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 **Mathematics Faculty**

 **Year 10 Higher – Spring Term 2**

 **Unit 8 Overview – Ratio and Proportion**

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| **Topic** | **Key Ideas** | **Progress** |
| **R** | **A** | **G** |
| **Ratio and Proportion** | I can solve ratio problems. |  |  |  |
| I can construct and solve equations that describe direct and inverse proportion. |  |  |  |
| I can relate algebraic solutions to graphical representations. |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Solving mixed ratio problems e.g. scaling up ratios, sharing an amount in a given ratio, calculating amounts when given the difference (CM clips 270, 271 & 271b) | Formative assessment strategies e.g. MWBs, whole class questioning, Diagnostic Questions, SLOP time with self-assessment, Live Marking etc.Assessment is also supported with our use of ILOs, set through Century Learning, Corbettmaths, Dr Frost Maths and Justmaths.Finally, units are assessed through skills checks and half termly assessments, as part of our Assessment Calendar in Mathematics. | ratio, quantity, scale, share, multiply, divide, part, difference |
| **2** | **Solving problems involving 2 ratios** (CM clip 271a) | ratio, part, equivalent, LCM |
| **3** | **Constructing and solving equations that describe simple direct proportion. Recognising graphs that represent direct proportion** (CM clip 254) | proportion, direct, equation, constant, solve, graph, linear |
| **4** | Constructing and solving equations for proportion problems involving powers and roots (CM clip 254) | proportion, direct, equation, constant, solve, square, cube, root |
| **5** | **Constructing and solving equations that describe simple inverse proportion. Recognising graphs that represent inverse proportion** (CM clip 255) | proportion, inverse, equation, constant, solve, graph, reciprocal |
| **6** | Constructing and solving equations for inverse proportion problems involving powers and roots (CM clip 255) | proportion, inverse, equation, constant, solve, square, cube, root |