	Term 1A	Term 1B	Term 2A	Term 2B	Term 3A	Term 3B
Year 7	**Algebraic Thinking** - Sequences - Understanding and Using Algebraic Notation - Equality and Equivalence	**Place Value and Proportion** - Place value and understanding decimals - Fractions, decimals and percentages *Assessment Point 1*	**Applications of Number** - Problem solving with addition and subtraction - Problem solving with multiplication and division - Fractions and percentages of amounts	**Directed Number and Fractional Thinking** - Operations and equations with negative numbers - Adding and subtracting fractions	**Lines and Angles** - Constructing , measuring, and using geometric notation - Developing geometric reasoning *Assessment Point 2*	**Reasoning with Number** - Developing number sense - Sets and probability - Prime number and proof
Year 8	**Proportional Reasoning** - Ratio and scale - Multiplicative change - Multiplication and division of fractions	**Representations** - Working in the Cartesian plane - Representing data - Tables and probability	**Algebraic Techniques** - Brackets, Equations, and inequalities - Sequences - Indices *Assessment Point 1*	**Developing Number** - Fractions and percentages - Standard index form - Developing number sense	**Developing Geometry** - Angles in parallel lines and polygons - Area of circles and trapezia - Line symmetry and reflection	**Reasoning with Data** - The data handling cycle - Measures of Location *Assessment Point 2*
Year 9	**Number** - HCF and LCM - Rounding and Estimating - Indices - Standard form **Algebra 1 (Expressions)** - Simplifying Expressions - Expanding and Factorising - Forming expressions - Rearranging formulae	**Fractions, decimals and percentages** - 4 operations with fractions - Percentage increase/decrease problems - Compound Interest - Recurring Decimals **Handling data** - Representing Data - Box Plots and Quartiles - Averages - Frequency tables **Algebra 2 (Equations and Inequalities)** - Linear Equations - Forming equations - Inequalities - Monic quadratic equations *Assessment Point 1*	**Sequences** - Linear Sequences - Quadratic sequences - Special sequences **Ratio and proportion** - Sharing in a ratio - Combining ratios - Changing ratios - Ratio of a ratio - Direct proportion - Exchange rates and unit conversions - Inverse proportion - Compound proportion	**Angles** - Angle facts - Angles in parallel lines - Angles in a polygon - Interior and exterior angles - Proof problems **Probability** - Experimental and theoretical probabilities - Samples space diagrams and two-way tables - Venn diagrams - Tree diagrams	**Perimeter and Area** - Area and perimeter of compound Shapes - Area and circumference of a circle **Coordinate geometry 1** - Drawing straight line graphs - Gradient and equation of a straight line - Parallel and perpendicular lines - Solve linear simultaneous equations algebraically and graphically.	**Volume** - Volume of cuboids, prisms and cylinders. - Functional problems - Density and pressure - Combined Density *Synoptic Assessment Point*

Year 10 Higher	**Pythagoras' Theorem and Trigonometry** - Solving problems with Pythagoras - Distance between 2 points - Trig ratios for right-angled triangle - Exact trig values - Bearings **Transformations** - Rotations - Reflections - Enlargements - Translations - Combined transformations	**Surds** - Understanding surds - Operations with surds - Simplifying surds - Rationalising Denominator **Algebra 3 (Quadratics)** - Quadratic graphs - Solving quadratic equations - Completing the Square - Quadratic Inequalities - Quadratic simultaneous equations	**Probability 2** - Independent events - Tree Diagrams - Conditional Probability - Problems involving probability and algebra **Handling Data 2** - Cumulative frequency diagram - Quartiles and box plots from a cumulative frequency diagram - Histograms - Sampling	**Perimeter, Area, Volume 2** - Volume and Surface Area of spheres, cones, and pyramids. - Compound shapes - Volume of a frustrum - Density and Rates of Flow **Similarity** - Area, Length, Volume scale factors - Similar Shapes *Synoptic Assessment Point*	**Co-ordinate Geometry 2** - Cubic, exponential, and reciprocal graphs. - Graph of a circle - Equation of a tangent to a circle - Draw a tangent to a curve - Estimate area under a graph - Iteration **Direct and Inverse Variation** - Direct and Inverse proportional graphs - Forming equations for direct and inverse proportion - Compound proportion problems	**Algebra 4** - Algebraic Fractions - Changing subject of a formula involving fractions - Algebraic Proof **Functions** - Understand function notation - Composite functions - Inverse functions *End of year Assessment*
Year 10 Foundation	**Pythagoras' Theorem and Trigonometry** - Solving problems with Pythagoras - Trig ratios for right-angled triangle - Exact trig values **Transformations** - Rotations - Reflections - Enlargements - Translations - Combined transformations	**Standard Form and Indices** - Convert to and from standard form - Ordering numbers - Multiply, divide, add and subtract numbers in standard form. **Algebra 3 (Quadratics)** - Plot and draw a quadratic graph - Identify roots and turning point - Expand a product of 2 brackets - Factorise and solve a quadratic equation	**Probability 2** - Finding probabilities from a table - Relative frequency - Independent events - Tree Diagrams **Handling Data 2** - Draw and interpret scatter graph - Frequency polygon - Mean and median from a frequency table	**Similarity and Congruency** - Determine scale factor of 2 similar shapes - Calculate missing sides of similar shapes - Understand congruency criteria for triangles *Synoptic Assessment Point*	**Co-ordinate Geometry 2** - Graphs of cubic functions - Graphs of reciprocal functions - Real life graphs in context - Simultaneous equations graphically **Vectors** - Add and subtract column vectors - Multiply a vector by a scalar.	**Loci and Constructions** - Scale diagrams - Plans and elevations - Use compasses and protractors - Bearings - Locus of a point *End of year Assessment*

Year 11 Higher	**Trigonometry 2** - Use Pythagoras and right-angled trigonometry in 3 Dimensions. - Recognise graphs of Sine, Cosine, and Tangent. - Sine and Cosine rules - Area of a triangle **Transformations of Graphs** - Translations of graphs - Reflections of graphs *SA ASSESSMENT SEPTEMBER*	**Circle Theorems** - Apply and use circle theorems. - Derive proof of circle problems. **Vectors** - Represent vectors diagrammatically - Add vectors - Multiply by a scalar - Geometrical problems with vectors **Upper and Lower Bounds** - Solve problems with upper and lower bounds	**Proof & Congruency** - Understand and use SSS, SAS, ASA, RHS conditions. - Use congruent criteria to prove geometric results **Loci and Constructions** - Scale drawings - Bearings - Locus of a point - Construct perpendicular bisector - Construct angle bisectors *SA ASSESSMENT FEBRUARY*	- Diagnostic teaching - Revision - Exam technique and preparation	- Diagnostic teaching - Revision - Exam technique and preparation	
Year 11 Foundation	- Diagnostic teaching - Revision - Exam technique and preparation *SA ASSESSMENT SEPTEMBER*	- Diagnostic teaching - Revision - Exam technique and preparation	- Diagnostic teaching - Revision - Exam technique and preparation *SA ASSESSMENT FEBRUARY*	- Diagnostic teaching - Revision - Exam technique and preparation	- Diagnostic teaching - Revision - Exam technique and preparation	

In year 7 and 8 students complete pre and post tests for every unit of work, in addition to the calendared assessment points.

In year 9 and 10 students complete a unit assessment at the end of every topic, in addition to the calendared assessment points.

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

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

Some students in year 7, 8 and 9 follow a separate support scheme of learning building on their learning from primary school.

	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	*Synoptic Assessment January* 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 *Synoptic Assessment November* Series Numerical Methods	Trigonometry (Compound and Double Angle formulae*)* Integration Parametric Equations	*Synoptic Assessment February* 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	*Synoptic Assessment January* Series Proof by Induction Linear Programming	Vectors Roots of Polynomials	Work, Energy, Power Volumes of Revolution Critical Path Analysis Route Inspection	*Synoptic Assessment June*
Year 13 Further Maths	Complex Numbers – De Moivre's theorem Simplex Algorithm	Elastic collisions in 2 dimensions Series *Synoptic Assessment November* Hyperbolic Functions Polar Co-ordinates	Methods in Differential Equations Modelling with Differential Equations Methods in Calculus	*Synoptic Assessment February* Volumes of Revolution Elastic Strings and Springs Travelling Salesman Problem	Diagnostic teaching Revision Exam technique and preparation	