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 **Mathematics Faculty**

 **Year 11 Foundation - Autumn Term 1**

 **Unit 1 Overview - Algebraic Graphs 1**

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| **Topic** | **Key Ideas** | **Progress** |
| **R** | **A** | **G** |
| **Algebraic Graphs 1** | I can identify gradients and intercepts algebraically and graphically. |  |  |  |
| I can plot linear graphs. |  |  |  |
| I can find the equation of a straight line. |  |  |  |
| I can solve simultaneous equations graphically. |  |  |  |
| I can plot and interpret distance-time graphs. |  |  |  |
| I can interpret line graphs from real-life sitiuations. |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | **Identifying gradients and intercepts of linear functions algebraically (CM clip 191)** | 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 staples challenges and half termly assessments, as part of our Assessment Calendar in Mathematics. | gradient, rate of change, intercept, linear, equation, rearrange |
| **2** | Identifying gradients and intercepts of linear functions graphically. Finding the midpoint of a line (CM clips 87, 189 & 190) | gradient, rate of change, intercept, linear, coordinate, axis, midpoint |
| **3** | **Plotting linear graphs (CM clips 151, 152, 186 & 187)** | linear, table of values, substitute, equation, plot, intercept, gradient, positive, negative |
| **4** | Finding the equation of a line, given its gradient and a point or given two points (CM clips 194 & 195) | equation, linear, gradient, intercept, point, coordinate, substitute |
| **5** | Finding approximate solutions to two linear equations using a graph (CM clip 297) | simultaneous equation, linear, solve, plot, intersection, coordinate, value |
| **6** | **Plotting and interpreting distance-time graphs (CM clip 171)** | distance, time, speed, graph, plot, gradient, coordinate |
| **7** | Interpreting line graphs from real-life situations (CM clips 151 & 152) | linear, graph, conversion, value |