

Dates	Topics	Subtopics -Textbook References (* means it is in the Year 2 textbook)
9 th Sept – 13 th Sept Surds, Indices & Quadratics	Algebraic Expressions	1.1 Index Laws 1.2 Expanding Brackets 1.3 Factorising 1.4 Negative and Fractional Indices 1.5 Surds 1.6 Rationalising Denominators
	Quadratics	2.1 Solving Quadratic Equations 2.2 Completing the Square 2.3 Functions 2.4 Quadratic Graphs
16 th Sept – 20 th Sept Discriminant, Simultaneous Equations & Inequalities	Quadratics	2.5 The Discriminant 2.6 Modelling with Quadratics
	Equations & Inequalities	3.1 Linear Simultaneous Equations 3.2 Quadratic Simultaneous Equations 3.3 Simultaneous Equations on Graphs 3.4 Linear Inequalities 3.5 Quadratic Inequalities 3.6 Inequalities on Graphs 3.7 Regions
23 rd Sept – 27 th Sept Straight Lines	Straight Lines	5.1 $y = mx + c$ 5.2 Equations of Straight Lines 5.3 Parallel and Perpendicular Lines 5.4 Length and Area 5.5 Modelling with Straight Lines
30 th Sept – 4 th Oct Circles	Circles	6.1 Midpoints and Perpendicular Bisectors 6.2 Equation of a Circle 6.3 Intersections of Straight Lines and Circles 6.4 Use Tangents and Chord Properties 6.5 Circles and Triangles
7 th Oct – 16 th Oct Proof	Proof	7.4 Mathematical Proof 7.5 Methods of Proof *1.1 Proof by Contradiction
17 th Oct – 27 th Oct	OCTOBER HALF TERM	

28 th Oct – 1 st Nov Constant Acceleration	Constant Acceleration	9.1 Displacement-Time Graphs 9.2 Velocity-Time Graphs 9.3 Constant Acceleration Formulae 1 9.4 Constant Acceleration Formulae 2 9.5 Vertical Motion Under Gravity
4 th Nov – 8 th Nov Factor Theorem	Factor Theorem	7.1 Algebraic Fractions 7.2 Dividing Polynomials 7.3 The Factor Theorem
11 th Nov – 15 th Nov Partial Fractions	Partial Fractions	*1.2 Algebraic Fractions *1.3 Partial Fractions *1.4 Repeated Factors *1.5 Algebraic Division
18 th Nov – 22 nd Nov Graphs	Graphs	4.1 Cubic Graphs 4.2 Quartic Graphs 4.3 Reciprocal Graphs 4.4 Points of Intersection
25 th Nov – 29 th Nov Exponentials & Logs – Part 1	ASSESSMENT 1	
	Exponentials & Logs	14.4 Logarithms 14.5 Laws of Logarithms 14.6 Solving Equations using Logarithms
2 nd Dec – 6 th Dec Exponentials & Logs – Part 2	FEEDBACK	
	Exponentials & Logs	14.1 Exponential Functions 14.2 $y = e^x$
9 th Dec – 13 th Dec Exps & Logs – Part 2	Exponentials & Logs	14.7 Working with Natural Logarithms 14.8 Logarithms and Non-Linear Data
16 th Dec – 19 th Dec Functions – Part 1	Transformations	4.5 Translating Graphs 4.6 Stretching Graphs 4.7 Transforming Functions
	Functions	*2.2 Functions and Mappings *2.1 Modulus Function
20 th Dec – 6 th Jan	CHRISTMAS	

7 th Jan – 10 th Jan Functions – Part 2	Functions	*2.3 Composite Functions *2.4 Inverse Functions *2.5 $y = f(x) $ and $y = f(x)$ *2.6 Combining Transformations *2.7 Solving Modulus Problems
13 th Jan – 17 th Jan Trigonometry – Part 1	Trigonometry	9.5 Graphs of Sine, Cosine and Tangent 9.6 Transforming Trigonometric Graphs 9.1 The Cosine Rule 9.2 The Sine Rule 9.3 Areas of Triangles 9.4 Solving Triangle Problems
20 th Jan – 24 th Jan Trigonometry – Part 2	Trigonometry	10.1 Angles in All Four Quadrants 10.2 Exact Values of Trigonometric Ratios *5.1 Radian Measure *5.2 Arc Length *5.3 Areas of Sectors and Segments *5.5 Small Angle Approximations
27 th Jan – 31 st Jan Data Collection BLOCK WEEK	Data Collection	1.1 Population and Samples 1.2 Sampling 1.3 Non-Random Sampling 1.4 Types of Data 1.5 The Large Data Set
3 rd Feb – 7 th Feb Trigonometry – Part 3	Trigonometry	10.3 Trigonometric Identities 10.4 Simple Trigonometric Equations 10.5 Harder Trigonometric Equations 10.6 Equations and Identities *5.4 Solving Trigonometric Equations
10 th Feb – 14 th Feb Trigonometry – Part 4	Trigonometry	*6.1 Secant, Cosecant and Cotangent *6.2 Graphs of $\sec x$, $\operatorname{cosec} x$ and $\cot x$ *6.3 Using $\sec x$, $\operatorname{cosec} x$ and $\cot x$ *6.4 Trigonometric Identities *6.5 Inverse Trigonometric Identities
15 th Feb – 23 rd Feb	FEBRUARY HALF TERM	

24 th Feb – 28 th Feb	ASSESSMENT 2	
Probability	Probability	5.1 Calculating Probabilities 5.2 Venn Diagrams 5.3 Mutually Exclusive & Independent Events 5.4 Tree Diagrams
	Conditional Probability	*2.1 Set Notation
2 nd Mar – 6 th Mar	FEEDBACK	
Probability	Conditional Probability	*2.2 Conditional Probability *2.3 Conditional Probabilities in Venn Diagrams *2.4 Probability Formulae *2.5 Tree Diagrams
	Binomial Expansion	8.1 Pascal's Triangle 8.2 Factorial Notation 8.3 The Binomial Expansion 8.4 Solving Binomial Problems 8.5 Binomial Estimation
9 th Mar – 13 th Mar	Binomial Expansion	*4.1 Expanding $(1 + x)^n$ *4.2 Expanding $(a + bx)^n$ *4.3 Using Partial Fractions
16 th Mar – 20 th Mar	Statistical Distributions	6.1 Probability Distributions 6.2 The Binomial Distribution 6.3 Cumulative Probabilities
23 rd Mar – 31 st Mar	Hypothesis Testing	7.1 Hypothesis Testing 7.2 Finding Critical Values 7.3 One-Tailed Tests 7.4 Two-Tailed Tests
1 st April – 3 rd April	Modelling in Mechanics	8.1 Constructing a Model 8.2 Modelling Assumptions 8.3 Quantities and Units 8.4 Working with Vectors
4 th April – 19 th April	EASTER	

20 th April – 24 th April Forces – Part 1	Forces	10.1 Force Diagrams 10.3 Forces and Acceleration *5.1 Resolving Forces *5.2 Inclined Planes *5.3 Friction *7.1 Static Particles *7.3 Friction and Static Particles *7.5 Dynamics and Inclined Planes
27 th April – 1 st May Forces – Part 2	Forces	10.5 Connected Particles 10.6 Pulleys
4 th May – 7 th May Differentiation – Part 1	Differentiation	12.1 Gradients of Curves 12.2 Finding the Derivative 12.3 Differentiating x^n 12.4 Differentiating Quadratics 12.5 Differentiating Two or More Terms 12.6 Gradients, Tangents & Normals
11 th May – 15 th May Differentiation – Part 2	Differentiation	12.7 Increasing & Decreasing Functions 12.8 Second Order Derivatives 12.9 Stationary Points 12.10 Sketching Gradient Functions 12.11 Modelling with Differentiation
18 th May – 22 nd May Integration – Part 1	Integration	13.1 Integrating x^n 13.2 Indefinite Integrals 13.3 Finding Functions 13.4 Definite Integrals 13.5 Areas Under Curves 13.6 Areas Under the x -axis 13.7 Areas Between Curves and Lines
23 rd May – 31 st May	MAY HALF TERM	
1 st June – 19 th June	REVISION	
22 nd June – 26 th June	MOCK WEEK	
29 th June – 3 rd July	Work Experience Week	
6 th July – 10 th July	FEEDBACK	