



Year 6 Maths long term plan 2023-2024



Autumn 1			Autumn 2			
Autumn	Number: Place Value read, write, order and compare numbers up to 10,000,000 and determine the value of each digit <ul style="list-style-type: none">round any whole number to a required degree of accuracyuse negative numbers in context, and calculate intervals across 0solve number and practical problems that involve all of the aboveidentify the value of each digit in numbers given to 3 decimal places	Number: Addition and Subtraction <ul style="list-style-type: none">solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and whyUse estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate	Multiplication and Division <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 multiplicationdivide 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 contextdivide 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 contextperform mental calculations, including with mixed operations and large numbersidentify common factors, common multiples and prime numberssolve problems involving addition, subtraction, multiplication and divisionuse estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracyMultiply and divide decimals up to two decimal places.Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size		Fractions <ul style="list-style-type: none">Use common factors to simplify fractions; use common multiples to express fractions in the same denominationCompare and order fractions, including fractions > 1Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	
	Spring 1			Spring 2		
Spring	Fractions multiply simple pairs of proper fractions, writing the answer in	Fractions, Decimals, Percentages Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375]	Geometry Draw 2-D shapes using given dimensions and angles	Geometry: Position and Direction	Measure Solve problems involving the calculation and conversion of	Measurement Recognise that shapes with the same areas can have different

	<p>its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]</p> <p>divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]</p>	<p>for a simple fraction [for example, $\frac{3}{8}$]</p> <p>Retrieval: 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</p> <p>Solve problems involving the calculation of percentages (ratio and proportion)</p> <p>Use written division methods in cases where the answer has up to two decimal places</p> <p>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p>	<p>Recognise, describe and build simple 3-D shapes, including making nets</p> <p>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons</p> <p>Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</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>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>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 unit, and vice versa, using decimal notation to up to three decimal places</p> <p>Convert between miles and kilometres</p>	<p>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, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].</p>
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Summer 1				Summer 2	
Summer	<p>Ratio and Proportion</p> <p>solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts</p> <p>solve problems involving the calculation of percentages [for example, of measures</p>	<p>Algebra</p> <ul style="list-style-type: none"> □ 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 	<p>Statistics</p> <ul style="list-style-type: none"> □ interpret and construct pie charts and line graphs and use these to solve problems □ calculate and interpret the mean as an average. 	<p>Properties of Number</p> <p>Revise all NC objectives</p>	<p>Transition units for KS3</p>

	<p>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>□ enumerate possibilities of combinations of two variables.</p> <ul style="list-style-type: none">• use their knowledge of the order of operations to carry out calculations involving the 4 operations			
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