	Cycle 1	Cycle 2	Cycle 3
Year 10 - Higher	**Topic:** **Unit 1:** Right Angled Triangle Trigonometry **Unit 2:** Equations, Inequalities and Formulae **Unit 3:** Proportion Growth and Decay **Unit 4:** Venn and Tree Diagrams **Overview:** Unit 1 • Pythagoras Theorem • Finding a missing side using Trigonometry • Finding a missing angle using Trigonometry Unit 2 • Solving Inequalities • Representing inequalities on a number line • Representing inequalities • Solving one and two step equations • Solving equations with unknowns on both sides • Forming and Solving Equations • Rearranging Formulae with squares/cubes Unit 3 • Direct Proportion • Inverse Proportion • Work Problems • Percentage Increase/Decrease • Compound Growth/Decay Unit 4 • Product rule for counting • Frequency Tree Diagrams • Tree Diagrams for Dependent and Independent events • Venn Diagrams • Conditional Probability (Venn Diagrams) **Mid-Cycle Assessment:** End of Topic Test – Open Book **Assessment Week:** Unit 1-4 Non-Calculator Paper	**Topic:** **Unit 5:** Measures and Real Life Graphs **Unit 6:** Vectors, Transformations and congruence **Unit 7:** Quadratic and Simultaneous Equations **Unit 8:** Advanced Trigonometry **Overview:** Unit 5 • Speed Distance Time • Density & Pressure • Gradient of Speed-Time Graph & Distance Time Graph • Distance travelled from a Speed-Time graph Unit 6 • Reflection, Rotation, Translation, Enlargement • Column Vector Notation • Adding and Subtracting Vectors • Parallel & Collinear Vectors • Similar Shapes • Congruent Triangle Proofs Unit 7 • Plotting quadratic graphs • Expanding Double Brackets • Expanding Trinomials Solving Quadratics by Factorising • Completing the square • Quadratic Formula • Forming and Solving Quadratic Equations • Solving Linear Simultaneous Equations • Graphical Simultaneous Equations Unit 8 • Exact Trig Values • 3D Trigonometry and Pythagoras • Sine Rule, Cosine Rule • Area of a Triangle: $\frac{1}{2}ab\sin sin\, C$ **Mid-Cycle Assessment:** End of Topic Test – Open Book **Assessment Week:**	**Topic:** **Unit 9:** Circles, Cylinders, cones and Spheres. **Unit 10:** Histograms **Unit 11:** Circle Geometry **Overview:** Unit 9 • Area and Circumference of a circle • Area of a sector • Area of segments • Arc length • Surface Area, Volume of Prism, Cylinder, Cone, Sphere, Pyramid • Volume and Surface Area of Frustum Unit 10 • Averages from a Frequency Table • Drawing Histograms • Interpreting Histograms • Sampling Unit 11 • Circle Theorems • Alternate Segment Theorem • Tangent and Chord Circle Theorems **Mid-Cycle Assessment:** End of Topic Test – Open Book **Assessment Week:** Year 10 Mock Exams

	Cycle 1	Cycle 2	Cycle 3
Year 10 - Foundation	**Topic:** **Unit 1:** Number and Algebra Recap **Unit 2:** Equations, Inequalities and Formulae **Unit 3:** Ratio, Proportion **Unit 4:** Venn and Tree Diagrams **Overview:** Unit 1 • Add & Subtract Mixed Numbers • Percentage of an amount • Standard Form Calculations • Collecting Like Terms • Expanding and Factorising Unit 2 • Solving Inequalities • Solving one and two step equations • Solving equations with unknowns on both sides • Forming and Solving Equations • Rearranging Formulae Unit 3 • Equivalent Ratios • Share a quantity in a given ratio • Unitary Method • Direct Proportion • Work Problems Unit 4 • Product rule for counting • Frequency Tree Diagrams • Tree Diagrams for Dependent and Independent events • Venn Diagrams **Mid-Cycle Assessment:** End of Topic Test – Open Book **Assessment Week:** Unit 1-4 Non-Calculator Paper	**Topic:** **Unit 5:** Measures and Real Life Graphs **Unit 6:** Vectors, Transformations and congruence **Unit 7:** Quadratic and Simultaneous Equations **Unit 8:** Circles, Cylinders, cones and Spheres **Overview:** Unit 5 • Speed Distance Time • Density & Pressure • Best Buy & Rate of Pay Problems • Gradients • Distance travelled from a Speed-Time graph Unit 6 • Reflection, Rotation, Translation, Enlargement • Column Vector Notation • Adding and Subtracting Vectors • Similar Shapes • Congruent Triangles Unit 7 • Plotting quadratic graphs • Expanding Double Brackets • Factorising Quadratic Expressions • Solving Quadratics by Factorising • Solving Simultaneous Equations Unit 8 • Area and Circumference of a circle • Area of a sector & Arc Length • Surface Area, Volume of Prism, Cylinder, Cone, Sphere, Pyramid **Mid-Cycle Assessment:** End of Topic Test – Open Book **Assessment Week:** Unit 1-8 Non-Calculator Paper	**Topic:** **Unit 9:** Averages and Statistical Diagrams **Unit 10:** Construction and Loci **Unit 11:** Right Angled Triangles **Overview:** Unit 9 • Pie Charts • Averages from a Frequency Table • Scatter Graphs and Correlation Unit 10 • Scale Drawings • Bearings • Plans and Elevations • Constructing Triangles • Angle and Line Bisectors • Loci Unit 11 • Pythagoras Theorem • Finding missing side using Trigonometry • Finding missing angle using Trigonometry **Mid-Cycle Assessment:** End of Topic Test – Open Book **Assessment Week:** Year 10 Mock Exams

	Cycle 1	Cycle 2	Cycle 3
Year 11 -Higher	**Topic:** **Unit 1:** Circles and Tangents **Unit 2:** Sequences & Non-Linear Simultaneous Equations **Unit 3:** Further Algebra **Unit 4:** Non Linear Graphs **Overview:** Unit 1 • $y = mx + c$ revision • Equation of a line through a point • Equation of a line through two points • Parallel and Perpendicular Lines • Equation of a circle • Equation of a tangent to a circle Unit 2 • Solving Non-Linear Simultaneous Equations • Quadratic Sequences • Fibonacci and Geometric Sequences • Iteration Unit 3 • Factorising $ax^2 + bx + c$ where $a > 1$ • Adding/Subtracting/Multiplying/Dividing Algebraic Fractions • Solving equation involving algebraic fractions. • Using Functions • Composing Functions, Inverse Functions • Algebraic Proof • Quadratic Inequalities Unit 4 • Revise Plotting Quadratic Graphs • Finding the turning point graphically and by completing the square • Sketching Quadratic Functions • Cubic, Reciprocal, Trig Graphs • Transformations of Functions **Mid-Cycle Assessment:** End of Topic Test – Open Book	**Topic:** **Unit 5:** Revise: Number & Algebra **Unit 6:** Revise: Geometry **Unit 7:** Revise: Statistics & Probability **Overview:** Unit 5 • Surds & Indices • Irrational Numbers to fractions • Quadratic Equations • Simultaneous Equations Unit 6 • RA Trigonometry • Sine and Cosine Rule • Exact Trig Values • Parallel Line Angle Facts • Exterior/Interior Angles • Area, Perimeter, Volume, • Similar Shapes & Congruent Shapes • Loci and Constructions Unit 7 • Cumulative Frequency Diagrams • Box Plots • Averages from a frequency table • Histograms • Tree Diagrams • Venn Diagrams **Mid-Cycle Assessment:** Sections of GCSE Papers **Assessment Week:** Year 11 March Mock Exams	**Topic:** **Unit 8:** Revise: Ratio, Proportion and Rates of Change **Overview:** Unit 9 • Ratio Problems • Worded percentage problems • Rates of Change (Gradients & Areas) Inverse & Direct Proportion **Mid-Cycle Assessment:** Section of GCSE Paper **Assessment Week:** GCSE Summative Exams

	Assessment Week: Year 11 November Mock Exams		

	Cycle 1	Cycle 2	Cycle 3
Year 11 -Foundation	**Topic:** **Unit 1:** Proportion **Unit 2:** Growth and Decay **Unit 3:** Non- Linear Graphs **Unit 4:** Further Trigonometry **Overview:** Unit 1 • Unitary Method • Recipes • Formal Method for Proportion • Direct and Inverse Proportion Unit 2 • Simple and Compound Interest • Percentages Revision • Reverse Percentage Change • Repeated Percentage Change Unit 3 • Drawing quadratic graphs • Features of Quadratic graphs • Solving quadratic equations graphically • Reciprocal and Cubic Graphs • Proportion Graphs Unit 4 • Pythagoras Revision • Trigonometry Revision • Exact Trig Values **Mid-Cycle Assessment:** End of Topic Test – Open Book **Assessment Week:** Year 11 November Mock Exams	**Topic:** **Unit 5:** Revise: Number & Algebra **Unit 6:** Revise: Geometry **Unit 7:** Revise: Statistics & Probability **Overview:** Unit 5 • Number Problem Solving • Fractions Calculations • Percentage Calculations • Financial Maths Questions • Written Calculation • Solving Equations • Equivalent Expressions • Rearranging Formulae • Expanding, Factorising, Solving Quadratics Unit 6 • Angle Facts • Area, Perimeter, Volume • Loci & Constructions • Pythagoras and Trigonometry Unit 7 • Mutually Exclusive Events • Tree Diagrams • Venn Diagrams • Bar Charts & Pictograms • Scatter Graphs and Correlation • Averages and the range • Averages from a Frequency Table **Mid-Cycle Assessment:** Sections of GCSE Papers **Assessment Week:** Year 11 March Mock Exams	**Topic:** **Unit 8:** Revise: Ratio, Proportion and Rates of Change **Overview:** Unit 9 • Ratio Problems • Worded percentage problems • Rates of Change (Gradients & Areas) • Inverse & Direct Proportion **Mid-Cycle Assessment:** Section of GCSE Paper **Assessment Week:** GCSE Summatice Exams