



John Mayne Church of England Primary School- Subject Curriculum Plan

Subject	Mathematics	Subject leader	Helen Tester
This progression map has been written following the published guidance/progression map from White Rose Maths and includes references to the Term and Block when they are introduced.			

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Counting	Numbers to 5. Autumn Number bonds to 5. Numbers to 10 Counting to 6,7,8,9 and 10. Spring Adding by counting on Take away by counting back. Counting to 20 Odds and evens. Summer	Count to and across 100 forwards and backwards, beginning at 0 or 1, or from any given number. Autumn 1, Autumn 4, Spring 2, Summer 4	Count in steps of 2, 3 or 5 from 0 and in tens from any number forward and backward. Autumn 1	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. Autumn 1, Autumn 3	Count in multiples of 6, 7, 9, 25 and 1000. Count backwards through zero to include negative numbers. Autumn 1, Autumn 4	Count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000. Autumn 1	



Place Value: Represent	<p>Numbers to 5 - Identify and represent numbers using objects and pictorial representations.</p> <p>Autumn</p> <p>Numbers to 10 Identify and represent numbers using objects and pictorial representations.</p> <p>Spring</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 number from 1 to 20 in words and numerals.</p> <p>Autumn 1, Autumn 4, Spring 2, Summer 4</p>	<p>Read and write numbers to at least 100 in numerals and words.</p> <p>Identify, represent and estimate numbers using different representations including the number line.</p> <p>Autumn 1</p>	<p>Identify, represent and estimate numbers using different representations.</p> <p>Read and write numbers up to 1,000 in numerals and words.</p> <p>Autumn 1</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>Autumn 1</p>	<p>Read, write (order and compare) numbers to at least 1,000,000 and determine the value of each digit.</p> <p>Read roman numerals to 1,000 (M) and recognise years written in roman numerals.</p> <p>Autumn 1</p>	<p>Read, write (order and compare) numbers to at least 10,000,000 and determine the value of each digit.</p> <p>Autumn 1</p>
Place Value: Use place value and compare	<p>Comparing quantities of identical and non-identical items up to 5</p> <p>Autumn</p> <p>Comparing quantities of identical and non-identical items up to 10</p> <p>Spring</p>	<p>Given a number, identify one more and one less.</p> <p>Autumn 1, Autumn 4, Spring 2, Summer 4</p>	<p>Recognise the place value of each digit in a two-digit number (tens,ones).</p> <p>Compare and order numbers from 0 up to 100; use < > and = signs</p> <p>Autumn 1</p>	<p>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).</p> <p>Compare and order numbers up to 1 000.</p> <p>Autumn 1</p>	<p>Find 1 000 more or less than a given number.</p> <p>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, ones).</p> <p>Order and compare numbers beyond 1 000.</p> <p>Autumn 1</p>	<p>(Read, write) order and compare numbers to at least 1 000 000 and determine the value of each digit.</p> <p>Autumn 1</p>	<p>(Read, write) order and compare numbers up to at least 10 000 000 and determine the value of each digit.</p> <p>Autumn 1</p>



<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Place Value: Problems and rounding.</p>			<p>Use place value and number facts to solve problems.</p> <p>Autumn 1</p>	<p>Solve number problems and practical problems involving these ideas.</p> <p>Autumn 1</p>	<p>Round any number to the nearest 10, 100 or 1,000.</p> <p>Solve number and practical problems that involve all of the above and with increasingly large positive numbers.</p> <p>Autumn 1</p>	<p>Interpret negative numbers in context. Round any number up to 1,000,000 to the nearest 10, 100, 1 000, 10 000 and 100 000.</p> <p>Solve number problems and practical problems that involve all of the above.</p> <p>Autumn 1</p>	<p>Round any whole number to a required level of accuracy.</p> <p>Use negative numbers in context and calculate intervals across zero.</p> <p>Solve number and practical problems that involve all of the above.</p> <p>Autumn 1</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Addition and Subtraction: Recall, represent, use</p>	<p>Sorting into groups. Change within 5 One more. One less.</p> <p>Autumn</p> <p>Combining two groups to find a whole. Number bonds to 10 – tens frame. Number bonds to 10 – part whole model.</p> <p>Spring</p>	<p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Represent and use number bonds and related subtraction facts within 20.</p>	<p>Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100.</p> <p>Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</p> <p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p> <p>Autumn 2</p>	<p>Estimate the answer to a calculation and use inverse operations to check answers.</p> <p>Autumn 2</p>	<p>Estimate and use inverse operations to answer a calculation.</p> <p>Autumn 2</p>	<p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</p> <p>Autumn 2</p>	



<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Addition and Subtraction: Calculations</p>		<p>Add and subtract one-digit and two-digit numbers to 20, including zero.</p> <p>Autumn 2, Spring 1</p>	<p>Add and subtract numbers using concrete objects, pictorial representations and mentally including:</p> <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. <p>Autumn 2</p>	<p>Add and subtract numbers mentally including:</p> <ul style="list-style-type: none"> • A three-digit number and ones. • A three-digit number and tens. • A three-digit numbers and hundreds. <p>Add and subtract numbers, with up to three digits, using formal written methods of columnar addition and subtraction.</p> <p>Autumn 2</p>	<p>Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate.</p> <p>Autumn 2</p>	<p>Add and subtract whole numbers with more than 4 digits, including formal written methods (columnar addition and subtraction). Add and subtract numbers mentally with increasingly large numbers.</p> <p>Autumn 2</p>	<p>Perform mental calculations, including with mixed operations and large numbers. Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p>Autumn 2</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Addition and Subtraction: Solve problems</p>		<p>Solve one-step problems that involve addition and subtraction using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$</p> <p>Autumn 2, Spring 1</p>	<p>Solve problems that include addition and subtraction:</p> <ul style="list-style-type: none"> • Using concrete objects and pictorial representations, including those that involve numbers, quantities and measures. • Applying their increasing knowledge of mental and written methods. <p>Autumn 2</p>	<p>Solve problems including missing number problems, using number facts, place value and more complex addition and subtraction.</p> <p>Autumn 2</p>	<p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p> <p>Autumn 2</p>	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p> <p>Solve problems including addition, subtraction, multiplication and division and a combination of these, including understanding of the equals sign.</p> <p>Autumn 2</p>	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p> <p>Autumn 2</p>



<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Multiplication and division: Recall, represent, use</p>	<p>Sorting into groups using identical and non-identical items.</p> <p>Autumn</p> <p>Doubling Halving and sharing Odd and evens</p> <p>Summer</p>		<p>Recall and use multiplication and division facts for 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</p>	<p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</p>	<p>Recall multiplication and division facts for multiplication tables up to 12 x 12.</p> <p>Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1 and multiplying together three numbers.</p> <p>Recognise and use factor pairs and commutativity for mental calculations.</p>	<p>Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers.</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</p> <p>Establish whether a number up to 100 is prime and recall prime numbers up to 19.</p> <p>Recognise and use square numbers and cubed numbers and the notations squared (²) and cubed (³)</p>	<p>Identify common factors, common multiples and prime numbers.</p> <p>Use estimation to check answers to calculations, and determine, in the context of a problem, an appropriate degree of accuracy.</p>
			<p>Autumn 4, Spring 1</p>	<p>Autumn 3</p>	<p>Autumn 4, Spring 1</p>	<p>Autumn 4</p>	<p>Autumn 4</p>



Multiplication and division: Calculations			Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.	Calculate mathematical statements for multiplication and division, within the multiplication tables that they know including for two-digit numbers times one-digit numbers and using mental and progressing to formal written methods.	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.	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.	Multiply multi-digit numbers up to four-digits by a two-digit whole number using the formal wrtten method of long multiplication.
			Autumn 4, Spring 1	Autumn 3, Spring 1	Spring 1	Multiply and divide numbers mentally, drawing upon known facts. 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. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.	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. Divide numbers up to four digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context. Perform mental calculations, including with mixed operations and large numbers.



<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Multiplication and Division: Solve Problems</p>		<p>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>	<p>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.</p>	<p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</p>	<p>Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m problems.</p>	<p>Solve problems involving multiplication and division including their knowledge of factors and multiples, squares and cubes.</p> <p>Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</p>	<p>Solve problems involving addition, subtraction, multiplication and division.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Multiplication and Division: Combined Operations</p>		<p>Summer 1</p>	<p>Autumn 4, Spring 1</p>	<p>Spring 1</p>	<p>Spring 1</p>	<p>Autumn 4, Spring 1</p> <p>Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.</p>	<p>Autumn 2</p> <p>Use their knowledge of the order of operations (BIDMAS) to carry out calculations involving the four operations.</p> <p>Autumn 2</p>
						<p>Spring 1</p>	



<p>Fractions: Recognise and Write</p>		<p>Recognise, find and name a half as one of two equal parts or 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>Summer 2</p>	<p>Recognise, name and write fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$ of a length, shape, set of objects or quantity.</p> <p>Spring 4</p>	<p>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.</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>Spring 5</p>	<p>Count up and down in hundreds; recognise that hundreds arise from dividing an object into 100 equal parts and in dividing tenths by 10.</p> <p>Spring 3</p>	<p>Identify, name and write an 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 another and write mathematical statements >1 as a mixed number for example</p> <p>$\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}$</p> <p>Spring 2</p>	
<p>Fractions: Compare</p>			<p>Recognise the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$.</p> <p>Spring 4</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>Summer 1</p>	<p>Recognise and show, using diagrams, families of common equivalent fractions.</p> <p>Spring 3</p>	<p>Compare and order fractions whose denominators are all multiples of the same number.</p> <p>Spring 2</p>	<p>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.</p> <p>Compare and order fractions including fractions > 1</p> <p>Autumn 3</p>



Fractions: Calculations			Write simple fractions for example $\frac{1}{2}$ of $6 = 3$ Spring 4	Add and subtract fractions with the same denominator within one whole For example $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ Summer 1	Add and subtract fractions with the same denominator. Spring 3	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. Spring 3	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. For example $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ Divide proper fractions by whole numbers For example $\frac{1}{3} \div 2 = \frac{1}{6}$ Autumn 3
Fractions: Solve Problems				Solve problems that involve all of the above. Spring 5, Summer 1	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. Spring 3		



Decimals: Recognise and Write					<p>Recognise and write decimal equivalents of any number of tenths and hundredths.</p> <p>Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$</p> <p>Spring 4, Summer 1</p>	<p>Read and write decimal numbers as fractions For example $0.71 = \frac{71}{100}$.</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimals equivalents.</p> <p>Spring 3</p>	<p>Identify the value of each digit in numbers given to three decimals places.</p> <p>Spring 1</p>
Decimals: Compare					<p>Round decimals with one decimal place to the nearest whole number.</p> <p>Compare decimals with the same number of decimal places up to two decimal places.</p> <p>Summer 1</p>	<p>Round decimals with two decimal places to the nearest whole number and one decimal place.</p> <p>Read, write, order and compare numbers with up to three decimal places.</p> <p>Spring 3</p>	



Decimals: Calculations and Problems					Find the effect of dividing a one or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.	Solve problems involving number up to three decimal places.	Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.
					Spring 4	Summer 1	Multiply one-digit numbers with up to two decimal places by whole numbers. Use written division methods in cases where the answer has up to two decimal places. Solve problems which require the answer to be rounded to specified degrees of accuracy. Spring 1



Fractions, Decimals and Percentages					<p>Solve simple measure and money problems involving fractions and decimals to two decimal places.</p> <p>Spring 3, Spring 4, Summer 1</p>	<p>Recognise the percent symbol (%) and understand that per cent relates to 'number of parts per hundred' and write percentages as a fraction with denominator 100 and as a decimal.</p> <p>Solve problems which require knowing percentage 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>Spring 3</p>	<p>Associate a fraction with division and calculate decimal fraction equivalents (for example 0.375) for a simple fraction (for example $\frac{3}{9}$).</p> <p>Recall and use equivalences between simple fractions, decimals and percentages including in different contexts.</p> <p>Spring 1, Spring 2</p>
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Ratio and Proportion							<p>Solve problems involving the relative sizes of two quantities where missing values can be found using integer multiplication and division facts.</p> <p>Solve problems involving calculation of percentages (for example, of measures, and such as 15% of 360) 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> <p>Spring 6</p>
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Algebra		Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems such as $7 = \square - 9$	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Solve problems including missing number problems.			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. Enumerate possibilities of combinations of two variables. Spring 3
		Note: Although algebraic notation is not introduced until Year 6, algebraic thinking starts much earlier as exemplified by the missing number objectives from Year 1, 2 and 3 listed earlier in this document.					



Measurement: Using Measure	<p>My day. Develop recall of days of the week. Key times throughout the day. Know the order of months of the year. How many minutes, hours, days, sleeps? When is your birthday?</p> <p>Autumn</p> <p>Exploring and comparing measure. Length, height and distance. Weight Capacity</p> <p>Summer</p>	<p>Compare and describe practical problems for: *lengths and heights (for example long/short, longer/shorter, tall/short, double/half) *mass/weight (for example heavy/light, heavier than/lighter than) *capacity and volume (for example full/empty, more than/less than, half, half full, quarter) *time (for example quicker, slower, earlier, later) Measure and begin to record lengths and heights, mass/weight, capacity and volume, time (hours, minutes and seconds)</p> <p>Spring 3, Spring 4, Summer 6</p>	<p>Chose and use appropriate standard units to estimate and measure:</p> <ul style="list-style-type: none"> length/height in any direction (m, cm) mass (kg, g) temperature ($^{\circ}$C) capacity (l, ml) <p>to the nearest appropriate 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>Spring 5, Summer 5</p>	<p>Measure, compare, add and subtract: lengths (m, cm, mm) mass (kg, g) volume/capacity (l, ml)</p> <p>Spring 4, Summer 4</p>	<p>Convert between different units of measure (for example from km to m, hour to minute).</p> <p>Estimate, compare and calculate different measures.</p> <p>Autumn 3, Spring 2, Summer 3</p>	<p>Convert between units of metric measure (for example km and m, cm and m, cm and mm, g and kg, l and ml),</p> <p>Understand and use approximate equivalences between metric units and common imperial units inches, pounds and pints.</p> <p>Use all four operations to solve problems involving measure (length, mass, volume, money) using decimal notation including scaling.</p> <p>Summer 1, Summer 4, Summer 5</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, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger and vice versa, using decimal notation up to three decimal places.</p> <p>Convert between miles and kilometres.</p> <p>Spring 4</p>
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Measurement: Money		Recognise and know the value of different denominations of coins and notes.	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.	Add and subtract amounts of money to give change, using both £ and p in practical contexts.	Estimate, calculate and compare different measures including money in pounds and pence.	Use all four operations to solve problems involving measure.	
		Summer 5	Find different combinations of coins that equal the same amounts.. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.	Spring 2	Summer 2	Summer 1	
			Autumn 3				



Measurement: Time	<p>Sequence events in chronological order using language (for example before, after, next, first, today, yesterday, tomorrow, morning, afternoon and evening).</p> <p>Recognise and use language relating to dates, including days of the week, weeks, months and years).</p> <p>Tell time to the hour and half past the hour and draw the hand on a clock face to show these times.</p>	<p>Compare and sequence intervals of time.</p> <p>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.</p> <p>Know the number of minutes in an hour and the number of hours in a day.</p>	<p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, 12-hour and 24-hour clocks.</p> <p>Estimate and read time with increasing accuracy to the nearest minute; record and compare times in terms of seconds, minutes and hours; 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, year and leap year.</p> <p>Compare durations of events (for example the time taken for particular tasks).</p>	<p>Read, write and convert time between analogue and digital 12-hour 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, converting measurements of time from a smaller unit of measure to a larger unit and vice versa.</p>
	Summer 6	Summer 3	Summer 2	Summer 3	Summer 4	Year 5 Summer 5



Measurement: Perimeter, Area and Volume				<p>Measure the perimeter of simple 2d shapes.</p> <p>Spring 4</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>Autumn 3, Spring 2</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) including using standard units, cm^2 and m^2 and estimate the area of irregular shapes.</p> <p>Estimate volume (for example using 1cm^3 blocks to build cuboids (including cubes)) and capacity</p> <p>Autumn 5, Summer 5</p>	<p>Recognise that shapes with the same area can have different perimeters and vice versa.</p> <p>Recognise when it is possible to use formulae for area and volume of shapes.</p> <p>Calculate the area of parallelograms and triangles.</p> <p>Calculate, estimate and compare volume of cubes and cuboids using standard units cm^3 and m^3 and extending to mm^3 and km^3.</p> <p>Spring 5</p>



<p style="text-align: center;">Geometry Space and pattern</p>	<p>Spatial awareness</p> <p>Spring</p> <p>Making simple patterns Exploring more complex patterns using repeating pictorial representations.</p> <p>Summer</p>						
<p style="text-align: center;">Geometry 2d shapes</p>	<p>Spatial awareness</p> <p>Recognise and name common 2D shapes Square Triangle Circle Rectangle</p> <p>Spring</p>	<p>Recognise and name common 2-D shapes (rectangles, squares, circles, triangles).</p> <p>Autumn 3</p>	<p>Identify and describe the properties of 2-D shapes, including the number of sides and line of symmetry in a vertical line.</p> <p>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> <p>Compare and sort common 2-D shapes and everyday objects.</p> <p>Spring 3</p>	<p>Draw 2-D shapes.</p> <p>Summer 3</p>	<p>Compare and classify geometric shapes including quadrilaterals and triangles based on their properties and size.</p> <p>Identify lines of symmetry in 2-D shapes presented in different orientations.</p> <p>Summer 5</p>	<p>Distinguish between regular and irregular polygons based on reasoning about equal side and angles.</p> <p>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</p> <p>Summer 2</p>	<p>Draw 2-D shapes from given dimensions and angles.</p> <p>Compare and classify 2-D shapes based on their properties and sizes.</p> <p>Illustrate and name parts of a circle including radius, diameter and circumference and know that diameter is twice the radius.</p> <p>Summer 1</p>



<p style="text-align: center;">Geometry 3d shapes</p>	<p>Recognise and name common 3D shapes Cube Sphere Cylinder Cone Spring</p>	<p>Recognise and name common 3-D shapes (cuboids (including cubes), pyramids and spheres).</p> <p style="text-align: center;">Autumn 3</p>	<p>Recognise and name common 3-D shapes (cuboids(includng cubes), pyramids and spheres).</p> <p>Compare and sort common 3-D shapes and everyday objects.</p> <p style="text-align: center;">Spring 3</p>	<p>Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.</p> <p style="text-align: center;">Summer 3</p>		<p>Identify 3-D shapes including cubes and other cuboids from 2-D representations.</p> <p style="text-align: center;">Summer 2</p>	<p>Recognise, describe and build simple 3-D shapes, including making nets.</p> <p style="text-align: center;">Summer 1</p>
<p style="text-align: center;">Geometry Angles and Lines</p>			<p>Recognise angles as a property of shape or a description of a turn.</p> <p>Identify right angles, recognise that two right angles make a half-turn, three makes three-quarters of a turn and four a complete turn; identify whether angles are less than or greater than a right angle.</p> <p>Identify horizontal and vertical lines and pairs of parallel and perpendicular lines.</p> <p style="text-align: center;">Summer 3</p>	<p>Identify acute and obtuse angles and order angles up to two right angles by size.</p> <p>Identify lines of symmetry in 2-D shapes presented in different orientations.</p> <p>Complete a simple symmetric figure with respect to a specific line of symmetry.</p> <p style="text-align: center;">Summer 5</p>	<p>Know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles.</p> <p>Draw given angles and measure them in degrees.</p> <p>Identify:</p> <ul style="list-style-type: none"> • Angles at a point and one whole turn (total 360°). • Angles at a point on a straight line and half a turn (total 180°). • Other multiples of 90° <p style="text-align: center;">Summer 2</p>	<p>Find unknown angles in any triangles, quadrilaterals and regular polygons.</p> <p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p> <p style="text-align: center;">Summer 1</p>	



<p style="text-align: center;">Geometry Position and Direction</p>		<p>Describe position, direction and movement including whole, half, quarter and three-quarter turns.</p> <p style="text-align: center;">Summer 3</p>	<p>Order and arrange combinations of mathematical objects in patterns and sequences.</p> <p>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).</p> <p style="text-align: center;">Spring 3, Summer 1</p>		<p>Describe positions on a 2-D grid as coordinates in the first quadrant.</p> <p>Describe movements between positions as translations of a given unit to the left/right and up/down.</p> <p>Plot specific points and draw side to complete given polygons.</p> <p style="text-align: center;">Summer 6</p>	<p>Identify, describe and represent the position of a shape as a reflection or translation, using the appropriate language, and know that the shape has not changed.</p> <p style="text-align: center;">Summer 3</p>	<p>Describe positions on the full coordinate grid (all four quadrants).</p> <p>Draw and translate simple shapes on the coordinate plane and reflect them in the axes.</p> <p style="text-align: center;">Autumn 4</p>
<p style="text-align: center;">Statistics Present and Interpret</p>			<p>Interpret and construct simple pictograms, tall charts, block diagrams and simple tables.</p> <p style="text-align: center;">Spring 2</p>	<p>Interpret and present data using bar charts, pictograms and tables.</p> <p style="text-align: center;">Spring 3</p>	<p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</p> <p style="text-align: center;">Summer 4</p>	<p>Complete, read and interpret information in tables including timetables.</p> <p style="text-align: center;">Autumn 3</p>	<p>Interpret and construct pie charts and line graphs and use them to solve problems.</p> <p style="text-align: center;">Summer 3</p>



Statistics Solve Problems		Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantities. Ask and answer questions about totalling and comparing categorical data. Spring 2	Solve one-step and two-step questions (for example How many more? and How many fewer?) using information presented in scaled bar charts and pictograms and tables. Spring 3	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. Summer 4	Solve comparison, sum and difference problems using information presented in a line graph. Autumn 3	Calculate and interpret the mean as an average. Summer 3
	Cross Curricular Links					
Cooking	Catering for given numbers of guests. Measure, scaling measurements up and down, budgeting.					
Money	Solving practical budget problems to achieve a task. E.g., Plan a party with a set budget. Cost a project. Awareness of costs of living. Banking saving and interest. Enterprise project. Using money for role play activities. Comparing costs for everyday items. Practical purchase an item from a shop.					
Art and Design	Planning design projects using knowledge of shape. Using pattern to create designs. Using measurement accurately.					
Science	Reading and interpreting data. Representing investigations using charts and graphs.					
Geography	Using scales to interpret maps. Time zones. Currencies. Reading and calculating temperatures.					
History	Chronology					
PE	Measure.					



EYFS Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	<p>Place Value - Numbers to 5 Addition and Subtraction - Sorting Place Value - Comparing groups Addition and Subtraction - Change within 5 Measurement - Time</p>											
Spring	<p>Addition and Subtraction - Numbers to 5 Place Value - Numbers to 10 Addition and Subtraction - Addition to 10 Geometry - Shape and space</p>											
Summer	<p>Geometry - Exploring patterns Addition and Subtraction - Count on and back Place Value - Numbers to 20 Multiplication and Division - Numerical patterns Measurement - Measure</p>											



Year 1 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	
Autumn	Number: Place Value (within 10)			Number: Addition and Subtraction (within 10)				Geometry: Shape	Number: Place Value (within 20)		Consolidation		
Spring	Number: Addition and Subtraction (within 20)			Number: Place Value (within 50) (Multiples of 2, 5 and 10 included.)				Measurement: Length and Height	Measurement: Weight and Volume		Consolidation		
Summer	Number: Multiplication and Division (Reinforce multiples of 2, 5 and 10 included)			Number: Fractions		Geometry: Position and Direction		Number: Place Value (within 100)		Measurement: Money	Measurement: Time		Consolidation



Year 2 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value			Number: Addition and Subtraction				Measurement: Money		Number: Multiplication and Division		
Spring	Number: Multiplication and Division		Statistics		Geometry: Properties of Shape		Number: Fractions			Measurement: Length and Height	Consolidation	
Summer	Geometry: Position and Direction			Problem Solving and efficient methods.		Measurement: Time	Measurement: Mass, Capacity and Temperature			Investigations		



Year 3 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value			Number: Addition and Subtraction				Number: Multiplication and Division			Consolidation	
Spring	Number: Multiplication and Division			Measurement Money	Statistics		Measurement: Length and Perimeter		Number: Fractions		Consolidation	
Summer	Number: Fractions			Measurement: Time			Geometry: Properties of Shape	Measurement: Mass and Capacity			Consolidation	



Year 4 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value				Number: Addition and Subtraction			Measurement: Length and Perimeter	Number: Multiplication and Division			Consolidation
Spring	Number: Multiplication and Division			Measurement: Area	Number: Fractions				Number: Decimals			Consolidation
Summer	Number: Decimals		Measurement: Money		Measurement: Time	Statistics		Geometry: Properties of Shape		Geometry: Position and Direction		Consolidation



Year 5 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value			Number: Addition and Subtraction		Statistics		Number: Multiplication and Division		Measurement: Perimeter and Area		Consolidation
Spring	Number: Multiplication and Division			Number: Fractions						Number: Decimals and Percentages		Consolidation
Summer	Number: Decimals				Geometry: Properties of Shape			Geometry: Position and Direction	Measurement: Converting Units		Measurement: Volume	Consolidation



Year 6 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value		Number: Addition, Subtraction, Multiplication and Division				Number: Fractions				Geometry: Position and Direction	Consolidation
Spring	Number: Decimals		Number: Percentages		Number: Algebra		Measurement: Converting Units	Measurement: Perimeter, Area and Volume		Number: Ratio		Consolidation
Summer	Geometry: Properties of Shape		Problem Solving			Statistics		Investigations				Consolidation

