



Subject		Year	Term
Further Maths		12	3
Topic			
Volumes of Revolution, Recurrence Relations, Exam Preparation, Complex Numbers, Algorithms & Graph Theory			
Content (Intent)			
Prior Learning (Topic)		Proof, Vectors, Volumes of Revolution, Critical Path Analysis, Allocation Problems, Flows in Networks, Game Theory	
<ul style="list-style-type: none"> • Recurrence Relations • Revision And Exam Preparation • Further Calculus • Further Algebra & Functions • Algorithms & Graph Theory 			
Future Learning (Topic)		Complex Numbers, Polar Co-ordinates, Algorithms on Graphs, Series, Hyperbolic Functions, Linear Programming, Critical Path Analysis	
What Knowledge and Skills will be taught (Implementation)		How will your understanding be assessed & recorded (Impact)	
<ul style="list-style-type: none"> • Calculate volumes of revolution about both the x and y-axes • Modelling using recurrence relations & solving first order recurrence relations • Revision of all year 12 topics & use of practice and past exam papers. 		AS Further Mathematics Exams in Core & Decision Maths (8FM0/01 & 8FM01/2K)	
<ul style="list-style-type: none"> • Understand how De Moivre's Theorem can be applied in various contexts, such as deriving trigonometric identities. • Know how to find the n'th roots of a complex number, and their connection on an Argand Diagram. 		Formal Homework (Core Maths & Decision Maths) Ongoing self-assessment	
<ul style="list-style-type: none"> • Apply & understand the planarity algorithm for planar graphs 			
How can parents help at home?			
Check assessment results and work completed in formal homework books Encourage use of MyMaths (www.mymaths.co.uk) and MathsGenie (www.mathsgenie.co.uk) Regularly review previously taught topics			
Helpful further reading/discussion (including Reading and Vocabulary Lists)			
Reading Textbooks (ISBN) Core Pure Mathematics Book 1: 9781292183336 Decision Mathematics 1: 9781292183299 Decision Mathematics 2: 9781292183305 Website: https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics-2017.html#tab-AlevelFurtherMathematics		Vocabulary Lists Planarity Planar Recurrence	