



Curriculum Intent

Subject: Mathematics

Year 8

	Topics	Why?	National Curriculum Links
Term 1-1	Number Calculation Measures, perimeter and area Expressions	<ul style="list-style-type: none"> - Students will recap basic arithmetic skills from last year, ensuring they have sharp recall of number work, enabling them to approach the remainder of the year with confidence. - Shape work and algebra are taught alongside each other as year 8 begin to make links in maths between topics, and combine techniques to solve problems across the curriculum. 	<ul style="list-style-type: none"> • HCF LCM • Prime factorisation • BIDMAS • Inverse operations • Perimeter and area
Term 1-2	Fractions Decimals and Percentages Angles and 2D Shapes Graphs	<ul style="list-style-type: none"> - Fluency with fractions decimals and percentages is important to further progress towards the middle of the key stage. Students will develop an understanding that answers to questions can be written in a number of ways, notably more difficult numerical problems as fractions. - Year 8 will build on the basic understanding of angles and graphs from year 8. - 	<ul style="list-style-type: none"> • Gradients and intercepts • Linear graphs for estimation • Angles on parallel lines
Term 2-1	Decimal Calculations Statistics Equations	<ul style="list-style-type: none"> - Students will further develop their written and mental numeracy by progressing to work with decimals, as well as whole number calculation. - Year 8 will develop their data analysis work from year 7 into displaying data in different forms. - 	<ul style="list-style-type: none"> • Form and solve algebraic equations • Equations graphically
Term 2-2	Powers and Roots Exam Recap	<ul style="list-style-type: none"> - Building on factors and multiple work from last year, students will learn to display numbers written as powers. They will then build this understanding into writing and calculating with standard form. Higher ability students will develop an understanding of Pythagoras and his famous theorem. 	<ul style="list-style-type: none"> • Standard form • Pythagoras' theorem
Term 3-1	Ratio Probability	<ul style="list-style-type: none"> - Again students will learn to combine learning between key mathematical contexts, and develop their understanding how ratio and probability can be used together to solve problems. - 	<ul style="list-style-type: none"> • Probability of events • Ratio Notation
Term 3-2	3D Shapes Further Calculations	<ul style="list-style-type: none"> - As students shape knowledge builds, they will integrate prior learning into the 3 dimensional world. 	<ul style="list-style-type: none"> • Properties of shape