



# Year 6 Maths Curriculum

PLACE VALUE	CALCULATIONS	FRACTIONS, DECIMALS and PERCENTAGES	MEASUREMENT	GEOMETRY	STATISTICS
Use negative numbers in context, and calculate intervals across zero	Perform mental calculations, including with mixed operations and large numbers	<a href="#">Compare and order fractions, including fractions &gt;1</a>	Calculate, estimate and compare volume of cubes and cuboids using standard units, including $\text{cm}^3$ and $\text{m}^3$ and extending to other units such as $\text{mm}^3$ and $\text{km}^3$ .	Recognise, describe and build simple 3-d shapes, including making nets (appears also in drawing and constructing)	Interpret and construct pie charts and use these to solve problems
Read and write numbers up to 10 000000 and determine the value of each digit	<a href="#">Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication</a>	Identify the value of each digit in numbers given to three decimal places	Recognise that shapes with the same areas can have different <b>perimeters</b> and vice versa	Illustrate and name parts of circles (radius, diameter and circumference) know that the diameter is twice the radius	Interpret and construct line graphs and use these to solve problems
<a href="#">Order and compare numbers up to 10 000 000 and determine the value of each digit</a>	<a href="#">Divide numbers up to 4-digits by a two-digit whole number using the formal written method of short division</a>	Solve problems which require answers to be rounded to specified degrees of accuracy	Calculate the area of triangles  Calculate the area of parallelograms	<a href="#">Draw 2-d shapes using given dimensions and angles</a>	<a href="#">Calculate and interpret the mean as an average</a>
Identify the value of each digit to three decimal places	<a href="#">Divide numbers up to 4-digits by a two-digit whole number using long division</a>	<a href="#">Use common factors to simplify fractions; use common multiples to express fractions in the same denomination</a>	Convert 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	Compare and classify geometric shapes based on their properties and sizes	
Round any whole number to a required degree of accuracy	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$ )	<a href="#">Recognise when it is possible to use formulae for area and volume of shapes</a>	Find unknown angles in any triangles, quadrilaterals, and regular polygons	
Solve problems which require answers to be rounded to specified degrees of accuracy	Show answers with remainders, as fractions, through rounding or as decimals up to 2dp (appropriate to the context.)	<a href="#">Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</a>	Convert between miles and kilometres	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite	



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Solve number and practical problems that involve all of the above	Identify common factors	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	Solve problems involving the calculation and <b>conversion of units of measure</b> , using decimal notation up to three decimal places where appropriate	Find missing angles where they meet at a point, are on a straight line, or are vertically opposite	
	Identify common multiples				
	Identify prime numbers				
	Use their knowledge of the order of operations to carry out calculations involving the four operations	Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ )		Describe positions on the full coordinate grid (all four quadrants)	
	Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy	Multiply one-digit numbers with up to two decimal places by whole numbers		Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.	
	Solve problems involving addition, subtraction, multiplication and division	Divide proper fractions by whole numbers (e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$ )			
	Multiply one-digit numbers with up to two decimal places by whole numbers	Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$ )			
	Multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places				

## Algebra

Express missing number problems algebraically	Find pairs of numbers that satisfy number sentences involving two unknowns	Enumerate all possibilities of combinations of two variables	Use simple formulae	Generate and describe linear number sequences
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## Ratio and proportion

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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