

### Year 5 and 6 Number and Place Value

<u>Vocabulary</u>	<u>Definition</u>
Powers of 10	The number of times a base number is multiplied by itself, indicated by a small number to its upper-right e.g. $10^5 = 10 \times 10 \times 10 \times 10 \times 10$ , read as 10 to the power of 5. The small number is called a power, an exponent, an index or order.
Numbers to ten million	An arithmetical value, expressed by a word, symbol, or figure, representing a particular quantity and used in counting and making calculations.
<u>Year 5 and 6 Addition and Subtraction</u>	
<u>Vocabulary</u>	<u>Definition</u>
Efficient Written Method	Using column addition and subtraction to calculate effectively and accurately.
Order of operations	The order in which mathematical operations should be done.

## Year 5 and 6 Multiplication and Division

<u>Vocabulary</u>	<u>Definition</u>
Factor pairs	A pair of numbers multiplied together form another number called their product.
Composite numbers	A number with more than two factors.
Prime number	A number with only two factors, 1 and itself (e.g. 2,3,5,7,11, 13, 17, 19, 23...)
Prime factors	A prime factor is a prime number that divides exactly into another given number. In prime factorisation, a number is written as the product of its prime factors. Every positive integer has its own unique set of prime factors.
Square number	A number whose units can be arranged into a square (e.g. 1,4,9,16,25,36,49,64...)
Cubed number	A number raised to the third power which is indicated by a small 3 to its upper-right. EXAMPLES: $2^3 = 2 \times 2 \times 2 = 8$ , 2 cubed = 8
Formal written method	Using a written method to calculate answers.
Common factors	A whole number that divides two or more other numbers exactly.
Common multiples	A multiple that is shared by two or more numbers. EXAMPLES: 12 for 2, 3, 4 and 5; 20 for 2, 4, 5 and 10

## Year 5 and 6 Measure

<u>Vocabulary</u>	<u>Definition</u>
Volume	Amount of space occupied by an object.
Imperial units	<p>The Imperial system of measurement is an old measurement system based on everyday activities that originated in England.</p> <p>The US Standard or customary units developed from this system.</p> <p>Most countries use the metric system of measurement but Imperial units may remain in everyday use.</p>
Metric units	<p>A decimal system of measurement based on 10.</p> <p>Officially called the International System of Units or SI which is the modern form of the metric system and the most widely used system in the world.</p> <p>The S.I. base units are mass - the kilogram, time - the second, length - the metre.</p> <p>All other units are derived from these.</p>



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### Year 5 and 6 Geometry (position and direction)

<u>Vocabulary</u>	<u>Definition</u>
Reflex angle	An angle greater than 180 degrees.
Dimensions	The measurable size of something. Often refers to length, width and height. 1D ... one dimension ... length 2D ... two dimensions ... length and width 3D ... three dimensions ... length, width and height
Four quadrants (coordinates)	Any quarter of a plane divided by an x and y axis.

### Year 5 and 6 Geometry (properties of shapes)

<u>Vocabulary</u>	<u>Definition</u>
Regular polygons	Regular polygons have all sides equal and all angles equal.
Irregular polygons	A shape or mathematical object which is not regular. A regular shape has sides, faces and angles of equal size, but an irregular shape has sides, faces or angles of differing sizes.
Vertically opposite (angles)	Pair of angles directly opposite each other, formed by the intersection of straight lines. May also be called vertically opposite angles or opposite angles.
Circumference	The distance around a circle (its perimeter).
Radius	The distance from the centre of a circle to its circumference. The distance from the centre of a regular polygon to a vertex. The distance from the centre of a sphere to any point on its surface
Diameter	A straight line passing through the centre of a circle to touch both sides of the circumference.

## Year 5 and 6 Fractions, decimals and percentages

<u>Vocabulary</u>	<u>Definition</u>
Proper fractions	A fraction smaller than one whole. The numerator is smaller than the denominator.
Improper fractions	A fraction equivalent to or larger than one whole. The numerator is larger than or equal to the denominator.
Mixed numbers/mixed fraction	A number written as a whole number with a fraction
Percentage	A percent or percentage is a fraction expressed as a number out of 100 followed by the % symbol.
Half	One of two equal parts.
Quarter	One of four equal parts
Fifths	One of five equal parts.
Ratio	Commonly a ratio is the comparison of two values of the same kind, which may be written as a to b, a:b or as a fraction a/b. A part-part ratio compares a number of parts of a whole to other parts in the whole. A part-whole ratio compares a number of parts of a whole to the total of all parts in the whole. A ratio may have more than two terms
Degree of accuracy	The degree of accuracy is a measure of how close and correct a stated value is to the actual, real value being described. Accuracy may be affected by rounding, the use of significant figures or designated units or ranges in measurement.
Simplify/simplest form	To simplify a fraction to its simplest form: to reduce the numerator and denominator in a fraction to the smallest numbers possible. To simplify an expression: to remove brackets, unnecessary terms and numbers

## Year 5 and 6 Algebra

<u>Vocabulary</u>	<u>Definition</u>
Linear number sequence	A number pattern which increases (or decreases) by the same amount each time is called a linear sequence. The amount it increases or decreases by is known as the common difference.
Substitute	In algebra, the substitution of numbers for letters. The substitution of numbers for variables to simplify or solve expressions and equations
Variables	A quantity that can change or vary, taking on different values. A letter or symbol representing a varying quantity, for example, $n$ in $10 + n$ .
Symbol /sign	Symbols and signs are commonly used to represent values, equality, operations, grouping and mathematical terms.
Known values	To replace a variable with a number in an algebraic expression

## Year 5 and 6 Data/statistics

<u>Vocabulary</u>	<u>Definition</u>
<b>Mean</b>	Usually called the average and may be called the arithmetic mean. The mean is the total of all the scores or amounts, divided by, how many scores or amounts there were. <u>How to work out the mean</u> 1. Add up all the amounts. 2. Divide your total by the number of amounts.
<b>Pie chart</b>	A graph using a divided circle where each section represents a percentage of the total.
<b>Construct</b>	To draw a shape, line or angle accurately using a compass and straightedge (ruler). Sometimes you are also allowed to use a protractor and triangle.