## Year 6 - Overview



Geometry - Angles, 3D sh: Draw 2-D shapes using given dimensions and angles

Recognise, describe and build simple 3D 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

Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius

|  |  | Perform mental <br> calculations, including <br> with mixed operations <br> and large numbers. <br> Solve problems involving <br> multiplication and division <br> Explore the order of <br> operations using brackets; <br> use their knowledge of <br> the order of operations to <br> carry out calculations <br> involving the four <br> operations <br> Identify common factors, <br> common multiples and <br> prime numbers |  |
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## Spring

Geometry - position and movement Use negative numbers in context, and calculate intervals across zero.

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.

## Fractions and Decimals

Associate a fraction with division and calculate decimal fraction equivalents.

Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

Compare and order fractions, including fractions $>1$.

Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $1 / 4 \times 1 / 2=1 / 8$.

Divide proper fractions by a whole number eg
$1 / 3 \div 2=1 / 6$

## Percentage and ratio

Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Solve problems involving the calculation of percentages and use percentages as comparison

Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples

Solve problems involving similar shapes where the scale factor is known or can be found

## Algebra

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 2 variables

## Statistics

Interpret and construct pie charts and line graphs and use these to solve problems

Calculate and interpret the mean as an average.

