

Curriculum Map	Subject: Mathematics		
Theme / Area Covered	Unit 7 Proportional Reasoning		
	Age Related Targets – Year 7	Age Related Targets – Year 8	Age Related Targets – Year 9
<b>Key Objectives / Learning Pathway</b> <b>Emerging</b>	Solve simple problems involving ratio written in words Use a scale factor to solve problems involving similar shapes Find the scale factor of similar shapes. Solve problems involving equal sharing or grouping problems using fractions Solve problems involving equal sharing or grouping problems using multiples	Describe a comparison of measurements or objects using ratio notation a:b Simplify a ratio by cancelling common factors Divide a quantity in two parts in a given part:part ratio Divide a quantity in two parts in a given part:whole ratio	Use equality of ratios to solve problems and represent ratios as linear equations and draw their graphs. Understand and use fractions, decimals and percentages as multipliers when calculating the original amount after a % change, including improper fractions
<b>Key Objectives / Learning Pathway</b> <b>Developing</b>	Describe a comparison of measurements or objects using ratio notation a:b Simplify a ratio by cancelling common factors Divide a quantity in two parts in a given part:part ratio Divide a quantity in two parts in a given part:whole ratio	Understand and use common multiples when solving problems involving direct proportion. Share in a given ratio. Understand and use fractions, decimals and percentages as multipliers when increasing and decreasing. Simplify a ratio and write in the form 1:n or n:1 and interpret scales and maps using ratio.	Solve ratio problems involving mixing Solve ratio problems involving comparisons Solve ratio problems involving concentrations Understand and use compound units Convert between units of speed Solve problems involving speed Solve problems involving rates of pay Solve problems involving unit pricing
<b>Key Objectives / Learning Pathway</b> <b>Securing</b>	Understand and use common multiples when solving problems involving direct proportion. Share in a given ratio. Understand and use fractions, decimals and percentages as multipliers when increasing and decreasing. Simplify a ratio and write in the form 1:n or n:1 and interpret scales and maps using ratio.	Use equality of ratios to solve problems and represent ratios as linear equations and draw their graphs. Understand and use fractions, decimals and percentages as multipliers when calculating the original amount after a % change, including improper fractions	Solve ratio problems involving mixing Solve ratio problems involving comparisons Solve ratio problems involving concentrations Understand and use compound units Convert between units of speed Solve problems involving speed Solve problems involving rates of pay Solve problems involving unit pricing
<b>Key Objectives / Learning Pathway</b> <b>Excelling</b>	Use equality of ratios to solve problems and represent ratios as linear equations and draw their graphs. Understand and use fractions, decimals and percentages as multipliers when calculating the original amount after a % change, including improper fractions	Solve ratio problems involving mixing Solve ratio problems involving comparisons Solve ratio problems involving concentrations Understand and use compound units Convert between units of speed Solve problems involving speed Solve problems involving rates of pay Solve problems involving unit pricing	For problems involving direct and inverse proportion, write relationships and recognise graphs.