This vocabulary list of 142 words and phrases details the words and definitions that children need to know and use by the end of Key Stage 2. It is adapted from the *'Ultimate Maths Vocabulary List'* from Third Space Learning.

Term	Definition	Notes
Acute	Describes angles between 0 and 90 degrees.	
Addition	One of the four calculation operations. It involves combining two or more numbers to create a sum/total. The inverse of subtraction.	
Adjacent	Adjoining (as used to describe lines and angles).	
Alternate	Every other one in a sequence.	
Angle	A measure of turn - the number of degrees rotated around a point.	
Area	The measure of surface within a perimeter expressed in square units.	
Array (rectangular)	A set of items arranged in rows and columns in the shape of a rectangle. Each row has the same number of items in it. Each column has the same number of items in it.	
Ascending order	The arrangement of numbers from least to greatest.	
Average	A number representing a greater set of numbers. Can have three interpretations: mean - dividing the total of the numbers by the numbers itself; median – the middle value when the numbers are in ascending or descending order; mode – the value that occurs most often in the set.	
Axis of symmetry	A line dividing a shape into two symmetrical parts.	
Term	Definition	Notes
Bar chart/graph	A graphical representation of data in which values are represented by bars or columns and interpreted using the scales on the axes.	
Bar model	A way of representing relationships in a structured diagram in which numbers are shown using bars (rectangles).	
Base	The line or face on which a shape is standing.	
Base angles	Those angles adjacent to the base of a shape.	
Bisect	To divide into two equal parts.	
Block graph	A way of representing discrete data in which each item is represented by one block/square arranged in columns. The frequency of a particular set is how many blocks or squares are in it.	

| Breadth | Breadth is another name for width. It is the distance across from side to side or the shorter measurement with the longer one described as length. | |

Term	Definition	Notes
Capacity	The amount of space in an object (the maximum amount of liquid or air it can contain).	
Cardinal number	A number that shows quantity but not order.	
Carroll diagram	A diagram used for classification identifying whether members of the set possess a given property or not.	
Circumference	The distance around a circle (its perimeter).	
Circle	A 2-D shape in which all of the points on the edge are of equal distance from the centre of the shape.	
Composite number	A number with more than two factors.	
Cone	A 3-D shape made of one circular face and a curved surface tapering to a point (apex) directly above the centre of the circular face.	
Congruent	Congruent shapes are the same shape and size (equal).	
Consecutive	Consecutive numbers follow in order without interruption (e.g. 2,3,4,5).	
Continuous data	Data that can take any value along a continuum, e.g. as a child's foot grows, it will go through all the values of 18.1cm, 18.2cm, 18.3cm etc.	
Coordinates	Numbers used to describe position of a point on a grid.	
Cube	A regular six-sided polyhedron in which the faces are all congruent squares.	
Cuboid	A six-sided polyhedron in which all the faces are rectangles. Otherwise known as a rectangular prism.	
Cylinder	A 3-D shape made of two congruent circular faces that are opposite each other and a curved surface joining them.	

Term	Definition	Notes
Decagon	A polygon with ten sides and angles.	
Decimal	A way of expressing fractions in the Base 10 number system. Fractional parts are expressed in tenths, hundredths, thousandths etc.	
Denominator	The number below the line in a fraction which shows how many equal parts the whole has been split into.	
Descending order	The arrangement of numbers from the greatest to least.	

Term	Definition	Notes
Diagonal	A straight line connecting two non-adjacent vertices (corners) of a polygon.	
Diameter	A line across a circle that passes through the centre and touches the circumference at each end.	
Difference	The answer to a subtraction calculation. A form of subtraction in which two amounts/numbers are compared. By how much a number is greater or less than another.	
Digit	The numerical symbols from 0 to 9 (inclusive). Digits can be arranged to numerically represent numbers.	
Digital root	The digital root of 58 is 4 because 5 + 8 = 13 and 1 + 3 = 4	
Dimensions	The measurements of a shape (i.e. length, width, height).	
Discrete data	Data that can only take specific values, e.g. as a child's foot grows, the shoe sizes needed can only have given sizes.	
Division	One of the four calculation operations. It can be interpreted as: repeated subtraction (grouping) – finding how many groups of a given equal size can be made from a number; sharing a number into equal parts. It is the inverse of multiplication.	
Dodecagon	A twelve sided polygon.	
Term	**Definition**	**Notes**
Edge	The intersection of two faces/curved surfaces of a three-dimensional object.	
Equation	A statement of equality between two expressions (e.g. 3 x 4 = 6 + 6).	
Equilateral triangle	A triangle with congruent (equal) sides and angles. It also has three axes (lines) of symmetry.	
Even number	A positive or negative number exactly divisible by 2.	
Exterior	Outside.	
Term	**Definition**	**Notes**
Face	A plane (flat) surface of a three-dimensional object.	
Factor	A number which will divide exactly into another number.	
Fraction	A number in its own right that can be positioned on a number line. A way of expressing a proportion (part of a whole). The outcome when you divide an integer by another integer (e.g. 3 ÷ 4 = ¾)	
Frequency	The number of times something occurs within a study.	
Term	**Definition**	**Notes**

Term	Definition	Notes
Greater than	An inequality between numbers. The symbol used to represent greater than is an arrow pointing towards the smallest number.	

Term	Definition	Notes
Hemisphere	A 3-D shape made up of a circular face and a curved surface. It is half of a sphere.	
Hendecagon	A polygon with eleven sides and eleven angles: also called an undecagon.	
Heptagon	A polygon with seven sides and seven angles: also called a septagon.	
Hexagon	A polygon with six sides.	
Horizontal	Describes a line or plane parallel to the horizon.	

Term	Definition	Notes
Improper fraction	A fraction whose numerator is equal to or greater than its denominator.	
Integer	A negative or positive whole number.	
Interior	Inside.	
Intersection	The point or line where two lines or two faces meet.	
Irregular shapes	Polygons which do not have all equal sides and angles or polyhedrons which do not have all congruent faces and angles.	
Isosceles triangle	A triangle which has two sides of equal length and two equal angles. It also has one axis (line) of symmetry.	

Term	Definition	Notes
Kite	A quadrilateral that has two adjacent pairs of sides that are equal in length, and at least one pair of opposite angles are equal.	

Term	Definition	Notes
Less than	An inequality between numbers. The symbol used to represent less than is an arrow pointing towards the smallest number.	
Line of symmetry	(See axis of symmetry).	
Line graph	A representation of data collected over time. Each point along the line has a meaningful value.	

Term	Definition	Notes
Mass	The measurement of the quantity of matter in an object, measured in grams and kilograms.	
Mean	An average of a set of numbers. The sum of the values in a set of data divided by the total number of items in that set.	
Median	An average of a set of numbers. The middle value when the numbers are in ascending or descending order.	

Term	Definition	Notes
Mode	An average of a set of numbers. The value that occurs the most often in a set of data.	
Multiple	The product of a given number with another factor.	
Multiplication	One of the four calculation operations. It can be interpreted as: repeated addition – adding the same number to itself a number of times; scaling – making a number so many times greater (or smaller) It is the inverse of division.	
Term	**Definition**	**Notes**
Negative number	A number less than 0. Indicated by a - sign before the numeral and read as 'negative 4' for -4. Colloquially said as 'minus 4', especially when referring to temperature.	
Nonagon	A polygon with nine sides and angles.	
Number	A quantity, measurement or label indicating a value.	
Numeral	The written symbol used to represent an amount, value or label. For example the number three hundred can be represented by the numeral 300 or CCC using Roman numerals.	
Numerator	The number above the line in a fraction which shows the number of denominator parts considered in a fraction.	
Term	**Definition**	**Notes**
Oblique	Oblique means sloping or slanting.	
Oblong	A polygon with two pairs of straight, unequal sides and four right angles. An irregular rectangle.	
Obtuse angle	An angle between 90 and 180 degrees.	
Octagon	A polygon with eight sides and eight angles.	
Octahedron	A polyhedron with eight faces.	
Odd number	A number that when divided by two leaves a remainder of one.	
Ordinal number	Describes a position in a sequence e.g. first, second, third etc.	
Term	**Definition**	**Notes**
Parallel lines	Lines with no common points and always the same distance apart.	
Parallelogram	A four-sided polygon with opposite sides equal and parallel and the opposite angles are equal in size.	
Part-part-whole	The understanding of how a number (whole) can be shown to be the sum of two parts. It can be used to represent the relationship between the four operations.	

Term	Definition	Notes
Partition	The action of splitting a number into parts.	
Pentagon	A polygon with five sides and angles.	
Percentage	A way of describing a proportion of an amount by expressing it out of (every) 100.	
Perimeter	The distance around the boundary of a shape.	
Perpendicular line	A line at right angles to another line or plane. *NB The lines do not have to be touching.*	
Pictogram	A way of representing discrete data in which a picture or icon is used to represent each item or a given number of items.	
Pie chart	A way of representing data where the total is represented by a circle (pie) and each category shown by a sector of the circle which indicates the frequency of the category.	
Polygon	A plane (flat) shape with straight sides.	
Polyhedron	A three dimensional shape with plane (flat) faces.	
Place value	Indicates the position of a numeral (e.g. the place value of the 3 in 738 is 30) and how numbers relate to other numbers within the Base 10 number system.	
Prime number	A number with only two factors, 1 and itself (e.g. 2,3,5,7,11, 13, 17, 19, 23…)	
Prism	A polyhedron (3-D shape with faces and no curved surfaces) in which opposite ends are congruent and these are joined by rectangular faces.	
Product	The result when two or more numbers are multiplied.	
Pyramid	A polyhedron made of a polygon base with straight edges coming from each vertex of the base meeting at a single point (apex). All the other faces are therefore triangular.	
Term	**Definition**	**Notes**
Quadrant	The sectors of a coordinate grid are called quadrants. They are named first (+,+), second (-,+), third (-,-) and fourth (+,-) A quarter of the area of a circle which also contains a right angle.	
Quadrilateral	A polygon with four sides and angles.	
Quotient	The result when one number is divided by another number.	
Term	**Definition**	**Notes**
Radius	A line in a circle from the centre to the edge. It is half the diameter.	

Term	Definition	Notes
Ratio	An expression of the comparison between two or more quantities found by dividing one quantity by the other.	
Rectangle	A quadrilateral with opposite sides equal and parallel and containing four right angles.	
Rectilinear	A polygon made of lines meeting at right angles.	
Reflection	The image of a shape in a 'mirror line'. Corresponding points of the shape and its reflection are equidistant from the 'mirror line'.	
Reflex angle	An angle greater than 180 degrees.	
Regular	In geometry when a polygon has sides of equal length and angles of equal size or when a polyhedron has congruent faces and internal angles where faces meet. The only regular polyhedrons are tetrahedron, cube, octahedron, dodecahedron and icosahedron.	
Rhombus	A parallelogram with equal length sides. Opposite sides are parallel and opposite sides are equal in size.	
Roman numerals	Seven letters are used in combination to write numbers: I = 1 V = 5 X = 10 L = 50 C = 100 D = 500 M = 1000	
Rotation	Turning around a given point – the centre of rotation.	
Rotational symmetry	A shape is said to have rotational symmetry if it looks the same in different positions when rotated about its centre.	
Rounding	An approximation used to express a number in a more convenient way.	
Term	**Definition**	**Notes**
Scalene triangle	A triangle that has three sides of different length and no equal angles.	
Semi-circle	A 2-D shape with one straight side and one curved edge. It is one half of a circle.	
Sphere	A 3-D shape with one curved surface in which every point on the surface is equidistant from the centre of the shape.	
Squared	A number squared is a number multiplied by itself.	
Square number	The product of a number multiplied by itself. A number whose units can be arranged into a square (e.g. 1, 4, 9, 16, 25, 36, 49, 64…).	
Subtraction	One of the four calculation operations. It can be interpreted as: - take away, in which one number is removed from another;	

Term	Definition	Notes
	- difference, in which two numbers are compared.	
Sum	The result when two or more numbers are added together.	
Symmetrical	A shape is symmetrical if it is identical on either side of a line dividing it into two parts.	
Term	**Definition**	**Notes**
Tally	A system of collecting data when the final total for each category cannot be determined immediately. Items are recorded using vertical lines for numbers less than 5 and an oblique line across the vertical lines to show a group of 5.	
Temperature	The measure of hot and cold.	
Tessellation	Shapes fitted together with a number of exact copies and with no overlaps or gaps.	
Tetrahedron	A polyhedron with four faces.	
Translation	This takes place when a shape is moved from one place to another just by sliding it (without rotating, reflecting or enlarging).	
Trapezium	A quadrilateral with only one pair of parallel sides.	
Triangle	A polygon with three sides and angles. They can be scalene, isosceles or equilateral, and also described as right angled.	
Triangular number	A number created by adding consecutive numbers from starting from 1). A number whose units can be arranged into a triangle (e.g. 1, 3, 6, 10, 15, 21…)	
Term	**Definition**	**Notes**
Venn diagram	A diagram used for classification identifying whether members of the set possess given properties.	
Vertex	The point at which two sides of a 2-D shape meet or two or more edges of a polyhedron meet.	
Vertical line	A line which is at right angles to a horizontal line.	
Volume	The amount of liquid in a container or the amount of three-dimensional space taken up by an object, measured in cubic units.	
Term	**Definition**	**Notes**
Weight	The force of gravity on an object, measured in newtons.	
Term	**Definition**	**Notes**
x axis	The horizontal line on a graph or coordinate grid.	

Term	Definition	Notes
y axis	The vertical line on a graph or coordinate grid.	