

ONGOING:

Children will complete mental arithmetic, basic skills, reasoning, problem solving and times tables activities throughout each week to deepen and consolidate essential mathematical skills.

Main Learning Focus:

Year 5

Percentages (4 sessions)

- recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- solve 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.

Fractions B (5 sessions)

- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- find fractions of amounts and quantities

Perimeter and area (6 sessions)

- measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes

Statistics (4 sessions)

- solve comparison, sum and difference problems using information presented in a line graph
- complete, read and interpret information in tables, including timetables.

Angles (4 sessions)

- know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
- measure angles in degrees

Year 6

Percentages (4 sessions)

- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
- calculate percentages

Perimeter and area (6 sessions)

- recognise that shapes with the same areas can have different perimeters and vice versa
- calculate the area of parallelograms and triangles

Shape and coordinates (4 sessions)

- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Volume (2 sessions)

- recognise when it is possible to use formulae for area and volume of shapes
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³].

Number – Algebra (4 sessions)

- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns
- enumerate possibilities of combinations of two variables.

Angles (6 sessions)

- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.