## Year 9 Overview

| 9.1 Graphs and proportion | 9.1.1 Cartesian coordinates |
| :---: | :---: |
|  | 9.1.2 Linear graphs |
|  | 9.1.3 Direct and Indirect proportion |
|  | 9.1.4 Calculating with scales |
|  | 9.1.5 Sequences (nth term) |
|  | 8.4.5 Speed, distance and time |
| 9.2 Algebraic expressions | 9.2.1 Change the subject of a formula |
|  | 9.2.2 Expansion |
|  | 9.2.3 Factorisation |
|  | 9.2.4 Algebraic fractions |
| 9.3 2D Geometry | 9.3.1 Construction and Loci |
|  | 9.3.2 Tringles and quadrilaterals, angles on diagonals |
|  | 9.3.3 Angles in polygons |
|  | 9.3.4 Congruence and similarity |
| 9.4 Equations and inequalities | 9.4.1 Equations |
|  | 9.4.2 Inequalities |
|  | 9.4.3 Constructing equations and Inequalities |
|  | 9.4.4 Quadratic equations |
|  | 9.4.5 Simultaneous linear equations |
| 9.5 Probability | 9.5.1 Probability scale and listing outcomes |
|  | 9.5.2 Independent events and Tree diagrams |
|  | 9.5.3 Experimental and Theoretical Probability |
|  | 9.5.4 Sets and Venn Diagrams |
| 9.6 Statistics | 9.6.1 Comparing two data sets |
|  | 9.6.2 Stem and Leaf diagrams |
|  | 9.6.3 Averages of grouped data |
|  | 9.6.4 Scatter graphs |

Term 2A - 2D Geometry

| Topic | Small Steps |
| :--- | :--- |
| 9.3.1 Construction and Loci | a) Construct the midpoint and perpendicular bisector of a line segment <br> b) Construct the perpendicular from a point to a line and from a point on a line <br> c) Bisect angles <br> d) Find simple loci <br> e) Find the locus of a point that moves <br> f) Use ICT to explore constructions |
| 9.3.2 Tringles and quadrilaterals, angles on diagonals | a) Know the properties of diagonals in quadrilaterals |
| 9.3.3 Angles in polygons | a) Know and use interior angle facts for regular polygons <br> b) Know and use exterior angle facts for regular polygons |
| 9.3.4 Congruence and similarity | a) Identify and use congruent shapes <br> b) Identify and use similarity <br> c) Use similarity to find lengths of objects that have been enlarged or reduced using the scale factor |

