

Year 3: 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>Number and place value Counts from 0 in multiples of four, eight, 50 and 100. Can work out if a given number is greater or less than 10 or 100. Recognises the place value of each digit in a three digit number (hundreds, tens and ones) Solves number problems and practical problems involving these ideas</p> <p>Addition and subtraction (inc statistics) Adds and subtracts numbers mentally including:</p> <ul style="list-style-type: none"> • a three digit number and ones • a three digit number and tens and • a three digit number and hundreds <p>Statistics: Interprets and presents data using bar charts, pictograms and tables</p> <p>Multiplication and division Recalls and uses multiplication and division facts for the multiplication tables:</p> <ul style="list-style-type: none"> • three • four, and • eight <p>Writes and calculates mathematical statements for multiplication and division using the multiplication tables that are known including for two digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p>Fractions (including decimals) Counts up and down in tenths; recognises that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. Recognises, finds and writes fractions of a discrete set of objects; unit fractions and non-unit fractions with small denominators. Recognises and shows, using diagrams, equivalent fractions with small denominators.</p> <p>Measurement Measures, compares, adds and subtracts lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Adds and subtracts amounts of money to give change, using both £ and p in practical contexts. Tells and writes the time from an analogue clock and 12 hour and 24 hour clocks.</p> <p>Geometry Identifies right angles, recognises that two right angles make a half turn, three make three quarters of a turn and four a complete turn; identifies whether angles are greater than or less than a right angle.</p> <p>Statistics Interprets and presents data using bar charts, pictograms and tables</p>	<p>With reference to the KPIs</p> <p>By the end of Y3 a child will be developing written and mental methods using the four operations including number facts and the concept of place value, and performing calculations with whole numbers.</p> <p>A child can:</p> <ul style="list-style-type: none"> • solve a range of number and place value problems • compare different shapes with reference to its angles • use measuring instruments, making reference to their units of measure • tell the time accurately • recall the majority of the multiplication tables; and • read and spell mathematical vocabulary correctly and confidently, using growing word reading knowledge and knowledge of spelling <p>A child is able to read and write simple fractions and decimals.</p>