

## Maths Overview: Year 4

<b>Number and Place Value</b>	<ul style="list-style-type: none"> <li>-Count backwards through zero to include negative numbers</li> <li>-Count in multiples of 6, 7, 9, 25 and 1000</li> <li>-Find 1000 more or less than a given number</li> <li>-Identify, represent and estimate numbers using different representations</li> <li>-Order and compare numbers beyond 1000</li> <li>-Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>-Round any number to the nearest 10, 100 or 1000</li> <li>-Solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>-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.</li> </ul>
<b>Vocabulary</b>	Tenths, hundredths, decimals, decimal place, round, more, less, negative integers, roman numerals (I to C)
<b>Addition and Subtraction</b>	<ul style="list-style-type: none"> <li>-Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>-Estimate and use inverse operations to check answers to a calculation</li> <li>-Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>
<b>Vocabulary</b>	Formal written methods, columnar
<b>Multiplication and Division</b>	<ul style="list-style-type: none"> <li>-Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> <li>-Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li> <li>-Recognise and use factor pairs and commutativity in mental calculations</li> <li>-Multiply and divide two-digit and three-digit numbers by a one-digit number using formal written layout</li> <li>-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</li> </ul>
<b>Vocabulary</b>	Multiplication facts (up to $12 \times 12$ ) division facts, inverse, derive
<b>Fractions and decimals</b>	<ul style="list-style-type: none"> <li>-Recognise and show, using diagrams, families of common equivalent fractions</li> <li>-Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li> <li>-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</li> <li>-Add and subtract fractions with the same denominator</li> <li>-Recognise and write decimal equivalents of any number of tenths or hundredths</li> <li>-Recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math>, <math>\frac{3}{4}</math></li> <li>-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</li> </ul>

	<ul style="list-style-type: none"> <li>-Round decimals with one decimal place to the nearest whole number</li> <li>-Compare numbers with the same number of decimal places up to two decimal places</li> <li>-Solve simple measure and money problems involving fractions and decimals to two decimal places.</li> </ul>
Vocabulary	Equivalent decimals and fractions
Measurement	<ul style="list-style-type: none"> <li>-Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> <li>-Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li> <li>-Estimate, compare and calculate different measures, including money in pounds and pence</li> <li>-Read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>-Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</li> </ul>
Vocabulary	convert
Geometry – Properties of Shape	<ul style="list-style-type: none"> <li>-Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> <li>-Identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>-Identify lines of symmetry in 2-D shapes presented in different orientations</li> <li>-Complete a simple symmetric figure with respect to a specific line of symmetry.</li> </ul>
Vocabulary	Quadrilaterals, triangles, right angle, acute, obtuse
Geometry – Position and Direction	<ul style="list-style-type: none"> <li>-Describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>-Describe movements between positions as translations of a given unit to the left/right and up/down</li> <li>-Plot specified points and draw sides to complete a given polygon.</li> </ul>
Vocabulary	Coordinates, translation, quadrant, x-axis, y-axis, perimeter, area
Statistics	<ul style="list-style-type: none"> <li>-Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</li> <li>-Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</li> </ul>
Vocabulary	continuous data, line graph