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**Mathematics Faculty**

**Year 10 Unit 9 Overview**

**Graphs**

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| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Graphs** | I can recognise and plot graphs parallel to the axes |  |  |  |
| I can generate coordinates and plot linear graphs |  |  |  |
| I can identify gradients and y-intercepts |  |  |  |
| I can recognise parallel lines |  |  |  |
| I can find the equation of a linear graph |  |  |  |
| I can construct and interpret real-life graphs |  |  |  |
| I can construct and interpret distance-time graphs |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Recognising, naming and plotting straight-line graphs parallel to the axes. Finding the midpoint of a line segment.  (CM clips 192, 193 & 198) | 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 which alternate between Basic Skills Checks one week and then a more individual ILO the following set through Century and Corbettmaths.  Finally every unit is assessed half termly as part of our Assessment Calendar in Mathematics. | coordinate, line, graph, horizontal, vertical, parallel, axis, midpoint |
| **2** | **Generating and plotting coordinates from a rule. Plotting straight-line graphs from a table of values.**  (CM clip 186) | coordinate, plot, linear, graph, substitute, equation |
| **3** | Identifying the gradient and y-intercept of a straight line from a diagram and from an equation. Understanding that parallel lines have the same gradient.  (CM clips 189, 191 & 196) | linear, equation, gradient, y-intercept, coordinate, parallel |
| **4** | Finding the equation of straight line graphs.  (CM clip 194) | line, equation, gradient, y-intercept, coordinate, substitute |
| **5** | Drawing and interpreting graphs from real data.  (CM clips 151 & 152) | graph, data, coordinate, plot, interpret, rate of change |
| **6** | Constructing and interpreting distance-time graphs.  (CM clip 171) | graph, distance, time, plot, interpret, gradient, horizontal |