

Mathematics: Key Stage 4 OVERVIEW

	Term 1	Term 2	Term 3
Year 9	Unit 1: Number Number properties and indices Standard form Surds Unit 4: Fractions, ratio and percentages Fractions	Unit 3: Interpreting and representing data• Statistical diagrams• Averages and range• Interpreting and analysing dataUnit 2: Algebra• Expanding and factorising	 Unit 5: Angles and trigonometry Angle properties of polygons Pythagoras Theorem Trigonometry Unit 7: Area and volume Area and perimeter of 2D shapes
	 Ratio and proportion Percentages Unit 8: Transformations and construction 	Equations and formula Sequences Unit 12: Similarity and congruence	Circles Volume, surface area of 3D shapes Unit 6: Graphs
Year 10	 Transformations Constructions and loci Bearings and scale drawings 	Congruence Similarity Geometric proof	 Linear graph Rates of change Quadratic, cubic, reciprocal graphs
	 Probability Probability Tree diagrams Set notation 	 Sampling and populations Cumulative frequency and box plots Histograms 	 Quadratic equations Quadratic equations Simultaneous equations
	 Unit 11: Multiplicative reasoning Growth and decay Compound measures Ratio and proportion 		
Year 11	Unit 15: Equations and graphs Graphical solutions Representing inequalities Graphs of cubics 	Unit 18: Vectors and proof • Vectors • Geometric proof	Preparation for examinations
	 Unit 13: Advanced trigonometry Graphs of trigonometric functions Sine and cosine rules Transforming graphs 	Unit 17: Advanced algebra • Algebraic fractions • Surds • Functions • Proof	
	 Unit 16: Circle theorems Properties of circles Angles in circles Applying circle theorems 	 Unit 19: Proportion and graphs Direct and inverse proportion Exponential functions Non linear functions Transformations of graphs 	