



“Mathematics is not about numbers, equations, computations or algorithms; it is about UNDERSTANDING”

William Paul Thurston

Purpose of study

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history’s most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Aims

The national curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects. The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils’ understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Place Value: Counting	<p>-count up to 20, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>-count numbers to 20 in numerals and with concrete objects.</p>	<p>-count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>-count numbers to 100 in numerals.</p> <p>-count in multiples of twos, fives and tens.</p>	<p>-count in steps of 2, 3 and 5 from 0, and in tens from any number, forwards and backwards.</p>	<p>-count from 0 in multiples of 4, 8, 50 and 100.</p> <p>-find 10 or 100 more or less than a given number.</p>	<p>-count in multiples of 6, 7, 9, 25 and 1000.</p>	<p>-count forwards or backwards in steps of powers of ten for any given number up to 1000000.</p> <p>-count forwards and backwards with positive and negative whole numbers, including through zero.</p>	

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Place Value: Represent	<p>-identify and represent numbers using objects and begin to use pictorial representations.</p> <p>-read and write numbers to 20 in numerals.</p>	<p>-identify and represent numbers using objects and pictorial representations.</p> <p>-read and write numbers to 100 in numerals.</p> <p>-read and write numbers to 20 in numerals and words.</p>	<p>-read and write to at least 100 in numerals and words.</p> <p>-identify, represent and estimate numbers using different representations, including the number line.</p>	<p>-identify, represent and estimate numbers using different representations.</p> <p>-read and write numbers up to 1000 in numerals and words.</p>	<p>-identify, represent and estimate numbers using different representations.</p> <p>-read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</p>	<p>-read, write (order and compare) numbers to at least 1000000 and determine the value of each digit.</p> <p>-read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</p>	<p>-read, write (order and compare) numbers up to 10000000 and determine the value of each digit.</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Place Value: Using Place Value and Comparing	<ul style="list-style-type: none"> -compare groups of identical and non-identical objects. -compare groups of up to 10. -change within 10; one more and one less. 	<ul style="list-style-type: none"> -given a number, identify one more and one less. 	<ul style="list-style-type: none"> -recognise the place value of each digit in a two digit number (Tens and Ones). -compare and order numbers from 0 to 100. -use symbols: $<$, $>$, $=$ to compare. 	<ul style="list-style-type: none"> -recognise the place value of each digit in a three digit number (Hundreds, Tens and Ones). -compare and order numbers up to 1000. 	<ul style="list-style-type: none"> -find 1000 more or less than a given number. -recognise the place value of each digit in a four digit number (Thousands, Hundreds, Tens and Ones). -order and compare numbers beyond 1000. 	<ul style="list-style-type: none"> -order and compare numbers to at least 1000000 and determine the value of each digit. 	<ul style="list-style-type: none"> -order and compare numbers to at least 10000000 and determine the value of each digit.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Place Value: Problems and Rounding			<ul style="list-style-type: none"> -use place value and number facts to solve problems. 	<ul style="list-style-type: none"> -solve number problems and practical problems involving these ideas. 	<ul style="list-style-type: none"> -round any number to the nearest 10, 100 or 1000. -solve number and practical problems that involve all of the above and with increasingly large positive numbers. 	<ul style="list-style-type: none"> -interpret negative numbers in context. -round any number up to 100000 to the nearest 10, 100, 1000, 10000 and 100000. -solve number and practical problems that involve all of the above. 	<ul style="list-style-type: none"> -round any whole number to a required degree of accuracy. -use negative numbers in context, and calculate intervals across zero. -solve number and practical problems that involve all of the above.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Addition and Subtraction: Calculations	<ul style="list-style-type: none"> -combine two groups to find the whole with numbers to 10. -add by counting on. -take away by counting back. 	-add and subtract one digit and two digit numbers to 20, including zero.	<ul style="list-style-type: none"> -add and subtract numbers using concrete objects, pictorial representations and mentally, including: <ul style="list-style-type: none"> -a two digit number and ones -a two digit number and tens -two two digit numbers -adding three one digit numbers. 	<ul style="list-style-type: none"> -add and subtract numbers mentally, including: <ul style="list-style-type: none"> -a three digit number and ones -a three digit number and tens -a three digit number and hundreds. -add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. 	-add and subtract numbers with up to 4 digits using the formal written method of columnar addition and subtraction, where appropriate.	<ul style="list-style-type: none"> -add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). -add and subtract numbers mentally with increasingly large numbers. 	<ul style="list-style-type: none"> -perform mental calculations, including with mixed operations and large numbers. -use knowledge of operations to carry out calculations involving the four operations.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Addition and Subtraction: Solve Problems	-solve one-step problems that involve addition and subtraction, using concrete objects.	-solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.	<ul style="list-style-type: none"> -solve problems with addition and subtraction: <ul style="list-style-type: none"> -using concrete objects and pictorial representations, including those involving numbers, quantities and measures. -applying knowledge of mental and written methods. 	-solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.	-solve addition and subtraction two-step problems in context, deciding which operations and methods to use and why.	<ul style="list-style-type: none"> -solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why. -solve problems involving a combination of the four operations, understand the meaning of the equals sign. 	-solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Multiplication and Division: Recall, Represent and Use	<ul style="list-style-type: none"> -recall numerical patterns. -double, halve and share up to 20. -understand the difference between odd and even number. 	<ul style="list-style-type: none"> -double, halve and share. -explain the definition of an odd and even number. 	<ul style="list-style-type: none"> -recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. -show that multiplication is commutative and division is not. 	<ul style="list-style-type: none"> -recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. 	<ul style="list-style-type: none"> -recall multiplication and division facts for multiplication tables up to 12×12. -use place value, known and derived facts to multiply and divide mentally, including: <ul style="list-style-type: none"> -multiplying by 0 and 1 -dividing by 1 -multiplying together three numbers. -recognise and use factor pairs and commutivity in mental calculations. 	<ul style="list-style-type: none"> -identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers. -know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. -establish whether a number up to 100 is prime and recall prime numbers up to 19. -recognise and use square and cube numbers and the notation for squared (2) and cubed (3). 	<ul style="list-style-type: none"> -identify common factors, common multiples and prime numbers. -use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Multiplication and Division: Calculations			<p>-calculate mathematical statements for multiplication and division within the multiplication tables and write them using the symbols \times, \div and $=$.</p>	<p>-write and calculate mathematical statements for multiplication and division within the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</p>	<p>-multiply two-digit and three-digit numbers by a one-digit number using the formal, written layout.</p>	<p>-multiply numbers up to four digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.</p> <p>-multiply and divide numbers mentally drawing upon known facts.</p> <p>-divide numbers up to four digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.</p> <p>-multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</p> <p>.</p>	<p>-multiply multi-digit numbers by a two-digit whole number using the formal written method of long multiplication.</p> <p>-divide numbers up to four digits by a two-digit whole number using the formal written method of long division and interpret remainders as whole number remainders, fractions or by rounding, as appropriate for the context.</p> <p>-divide numbers up to four digits by a two-digit number using the formal written method of short division and interpret remainders appropriately for the context.</p> <p>-perform mental calculations, including with mixed operations and large numbers.</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Multiplication and Division: Solve Problems	-solve one-step problems involving doubling, halving and sharing, using concrete objects.	-solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of a teacher.	-solve one-step problems involving multiplication and division using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in context.	-solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems (such as n objects are connected to m objects).	-solve problems involving multiplication and division, including using the distributive law to multiply two-digit numbers by one-digit numbers, integer scaling problems and harder correspondence problems (such as n objects are connected to m objects).	-solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes. -solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	-solve problems involving addition, subtraction, multiplication and division.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Fractions: Recognise and Write		<p>-recognise, find and name a half as one of two equal parts of an object, shape or quantity.</p> <p>-recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</p>	<p>-recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity.</p>	<p>-count up and down in tenths and recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.</p> <p>-recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</p> <p>-recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.</p>	<p>-count up and down in hundredths and recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10.</p>	<p>-identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.</p> <p>-recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements greater than 1 as a mixed number e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}$.</p>	

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Fractions: Compare			<p>-recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.</p>	<p>-recognise and show, using diagrams, equivalent fractions with small denominators.</p> <p>-compare and order unit fractions, and fractions with the same denominators.</p>	<p>-recognise and show, using diagrams, families of common equivalent fractions.</p>	<p>-compare and order fractions whose denominators are all multiples of the same number.</p>	<p>-use common factors to simplify fractions and use common multiples to express fractions in the same denomination.</p> <p>-compare and order fractions, including fractions greater than one.</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Fractions: Calculations			-write simple fractions, e.g. $\frac{1}{2}$ of 6 = 3.	-add and subtract fractions with the same denominator within one whole, e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$.	-add and subtract fractions within the same denominator.	-add and subtract fractions with the same denominator and denominators that are multiples of the same number. -multiple proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	-add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. -multiply simple pairs of proper fractions, writing the answer in its simplest form. -divide proper fractions by whole numbers, e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Fractions: Solve Problems				-solve problems that involve all of the above.	-solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.		

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Decimals: Recognise, Write and Compare					<p>-recognise and write decimal equivalents of any number of tenths or hundredths.</p> <p>-recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.</p> <p>-round decimals with one decimal place to the nearest whole number.</p> <p>-compare numbers with the same number of decimal places up to two decimal places.</p>	<p>-read and write decimal numbers as fractions.</p> <p>-recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</p> <p>-round decimals with two decimal places to the nearest whole number and to one decimal place.</p> <p>-read, write, order and compare numbers with up to three decimal places.</p>	<p>-identify the value of each digit in numbers given to three decimal places.</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Fractions, Decimals and Percentages					<p>-solve simple measure and money problems involving fractions and decimals to two decimal places.</p>	<p>-recognise the percent (%) symbol and understand that percent relates to number of parts per hundred and write percentages as a fraction with denominator of 100 and as a decimal.</p> <p>-solve problems which require knowing percentages and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.</p>	<p>-associate a fraction with division and calculate decimal fraction equivalents for a simple fraction.</p> <p>-recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Ratio and Proportion							<p>-solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.</p> <p>-solve problems involving the calculations of percentages and the use of percentages for comparison.</p> <p>-solve problems involving similar shapes where the scale factor is known or can be found.</p> <p>-solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Algebra		<p>-solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as: $7 = \square - 9$ (Algebraic Thinking)</p>	<p>-recognise and use the inverse relationship between addition and subtraction to check calculations and solve missing number problems. (Algebraic Thinking)</p>	<p>-solve problems including missing number problems. (Algebraic Thinking)</p>			<p>-use simple formulae.</p> <p>-generate and describe linear number sentences.</p> <p>-express missing number problems algebraically.</p> <p>-find pairs of numbers that satisfy an equation with two unknowns.</p> <p>-enumerate possibilities of combinations of two variables.</p>

		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Measurement: Using Measures	<p>-use language to describe length, height, weight and capacity.</p> <p>-compare length, height, weight and capacity by direct and indirect comparison.</p>	<p>-compare, describe and solve practical problems for:</p> <ul style="list-style-type: none"> -lengths and heights -mass/weight -capacity and volume -time <p>-measure and begin to record:</p> <ul style="list-style-type: none"> -lengths and heights -mass/weight -capacity and volume -time (hours, minutes, seconds) 	<p>-choose and use appropriate standard units to estimate and measure:</p> <ul style="list-style-type: none"> -length and height (m/cm) -mass (kg/g) -temperature(°C) -capacity (L/mL) <p>to the nearest unit using rulers, scales, thermometers and measuring vessels.</p> <p>-compare and order lengths, mass, volume/capacity and record the results using >, < and =.</p>	<p>-measure, compare, add and subtract:</p> <ul style="list-style-type: none"> -lengths (m/cm/mm) -mass (kg/g) -volume/capacity (L/mL) 	<p>-convert between different units of measure (e.g. km to m, hour to minute).</p> <p>-estimate, compare and calculate different measures.</p>	<p>-convert between different units of metric measure (e.g. km/m, m/cm/mm, kg/g, L/mL).</p> <p>-understand and use approximate equivalences between metric units and common imperial units (such as inches, pounds and pints).</p> <p>-use all four operations to solve problems involving measures using decimal notation, including scaling.</p>	<p>-solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</p> <p>-use, read, write and convert between standard units, including from smaller to larger unit and vice versa using decimal notation up to three decimal places.</p> <p>-convert between miles and kilometres.</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Measurement: Money		<p>-recognise and know the value of different denominations of coins and notes.</p>	<p>-recognise and use symbols for pounds (£) and pence (p).</p> <p>-combine amounts to make a particular value.</p> <p>-find different combinations of coins that equal the same amounts of money.</p> <p>-solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.</p>	<p>-add and subtract amounts of money to give change, using both £ and p in practical contexts.</p>	<p>-estimate, compare and calculate different measures, including money in pounds and pence.</p>	<p>-use all four operations to solve problems involving money.</p>	

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Measurement: Time	<p>-order important times in their day using positional language.</p> <p>-begin to measure time in simple non-standard units.</p>	<p>-sequence events in chronological order, using language to describe.</p> <p>-recognise and use language relating to dates.</p> <p>-tell the time to the hour and half past and draw hands on a clock face to show these times.</p>	<p>-compare and sequence intervals of time.</p> <p>-tell and write the time to 5 minutes, including quarter to and past and draw the hands on a clock face to show these times.</p> <p>-know the number of minutes in an hour and hours in a day.</p>	<p>-tell and write the time from an analogue clock, including Roman numeral I to XII and 12-hour and 24-hour clocks.</p> <p>-estimate and measure time with increasing accuracy to the nearest minute.</p> <p>-record and compare time in seconds, minutes and hours.</p> <p>-Use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight.</p> <p>-know the number of seconds in a minute, days in each month and months in each year.</p> <p>-compare durations of tasks and events.</p>	<p>-read, write and convert time between analogue and digital, 12- and 24-hour clocks.</p> <p>-solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days.</p>	<p>-solve problems involving converting between units of time.</p>	<p>-use, read, write and convert between standard units, including from smaller unit to larger and vice versa.</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Measurement: Perimeter, Area and Volume				<p>-measure the perimeter of a simple 2D shape.</p>	<p>-measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m.</p> <p>-find the area of rectilinear shapes by counting squares.</p>	<p>-measure and calculate the perimeter of composite rectilinear shapes in cm and m.</p> <p>-calculate and compare the area of rectangles (including squares) using standard units (cm^2 and m^2) and estimating the area of irregular shapes.</p> <p>-estimate volume and capacity, using practical methods.</p>	<p>-recognise that shapes with the same area can have different perimeters and vice versa.</p> <p>-recognise that when it is possible to use formulae to calculate the area and volume of shapes.</p> <p>-calculate the area of a parallelogram and triangle.</p> <p>-calculate, estimate and compare the volume of cubes and cuboids using standard units (cm^3 and m^3) and extending to other units (e.g. km^3 and mm^3).</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Geometry: 2D Shapes	<ul style="list-style-type: none"> -explore common 2D shapes. -experience common 2D shapes in different orientations. -compare and sort common 3D shapes by observed similarities and differences. -combine and partition 2D shapes to make new shapes 	-recognise and name common 2D shapes.	<ul style="list-style-type: none"> -identify and describe the properties of 2D shapes, including number of sides and vertical lines of symmetry. -identify 2D shapes on the faces of 3D shapes. -compare and sort common 2D shapes and everyday objects. 	-draw 2D shapes.	<ul style="list-style-type: none"> -compare and classify geometric shapes, including quadrilaterals and triangle, based on their properties and sizes. -identify lines of symmetry in 2D shapes presented in different orientations. 	<ul style="list-style-type: none"> -distinguish between regular and irregular polygons based on reasoning about equal sides and angles). -use the properties of rectangles to deduce related facts and find missing lengths and angles. 	<ul style="list-style-type: none"> -draw 2D shapes using given dimensions and angles. -compare and classify geometric shapes based on their properties and sizes. -illustrate and name parts of a circle including radius, diameter and circumference and know that the diameter is twice the radius.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Geometry: 3D Shapes	<ul style="list-style-type: none"> -explore common 3D shapes. -compare and sort common 3D shapes by observed similarities and differences. 	-recognise and name common 3D shapes.	<ul style="list-style-type: none"> -recognise and name common 3D shapes. -compare and sort common 3D shape and everyday objects. 	<ul style="list-style-type: none"> -make 3D shapes using modelling materials. -recognise 3D shapes in different orientations and describe them. 		-identify 3D shapes from 2D representations.	-recognise, describe and build simple 3D shapes, including making nets.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Geometry: Angles and Lines				<p>-recognise angles as a property of a shape or a description of a turn.</p> <p>-identify right angles and recognise that two right angles make a half turn, three make $\frac{3}{4}$ and four make a whole turn.</p> <p>-identify if an angle is greater or less than a right angle.</p> <p>-identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</p>	<p>-identify acute and obtuse angles and compare and order angles up to two right angles by size.</p> <p>-identify lines of symmetry in 2D shapes presented in different orientations.</p> <p>-complete a simple symmetric figure with respect to a specific line of symmetry.</p>	<p>-know angles are measured in degrees.</p> <p>-estimate and compare acute, obtuse and reflex angles.</p> <p>-draw given angles and measure them in degrees.</p> <p>-identify that angles at a point and one whole turn total 360°, and for half a turn total 180° and other multiples of 90°.</p>	<p>-find unknown angles in any triangle, quadrilateral and regular polygon.</p> <p>-recognise angles where they meet at a point, are on a straight line or are vertically opposite and find missing angles.</p>

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Geometry: Position and Direction	-use positional language to describe how objects relate to one another spatially.	-describe position, direction and movement including whole/half/quarter/three-quarter turns.	-order and arrange combinations of mathematical objects in patterns and sequences. -use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).		-describe positions on a 2D grid as coordinates in the first quadrant. -describe movements between positions as translations of a given unit to left/right/up/down. -plot specific points and draw sides to complete a given polygon.	-identify, describe and represent the position of a shape following a reflection or translation using the appropriate language and know that the shape has not changed.	-describe positions on the full coordinate grid (all four quadrants). -draw and translate simple shapes on the coordinate plane and reflect them in the axes.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Statistics: Present and Interpret			-interpret and construct simple pictograms, tally charts, block diagrams and simple tables.	-interpret and present data using bar charts, pictograms and tables.	-interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.	-complete, read and interpret information in tables, including timetables.	-interpret and construct pie charts and line graphs and use these to solve problems.

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Statistics: Solve Problems			<p>-ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</p> <p>-ask and answer questions about totalling and comparing categorical data.</p>	<p>-solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables.</p>	<p>-solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p>	<p>-solve comparison, sum and difference problems using information presented in a line graph.</p>	<p>-calculate and interpret the mean as an average.</p>