



MATHS CURRICULUM MAP

	AUTUMN	SPRING	SUMMER
EYFS Development Matters	<p>Match, sort and compare</p> <ul style="list-style-type: none"> Compare numbers. <p>Talk about measure and pattern</p> <ul style="list-style-type: none"> Make comparisons between objects relating to size, length, weight and capacity. Talk about and identify the patterns around them. Continue, copy and create repeating patterns. <p>It's me 1, 2, 3</p> <ul style="list-style-type: none"> Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value. Subitise Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value. Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10 <p>Circles and Triangles</p> <ul style="list-style-type: none"> Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'. <p>1,2,3,4,5</p> <ul style="list-style-type: none"> Link the number symbol (numeral) with its cardinal number value. Subitise. Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value. Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10. <p>Shapes with four sides:</p> <ul style="list-style-type: none"> Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language. Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...' 	<p>Alive in 5</p> <ul style="list-style-type: none"> Link the number symbol (numeral) with its cardinal number value. Link the number symbol (numeral) with its cardinal number value. Count objects, actions and sounds. Subitise. Compare numbers. Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10. <p>Mass and capacity</p> <ul style="list-style-type: none"> Compare length, weight and capacity. <p>Growing 6,7 8</p> <ul style="list-style-type: none"> Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value. Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10. Subitise. <p>Length, height and time</p> <ul style="list-style-type: none"> Compare length, weight and capacity. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...' <p>Building 9 and 10</p> <ul style="list-style-type: none"> Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value. Subitise. Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10. Automatically recall number bonds for numbers 0–5 and some to 10. <p>Explore 3-D shape</p> <ul style="list-style-type: none"> Select, rotate and manipulate shapes to develop spatial reasoning skills. Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) 	<p>To 20 and beyond</p> <ul style="list-style-type: none"> Count beyond ten <p>How many now?</p> <ul style="list-style-type: none"> Automatically recall number bonds for numbers 0–5 and some to 10. <p>Manipulate, compose and decompose</p> <ul style="list-style-type: none"> Select, rotate and manipulate shapes to develop spatial reasoning skills. Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. <p>Sharing and Grouping</p> <ul style="list-style-type: none"> Compare numbers. Explore the composition of numbers to 10. Automatically recall number bonds for numbers 0–5 and some to 10. <p>Visualise, build and map</p> <ul style="list-style-type: none"> Continue, copy and create repeating patterns. Discuss routes and locations, using words like 'in front of' and 'behind'. Describe a familiar route. Understand position through words alone – for example, "The bag is under the table," – with no pointing. Understand position through words alone – for example, "The bag is under the table," – with no pointing. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'

		<p>using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.</p> <ul style="list-style-type: none"> Continue, copy and create repeating patterns. 	
	Autumn	Spring	Summer
Y1	<p>NUMBER: Place Value (Within 10)</p> <ul style="list-style-type: none"> Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Read and write numbers from 1 to 20 in numerals and words Read and write numbers to 100 in numerals Given a number, identify one more and one less Identify and represent numbers using objects and pictorial representations Count numbers to 100 in numerals; count in multiples of twos, fives and tens <p>NUMBER: Addition and Subtraction (within 10)</p> <ul style="list-style-type: none"> Represent and use number bonds and related subtraction facts within 20 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Add and subtract one- and two-digit numbers to 20, including zero Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ <p>GEOMETRY: Shape</p> <ul style="list-style-type: none"> Recognise and name common 2-D shapes i.e. including rectangles (including squares), circles and triangles Recognise and name common 3-D shapes i.e. including cuboids (including cubes), pyramids and spheres 	<p>NUMBER: Place Value (within 20)</p> <ul style="list-style-type: none"> Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Read and write numbers from 1 to 20 in numerals and words Read and write numbers to 100 in numerals Given a number, identify one more and one less Identify and represent numbers using objects and pictorial representations Count numbers to 100 in numerals; count in multiples of twos, fives and tens <p>NUMBER: Addition and Subtraction (within 20)</p> <ul style="list-style-type: none"> Represent and use number bonds and related subtraction facts within 20 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Add and subtract one- and two-digit numbers to 20, including zero Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ <p>NUMBER: Place Value (within 50)</p> <ul style="list-style-type: none"> Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Read and write numbers from 1 to 20 in numerals and words Read and write numbers to 100 in numerals Given a number, identify one more and one less Count numbers to 100 in numerals; Count in multiples of twos, fives and tens Identify and represent numbers using objects and pictorial representations <p>MEASUREMENT: Length and Height</p> <ul style="list-style-type: none"> Measure and begin to record lengths and heights Compare, describe and solve practical problems for lengths and heights <p>MEASUREMENT: Mass and Volume</p>	<p>NUMBER: Multiplication and Division</p> <ul style="list-style-type: none"> Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher <p>NUMBER: Fractions</p> <ul style="list-style-type: none"> Recognise, find and name a half as one of two equal parts of an object, shape or quantity Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity <p>GEOMETRY: Position and Direction</p> <ul style="list-style-type: none"> Describe position, direction and movement, including whole, half, quarter and three quarter turns <p>NUMBER: Place Value (within 100)</p> <ul style="list-style-type: none"> Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count numbers to 100 in numerals; Count in multiples of twos, fives and tens Read and write numbers from 1 to 20 in numerals and words Read and write numbers to 100 in numerals Given a number, identify one more and one less Identify and represent numbers using objects and pictorial representations <p>MEASUREMENT: Money</p> <ul style="list-style-type: none"> Recognise and know the value of different denominations of coins and notes <p>MEASUREMENT: Time</p> <ul style="list-style-type: none"> Sequence events in chronological order using language such as before, after, next, first, today, yesterday, tomorrow, morning, afternoon, evening Recognise and use language relating to dates, including days of the week, weeks, months and years Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times Measure and begin to record time (hours, minutes, seconds)

		<ul style="list-style-type: none"> measure and begin to record mass/weight, capacity and volume Compare, describe and solve practical problems for mass or weight and capacity/volume 	<ul style="list-style-type: none"> Compare, describe and solve practical problems for time.
	Autumn	Spring	Summer
Y2	<p>NUMBER: Place Value</p> <ul style="list-style-type: none"> Read and write numbers to at least 100 in numerals and words Identify, represent and estimate numbers using different representations, including the number line Recognise the place value of each digit in a two-digit number (tens, ones) Compare and order numbers from 0 up to 100; Use $<$ $>$ and $=$ signs I can use place value and number facts to solve problems Count in steps of 2, 3, and 5 from 0, and in tens forward and backward <p>NUMBER: Addition and Subtraction</p> <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 Recall and use addition and subtraction facts to 20 and derive related facts up to 100 Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods Recognise and use the inverse relationship between addition and subtraction to solve missing number problems <p>GEOMETRY: Properties of Shapes</p> <ul style="list-style-type: none"> Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line Recognise and name common 3-D shapes, for example, cuboids (including cubes), 	<p>MEASUREMENT: Money</p> <ul style="list-style-type: none"> Recognise and use symbols for pounds (£) and pence (p); combine amounts of money to make a particular value Find different combinations of coins that equal the same amount of money Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change <p>NUMBER: Multiplication and Division</p> <ul style="list-style-type: none"> Recall multiplication and division facts for the 2, 5 and 10 multiplication tables, and use them to solve simple problems including recognising odd and even numbers Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot <p>MEASUREMENT: Length and Height</p> <ul style="list-style-type: none"> Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers, scales, and measuring vessels Compare and order measurements and record the results using $<$ $>$ and $=$ <p>MEASUREMENT: Mass, Capacity and Temperature</p> <ul style="list-style-type: none"> Choose and use appropriate standard units to estimate and measure mass (kg/g); temperature ($^{\circ}$C); capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels 	<p>NUMBER: Fractions</p> <ul style="list-style-type: none"> Recognise, find, name and write fractions $1/3$, $1/4$, $2/4$ and $3/4$ of a length, shape, set of objects or quantity Write simple fractions for example, $1/2$ of $6 = 3$ recognise the equivalence of $2/4$ and $1/2$ <p>MEASUREMENT: Time</p> <ul style="list-style-type: none"> Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times Know the number of minutes in an hour and the number of hours in a day Compare and sequence intervals of time <p>STATISTICS: Graphs</p> <ul style="list-style-type: none"> Interpret and construct simple pictograms, tally charts, block diagrams and simple tables Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity Ask and answer questions about totalling and comparing categorical data <p>GEOMETRY: Position and Direction</p> <ul style="list-style-type: none"> Use mathematical vocabulary to describe 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) Order and arrange combinations of mathematical objects in patterns and sequences

	<p>pyramids and spheres I can identify 2-D shapes on the surface of 3-D shapes, for example, a circle on a cylinder and a triangle on a pyramid</p> <ul style="list-style-type: none"> Compare & sort common 2-D shapes and everyday objects I can compare & sort common 3-D shapes and everyday objects 	<ul style="list-style-type: none"> Compare and order measurements and record the results using < > and = 	
	Autumn	Spring	Summer
Y3	<p>NUMBER: Place value</p> <ul style="list-style-type: none"> Identify, represent and estimate numbers using different representations Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) Compare and order numbers up to 1000 Read and write numbers up to 1000 in numerals and in words Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number Solve number problems and practical problems involving these ideas <p>NUMBER: Addition and Subtraction</p> <ul style="list-style-type: none"> Add and subtract numbers mentally including: a three-digit number with ones, tens or hundreds Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction Estimate and use inverse operations to check answers to a calculation Solve problems including missing number problems, using number facts and more complex addition and subtraction <p>NUMBER: Multiplication and Division (1)</p> <ul style="list-style-type: none"> Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods 	<p>NUMBER: Multiplication and Division (B)</p> <ul style="list-style-type: none"> Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables Solve calculation problems involving multiplication and division, including missing number problems, simple positive integer scaling and simple correspondence problems in which n objects are connected to m objects <p>MEASUREMENT: Length and Perimeter</p> <ul style="list-style-type: none"> Measure, compare, add and subtract: lengths (m/cm/mm) Measure the perimeter of simple 2D shapes <p>NUMBER: Fractions (A)</p> <ul style="list-style-type: none"> Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators Recognise, find and write fractions of a discrete set of objects, unit fractions and non-unit fractions with small denominators Recognise and show, using diagrams, equivalent fractions with small denominators Compare and order unit fractions and fractions with the same denominators Solve problems with fractions from the Year 3 curriculum <p>MEASUREMENT: Mass and Capacity</p> <ul style="list-style-type: none"> Measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml) 	<p>NUMBER: Fractions (B)</p> <ul style="list-style-type: none"> Add and subtract fractions with the same denominator within one whole for example $5/7 + 1/7 = 6/7$ Solve problems with fractions from the Year 3 curriculum <p>MEASUREMENT: Money</p> <ul style="list-style-type: none"> Add and subtract amounts of money to give change, using both £ and p in practical contexts <p>MEASUREMENT: Time</p> <ul style="list-style-type: none"> Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight Know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events [for example to calculate the time taken by particular events or tasks] <p>GEOMETRY: Property of Shapes</p> <ul style="list-style-type: none"> Recognise angles as a property of shape or a description of a turn Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn Identify whether angles are greater than or less than a right angle I can draw 2-D shapes Identify horizontal and vertical lines and pairs of perpendicular and parallel lines Recognise 3D shapes in different orientations and describe them I can make 3D shapes using modelling materials <p>STATISTICS</p>

			<ul style="list-style-type: none"> Solve one step and two step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in bar charts and pictograms and tables Interpret and present data in bar charts, pictograms and tables
	Autumn	Spring	Summer
Y4	<p>NUMBER: Place Value</p> <ul style="list-style-type: none"> 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 Count in multiples of 6, 7, 9, 25 and 1000 Count backwards through zero to include negative numbers I can find 1000 more or less than a given number Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, ones) Order and compare numbers beyond 1000 Identify, represent and estimate numbers using different representations Round any number to the nearest 10, 100 or 1000 Solve number and practical problems that involve all of the above with increasingly large positive numbers <p>NUMBER: Addition and Subtraction</p> <ul style="list-style-type: none"> Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Estimate and use inverse operations to check answers to a calculation Solve calculation problems involving two-step addition and subtraction in context, deciding which operation to use and why <p>MEASUREMENT: Area</p> <ul style="list-style-type: none"> Find the area of rectilinear shapes by counting squares Convert between different units of measure (for example, kilometre to metre) I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres <p>NUMBER: Multiplication and Division 1</p> <ul style="list-style-type: none"> Recall multiplication and division facts for multiplication tables up to 12×12 Count in multiples of 6, 7, 9, 25 and 1000 	<p>NUMBER: Multiplication and Division B</p> <ul style="list-style-type: none"> Recall multiplication and division facts for multiplication tables up to 12×12 Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers Solve problems involving multiplying and adding, including integer scaling and harder correspondence problems such as n objects are connected to m objects Recognise factor pairs and commutativity in mental calculations Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. <p>MEASUREMENT: Length and Perimeter</p> <ul style="list-style-type: none"> Estimate, compare and calculate different measures Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Find the area of rectilinear shapes by counting squares <p>NUMBER: Fractions</p> <ul style="list-style-type: none"> Recognise and show, using diagrams, families of common equivalent fractions Solve problems involving increasingly harder fractions to calculate and divide quantities, including non-unit fractions where the answer is a whole number Add and subtract fractions with the same denominator solve simple measure and money problems involving fractions and decimals to two decimal places <p>NUMBER: Decimals A</p>	<p>NUMBER: Decimals B</p> <ul style="list-style-type: none"> Compare numbers with the same number of decimal places up to two decimal places Round decimals with one decimal place to the nearest whole number Recognise and write decimal equivalents of any number of tenths or hundredths and $1/4$; $1/2$; $3/4$ Solve simple measure and money problems involving fractions and decimals to two decimal places <p>MEASUREMENT: Money</p> <ul style="list-style-type: none"> Estimate, calculate and compare different measures, including money in pounds and pence <p>MEASUREMENT: Time</p> <ul style="list-style-type: none"> Read, write and convert time between analogue and digital 12- and 24-hour clocks I can convert between different units of measure (for example hour to minute) Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days I can estimate, compare and calculate different measures <p>GEOMETRY: Property of Shape</p> <ul style="list-style-type: none"> Identify acute and obtuse angles and compare and order angles up to two right angles by size Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Identify lines of symmetry in 2-D shapes presented in different orientations Complete a simple symmetric figure with respect to a specific line of symmetry <p>STATISTICS</p> <ul style="list-style-type: none"> Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

	<ul style="list-style-type: none"> Count backwards through zero to include negative numbers Recognise factor pairs and commutativity in mental calculations Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten 	<ul style="list-style-type: none"> Recognise and write decimal equivalents of any number of tenths or hundredths and $1/4$; $1/2$; $3/4$ Solve simple measure and money problems involving fractions and decimals to two decimal places Compare numbers with the same number of decimal places up to two decimal places round decimals with one decimal place to the nearest whole number 	<p>GEOMETRY: Position and Direction</p> <ul style="list-style-type: none"> Describe positions on a 2-D grid as coordinates in the first quadrant I can plot specified points and draw sides to complete a given polygon Describe movement between positions as translations of a given unit to the left/right and up/down
	Autumn	Spring	Summer
Y5	<p>NUMBER: Place Value</p> <ul style="list-style-type: none"> Read and write numbers to at least 1 000 000 and determine the value of each digit read Roman numerals to 1000 (M) and recognise years written in Roman numerals Order and compare numbers to at least 1 000 000 Count forwards or backwards in steps of powers of 10 for any given number to 1 000 000 Interpret negative numbers in context Count forwards and backwards with positive and negative whole numbers, including through zero Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 Solve number problems and practical problems that involve all the above <p>NUMBER: Addition and Subtraction</p> <ul style="list-style-type: none"> Add and subtract numbers mentally with increasingly large numbers Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy Solve addition and subtraction multi-step problems in familiar contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division, and a combination of these, including understanding the meaning of the equals sign <p>NUMBER: Multiplication and Division A</p>	<p>NUMBER: Multiplication and Division B</p> <ul style="list-style-type: none"> Multiply and divide numbers mentally drawing upon known facts Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers Divide numbers up to 4 digits by a one-digit number using formal written method of short division and interpret remainders appropriately for the context Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 solve problems involving addition, subtraction, multiplication and division, and a combination of these, understanding of the meaning of the equals sign Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes Solve problems involving scaling by simple fractions and problems involving simple rates <p>NUMBER: Fractions B</p> <ul style="list-style-type: none"> Add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams <p>NUMBER: Decimals and Percentages</p> <ul style="list-style-type: none"> Read, write, order and compare numbers with up to three decimal places Recognise and use thousandths and relate them to tenths and hundredths and decimal equivalents 	<p>GEOMETRY: Property of Shape</p> <ul style="list-style-type: none"> Identify 3-D shapes, including cubes and other cuboids, from 2-D representations Use the properties of rectangles to deduce related facts and find missing lengths and angles Distinguish between regular and irregular polygons based on reasoning about equal sides and angles Know that angles are measured in degrees: estimate and compare obtuse and reflex angles Draw given angles, and measure them in degrees Identify angles at a point and one whole turn, angles at a point on a straight line and $1/2$ a turn and other multiples of 90° <p>GEOMETRY: Position and Direction</p> <ul style="list-style-type: none"> 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. <p>NUMBER: Decimals</p> <ul style="list-style-type: none"> Solve problems involving numbers up to three decimal places Solve measurement problems using all four operations Read, write, order and compare numbers with up to three decimal places Read and write decimal numbers as fractions Round decimals with two decimal places to the nearest whole number and to one decimal place Recognise and use thousandths and relate them to tenths and hundredths and decimal equivalents

	<ul style="list-style-type: none"> Identify multiples and factors, including all factor pairs of a number, and common factors of 2 numbers I can 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 Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers Multiply and divide numbers mentally drawing upon known facts Divide numbers up to 4 digits by a one-digit number using formal written method of short division and interpret remainders appropriately for the context Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Recognise and use square numbers and cube numbers and the notation for them I can solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes Solve problems involving scaling by simple fractions and problems involving simple rates <p>NUMBER: Fractions A</p> <ul style="list-style-type: none"> Compare and order fractions whose denominators are all multiples of the same number Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths Recognise mixed numbers and improper fractions and convert from one form to the other Write mathematical statements > 1 as a mixed number I can add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams 	<ul style="list-style-type: none"> Round decimals with two decimal places to the nearest whole number and to one decimal place Solve problems involving addition and subtraction involving numbers up to three decimal places Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred" Write percentages as a fraction with denominator hundred, and as a decimal Read and write decimal numbers as fractions Know percentage and decimal equivalents of $1/2$, $1/4$, $1/5$, $2/5$, $4/5$ and those with a denominator of a multiple of 10 or 25 Solve problems which require knowing key percentage and decimal equivalents <p>MEASUREMENT: Perimeter and Area</p> <ul style="list-style-type: none"> Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres Calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres and square metres and estimate the area of irregular shapes Convert between different units of metric measure solve problems involving measure, using the four operations Understand and use approximate equivalences between metric units and common imperial units Estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water] <p>STATISTICS</p> <ul style="list-style-type: none"> Solve comparison, sum and difference problems using information presented in a line graph Complete, read and interpret information in tables, including timetables 	<p>NUMBER: Negative Numbers</p> <ul style="list-style-type: none"> count forwards or backwards in steps of powers of 10 for any given number to 1 000 000 Count forwards and backwards with positive and negative whole numbers, including through zero <p>MEASUREMENT: Converting Units</p> <ul style="list-style-type: none"> Convert between different units of metric measure estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water] measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres Calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres and square metres and estimate the area of irregular shapes Understand and use approximate equivalences between metric units and common imperial units Solve measurement problems using all four operations
	Autumn	Spring	Summer
Y6	<p>NUMBER: Place Value</p> <ul style="list-style-type: none"> Read, write (order and compare) numbers to 10 000 000 and determine the value of each digit 	<p>Number: Ratio</p> <ul style="list-style-type: none"> Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts 	<p>GEOMETRY: Shape</p> <ul style="list-style-type: none"> Draw 2-D shapes using given dimensions and angles Compare and classify geometric shapes based on their properties and sizes

- round any whole numbers to a required degree of accuracy
 - Use negative numbers in context and calculate intervals across zero I can solve number problems and practical problems that involve all of the above
- NUMBER: Addition, Subtraction, Multiplication and Division**
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
 - Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
 - Divide numbers up to 4 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 to the context
 - Divide numbers up to 4 digits by a two-digit whole number using the formal written method of short division where appropriate, interpreting remainders according to the context
 - Perform mental calculations, including mixed operations and large numbers
 - solve problems involving addition, subtraction, multiplication and division
 - Perform mental calculations, including with mixed operations and large numbers
 - Identify common factors, common multiples and prime numbers I can use knowledge of the order of operations to carry out calculations involving the four operations
 - Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
- NUMBER: Fractions A**
- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
 - Compare and order fractions, including fractions > 1
- NUMBER: Fractions B**
- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

- Solve problems involving the calculation/use of percentages for comparison
 - Solve problems involving similar shapes where the scale factor is known or can be found
 - Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples
- NUMBER: Algebra**
- Use simple formulae
 - generate and describe linear number sequences
 - Express missing number problems algebraically
 - Find pairs of numbers that satisfy an equation with two unknowns I can enumerate possibilities of combinations of two variables
- NUMBER: Fractions, Decimals and Percentages**
- Identify the value of each digit in three digit numbers given to three decimal places
 - Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
 - Associate a fraction with division and calculate a decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]
- MEASUREMENT: Perimeter, Area and Volume**
- Recognise that shapes with the same areas can have different perimeters and vice versa
 - Recognise when it is possible to use formulae for area and volume of shapes
 - Calculate the area of parallelograms and triangles
 - Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres and cubic metres, and extending to other units
- STATISTICS**
- Interpret and construct pie charts and line graphs and use these to solve problems
 - Calculate and interpret the mean as an average

- Find unknown angles and lengths in triangles, quadrilaterals, and regular polygons
 - Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
 - Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
 - Recognise and build simple 3-D shapes, including making nets
- GEOMETRY: Position and Direction**
- 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

- | | | | |
|--|---|--|--|
| | <ul style="list-style-type: none">• <i>Multiply simple pairs of proper fractions, writing the answer in its simplest form</i>• <i>Divide proper fractions by whole numbers</i> <p>MEASUREMENT: Converting Units</p> <ul style="list-style-type: none">• <i>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate</i>• <i>Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation up to 3 decimal places</i>• <i>Convert between miles and kilometres</i> | | |
|--|---|--|--|