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**Mathematics Faculty**

**Year 10 Unit 6 Overview**

**Graphs**

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| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Graphs** | I can construct and interpret linear graphs |  |  |  |
| I can identify the equation of a line and its gradient |  |  |  |
| I can draw and interpret distance time graphs |  |  |  |
| I can draw and interpret real time graphs |  |  |  |
| I can draw and interpret quadratic and special graphs |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Constructing and interpreting linear line graphs  (CM186, 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 that alternate between Basic Skills Checks one week and then a more individual ILO the following week through Mathswatch and Corbettmaths (see learning focus).  Finally every unit is assessed half-termly as part of our Assessment Calendar in Mathematics. | Linear, straight, graph, gradient, intercept, equation, plot |
| **2** | Identifying the equation of a line and its gradients  (CM186, 189, 191, 194) | Linear, straight, graph, gradient, intercept, equation, plot |
| **3** | Constructing and interpreting distance /velocity time graphs in context  (CM299) | Average, speed, time, velocity, distance, acceleration |
| **4** | Constructing and interpreting real life graphs in context  (CM171) | Direct proportion, volume, best fit |
| **5** | Finding the midpoints of line segments and their gradient  (CM87,88) | Line, segment, gradient, parallel, perpendicular, equation |
| **6** | Constructing quadratic graphs and use them to solve quadratic equations  (CM264) | Quadratic, equation, symmetry, real-life |
| **7** | Drawing and using cubic and special graphs  (CM344, 346) | Cubic, reciprocal, equation, symmetry, function |
| **8** | Drawing graphs of circles  (CM | Linear, non-linear, function |