

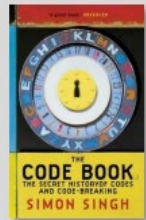
The English Martyrs Catholic School and Sixth Form College



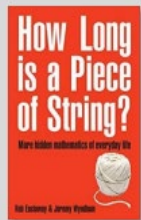
<u>Year 11 Maths Higher</u>	<u>Module 1</u>	<u>Module 2</u>	<u>Module 3</u>
<u>Topic Theme and Intent</u>	Within this first Module, Year 11 students will cover 3 main areas of the curriculum which are: Number, Algebra and Shape.	Tailored curriculum This may vary from class to class based on a RAG analysis of November mock.	Exam revision which may vary from class to class based on RAG analysis of March mock.
<u>Knowledge and Skills</u>	<p><u>Number:</u> Calculating with bounds</p> <p><u>Algebra:</u> Algebraic fractions, functions, inverse functions, composite functions, transformation of functions, trigonometric graphs, Iteration, sketching quadratics, graphical simultaneous equations, inequalities on graphs and complex rearranging the formula</p> <p><u>Shape:</u> Trigonometric values, complex vectors, circle geometry and geometric proof.</p>	Students will complete a tailored curriculum that addresses their mathematical weakness and misconceptions identified from their term 1 mock. At this stage some students may extend their knowledge within certain topics to access more challenging content.	Students fine tune their exam technique, further their understanding of mark schemes and fully prepare themselves for their GCSE exam.
<u>Literacy Links</u>	<p>Reading: Read and interpret trigonometric graphs.</p> <p>Writing: Write down upper and lower bounds.</p> <p>Oracy: Articulate reasoning with geometric proof</p>	<p>Reading: Picking out important information from applied and problem-solving questions.</p> <p>Writing: Model good answers.</p> <p>Oracy: Making sure students use the correct vocabulary when giving verbal answers.</p>	<p>Reading: Picking out important information from applied and problem-solving questions.</p> <p>Writing: Model good answers.</p> <p>Oracy: Making sure students use the correct vocabulary when giving verbal answers.</p>
<u>Essential Vocabulary</u>	Inverse, composite, changing the subject, geometric, iteration	Surds, bounds, direct & inverse proportion, Quadratic formula, algebraic fractions, trigonometric graphs, iteration, Sine, Cosine.	Quadratic simultaneous equations, transforming graphs, proof, completing the square, quadratic sequences, quadratic inequalities, velocity time graph, vectors,

Disciplinary Reading

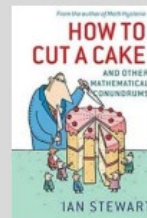
Reading for Pleasure



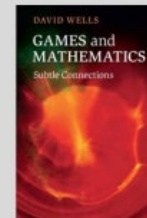
The Code Book by Simon Singh



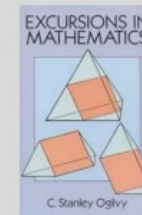
How Long Is a Piece of String by Rob



How to Cut a Cake by Ian Stewart



Game and Mathematics by David Wells



Excursions in Mathematics by C. Standley Ogilvy

The English Martyrs Catholic School and Sixth Form College