

## Hunton & Arrathorne Community Primary School

## Mathematics Vocabulary List & Glossary

This document sets out Key Stage 1 (KS1) and Key Stage 2 (KS2) Maths vocabulary which is taught under the new National Curriculum. The key stage in brackets is a rough guide for when this vocabulary is introduced. Within classrooms, key vocabulary is displayed on Maths Working Walls at appropriate times during the year and the use of this vocabulary is promoted through mathematical talk and reasoning opportunities in lessons, including through the use of sentence stems.

Vocabulary	Definition
2D (KS1)	2-dimensional – the shape lies on a plane (it is flat).
3D (KS1)	3-dimensional – the shape occupies space (it is not flat)./
Acute angle (KS2)	An angle between $0^{\circ}$ and $90^{\circ}$ .

Addend (KS1)	A number which is added to another number.
Addition (KS1)	The process of calculating the total of two or more numbers or amounts. The result of the addition is called the sum or total. The operation is denoted by the + sign.
Algebra (KS2)	Letters are used to denote variables and unknown numbers. For example, 5 + a = 8 where a = 3.

Angle (KS1)	An angle is a measure of rotation between two intersecting lines of surfaces. Angles are measured in degrees (°).
Angle at a point (KS2)	The complete angle all the way around a point is 360°.
Angle on a straight line (KS2)	The sum of the angles at a point on a line is 180°.
Anticlockwise (KS1)	In the opposite direction from the normal direction of travel of the hands of an analogue clock.
Approximation (KS2)	A number or result that is not exact but it is sufficiently close to the actual number for it to be useful. When two values are approximately equal, the sign $\approx$ is used.
Area (KS2)	A measure of the size of any plane surface (the inside of a shape). Area is usually measured in square units e.g. cm <sup>2</sup> or m <sup>2</sup> .
Array (KS1)	An ordered collection of counters, numbers etc. in rows or columns.

	Subtraction and division are not associative as the order that they are completed in matters.
Average (KS2)	A number expressing the central or typical value in a set of data. This links to the mode, median or mean.

Axis (KS2)	A fixed, reference line on a graph along which or from distances or angles are taken.
Bar chart (KS1)	A way of representing statistical information. Bars are used to represent different frequencies. The bars can be vertical or horizontal. This is also sometimes called a bar graph.
Brackets (KS2)	Symbols used to group numbers in arithmetic or letters and numbers in algebra. The brackets show that the operations within it have priority and should be completed first.
Capacity (KS1)	The volume of a material (typically liquid or air) help in a vessel or container. Units for capacity can include litres (I), millilitres (mI), cubic centimetres (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ).
Centre (KS2)	The middle point of a line or a circle.
Chart (KS1)	Another word for a table or graph.

Circumference (KS2)	The distance around a circle (perimeter).
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Clockwise (KS1)	In the direction that the hands follow on an analogue clock.
Common factor (KS2)	A number which is a factor of two of more numbers. E.g. 2 is a common factor of 4 and 10.
Common multiple (KS2)	A number which is a multiple of two or more numbers. E.g. 18 is a common multiple of 2, 3, 6 and 9.
Commutative	Additions and multiplications will result in the same answer whichever way it is completed. E.g. $4 + 5 = 9$ and $5 + 4 = 9$ . Also $3 \times 8 = 24$ and $8 \times 3 = 24$ .
Composite shape (KS1)	A shape formed by combining two or more shapes.
Conjecture	An educated guess when the result is not yet found.
Consecutive (KS1)	Following in order.
	E.g. 8, 9, 10 are consecutive numbers and 10, 15, 20 are consecutive multiples of 5.

Convert (KS2)	Changing from one quantity to another e.g. changing from centimetres to metres.
Coordinate (KS2)	A system which uses one or more numbers, or coordinates, to determine the position of a point in space.

Corner (KS1)	A point where two or more lines meet. More correctly called a vertex.
Cube number (KS2)	A number that is the product of three equal numbers. E.g. 27 is a cube number as $3 \times 3 \times 3 = 27$ , 8 is a cube number as $2 \times 2 \times 2 = 8$
Data (KS1)	Numerical information which can relate to counts or measurements.
Decimal (KS2)	A number that includes tenths, hundredths or thousandths. The decimal point is placed to the right of the ones column and any digits that follow the decimal point is a decimal place.
Degree (KS2)	Unit of measurement for angles. One whole turn is 360°.
Denominator (KS2)	The number that is written below the line of the fraction.

Diagonal (KS2)	The joining of two vertices on a shape that are not next to each other.
Diagram (KS1)	A picture, a geometric figure or a representation.
Diameter (KS2)	The length across a circle that passes through the centre.
Difference (KS1)	The numerical difference between two numbers. E.g. the difference between 8 and 3 is 5.

Direction (KS1)	The orientation of a line in space. E.g. north, south, left, down.
Divide (KS1)	Carrying out the operation of division.
Dividend (KS2)	The number that is divided. E.g. 30 $\div$ 5, 30 is the dividend.
Divisible by (KS2)	When a number can be divided by another with no remainder. E.g. 64 is divisible by 8 as $64 \div 8 = 8$ .
Division (KS1)	The number to be divided is shared equally into the stated number of parts.
Divisor (KS2)	The number that is divided by. E.g. $30 \div 5$ , 5 is the divisor.

Double (KS1)	Multiply by 2.
Edge (KS1)	A line joining two vertices of a figure e.g. a cuboid has 12 edges.
Equal (KS1)	Having the same value as. Symbol: =.
Equivalent (KS1)	Equal to.
Equivalent fractions (KS1)	Fractions that have the same value as another. E.g. 3/9 is an equivalent fraction to 1/3.
Estimate (KS2)	Making a rough or approximate answer.

Even number (KS1)	An integer that is divisible by 2.
Exchange (KS2)	Changing a number for another of an equal value e.g. 13 ones is the same as 1 ten and 3 ones. This often happens in column addition, subtraction and multiplication and in short division.
Face (KS1)	One of the flat surfaces of a solid shape. E.g. a cube has six faces.
Factor (KS2)	Numbers that can be multiplied by another number to create a final number. E.g. factors of 12 are 1, 2, 3, 4, 6 and 12 because 12 = 1 x 12 = 2 x 6 = 3 x 4.
Formula (KS2)	An equation that links sets of variables. E.g. the formula for finding the area is base x height.
Fraction (KS1)	The result of dividing one number by a second number, which must be non-zero. The dividend is the numerator and the divisor is the denominator.
Frequency (KS1)	The number of times something occurs.

Horizontal (KS2)	Parallel to the horizon.
Improper fraction (KS2)	The numerator is greater than the denominator in the fraction.
Inequality (KS1)	When one number, or quantity, is not equal to another.
Infinite (KS1)	Going on forever when referring to a sequence or a set.

Integer (KS1)	Any positive or negative whole number and zero.
Interpret (KS2)	Identifying the key mathematical features of a graph, chain of reasoning etc.
Inverse operations (KS1)	Operations that are the opposite of each other. E.g. addition and subtraction, multiplication and division.
Kilo- (KS2)	Prefix denoting one thousand.

Length (KS1)	The distance between two points.
Mean (KS2)	Synonymous to average. The sum of discrete data divided by the number of quantities.
Measure (KS1)	To find the size.
Median (KS2)	The middle number or value when all values in a set of data are arranged in ascending order.

Minuend (KS1)	The number which is subtracted from.
Minus (KS1)	A name for the symbol -, representing the operation of subtraction.
Minute (KS1)	Unit of time. 1 minute = 60 seconds. 60 minutes = 1 hour.
Mixed number (KS2)	A whole number and a fractional part (which is expressed as a common fraction.)

Mode (KS2)	The most commonly occurring value in a set of data.
Multiple (KS1)	Numbers in a multiplication table are multiples of that times table. E.g. multiples of 3 include 9, 15 and 30.
Multiplicand (KS2)	A number which is multiplied by another.
Multiplication (KS1)	Mathematical operation of scaling one number by another. Symbol: x.
Multiplier (KS2)	A quantity by which a given number is to be multiplied.
Multiply (KS1)	To carry out the process of multiplication.
Negative number (KS2)	A number less than 0. E.g1, -2, -3. These are commonly read as minus or negative 1.
Net (KS2)	A 2D figure composed of polygons which can be folded and joined to form a 3D shape.

Numeral (KS1)	A symbol used to denote a number.
Numerator (KS2)	The number above the line in the fraction.
Obtuse angle (KS2)	An angle greater than 90° but less than 180°.
Odd number (KS1)	An integer that has a remainder of 1 when divided by 2.

Order of operation (KS2)	The order in which different mathematical operations are applied in a calculation.
	B – brackets
	I – indices
	D – division
	M – multiplication
	A – addition
	S – subtraction
Ordinal number (KS1)	A term that describes a position within an ordered set. E.g. first, second etc.
Parallel (KS2)	Two lines which are equidistant (they will never meet).

Partition (KS1)	To split a number into component parts. E.g. 28 can be partitioned into 20 + 8 or 14 + 14.
Pattern (KS1)	A systematic arrangement of numbers, shapes or other elements according to a rule.
Percentage (KS2)	A fraction expressed as the number of parts per hundred using the notation %.
Perimeter (KS2)	The length of the boundary of a closed figure.
Perpendicular (KS2)	A line or plane that is at right angles to another line or plane.
Place holder (KS2)	The zero numeral used to denote the absence of a particular power of 10.

Place value (KS1)	The value of a digit that relates to its position or place in a number.
Plot (KS2)	The process of marking points. These are usually defined by coordinates and plotted onto a coordinate grid.
Plus (KS1)	A name for the symbol +, representing the operation of addition.
Polygon (KS1)	A closed plane figure bounded by straight lines (a shape with straight lines).

Polyhedron (KS2)	A closed solid figure bounded by faces that are polygons.
Positive number (KS2)	A number that is greater than zero.
Prime factor (KS2)	The factors of a number that are prime.
Prime number (KS2)	A whole number greater than 1 that has exactly two factors (itself and 1).
Product (KS1)	The result of multiplying one number by another.
Proper fraction (KS2)	A fraction where the numerator is less than the denominator.
Property (KS1)	Any attribute. E.g. one property of a square is that all sides are equal.

Proportion (KS2)	A part to whole comparison. E.g. Where £20 is shared between two people in the ratio 3:5, the first receives £7.50 which is 3/8 of the whole £20. The is his proportion of the whole.
Quadrant (KS2)	One of the four regions into which a plane is divided by the x and y axes.

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Quantity (KS1)	Something that has a numerical value.
Quarter turn (KS1)	A rotation through 90°.
Quotient (KS2)	The result of a division calculation.
Radius (KS2)	In relation to a circle, the distance from the centre to any point on the circle.
Ratio (KS2)	A part to part comparison. The ratio of a to b is usually written a:b.
Rectangle (KS1)	A parallelogram with an interior angle of 90°. Opposite sides are equal.
Recurring decimal (KS2)	A decimal number with an infinitely repeating digit or group of digits.
Reflection (KS2)	In 2D, a transformation of the whole place involving a mirror line or axis of symmetry in the plane.
Reflex angle (KS2)	An angle that is greater than 180° but less than 360°.
Regular (KS2)	When describing a polygon, all sides and internal angles are equal.

Remainder (KS2)	In the context of division, the amount remaining after the operation. E.g. 29 divided by 7 = 4 remainder 1.
Repeated addition (KS1)	The process of repeatedly adding the same amount. This can be one model for multiplication.

Repeated subtraction (KS1)	The process of repeatedly subtracting the same amount. This can be one model for division.
Right angle (KS2)	One quarter of a complete turn. An angle of 90°.
Rotation (KS1)	In 2D, a transformation of the whole plane which turns about a fixed point.
Scale (KS2)	To enlarge or reduce a number, quantity or measurement by a given amount.
Sequence (KS1)	A succession of terms formed according to a rule.
Share (KS1)	One model for the process of division.
Side (KS1)	An edge of a shape.

Simplify (a fraction) (KS2)	Reduce a fraction to its simplest form.
Square centimetre (KS2)	A unit of area: a square measuring 1cm by 1cm. Symbol: cm <sup>2</sup> .

Square number (KS2)	A number that can be expressed as the product of two equal numbers. E.g. 36 is a square number as $6 \times 6 = 36$ .
Subtract (KS1)	Carry out the process of subtraction.
Subtraction (KS1)	Finding the difference between two numbers. Take away. Symbol:
Subtrahend (KS1)	The number which is subtracted.
Sum (KS1)	The result of one or more additions.
Take away (KS1)	Subtract.
Tally (KS1)	Making marks to represent objects counted, usually by drawing vertical lines and crossing the fifth count with a horizontal or diagonal strike through.
Temperature (KS1)	A measure of warmth. Two measurements are °F (Fahrenheit) and °C (Centigrade).
Total (KS1)	The sum found by adding.
Translation (KS2)	A transformation in which every point of a body moves the same distance in the same direction.
Turn (KS1)	A rotation about a point. A quarter turn is a rotation of 90°, a half turn is a rotation of 180° and a whole turn is a rotation of 360°.
Unit (KS1)	A standard used in measuring.

Unit fraction (KS1)	A fraction that has 1 as the numerator and whose denominator is a non-zero integer.
Venn diagram (KS2)	A visual diagram that is used to describe the relationships between two sets. Venn diagrams are created by overlapping circles.
Vertex (KS1)	The point at which two or more lines intersect.
Vertical (KS1)	At right angles to the horizontal plane.
Volume (KS1)	A measure of 3-dimensional space. Usually measured in cubic units.
Zero (KS1)	Nought or nothing. Zero is the only number that is neither positive nor negative.