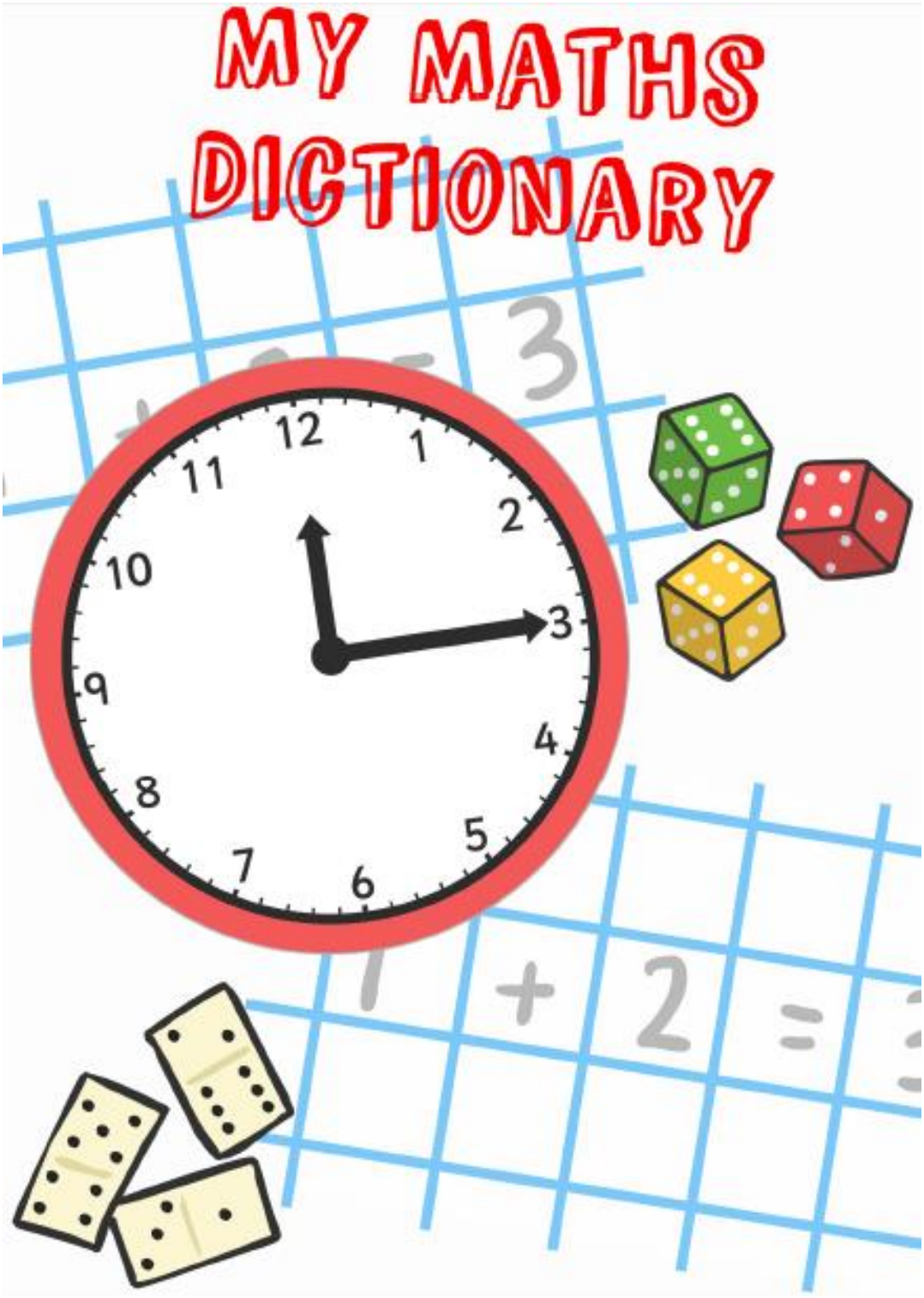
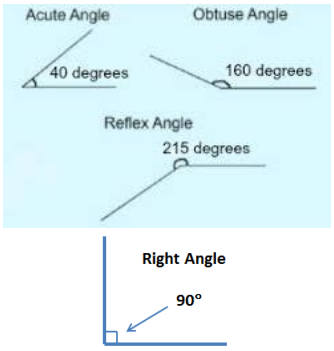
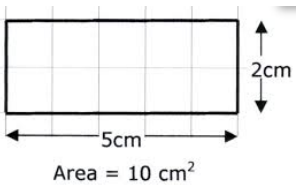
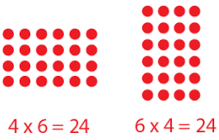
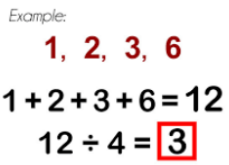
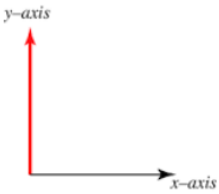
Westerton Primary School

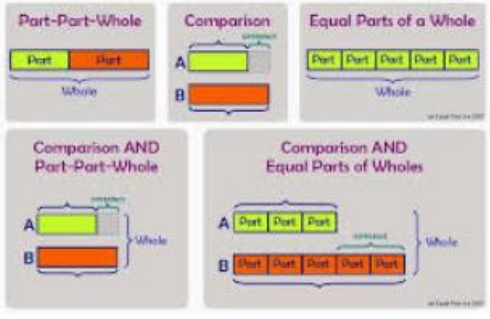


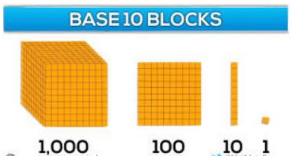
Parent Help Guide

A

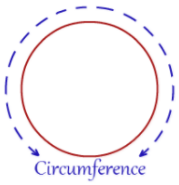
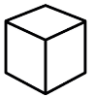
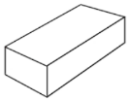
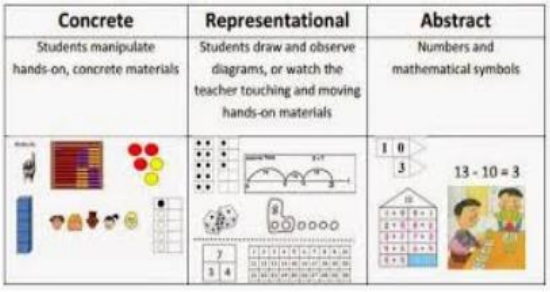
Angles	Angles are formed where two straight lines meet. Angles of different sizes have different names: **Acute**: This is a type of angle less than 90°. **Obtuse**: This is an angle larger than 90°. **Right angle**: This angle is exactly 90°. **Reflex angle**: An angle larger than 180° but smaller than 360°.	
Area	The amount of surface in a shape. Area can be measured in cm or cm².	
Arrays	A set that shows equal groups in rows and columns.	
Average	You can find the average of a set of numbers by adding them altogether and dividing the total by how many numbers there are. The average is called the mean.	
Axis	An axis is an imaginary line through the middle of any solid shape. An axis is also one of the horizontal or vertical lines on a graph. The axes (plural of axis) are used to measure the position of points on the graph.	

B

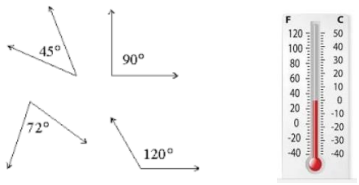
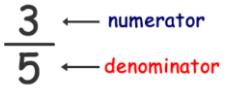
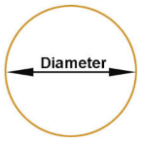
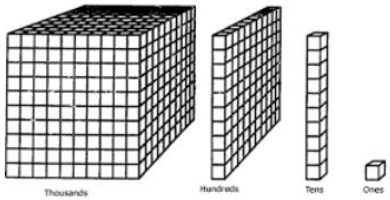
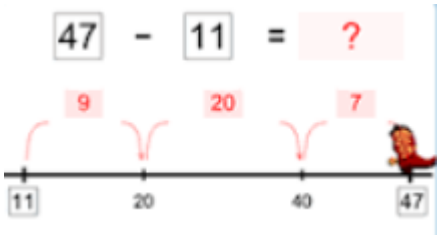
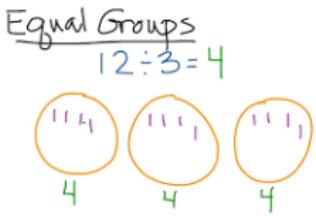
Bar Model	The bar model method is pictorial and develops from children handling actual objects to drawing pictures and then drawing boxes, each of which represents an individual unit to represent objects. Eventually, they will no longer need to draw all the boxes; instead, they just draw one long bar and label it with a number.	

Base 10	Base 10 refers to the numbering system in common use that uses decimal numbers. Base 10 is also called the decimal system or denary system.	
Brackets	These are included in many maths questions and look like these ( ). You must complete the sum inside the brackets first.	(4 x 3) + 10 = 22

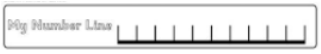
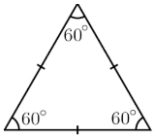
C

Calculate	This means 'to work something out'.	
Capacity	The capacity of a container is the amount of water or other liquid that it will hold.	
Century	This means 100. A century of time is 100 years.	
Circumference	The circumference is the edge of a shape, especially a curved shape such as a circle. The circumference is also the distance all the way around the edge of a shape.	
Consecutive	Consecutive numbers follow each other in an unbroken sequence.	
Cube	A symmetrical 3D shape made up of 6 equal squares.	
Cuboid	A 3D shape made up of 6 rectangular faces.	
Cylinder	A shape that has a pair of parallel sides and oval/circular bases.	
CPA	**Concrete**, **pictorial**, **abstract**(CPA) is a highly effective approach to teaching that develops a deep and sustainable understanding of maths in pupils. 	

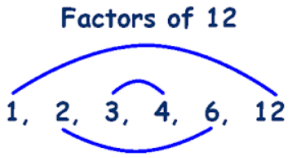
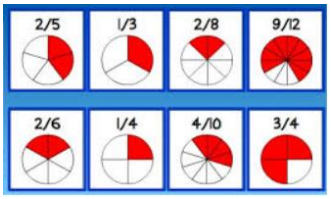
D

Decade	This means 10. A decade of time is 10 years.	
Decimal	A decimal is used for a value less than 1. You use a decimal point to separate the whole number from the decimal part.	
Degree	A unit used for measuring angles and temperatures.	
Denominator	The bottom number of a fraction.	
Diameter	The line that passes through a circle, from edge to edge, through the centre. It is also twice the radius measurement.	
Dienes	Wooden or plastic cubes, rods and flats used to support children in learning place value. Each small cube represents one unit, a rod represents 10, a flat represents 100 and a large cube represents 1000.	
Difference	In order to find the difference between two numbers you subtract the smaller number from the larger or start at the smaller number and find what you need to add on to it to reach the larger number.	
Digit	A digit is any one of the following 0,1,2,3,4,5,6,7,8,9. The number 143 is made up of the digits 1,4 and 3.	
Division	Splitting a number into equal sets or groups.	

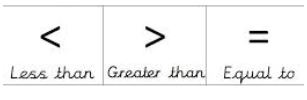
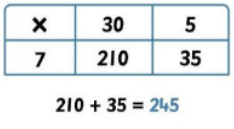
E

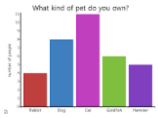
Empty number line	A number line with no numbers or markers, essentially the empty number line is a visual representation for recording and sharing thinking strategies during the process of mental computation.	
Equation	Usually seen in Algebra. An equation will always have an equals sign. It is showing that one thing is the same as another.	$4x + 3 = 7$ $4x = 4$ $x = 1$
Equilateral Triangle	All three sides of the triangle are equal. The angles are also equal. Each angle is 60^o.	
Estimate	To make an approximation (guess).	
Even	This can relate to the even numbers 2, 4, 6, 8 …. Or having an even chance in probability. This means you have the same chance as one thing happening than the other.	
Expression	Symbols that represent a number or quantity	**5(x + 4)**

F

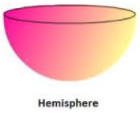
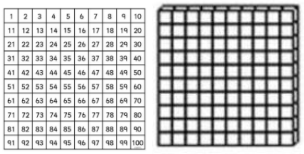
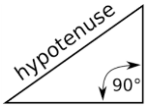
Factor	A factor is a number you can divide into another number without leaving a remainder. e.g. 2 divides into 8 four times with no remainder, so 2 is a factor of 8.	
Fraction	A fraction is a number that is less than a whole number. Half is a fraction. A fraction has numerator and a denominator.	
Formula	A rule defined by symbols e.g. The formula for the area of a rectangle = l x w (Length x Width)	

G

Greater than	› Means greater than or more than	
Grid method multiplication	The grid method is a way of teaching multiplication. Pupils move on from an array to the grid method. It is also used for teaching times tables. You need an empty number square.	

Graph	A graph is a diagram showing the relation between variable quantities, typically of two variables, each measured along one of a pair of axes at right angles.	

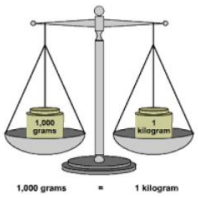
H

Hemisphere	A hemisphere is half a sphere. It is made by cutting through the centre of a sphere.	
Heptagon	A 7-sided shape.	
Hexagon	A 6-sided shape.	
Hundred square	The 100 square can be used to find lots of number patterns. The children can investigate how even and odd numbers are situated in the square, how multiples of different numbers are arranged, and where square and triangular numbers are found.	
Hypotenuse	The longest side on a right-angled triangle, opposite the right angle.	

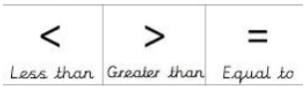
I

Integer	An integer is a whole number (not a fraction) that can be positive, negative, or zero.	
Inverse operation	To solve a calculation where there is a missing part, we can use an inverse operation.	**Example:** **150 + ____= 300** **Inverse operation:** **300 – 150 = _____**
Isosceles triangle	A triangle that has two equal sides. Two of the angles in an isosceles triangle are always equal.	

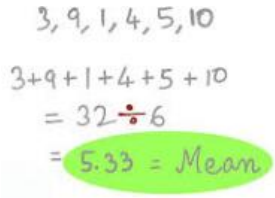
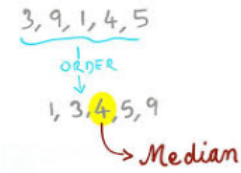
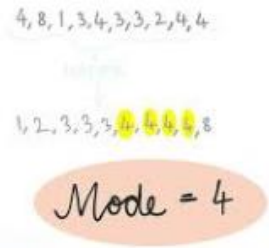
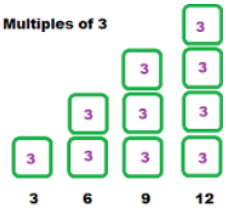
K

Kilogram	A kilogram is a measure of mass in the metric system. Kilograms are measures of weight. There are a thousand grams in one kilogram.	
Kilometre	A kilometre is 1000metres (m). It is a measure of distance in the metric system.	

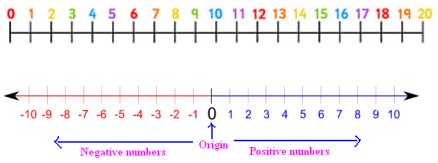
L

Less than	< Means less than	

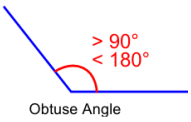
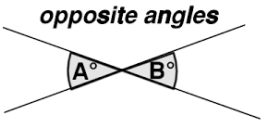
M

Mean	The mean is a type of average. To find this average, you need to add up all your results and then divide by the total number of results.	
Median	When data is arranges in size order, the middle result is the median.	
Mode	The mode is the most common result in data collected.	
Multiple	A multiple is a larger number than can be divided by smaller numbers without a remainder.	

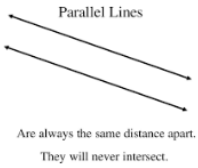
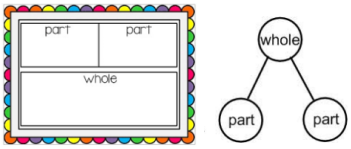
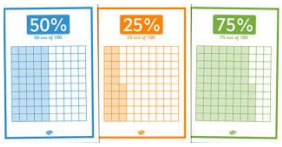
N

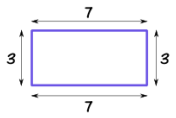
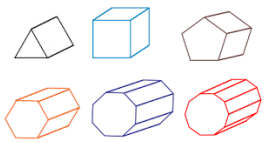
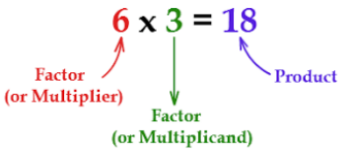
Numerator	The top number of a fraction.	
Number line	A number line is a straight, horizontal line with numbers placed at even increments along the length. It's not a ruler, so the space between each number doesn't matter, but the numbers included on the line determine how it's meant to be used.	

O

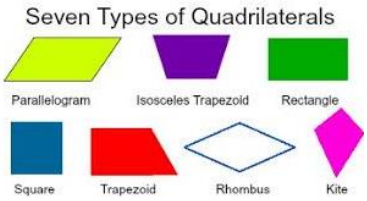
Obtuse angles	An angle that is greater than 90° but less than 180°.	
Opposite angles	Opposite angles are angles that are opposite one another when two lines cross. Another name for opposite angles is vertical angles because the two angles share the same vertex or corner.	

P

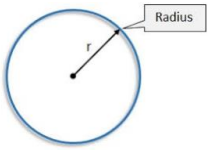
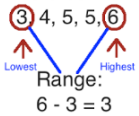
Parallel	Parallel lines run side by side, having the same distance continuously between them. Parallel lines never meet.	
Part/Part/Whole	Part-part-whole thinking refers to how numbers can be split into parts. It allows students to see the relationship between a number and its component parts. As a result, students generalise the connections between addition and subtraction.	
Percentages	'Per cent' means out of 100. Percentages are written using %. 60% is the same as 60/100.	

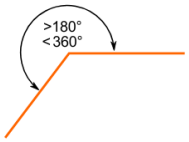
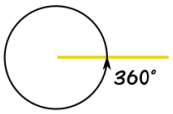
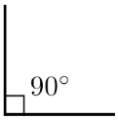
Perimeter	The distance area around the outside of a shape.	
Prime Numbers	A number that can be divided ONLY by 1 and itself. Prime numbers to 50 are: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47.	
Prism	A 3D shape with 2 identical ends and has the same cross-section all along its length.	
Probability	The chance of something happening. This can be written as a fraction, decimal or percentage.	
Product	The result when two numbers are multiplied together.	

Q

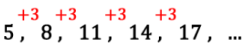
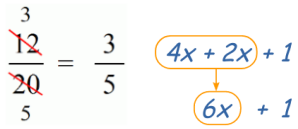
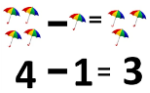
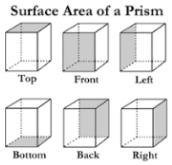
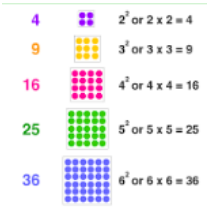
Quadrilateral	A word used to describe a 2D shape that is 4 sided.	

R

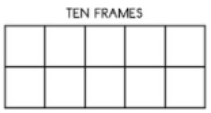
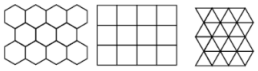
Radius	A radius is a line inside a circle. It goes from the centre to the edge of the circle, and it is half the diameter.	
Range	The range measures the spread of a data set. This is calculated by taking the lowest number away from the highest number.	
Ratio	In mathematics, a ratio is a relationship between two numbers indicating how many times the first number contains the second. For example, if a bowl of fruit contains eight oranges and six lemons, then the ratio of oranges to lemons is eight to six (that is, 8:6, which is equivalent to the ratio 4:3).	

Reflex angle	A reflex angle is greater than 180°.	
Revolution	A revolution is a whole turn (360°).	
Right angle	A right angle is a 90° angle.	

S

Scalene triangle	This is a triangle with no equal sides.	
Sequence	An ordered set of numbers that follow a particular pattern.	
Simplify	To reduce a fraction to a simpler form by cancellation of common factors. To reduce an equation by regrouping of terms in the same variable, etc.	
Subtraction	This means the same as ‘take away’. The process of taking one amount away from another.	
Sum	To find the sum of two numbers, you add them together.	
Surface area	The total area of all the surfaces on a 3D shape.	
Square number	The total of when a number is multiplied by itself.	
Square root	The square root of a number is a value that, when multiplied by itself, gives the number. Example: 4 × 4 = 16, so a square root of 16 is 4.	
Symmetry	Symmetry is when one shape becomes exactly like another if you flip, slide or turn it. The simplest type of symmetry is reflection (or mirror) symmetry. There is also rotational symmetry and point symmetry.	

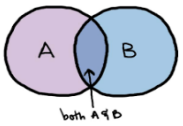
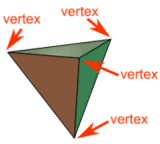
T

Tangent	A tangent is a line that touches the edge of a curve or circle at one point, but does not cross it.	
Tens frame	Ten-Frames are two-by-five rectangular frames into which counters or objects are placed to illustrate numbers less than or equal to ten. They are therefore very useful devices for developing number sense within the context of ten.	
Tessellation	When a shape can fit together lots of times without any gaps, it is a tessellating shape.	

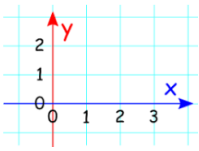
U

Unit cube	A cube with edges that are all 1cm long.	

V

Venn diagram	A diagram using two circles that overlap to group things. The overlapping section in the middle is used to place things that have characteristics of both sets.	
Vertex (vertices)	A vertex (plural: vertices) is a point where two or more lines meet. It is a corner.	
Volume	The measurement of space inside a shape.	

X

X axis	The horizontal axis on a graph or chart.	

Y

Y axis	The vertical axis on a graph or chart.