## CURRICULUM OVERVIEW - YEARS 9, 10 \& 11

Years 9, 10 and 11 Topics are taught in this order over a period of $21 / 2$ years, leaving time to revisit topics before the GCSE.

| Foundation | Higher |
| :---: | :---: |
| Integers and place value | Factors, multiples, primes, indices - use of calculator |
| Decimals | Algebraic expressions and manipulation |
| Algebra - the basics | Averages, range, quartiles and IQR |
| Statistics | Angles |
| Averages | Decimals and Rounding |
| Angles/Lines of Symmetry | Fractions |
| Polygons and parallel lines | Sequences |
| Indices, powers and roots | Linear Graphs |
| Factors, multiples and primes | Collecting data / Representing and interpreting data - easier charts and graphs |
| Equations | Sampling |
| Tables | Area, perimeter, surface area and volume |
| Averages from charts and graphs | Percentages |
| Perimeter and area (not surface area) | Solving linear equations / Changing the subject of a formula / Using formulas |
| Fractions | Pythagoras Theorem |
| Ratio | Ratio and proportion |
| Expand and factorise single brackets | Standard form |
| Translation (not describe) | Fractional and negative indices |
| Rotation (not describe) | Transformations |
| Reflection (not describe) | Solving linear simultaneous equations |
| Enlargement (not describe) | Probability |
| Fractions, decimals and percentages | Surds |
| Percentages (not increase/decrease, interest, VAT, no multiplier) | Pythagoras' Theorem / Right-angled trigonometry |
| Pie Charts | Linear Inequalities |
| Scatter diagrams | Cumulative Frequency / Box Plots |
| Expressions and substitution (no deriving of formula) | Constructions / Loci / Bearings |
| Sequences - not quadratic, not geometric | Bounds |
| Plotting straight line graphs | Harder sequences |
| Plans, elevations, nets and surface areas | Venn diagrams |
| Volume | Harder area, perimeter, surface area and volume |
| Probability 1 | Solving quadratic equations |
| Probability 2 with Venn diagrams (not including tree diagrams) | Similarity and congruence |
| Inequalities | Compound measures / Real-life graphs |
| Interior and exterior angles | Drawing graphs: quadratic, cubic, reciprocal, circles |
| Proportion | Circle Theorems |


| Bearings | Vectors |
| :--- | :--- |
| Constrution | Direct and Inverse Proportion |
| Loci | Non Right Angled Trigonometry |
| Averages from frequency tables | Parallel and Perpendicular Lines |
| Indices and standard form | Histograms |
| Fractions and reciprocals | Algebraic Fractions |
| Real life graphs | Use function notation |
| Compound measures/rates of change | Exponential Graphs |
| y=mX+c | Simultaneous Equations using Quadratics |
| Describing translations | Transformations of graphs - inc Trig Curves |
| Describing rotations | Iteration |
| Describing reflections | Area Under The Graph + Gradients Of Graphs |
| Describing enlargements | Proof |
| Percentages 2 (increase/decrease, multipier, <br> tax) | Graphing inequalities and solving quadratic |
| Inequalities |  |
| Pythagoras | Equations of Tangents |
| Circles, cylinders, cones and spheres |  |
| Simultaneous equations |  |
| Probability trees |  |
| Quadratic sequences |  |
| Quadratic equations, expanding and factorising |  |
| Quadratic, cubic and reciprocal graphs |  |
| Right angled trigonometry |  |
| Rearranging formula |  |
| Similarity and congruence |  |
| Vectors |  |

