

	Term 1A	Term 1B	Term 2A	Term 2B	Term 3A	Term 3B
Year 7	Algebraic Thinking <ul style="list-style-type: none"> - Sequences - Understanding and Using Algebraic Notation - Equality and Equivalence 	Place Value and Proportion <ul style="list-style-type: none"> - Place value and understanding decimals - Fractions, decimals and percentages <p><i>Assessment Point 1</i></p>	Applications of Number <ul style="list-style-type: none"> - Problem solving with addition and subtraction - Problem solving with multiplication and division - Fractions and percentages of amounts 	Directed Number and Fractional Thinking <ul style="list-style-type: none"> - Operations and equations with negative numbers - Adding and subtracting fractions 	Lines and Angles <ul style="list-style-type: none"> - Constructing, measuring, and using geometric notation - Developing geometric reasoning <p><i>Assessment Point 2</i></p>	Reasoning with Number <ul style="list-style-type: none"> - Developing number sense - Sets and probability - Prime number and proof
Year 8	Proportional Reasoning <ul style="list-style-type: none"> - Ratio and scale - Multiplicative change - Multiplication and division of fractions 	Representations <ul style="list-style-type: none"> - Working in the Cartesian plane - Representing data - Tables and probability <p><i>Assessment Point 1</i></p>	Algebraic Techniques <ul style="list-style-type: none"> - Brackets, Equations, and inequalities - Sequences - Indices 	Developing Number <ul style="list-style-type: none"> - Fractions and percentages - Standard index form - Developing number sense 	Developing Geometry <ul style="list-style-type: none"> - Angles in parallel lines and polygons - Area of circles and trapezia - Line symmetry and reflection <p><i>Assessment Point 2</i></p>	Reasoning with Data <ul style="list-style-type: none"> - The data handling cycle - Measures of Location
Year 9	Number Problems <ul style="list-style-type: none"> - HCF and LCM - Rounding and Estimating - Indices - Standard form Algebraic Manipulation <ul style="list-style-type: none"> - Simplifying Expressions - Expanding and Factorising Quadratics - Forming expressions - Rearranging formulae 	Percentages <ul style="list-style-type: none"> - Recurring Decimals - Compound Interest - Percentage Profit - Reverse Percentage Problems - Repeated Percentage Change Handling data <ul style="list-style-type: none"> - Representing Data - Box Plots and Quartiles - Averages - Frequency tables 	Working with Ratio <ul style="list-style-type: none"> - Sharing in a ratio - Combining ratios - Changing ratios - Ratio of a ratio - Algebraic Problems with Ratio <p><i>Assessment Point 1</i></p>	Equations and Inequalities <ul style="list-style-type: none"> - Linear Inequalities - Simultaneous Equations - Forming equations - Solving quadratic equations by factorising Perimeter and Area <ul style="list-style-type: none"> - Area and perimeter of compound Shapes - Functional area problems - Area problems with algebra - Sectors 	Pythagoras' Theorem and Trigonometry <ul style="list-style-type: none"> - Solving problems with Pythagoras - Distance between 2 points - Trig ratios for right-angled triangle - Exact trig values - Bearings Probability <ul style="list-style-type: none"> - Experimental and theoretical probabilities - Samples space diagrams and two-way tables - Venn diagrams - Tree diagrams 	Transformations <ul style="list-style-type: none"> - Rotations - Reflections - Enlargements - Translations - Combined transformations Angles <ul style="list-style-type: none"> - Angle facts - Angles in parallel lines - Angles in a polygon - Interior and exterior angles - Proof problems <p><i>Synoptic Assessment Point</i></p>

<p>Year 11 Higher</p>	<p>Probability 2</p> <ul style="list-style-type: none"> - Independent events - Tree Diagrams - Conditional Probability - Problems involving probability and algebra <p>Perimeter, Area, Volume 2</p> <ul style="list-style-type: none"> - Volume and Surface Area of spheres, cones, and pyramids. - Compound shapes - Volume of a frustrum - Density and Rates of Flow <p>SA ASSESSMENT SEPTEMBER</p>	<p>Similarity</p> <ul style="list-style-type: none"> - Area, Length, Volume scale factors - Similar Shapes <p>Algebra 4</p> <ul style="list-style-type: none"> - Algebraic Fractions - Changing subject of a formula involving fractions - Algebraic Proof <p>Functions</p> <ul style="list-style-type: none"> - Understand function notation - Composite functions - Inverse functions 	<p>Trigonometry 2</p> <ul style="list-style-type: none"> - Use Pythagoras and right-angled trigonometry in 3 Dimensions. - Recognise graphs of Sine, Cosine, and Tangent. - Sine and Cosine rules - Area of a triangle <p>Circle Theorems</p> <ul style="list-style-type: none"> - Apply and use circle theorems. - Derive proof of circle problems. <p>SA ASSESSMENT FEBRUARY</p>	<p>Transformations of Graphs</p> <ul style="list-style-type: none"> - Translations of graphs - Reflections of graphs <p>Vectors</p> <ul style="list-style-type: none"> - Add and subtract column vectors - Multiply a vector by a scalar. - <p>Proof & Congruency</p> <ul style="list-style-type: none"> - Understand and use SSS, SAS, ASA, RHS conditions. - Use congruent criteria to prove geometric results 	<p>Loci and Constructions</p> <ul style="list-style-type: none"> - Scale drawings - Bearings - Locus of a point - Construct perpendicular bisector - Construct angle bisectors 	
<p>Year 11 Foundation</p>	<ul style="list-style-type: none"> - Diagnostic teaching - Revision - Exam technique and preparation <p>SA ASSESSMENT SEPTEMBER</p>	<ul style="list-style-type: none"> - Diagnostic teaching - Revision - Exam technique and preparation <p>Loci and Constructions</p> <ul style="list-style-type: none"> - Scale diagrams - Plans and elevations - Use compasses and protractors - Bearings - Locus of a point 	<ul style="list-style-type: none"> - Diagnostic teaching - Revision - Exam technique and preparation <p>SA ASSESSMENT FEBRUARY</p>	<ul style="list-style-type: none"> - Diagnostic teaching - Revision - Exam technique and preparation - <p>Vectors</p> <ul style="list-style-type: none"> - Represent vectors diagrammatically - Add vectors - Multiply by a scalar - Geometrical problems with vectors 	<ul style="list-style-type: none"> - Diagnostic teaching - Revision - Exam technique and preparation 	

In year 11 students complete 3 weekly GCSE exam papers to inform diagnostic teaching and revision

	Term 1A	Term 1B	Term 2A	Term 2B	Term 3A	Term 3B
Year 12	Indices and Graphs Quadratics, equations, and inequalities Algebraic Methods Co-ordinate Geometry	Differentiation Kinematics Forces 1	<i>Synoptic Assessment January</i> Trigonometry Sampling Methods and Large Data set Data presentation and interpretation	Vectors Integration Probability	Vectors in Mechanics 1 Moments 1 Exponentials and Logarithms	Correlation and Regression Algebraic Methods Trigonometry (Radians)
Year 13	Trigonometry (Reciprocal Trig Functions) Forces 2 Binomial Distribution and Hypothesis Testing	Functions Projectiles <i>Synoptic Assessment November</i> Series Numerical Methods	Trigonometry (Compound and Double Angle formulae) Integration Parametric Equations	<i>Synoptic Assessment February</i> Vectors in Mechanics 2 Moments 2 Normal Distribution	Proof Diagnostic teaching Revision Exam technique and preparation	
Year 12 Further Maths	Complex Numbers and Argand Diagrams Algorithms, Graphs and Networks Algorithms on Graphs	Matrices and Linear Transformations Momentum and Impulse Elastic collisions in 1 dimensions	<i>Synoptic Assessment January</i> Series Proof by Induction Linear Programming	Vectors Roots of Polynomials	Work, Energy, Power Volumes of Revolution Critical Path Analysis Route Inspection	<i>Synoptic Assessment June</i>
Year 13 Further Maths	Complex Numbers – De Moivre’s theorem Simplex Algorithm	Elastic collisions in 2 dimensions Series <i>Synoptic Assessment November</i> Hyperbolic Functions Polar Co-ordinates	Methods in Differential Equations Modelling with Differential Equations Methods in Calculus	<i>Synoptic Assessment February</i> Volumes of Revolution Elastic Strings and Springs Travelling Salesman Problem	Diagnostic teaching Revision Exam technique and preparation	

In year 12 and 13 students complete a unit assessment at the end of every topic, in addition to the calendared synoptic assessments.