

**NATIONAL CURRICULUM STATUTORY REQUIREMENTS - MATHEMATICS**

Y6	<b>NUMBER – Number and place value</b>				
	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	Use negative numbers in context, and calculate intervals across zero	Solve number and practical problems that involve all of the above.	
	<b>NUMBER – Addition, subtraction, multiplication and division</b>				
	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 for the context	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	Perform mental calculations, including with mixed operations and large numbers	
	<b>NUMBER – Addition, subtraction, multiplication and division</b>				
	Identify common factors, common multiples and prime numbers	Use their knowledge of the order of operations to carry out calculations involving the four operations	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	Solve problems involving addition, subtraction, multiplication and division	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
	<b>NUMBER – Fractions (including decimals and percentages)</b>				
	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		
	<b>NUMBER – Fractions (including decimals and percentages)</b>				
	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, $\frac{1}{3} \div 2 = \frac{1}{6}$ ]	Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$ ]	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	
<b>NUMBER – Fractions (including decimals and percentages)</b>					
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 answers to be rounded to specified degrees of accuracy	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.		
<b>RATIO AND PROPORTION</b>					
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	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.		

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Y6	<b>ALGEBRA</b>				
	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
	<b>MEASUREMENT</b>				
	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 to up to three decimal places	Convert between miles and kilometres	Recognise that shapes with the same areas can have different perimeters and vice versa	
	<b>MEASUREMENT</b>				
	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 (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ), and extending to other units [for example, mm <sup>3</sup> and km <sup>3</sup> ].		
	<b>GEOMETRY – PROPERTIES OF SHAPES</b>				
	Draw 2-D shapes using given dimensions and angles	Recognise, describe and build simple 3-D shapes, including making nets	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any 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.
	<b>GEOMETRY – POSITION OF SHAPES</b>				
	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.			
<b>STATISTICS</b>					
Interpret and construct pie charts and line graphs and use these to solve problems	Calculate and interpret the mean as an average.				