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**Mathematics Faculty**

**Year 7 Summer Term 1 - Delta Scheme**

**Unit 10 Overview - Coordinates and Graphs**

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| **Topic** | **Key Ideas** | **Progress** |
| **R** | **A** | **G** |
| **Coordinates and Graphs** | I can recognise and sketch graphs of linear functions that are parallel to the axes and of the form y = +/- x |  |  |  |
| I can generate coordinates that satisfy a linear rule and plot the corresponding graph |  |  |  |
| I can interpret gradients as a rate of change and interpret intercepts graphically |  |  |  |
| I can find approximate solutions to equations using graphs |  |  |  |
| I can plot and interpret graphs in real-life contexts including speed and time |  |  |  |
| I can plot and interpret quadratic graphs |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Recognising and sketching graphs of linear functions that are parallel to the axes. Recognising and sketching y = +/- x graphs (CM clips 192 & 193) | 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 (see learning focus). Finally, every unit is assessed half-termly as part of our Assessment Calendar in Mathematics. | linear, graph, parallel, axis, horizontal, vertical, sketch |
| **2** | **Generating coordinates that satisfy a simple linear rule and plotting the corresponding graph** (CM clips 186 & 187) | coordinate, generate, graph, linear, equation, substitute |
| **3** | **Interpreting gradients as a rate of change and interpreting intercepts graphically** (CM clip 189) | gradient, rate, change, intercept, axis, coordinate, graph |
| **4** | Finding approximate solutions to equations using graphs  | graph, linear, equation, solution, approximate |
| **5** | Plotting and interpreting graphs in real-life contexts including distance-time (CM clip 171) | plot, graph, coordinate, interpret, speed, distance, time, gradient, horizontal |
| **6** | Completing a table of values for quadratic graphs and plotting the corresponding graph (CM clip 264) | coordinate, generate, graph, quadratic, equation, substitute, plot |
| **7** | Interpreting graphs of simple quadratic graphs including roots and turning points  | quadratic, graph, interpret, root, turning point |
| **8** | Interpreting real-life curved graphs  | graph, curved, real-life, data, interpret |