

3 lessons				3 lessons				3 lessons						
2 weeks commencing:	Chapter	Topic	LO	Homework	Chapter	Topic	LO	Homework	Chapter	Topic	LO	Homework		
05 September 2021	FM3	Elastic Springs & Strings	1) Elastic Energy 2) Energy Problems 3) Practice	Ex 3C Ex 3D Mixed Exercise	CP2-1	Complex Numbers & De Moivre	1) Exponential form of complex numbers 2) De Moivre's theorem 3) De Moivre's theorem	Ex 1A Ex 1B Ex 1C	CP11	Integration (Maths SoW)	1) Integration - Reverse chain rule 2) Integration by substitution 3) Integration by parts	Ex 11 D Ex 11		
19 September 2021	FM5	Elastic Collisions in Two Dimensions	1) Particle hitting a wall (vector) 2) Hitting a wall/a slope 3) Find the line perpendicular to	Ex SA Q9,10 and EXTRA Ex SA Q11-8 Ex SA Q11-18	CP2-1	Complex Numbers & De Moivre	4) Trigonometric identities (sin <sup>2</sup> (sin and cos ) 5) Sums of series	Ex 1D Q1, 2, 6, 7 Ex 1D Q3, 4, 5 Ex 1E	CP11	Integration (Maths SoW)	4) Integration by partial fractions	Ex 2A		
03 October 2021	FM5	Elastic Collisions in Two Dimensions	4) Successive impacts with right 5) Successive impacts with wall 6) Oblique impact of two spheres	Ex SB Q1-5 Ex SB Q6-10 Ex SC Q9-11, Q1-3	CP2-1	Complex Numbers & De Moivre	7) nth roots of a complex number 8) Solving geometric problems	Ex 1F Ex 1G	CP2-2	Series	1) The method of differences 2) Higher derivatives	Ex 2B		
17 October 2021	FM5	Elastic Collisions in Two Dimensions	7) Oblique impact of two spheres	Ex SC Q4-8, Q15, 16	CP2-5	Polar Coordinates	1) Polar coordinates and equations	Ex SA	CP2-2	Series	3) Maclaurin series	Ex 2C		
<b>Half Term</b>														
31 October 2021			8) Oblique impact of two spheres	Ex SC Q4-8, Q15, 16	CP2-5	Polar Coordinates	2) Sketching curves	Ex 5B	FS7	Probability Generating Functions	3) Mean and variance of a distribution	Ex 7C		
Year 13 PPE 1				Year 13 PPE 1				Year 13 PPE 1						
14 November 2021	CP2-6	Hyperbolic Functions	1) Introduction to Hyperbolic functions 2) Inverse Hyperbolic functions 3) Identities and Equations	Ex 6A, 3 exam questions from FM Ex 6B, 3 exam questions Ex 6C, 3 exam questions	CP2-5	Polar Coordinates	3) Area enclosed by a polar curve 4) Tangents to polar curves	Ex 5C Ex 5D Q1-4	FS7	Probability Generating Functions	4) Sums of independent random variables	Ex 7D plus redrafting PPE		
28 November 2021	CP2-6	Hyperbolic Functions	4) Differentiating Hyperbolic functions 5) Maclaurin with Hyperbolic functions 6) Integrating Hyperbolic functions	Ex 6D 1-11, 3 exam questions Ex 6D 12-17, 3 exam questions Ex 6E 1-18, 3 exam questions	CP2-5	Polar Coordinates	5) Normals to polar curves	Ex 5D Q5-8	FS5	Central Limit Theorem	1) The Central limit theorem 2) Applying the CLT to other distributions	Ex SA DrF		
12 December 2021	CP2-6	Hyperbolic Functions	7) Problem solving integrals	Ex 6E 19-27, 3 exam questions Test on Chapter 5 FM & Chapter 6 CP2	CP2-7	Differential Equations	1a) First order differential equations 2a) Second-order homogeneous	Mixed exercise 5 Ex 7A Q1-7 Ex 7B Q1-3	FS1-7	Central Limit Theorem	3) More application of the CLT	Ex 5B		
<b>End Of Autumn Term</b>														
02 January 2022	CP2-4	Volumes of Revolution	1) Volumes revolved around x-axis 2) Volumes revolved around y-axis 3) Volumes of parametrically defined shapes	Ex 4A Ex 4B Ex 4C	CP2-7	Differential Equations	2b) Second-order homogeneous 3) Second-order non-homogeneous	Ex 7B Q4-7 Ex 7C	CP2-3	Methods in Calculus	1) Improper integrals 2) The mean value of a function	Ex 3A Ex 3B		
16 January 2022	CP2-4	Volumes of Revolution	4) Modelling with volumes of revolution	Ex 4D	CP2-8	Differential Equations in Context	4) Using boundary conditions	Ex 7D	CP2-3	Methods in Calculus	3) Differentiating inverse trigonometric functions	Ex 3C		
30 January 2022			Revision & Re-teaching Revision & Re-teaching	Targeted Practice Targeted Practice			1) Modelling with first-order differential equations 2) Simple harmonic motion 3) Damped and harmonic motion	Ex 8A Ex 8B Ex 8C			4) Integrating with inverse trigonometric functions 5) Integrating using partial fractions	Ex 3D Ex 3E		
Year 13 PPE 2				Year 13 PPE 2				Year 13 PPE 2						
PPE Feedback				PPE Feedback				PPE Feedback						
<b>Half Term</b>														
20 February 2022			Revision & Re-teaching Revision & Re-teaching Revision & Re-teaching	Targeted Practice Targeted Practice Targeted Practice	CP2-8	Differential Equations in Context	4) Coupled first-order simultaneous equations Problem Solving	Ex 8D Mixed exercise 8	FS8	Quality of tests	1) Type I and Type II errors 2) Finding Type I and Type II errors	Ex 8A Ex 8B		
06 March 2022			Revision & Re-teaching Revision & Re-teaching Revision & Re-teaching	Targeted Practice Targeted Practice Targeted Practice			Revision & Re-teaching Revision & Re-teaching Revision & Re-teaching	Targeted Practice Targeted Practice Targeted Practice	FS8	Quality of tests	4) The power function 5) Exam style questions	Ex 8D Ex 8E		
20 March 2022			Revision & Re-teaching Revision & Re-teaching Revision & Re-teaching	Targeted Practice Targeted Practice Targeted Practice			Revision & Re-teaching Revision & Re-teaching Revision & Re-teaching	Targeted Practice Targeted Practice Targeted Practice			CP1 and CP2 Exam practice			
<b>End Of Spring Term</b>														
17 April 2022			Year 13 PPE 1				Year 13 PPE 1				Year 13 PPE 1			
01 May 2022			PPE Feedback				PPE Feedback				PPE Feedback			
15 May 2022			Public Exams				Public Exams				Public Exams			
<b>Half Term</b>														
05 June 2022			Public Exams				Public Exams				Public Exams			
19 June 2022			Public Exams				Public Exams				Public Exams			
<b>End Of Summer Term</b>														