	3 Lessons				3 lessons				3 lessons			
2 weeks commencing:	**Chapter**	**Topic**	**LO**	**Homework**	**Chapter**	**Topic**	**LO**	**Homework**	**Chapter**	**Topic**	**LO**	**Homework**
05 September 2021	CP1-6	Matrices	1) Operations with matrices	Ex 6A	CP1-1	Complex Numbers	1) Imaginary and complex num	Ex 1A, 1B	CP1-3	Series	1) Sum of natural numbers	Ex 3A
			2) Matrix multiplication	EX 6B			numbers	Ex 1C			2) Sum of squares and cubes	Ex 3B
			3) Determinants of matrices	Ex 6C			3) Complex conjugation	Ex 1D			3) More complex cases (additio	Mixed Ex3
19 September 2021	CP1-6	Matrices	4) Inverses of 2x2 matrices	Ex 6D	CP1-1	Complex Numbers	4) Roots of quadratic equations	Ex 1E	CP1-8	Proof By Induction	1) Proof by imathematical induc	Ex 8A
			5) Inverses of 3x3 matrices	Ex 6E			equations	Ex 1F			2) Proving divisibility results	Ex 8B
			6) Solving systems of equations	Ex 6F	CP1-2	Argand Diagrams	Problem Solving	Mixed Exercise 1			3) Proving statements involving	Ex 8C
03 October 2021	CP1-6	Matrices	Exam Questions	Exam Questions	CP1-2	Argand Diagrams	1) Argand diagrams	Ex 2A	CP1-3	Series & Proof By Induction	CP1-3&8	Additional questions
	FM1	Impulse & Momentum	1) What is an impulse and	Ex1A			2) Modulus and argument	Ex 2B	CP1-8		Review of the assessment	Redrafting the assessm
			2) Conservation of momentum	Ex1B			3a) Modulus-argument form of	Ex 2C	FS1	Discrete Random Variables	1) E(X) of DRV	Ex 1A
17 October 2021	FM1	Impulse & Momentum	3) Momentum as a vector	Ex1C	CP1-2	Argand Diagrams	3b) Multiplication and division c	Ex 2D	FS1	Discrete Random Variables	2) Var(X) of DRV	Ex 1B
	Half Term											
31 October 2021	FM1	Impulse & Momentum	4) Practice	Mixed Exercise	CP1-2	Argand Diagrams	4a) Loci in the Argand diagram	Ex 2E Q1 to Q9	FS1	Discrete Random Variables	3) E(X) and Var(X) of a function	Ex 1C
	A5	Friction (Maths SoW)	1) Resolving Forces	Ex 5A			4b) Loci in the Argand diagram	Ex 2F			4) Problem solving involving DR	Ex 1D + Additional ques
			2) Inclined planes	Ex 5B			Problem Solving	Mixed exercise 2	FS2	Poisson Distribution	1) Introduction to Poisson distri	Ex 2A
14 November 2021	A5	Friction (Maths SoW)	3) Friction	Ex 5C	CP1-4	Roots of Polynomials	1) Roots of a quadratic equation	4A	FS2	Poisson Distribution	2) Using a calculator	Ex 2B
	FM2	Work, Energy & Power	1) Work Done	Ex2A Q10-17			2) Roots of a cubic equation	4B		Poisson Distribution	3) Modelling with the Poisson d	Ex 2C
			2) KE and GPE	Ex2B Q4-11			3) Roots of a quartic equation	Ex 4C		Poisson Distribution	4) Adding Poisson distributions	Ex 2D
28 November 2021	FM2	Work, Energy & Power	3) Conservation of mechanical e	Ex2C Q1-10	CP1-4	Roots of Polynomials	4) Expressions relating to the ro	Ex 4D	FS2	Poisson Distribution	5) Mean and variance of a Poiss	Ex 2E
			4) Conservation of mechanical e	Ex2C Q14-19			5) Linear transformations of roo	Ex 4E		Poisson Distribution	6) Mean and variance of the bin	Ex 2F
			5) Power	Ex2D Q9-17			Revision of chapter 4 (test)	Mixed exercise 4		Poisson Distribution	7) Using the Poisson distributio	Ex 2G
12 December 2021	FM2	Work, Energy & Power	6) Practice	Mixed Exercise	CP1-7	Transformations & Matrices	1) Linear transformation in two	Ex 7A	FS1&2		Revision - Mixed Ex1 &2	Odd numbered Qs in M
			7) Practice	Exam Qs			2) Reflections and rotations	Ex 7B			Assessment	Even numbered Qs in M
	End Of Autumn Term											
02 January 2022	FM4	Elastic Collisions	1) Coefficient of restitution	Ex4A Q1-5	CP1-7	Transformations & Matrices	3) Enlargements and stretches	Ex 7C	FS4	Hypothesis Testing	1) Testing for the mean of a Poi	Ex 4A
			2) Two particles colliding- inequ	Ex4A Q6-10			4) Successive transformations	Ex 7D			2) Finding critical regions for a P	Ex 4B
			3) Collision with smooth plane	Ex4B			5) Linear transformations in thr	Ex 7E			3) Practice with exam style que	Mixed Ex 4
16 January 2022	FM4	Elastic Collisions	4) Loss of kinetic energy 1	Ex4C Q1-7	CP1-7	Transformations & Matrices	6) The inverse of a linear transfo	Ex 7F		PPE Revision	Series and Proof by induction	Additional materials
			5) Loss of kinetic energy 2	Ex4C Q8-14			Revision of chapter 7	Mixed ecercise 7		PPE Revision	DRV and Poisson distribution	Additional materials
			Revision	Exam Questions			Revision of chapter 7	Exam Questions		PPE Revision	Poisson distribution and hypoth	Additional materials
30 January 2022	**Year 12 PPE 1**				**Year 12 PPE 1**				**Year 12 PPE 1**			
	FM4	Elastic Collisions	6) Three particles 1	Ex4D Q1-5			PPE Feedback				PPE Feedback	
	Half Term											
20 February 2022	FM4	Elastic Collisions	7) Three particles 2	Ex4D Q6-9	CP1-9	Vectors & 3D Space	1) Equation of a line in three dir	Ex 9A	FS6	Chi-squared Tests	1) Goodness of fit	Ex 6A
			8) Practice	Mixed Exercise			2) Equation of a plane in three d	Ex 9B			2) Degrees of freedom and the	Ex 6B
			9) Practice	Exam Questions			3) Scalar product	Ex 9C			3) Testing a hypothesis	Ex 6C
06 March 2022	CP1-5	Roots of Polynomials	1) Roots of quadratic equations	Ex 4A	CP1-9	Vectors & 3D Space	4) Calculating angles between li	Ex 9D	FS6	Chi-squared Tests	4) Testing the goodness of fit w	Ex 6D
			2) Roots of Cubic equations	Ex 4B			5) Points of intersection	Ex 9E			5) Degrees of freedom and the	Ex 6E
			3) Roots of Quartic equations	Ex 4C			6) Finding perpendiculars (1)	Ex 9F			6) Review of chi-squared tests	Mixed Ex6
20 March 2022	CP1-5	Roots of Polynomials	4) Expressions for the roots of p	Ex 4D	CP1-9	Vectors & 3D Space	7) Finding perpendiculars (2)	Ex 9F	FS3	Geometric and negative binomial distributions	1) The geometric distribution	Ex 3A
			5) Linear transformations of roo	Ex 4E			Revision of chapter 9	Mixed exercise 9			2) Mean and variance of a geom	Ex 3B
			Revision & Re-teaching	Targeted Practice			Problem Solving	Exam Questions			3) The negative binomial distrib	Ex 3C
			Revision & Re-teaching	Targeted Practice								
	End Of Spring Term											
17 April 2022			Revision & Re-teaching	Targeted Practice	CP1-1		Revision	Review exercise 1	FS3	Geometric and negative binomial distributions	4) Mean and variance of the ne	Ex 3D
			Revision & Re-teaching	Targeted Practice	CP1-2		Revision				5) Challenging word-based prob	Mixed Ex 3 and Integrat
			Revision & Re-teaching	Targeted Practice			Revision		FS4	Hypothesis Testing	3) Hypothesis testing for the pa	Ex 4C
01 May 2022			Revision & Re-teaching	Targeted Practice	CP1-4		Revision	Review exercise 1	FS4	Hypothesis Testing	4) Finding Critical regions for a g	Ex 4C
			Revision & Re-teaching	Targeted Practice	CP1-7		Revision	Review exercise 2	FS6	Chi-squared Tests	6) Applying goodness-of-fit test	Ex 6F
			Revision & Re-teaching	Targeted Practice			Revision		FS3,4,6		Review	
15 May 2022			Revision & Re-teaching	Targeted Practice	CP1-9		Revision	Review exercise 2	FS3,4,6		Assessment	
			Revision & Re-teaching	Targeted Practice			Solve past papers	Past papers			Review of the assessment	Redrafting the answers
			Revision & Re-teaching	Targeted Practice							Revision & Re-teaching	Targeted Practice
	Half Term											
05 June 2022			Revision & Re-teaching	Targeted Practice			Revision & Re-teaching	Targeted Practice			Revision & Re-teaching	Targeted Practice
			Revision & Re-teaching	Targeted Practice			Revision & Re-teaching	Targeted Practice			Revision & Re-teaching	Targeted Practice
19 June 2022	**Year 12 End OF Year Exams**				**Year 12 End OF Year Exams**				**Year 12 End OF Year Exams**			
03 July 2022	C9 & C11	Calculus Methods	1) Chain rule	Ex 9C	C9 & C11	Calculus Methods	1) Quotient rule	Ex 9E	C9 & C11	Calculus Methods	1) Reverse chain rule	Ex 11D
			2) Differentiating sin x, cos x, ln	Ex 9A & 9B			2) Integrating f(ax + b)	Ex 11B			2) Integration by substitution	Ex 11E
			3) Product rule	Ex 9D			3) Integrating using the Trigono	Ex 11C			3) Integration by parts	Ex 11F
	Year 12 Work Experience				**Year 12 Work Experiene**				**Year 12 Work Experience**			
	End Of Summer Term											