

## Year 2: Mathematics

The national curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Key performance indicator	Performance standard
<p><b>Number and place value</b> Counts in steps of two, three, and five from 0, and in tens from any number, forward and backward Compares and orders numbers from 0 up to 100 Uses &lt; &gt; and = signs correctly Uses place value and number facts to solve problems</p> <p><b>Addition and subtraction (inc statistics)</b> Solves problems with addition and subtraction by:</p> <ol style="list-style-type: none"> <li>1. using concrete objects and pictorial representations, including those involving numbers, quantities and measures; and</li> <li>2. applying an increasing knowledge of mental and written methods.</li> </ol> <p>Recalls and uses addition and subtraction facts to 20 and 100:</p> <ol style="list-style-type: none"> <li>1. fluently up to 20</li> </ol> <p><b>Statistics:</b> Asks and answers questions about totalling and comparing categorical data</p> <p><b>Multiplication and division</b> Recalls and uses multiplication and division facts for the two, five and 10 multiplication tables, including recognising odd and even numbers. Solves problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</p> <p><b>Fractions (including decimals)</b> Recognises, finds, names and writes fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math>, and <math>\frac{3}{4}</math> of a length, shapes et of objects or quantity</p> <p><b>Measurement</b> Solves simple problems in a practical context involving addition and subtraction of money of the same unit including giving change</p> <p><b>Geometry: properties of shape</b> Compares and sorts common 2-D and 3-D shapes and everyday objects</p> <p><b>Geometry: position and direction</b> Uses mathematical vocabulary to describe position, direction and movement including movement in a straight line, and distinguishes between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) comparing categorical data</p>	<p><b>With reference to the KPIs</b></p> <p>By the end of Y2 a child should be mentally fluent with whole numbers, counting and place value. A child should know the number bonds to 20 and be precise in using and understanding place value</p> <p>Using practical resources, a child can work with numerals, words and the four operations (eg concrete objects and measuring tools)</p> <p>Using a range of measures, a child can recognise, describe, draw, compare and sort different shapes and use the related vocabulary</p> <p>A child can describe and compare different quantities such as length, mass, capacity/volume, time and money</p> <p>A child can read and spell mathematical vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1</p>