SUBJECT: Ratio and proportion CURRICULUM PROGRESSION PATHWAYS
CL: Miss Z. Bradshaw and Miss A. Hazell

| Year 7 | Year 8 | Year 9 | KS4 Foundation pathway | KS4 Higher pathway | KS5 (Level 3) -A-level Mathematics/Core Mathematics | Further Education and training | Careers |
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| Ratio <br> - Use scale drawings <br> - Use and understand ratio notation <br> - Simplify 2 or 3 part ratios <br> - Find equivalent ratios <br> - Divide a quantity into two parts of a given ratio <br> Proportion <br> - Solve simple problems involving direct proportion <br> - Use the unitary method to solve simple word problems involving direct proportion <br> - Use fractions to describe and compare proportions <br> - Understand and use the relationship between fractions, ratio and proportion <br> - Use percentages to describe and | Ratio <br> - Solve ratios and proportion problems involving decimals <br> - Use unit ratios <br> Proportion <br> - Apply direct proportion to graphical representations (straight line graphs) <br> - Recognise when two things are in direct proportion | Ratio <br> Proportion <br> - Write formula and use to solve problems using direct and inverse proportions <br> - Solve best buy problems <br> - Solve problems using inverse proportion | Ratio <br> - Use ratios to convert between units <br> - Compare ratios (a:b, b:c what is a:b:c) <br> - Understand the link between the unit ratio and the gradient <br> - Convert between currencies <br> Proportion | Ratio <br> - Use ratios to convert between units <br> - Compare ratios (a:b, b:c what is a:b:c) <br> - Understand the link between the unit ratio and the gradient <br> - Convert between currencies <br> Proportion <br> - Write and use equations for direct and inverse proportion using the constant $K$ <br> - Solve problems involving cubic and square proportionality <br> - Use and recognise graphs showing direct and indirect $\dagger$ proportion | Ratio <br> - Solve vector problems with lengths given in ratios (A-level) <br> - Solve mechanic problems with pulleys and weighted by unknown masses but with specific ratio (A-level) <br> Proportion <br> - Use graphs and calculation to identify whether sets of data are directly, indirectly proportional <br> - Identify whether linear models are suitable <br> - Use logarithms to help model non-linear data | - Natural Sciences <br> - Agriculture | - Banking <br> - Finance <br> - Mortgage Brokers <br> - Stock Brokers <br> - Post office <br> - Engineering <br> - Farming and land management <br> - Landscaping <br> - Cartography |



