

Curriculum plan

Subject

Key Stage 3

	Year 7	Year 8	Year 9
Autumn 1	<u>Number and Algebra 1</u> Numbers and Sequences <u>SSM1</u> Angles and Lines <u>Handling Data</u> Probability	<u>Algebra 6</u> Sequences, Functions and Graphs <u>Number 5</u> Proportional Reasoning <u>Algebra 7</u> Solving Equations	KS4 – GCSE course starts <u>Statistics</u> Collecting data Statistical Measures Representing data Scatter graphs
Autumn 2	<u>Number 2</u> Fractions and Percentages <u>Algebra 2</u> Expressions and Formula <u>SSM2</u> Measures and Measurements	<u>SSM 5</u> Geometrical reasoning and Constructions <u>Handling Data 4</u> Handling Data	KS4 – GCSE course conts. <u>Statistics</u> Probability Practise Controlled assessment
Spring 1	<u>Algebra 3</u> Functions and Graphs <u>Number 3</u> Number Calculations <u>SSM 3</u> Transformations and Symmetry	<u>SSM 6</u> Perimeter, Area and Volume <u>Number 6</u> Number Calculations <u>Algebra 8</u> Graphs of Functions	KS4 – GCSE course starts Mathematics Ratio and proportion Percentages Types of Number Sequences
Spring 2	<u>Algebra 4</u> Equations and Formula <u>Handling Data 2</u> Handling Data	<u>Handling Data 5</u> Probability <u>SSM 7</u> Transformations and Congruence	KS4 – GCSE course conts Mathematics Fractions Decimals Symbols Co-ordinates <i>Surds</i>
Summer 1	<u>Number 4</u> Calculating with Numbers <u>Algebra 5</u> Equations with Graphs <u>SSM 4</u> Shapes and Angles	<u>Algebra 9</u> Equations, Functions and Formulae <u>SSM 8</u> Applying Geometrical Reasoning <u>Handling Data 6</u> Probability	KS4 – GCSE course conts Mathematics Graphs of Linear Functions Equations and Inequalities Indices Formula <i>Standard Form</i> <i>Quadratic equations and algebraic proof</i>
Summer 1	<u>Handling Data 3</u> Data Projects <u>Problem Solving 1</u> Solving Problems	<u>Handling Data 7</u> Probability <u>Problem Solving 2</u> Solving Problems	KS4 – GCSE course conts Mathematics Real- life Graphs Simultaneous equations Revision of number and algebra

Key Stage 4

	Year 10	Year 11
Autumn 1	<p>KS4 – GCSE course conts Mathematics</p> <p>Perimeter, Area and Volume</p> <p>Pythagoras</p> <p>Angles</p> <p>Transformations</p> <p><i>Circle Theorems</i></p>	<p>Pathways – depend on results from Year 10</p> <p>Either</p> <p>Resit of the GCSE Mathematics course – OCR J567 Foundation or the OCR J567 Higher – topics in green and then those in italics</p> <p>GCSE Statistics – Edexcel ST01</p> <p>Additional Mathematics - 6993</p> <p>Additional Mathematics</p> <p>Algebra I – Review</p> <p>Algebra II – techniques</p>
Autumn 2	<p>KS4 – GCSE course conts Mathematics</p> <p>Properties of Polygons</p> <p>Measures</p> <p>Formulae</p> <p>Working with symbols</p> <p><i>Trigonometry</i></p>	<p>Additional Mathematics</p> <p>Algebra III – Polynomials</p> <p>Algebra IV – Applications</p> <p>Co-ordinate Geometry I</p>
Spring 1	<p>KS4 – GCSE course conts Mathematics</p> <p>Co-ordinates and Graphs</p> <p>Equations</p> <p>Loci and Construction</p> <p>Quadratics</p> <p><i>Simultaneous equations</i></p> <p><i>3d shapes and co-ordinates</i></p> <p><i>Graphs including cubic, quadratic and exponential</i></p>	<p>Additional Mathematics</p> <p>Co-ordinate Geometry II – applications</p> <p>Trigonometry I</p> <p>Trigonometry II - applications</p>
Spring 2	<p>KS4 – GCSE course conts Mathematics</p> <p>Revision for external exam – GCSE J567</p> <p><i>Non right angled trigonometry</i></p> <p><i>Vectors</i></p>	<p>Additional Mathematics</p> <p>Calculus I – differentiation</p> <p>Calculus II – integrations</p> <p>Calculus III – applications to kinematics</p>
Summer 1	<p>KS4 – GCSE course conts Mathematics</p> <p>Revision for external exam – GCSE J567</p>	<p>Preparation for final examinations – all courses.</p>
Summer 2	<p>KS4 – GCSE course conts Statistics</p> <p>Controlled assessment</p>	

Key Stage 5

	Year 12	Year 13
Autumn 1	<u>Core 1</u> Surds and Indices Algebra Manipulation Co-ordinate Geometry Circle Geometry	<u>Core 3</u> Algebra and Functions Integration Modulus and Transformations Exponential Functions
Autumn 2	<u>Core 1</u> Simultaneous Equations Differentiation Inequalities Transformation of Graphs	<u>Core 3</u> Trigonometry Solids of Revolution Review of work covered at the end of Year 12 – differentiation and numerical methods.
Spring 1	<u>Core 2</u> Factor /Reminder Theorem Dividing Polynomials Binomial Expansion <u>Decision 1</u> Sorting Algorithms Packing Algorithms Graphs and Networks	<u>Core 4</u> Algebra Binomial Expansion Further Differentiation <u>Mechanics 1</u> Force as a vector Equilibrium of a particle Kinematics of motion in a straight line
Spring 2	<u>Core 2</u> Exponentials and Logs Sequences and series <u>Decision 1</u> Spanning Tree Problems Shortest Paths Shortest paths in network	<u>Core 4</u> Co-ordinate Geometry Vectors Integration <u>Mechanics 1</u> Newton's laws of motion Linear Momentum
Summer 1	<u>Core 2</u> Integration Trigonometry <u>Decision 1</u> Route Inspection Problems Travelling Salesman Problem Linear Programming Preparation for the summer examinations	<u>Core 4</u> Cont... Integration Differential Equations Preparation for the summer examinations
Summer 2	<u>Core 3</u> Differentiation Numerical Methods	