

CURRICULUM MAP- Pure Mathematics

Term	Advanced	Term	Advanced
	Year 12		Year 13
Autumn 1	Unit of work	Autumn 1	Unit of work
Literacy / numeracy foci	Algebra and functions	Literacy foci	Algebra and functions
Reading skills	GCE Assessment objectives:	Reading skills	• Coordinate geometry in the (x, y) plane
Terminology and vocabulary	Laws of indices for all rational exponents.	Terminology and vocabulary	Further algebra
Writing skills, Interpreting graphs	Use and manipulation of surds.Algebra	Writing skills, Interpreting graphs	GCSE Assessment objectives
Homework	• Quadratic functions and their graphs. The discriminant of a quadratic	Homework	
Worksheets provided by the exam board	function. Completing the square. Solution of quadratic equations.Solution of simultaneous equations. Analytical solution by substitution.	Worksheets provided by the exam board (edexcel)	
(edexcel) Teacher designed work	 Solution of simulations equations. Analytical solution by substitution. Solution of linear and quadratic inequalities 	Teacher designed work	
Revisiting, revising, remembering	Enrichment/life and work skills:	Revisiting, revising, remembering	Enrichment/life and work skills
opportunities	Geometric parabola	opportunities	
	Assessments		
	Unit Test from Edexcel		•
SIMS Data drop: End of term test grades	Teacher self- assessment	SIMS Data drop: End of term test grades	Assessments
	Past paper chosen questions relating to content area		Unit Test from Edexcel
Autumn 2	Unit of work		Teacher self- assessment
Literacy foci	• Coordinate geometry in the (x, y) plane		Past paper chosen questions relating to content area
Reading skills	Further algebra	Autumn 2	Unit of work
Terminology and vocabulary	GCE Assessment objectives:	Literacy foci	Trigonometry
Writing skills, Interpreting graphs	Algebraic manipulation of polynomials, including expanding brackets	Reading skills	Vectors (2D)
Homework	and collecting like terms, and factorisation.Graphs of functions; sketching curves defined by simple equations.	Terminology and vocabulary	Differentiation
Worksheets provided by the exam board	 Graphs of functions, sketching curves defined by simple equations. Geometrical interpretation of algebraic solution of equations. 	Writing skills, Interpreting graphs	Integration
(edexcel) Teacher designed work	• Use of intersection points of graphs of functions to solve equations.	Homework	Exponentials and logarithms
	• Knowledge of the effect of simple transformations on the graph of $y = f(x)$ as represented by $y = af(x)$, $y = f(x) + a$, $y = f(x+a)$, $y = f(ax)$	Worksheets provided by the exam board (edexcel)	GCE Assessment objectives
	• Equation of a straight line in forms $y = mx + c$, $y-y_1 = m(x-x_1)$ and	Teacher designed work	
	Conditions for two straight lines to be parallel or perpendicular to	Revisiting, revising, remembering	
	each other. Enrichment/life and work skills	opportunities	
Revisiting, revising, remembering	Parabella		Enrichment/life and work skills
opportunities	Proof sorter – quadratic equation		
	Assessments	SIMS Data drop: 1 st Mock examination grades.	Assessments
	Unit Test from Edexcel		1 st Mock examination
SIMS Data drop: End of term test grades	Teacher self- assessment		
	Past paper chosen questions relating to content area		

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Term	Advanced	Term	Advanced
	Year 12		Year 13
Spring 1 Literacy / numeracy foci	Unit of work Trigonometry 	Spring 1 Literacy foci	Unit of work GCE Assessment objectives
Reading skills Terminology and vocabulary	 Vectors (2D) GCE Assessment objectives: 	Reading skills Terminology and vocabulary	
Writing skills, Interpreting graphs Homework	 The sine and cosine rules; Area of a triangle = ½absinC Radian measure, including use for arc length and area of sector. Sine, cosine and tangent functions. 	Writing skills, Interpreting graphs Homework	
Worksheets provided by the exam board (edexcel) Teacher designed work	 Their graphs, symmetries and periodicity. Knowledge and use of tanx = sinx/cosx and sin²θ +cos²θ=1. Solution of simple trigonometric equations in a given interval. 	Worksheets provided by the exam board (edexcel) Teacher designed work	Enrichment/life and work skills
Revisiting, revising, remembering opportunities		Revisiting, revising, remembering opportunities	Assessments
SIMS Data drop: End of term test grades	Enrichment/life and work skills		Unit Test from EdexcelTeacher self- assessment
	Assessments Unit Test from Edexcel 	SIMS Data drop: End of term test grades	Past paper chosen questions relating to content area
	Teacher self- assessment		
	Past paper chosen questions relating to content area	Spring 2 Literacy foci	Unit of work Trigonometry
Spring 2 Literacy foci	Unit of workDifferentiation	Reading skills	Parametric equations
Reading skills	Integration	Terminology and vocabulary Writing skills, Interpreting graphs	DifferentiationNumerical methods
Terminology and vocabulary Writing skills, Interpreting graphs	 GCE Assessment objectives: The derivative of f(x) as the gradient of the tangent to the graph of 	Homework	Integration (part 1)
Homework	y = f (x) at a point; the gradient of the tangent as a limit; interpretation as a rate of change. Second order derivatives.	Worksheets provided by the exam board (edexcel) Teacher designed work	GCE Assessment objectives
Worksheets provided by the exam board (edexcel) Teacher designed work	 Differentiation of xⁿ and related sums and differences. Applications of differentiation to gradients, tangents and normals Indefinite integration as the reverse of differentiation. 	Revisiting, revising, remembering opportunities	
Revisiting, revising, remembering opportunities	 Integration of xⁿ. Enrichment/life and work skills 		Enrichment/life and work skills
		SIMS Data drop: End of term test grades	Assessments
	Assessments		 Unit Test from Edexcel Teacher self- assessment
SIMS Data drop: End of term test grades	 Unit Test from Edexcel Teacher self- assessment 		Past paper chosen questions relating to content area
	Past paper chosen questions relating to content area		
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Term	Advanced	Term	Advanced
	Year 12		Year 13
Summer 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	Unit of work Exponentials and logarithms GCE Assessment objectives . Enrichment/life and work skills	Summer 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	Unit of work Integration (part 2) Vectors (3D) GCE Assessment objectives Revision Enrichment/life and work skills Assessments
SIMS Data drop: End of term test grades		SIMS Data drop: mock examination grades	3 rd mock examination
Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	Revision	Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	Revision Formal examination Enrichment/life and work skills
Revisiting, revising, remembering opportunities	Assessments 1st mock examination 	Revisiting, revising, remembering opportunities	AssessmentsEnd of year mock examinationFinal GCE examination
SIMS Data drop: End of term test grades		SIMS Data drop: End of term test grades	

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CURRICULUM MAP-Statistic

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-		Year 12		Year 13
	Autumn 1	Unit of work	Autumn 1	Unit of work
		Statistical sampling		Statistical sampling
	Literacy / numeracy foci	 Data presentation and interpretation 	Literacy foci	Data presentation and interpretation
	Reading skills	GCE Assessment objectives	Reading skills	GCE Assessment objectives
	Terminology and vocabulary		Terminology and vocabulary	
	Writing skills, Interpreting graphs		Writing skills, Interpreting graphs	
	Homework		Homework	
				Enrichment/life and work skills
		Enrichment/life and work skills		
	Revisiting, revising, remembering	Assessments	Revisiting, revising, remembering	Assessments
	opportunities		opportunities	Unit Test from Edexcel
		Unit Test from Edexcel		Teacher self- assessment
		Teacher self- assessment		Past paper chosen questions relating to content area
	CIMC Data draw. End of torm tort grades	Past paper chosen questions relating to content area	SIMS Data drop: End of term test grades	Tast paper chosen questions relating to content area
	SIMS Data drop: End of term test grades		Silvis Data drop. End of term test grades	
	Autumn 2	Unit of work	Autumn 2	Unit of work
	Literacy foci	Data presentation and interpretation	Literacy foci	Probability
	Reading skills	GCE Assessment objectives	Reading skills	Statistical distributions
	Terminology and vocabulary		Terminology and vocabulary	Statistical hypothesis testing
			Writing skills, Interpreting graphs	
	Writing skills, Interpreting graphs			GCE Assessment objectives
	Homework		Homework	,
		Enrichment/life and work skills		
			Revisiting, revising, remembering	
	Revisiting, revising, remembering		opportunities	Enrichment/life and work skills
		Assessments		
	opportunities	Unit Test from Edexcel		
		Teacher self- assessment		Assessments
	SIMS Data drop: End of term test grades	Past paper chosen questions relating to content area	SIMS Data drop: End of term test grades	1 st Mock examination

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C. C	Term	Advanced	Term	Advanced
		Year 12		Year 13
	Spring 1	Unit of work	Spring 1	Unit of work
	Literacy / numeracy foci	Probability	Literacy foci	Regression and correlation
	Reading skills	Statistical distributions	Reading skills	Probability
	Terminology and vocabulary	GCSE Assessment objectives	Terminology and vocabulary	GCE Assessment objectives
	Writing skills, Interpreting graphs		Writing skills, Interpreting graphs	
	Homework		Homework	
				Enrichment /life and work skills
		Enrichment/life and work skills		Enrichment/life and work skills
		,		
	Revisiting, revising, remembering		Revisiting, revising, remembering	Accessments
	opportunities	Assessments Unit Test from Edexcel	opportunities	Assessments Unit Test from Edexcel
		Teacher self- assessment		Teacher self- assessment
		Past paper chosen questions relating to content area		 Past paper chosen questions relating to content
	SIMS Data drop: End of term test grades		SIMS Data drop: End of term test grades	area
	Sivis Data drop: End of term test grades			ucu
	Spring 2	Unit of work	Spring 2	Unit of work
	Literacy foci	Statistical hypothesis testing	Literacy foci	The Normal distribution
	Reading skills	GCSE Assessment objectives	Reading skills	GCE Assessment objectives
	Ferminology and vocabulary		Terminology and vocabulary	
	Writing skills, Interpreting graphs		Writing skills, Interpreting graphs	
	Homework		Homework	
		Enrichment/life and work skills		Enrichment/life and work skills
	Revisiting, revising, remembering	Association	Revisiting, revising, remembering	
	opportunities	Assessments Unit Test from Edexcel 	opportunities	Assessments
		Teacher self- assessment		2 nd Mock examination
		 Past paper chosen questions relating to content area 		
	SIMS Data drop: End of term test grades		SIMS Data drop: 2 nd Mock examination	

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CURRICULUM MAP-Statistic

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ALL LE	Term	Advanced	Term	Advanced
		Year 12		Year 13
	Summer 1	Unit of work	Summer 1	Revision
	Literacy / numeracy foci	Statistical hypothesis testing	Literacy foci	
	Reading skills	Revision	Reading skills	GCE Assessment objectives
	Terminology and vocabulary	GCSE Assessment objectives	Terminology and vocabulary	
	Writing skills, Interpreting graphs		Writing skills, Interpreting graphs	
	Homework		Homework	
				Enrichment/life and work skills
		Enrichment/life and work skills		
	Revisiting, revising, remembering		Revisiting, revising, remembering	
	opportunities	Association	opportunities	Assessments:
		Assessments Unit Test from Edexcel		3 rd Mock examination
		Teacher self- assessment		
	SIMS Data drop: End of term test grades	 Past paper chosen questions relating to content area 	SIMS Data drop: Mock examination	
	Summer 2	Revision		• •••
	Literacy foci	Formal examination	Summer 2	Revision Formal examination
	Reading skills		Literacy foci	
	Terminology and vocabulary		Reading skills Terminology and vocabulary	GCE Assessment objectives
	Writing skills, Interpreting graphs		Writing skills, Interpreting graphs	
	Homework		Homework	
		Enrichment/life and work skills	homework	
				Enrichment/life and work skills
		Assessments	Revisiting, revising, remembering	
	Revisiting, revising, remembering	1 st mock examination	opportunities	
	opportunities			Assessments;
				End of year mock examination
			SIMS Data drop: End of term grades	Lite of year mock examination
	SIMS Data drop: 1 st mock examination			

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Term	Advanced	Term	Advanced
	Year 12		Year 13
Autumn 1	Unit of work	Autumn 1	Unit of work
Literacy / numeracy foci	Algebra and functions	Literacy foci	Quantities and units in mechanics
Reading skills	GCSE Assessment objectives:	Reading skills	Kinematics 1 (constant acceleration)
Terminology and vocabulary	Algebraic expressions – basic algebraic manipulation, indices and surds	Terminology and vocabulary	GCSE Assessment objectives
Writing skills, Interpreting graphs	 Quadratic functions – factorising, solving, graphs and the discriminants Equations – quadratic/linear simultaneous 	Writing skills, Interpreting graphs	
Homework	Graphs – cubic, quartic and reciprocal	Homework	
	• Transformations – transforming graphs – f(x) notation		Fourtebox and //ife and wants shills
	Inequalities – linear and quadratic (including graphical solutions) Environment /life and work skills		Enrichment/life and work skills
	Enrichment/life and work skills		
Revisiting, revising, remembering		Revisiting, revising, remembering	
opportunities	Assessments	opportunities	Assessments
	Assessments Unit Test from Edexcel 		Unit Test from Edexcel
	Teacher self- assessment		Teacher self- assessment
SIMS Data drop: End of term test grades	 Past paper chosen questions relating to content area 	SIMS Data drop: End of term test grades	Past paper chosen questions relating to content are
Autumn 2	Unit of work	Autumn 2	Unit of work
Literacy foci	• Coordinate geometry in the (x, y) plane	Literacy foci	Forces & Newton's laws
Reading skills	Further algebra	Reading skills	Kinematics 2 (variable acceleration)
Terminology and vocabulary	GCSE Assessment objectives:	Terminology and vocabulary	GCE Assessment objectives
Writing skills, Interpreting graphs	Straight-line graphs, parallel/perpendicular, length and area problems	Writing skills, Interpreting graphs	
Homework	Circles – equation of a circle, geometric problems on a grid	Homework	
	 Algebraic division, factor theorem and proof The binomial expansion 		
	Enrichment/life and work skills		Enrichment/life and work skills
Revisiting, revising, remembering		Revisiting, revising, remembering	
opportunities	Assessments	opportunities	Assessments
	Unit Test from Edexcel	opportunities	Unit Test from Edexcel
	Teacher self- assessment		Teacher self- assessment
	 Past paper chosen questions relating to content area 	SIMS Data drop: End of term test grades	 Past paper chosen questions relating to content
SIMS Data drop: End of term test grades		2.1.d of term test Brades	area

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Term	Advanced Year 12	Term	Advanced Year 13
Spring 1 Literacy / numeracy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	 Unit of work Trigonometry Vectors (2D) GCE Assessment objectives: 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 	Spring 1 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	Unit of work Moments Forces at any angle Applications of kinematics GCE Assessment objectives
Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	problems Enrichment/life and work skills Assessments • Unit Test from Edexcel • Teacher self- assessment • Past paper chosen questions relating to content area	Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	 Enrichment/life and work skills Assessments Unit Test from Edexcel Teacher self- assessment Past paper chosen questions relating to content are
Spring 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	 Unit of work Differentiation GCE Assessment objectives: Definition, differentiating polynomials, second derivatives Gradients, tangents, normals, maxima and minima First principles of derivatives Enrichment/life and work skills 	Spring 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	 Unit of work Applications of forces Further kinematics GCE Assessment objectives Enrichment/life and work skills
Revisiting, revising, remembering opportunities	Assessments Unit Test from Edexcel Teacher self- assessment Past paper chosen questions relating to content area 	Revisiting, revising, remembering opportunities SIMS Data drop: 2 nd Mock examination	Assessments 2nd Mock examination

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CURRICULUM MAP-Mechanics

A LE	Term	Advanced Year 12	Term	Advanced Year 13
	Summer 1 Literacy / numeracy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	 Unit of work Integration GCE Assessment objectives: Definition as opposite of differentiation, indefinite integrals of xⁿ Definite integrals and areas under curves 	Summer 1 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	Revision GCE Assessment objectives
	Revisiting, revising, remembering opportunities SIMS Data drop: End of term test grades	Assessments Unit Test from Edexcel Teacher self- assessment Past paper chosen questions relating to content area 	Revisiting, revising, remembering opportunities SIMS Data drop: 3 rd mock examination grades	Enrichment/life and work skills Assessments: • 3 rd mock examination
	Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	Exponential functions and natural logarithms Enrichment/life and work skills	Summer 2 Literacy foci Reading skills Terminology and vocabulary Writing skills, Interpreting graphs Homework	Revision Formal examination GCE Assessment objectives
	Revisiting, revising, remembering opportunities	Assessments 1st mock examination 	Revisiting, revising, remembering opportunities	Enrichment/life and work skills Assessments;
	SIMS Data drop: 1 st mock examination grades			 End of year mock examination Final GCE examination