

Scheme of Learning – Long Term Planning

Subject: Mathematics A Level

Key stage: 5

Year	Autumn Term*	Spring Term*	Summer Term*
12	<p><u>Autumn 1</u></p> <p>Algebra and Statistics:</p> <ul style="list-style-type: none"> ● Algebraic Expressions ● Quadratics ● Equations and Inequalities <p>End of Topic Assessment</p> <p>Calculus and Mechanics:</p> <ul style="list-style-type: none"> ● Straight Line Graphs ● Vectors ● Trigonometric Ratios <p>End of Topic Assessment</p>	<p><u>Spring 1</u></p> <p>Algebra and Statistics:</p> <ul style="list-style-type: none"> ● Statistical Distributions ● Exponentials and Logarithms ● Data Collection ● Measures of Location and Spread <p>End of Topic Assessment</p> <p>Calculus and Mechanics:</p> <ul style="list-style-type: none"> ● Trigonometric Identities and Equations ● Integration ● Modelling in Mechanics <p>End of Topic Assessment</p>	<p><u>Summer 1</u></p> <p>Algebra and Statistics:</p> <ul style="list-style-type: none"> ● Correlation ● Hypothesis Testing ● Review of all Statistics ● Revision and Improvement <p>Calculus and Mechanics:</p> <ul style="list-style-type: none"> ● Forces and Motion ● Review of all Mechanics ● Revision and Improvement
	<p><u>Autumn 2</u></p> <p>Algebra and Statistics:</p> <ul style="list-style-type: none"> ● Graphs and Transformations ● Algebraic Methods ● Binomial Expansion ● Statistics: Binomial Distribution <p>End of Topic Assessment</p> <p>Calculus and Mechanics:</p> <ul style="list-style-type: none"> ● Trigonometric Ratios ● Differentiation <p>End of Topic Assessment</p>	<p><u>Spring 2</u></p> <p>Algebra and Statistics:</p> <ul style="list-style-type: none"> ● Circles ● Representations of Data ● Probability ● Correlation <p>Early Mock without topics not yet covered</p> <p>Calculus and Mechanics:</p> <ul style="list-style-type: none"> ● Modelling in Mechanics ● Constant Accelerations ● Variable Acceleration <p>Early Mock without topics not yet covered</p>	<p><u>Summer 2</u></p> <p>Internal Summer Examinations</p> <p>Pure Maths Y13 content:</p> <ul style="list-style-type: none"> ● Radians ● Differentiation ● Trigonometric Identities and Equations.

13	<u>Autumn 1</u> Pure and Statistics: Differentiation Assessment <ul style="list-style-type: none"> ● Further Differentiation ● Proof and Algebraic Methods Improvement Assessment in Differentiation <ul style="list-style-type: none"> ● Integration Pure and Mechanics: <ul style="list-style-type: none"> ● Sequences and Series ● Trigonometry and Modelling 	<u>Spring 1</u> Pure and Statistics: <ul style="list-style-type: none"> ● Parametric Equations ● Implicit Differentiation ● Binomial Expansion ● Numerical Methods Pure and Mechanics: <ul style="list-style-type: none"> ● Inverse trigonometric Functions ● Vectors ● Forces and Friction 	<u>Summer 1</u> Pure and Statistics: <ul style="list-style-type: none"> ● Hypothesis Testing ● Review of Statistics Pure and Mechanics: <ul style="list-style-type: none"> ● Straight Line Graphs ● Vectors ● Trigonometric Ratios FULL Applied Mock Examination
	<u>Autumn 2</u> Pure and Statistics: <ul style="list-style-type: none"> ● Integration ● Rates of Change ● Differential Equations Pure and Mechanics: <ul style="list-style-type: none"> ● Projectiles. ● Functions and Graphs Mock Examination	<u>Spring 2</u> FULL Pure Mock Examination Pure and Statistics: <ul style="list-style-type: none"> ● Normal Distribution ● Conditional Probability ● Regression, correlation Pure and Mechanics: <ul style="list-style-type: none"> ● Applications of Forces ● Moments ● Further Kinematics 	<u>Summer 2</u> External Examination