



Age Related Expectations

Year 5 - Maths

Key performance indicator (KPIs)	Performance standard
<p>Number and place value</p> <ul style="list-style-type: none"> ☐ Reads, writes, orders and compares numbers to at least 1,000,000 and determines the value of each digit; ☐ Interprets negative numbers in context, counts forwards and backwards with positive and negative whole numbers including through zero. <p>Addition and subtraction</p> <ul style="list-style-type: none"> ☐ Adds and subtracts whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction); ☐ Numbers mentally with increasingly large numbers (eg $12,462 - 2,300 = 10,162$). <p>Multiplication and division</p> <ul style="list-style-type: none"> ☐ Identifies multiples and factors including finding all factor pairs of a number and common factors of two numbers; ☐ Solves problems involving multiplication and division including using a knowledge of factors and multiples, squares and cubes; ☐ Solves problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. <p>Fractions (including decimals)</p> <ul style="list-style-type: none"> ☐ Compares and orders fractions whose denominators are all multiples of the same number; 	<p><i>With reference to the KPIs</i></p> <p>By the end of Y5, a child should be fluent in formal written methods for addition and subtraction. Using a developing knowledge of formal methods of multiplication and division, a child should be able to solve problems including properties of numbers and arithmetic.</p> <p>A child can:</p> <ul style="list-style-type: none"> ☐ make connections between fractions, decimals and percentages; ☐ classify shapes with geometric properties and use the vocabulary needed to describe them; ☐ read, spell and pronounce mathematical vocabulary correctly.

Reads and writes decimal numbers as fractions e.g. $0.71 = \frac{71}{100}$;

□ Reads, writes, orders and compares numbers with up to three decimal places. Solves problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.

Measurement

□ Converts between different units of metric measure (eg kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre);

□ Measures and calculates the perimeter of composite rectilinear shapes in centimetres and metres;

□ Calculates and compares the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2).

Geometry: Properties of shape

□ Draws given angles and measures them in degrees ($^\circ$);

□ Distinguishes between regular and irregular polygons based on reasoning about equal sides and angles.

Geometry: position and direction

□ Covered in Y6.

Statistics

□ Completes, reads and interprets information in tables, including timetables.