

W/c	Week	Teacher 1 (Pure and Mechanics) HAG			Teacher 2 (Pure and Statistics) IPR		
09/09	2	Pure Ch5 (Radians)	Pure Ch5 (Radians)	Pure Ch5 (Radians)	Pure Ch9 (Differentiation)	Pure Ch9 (Differentiation)	
16/09	3	Pure Ch5 (Radians)	Pure Ch5 (Radians) DIRT		Pure Ch9 (Differentiation)	Pure Ch9 (Differentiation)	Pure Ch9 (Differentiation)
23/09	4	Pure Ch 6 (Trig Functions)	Pure Ch 6 (Trig Functions)	Pure Ch 6 (Trig Functions)	Pure Ch9 (Differentiation)	Pure Ch9 (Differentiation)	
30/09	5	Pure Ch 6 (Trig Functions) DIRT	Catch Up		Pure Ch9 (Differentiation)	Pure Ch9 (Differentiation)	Pure Ch9 (Differentiation) DIRT
07/10	6	Pure Ch7 (Trig and Modelling)	Pure Ch7 (Trig and Modelling)	Pure Ch7 (Trig an Modelling)	Catch Up	Assessment Pure Chap 9	
14/10	7	Pure Ch7 (Trig and Modelling)	Pure Ch7 (Trig and Modelling)		Pure Ch11 (Integration)	Pure Ch11 (Integration)	Pure Ch11 (Integration)
21/10	8	Pure Ch7 (Trig and Modelling)	Pure Ch7 (Trig and Modelling) DIRT	Catch Up	Pure Ch11 (Integration)	Pure Ch11 (Integration)	
Half Term							
04/11	9	Assessment Pure Chap 5,6,7	Mech Ch 6 (Resolving Forces)		Pure Ch11 (Integration)	Pure Ch11 (Integration)	Pure Ch11 (Integration)
11/11	10	Mech Ch 6 (Resolving Forces)	Mech Ch 6 (Resolving Forces)	Mech Ch 6 (Resolving Forces)	Pure Ch11 (Integration)	Pure Ch11 (Integration)	
18/11	11	Mech Ch 6 (Resolving Forces)	Catch Up		Pure Ch11 (Integration)	Pure Ch11 (Integration)	Pure Ch11 (Integration)
25/11	12	Y12 Vectors Revision	Y12 Vectors Revision	Pure Ch12 (Vectors)	Pure Ch11 (Integration) DIRT	Catch Up	
02/12	13	Pure Ch12 (Vectors)	Pure Ch12 (Vectors)		Assessment Pure Chap 11	Pure Ch8 (Parametric Equations)	Pure Ch8 (Parametric Equations)
09/12	14	Pure Ch12 (Vectors) DIRT	Pure Ch 3 (Sequences and Series)	Pure Ch 3 (Sequences and Series)	Pure Ch8 (Parametric Equations)	Pure Ch8 (Parametric Equations)	
16/12	15	Pure Ch 3 (Sequences and Series)	Pure Ch 3 (Sequences and Series)		Pure Ch8 (Parametric Equations)	Pure Ch8 (Differentiating Parametric Equations)	Pure Ch8 (Integrating Parametric Equations) DIRT
Christmas Holiday							
06/01	16	Pure Ch 3 (Sequences and Series)	Pure Ch 3 (Sequences and Series)	Pure Ch 3 (Sequences and Series)	Stats Ch 1 (Regression and Correlation)	Stats Ch 1 (Regression and Correlation)	
13/01	17	Pure Ch 3 (Sequences and Series)	Pure Ch 3 (Sequences and Series) DIRT		Stats Ch 1 (Regression and Correlation)	Stats Ch 1 (Regression and Correlation)	Catch Up
20/01	18	Catch Up	Assessment Pure Chap 3,8,12	Mech Ch7 (Applications of forces)	Stats Ch3 (Normal Distribution)	Stats Ch3 (Normal Distribution)	
27/01	19	Mech Ch7 (Applications of forces)	Mech Ch7 (Applications of forces)		Stats Ch3 (Normal Distribution)	Stats Ch3 (Normal Distribution)	Stats Ch3 (Normal Distribution)
03/02	20	Mech Ch7	Mech Ch7	Mech Ch7	Stats Ch3	Stats Ch3	

		(Applications of forces)	(Applications of forces)	(Applications of forces)	(Normal Distribution)	(Normal Distribution)	
10/02	21	Mech Ch 8 (Further Mechanics)	Mech Ch 8 (Further Mechanics)		Stats Ch3 (Normal Distribution)	Stats Ch3 (Normal Distribution)	Catch Up
Half Term							
24/02	22	Mech Ch 8 (Further Mechanics)	Mech Ch 8 (Further Mechanics)	Mech Ch 8 (Further Mechanics)	Assessment Stats Chap 1,2	Pure Ch 2 (Functions and Graphs)	
03/03	23	Catch Up	Assessment Mech Chap 7,8		Pure Ch 2 (Functions and Graphs)	Pure Ch 2 (Functions and Graphs)	Pure Ch 2 (Functions and Graphs)
10/03	24	Pure Ch 10 (Numerical Methods)	Pure Ch 10 (Numerical Methods)	Pure Ch 10 (Numerical Methods)	Pure Ch 2 (Functions and Graphs)	Pure Ch 2 (Functions and Graphs)	
17/03	25	Pure Ch 10 (Numerical Methods) DIRT	Catch Up		Pure Ch 2 (Functions and Graphs) DIRT	Catch Up	Assessment Pure Chap 2,10
24/03	26	Revision	Revision	Revision	Revision	Revision	
31/03	27	Revision	Revision		Revision	Revision	Revision
Easter							
21/04	28	Revision	Revision	Revision	Revision	Revision	
28/04	29	Revision	Revision		Revision	Revision	Revision
05/05	30	Revision	Revision	Revision	Revision	Revision	
12/05	31	Revision	Revision		Revision	Revision	
19/05	32	Revision	Revision	Revision	Revision	Revision	
Half Term							
02/06	33	Revision	Revision		Revision	Revision	Revision
Pure Mathematics 1 Exam: Wednesday 4 th June							
09/06	34	Revision	Revision	Revision	Revision	Revision	
Pure Mathematics 2 Exam: Thursday 12 th June							
16/06	35	Revision	Revision		Revision	Revision	Revision
Stats and Mechanics Exam: Thursday 19 th June							
23/06	36						
30/06	37						
07/07	38						
14/07	39						
21/07	40						

Pure Maths

Year 1/AS

Chapter 1 – Algebraic expressions (not expanding and factorising)

	Topic	Lessons suggested
1.1	Index laws	1 lesson
1.4	Negative and fractional indices	
1.5	Surds	1 lesson
1.6	Rationalise	1 lesson

Total 3 lessons

Chapter 2 – Quadratics (+ expanding and factorising from ch1)

	Topic	Lessons suggested
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1.2	Expand brackets	2 lessons
1.3	Factorise	
2.1	Solving quadratics (factorising and formula)	
2.2	Completing the square	
2.3	Functions	1 lesson
2.4	Quadratic graphs	
2.5	Discriminant	1 lesson
2.6	Modelling	1 lesson

Total 5 lessons

Chapter 3 – Equations and inequalities

	Topic	Lessons suggested
3.1	Linear Simultaneous equations	1 lesson
3.2	Quadratic Simultaneous equations	1 lesson
3.3	Simultaneous equations with graphs (including the discriminant)	1 lesson
3.4	Linear inequalities	1 lesson
3.5	Quadratic inequalities	1 lesson
3.6	Inequality graphs	1 lesson
3.7	Regions	

Total 6 lessons

Chapter 4 – Graphs and transformations

	Topic	Lessons suggested
4.1	Cubic graphs	1 lesson
4.2	Quartic graphs	1 lesson
4.3	Reciprocal graphs	
4.4	Points of intersection	1 lesson
4.5	Translating graphs	2 lessons
4.6	Stretching graphs	
4.7	Transforming graphs	

Total 5 lessons

Chapter 5 – Straight line graphs

	Topic	Lessons suggested
5.1	$y = mx + c$	1 lesson

5.2	Equations of straight lines	
5.3	Parallel and perpendicular	1 lesson
5.4	Length and area	1 lesson
5.5	Modelling with lines	1 lesson

Total 4 lessons

Chapter 6 – Circles

	Topic	Lessons suggested
6.1	Midpoints	1 lesson
6.2	Equation of a circle	1 lesson
6.3	Intersections of straight lines and circles	1 lesson
6.4	Tangents and chords	1 lessons
6.5	Circles and triangles	1 lesson

Total 5 lessons

Chapter 7 – Algebraic methods

	Topic	Lessons suggested
7.1	Algebraic fractions	1 lesson
7.2	Divide polynomials	2 lesson
7.3	Factor theorem	1 lesson
7.4	Mathematical proof	1 lesson
7.5	Methods of proof	1 lesson

Total 6 lessons

Chapter 8 – Binomial Expansions

	Topic	Lessons suggested
8.1	Pascal's triangle	1 lesson
8.2	Factorial notation	1 lesson
8.3	Binomial expansion	1 lesson
8.4	Solving binomial problems	1 lessons
8.5	Binomial estimation	1 lesson

Total 5 lessons

Chapter 9 – Trigonometric ratios

	Topic	Lessons suggested
9.1	Cosine rule	2 lessons

9.2	Sine rule	
9.3	Area of a triangle	
9.4	Solve triangle problems	1 lesson
9.5	Graphs	1 lesson
9.6	Transforming trigonometric graphs	

Total 4 lessons

Chapter 10 – Trigonometric identities and equations

	Topic	Lessons suggested
10.1	Angles in 4 quadrants	1 lesson
10.2	Exact values in trigonometric ratios	
10.3	Trigonometric identities	1 lesson
10.4	Simple trigonometric equations	1 lesson
10.5	Harder trigonometric equations	1 lesson
10.6	Equations and identities	1 lesson
	Revision	1 lesson

Total 6 lessons

Chapter 11 – Vectors

	Topic	Lessons suggested
11.1	Vectors	1 lesson
11.2	Representing vectors	
11.3	Magnitude and direction	1 lesson
11.4	Position vectors	1 lesson
11.5	Solving geometrical problems	1 lesson
11.6	Modelling	1 lesson

Total 5 lessons

Chapter 12 – Differentiation

	Topic	Lessons suggested
12.1	Gradients of curves	1 lesson

12.2	Finding the derivatives	1 lesson
12.3	Differentiating x^n	1 lesson
12.4	Differentiating quadratics	1 lesson
12.5	Differentiating functions with 2 or more terms	
12.8	Second order differentials	1 lesson
12.6	Gradients, tangents and normals	1 lesson
12.7	Increasing and decreasing functions	1 lesson
12.9	Stationary points	1 lesson
12.10	Sketching gradient functions	1 lesson
12.11	Modelling with differentiation	1 lessons

Total 10 lessons

Chapter 13 – Integration

	Topic	Lessons suggested
13.1	Integrating x^n	1 lesson
13.2	Indefinite integration	1 lesson
13.3	Finding functions	1 lesson
13.4	Definite integration	1 lesson
13.5	Areas under curves	1 lesson
13.6	Areas under x- axis	1 lesson
13.7	Areas between curves and lines	2 lessons

Total 8 lessons

Chapter 14 – Exponentials and logarithms

	Topic	Lessons suggested
14.1	Exponential function	1 lesson
14.2	$y = e^x$	
14.3	Exponential modelling	1 lesson
14.4	Logarithms	
14.5	Laws of logarithms	1 lesson
14.6	Solving equations using logarithms	1 lesson
14.7	Working with natural logarithms	1 lesson
14.8	Logarithms and non-linear data	1 lessons
	Chapter assessment	1 lesson

Total 7 lessons

There are chapter assessments for all chapters. Some of these will be completed after-school in period 6:

Baseline assessment

Pure ch 1-4 (algebra, quadratics, inequalities, graphs and transformations)

Pure ch 5/6 (coordinate geometry)

Pure ch 12 (differentiation)

Pure ch 14 (exponentials and logs)

In addition, there are extra chapter assessments which should be completed either in class in test conditions (time permitting) or as a homework

Pure ch 7 and 8 (polynomials and binomial)

Pure ch 9/10 (trig identities and equations)

Pure ch 11 (vectors)

Pure ch 13 (integration)