

## **Glossary of Terms**

Term	Definition
2-D	Stands for two-dimensional. A 2-D shape will only have two dimensions for example length and height. Squares and circles are examples of 2-D shapes.
3-D	Stands for three-dimensional. A 3-D shape will have three dimensions for example length, height and depth. Cubes and spheres are examples of 3-D shapes.
Activity Time	Games and group activities to help pupils explore the concepts covered in the lesson further and reinforce their learning.
Acute Angle	An angle that is between 0° and 90°.
Addend	Any number that is added to another number. For example: 2 + 3 = 5 both 2 and 3 are addends.
Addition	The process of putting things together. Mathematically this means calculating the total of two or more numbers. We usually use + to show addition.
Algebra	A part of mathematics that studies symbols and the rules for manipulating these symbols. In basic algebra, symbols (usually Latin or greek letters) are used to represent unknown quantities or quantities without a fixed value.
Alternate Angles	A pair of angles that are formed when a transversal intersects two other lines. When the two lines intersected are parallel, the alternate angles are equal.
Anchor Task	The problem presented to a class that the whole lesson will be based around. The tasks have been designed to motivate exploration and learning.
Angle	The way mathematicians measure the space between two intersecting lines. It is usually measured in degrees and uses this symbol (°).
Angle At A Point	Refers to the sum of angles around a point or a complete turn of a circle being equal to 360°. For example: in one hour, the minute hand of a clock travels 360°.
Angles On a Straight Line	Angles on a straight line always add up to 180°. For example: a straight line could be represented by the diameter of a circle, a line that splits a circle in half. So the angle of a straight line can be calculated by dividing 360° by 2.
Anticlockwise	The opposite direction to which the hands of a clock move.
Approximately Equal To	When two quantities are close enough in value that they can be considered similar for the specific calculation or purpose. We usually use $\approx$ to show two numbers are approximately equal to.

Approximation	A rough calculation that is similar enough for the specific purpose to the exact result.
Arc	A portion of the circumference of a circle.
Area	A measure of how much space there is on a flat surface. Area is measured in square units.
Array	A set of items (objects or numbers) that are ordered into an arrangement, normally in rows and columns.
Assessment	Assessment is used to try and identify where a learner is in their learning: what do they know and what don't they know yet? It can be used by the teacher or by the learner themselves (self-assessment). It helps with planning (what to do next?) and evaluating teaching and learning strategies (what worked and what didn't work?). Assessment can be: a test, a quiz, observing group work, marking workbooks, reflecting on learning etc. It takes many forms.
Average	The central or typical value of a set of numbers. Types of average include: mode, median or, most commonly, mean.
Axis	A fixed line for the measurement of coordinates. We usually label a horizontal line the x-axis and the vertical line the y-axis.
Bar Chart	A type of graph where the numerical value of each variable is represented by the height or length of the bar, rectangle or line. Each bar, rectangle or line will have the same width.
Bar Model	A pictorial representation of a mathematical problem. It can be used to help visually understand the problem at hand and work out how best to solve the problem. It uses bars or rectangles to represent known and unknown numbers, to bridge the gap between the word problem and the abstract algebra needed to solve the problem.
Base-10 Materials	3-D manipulatives based on the work by Zoltan Dienes that allow pupils to learn the basic mathematical concepts like number sense, place value, counting, addition and subtraction.
Bisect	Divide a line or angle into two equal parts.
Brackets	Used in mathematics to create groups or to clarify the order of operations in an algebraic expression.
Capacity	Refers to the amount of substance or potential amount of substance an object can hold. Only hollow objects have capacity. It is usually measured in metric units e.g. litres, grams, pounds etc.
Centimetre	A metric unit of length or distance. It is equal to 10 mm or 1/100 m. We usually use cm as the symbol for centimetres.
Chord	A line that connects two points on a curve, usually connecting two points on a circle's circumference. If the line passes through the circle's centre it is called the diameter.
Circle	The set of all points that are the same distance away from a central point.

Circumference	The length of the circle if it were opened up and straightened to form a line i.e. the distance around the edge of the circle. Circumference = $2\pi r$ , where r is the radius of the circle.
Clockwise	The direction the hands of a clock move.
Column	A vertical array, normally found in a table or matrix.
Common Factor	A number that can be divided exactly into two or more different numbers without leaving a remainder. For example: 5 is a common factor for 25 and 40.
Common Multiple	A number that is a multiple of two or more numbers. For example: the common multiples of 3 and 5 are 15, 30, 45 etc.
Commutative	A mathematical operation where the order of the numbers does not affect the answer. For example: both addition and multiplication are commutative, but subtraction and division are not.
Compare	To study the difference between numbers or quantities, we usually use terms like 'greater than', 'less than' or 'equal' to define the differences.
Comparison model	A type of bar model where there are two or more vertically aligned bars usually drawn to compare two or more amounts. Brackets can usually be used to show the whole amount. These models are most commonly used for finding the difference between amounts.
Compass	A tool for drawing circles and arcs. It can also be used to measure the distances between points or to bisect lines or angles.
Composite Number	A positive number that has at least one divisor other than 1 and itself. For example: 6 and 15 are both composite numbers.
Cone	A 3-D shape that tapers smoothly from a flat (usually circular) base to a point.
Convert	Change a value or expression from one form to another. We usually are changing the units when we convert in mathematics.
Coordinate	A set of values that show the exact position of a point. Usually on a graph, it is two numbers that show the distance from the x and y-axis. For example: (6, 3) is a coordinate, it tells us that 6 units to the right from the y-axis and 3 units above the x-axis.
Counting Backwards	A process for subtraction where you count backwards from the first number to find the difference.
Counting On	A process for addition where you begin counting from the larger number to find the sum.
CPA	Stands for Concrete, Pictorial, Abstract which is an approach to teaching developed by Jerome Bruner. This approach introduces all abstract concepts, firstly in a concrete and tangible way before moving on to pictorial representations then finally introducing the abstract approach. This way learners should develop a strong, conceptual understanding of the topics.
Cube	A 3-D solid formed by six equal squares at right angles to each other.
Cube Number	The product of a number multiplied by itself twice. To cube is the process of multiplying a number by itself two times and is shown by a <sup>3</sup> .

	For example: $5 \times 5 \times 5 = 125$ , where 125 is a cube number.
Cube Units	Units usually used to measure volume.
Cuboid	A 3-D solid formed by 6 rectangular faces at right angles to each other.
Day	A period of 24 hours.
Decimal	Is a system that has 10 as its base, meaning it uses the number 0 to 9. It refers to fractions being shown in this numbering system. For example: 1 1/2 can be written as 1.5, which is its decimal format. The decimal place separates the ones place from the tenths place.
Degrees Celsius	A common unit used to measure temperature. We use °C as the symbol for degrees celsius. The Celsius scale is based on 0°C being the freezing point of water (where water turns from a liquid to a solid) and 100°C being the boiling point of water (where water turns from a liquid to a gas).
Denominator	Refers to how many equal parts make up the whole. It is the bottom number in a fraction. For example: 2/5, 5 is the denominator, it means the whole amount has been split into 5 equal parts.
Diameter	A straight line that passes through the centre of a circle and with both end points lying on the circumference of the circle. It is equal to twice the radius.
Difference	The answer in a subtraction problem. For example: $6 - 4 = 2$ , 2 is the difference.
Differentiation	The process of adapting lesson content so that all pupils are engaged in the learning process while still keeping the whole class learning together. It means the same anchor task can not only support struggling learners but also challenge advanced learners. It aims to strengthen mastery of the underlying concepts or ideas.
Digit	A single numerical symbol, usually from 0 to 9. For example: 5 is both a digit and a number, but 13 is a two-digit number.
Dividend	A number being divided by another number.
Division	The opposite process of multiplication. It is the process of splitting into equal parts or groups. We usually use ÷ or / as the symbol for division.
Division As Sharing	<ul> <li>Also known as equal sharing, it is probably the most common way of thinking about division. Here the quotient represents the number of shared objects in each group.</li> <li>For example: I want to put 32 cookies into 4 equally-sized boxes, each box will hold 8 cookies — is an example of a division as sharing story for the equation 32 ÷ 4 = 8.</li> </ul>
Division By Grouping	<ul> <li>Also known as equal grouping. Here the quotient represents the number of groups the original quantity is split into. Some people see division as grouping as repeated subtraction.</li> <li>For example: I want to put 32 cookies into packs of 4, then there will be 8 packs — is an example of a division as grouping story for the equation 32 ÷ 4 = 8.</li> </ul>

Divisor	The number which the dividend is divided by.
Edge	A line segment where two faces meet.
Enlargement	A type of transformation. Expanding or contracting an object without changing its shape or orientation.
Equal To	When two or more things have exactly the same amount of value. We usually use = to show equality.
Equation	A statement that shows the values of two mathematical expressions are equal. For example: $1 + 3 = 4$ or $5x + 2 = 12$
Equilateral Triangle	A triangle with all three sides of equal length and all three angles equal $(60^{\circ})$ .
Equivalent	When two or more things are equal in value, function or meaning. In maths, we usually use this term when two numbers are the same but written in different formats. For example: 1/4 is equivalent to 2/8.
Estimation	To find a value that is close enough (this can change depending on the situation) to the right answer, usually with some justification to the estimated value.
Even Number	Any integer that can be divided exactly by 2. Even numbers have 0, 2, 4, 6 or 8 as the digit in the ones place.
Exploration	One component of an MNP lesson. Pupils are presented with a problem (the anchor task which can be found in the In Focus section of the textbook) and are encouraged to collaboratively investigate the question without teacher interruptions.
Expression	A collection of terms which can contain variables and/or numbers separated by operations. For example: 5x + 2 is an expression.
Face	A flat surface that makes up a 3-D solid.
Factor	The numbers that can be divided into another number without a remainder. For example: 8 has four factors: 1, 2, 4 and 8.
Figure	A geometric form.
Fluency	The ability to complete mathematical problems accurately and efficiently, and being able to flexibly manipulate mathematical concepts.
Foot	An imperial unit of length or distance. It is equal to 1/3 of a yard or 12 inches. 1 foot = 30.48 cm. We usually use ft as the symbol for feet.
Formative Assessment	Assessment information that is used to inform the next steps for teaching and learning. Also called "Assessment for Learning".
Formula	A mathematical relationship, fact or rule expressed using symbols. It usually has two or more variables that represent values that we do not know yet and an equals symbol. For example: The formula for the area of a circle is $A = \pi r^2$ .
Formulae	Plural of formula.

Fraction	A numerical quantity that is not a whole number.
Geometry	The area of mathematics that is concerned with the measurement, properties and relationships of points, lines, angles, surfaces and solids.
Gram	A metric unit of mass. It is equal to 1/1000 of a kilogram. We usually use g as the symbol for grammes.
Graph	A pictorial representation used to show the relationship between variables.
Greater Depth	Having a deep understanding of mathematical concepts so learners are able to fluently and flexibly manipulate mathematical rules and ideas.
Greater Than	It is an inequality used to compare two numbers or quantities. It means that one number/quantity is larger than the second number/quantity. We usually use > to show the term 'greater than'. For example: 10 > 4
Greater Than Or Equal To	Used when one number/quantity is larger than or the same as the second number/quantity. We usually use $\geq$ to show the term 'greater than or equal to'. For example: $a \geq b$
Growth Mindset	Based on the work by Carol Dweck, it is the belief that learners can learn anything and that their intelligence can grow regardless of their starting point.
Height	The vertical distance that spans from the top of an object or figure to the base.
Heptagon	A seven-sided polygon.
Hexagon	A six-sided polygon.
Highest Common Factor (HCF)	The greatest number that can be divided exactly into two or more numbers without leaving a remainder. For example: The highest common factor of 24 and 16 is 8.
Horizontal	At right angles to the vertical plane.
Hour	A period of 60 minutes. We use h as the symbol for hours.
Hundred-thousands Place	Refers to the place six to the left of the decimal place. The digit in the hundred-thousands place tells you how many groups of 100 000 are in that number.
Hundreds Place	Refers to the place three to the left of the decimal place. The digit in the hundreds place tells you how many groups of 100 are in that number.
Hundredths Place	Refers to the second place to the right of the decimal place. One hundredth means you have one out of 100 equal parts of a whole. The digit in the hundredths place tells you how many groups of 1/100 are in that number.
Improper Fraction	A fraction which has a numerator greater than the denominator. An improper fraction has a value greater than 1.
In Focus	Includes questions/anchor task related to various lesson objectives as an introductory activity for pupils to explore.

Inch	An imperial unit of length or distance. It is 1/12 of a foot and equal to 2.54 centimetres. We usually use in as the symbol for inches.
Integer	A number which is not a fraction or a decimal. It is a whole number and can be positive, negative or 0. E.g432, -1, 0, 1, 2, 3, 4
Irregular Polygon	A polygon where all the sides are not equal and all the angles are not equal.
Isosceles Triangle	A triangle with two equal lengths and two equal angles.
Journaling	One component of an MNP lesson. Pupils are given a question or task based on the lesson's problem. It allows learners to explore new ideas and to create a completely personal journal entry, making it easier for teachers to assess which individuals have truly grasped the concept and who in the class is working at a greater depth. There are four types of journaling — descriptive, evaluative, creative and investigative.
Kilogram	A metric unit of mass. It is equal to 1000 g. It is very nearly equal to the mass of 1000 cubic cm or 1 litre of water. We usually use kg as the symbol for kilograms.
Kilometre	A metric unit of length or distance equal to 1000 m. We usually use km as the symbol for kilometres.
Length	The measurement of something from one end to the other.
Less Than	It is an inequality used to compare two numbers or quantities. It means that one number/quantity is smaller than the second number/quantity. We usually use < to show the term 'less than'. For example: 4 < 10
Less Than Or Equal To	Used when one number/quantity is smaller than or the same as the second number/quantity. We usually use $\leq$ to show the term 'less than or equal to'. For example: $a \leq b$
Lesson Objective	The aims for what you want pupils to be able to achieve at the end of the lesson.
Let's Learn	This is a section of the textbook and can provide some anticipated methods for solving the lesson's problem. Teachers can use this section to guide the Structured Discussion.
Line Graph	A graph that displays information as a series of points joined by straight line segments. It shows how the value of something changes, usually over time.
Line Of Symmetry	The line in which an image could be split in half so each part is a mirror image of the other. In other words, if you folded the image down the line of symmetry each half would match exactly.
Litre	A metric unit of capacity. It is equal to 1000 ml. We usually use I as the symbol for litres.
Locus	A set of points all satisfying a certain condition.
Lowest Common Multiple (LCM)	The smallest number that is a multiple of two or more numbers. For example: 15 is the lowest common multiple of 3 and 5.
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Manipulatives	An object designed to help learners perceive mathematical concepts by manipulating it. It provides a way for pupils to learn concepts through developmentally appropriate hands-on experience.
Mass	A measure of how much matter is in an object. It is usually measured by weighing the object, however mass is not affected by gravity whereas weight is. Mass can be measured in grams, kilograms, tonnes, ounces, pounds etc.
Maths Mastery	Teaching maths for mastery is a transformational approach to maths teaching which stems from high performing Asian nations such as Singapore. When taught to master maths, children develop their mathematical fluency without resorting to rote learning and are able to solve non-routine maths problems without having to memorise procedures.
Mean	A type of average of a set of numbers. Calculated by adding up all the numbers and then dividing by how many numbers there are.
Measure	To find the exact size or amount of something, usually using a tool to find out.
Median	A type of average of a set of numbers. Calculated by ordering the numbers, normally in ascending order, and the median number is the middle number in the list.
Mental Calculation	Completing calculations using only the human brain with no assistance from any resources.
Metre	A metric unit of length or distance. It is equal to 100 cm or 1/1000 km. We usually use m as the symbol for metres.
Mile	An imperial unit of length or distance. It is equal to 1760 yards or 5280 feet. 1 mile is equal to 1.6 kilometres.
Millilitre	A metric unit of capacity. It is equal to 1/1000 of a litre. We usually use ml as the symbol for millilitres.
Millions Place	Refers to the place seven to the left of the decimal place. The digit in the millions place tells you how many groups of 1 000 000 are in that number.
Mind Workout	A non-routine problem found at the end of each chapter in the textbook and workbook. It has been designed to encourage pupils to work on their greater depth thinking.
Minuend	The value you are subtracting from. For example: $6 - 4 = 2$ , 6 is the minuend.
Minute	A period of 60 seconds. We use min as the symbol for minutes.
Misconceptions	A view or understanding that is incorrect and usually based on faulty thinking or misunderstandings.
Mixed Number	A number that is made up of an integer and a proper fraction.
Mode	A type of average of a set of numbers. Calculated by finding the most common value or the number that appears most often in the set of numbers.
Multiple	The product of one number multiplied by another number.

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	For example: 8 is a multiple of both 4 and 2.
Multiplicand	The number that is being multiplied. Usually this number is placed second in a multiplication calculation i.e. after the multiplication symbol. Multiplication is commutative though, so it is better to refer to both the multiplicand and the multiplier as a factor.
Multiplication	The process of repeated addition. We usually use × to show multiplication. For example: we can read 4 × 5 as 4 lots of 5. So $4 \times 5 = 5 + 5 + 5 + 5 = 20$ .
Multiplier	The number by which you multiply by. Usually this number is placed first in a multiplication calculation i.e. before the multiplication symbol. Multiplication is commutative though, so it is better to refer to both the multiplicand and the multiplier as a factor.
National Curriculum	The statutory national curriculum requirements for the lesson.
Natural Numbers	They are all positive integers (not fractions or decimals) not including 0. E.g. 1, 2, 3, 4 and so on
Non-negotiables	What the most struggling learners are expected to achieve to ensure they can continue to make progress, bearing the following lessons in mind. It is not the main objective watered down; it is the most essential part of the lesson. Non-negotiables are different from the national curriculum objectives, which set out what all children need to know by the end of the year.
Number	A string of one or more digits. For example: 13 is a two-digit number.
Number Bond	A pictorial representation between a number and the parts that add up to make it.
Number Disc or Place-value Disc	Colour coded manipulatives that are used to represent ones, tens, hundreds, thousands, ten-thousands, hundred-thousands and millions.
Number Line	A line on which numbers are marked at set intervals. It can be used as a pictorial representation for various operations as well as number patterns.
Number Pair	A set of two numbers.
Number Pattern	A sequence of numbers with a common relationship between all the numbers. For example: 7, 10, 13, 16, each step in the pattern is adding 3 to the previous number.
Numerals	A symbol that stands for a number. Whereas number is the idea, numeral is the representation of how we write it. For example: 49 is a numeral, it is written using digits.
Numerator	Refers to how many of the equal parts we have out of a whole. It is the top number in a fraction. For example: 2/5, 2 is the numerator, it means we have two out of five parts.
Obtugo Anglo	An angle that is between 90° and 180°.
Obtuse Angle	

Odd Number	Any integer that cannot be divided exactly by 2. Odd numbers have 1, 3, 5, 7 or 9 as the digit in the ones place.
Ones Place	Refers to the first place to the left of the decimal place. The digit in the ones place tells you how many groups of 1 are in that number.
Ounce	An imperial unit of weight. It is 1/16 of a pound and is approximately equal to 28 grams. We usually use oz as the symbol for ounces.
Parallel	Two lines that are always the same distance apart, they will never touch.
Parallelogram	A quadrilateral with opposite sides parallel. Opposite sides are equal and opposite angles are equal.
Part-part-whole model or Part-whole model	A type of bar model where the parts are compared to the whole amount. It can be used to find out the unknown amount either one of the parts or the whole. It can be used for question involving all four operations, fractions, measure, algebra, time, ratio, proportion etc.
Partitioning	The process of splitting large numbers into smaller units to make it easier to work out mathematical problems.
Pentagon	A five-sided polygon.
Per Cent	Means 'out of 100'. We usually use % as the symbol for per cent.
Percentage	A part of a whole expressed in hundredths. Does not need to be accompanied by a number.
Perimeter	The total length of the sides of a polygon.
Perpendicular	A line meeting another line at a right angle.
Pi	A mathematical constant. It is a number which is equal to the circumference of a circle divided by its diameter. It is approximately equal to 3.1416 and we usually use the greek symbol $\pi$ as the symbol for this constant.
Place Value	Every digit in a number has a place value. It is the value represented by that digit in the number. For example: In the number 34 567: The digit 3 has a place value of 30 000, the digit 4 has a place value of 4000, the digit 5 has a place value of 500, the digit 6 has a place value of 60 and the digit 7 has a place value of 7.
Plenary	It is an evaluative part of the lesson and either during or at the end of a lesson by teachers to review the lesson objectives and consolidate the pupils' learning.
Polygon	A 2-D shape formed using straight lines. For example: triangles, squares, hexagons etc are all polygons, but a circle is not a polygon because it is formed using curved lines.
Pound (£)	The official currency of the United Kingdom.
Pound (lb)	An imperial unit of weight. It is equal to 16 ounces. 1 lb = 2.2 kg. We usually use lb as the symbol for pounds.

Practice	One component of an MNP lesson. Pupils are able to practice what they have learnt. There are two types of practice: Guided Practice which can be found in the textbook and Independent Practice which can be found in the workbook. Both sets of questions have been designed with variation in mind.
Prime Number	A number that only has two factors, 1 and itself.
Prism	A 3-D solid with two identical, parallel faces, so that it will have the same cross-section the whole way along the length.
Problem Solving	Exploring a task where the solution method is not known in advance.
Product	The result of multiplication.
Proper Fraction	A fraction which has a numerator that is less than the denominator. A proper fraction has a value less than 1.
Protractor	A tool for measuring angles.
Quadrilateral	A four-sided polygon.
Quotient	The result of division, where one number has been divided by another.
Radius	A straight line from the centre of a circle to the circumference of the circle. It is equal to half the diameter.
Rational Number	Is a number that satisfies the following: a/b, where a and b are both integers and b is not equal to 0.
Reading	One component of an MNP lesson. Pupils read through the lesson content in the textbook and discuss the different sections of the lesson.
Rectangle	A quadrilateral with two pair of equal, parallel sides and four right angles.
Reflection	A type of transformation. An image of how it would be seen in a mirror. Each point of the mirror image is the same distance from the mirror line as the equivalent point in the original image.
Reflex Angle	An angle that is between 180° and 360°.
Regular Polygon	A polygon where all the sides are equal and all the angles are equal.
Remainder	The number left over after one number has been divided by another to produce an integer quotient.
Renaming	The process of re-writing something as its equivalent to make a mathematical process easier. For example: renaming 324 to 32 tens and 8 ones so it is easier to divide it by 4.
Right Angle	An angle that is equal to 90°.
Right-angled Triangle	A triangle where one angle is 90°.
Roman Numerals	The symbols the Romans used to write and refer to numbers. It is based on seven symbols: I = 1, V = 5, X = 10, L = 50, C = 100, D = 500 and M = 1000
Rotation	A type of transformation. Rotating an object about a fixed point without changing its size or shape.

Rounding	Simplifying a number but still keeping its value close to what it was. Rounding is a type of estimating. We normally round to the nearest whole number, the nearest 10 or nearest 100 etc.
Row	A horizontal array, normally found in a table or matrix.
Scalene Triangle	A triangle with all three sides unequal and all three angles unequal.
Second	The base unit of time. It is equal to 1/60 of a minute or 1/86400 of a day. We use s as the symbol for seconds.
Self Check	Found at the end of each chapter in the textbook and allows pupils to assess their own learning after each section of learning.
Set	A collection of distinct objects. Distinct meaning all the objects in the set are different.
Simplify	To put something in its simplest form. For example: for fractions this could mean dividing both the numerator and the denominator by their highest common factor or for an expression it could be collecting all like terms.
Singapore Maths	Refers to the style of teaching maths in Singapore, that is based on over 30 years of research and practice.
Skip Counting	Counting forwards or backwards in groups larger than 1. It is an early form of learning multiplication.
Solve	To find a solution.
Speed	The rate at which something is moving. It is the distance covered by an object per unit time. Usually measured in metres per second or kilometres per hour.
Sphere	The set of all points that are the same distance away from a central point. It is a perfectly round 3-D solid.
Spiral Approach	Learning is spread over a period of time rather than being concentrated in shorter periods. Topics are revisited at intervals and each time the pupil encounters the topic they build on their previously learned knowledge and expand their understanding of the concept.
Square	A regular quadrilateral, with four equal sides and four equal angles (90°).
Square Number	The product of a number multiplied by itself. To square is the process of multiplying a number by itself and is shown by a $^{2}$ . For example: 5 × 5 = 25, where 25 is a square number.
Square Units	Units usually used to measure area.
Structured Discussion	One component of an MNP lesson. A teacher-led discussion that engages the whole class.
Subtraction	The process of taking something away from a number or group of things. We usually use – to show subtraction.
Subtrahend	The value you are subtracting from another value. For example: $6 - 4 = 2$ , 4 is the subtrahend.
Sum	The total amount when two or more numbers are added together. For example: $2 + 3 = 5$ , the sum is 5.

Summative Assessment	Assessment information that is used to understand what has been learned from the content that has already been taught. It can be thought of as 'learning so far summed up'.
Symmetry	When one shape becomes exactly like another when you move it in some way. Two or more shapes can be symmetrical or one shape can be symmetrical if it has a mirror line that divides the shape in half and both sides are exactly the same as each other.
Table	Information arranged in rows and columns.
Tangent	A line that touches a curve at one point.
Temperature	The measure of how hot or cold something is. It is measured with a thermometer and we usually measure temperature using degrees Celsius (°C) or degrees Fahrenheit (°F).
Ten-thousands Place	Refers to the place five to the left of the decimal place. The digit in the ten-thousands place tells you how many groups of 10 000 are in that number.
Tens Place	Refers to the place two to the left of the decimal place. The digit in the tens place tells you how many groups of 10 are in that number.
Tenths Place	Refers to the first place to the right of the decimal place. One tenth means you have one out of 10 equal parts of a whole. The digit in the tenths place tells you how many groups of 1/10 are in that number.
Term	A combination of a number and variables separated by mathematical operations that make up an expression or equation. For example: There are three terms (5x, 2 and 12) in the following equation $5x + 2 = 12$ .
Textbook	A resource for both teachers and pupils that provides the anchor task for the lesson, various methods to solve the anchor task, practice questions and a self-check. The MNP textbook follows the 2014 English National Curriculum.
Thousands Place	Refers to the place four to the left of the decimal place. The digit in the thousands place tells you how many groups of 1000 are in that number.
Thousandths Place	Refers to the third place to the right of the decimal place. One thousandth means you have one out of 1000 equal parts of a whole. The digit in the thousandths place tells you how many groups of 1/1000 are in that number.
Time	The ongoing sequence of events taking place including the past, present and future. It is measured usually using clocks and calendars. And the units we use for time are seconds, minutes, hours, days, weeks, months, years etc.
Transformation	The movement of objects in the coordinate plane. There are four main types of transformations: Enlargement, Reflection, Rotation, Translation.
Translation	A type of transformation. Moving an object or image without changing its size, shape or orientation.
Transversal	A line that intersects two or more lines.
Trapezium	A quadrilateral with only one pair of parallel sides.

Triangle	A three-sided polygon.
Unit	A standard used in measuring
Unit Fraction	A fraction that has a numerator of 1 and a denominator that is a non-zero integer.
Variable	A quantity with an unknown value. We usually use a letter like x or y to represent a variable. For example: in the expression, 5x + 2, x is the variable.
Variation	Pupils are not just learning through repetition they are experiencing variation. And it's more than just mathematical variation, where we vary the numbers used, but it is variation of skills and approaches needed to solve the problems.
Vertex	A point where two or more lines meet, or a corner of a shape.
Vertical	At right angles to the horizontal plane.
Vertices	Plural of vertex.
Volume	Refers to the amount of space an object occupies. Both solid and hollow objects can have volume. It is usually measured in cubic units.
Week	A period of seven days.
Weight	The force exerted on an object by the gravity of the earth. Mass and weight are sometimes used interchangeably, however mass is not affected by gravity.
Whole-Class Teaching	Pupils are not set by ability but learn the curriculum in mixed-ability groups.
Whole Numbers	They are all positive integers (not fractions or decimals) including 0. E.g. 0, 1, 2, 3, 4 and so on
Width	A measurement from one end to the other, it usually refers to the shortest length of an object.
Word Problems	A mathematical problem where information on the problem is presented as text rather than in mathematical notation.
Workbook	A practice book that complements the textbooks for pupils to extend learning with well-structured exercises.
Yard	An imperial unit of length or distance. It is equal to 3 feet. 1 yard is equal to 0.91 metres.
Year	A period of 365 days (or 366 days in a leap year). It is the time taken by the earth to travel once around the sun.
Zero	Refers to an empty set. It is neither positive nor negative.

If you think anything is missing from this document, please contact us at <u>hello@mathsnoproblem.com</u> to let us know.