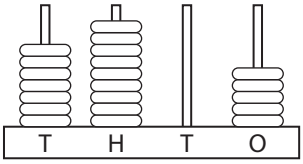
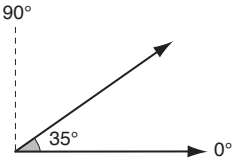
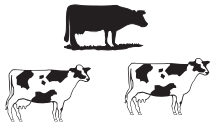
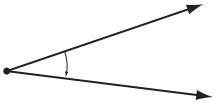
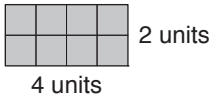
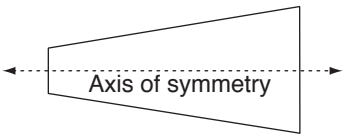
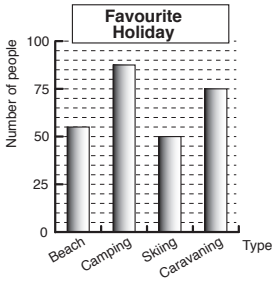
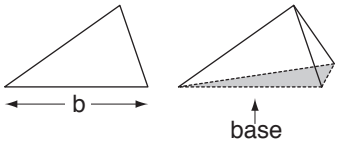
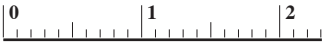
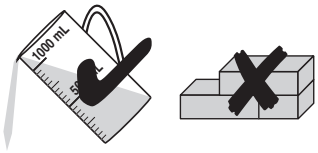
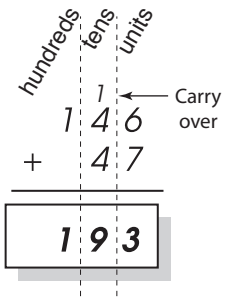
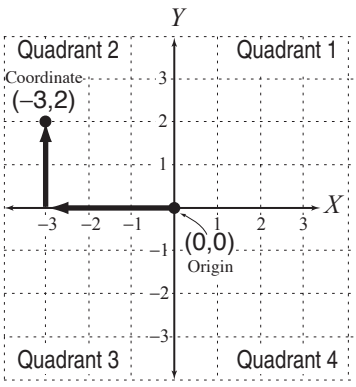
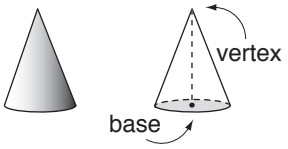
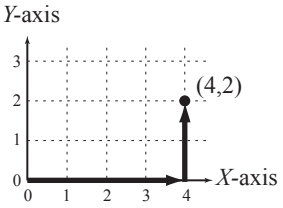
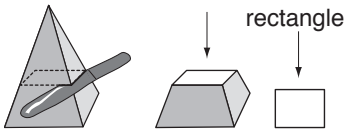
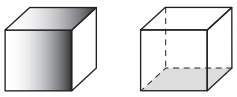
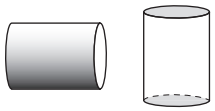
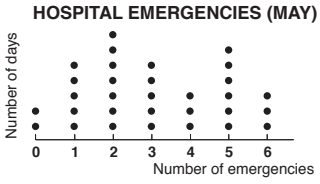
GLOSSARY

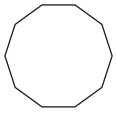
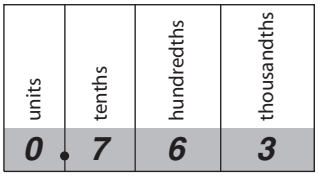
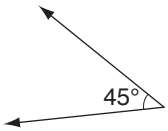
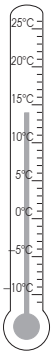
TERMS	DEFINITIONS	EXAMPLES
abacus	• Beads on a frame used for counting and calculating.	
acute angle	• An *angle* measuring less than 90°.	
add (+)	• To join together.	If you add together the number of cows, there are 3. 
addition	• The *operation* of finding the total or sum of two or more numbers to make one number.	Adding 15 and 6 we reach a total (sum) of 21. 15 + 6 = 21
am (**a**nte **m**eridiem)	• The *time* from midnight to midday (morning).	
analogue clock	• A clock or watch that has rotating hands and shows 12 *hour time*.	
angle	• The amount of turning between two straight lines that are fixed at a point. • An angle is measured in *degrees*.	
annual	• Happening *once* a *year*.	
anticlockwise	• Moving in the *opposite direction* to the hands on a clock.	
approximate	• Very close to the actual size. • To estimate by rounding off.	If you have $24.85 in your wallet, you can say you have approximately $25.00.

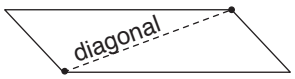
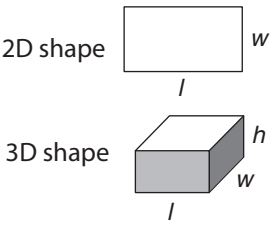
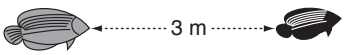
area	• The amount of surface covered by a *2D-shape*. • Area is measured in *square units* e.g. square centimetres (cm^2) or square metres (m^2).	The area of a rectangle is calculated by multiplying length by width: $A = lw$ $A = 4 \times 2$ $A = 8$ Area = 8 square units 
axis of symmetry	• (pl. **axes**) See *line of symmetry*.	
backwards	• Away from your front. • In reverse of the usual way.	
bar graph	• Uses bars to show quantities or numbers so they can be easily compared.	 Camping is the favourite holiday.
base	• A line or surface on which a figure stands.	
between	• At a place bounded by two or more places.	Canberra is between Sydney and Melbourne. 
bi	• (or **di**) Prefix meaning two.	A bicycle has 2 wheels. 
brackets ( )	• A *pair* of symbols used to group mathematical expressions together.	$(20 \div 5) + 5 = 9$ Brackets group 20 divided by 5
calculate	• To work something out.	$3 + 5 + 6 = 14$ 

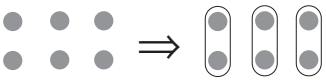
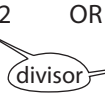
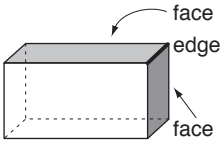
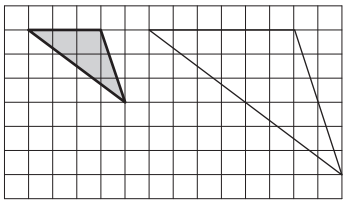
calendar	• A *time* chart that tells us what *day*, *week*, *month* and *year* it is.	
calibration	• A mark on a *scale*.	
capacity	• Or *volume*, is the measure of the amount of liquid a container can hold.	A jug has capacity because it can hold liquid, a brick does not. 
cardinal number	• A *whole number* that shows the amount.	1, 2, 3, 4, 5..... are cardinal numbers.
carry over	• The amount passed to the next *place value* in an algorithm.	
Cartesian plane	• A *plane* divided into four *quadrants* by a *horizontal line* called the *x-axis* and a *vertical line* called the *y-axis*.	
cent (¢)	• The *smallest unit* of money. 100 cents = 1 *dollar*	
century	• A *unit* of *time* equal to 100 *years*.	The 21st century will go from 2001 until 2100.

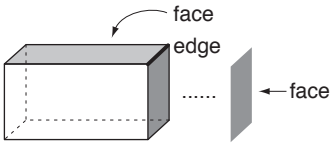
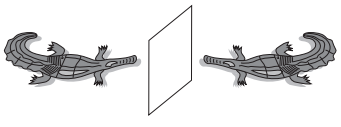
certain	• Being sure. • Will definitely happen.	 death  taxes
chance	• The possibility of getting a particular result.	Roll the die! There's a 1 in 6 chance of rolling a 2! 
change (money)	• The leftover money you are given back after buying something.	   change from $1
clockwise	• Moving in the direction of the hands on a clock.	
closest	• Nearest to.	The son is closest to the mother. 
column	• A *vertical* line of *data* in a table.	Netball: Aust v NZ NZ / Quarters: Shooting chances; Actual goals; Success % 1st: 9; 9; 100 2nd: 14; 13; 92.85 3rd: 23; 20; 86.95 4th: 18; 17; 94.44
compass	• An instrument that shows *direction*.	 
composite number	• A *positive integer* that has *factors* other than just 1 and the number itself.	12 is a composite number. $12 = 1 \times 12 = 2 \times 6 = 3 \times 4$ The factors of 12 are: 1, 2, 3, 4, 6, 12
commutative property (of addition and multiplication)	• Rule: When *adding* or *multiplying*, no matter how the numbers are ordered, the answers will always be the same.	$a + b = b + a$ $1 + 3 = 3 + 1$ $4 = 4$ "✚" $a \times b = b \times a$ $3 \times 4 = 4 \times 3$ $12 = 12$ "✖"

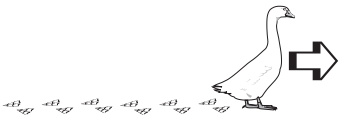
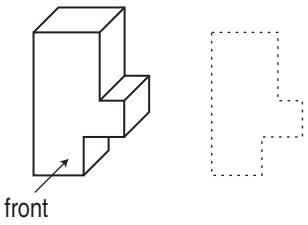
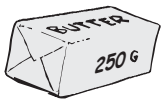
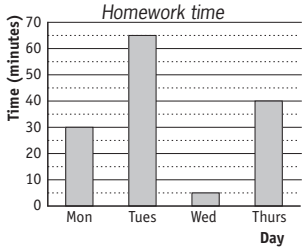
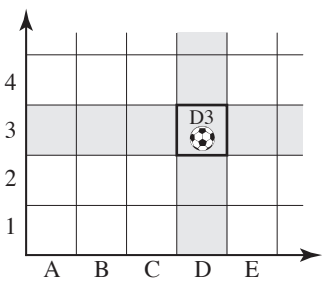
cone	• A *solid* with one circular base and one *vertex*.	
consecutive numbers	• Numbers that follow each other.	4 and 5 are consecutive numbers. 
convert	• Change from a unit to another.	Five $20 notes can be converted to a $100 bill.
coordinates	• Two numbers that locate a *point*. • The *first* number tells you the position of a point along the *x*-axis. The *second* tells you the position of a point along the *y*-axis. • They are written in *brackets* with a comma between.	(4,2) are the coordinates of a point located 4 units to the right and 2 units upward. 
counting number	• Any of the *whole numbers* from zero onwards.	0, 1, 2, 3, 4, 5..... are counting numbers.
cross section	• The face that results when an object is cut through.	
cube	• A *solid* with six identical *square* faces.	
cylinder	• A *solid* with two *parallel* circular ends of the same size.	
data	• Collection of information that can include facts, numbers or measurements.	
day	• A *unit* of *time* equal to 24 *hours*.	A day starts and ends at midnight. 
deca	• Prefix meaning ten.	Decathlon is an athletics contest with ten events.

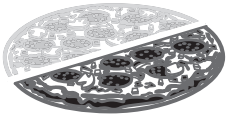
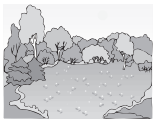
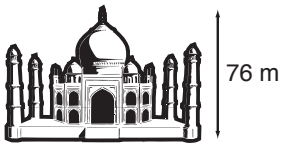
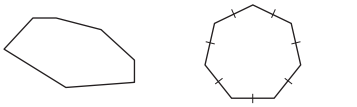
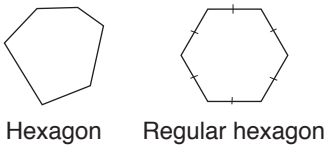
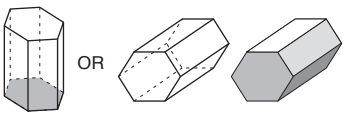
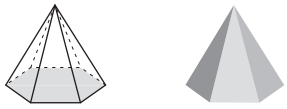
decade	• A *unit* of *time* equal to 10 *years*.	2000 to 2009 make a decade.
decagon	• A shape with 10 *sides*.	
decimal number	• A number based on the ten *place value* system.	The decimal number 4.3 represents: 4 - ones 3 - tenths. OR 4 and 3 tenths.
decimal place		7 is in the tenths place. 6 is in the hundredths place. 3 is in the thousandths place.
decimal point (.)	• A point that separates the *units* and *tenths* in a *decimal number*.	2.5 is a decimal number where the 2 and the 5 are separated by a decimal point.
decrease	• To make smaller.	8 must decrease by 5 to become 3.
deduct	• To take away.	If you deduct 1 from 3 there are 2 left. 3 – 1 = 2
degree (°)	• A *unit* used to measure the amount of turn in an *angle*.	The measure of this angle is 45° 
degrees Celsius (°C)	• A *unit* used to measure temperature.	The thermometer shows 14°C. 
denominator	• The number below the fraction bar in a *fraction*.	$\frac{3}{5}$ denominator - how many equal parts in one whole

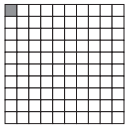
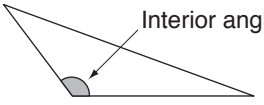
diagonal	• A straight line inside a *polygon* joining any two corners that are not next to each other.	
die	• (pl. **dice**) A numbered *cube* that is used in games.	
difference	• The result when a number is *subtracted* from another number. • The amount by which one number is bigger or smaller than another number.	The difference between 5 and 3 is 2. 5 – 3 = 2
digit	• Any of the first ten *whole numbers* from 0 to 9.	There are 10 digits: 0, 1, 2, 3, 4, 5, 6, 7, 8 or 9.
digit sum	• The *sum* of the *digits* in a number.	124 has a digit sum of 7. 1 + 2 + 4 = 7
digital clock	• A clock that uses only numbers to show the *time*. (No hands!)	
dimension	• A measure of size. A *two dimensional* shape (2D shape) has *length* and *width*. A *three dimensional* shape (3D shape) has *length*, *width* and *height*.	
direction	• The way something is placed or pointing.	North, east, south, west, up, down, sideways, backwards and forwards.
distance	• The *length* between two points.	The distance between the fish is 3 metres. 
divide (÷)	• To share into groups.	These 6 cows are divided into 2 groups.  6 ÷ 2 = 3 in each group
divisible	• Can be divided without a *remainder*.	20 ÷ 2 = 10 with 0 remainder. So 20 is divisible by 2.

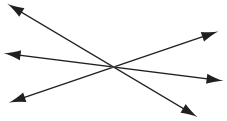
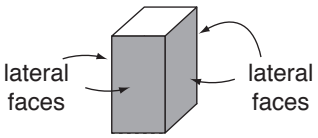
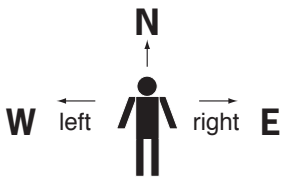
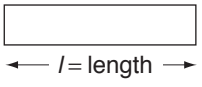
division	• The *operation* of sharing or grouping a number into *equal* parts.	The division 6 ÷ 2 = 3 means: How many groups of 2 can 6 be divided into? OR How many groups of 2 can be taken from 6 before none remain? ⇒3 groups of 2. 
divisor	• The *second* number written in a *division*. In a *fraction* the divisor is the *denominator*.	$8 \div \boxed{4} = 2$ OR $\frac{8}{\boxed{4}} = 2$ 
dollar ($)	• A *unit* of money. 1 dollar = 100 *cents*	 5 dollars  10 dollars  20 dollars  50 dollars  100 dollars
double	• *Twice* as much. • *Multiplied* by two.	Double 4 is: 4 + 4 = 8 OR 4 × 2 = 8.
east	• A *compass direction*.	The sun rises in the east. 
edge	• Where two *faces of a solid* meet.	
eighth	• The position after *seventh*.	1st, 2nd, 3rd, 4th, 5th, 6th, 7th, **8th**.....
enlargement	• To reproduce and make bigger.	The original triangle has been enlarged to make it 2× bigger. 
equal (=)	• Exactly the same in value or size.	100 centimetres is equal to 1 metre: 100 cm = 1 m

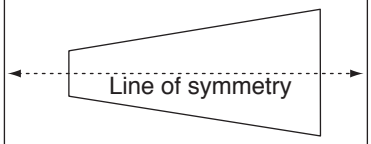
equation	• A mathematical sentence formed by placing an *equals* sign (=) between two *expressions*.	$6 \times 2 = 9 + 3$ is an equation.
equivalent fractions	• *Fractions* that represent the same number.	$\frac{2}{16}$ and $\frac{8}{64}$ are equivalent fractions. They both equal $\frac{1}{8}$.
estimate	• To make a close guess based on *rounding*.	$48 + 21 = ?$ By rounding to $50 + 20$, the estimation of the sum is 70.
evaluate	• To work out the value.	$21 \div x = 3$ Evaluate for x. $x = 7$
even numbers	• A *whole number* that can be *divided* by two. • Even numbers end with 0, 2, 4, 6 and 8.	134 is an even number. 134 ✔ 431 is not an even number. 431 ✘
event	• Possible *outcomes* resulting from a particular *experiment*.	Experiment: A die is rolled. Possible outcomes: Either a 5 or a 6 may result 
faces of a solid	• *Polygons* that join on their *edges* to form a *solid*.	A rectangular prism has 6 rectangular faces. 
factor	• A whole number that divides exactly into another number. See *divisibility tests*.	Because $1 \times 12 = 12$ $2 \times 6 = 12$ and $3 \times 4 = 12$ 1, 2, 3, 4, 6 and 12 are all factors of 12.
fifth	• The position after *fourth*.	1st, 2nd, 3rd, 4th, **5th**.....
first	• Placed before anything else.	The first athlete to cross the finish line won the gold medal.
flip	• To turn across a line so the result is a mirror image. See *reflection*.	

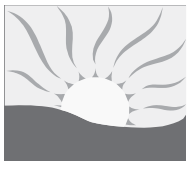
fortnight	• A *unit* of *time* equal to 2 whole *weeks* or 14 *days*.	
forwards	• In the *direction* of your front. • The usual way.	
fourth	• The position after *third*.	1st, 2nd, 3rd, **4th**.....
fraction	• Part of a group. • Part of a whole. • A number in the form $\frac{a}{b}$ $(b \neq 0)$ where a is the *numerator* and b is the *denominator*. • Fractions can be *proper fractions* or *improper fractions*.	5 out of a group of 8 dots are circled.  $\frac{5}{8}$ 1 half of a whole orange.  $\frac{1}{2}$
front view	• What you see of an object looking from a frontal perspective. • *Three-dimensional* objects have 3 views: front, top and side.	
gram (g)	• A *unit* of *measurement* for *mass equal* to 1000 *milligrams*.	250 g of butter. 
graph	• A diagram that shows a collection of *data*.	
greater than (>)	• A symbol showing which is bigger.	10 > 2 means that 10 is greater than 2.
grid reference	• A pair of letters and/or numbers that describe location within a grid. See also *coordinates*.	

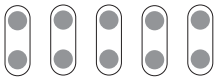
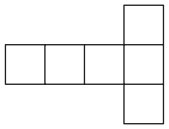
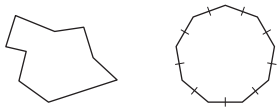
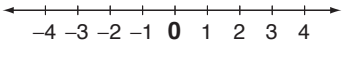
GST (money)	• An abbreviation for the Goods and Services Tax which is applied to certain purchases at a designated *rate*.	The standard GST in Australia is 10%. If the price of an item is $150 excluding GST then its GST inclusive price would be $165.
half	• (pl. **halves**) One of two *equal* parts expressed as a fraction.	One half is 1 of 2 parts of one whole pizza:  $\frac{1}{2}$
hectare (ha)	• A *unit* of *area equal* to 10 000 square metres (100 m × 100 m).	The field measures 2 hectares. 
hedron	• (pl. **hedra**) Face.	Polyhedron - A solid object that has polygons as faces. 
height	• The *vertical* distance from top to bottom.	
hepta	• Prefix meaning seven.	See *heptagon*
heptagon	• A *polygon* with 7 sides.	
hexa	• Prefix meaning six.	See *hexagon*
hexagon	• A *polygon* with 6 sides.	
hexagonal prism	• A *three dimensional* shape. Two identical *bases* are *hexagons*. Six *faces* are *rectangles*.	
hexagonal pyramid	• A *three dimensional* shape. The *base* is a *hexagon*. Six faces are *triangles*.	
horizontal line	• *Parallel* to the horizon.	

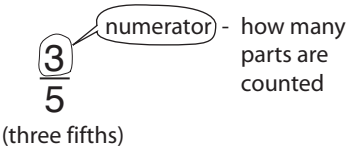
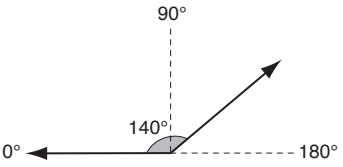
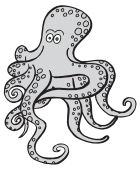
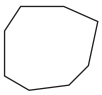
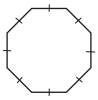
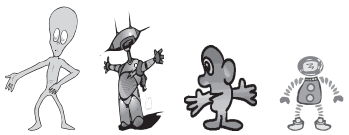
hour (h)	• A *unit* of *time equal* to 60 *minutes*.	One hour is the amount of time between 1 o'clock and 2 o'clock.
hundreds	• The *place value* between *tens* and *thousands*.	1825.763 has 8 hundreds. thousands: 1 · hundreds: 8 · tens: 2 · units: 5 · tenths: 7 · hundredths: 6 · thousandths: 3
hundredth	• One part out of 100 parts of one whole.	
hundredths	• The *place value* between *tenths* and *thousandths*.	1825.763 has 6 hundredths. thousands: 1 · hundreds: 8 · tens: 2 · units: 5 · tenths: 7 · hundredths: 6 · thousandths: 3
identity element (for addition)	Rule: The *sum* of any number and zero equals that number. • Zero is the identity element for *addition*.	$a + 0 = a$ *OR* $0 + a = a$ $3 + 0 = 3$ $0 + 3 = 3$
identity element (for multiplication)	Rule: The *product* of any number and one equals that number. • One is the identity element for addition.	$a \times 1 = a$ *OR* $1 \times a = a$ $3 \times 1 = 3$ $1 \times 3 = 3$
impossible	• Cannot happen.	 Christmas Day - 4th of April?
improper fraction	• Any *fraction* in which the *numerator* is greater than or equal to the *denominator*.	$\frac{9}{8}$ the numerator is 9 the denominator is 8 $9 \geq 8$ so $\frac{9}{8}$ is an improper fraction.
increase	• To make larger or grow in size.	8 must increase by 5 to get to 13.
interior angle	• An *angle* inside a *polygon*.	

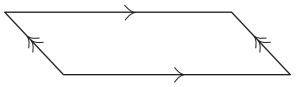
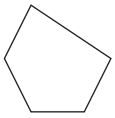
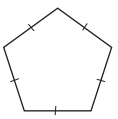
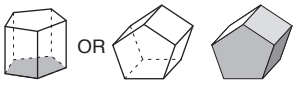
intersecting lines	• Lines that meet at a point.	
integer ($\mathbb{Z}$)	• Any *negative number*, zero or *positive number*.	$-3, -2, -1, 0, 1, 2, 3$ are integers. 3.5 and $5\frac{2}{3}$ are not integers.
inverse of an operation	• The *opposite* operation. Operations that undo each other.	+ is opposite – × is opposite ÷
kilogram (kg)	• A *unit* of *weight equal* to 1000 *grams*.	My father weighs 85 kg. 
kilometre (km)	• A *unit* of *distance equal* to 1000 *metres*.	The distance from Melbourne to Sydney is 900 km. 
largest to smallest	• Ranking in order from the biggest to the littlest.	 1st 2nd 3rd 4th
lateral faces	• The *vertical* surfaces on a solid.	A rectangular prism has 4 lateral faces. 
leap year	• A *year* with 366 *days* that falls every *fourth* year and includes the 29th of February as the extra day.	A leap year is divisible by 4. 2012 will be a leap year.
left	• The *direction* to the *west* of your body if you are facing *north*.	
length	• The *distance* from one end to the other. • How long a shape is.	

less than (<)	• A symbol showing which is smaller.	2 < 10 means that 2 is less than 10.
likely	• Will probably happen.	This spinner is likely to land on a Z. 
line of symmetry	• A line that divides a shape so that one *side* is a mirror image of the other. Both sides match exactly when folded.	
litre (L)	• A *unit* of *capacity* equal to 1000 *millilitres*.	1 litre of milk. 
location	• The exact place, where something is situated.	
longest	• Having the biggest *length*.	The reticulated python of SE Asia regularly exceeds 6.25 m. The record length is 10 m for a specimen shot in Celebes, Indonesia in 1912. 
magic square	• A square grid filled with numbers • The *sum* of the numbers in every *row*, *column* and *diagonal* is the same.	4 9 2 3 5 7 8 1 6 Rows: 4 + 9 + 2 = 3 + 5 + 7 = 8 + 1 + 6 = 15 Columns: 4 + 3 + 8 = 9 + 5 + 1 = 2 + 7 + 6 = 15 Diagonals: 4 + 5 + 6 = 2 + 5 + 8 = 15
map	• A diagram of a region showing its position in the world.	South Pacific 

mass	• The amount of matter in an object.	The mass of 3 oranges is about 1 kg.
maximum	• The highest value.	The maximum speed in a residential area is 50 kilometres per hour. 
metre (m)	• A *unit* of *length equal* to 100 *centimetres*.	Track distances are measured in metres.
millilitre (mL)	• A *unit* of *capacity*. • 1000 millilitres is *equal* to 1 *litre*.	Medicines are measured in mL.
millimetre (mm)	• A *unit* of *length*. • 1000 millimetres is *equal* to 1 *metre*.	Timber length is measured in millimetres.
million	• A thousand thousands.	1 000 000
minimum	• The lowest value.	The minimum temperature reached yesterday was 25°C.
minus (–)	• Another word for *subtract*. To take away.	\$20 minus \$5 is \$15. 20 – 5 = 15
minute (min)	• A *unit* of *time equal* to 60 *seconds*.	One minute has 60 seconds.
mixed number	• The *sum* of a *whole number* and a *fraction* less than one.	$3\frac{5}{7}$ is a mixed number.
month	• A *unit* of *time equal* to 28, 29, 30 or 31 *days*.	There are 12 months in a year starting with January. 
morning	• The early part of the *day* ending at 12 noon.	
multiple	• A multiple of a *whole number* is the *product* of that number with any non-zero whole number.	The multiples of 2 are 2, 4, 6, 8, 10, ... 2 × 1 = 2 2 × 2 = 4 2 × 3 = 6 etc.

multiplication	• An *operation* where a number is added to itself a number of times.	$2+2+2+2+2=10$ or $5\times2=10$ 
multiply ($\times$)	• To find the *total* of a number of identical groups.	Three lots of 2 cows is 6. $3\times2=6$ or $2+2+2=6$ 
negative number	• A number that is less than zero.	$-1, -2, -3, -4, -5, ...$ are negative numbers.
net	• The pattern you cut out to form a *3D* shape.	Net of a cube. 
ninth	• The *position* after *eighth*.	1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, **9th**.....
nona	• Prefix meaning nine.	See *nonagon*
nonagon	• A *polygon* with 9 sides.	 Nonagon Regular nonagon
north	• A *compass direction*.	 N
northeast	• A *compass direction*.	 NE
northwest	• A *compass direction*.	 NW
number line	• An evenly marked *line* that shows position of *numbers*.	 $-4\ -3\ -2\ -1\ \mathbf{0}\ 1\ 2\ 3\ 4$
number sentence	• A sentence using numbers and *operations*.	"Mary had four cats and two dogs. How many pets did she have?" Number sentence: $4+2=6$
numeral	• A symbol used to represent a number.	Arabic numerals: 1, 2, 3, 4, 5 Roman numerals: I, II, III, IV, V

numerator	• The number above the fraction bar in a *fraction*.	 - how many parts are counted (three fifths)
oblique line	• A line at an *angle* to the horizon.	
obtuse angle	• An *angle* measuring greater than 90° and less than 180°.	
octa	• Prefix meaning eight.	An octopus has 8 legs. 
octagon	• A *polygon* with 8 sides.	 Octagon  Regular octagon
odd numbers	• A *whole number* that is not *divisible* by 2.	Odd numbers end with 1, 3, 5, 7 and 9.
of	• Means to *multiply*.	Whenever you say or read 'of' then multiply!
once	• On one occasion.	Just this time!
operation	• A mathematical process performed according to certain rules.	There are four basic operations in arithmetic: addition 3 + 12 subtraction 3 – 1 multiplication 1 × 5 division 6 ÷ 3
opposite	• The equivalent position but on the other side.	The opposite: left/right +4/–4
order	• Placing a group in a special arrangement.	The aliens are arranged in order of height. 

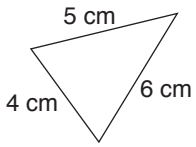
order of operations	• The order of doing *operations*. 1) *Simplify* inside all *brackets*. 2) Calculate × and ÷ from left to right. 3) Calculate + and − from left to right.	Calculate $4 + 3 \times (6 - 2)$ by 1) $= 4 + 3 \times 4$ 2) $= 4 + 12$ 3) $= 16$
ordinal numbers	• A *whole number* that shows position.	1st, 2nd, 3rd, 4th, 5th..... are ordinal numbers.
orientation	• Position relative to *direction*.	The tornado is coming from the west. 
outcome	• Result.	The outcome (result) of 2×4 is 8
pair	• Two together.	
parallelogram	• A special *quadrilateral*. *Opposite* sides are *parallel lines*. *Opposite* sides are equal in length.	
pattern	• Numbers or objects that are arranged following a rule.	
penta	• Prefix meaning five.	See *pentagon*
pentagon	• A *polygon* with 5 sides.	 Pentagon  Regular pentagon
pentagonal prism	• A *three dimensional* shape. Two identical, *parallel bases* are *pentagons*. Five *faces* are *rectangles*.	
pentagonal pyramid	• A *three dimensional* shape. *Base* is a *pentagon*. Five *faces* are *triangles*.	
per	• For each. • Can be written as a forward slash (/).	5 kilometres per hour or 5 km/h means 5 km travelled for each hour.
percentage	• Out of 100 • 'Per' means for each, 'cent' means 100.	$59\% = \frac{59}{100} = 0.59$

perimeter

• The distance around the outside of a shape.

Add the length of all sides.

Perimeter = 4 + 5 + 6 = 15 cm

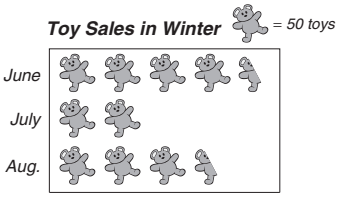


perspective

• The appearance of objects affected by size and *position*.

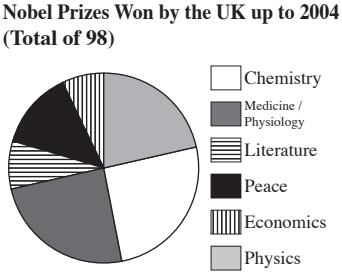
pictograph

• A *graph* that uses pictures or symbols to represent *data*.



pie chart

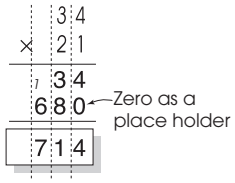
• A *graph* that represents *data* as a *sector* of a *circle*.



place holder

• Minds a spot in a number.

Zeros are used as place holders in long multiplication algorithms.



place value

• Value according to position in a number.

954
5 is in the tens place
5 has a value of 50

millions	*hundreds of thousands*	*tens of thousands*	*thousands*	*hundreds*	*tens*	*units*	• *decimal point*	*tenths*	*hundredths*	*thousandths*
1 000 000	*100 000*	*10 000*	*1000*	*100*	*10*	*1*		$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

plane

• A flat surface.

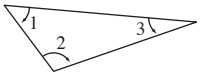
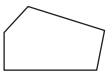
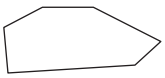
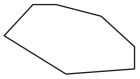
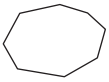
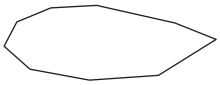
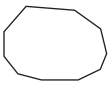
plus (+)

• Another word for *addition*. To add.

2 cows plus 3 cows gives you 5 cows.

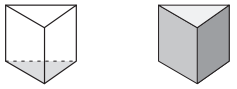
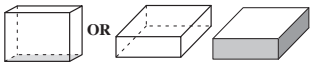
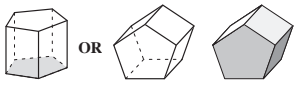
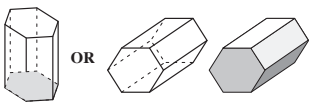
2 + 3 = 5

pm **(p**ost **m**eridiem**)**	• The *time* from midday to midnight.	Every night Jimmy starts reading at 9 pm. 
polygon	• A closed *two-dimensional* shape for which all sides are line segments. 3 or more *sides* and *angles*.	'Poly' means many 'gon' means angle. triangle (3 angles)

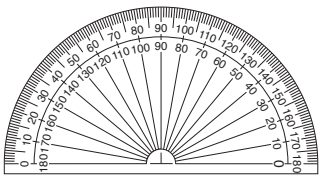
polygon (many angles)	**regular polygon** (all sides and all angles are equal)	Number of Sides	Number of Interior angles
Triangle  3 angles	Equilateral triangle 	3	3
Quadrilateral  4 angles	Square 	4	4
Pentagon  5 angles	Regular pentagon 	5	5
Hexagon  6 angles	Regular hexagon 	6	6
Heptagon  7 angles	Regular heptagon 	7	7
Octagon  8 angles	Regular octagon 	8	8
Nonagon  9 angles	Regular nonagon 	9	9
Decagon  10 angles	Regular decagon 	10	10

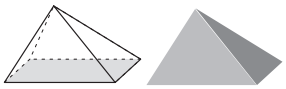
polyhedron	• A *three dimensional* shape. Four or more *faces*. Described by their *faces*, *edges* and *vertices*.	'Poly' means many 'hedron' means faces. tetrahedron (4 faces)
position	• Where something is in relation to things around it.	In, on, under, behind, next to.
positive numbers	• A number that is *greater than* zero.	+1, +2, +3, +4, +5, ... are positive numbers.
possible	• Can happen.	 landing on a head

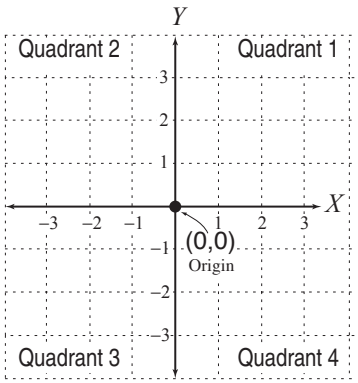
power	• An expression, such as 4^3, in which the *base* (4) is multiplied by itself a number of times equal to the *exponent* (3).	4^3 or 4 to the power of 3 is $4 \times 4 \times 4 = 64$
powers of ten	• 1 followed by a certain number of zeros.	10, 100, 1000, 10 000..... are powers of 10
previous	• The one before.	If the current year is 2014, the previous year is 2013.
prime number	• A *whole number* that has exactly two *factors*, 1 and itself. • 1 is not a prime number.	59 is a prime number as its only factors are 1 and 59. The prime numbers between 0 and 100 are: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89 and 97.
prism	• A *three dimensional* shape. Two *parallel bases* are the same.	

prism	Properties	Number of			Examples
		Faces	Edges	Vertices	
Triangular Prism	Bases are triangles Lateral faces are rectangles	5	9	6	
Square Prism	Bases are squares Lateral faces are rectangles	6	12	8	
Rectangular Prism	Bases are rectangles Lateral faces are rectangles	6	12	8	
Pentagonal Prism	Bases are pentagons Lateral faces are rectangles	7	15	10	
Hexagonal Prism	Bases are hexagons Lateral faces are rectangles	8	18	12	

product	• The result when two or more numbers are multiplied.	The product of 4 and 5 is 20: $4 \times 5 = 5 \times 4 = 20$
profit	• What is gained, less any expenses. Profit = Revenue − Expense.	Revenue from a business activity is $20. If the expenses are $15 then the profit would be $5.

proper fraction	• Any *fraction* in which the *numerator* is *less than* the *denominator*.	$\frac{5}{8}$ the numerator is 5 the denominator is 8 5 < 8 so $\frac{5}{8}$ is a proper fraction.
protractor	• A semi-circular tool used to measure *degrees*. There are 180° on a protractor.	
pyramid	• A *three dimensional* shape. One *base* is a *polygon*. All other *faces* are *triangles* that meet at one point called *vertex*. A pyramid is named for the shape of its base.	

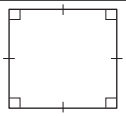
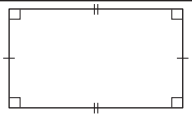
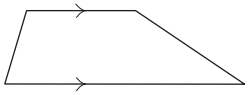
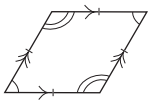
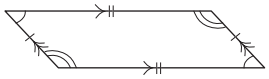
pyramid	Properties	Number of			Examples
		Faces	Edges	Vertices	
Triangular Pyramid	Base is a triangle Lateral faces are triangles	4	6	4	
Square Pyramid	Base is a square Lateral faces are triangles	5	8	5	
Rectangular Pyramid	Base is a rectangle Lateral faces are triangles	5	8	5	
Pentagonal Pyramid	Base is a pentagon Lateral faces are triangles	6	10	6	
Hexagonal Pyramid	Base is a hexagon Lateral faces are triangles	7	12	7	

quadrant	• Any *quarter* of a *plane* divided by an *x-axis* and a *y-axis*.	

quadrilateral

• A *polygon* with 4 *sides*.

'Quad' means 4
'lateral' means side.

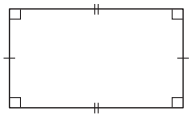
quadrilateral	Sides	Interior angles	Diagram
Square	4 sides of equal length	4 right angles	
Rectangle	Opposite sides of equal length	4 right angles	
Trapezium	2 opposite sides parallel		
Rhombus	4 sides of equal length and opposite sides parallel	Opposite angles equal	
Parallelogram	Opposite sides of equal length and opposite sides parallel	Opposite angles equal	

quarter

• One of four equal parts of a group or object
• Written as the *fraction* $\frac{1}{4}$.

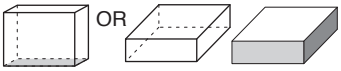
rectangle

• A special *parallelogram*.
Four *right angles*.



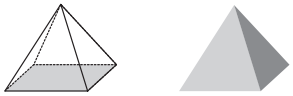
rectangular prism

• A *three dimensional* shape.
Six rectangular faces.



rectangular pyramid

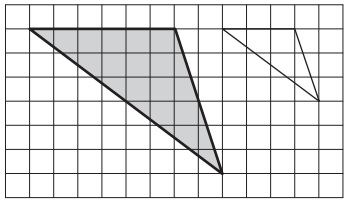
• A *three dimensional* shape.
One *rectangular base*.
All the other *faces* are *triangles*.



reduction

• Make smaller or decrease.

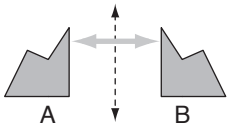
The original triangle has been reduced to make it 2× smaller.

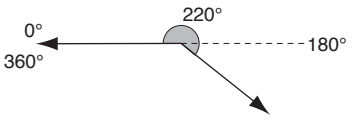
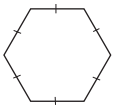
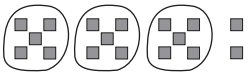
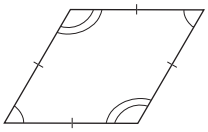
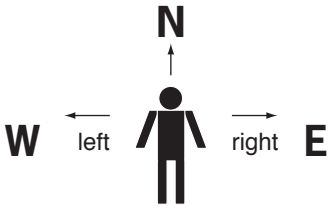
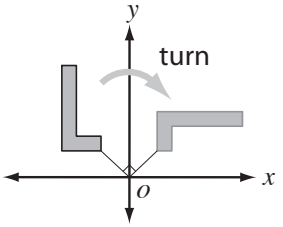


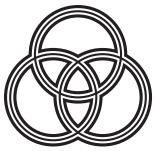
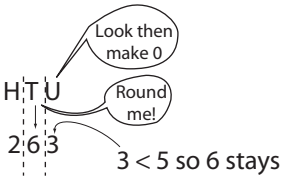
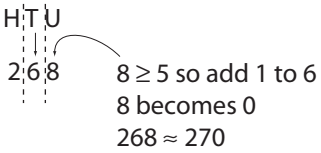
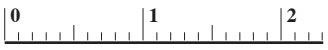
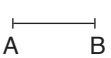
reflection

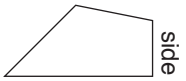
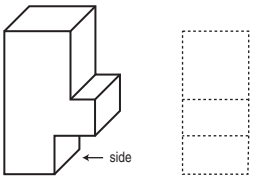
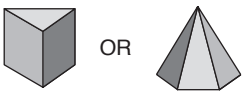
• A movement that *flips* a figure across a line so that the figure is in the mirror image *position*.

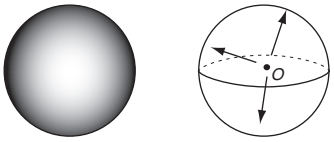
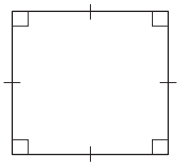
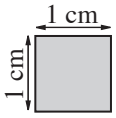
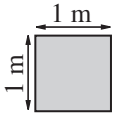
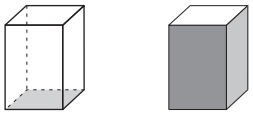
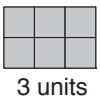
Shape B is a reflection of shape A.



reflex angle	• An *angle* measuring greater than 180° and less than 360°.	
regular shape	• A shape with all *side*s and all *angles equal*.	A regular hexagon has 6 equal sides and 6 equal angles.  Regular hexagon
remainder	• The amount left over when one number cannot be *divided* exactly by another.	17 ÷ 5 = 3 with 2 remainder. 
reversible	• Able to be turned in the *opposite* way.	The process of freezing the water is reversible: water ⟶ ice ⟶ water
rhombus	• A special *parallelogram*. Four *equal sides*. *Opposite angles equal*.	
right	• The *direction* to the *east* of your body if you are facing *north*.	
right angle	• An *angle* measuring exactly 90°. It is marked with a corner.	
Roman numerals	• Numeral system invented by the ancient Romans.	I = 1 V = 5 X = 10 L = 50 C = 100 D = 500 M = 1000
rotation	• A movement that turns a shape about a fixed *point* (the centre of rotation) by a given *angle* (the angle of rotation).	The centre of rotation is the origin *O* and the angle of rotation is 90°. 

rotational symmetry	• A shape has rotational symmetry if a *rotation* of 180° or less produces an image that fits exactly on the original shape.	This shape has rotational symmetry because after a rotation of 120° it looks identical to the original. 
round	• To *approximate* a number to a given *place value*. Look at the next *digit* after the given place value you are rounding to. If this digit is less than 5, keep the digit in the given place value the same. If this digit is greater than or equal to 5, add 1 to the digit in the given place value. Then make the digit you were looking at zero.	Round 263 to the nearest 10:  Round 268 to the nearest 10: 
row	• A *horizontal* line of *data* in a *table*.	Netball: Aust v NZ → NZ / Quarters | Shooting chances | Actual goals | Success % 1st | 9 | 9 | 100 2nd | 14 | 13 | 92.85 3rd | 23 | 20 | 86.95 4th | 18 | 17 | 94.44
scale	• A key on a *scale drawing/map* that tells how the drawing's *dimensions* and life size dimensions are related. • Set of marks on a line.	If the scale on a map is 1 cm : 10 m then every cm on the drawing represents 10 m in real life. 
scale drawing	• Changing the size of an object but not the shape.	A life size staple.  The staple scaled by 50%. 
second	• The *position* after *first*.	1st, **2nd**.....
second (s)	• A very short unit of *time*.	There are 60 seconds in 1 minute.
segment	• Two *points* and all points on the *line* between the two points. Part of a line.	Segment $\overline{AB}$ 
seventh	• The *position* after *sixth*.	1st, 2nd, 3rd, 4th, 5th, 6th, **7th**.....

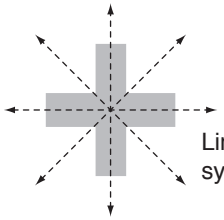
shortest	• Having the smallest *length*.	Sam is the shortest in the class.
side	• One of the lines that form a *polygon*.	
side view	• What you see of an object looking from a side *perspective*. • *Three-dimensional* objects have 3 views: front, top and side.	
simplest form of a fraction	• A *fraction* is in its simplest form when the only number that divides into both the *numerator* and the *denominator* is 1.	The simplest form of $\frac{6}{9}$ is $\frac{2}{3}$. (Divide 6 and 9 by 3. 2 and 3 can only be divided by 1 so they can not be reduced.)
simplify	• To reduce to the *simplest form*.	To simplify the ratio 14:6 divide both sides by 2. 14:6 simplified is 7:3.
sixth	• The *position* after *fifth*.	1st, 2nd, 3rd, 4th, 5th, **6th**.....
size	• How big an object is.	The size of the wave is 2 metres. 
slide	• Move without changing direction.	
smallest to largest	• Ranking in order from the littlest to the biggest.	
solid	• A *three dimensional* shape that encloses a part of space.	
south	• A *compass direction*.	
southeast	• A *compass direction*.	
southwest	• A *compass direction*.	

sphere	• A set of *points* in space of equal distance from the central point.	
square	• A *rectangle* with all *sides* of equal length.	
square number	• A number that results from multiplying another number by itself.	$4 \times 4 = 16$ 16 is a square number.
square centimetre	• A *unit* of *area* equal to 1 *centimetre* by 1 centimetre.	
square metre	• A *unit* of *area* equal to 1 *metre* by 1 metre.	
square prism	• A *three dimensional* shape. Two identical square *bases*. All the other faces *rectangles*.	
square pyramid	• A *three dimensional* shape. One square *base*. All the other faces are *triangles*.	
square units	• A *unit* of *area* equal to the area of a square with side lengths of 1 unit.	$\boldsymbol{A} = lw$ $\boldsymbol{A} = 3 \times 2$ $\boldsymbol{A} = 6$  2 units 3 units Area = 6 square units
squared	• Multiplying a number by itself. A number raised to the second *power*.	4 squared written as 4^2: $4^2 = 4 \times 4 = 16$
straight angle	• An *angle* measuring 180°.	
subtract	• To take away or *minus*.	If you subtract 10 from 15 you are left with 5: $15 - 10 = 5$
sum	• The result when two or more numbers are added.	The sum of 20 and 6 is 26: $20 + 6 = 6 + 20 = 26$

symmetry

• A shape has a *line of symmetry* when a line can be drawn through the shape so that one side of the shape is the mirror image of the other.

There are 3 kinds of symmetry:
horizontal symmetry
vertical symmetry
rotational symmetry



table

• *Data* organised in *columns* and *rows*.

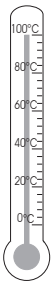
Netball: Aust v NZ

Quarters \ NZ	Shooting chances	Actual goals	Success %
1st	9	9	100
2nd	14	13	92.85
3rd	23	20	86.95
4th	18	17	94.44

temperature

• How hot or cold a thing is.
• Temperature is measured in *degrees* Celsius (°C) with a *thermometer*.

100°C is the temperature at which water boils.



tens

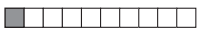
• The *place value* between the *units* and *hundreds*.

1825.763 has 2 tens.

thousands	hundreds	tens	units	tenths	hundredths	thousandths
1	8	2	5	7	6	3

tenth

• One part out of 10 parts of one whole.



tenths

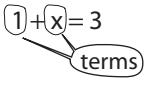
• The *place value* after the *decimal point* between the *units* and *hundredths*.

1825.763 has 7 tenths.

thousands	hundreds	tens	units	tenths	hundredths	thousandths
1	8	2	5	7	6	3

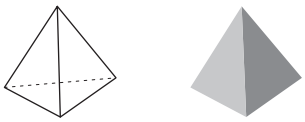
term

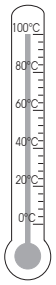
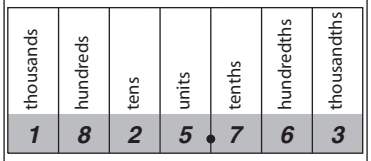
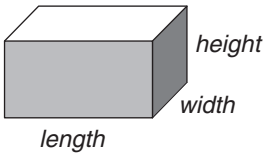
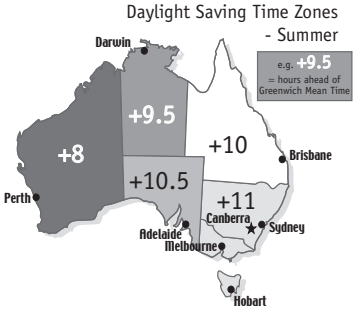
• A number or unknown amount.

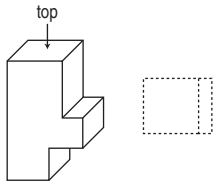
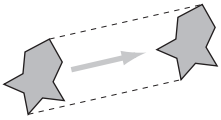
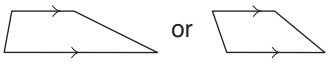
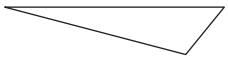
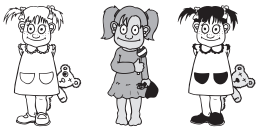


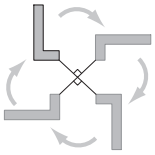
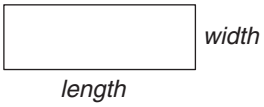
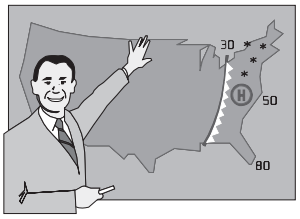
tetrahedron

• A *three dimensional*, *regular* shape.
The *base* is an *equilateral triangle*.
Three faces are *equilateral triangles*.



thermometer	• An instrument used to measure *temperature*.	
third	• The *position* after *second*.	1st, 2nd, **3rd**.....
thousands	• The *place value* between *hundreds* and tens of thousands.	1825.763 has 1 thousand. 
thousandth	• One part out of 1000 parts of one whole.	One gram is a thousandth of a kilogram.
thousandths	• The *place value* after *hundredths*.	1825.763 has 3 thousandths. 
three dimensional (3D)	• Able to be measured in three directions namely *length*, *width* and *height*.	
time	• The continuum from past to present to future.	The time is 9:25 am.
time zone	• Regions of different times around the world. Based on Greenwich Mean Time (GMT), each 15° of longitude away from Greenwich, England represents 1 hour of time.	NSW time is 3 hours ahead of WA time during daylight saving. 
tonne (t)	• A *unit* of *measurement* for *mass equal* to 1000 *kilograms*.	The humpback whale can weigh 58 tonnes.

top view	• What you see of an object looking from a top *perspective*. • *Three-dimensional* objects have 3 views: front, top and side.	
total	• The whole lot. • The *sum* of two or more quantities.	The total of 2 and 7 and 3 is 12: 2 + 7 + 3 = 12
transformation	• A movement of a shape in a *coordinate plane*. Types of transformations are *translations*, *reflections* and *rotations*.	See *translation*, *reflection* and *rotation*
translation	• A movement that *slides* a shape without lifting or changing *direction*. The shape is unchanged.	
trapezium	• A *quadrilateral*. Two *opposite sides* are *parallel*.	
tri	• Prefix meaning three.	A tricycle has 3 wheels.
trial and error	• To try repeatedly and learn from mistakes.	This sum can be solved using trial and error. TWO + TWO FOUR
triangle	• A *polygon* with 3 straight *sides*.	
triangular prism	• A *three dimensional* shape. Two identical triangular *bases*. Three rectangular faces.	
triangular pyramid	• A *three dimensional* shape. One triangular *base*. The other three faces are *triangles*.	
triple	• Multiply by three.	Children × 3 = triplets! 

turn	• To *rotate* about a point.	
twenty-four hour time	• Time told in 24 hour lots using 4 *digits*.	Nine thirty is 0930 or 09:30 Two thirty is 1430 or 14:30
twice	• Two times.	Sam has $5 and Jo has $10. Jo has twice as much as Sam.
two dimensional (2D)	• Able to be measured in 2 *directions* (*length* and *width*).	
uncertain	• Not sure it will happen.	 It will rain tomorrow?
unit	• One.	The unit of measurement for length is metre (m).
units	• The *place value* before the decimal point between the *tens* and *tenths*.	1825.763 has 5 units.

thousands	hundreds	tens	units	tenths	hundredths	thousandths
1	8	2	5 .	7	6	3

units of measurement

• Standard amount or quantity.

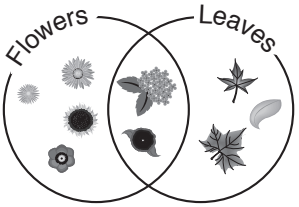
unit	Abbreviation	Examples	Used for measuring.....
• millimetre	mm	thickness of a plank of wood	LENGTH distance - length, width, height, diameter, perimeter
• centimetre	cm	width of a photo frame	
• metre	m	length of a lap of a stadium	
• kilometre	km	distance between two cities	
• gram	g	weight of an egg	MASS weight - people, animals, objects
• kilogram	kg	weight of a bag of apples	
• tonne	t	weight of an elephant	
• millilitre	mL	liquid in a glass	CAPACITY quantity - liquids
• litre	L	liquid in a bucket	
• megalitre	ML	liquid in a water tower	
• square centimetre	cm^2	area of a Maths book cover	AREA surface - objects
• square metre	m^2	area of basketball court	

unlikely

• Probably will not happen.

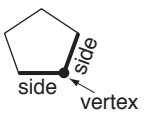
Venn diagram

• A diagram using shapes to show the relationship between sets of objects.

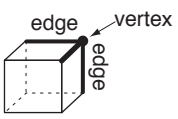


vertex

• (pl. **vertices**) The point at which two *sides* (of a *polygon*) or three *edges* (of a *solid*) meet.



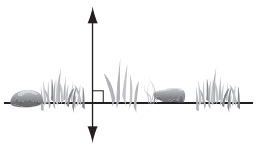
Polygon

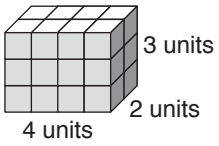
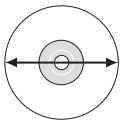
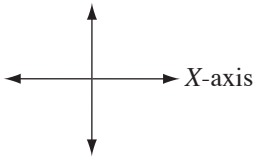
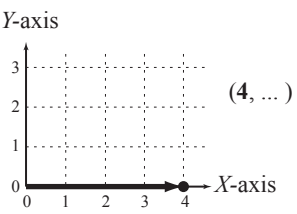


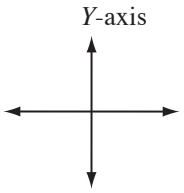
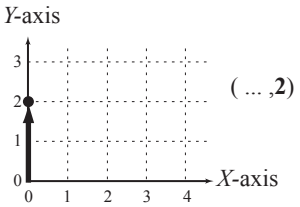
Solid

vertical line

• A line at right angles to the horizon.



volume	• The amount of space that a *solid* occupies. Volume is measured in cubic units. e.g. cubic centimetres (cm^3) or cubic metres (m^3).	Volume of a rectangular prism is calculated by multiplying length by width by height: $V = lwh$ $V = 4 \times 2 \times 3$ $V = 24$ Volume = 24 cubic units 
week	• A *unit* of *time* equal to 7 days; Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.	Roger was on holidays for one week (seven days).
weight	• The heaviness of an object. Equals the *mass* of an object times the force of gravity. This means that weight changes with any change in gravity.	A 3 kg brick weighs: 3 kg on Earth, about 0.5 kg on the moon, 0 kg in space.
west	• A *compass direction*.	The sun sets in the west. 
whole numbers	• The *counting numbers* from zero to infinity.	0, 1, 2, 3, 4, 5, ... are whole numbers.
width	• How wide an object is. The sideways *dimension*.	The width of the CD is 12 cm.  12 cm 
***x*-axis**	• The *horizontal* axis.	
***x*-coordinate**	• The *first* number in an ordered pair. The position of a point along the *X*-axis.	

y-axis	• The *vertical* axis.	
y-coordinate	• The *second* number in an ordered pair. The position of a point along the *Y*-axis.	
year	• A *unit* of *time* equal to 365 days. (366 in a leap year).	1st of January to the 31st of December.