****

**Mathematics Faculty**

**Year 10 Unit 9 Overview**

**Graphs**

|  |  |  |
| --- | --- | --- |
| **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 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **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 |