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**Mathematics Faculty**

**Year 10 Foundation – Summer Term 1**

**Unit 10 Overview – Algebraic Graphs 1**

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| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Algebraic Graphs 1** | I can plot graphs of linear functions. |  |  |  |
| I can identify gradients and y-intercepts. |  |  |  |
| I can recognise parallel lines. |  |  |  |
| I can find the equation of a straight line. |  |  |  |
| I can solve simultaneous equations graphically. |  |  |  |
| I can plot and interpret real-life graphs. |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | **Plotting the graphs of linear functions** (CM clip 186) | 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. | linear, graph, function, table of values, substitute, coordinate, plot, equation |
| **2** | **Reducing a given equation to the form y = mx + c and calculating the gradient and y-intercept** (CM clip 191) | equation, linear, gradient, y-intercept, rearrange |
| **3** | **Calculating the gradient of a straight line given two points** (CM clips 189 & 190) | gradient, coordinate, difference, value |
| **4** | Using the form y = mx + c to identify parallel lines (CM clip 196) | equation, linear, parallel, gradient, rearrange |
| **5** | Finding the equation of a line, given its gradient and a point (CM clip 194) | equation, linear, gradient, intercept, point, coordinate, substitute |
| **6** | Finding the equation of a line, given two points (CM clip 195) | equation, linear, gradient, intercept, point, coordinate, substitute |
| **7** | Finding approximate solutions to simultaneous equations using graphs (CM clip 297) | simultaneous equation, linear, solve, plot, intersection, coordinate, value |
| **8** | Plotting and interpreting graphs of linear functions in real-life contexts e.g. conversion graphs and graphs representing financial situations (CM clips 151, 152 & 186) | linear, graph, function, table of values, substitute, coordinate, plot, equation, conversion |