

# Ratio, Proportion and Rates of Change at Fen Rivers

Progression pathway

## In Year 6 we will...

- Solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts
- Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison
- Solve problems involving similar shapes where the scale factor is known or can be found
- Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples

## In KS3 we will...

- Change freely between related standard units (for example, time, length, area, volume/capacity, mass)
- Use scale factors, scale diagrams and maps
- Express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1
- Use ratio notation, including reduction to simplest form
- Divide a given quantity into two parts in a given part-part or part-whole ratio; express the division of a quantity into two parts as a ratio
- Understand that a multiplicative relationship between two quantities can be expressed as a ratio or as a fraction
- Relate the language of ratios and the associated calculations to the arithmetic of fractions and to linear functions
- Solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematics
- Solve problems involving direct and inverse proportion, including graphical and algebraic representations
- Use compound units such as speed, unit pricing and density to solve problems