

Mathematics Year Nine	Curriculum Intent: The Year 9 curriculum will consolidate and build on the key themes studied during Year 7 and Year 8. 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 student. 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: <ul style="list-style-type: none"> Calculating with bounds Fractional & negative laws of indices Standard form calculations Calculating with surds Rationalising the denominator Algebra 1: <ul style="list-style-type: none"> Developing algebraic skills Difference of two squares Algebraic fractions Nth term Graphical inequalities Geometry & Data 1: <ul style="list-style-type: none"> Vector notation and calculations Translations Reflections Rotations Enlargement 					Number 2: <ul style="list-style-type: none"> Developing all work on percentages Growth and decay Compound measures Real life graphs SDT calculations Algebra 2: <ul style="list-style-type: none"> Developing skills with algebraic equations Solving quadratic equations Completing the square Developing skills with simultaneous equations Developing skills with rearranging formulae Geometry & Data 2: <ul style="list-style-type: none"> Developing skills with area and volume Developing skills with surface area Developing skills with trigonometry Sine and cosine rule Introduction to circle theorems 					Number 3: <ul style="list-style-type: none"> Developing recurring decimals skills Developing ratio skills Direct proportion from a table Direct proportion – algebraically Inverse proportion – algebraically Geometry & Data 3: <ul style="list-style-type: none"> Averages Sampling methods Collecting data Bar charts, pictograms and line graphs Pie charts Scatter graphs Cumulative frequency diagrams Box and whisker diagrams Histograms 							
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							