




# Mathematics Glossary

## Introduction

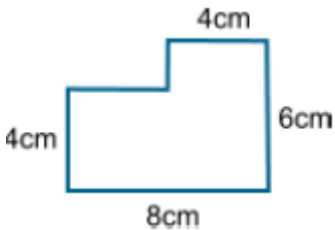
At Torridon Primary School, we value the importance of developing children's vocabulary. Understanding mathematical vocabulary helps children become better at problem solving and allows them to gain a conceptual understanding of maths itself.

This glossary has been designed to support the teaching of maths at Torridon. The definitions refer to the words and terms that are used in the Mathematics Programme of Study. It is intended to be used alongside the 2014 National Curriculum for teachers to check the meaning of the terms. Many of the words relate to mathematics, and the naming of mathematical forms or geometrical constructs. Underneath most entries in the glossary, there is an indication of which key stage the concept in question is first introduced. Of course, once a concept has been introduced it will in all likelihood reappear at later stages of the curriculum.

Acute angle (KS2)	An angle between 0° and 90°.
Addend (KS1)	A number to be added to another. (See also dividend, subtrahend and multiplicand.)
Addition (KS1)	The binary operation of addition on the set of all real numbers that adds one number of the set to another in the set to form a third number which is also in the set. The result of the addition is called the sum or total. The operation is denoted by the + sign. When we write $5 + 3$ we mean 'add 3 to 5'; we can also read this as '5 plus 3'. In practice the order of addition does not matter: The answer to $5 + 3$ is the same as $3 + 5$ and in both cases the sum is 8. This holds for all pairs of numbers and therefore the operation of addition is said to be commutative.
Algebra (KS1)	The part of mathematics that deals with generalised arithmetic. Letters are used to denote variables and unknown numbers and to state general properties. Example: $a(x + y) = ax + ay$ exemplifies a relationship that is true for any numbers $a$ , $x$ and $y$ . Adjective: algebraic.
Analogue clock (KS1)	A clock usually with 12 equal divisions labelled 'clockwise' from the top 12, 1, 2, 3 and so on up to 11 to represent hours. Commonly, each of the twelve divisions is further subdivided into five equal parts providing sixty minor divisions to represent minutes. The clock has two hands that rotate about the centre. The minute hand completes one revolution in one hour, whilst the hour hand completes one revolution in 12 hours.
Angle (KS1)	An angle is a measure of rotation and is often shown as the amount of rotation required to turn one-line segment onto another where the two-line segments meet at a point.
Angle at a point (KS2)	The complete angle all the way around a point is $360^\circ$ .
Angle at a point on a line (KS2)	The sum of the angles at a point on a line is $180^\circ$ .
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. In a practical situation an approximation is sufficiently close to the actual number for it to be useful. Verb: approximate. Adverb: approximately. When two values are approximately equal, the sign $\approx$ is used.
Area (KS2)	A measure of the size of any plane surface. Area is usually measured in square units e.g. square centimetres (cm <sup>2</sup> ), square metres (m <sup>2</sup> ).
Array (KS1)	An ordered collection of counters, numbers etc. in rows and columns.
Average (KS2)	Loosely an ordinary or typical value, however, a more precise mathematical definition is a measure of central tendency which represents and or summarises in some way a set of data.
Axis (KS2)	A fixed, reference line along which or from which distances or angles are taken
Axis of symmetry (KS1)	A line about which a geometrical figure, or shape, is symmetrical or about which a geometrical shape or figure is reflected in order to produce a symmetrical shape or picture. Reflective symmetry exists when for every point on one side of the line there is another point (its image) on the other side of the line which is the same perpendicular distance from the line as the initial point. Example: a regular hexagon has six lines of symmetry; an equilateral triangle has three lines of symmetry.
Bar chart (KS1)	A format for representing statistical information. Bars, of equal width, represent frequencies and the lengths of the bars are proportional to the frequencies (and often equal to the frequencies). Sometimes called bar graph. The bars may be vertical or horizontal depending on the orientation of the chart.
Binary operation (KS1)	A rule for combining two numbers in the set to produce a third also in the set. Addition, subtraction, multiplication and division of real numbers are all binary operations.
Block graph (KS1)	A simple format for representing statistical information. One block represents one observation. Example: A birthday graph where each child places one block, or colours one square, to represent himself / herself in the month in which he or she was born. 

Brackets (KS2)	Symbols used to group numbers in arithmetic or letters and numbers in algebra and indicating certain operations as having priority. Example: $2 \times (3 + 4) = 2 \times 7 = 14$ whereas $2 \times 3 + 4 = 6 + 4 = 10$ . Example: $3(x + 4)$ denotes the result of adding 4 to a number and then multiplying by 3; $(x + 1)^2$ denotes the result of adding 1 to a number and then squaring the result.									
Capacity (KS1)	Capacity – the volume of a material (typically liquid or air) held in a vessel or container. Note: the term 'volume' is used as a general measure of 3-dimensional space and cannot always be used as synonymously with capacity. e.g. the volume of a cup is the space taken up by the actual material of the cup (a metal cup melted down would have the same volume); whereas the capacity of the cup is the volume of the liquid or other substance that the cup can contain. A solid cube has a volume but no capacity. Units include litres, decilitres, millilitres; cubic centimetres (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ). A litre is equivalent to 1000 cm <sup>3</sup> .									
Carroll diagram (KS1)	A sorting diagram named after Lewis Carroll, author and mathematician, in which numbers (or objects) are classified as having a certain property or not having that property Example: Use the diagram below to classify all the integers from 1 to 33. <table><tr><td></td><td>Even</td><td>Not even</td></tr><tr><td>Multiple of three</td><td>6, 12, 18, 24, 30</td><td>3, 9, 15, 21, 27, 33</td></tr><tr><td>Not multiple of three</td><td>2, 4, 8, 10, 14, 16, 20, 22, 24, 26, 28, 32</td><td>1, 5, 7, 11, 13, 17, 19, 23, 25, 29, 31</td></tr></table>		Even	Not even	Multiple of three	6, 12, 18, 24, 30	3, 9, 15, 21, 27, 33	Not multiple of three	2, 4, 8, 10, 14, 16, 20, 22, 24, 26, 28, 32	1, 5, 7, 11, 13, 17, 19, 23, 25, 29, 31
	Even	Not even								
Multiple of three	6, 12, 18, 24, 30	3, 9, 15, 21, 27, 33								
Not multiple of three	2, 4, 8, 10, 14, 16, 20, 22, 24, 26, 28, 32	1, 5, 7, 11, 13, 17, 19, 23, 25, 29, 31								
Categorical data (KS1)	Data arising from situations where categories (unordered discrete) are used. Examples: pets, pupils' favourite colours; states of matter – solids, liquids, gases, gels etc; nutrient groups in foods – carbohydrates, proteins, fats etc; settlement types – hamlet, village, town, city etc; and types of land use – offices, industry, shops, open space, residential etc.									
Centi– (KS1)	Prefix meaning one-hundredth (of)									
Centilitre	Symbol: cl. A unit of capacity or volume equivalent to one-hundredth of a litre.									
Centimetre	Symbol: cm. A unit of linear measure equivalent to one hundredth of a metre.									
Centre (KS2)	The middle point for example of a line or a circle									
Chart										

(KS1)	Another word for a table or graph
Circumference (KS2)	The distance around a circle (its perimeter). If the radius of a circle is $r$ units, and the diameter $d$ units, then the circumference is $2r$ , or $d$ units.
Clockwise (KS1)	In the direction in which the hands of an analogue clock travel
Column (KS2)	A vertical arrangement for example, in a table the cells arranged vertically.
Common factor (KS2)	A number which is a factor of two or more other numbers, for example 3 is a common factor of the numbers 9 and 30
Common fraction (KS1)	A fraction where the numerator and denominator are both integers.
Common multiple (KS2)	An integer which is a multiple of a given set of integers, e.g. 24 is a common multiple of 2, 3, 4, 6, 8 and 12.
Commutative (KS1)	The Law that says you can swap numbers around and still get the same answer when you add or when you multiply.
Compasses (pair of) (KS2)	An instrument for constructing circles and circular arcs and for marking points at a given distance from a fixed point.
Composite shape (KS1)	A shape formed by combining two or more shapes. 
Concrete objects (KS1)	Objects that can be handled and manipulated to support understanding of the structure of a mathematical concept. Materials such as Dienes (Base 10 materials), Cuisenaire, Numicon, pattern blocks are all examples of concrete objects.
Consecutive (KS1)	Following in order. Consecutive numbers are adjacent in a count. Examples: 5, 6, 7 are consecutive numbers. 25, 30, 35 are consecutive multiples of 5. In a polygon, consecutive sides share a common vertex and consecutive angles share a common side.
Continuous data (KS1)	Data arising from measurements taken on a continuous variable (examples: lengths of caterpillars; weight of crisp packets). Continuous data may be grouped into touching but non-overlapping categories

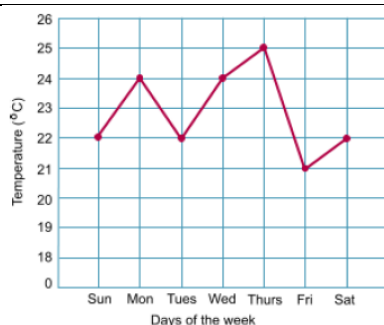
Convert (KS2)	Changing from one quantity or measurement to another. E.g. from litres to gallons or from centimetres to millimetres etc.
Coordinate (KS2)	In geometry, a coordinate system is a system which uses one or more numbers, or coordinates, to uniquely determine the position of a point in space.
Corner (KS1)	In geometry, a point where two or more lines or line segments meet. More correctly called vertex, vertices (plural). Examples: a rectangle has four corners or vertices; and a cube has eight corners or vertices.
Cube number (KS2)	A number that can be expressed as the product of three equal integers. Example: $27 = 3 \times 3 \times 3$ . Consequently, 27 is a cube number; it is the cube of 3 or 3 cubed. This is written compactly as $27 = 3^3$ , using index, or power, notation.
Cubic centimetre (KS2)	Symbol: $\text{cm}^3$ . A unit of volume. The three-dimensional space equivalent to a cube with edge length 1cm.
Cubic metre (KS2)	Symbol: $\text{m}^3$ . A unit of volume. A three-dimensional space equivalent to a cube of edge length 1m.
2-D; 3-D (KS1)	Short for 2-dimensional and 3-dimensional. A figure is two-dimensional if it lies in a plane. A solid is three-dimensional and occupies space (in more than one plane).
Decimal (KS2)	Relating to the base ten. Most commonly used synonymously with decimal fractions where the number of tenths, hundredths, thousandths, etc. are represented as digits following a decimal point. The decimal point is placed at the right of the ones column. Each column after the decimal point is a decimal place.
Degree (KS2)	The most common unit of measurement for angle. One whole turn is equal to 360 degrees, written $360^\circ$
Degree of accuracy (KS2)	A measure of the precision of a calculation, or the representation of a quantity. A number may be recorded as accurate to a given number of decimal places, or rounded to the nearest integer, or to so many significant figures
Denominator (KS2)	In the notation of common fractions, the number written below the line i.e. the divisor. Example: In the fraction $\frac{2}{3}$ the denominator is 3.
Diameter (KS2)	Any of the chords of a circle or sphere that pass through the centre
Difference (KS1)	In mathematics (as distinct from its everyday meaning), difference means the numerical difference between two numbers or sets of objects and is found by comparing the quantity of one set of objects with another.

	<p>e.g. the difference between 12 and 5 is 7; 12 is 5 more than 7 or 7 is 5 fewer than 12.</p> <p>Difference is one way of thinking about subtraction and can, in some circumstances, be a more helpful image for subtraction than 'take-away' – e.g. <math>102 - 98</math></p>
Digit (KS1)	One of the symbols of a number system most commonly the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9. Examples: the number 29 is a 2-digit number; there are three digits in 2.95. The position or place of a digit in a number conveys its value.
Digital clock (KS1)	A clock that displays the time as hours and minutes passed, usually since midnight. Example: four thirty in the afternoon is displayed as 16:30.
Divide (KS1)	To carry out the operation of division.
Dividend (KS1)	In division, the number that is divided. E.g. in $15 \div 3$ , 15 is the dividend See also Addend, subtrahend and multiplicand.
Divisibility (KS2)	The property of being divisible by a given number. Example: A test of divisibility by 9 checks if a number can be divided by 9 with no remainder.
Divisible (by) (KS2)	A whole number is divisible by another if there is no remainder after division and the result is a whole number. Example: 63 is divisible by 7 because $63 \div 7 = 9$ remainder 0. However, 63 is not divisible by 8 because $63 \div 8 = 7.875$ or 7 remainder 7.
Division (KS1)	<p>1. An operation on numbers interpreted in a number of ways. Division can be sharing – the number to be divided is shared equally into the stated number of parts; or grouping – the number of groups of a given size is found. Division is the inverse operation to multiplication.</p> <p>2. On a scale, one part. Example: Each division on a ruler might represent a millimetre.</p>
Divisor (KS2)	The number by which another is divided. Example: In the calculation $30 \div 6 = 5$ , the divisor is 6. In this example, 30 is the dividend and 5 is the quotient.
Double (KS1)	<p>1. To multiply by 2. Example: Double 13 is <math>(13 \times 2) = 26</math>.</p> <p>2. The number or quantity that is twice another. Example: 26 is double 13.</p>
Edge (KS1)	A line segment, joining two vertices of a figure. A line segment formed by the intersection of two plane surfaces. Examples: a square has four edges; and a cuboid has twelve edges.
Equal (KS1)	Symbol: $=$ , read as 'is equal to' or 'equals'. and meaning 'having the same value as'. Example: $7 - 2 = 4 + 1$ since both expressions, $7 - 2$ and $4 + 1$ have the same value, 5.
Equivalent fractions (KS1)	Fractions with the same value as another. For example: $\frac{4}{8}$ , $\frac{5}{10}$ , $\frac{8}{16}$ are all equivalent fractions and all are equal to $\frac{1}{2}$ .



Estimate (KS2)	1. Verb: To arrive at a rough or approximate answer by calculating with suitable approximations for terms or, in measurement, by using previous experience. 2. Noun: A rough or approximate answer.
Even number (KS1)	An integer that is divisible by 2.
Exchange (KS1 and KS2)	Change a number or expression for another of equal value. The process of exchange is used in some standard compact methods of calculation. Examples: 'carrying figures' in addition, multiplication or division; and 'decomposition' in subtraction.
Expression (KS2)	A mathematical form expressed symbolically. Examples: $7 + 3$ ; $a^2 + b^2$ .
Face (KS1)	One of the flat surfaces of a solid shape. Example: a cube has six faces; each face being a square
Factor (KS2)	When a number, or polynomial in algebra, can be expressed as the product of two numbers.
Fluency (KS1)	To be mathematically fluent one must have a mix of conceptual understanding, procedural fluency and knowledge of facts to enable you to tackle problems appropriate to your stage of development confidently, accurately and efficiently.
(the) four operations	Common shorthand for the four arithmetic operations of addition, subtraction, multiplication and division.
Fraction (KS1)	An equal part of a whole.
Frequency (KS1)	The number of times an event occurs; or the number of individuals (people, animals etc.) with some specific property.
Gram (KS1)	Symbol: g. The unit of mass equal to one thousandth of a kilogram.
Graph (KS2)	A diagram showing a relationship between variables. Adjective: graphical.
Grid (KS2)	A lattice created with two sets of parallel lines. Lines in each set are usually equally spaced. If the sets of lines are at right angles and lines in both sets are equally spaced, a square grid is created.
Highest common factor (HCF) (KS2)	The common factor of two or more numbers which has the highest value. Example: 16 has factors 1, 2, 4, 8, 16. 24 has factors 1, 2, 3, 4, 6, 8, 12, 24. 56 has factors 1, 2, 4, 7, 8, 14, 28, 56. The common factors of 16, 24 and 56 are 1, 2, 4 and 8. Their highest common factor is 8.
Horizontal (KS2)	Parallel to the horizon.
Hour (KS1)	A unit of time. One twenty-fourth of a day. 1 hour = 60 minutes = 3600 (60 x 60) seconds.
Hundred square	A 10 by 10 square grid numbered 1 to 100. A similar grid could be numbered as a 0 – 99 grid.

(KS1)	
Improper fraction (KS2)	An improper fraction has a numerator that is greater than its denominator. Example: $\frac{9}{4}$ is improper and could be expressed as the mixed number $2\frac{1}{4}$ .
Infinite (KS1)	Of a number, always bigger than any (finite) number that can be thought of. Of a sequence or set, going on forever. The set of integers is an infinite set.
Integer (KS2)	Any of the positive or negative whole numbers and zero. Example: ...-2, -1, 0, +1, +2 ... The integers form an infinite set; there is no greatest or least integer.
Interior angle (KS2)	At a vertex of a polygon, the angle that lies within the polygon.
Interpret (KS2)	Draw out the key mathematical features of a graph, or a chain of reasoning, or a mathematical model, or the solutions of an equation, etc.
Interval [0,1] (KS2)	All possible points in the closed continuous interval between 0 and 1 on the real number line, including the end points zero and 1.
Inverse operations (KS1)	Operations that, when they are combined, leave the entity on which they operate unchanged. Examples: addition and subtraction are inverse operations e.g. $5 + 6 - 6 = 5$ . Multiplication and division are inverse operations e.g. $6 \times 10 \div 10 = 6$ . Squaring and taking the square root are inverse to each other:
Kilo- (KS2)	Prefix denoting one thousand
Kilogram (KS2)	Symbol: kg. The base unit of mass in the SI (Système International d'Unités). $1\text{kg.} = 1000\text{g.}$
Kilometre (KS2)	Symbol: km. A unit of length in the SI (Système International d'Unités). The base unit of length in the system is the metre. $1\text{km.} = 1000\text{m.}$
Least common multiple (LCM) (KS2)	The common multiple of two or more numbers, which has the least value. Example: 3 has multiples 3, 6, 9, 12, 15, 18, 21, 24 ..., 4 has multiples 4, 8, 12, 16, 20, 24 ... and 6 has multiples 6, 12, 18, 24, 30 .... The common multiples of 3, 4 and 6 include 12, 24 and 36. The least common multiple of 3, 4 and 6 is 12.
Length (KS1)	The extent of a line segment between two points. Length is independent of the orientation of the line segment.
Line graph (KS2)	A graph in which adjacent points are joined by straight-line segments. Such a graph is better seen as giving a quick pictorial visualisation of variation between points rather than an accurate mathematical description of the variation between points.



Mass (KS1)	A characteristic of a body, relating to the amount of matter within it. Mass differs from weight, the force with which a body is attracted towards the earth's centre. Whereas, under certain conditions, a body can become weightless, mass is constant. In a constant gravitational field weight is proportional to mass.
Mean (KS2)	Often used synonymously with average. The mean (sometimes referred to as the arithmetic mean) of a set of discrete data is the sum of quantities divided by the number of quantities. Example: The arithmetic mean of 5, 6, 14, 15 and 45 is $(5 + 6 + 14 + 15 + 45) \div 5$ i.e. 17.
Measure (KS1)	1. The size in terms of an agreed unit. 2. Measure is also used as a verb, to find the size.
Median (KS2)	The middle number or value when all values in a set of data are arranged in ascending order. Example: The median of 5, 6, 14, 15 and 45 is 14. When there is an even number of values, the arithmetic mean of the two middle values is calculated. Example: The median of 5, 6, 7, 8, 14 and 45 is $(7 + 8) \div 2$ i.e. 7.5.
Metre (KS2)	Symbol: m. The base unit of length in SI (Système International d'Unités).
Metric unit (KS2)	Unit of measurement in the metric system. Metric units include metre, centimetre, millimetre, kilometre, gram, kilogram, litre and millilitre.
Mile (KS2)	An imperial measure of length. 1 mile = 1760 yards. 5 miles is approximately 8 kilometres.
Milli- (KS2)	Prefix. One-thousandth.
Millilitre (KS2)	Symbol: ml. One thousandth of a litre.
Millimetre (KS2)	Symbol: mm. One thousandth of a metre.
Minus (KS1)	A name for the symbol -, representing the operation of subtraction.
Minute (KS1)	Unit of time. One-sixtieth of an hour. 1 minute = 60 seconds
Mixed number (KS2)	A whole number and a fractional part expressed as a common fraction. Example: $2 \frac{1}{4}$ is a mixed number. Also known as a mixed fraction.
Mode	The most commonly occurring value or class with the largest frequency.

(KS2)	e.g. the mode of this set of data: 2, 3, 3, 3, 4, 4, 5, 5, 6, 7, 8 is 3
Multiple (KS1)	For any integers $a$ and $b$ , $a$ is a multiple of $b$ if a third integer $c$ exists so that $a = bc$ Example: 14, 49 and 70 are all multiples of 7 because $14 = 7 \times 2$ , $49 = 7 \times 7$ and $70 = 7 \times 10$ . -21 is also a multiple of 7 since $-21 = 7 \times -3$ .
Multiplicand (KS1)	A number to be multiplied by another. e.g. in $5 \times 3$ , 5 is the multiplicand as it is the number to be multiplied by 3. See also Addend, subtrahend and dividend.
Multiplication (KS1)	Multiplication (often denoted by the symbol " $\times$ ") is the mathematical operation of scaling one number by another. It is one of the four binary operations in arithmetic (the others being addition, subtraction and division).
Negative number (KS2)	1. A number less than zero. Example: $-0.25$ . Where a point on a line is labelled 0 negative numbers are all those to the left of the zero on a horizontal numberline.
Notation (KS1)	A convention for recording mathematical ideas. Examples: Money is recorded using decimal notation e.g. £2.50 Other examples of mathematical notation include $a + a = 2a$
Number sentence (KS1)	A mathematical sentence involving numbers. Examples: $3 + 6 = 9$ and $9 > 3$
N numeral (KS1)	A symbol used to denote a number. The Roman numerals I, V, X, L, C, D and M represent the numbers one, five, ten, fifty, one hundred, five hundred and one thousand. The Arabic numerals 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 are used in the Hindu-Arabic system giving numbers in the form that is widely used today.
Numerator (KS2)	In the notation of common fractions, the number written on the top – the dividend (the part that is divided). In the fraction $\frac{2}{3}$ , the numerator is 2.
Odd number (KS2)	An integer that has a remainder of 1 when divided by 2.
Order of operation (KS2)	This refers to the order in which different mathematical operations are applied in a calculation. This convention is often encapsulated in the mnemonic BODMAS or BIDMAS: Brackets Orders / Indices (powers) Division & Multiplication Addition & Subtraction
Partition (KS1)	1. To separate a set into subsets. 2. To split a number into component parts. Example: the two-digit number 38 can be partitioned into $30 + 8$ or $19 + 19$ . 3. A model of division. Example: $21 \div 7$ is treated as 'how many sevens in 21?'
Pattern (KS1)	A systematic arrangement of numbers, shapes or other elements according to a rule.

Percentage (KS2)	<p>1. A fraction expressed as the number of parts per hundred and recorded using the notation %. Example: One half can be expressed as 50%; the whole can be expressed as 100%</p> <p>2. Percentage can also be interpreted as the operator 'a number of hundredths of'. Example: 15% of Y means <math>15/100 \times Y</math></p>
Perimeter (KS2)	The length of the boundary of a closed figure.
Pictogram (KS1)	A format for representing statistical information. Suitable pictures, symbols or icons are used to represent objects. For large numbers one symbol may represent a number of objects and a part symbol then represents a rough proportion of the number.
Pictorial representations (KS1)	Pictorial representations enable learners to use pictures and images to represent the structure of a mathematical concept. The pictorial representation may build on the familiarity with concrete objects. E.g. a square to represent a Dienes 'flat' (representation of the number 100). Pupils may interpret pictorial representations provided to them or create a pictorial representation themselves to help solve a mathematical problem.
Pie-chart (KS2)	Also known as pie graph. A form of presentation of statistical information. Within a circle, sectors like 'slices of a pie' represent the quantities involved. The frequency or amount of each quantity is proportional to the angle at the centre of the circle.
Place holder (KS2)	In decimal notation, the zero numeral is used as a place holder to denote the absence of a particular power of 10.
Positive number (KS2)	A number greater than zero. Where a point on a line is labelled 0 positive numbers are all those to the left of the zero and are read 'positive one, positive two, positive three' etc. See also directed number and negative number.
Prime factor (KS2)	The factors of a number that are prime. Example: 2 and 3 are the prime factors of 12 ( $12 = 2 \times 2 \times 3$ ). See also factor.
Prime number (KS2)	A whole number greater than 1 that has exactly two factors, itself and 1. Examples: 2 (factors 2, 1), 3 (factors 3, 1). 51 is not prime (factors 51, 17, 3, 1).
Product (KS1)	The result of multiplying one number by another. Example: The product of 2 and 3 is 6 since $2 \times 3 = 6$ .
Proper fraction (KS2)	A proper fraction has a numerator that is less than its denominator So $\frac{3}{4}$ is a proper fraction, whereas $\frac{4}{3}$ is an improper fraction (i.e. not proper).
Quadrant (KS2)	One of the four regions into which a plane is divided by the x and y axes in the Cartesian coordinate system.
Quadrilateral (KS1)	A polygon with four sides.
Quotient (KS2)	The result of a division. Example: $46 \div 3 = 15\frac{1}{3}$ and $15\frac{1}{3}$ is the quotient of 46 by 3. Where the operation of division is applied to the set of integers, and the result expressed in integers, for example $46 \div 3 = 15$ remainder 1 then 15 is the quotient of 46 by 3 and 1 is the remainder.

Radius (KS2)	In relation to a circle, the distance from the centre to any point on the circle. Similarly, in relation to a sphere, the distance from the centre to any point on the sphere.
Ratio (KS2)	A part to part comparison. The ratio of a to b is usually written $a : b$ . Example: In a recipe for pastry fat and flour are mixed in the ratio 1 : 2 which means that the fat used has half the mass of the flour, that is $\text{amount of fat/amount of flour} = \frac{1}{2}$ .
Reflection (KS2)	In 2-D, a transformation of the whole plane involving a mirror line or axis of symmetry in the plane, such that the line segment joining a point to its image is perpendicular to the axis and has its midpoint on the axis. A 2-D reflection is specified by its mirror line.
Regular (KS2)	1. Describing a polygon, having all sides equal and all internal angles equal. 2. Describing a tessellation, using only one kind of regular polygon.
Remainder (KS2)	In the context of division requiring a whole number answer (quotient), the amount remaining after the operation.
Repeated addition (KS1)	The process of repeatedly adding the same number or amount. One model for multiplication. Example $5 + 5 + 5 + 5 = 5 \times 4$ .
Right angle (KS2)	One quarter of a complete turn. An angle of 90 degrees. An acute angle is less than one right angle. An obtuse angle is greater than one right angle but less than two. A reflex angle is greater than two right angles.
Roman numerals (KS2)	The Romans used the following capital letters to denote cardinal numbers: I for 1; V for 5; X for 10; L for 50; C for 100; D for 500; M for 1000.
Rotation (KS1)	In 2-D, a transformation of the whole plane which turns about a fixed point, the centre of rotation. A is specified by a centre and an (anticlockwise) angle.
Scale (noun)	A measuring device usually consisting of points on a line with equal intervals.
Scale (verb) (KS2)	To enlarge or reduce a number, quantity or measurement by a given amount (called a scale factor). e.g. to have 3 times the number of people in a room than before; to find a quarter of a length of ribbon; to find 75% of a sum of money.
Sequence (KS1)	A succession of terms formed according to a rule. There is a definite relation between one term and the next and between each term and its position in the sequence. Example: 1, 4, 9, 16, 25 etc.
Set (KS1)	A well-defined collection of objects (called members or elements).
Share (equally) (KS1)	Sections of this page that are currently empty will be filled over the coming weeks. One model for the process of division.
Side (KS1)	A line segment that forms part of the boundary of a figure. Also edge.
Sign (KS1)	A symbol used to denote an operation. Examples: addition sign +, subtraction sign -, multiplication sign $\times$ , division sign $\div$ , equals sign = etc. In the case of

	directed numbers, the positive + or negative – sign indicates the direction in which the number is located from the origin along the number line.
Simple fraction (KS1)	A fraction where the numerator and denominator are both integers.
Sort (KS1)	To classify a set of entities into specified categories.
Square number (KS2)	A number that can be expressed as the product of two equal numbers. Example $36 = 6 \times 6$ and so 36 is a square number or “6 squared”. A square number can be represented by dots in a square array.
Subtract (KS1)	Carry out the process of subtraction
Subtraction (KS1)	The inverse operation to addition. Finding the difference when comparing magnitude. Take away
Subtrahend (KS1)	A number to be subtracted from another. See also Addend, dividend and multiplicand.
Sum (KS1)	The result of one or more additions
Surface (KS1)	A set of points defining a space in two or three dimensions.
Symbol (KS1)	A letter, numeral or other mark that represents a number, an operation or another mathematical idea. Example: L (Roman symbol for fifty), > (is greater than).
Symmetry (KS1)	A plane figure has symmetry if it is invariant under a reflection or rotation i.e. if the effect of the reflection or rotation is to produce an identical-looking figure in the same position. See also reflection symmetry, rotation symmetry. Adjective: symmetrical.
Take away (KS1)	1. Subtraction as reduction 2. Remove a number of items from a set.
Temperature (KS1)	A measure of the hotness of a body, measured by a thermometer or other form of heat sensor.
Time (KS1)	1. Progress from past, to present and to future 2. Time of day, in hours, minutes and seconds; clocks and associated vocabulary 3. Duration and associated vocabulary 4. Calendar time in days, weeks, months, years 5. Associated vocabulary such as later, earlier, sooner, when, interval of time, clock today, yesterday, tomorrow, days of the week, the 12 months of a year, morning, a.m., afternoon, p.m., noon, etc.
Total (KS1)	1. The aggregate. Example: the total population - all in the population. 2. The sum found by adding.
Translation (KS2)	A transformation in which every point of a body moves the same distance in the same direction. A transformation specified by a distance and direction
Turn (KS1)	A rotation about a point: a quarter turn is a rotation of $90^\circ$ . A half turn is a rotation of $180^\circ$ , a whole turn is a rotation of $360^\circ$ .

Unit (KS1)	A standard used in measuring e.g. the metre is a unit of length; the degree is a unit of turn/angle, etc.
Unit fraction (KS1)	A fraction that has 1 as the numerator and whose denominator is a non-zero integer. Example: $\frac{1}{2}$ , $\frac{1}{3}$
Vertex (KS1)	The point at which two or more lines intersect. Plural: vertices.
Vertical (KS1)	At right angles to the horizontal plane. The up-down direction on a graph or map.
Vertically opposite angles (KS2)	The pair of equal angles between two intersecting straight lines. There are two such pairs of vertically opposite angles
Volume (KS1)	A measure of three-dimensional space. Usually measured in cubic units; for example, cubic centimetres (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ).
Weight (KS1)	In everyday English weight is often confused with mass. In mathematics, and physics, the weight of a body is the force exerted on the body by the gravity of the earth, or any other gravitational body.
Zero (KS1)	<ol style="list-style-type: none"> <li>1. Nought or nothing; zero is the only number that is neither positive nor negative.</li> <li>2. Zero is needed to complete the number system.</li> <li>3. In a place value system, a place-holder. Example: 105.</li> <li>4. The cardinal number of an empty set.</li> </ol>