

Key Stage 3 Curriculum Plan: **Maths** 2023

Intent:

The Mathematics department encourages students to build fluency, the ability to reason mathematically and solve complex multi-stage problems. Mathematics is a discipline which has intrigued the most brilliant minds for centuries. Mathematical concepts are essential to every walk of life, central to many other areas of the curriculum and pivotal to further education and the world of work



Year 7	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<ul style="list-style-type: none"> • Being a Mathematician • Place Value • Angles • Factors & Multiples 		<ul style="list-style-type: none"> • Expressions 	<ul style="list-style-type: none"> • Ratio & Measure 	<ul style="list-style-type: none"> • Classifying Shapes, Area & Perimeter 	<ul style="list-style-type: none"> • Fractions • End of year Examination • Sequences
	Assessment: Place Value test – 1 hr	Assessment: Angles test – 1 hr Factors/Multiples – 1 hr	Assessment: Expressions – 1 hr	Assessment: Ratio & Measure – 1 hr	Assessment: Classifying Shapes, Area & Perimeter – 1 hr	Assessment: End of Year Test – 1 hr
Year 8	<ul style="list-style-type: none"> • Being a Mathematician • Sequences • Discrete Data Project 	<ul style="list-style-type: none"> • Proportion • 3D Shapes 	<ul style="list-style-type: none"> • More complex equations & expressions 	<ul style="list-style-type: none"> • Percentages 	<ul style="list-style-type: none"> • Construction Loci & Pythagoras 	<ul style="list-style-type: none"> • End of year examination • Graphs
	Assessment: Discrete Data test – 1 hr	Assessment: Proportion – 1 hr	Assessment: 3D Shape – 1 hr	Assessment: Equations – 1 hr Percentages – 1 hr	Assessment: Construction, Loci & Pythagoras – 1 hr	Assessment: End of Year Test – 1 hr
Year 9	<ul style="list-style-type: none"> • Being a Mathematician • Probability • Equations & Inequalities 	<ul style="list-style-type: none"> • Angle Reasoning, Pythagoras & Trigonometry 	<ul style="list-style-type: none"> • Compound Measures & Standard Form • Formulae 	<ul style="list-style-type: none"> • Graphs 	<ul style="list-style-type: none"> • Percentages • Transformations 	<ul style="list-style-type: none"> • End of year Examination • Grouped Data Project
	Assessment Probability – 1 hr	Assessment Equations & Inequalities – 1 hr	Assessment Compound Measures & Standard Form – 1 hr	Assessment Formulae & Graphs – 1 hr	Assessment Percentages – 1 hr	Assessment End of Year Examination Paper 1 – Non Calc (90 mins)

		Angle Reasoning, Pythagoras & Trigonometry – 1 hr					Paper 2 – Calculator (90 mins)
--	--	--	--	--	--	--	---

Key Stage 4 Curriculum Plan: **Maths** 2023

Intent:

The Mathematics department encourages students to build fluency, the ability to reason mathematically and solve complex multi-stage problems. Mathematics is a discipline which has intrigued the most brilliant minds for centuries. Mathematical concepts are essential to every walk of life, central to many other areas of the curriculum and pivotal to further education and the world of work



FOUNDATION						
Year 10	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<ul style="list-style-type: none"> • Expressions & sequences • Place Value / Rounding / Indices 	<ul style="list-style-type: none"> • Angles • Fractions, Decimals & Percentages 	<ul style="list-style-type: none"> • Probability • Equations, Formulae & Inequalities 	<ul style="list-style-type: none"> • Ratio & Proportion • Transformations & Vectors 	<ul style="list-style-type: none"> • Area & Volume 	<ul style="list-style-type: none"> • Data Project • Revision/Contingency • End of Year Exams
	Assessment: Expressions & Sequences – 1hr Place Value – 1hr	Assessment: Angles – 1 hr Fractions, Decimals, Percentages – 1 hr	Assessment: Probability – 1hr Equations, Formulae & Inequalities – 1 hr	Assessment: Ratio & Proportion–1 hr Tranformations – 1 hr	Assessment: Area & Volume – 1 hr	Assessment: End of Year Examination Paper 1 – Non Calc (90 mins) Paper 2 – Calculator (90 mins)
Year 11	<ul style="list-style-type: none"> • Graphs • Pythagoras and Trigonometry 	<ul style="list-style-type: none"> • Mock Exams • Simultaneous Equations 	<ul style="list-style-type: none"> • Complex Volumes • Quadratics 	<ul style="list-style-type: none"> • Revision/Contingency 	<ul style="list-style-type: none"> • Revision/Contingency 	
	Assessment: Graphs – 1 hr Pythagoras & Trigonometry – 1 hr	Assessment: Mock Exams – 3 x 90 minute papers	Assessment: Complex Volumes – 1 hr	Assessment: Mock Exams – 3 x 90 minute papers	Assessment:	Assessment:

HIGHER						
Year 10	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<ul style="list-style-type: none"> Expressions, Equations, Sequences Trigonometry 	<ul style="list-style-type: none"> Indices, Surds, Standard Form 	<ul style="list-style-type: none"> Probability Graphs 	<ul style="list-style-type: none"> Percentages & Proportion 	<ul style="list-style-type: none"> Complex area and volumes. Accuracy 	<ul style="list-style-type: none"> Transformations Revision End of year examination
	Assessment: Expressions & Sequences – 1 hr Trigonometry – 1 hr	Assessment: Indices, Surds & Standard Form – 1 hr	Assessment: Probability – 1hr Graphs – 1 hr	Assessment: Percentages & Proportion – 1 hr	Assessment: Complex area and volumes – 1 hr	Assessment: End of Year Examination Paper 1 – Non Calc (90 mins) Paper 2 – Calculator (90 mins)
Year 11	<ul style="list-style-type: none"> Quadratics Data Project 	<ul style="list-style-type: none"> Circle Theorems & Trigonometry Mock Exams 	<ul style="list-style-type: none"> Vectors Functions Algebraic Fractions & Proof 	<ul style="list-style-type: none"> Revision/Contingency 	<ul style="list-style-type: none"> Revision/Contingency 	
	Assessment: Quadratics – 1 hr Data Project – 1 hr	Assessment: Mock Exams – 3 x 90 minute papers Circle Theorems & Trigonometry – 1 hr	Assessment: Vectors – 1 hr	Assessment: Mock Exams – 3 x 90 minute papers	Assessment:	Assessment:

Key Stage 5 Curriculum Plan: **Maths** 2023

Intent:

The Mathematics department encourages students to build fluency, the ability to reason mathematically and solve complex multi-stage problems. Mathematics is a discipline which has intrigued the most brilliant minds for centuries. Mathematical concepts are essential to every walk of life, central to many other areas of the curriculum and pivotal to further education and the world of work



Year 12	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<ul style="list-style-type: none"> Algebra & Functions Quadratic Functions Equations Inequalities Graphs Co-ordinate Geometry in the x-y plane (Graphs & Circles) 	<ul style="list-style-type: none"> Algebraic Division, Factor Theorem, Proof Trigonometry: Ratios, Graphs, Identities & Equations Kinematics: Graphs & SUVAT Binomial Expansion Exponentials & Logarithms 	<ul style="list-style-type: none"> Forces & Newton's Law Differentiation Data Collection Measures of Location & Spread Representations of Data Correlation 	<ul style="list-style-type: none"> Integration Probability Vectors Statistical Distributions Kinematics: Variable Acceleration Hypothesis Testing 	<ul style="list-style-type: none"> Revision/Examinations 	<ul style="list-style-type: none"> Proof Algebraic & Partial Fractions Functions & Modelling Sequences & Series Moments Binomial Theorem
	Assessment: Topic Test – 1 hr	Assessment: Topic Test – 1 hr	Assessment: Pure Mock Applied Mock	Assessment: Topic Test – 1 hr	Assessment: Pure Mock Applied Mock	Assessment:
Year 13	<ul style="list-style-type: none"> Trigonometry Parametric Equations Differentiation Forces at any Angle Probability 	<ul style="list-style-type: none"> Numerical Methods Kinematics: Projectiles Integration Application of Forces Probability Distributions 	<ul style="list-style-type: none"> Vectors in 3D Kinematics with Vectors Hypothesis Testing 	<ul style="list-style-type: none"> Revision/Examinations 	<ul style="list-style-type: none"> Revision/Examinations 	
	Assessment: Topic Test – 1 hr	Assessment: Topic Test – 1 hr	Assessment: Pure Mock Applied Mock	Assessment:	Assessment:	Assessment: