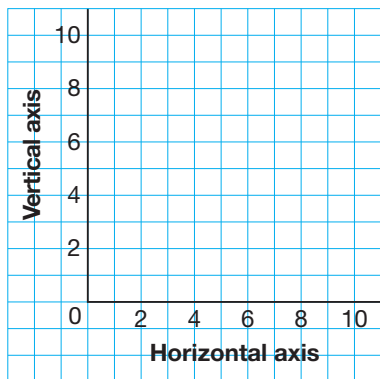
**Consecutive numbers:** Numbers that follow in order; for example, 4, 5, 6, 7, ...

**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  $180^\circ$ .



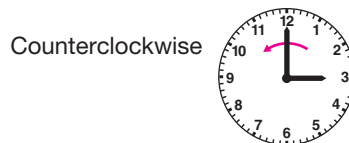
**Coordinate grid:** A two-dimensional surface on which a coordinate system has been set up.



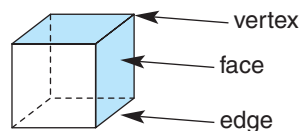
**Coordinates:** The numbers in an ordered pair that locate a point on the grid. See **Ordered pair**.

**Core:** See **Repeating pattern**.

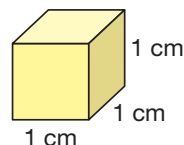
**Counterclockwise:** A turn in the opposite direction to the direction the hands on a clock turn.



**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 ( $\text{cm}^3$ ):** A unit to measure **volume**. A centimetre cube has a volume of one cubic centimetre. We write one cubic centimetre as  $1 \text{ cm}^3$ .

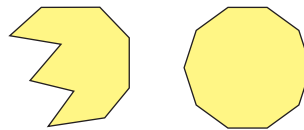


**Cubic metre:** A unit to measure **volume**. One cubic metre is the volume of a cube with edge length 1 m. We write one cubic metre as  $1 \text{ m}^3$ .

**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.”

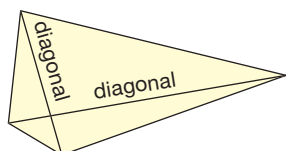
**Degree:**

1. A unit to measure temperature. We write one degree Celsius as  $1^{\circ}\text{C}$ .
2. A unit used to measure the size of an angle; the symbol for degree is  $^{\circ}$ .



**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.



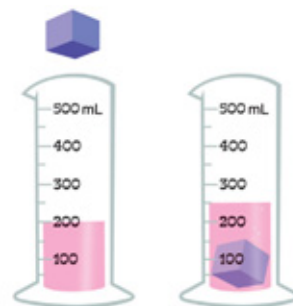
**Difference:** The result of a subtraction. For example, the difference of 3.5 and 2 is  $3.5 - 2 = 1.5$

**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.

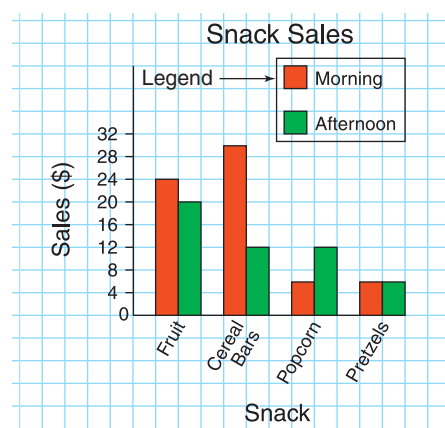
**Displacement:** The volume of water moved or displaced by an object put in the water. The displacement of this cube is 50 mL or  $50\text{ cm}^3$ .



**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**.

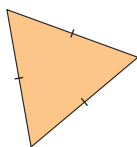
**Equally likely events:** Two or more events, each of which is as likely to happen as the other. For example, if you toss a coin, it is equally likely that the coin will land heads up as tails up.

**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  $+$ ,  $-$ ,  $\times$ , or  $\div$ , 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:**

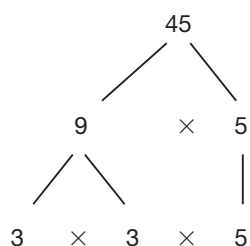
1. A mathematical statement with numbers and operations; for example,  $3 \times 4 - 2$  is an expression.
2. Uses a **variable** and numbers to represent a pattern; for example,  $d + 2$  represents the number of dots on Figure  $d$  in the pattern shown in the table below.

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.

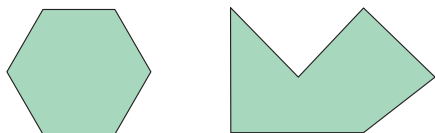
**Formula:** A short way to state a rule.  
For example, a formula for the area of a rectangle is  $A = \ell \times w$ , where  $\ell$  represents the length of the rectangle and  $w$  represents its width.

**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:  $72 \times 23$  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.



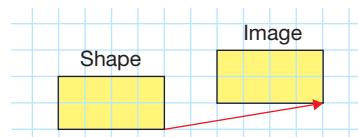
**Horizontal axis:** See **Axis**.

**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.

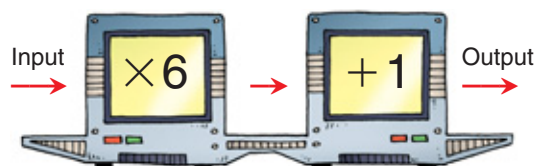
**Improper fraction:** A fraction that shows an amount greater than one whole. The **numerator** is greater than the **denominator**. For example,  $\frac{3}{2}$  is an improper fraction.

**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).

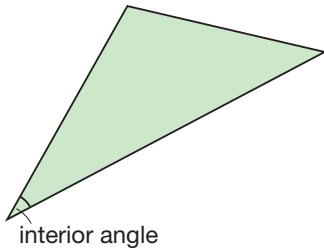


**Inspection:** To solve an equation by inspection, find the value of the unknown by using addition, subtraction, multiplication, and division facts.



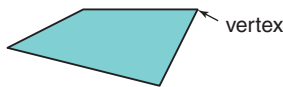
**Integers:** The set of numbers  
... -3, -2, -1, 0, +1, +2, +3, ...

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



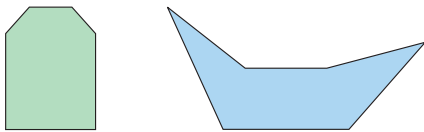
**Intersect:**

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

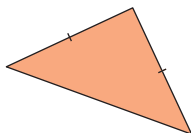


2. For objects, when three or more **edges** meet, they intersect at a point called the **vertex**. When two **faces** meet, they intersect at an **edge**. See **Cube**.

**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.

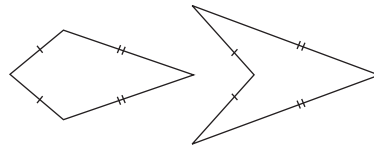


**Key:** See **Pictograph**.

**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.

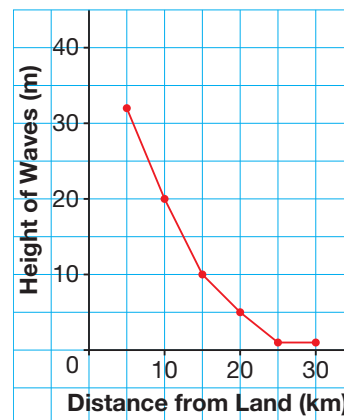


**Legend:** Tells the **scale** on a **double bar graph** and what each bar represents. See **Double bar graph**.

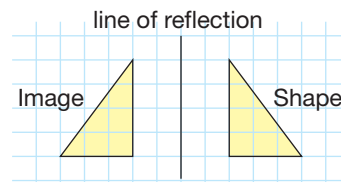
**Likely event:** An event that will probably happen; for example, you will talk to someone tomorrow.

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

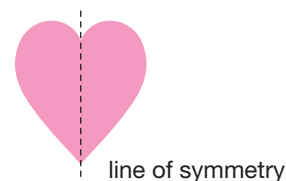
Height of Waves in a Tsunami



**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.  
 $1\text{ L} = 1000\text{ mL}$

**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.  
 $1\text{ m} = 100\text{ cm}$   
 $1\text{ m} = 1000\text{ mm}$

**Milligram:** A unit to measure **mass**.  
We write one milligram as 1 mg.  
 $1000\text{ mg} = 1\text{ g}$

**Millilitre:** A unit to measure the **capacity** of a container. We write one millilitre as 1 mL.  
 $1000\text{ mL} = 1\text{ L}$   
 $1\text{ mL} = 1\text{ cm}^3$

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

**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.

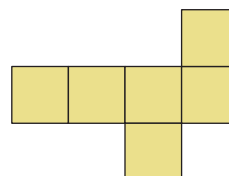
**Mixed number:** A number that has a whole number part and a fraction part; for example,  $1\frac{1}{6}$  is a mixed number.

**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, ...

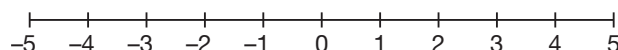
**Multiplication fact:** A sentence that relates **factors** to a **product**. For example,  $3 \times 7 = 21$  is a multiplication fact.

**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.

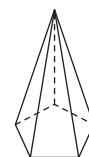


**Number line:** Has numbers in order from least to greatest. The spaces between pairs of consecutive numbers are equal.

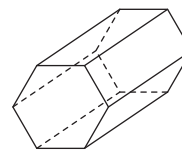


**Numerator:** The part of a fraction that tells how many equal parts to count. The numerator is the top number in a fraction. For example, in the fraction  $\frac{2}{3}$ , the numerator is 2. We count 2 thirds of the whole.

**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.

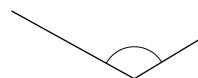


Pentagonal  
pyramid



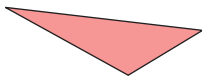
Hexagonal  
prism

**Obtuse angle:** An angle that measures between  $90^\circ$  and  $180^\circ$ .

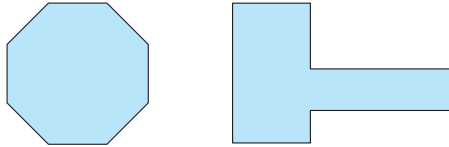




**Obtuse triangle:** A triangle with one angle greater than  $90^\circ$  and less than  $180^\circ$ .

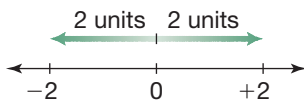


**Octagon:** A **polygon** with 8 sides.



**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**.

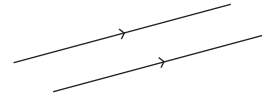
**Outcome:** One result of an **event** or experiment. Tossing a coin has two possible outcomes, heads or tails.

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

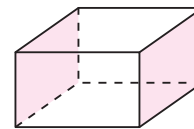
**Palindrome:** A word, phrase, or number that reads the same from both directions; for example, noon and 636 are palindromes.

**Parallel:**

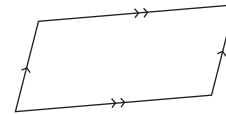
1. Two lines that are always the same distance apart are parallel.



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.

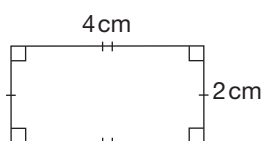
**Part-to-part ratio:** A **ratio** that compares a part of the whole to another part of the whole. For example, there are 11 boys and 14 girls in the class. The ratio of boys to girls is 11 : 14.

**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.

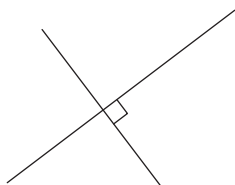
**Percent:** The number of parts per hundred. The numerator of a fraction with denominator 100; for example,  $\frac{31}{100}$  is 31%.

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

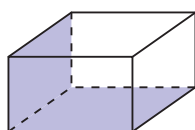


**Perpendicular:**

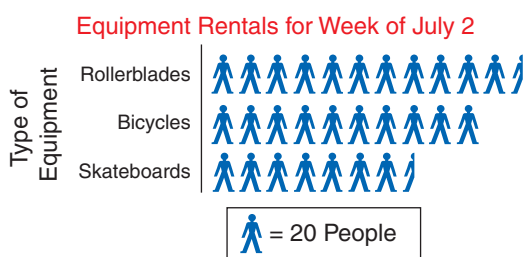
- Two lines that intersect at a right angle are perpendicular.



- 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.

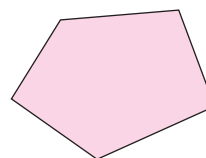


**Place-value chart:** It shows how the value of each digit in a number depends on its place in the number; see page 47 for whole numbers and page 89 for decimals.

**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.

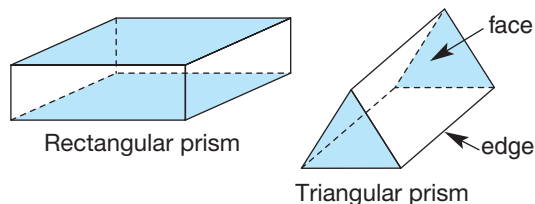
**Possible event:** An event that may happen; for example, rolling a 6 on a die labelled 1 to 6.

**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.



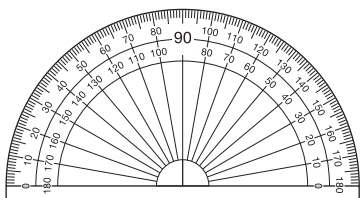
**Probability:** Tells how likely it is that an event will occur.

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

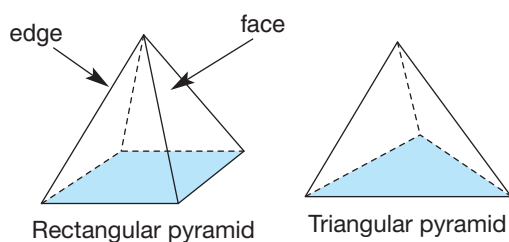
**Product:** The result of a multiplication. For example, the product of 1.5 and 2 is  $1.5 \times 2 = 3$

**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.

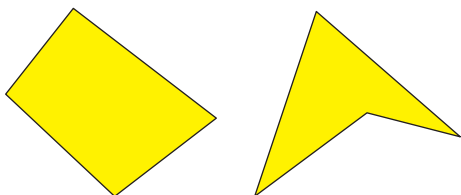
**Protractor:** An instrument used to measure the number of degrees in an angle.



**Pyramid:** An object with 1 base.



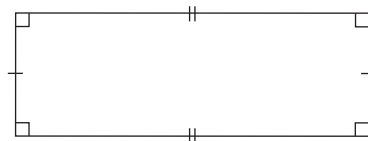
**Quadrilateral:** A shape with 4 sides.



**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<sup>3</sup> is the tip of a finger.  
a volume of 1 m<sup>3</sup> 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.

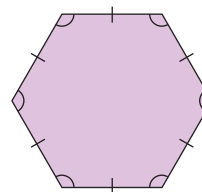
**Reflection:** Reflects a shape in a **line of reflection** to create a **reflection image**. See **Line of reflection**.

**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**.

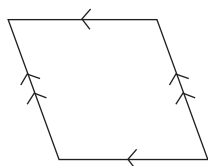
**Related facts:** Sets of addition and subtraction facts or multiplication and division facts that have the same numbers. Here are two sets of related facts:

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

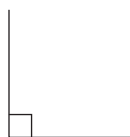
**Remainder:** What is left over when one number does not divide exactly into another number. For example, in the quotient  $13 \div 5 = 2 \text{ R}3$ , the remainder is 3.

**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.

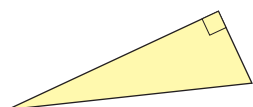
**Rhombus:** A **quadrilateral** with all sides equal and 2 pairs of opposite sides **parallel**.



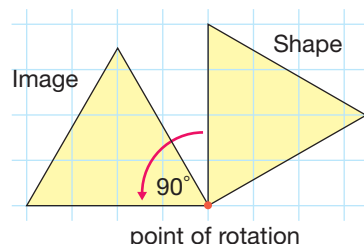
**Right angle:** An angle that measures  $90^\circ$ .



**Right triangle:** A triangle with one  $90^\circ$  angle.



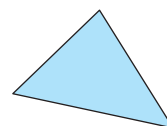
**Rotation:** Turns a shape about a **point of rotation** in a given direction. For example, this is a triangle and its image after a rotation of  $90^\circ$  **counterclockwise** about one **vertex**:



**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.



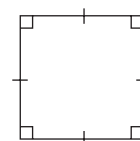
**Second:** A small unit of time. There are 60 seconds in 1 minute.  
 $60 \text{ s} = 1 \text{ min}$

**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.



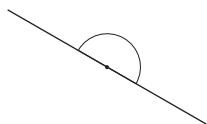
**Square centimetre:** A unit of **area** that is a **square** with 1-cm sides. We write one square centimetre as  $1 \text{ cm}^2$ .

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

**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  $180^\circ$ .



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

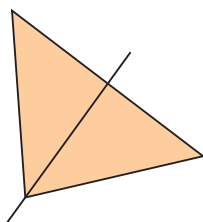
**Successive rotations:** A shape that is rotated two or more times.

**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 =

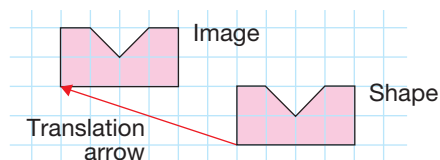
$$\frac{\text{Number of favourable outcomes}}{\text{Number of possible outcomes}}$$

**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.

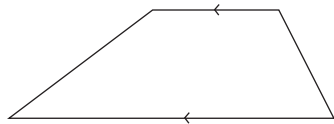
**Translation:** Slides a shape from one location to another. A translation arrow joins matching points on the shape and its image. For example, this shape has been translated 6 squares left and 2 squares up.



**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](#).

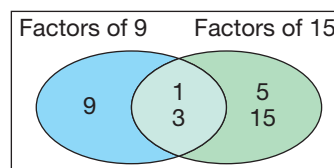
**Triangular pyramid:** See [Pyramid](#).

**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](#).