



CURRICULUM MAP- Pure Mathematics

Term	Advanced Year 12	Term	Advanced Year 13
Autumn 1 Literacy / numeracy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Worksheets provided by the exam board (edexcel) Teacher designed work Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> Algebra and functions GCE Assessment objectives: <ul style="list-style-type: none"> Laws of indices for all rational exponents. Use and manipulation of surds. Algebra Quadratic functions and their graphs. The discriminant of a quadratic function. Completing the square. Solution of quadratic equations. Solution of simultaneous equations. Analytical solution by substitution. Solution of linear and quadratic inequalities Enrichment/life and work skills: Geometric parabola Assessments <ul style="list-style-type: none"> Unit Test from Edexcel Teacher self- assessment Past paper chosen questions relating to content area 	Autumn 1 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Worksheets provided by the exam board (edexcel) Teacher designed work Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> Algebra and functions Coordinate geometry in the (x, y) plane Further algebra GCSE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> Unit Test from Edexcel Teacher self- assessment Past paper chosen questions relating to content area
Autumn 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Worksheets provided by the exam board (edexcel) Teacher designed work Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> Coordinate geometry in the (x, y) plane Further algebra GCE Assessment objectives: <ul style="list-style-type: none"> Algebraic manipulation of polynomials, including expanding brackets and collecting like terms, and factorisation. Graphs of functions; sketching curves defined by simple equations. Geometrical interpretation of algebraic solution of equations. Use of intersection points of graphs of functions to solve equations. Knowledge of the effect of simple transformations on the graph of $y = f(x)$ as represented by $y = af(x)$, $y = f(x) + a$, $y = f(x+a)$, $y = f(ax)$ Equation of a straight line in forms $y = mx + c$, $y - y_1 = m(x - x_1)$ and ... Conditions for two straight lines to be parallel or perpendicular to each other. Enrichment/life and work skills Parabola Proof sorter – quadratic equation Assessments <ul style="list-style-type: none"> Unit Test from Edexcel Teacher self- assessment Past paper chosen questions relating to content area 	Autumn 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Worksheets provided by the exam board (edexcel) Teacher designed work Revisiting, revising, remembering opportunities SIMS Data drop: 1st Mock examination grades.	Unit of work <ul style="list-style-type: none"> Trigonometry Vectors (2D) Differentiation Integration Exponentials and logarithms GCE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> 1st Mock examination

‘skills, knowledge and concepts: literacy, life skills and enrichment’



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Spring 1 Literacy / numeracy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Worksheets provided by the exam board (edexcel) Teacher designed work Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Trigonometry • Vectors (2D) GCE Assessment objectives: <ul style="list-style-type: none"> • The sine and cosine rules; Area of a triangle = $\frac{1}{2}ab\sin C$ • Radian measure, including use for arc length and area of sector. • Sine, cosine and tangent functions. • Their graphs, symmetries and periodicity. • Knowledge and use of $\tan x = \frac{\sin x}{\cos x}$ and $\sin^2\theta + \cos^2\theta = 1$. • Solution of simple trigonometric equations in a given interval. Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	Spring 1 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Worksheets provided by the exam board (edexcel) Teacher designed work Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work GCE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area
Spring 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Worksheets provided by the exam board (edexcel) Teacher designed work Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Differentiation • Integration GCE Assessment objectives: <ul style="list-style-type: none"> • The derivative of $f(x)$ as the gradient of the tangent to the graph of $y = f(x)$ at a point; the gradient of the tangent as a limit; interpretation as a rate of change. Second order derivatives. • Differentiation of x^n and related sums and differences. • Applications of differentiation to gradients, tangents and normals • Indefinite integration as the reverse of differentiation. • Integration of x^n. Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	Spring 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Worksheets provided by the exam board (edexcel) Teacher designed work Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Trigonometry • Parametric equations • Differentiation • Numerical methods • Integration (part 1) GCE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area

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Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	GCE Assessment objectives Revision Formal examination Enrichment/life and work skills Assessments <ul style="list-style-type: none"> 1st mock examination 	Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Revision Formal examination Enrichment/life and work skills Assessments <ul style="list-style-type: none"> End of year mock examination Final GCE examination

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CURRICULUM MAP -Statistic

Term	Advanced Year 12	Term	Advanced Year 13
Autumn 1 Literacy / numeracy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Statistical sampling • Data presentation and interpretation GCE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	Autumn 1 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Statistical sampling • Data presentation and interpretation GCE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area
Autumn 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Data presentation and interpretation GCE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	Autumn 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Probability • Statistical distributions • Statistical hypothesis testing GCE Assessment objectives Enrichment/life and work skills Assessments 1st Mock examination

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CURRICULUM MAP-Statistic

Term	Advanced Year 12	Term	Advanced Year 13
<p>Spring 1 Literacy / numeracy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework</p> <p>Revisiting, revising, remembering opportunities</p> <p>SIMS Data drop: End of term test grades</p>	<p>Unit of work</p> <ul style="list-style-type: none"> • Probability • Statistical distributions <p>GCSE Assessment objectives</p> <p>Enrichment/life and work skills</p> <ul style="list-style-type: none"> • Assessments Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	<p>Spring 1 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework</p> <p>Revisiting, revising, remembering opportunities</p> <p>SIMS Data drop: End of term test grades</p>	<p>Unit of work</p> <ul style="list-style-type: none"> • Regression and correlation • Probability <p>GCE Assessment objectives</p> <p>Enrichment/life and work skills</p> <p>Assessments</p> <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area
<p>Spring 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework</p> <p>Revisiting, revising, remembering opportunities</p> <p>SIMS Data drop: End of term test grades</p>	<p>Unit of work</p> <ul style="list-style-type: none"> • Statistical hypothesis testing <p>GCSE Assessment objectives</p> <p>Enrichment/life and work skills</p> <p>Assessments</p> <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	<p>Spring 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework</p> <p>Revisiting, revising, remembering opportunities</p> <p>SIMS Data drop: 2nd Mock examination</p>	<p>Unit of work</p> <ul style="list-style-type: none"> • The Normal distribution <p>GCE Assessment objectives</p> <p>Enrichment/life and work skills</p> <p>Assessments</p> <ul style="list-style-type: none"> • 2nd Mock examination

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Summer 1 Literacy / numeracy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Statistical hypothesis testing • Revision GCSE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	Summer 1 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: Mock examination	Revision GCE Assessment objectives Enrichment/life and work skills Assessments: <ul style="list-style-type: none"> • 3rd Mock examination
Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: 1st mock examination	Revision Formal examination Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • 1st mock examination 	Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term grades	Revision Formal examination GCE Assessment objectives Enrichment/life and work skills Assessments; <ul style="list-style-type: none"> • End of year mock examination

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Autumn 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Coordinate geometry in the (x, y) plane • Further algebra GCSE Assessment objectives: <ul style="list-style-type: none"> • Straight-line graphs, parallel/perpendicular, length and area problems • Circles – equation of a circle, geometric problems on a grid • Algebraic division, factor theorem and proof • The binomial expansion Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	Autumn 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Forces & Newton’s laws • Kinematics 2 (variable acceleration) GCE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area

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Spring 1 Literacy / numeracy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Trigonometry • Vectors (2D) GCE Assessment objectives: <ul style="list-style-type: none"> • Trigonometric ratios and graphs (Sine, Cosine & Tangent) • Graphs of their inverse functions • Trigonometric identities and equations • Definitions, magnitude/direction, addition and scalar multiplication • Position vectors, distance between two points, geometric problems Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	Spring 1 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Moments • Forces at any angle • Applications of kinematics GCE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area
Spring 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work <ul style="list-style-type: none"> • Differentiation GCE Assessment objectives: <ul style="list-style-type: none"> • Definition, differentiating polynomials, second derivatives • Gradients, tangents, normals, maxima and minima • First principles of derivatives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	Spring 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: 2nd Mock examination	Unit of work <ul style="list-style-type: none"> • Applications of forces • Further kinematics GCE Assessment objectives Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • 2nd Mock examination

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CURRICULUM MAP-Mechanics

Term	Advanced Year 12	Term	Advanced Year 13
Summer 1 Literacy / numeracy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Unit of work Integration GCE Assessment objectives: <ul style="list-style-type: none"> • Definition as opposite of differentiation, indefinite integrals of x^n • Definite integrals and areas under curves Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area 	Summer 1 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: 3 rd mock examination grades	Revision GCE Assessment objectives Enrichment/life and work skills Assessments: <ul style="list-style-type: none"> • 3rd mock examination
Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities SIMS Data drop: 1 st mock examination grades	Unit of work Exponentials and logarithms: GCE Assessment objectives: <ul style="list-style-type: none"> • Exponential functions and natural logarithms Enrichment/life and work skills Assessments <ul style="list-style-type: none"> • 1st mock examination 	Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework Revisiting, revising, remembering opportunities	Revision Formal examination GCE Assessment objectives Enrichment/life and work skills Assessments; <ul style="list-style-type: none"> • End of year mock examination • Final GCE examination

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