

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p><u>Number:</u> Number and Place Value:</p> <ul style="list-style-type: none"> - Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit - Round any whole number to a required degree of accuracy - Solve number and practical problems that involve all of the above. <p><u>Number:</u> Addition and Subtraction/ Multiplication and Division:</p> <ul style="list-style-type: none"> - Perform mental calculations, including with mixed operations and large numbers. - Identify common factors, common multiples and prime numbers. 	<p><u>Number:</u> Number and Place Value:</p> <ul style="list-style-type: none"> - Use negative numbers in context, and calculate intervals across zero - Solve number and practical problems that involve all of the above. <p><u>Number:</u> Addition and Subtraction/ Multiplication and Division:</p> <ul style="list-style-type: none"> - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. - Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. 	<p><u>Number:</u> Addition and Subtraction/ Multiplication and Division:</p> <ul style="list-style-type: none"> - Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. <p><u>Number:</u> Fractions, Decimals and Percentages:</p> <ul style="list-style-type: none"> - Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places. - Multiply one-digit numbers with up to two decimal places by whole numbers 	<p><u>Number:</u> Addition and Subtraction/ Multiplication and Division:</p> <ul style="list-style-type: none"> - Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context. - 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 for the context. <p><u>Number</u> Fractions, Decimals and Percentages:</p> <ul style="list-style-type: none"> - Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a 	<p><u>Number:</u> Addition and Subtraction/ Multiplication and Division:</p> <ul style="list-style-type: none"> - Perform mental calculations, including with mixed operations and large numbers- Revisit. <p><u>Number</u> Fractions, Decimals and Percentages:</p> <ul style="list-style-type: none"> - Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. - Convert between miles and kilometres - Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal 	<p><u>Number:</u> Addition and Subtraction/ Multiplication and Division:</p> <ul style="list-style-type: none"> - Solve problems involving addition, subtraction, multiplication and division - Use their knowledge of the order of operations to carry out calculations involving the four operations <p><u>Number</u> Fractions, Decimals and Percentages:</p> <ul style="list-style-type: none"> - Solve problems which require answers to be rounded to specified degrees of accuracy. <p><u>Ratio and Proportion</u></p> <ul style="list-style-type: none"> - Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

<p><u>Number</u> Fractions, Decimals and Percentages:</p> <ul style="list-style-type: none"> - Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. - Compare and order fractions, including fractions > 1. - Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. <p><u>Algebra</u></p> <ul style="list-style-type: none"> - Use simple formulae - Generate and describe linear number sequences. <p><u>Measurement</u></p> <ul style="list-style-type: none"> - Recognise that shapes with the same areas can have different perimeters and vice versa. - Calculate the area of parallelograms and triangles. 	<p><u>Number</u> Fractions, Decimals and Percentages:</p> <ul style="list-style-type: none"> - 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, $\frac{1}{3} \div 2 = \frac{1}{6}$] <p><u>Ratio and Proportion</u></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. - Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison. <p><u>Geometry</u> Properties of Shape:</p> <ul style="list-style-type: none"> - Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, 	<p><u>Algebra</u></p> <ul style="list-style-type: none"> - Express missing number problems algebraically - Find pairs of numbers that satisfy an equation with two unknowns - Enumerate possibilities of combinations of two variables. <p><u>Measurement</u></p> <ul style="list-style-type: none"> - Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate - 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 three decimal places <p><u>Statistics:</u></p> <ul style="list-style-type: none"> - Interpret and construct line graphs and use these to solve problems. - Calculate and interpret the mean as an average. 	<p>simple fraction [for example, $\frac{3}{8}$].</p> <ul style="list-style-type: none"> - Use written division methods in cases where the answer has up to two decimal places. <p><u>Ratio and Proportion</u></p> <ul style="list-style-type: none"> - Solve problems involving similar shapes where the scale factor is known or can be found. <p><u>Geometry:</u> Position and Direction:</p> <ul style="list-style-type: none"> - 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. 	<p>places where appropriate- Revisit.</p> <ul style="list-style-type: none"> - 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 three decimal places- Revisit. <p><u>Geometry:</u> Properties of Shape:</p> <ul style="list-style-type: none"> - 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. <p><u>Statistics</u></p> <ul style="list-style-type: none"> - Interpret and construct pie charts and use these to solve problems. 	<p><u>Measurement</u></p> <ul style="list-style-type: none"> - Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³]. - Recognise when it is possible to use formulae for area and volume of shapes <p><u>Geometry:</u> Properties of Shape:</p> <ul style="list-style-type: none"> - Recognise, describe and build simple 3-D shapes, including making nets.
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	<p>quadrilaterals, and regular polygons.</p> <p>- Draw 2-D shapes using given dimensions and angles.</p>				
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