

Year 6 End of Unit Milestones: Spring Term

Measurement

By the end of this unit, children will be able to:

- convert common measurements into metres, centimetres and millimetres
- convert units of measure into different units; to use knowledge of decimals and fractions to help convert units
- convert metres into kilometres as units of measure
- convert units of mass from grams to kilograms using decimals and fractions.
- convert units of volume from millilitres to litres.

Percentages

By the end of this unit, children will be able to:

- find the percentage of a whole number using division and multiplication
- use bar modelling as a pictorial approach to calculating percentage
- find the percentage of a quantity
- use bar model diagrams to support the division and multiplication of numbers towards the percentage.
- use percentage, bar models and fractions to compare amounts.

Ratio

By the end of this unit, children will be able to:

- use ratios and fractions to compare objects
- find the relationship between ratios, percentages and fractions
- determine the ratio of a quantity using concrete materials
- simplify ratios using concrete materials in addition to division
- compare more than two quantities using the term 'ratio'
- use bar models to express ratios where there is more than one quantity
- compare quantity using both fractions and ratios
- compare quantities using bar models and common factors
- use multiplication and division to simplify ratios
- compare numbers using ratios and make decisions about simplifying ratios using division

Algebra

By the end of this unit, children will be able to:

- write algebraic expressions using each of the four operations.
- evaluate algebraic expressions including the use of inverse operations
- to write and use formulae to solve problems
- replace a letter/variable with a number then solve the equation

Area and Perimeter

By the end of this unit, children will be able to:

- find the area and perimeter of rectangles
- calculate perimeter using the known area and vice versa
- find and calculate the area of a parallelogram
- use concrete materials and prior understanding of area to construct a formula for the area
- use prior knowledge of area to determine and solve the area of a triangle
- use and apply the formula for the area of a rectangle to solve problems involving triangles
- calculate the area of a triangle using a formula
- find the area of a parallelogram using an understanding of triangles
- use concrete materials to find the area of a parallelogram.

Volume

By the end of this unit, children will be able to:

- find the volume of cubes and cuboids using concrete materials
- determine the formula for the volume of cubes and cuboids and apply it to calculate the volume of shapes
- estimate the volume of objects and spaces
- calculate the volume of boxes using the formula for volume of cubes and cuboids
- apply the formula for the volume of a cube or cuboid.

Geometry: Properties and Shapes: Geometry

By the end of this unit, children will be able to:

- solve problems involving angles(including opposite angles)
- solve problems involving angles without protractors
- determine and show the sum of the angles inside a triangle and in quadrilaterals
- use the knowledge of angles inside a triangle and a quadrilateral to solve problems involving angles in other shapes
- name the parts of a circle
- calculate diameter and radius using parts of a circle

Geometry: Position and Movement

By the end of this unit, children will be able to:

- represent negative numbers on both vertical and horizontal number lines
- describe the positions of objects on a coordinate grid; to use x and y axes to determine the position of objects on a grid
- describe the position of points using coordinates on a grid
- recognise and draw polygons on a coordinate grid
- describe the translation of shapes on a coordinate grid
- translate and reflect shapes on a coordinate grid
- reposition objects so they can be reflected in the x and y axis as the mirror line.