

Mathematics Year Eight	Curriculum Intent: The Year 8 curriculum will consolidate and build on the key themes studied at KS2 and during Year 7. Students will study all aspects of mathematics – Number, Algebra, Geometry and Data. Key concepts will be revisited through retrieval practice, and then developed at a level appropriate to the ability of each students. New learning will be carefully spaced and regular consolidation tasks will enable retention of key knowledge. Key skills will be developed with repeated practice and frequent problem solving activities requiring students to identify the skills needed to complete the task. Students will develop understanding of key concepts and will be given the opportunity to demonstrate this in a range of different contexts.																	
	Term 1 & 2						Term 3 & 4						Term 5 & 6					
Knowledge	Number 1: - Rounding to significant figures - Bounds of errors - Laws of indices - Standard form - Simplifying surds Algebra 1: - Developing algebraic skills - Working with terms and expressions - Expanding double brackets - Expanding triple brackets - Factorising quadratic expressions Geometry & Data 1: - Area and perimeter of compound shapes - Area and circumference of circles - Volume of prisms, pyramids & spheres - Surface area of prisms - Pythagoras						Number 2: - LCM and HCF using prime factors - Use of venn diagrams - Developing percentages skills - Simple and compound interest - Reverse percentages Algebra 2: - Developing skills with algebraic equations - Solving equations with fractions - Forming and solving equations - Rearranging formulae - Simultaneous equations Geometry & Data 2: - Probability scales and language - Probability of a single event - Listing outcomes - Expectation - Tree diagrams and venn diagrams						Number 3: - Recurring decimal conversions - Developing ratio skills - Exchange rate calculations - Proportion, including graphically - Direct proportion, including algebraically Algebra 3: - Straight lines in four quadrants - Plotting linear graphs - Gradient and y-intercept - Equation of a straight line - Plotting quadratic graphs Geometry & Data 3: - Developing angles skills - Bearings using angle facts - Angles in polygons, interior and exterior - Right-angled trigonometry - Similarity and congruence					
Understanding	Completion of problem solving activities and challenges to develop application of knowledge and skills						Completion of problem solving activities and challenges to develop application of knowledge and skills						Completion of problem solving activities and challenges to develop application of knowledge and skills					
Skills	Number Place Value & Four Operations	Number FDP & Ratio	Measurement & Units	Geometry Angles & Shapes	Statistics	Problem Solving & Investigations	Number Place Value & Four Operations	Number FDP & Ratio	Measurement & Units	Geometry Angles & Shapes	Statistics	Problem Solving & Investigations	Number Place Value & Four Operations	Number FDP & Ratio	Measurement & Units	Geometry Angles & Shapes	Statistics	Problem Solving & Investigations
Interleaving	Regular consolidation of all prior teaching Reviewing skills for future learning Use of Mathsbox 10 and 20 question starters						Regular consolidation of all prior teaching Reviewing skills for future learning Use of Mathsbox 10 and 20 question starters						Regular consolidation of all prior teaching Reviewing skills for future learning Use of Mathsbox 10 and 20 question starters					
Assessment	'Low Stakes' KPI task after each section of work Formal written assessment at end of Term 2						'Low Stakes' KPI task after each section of work Formal written assessment at end of Term 4						'Low Stakes' KPI task after each section of work End of Year Assessment during Term 6					