



**Subject: Mathematics Middle Ability (Core) Sets**

Year 7						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<ul style="list-style-type: none"> <li>Written Numerical Methods</li> <li>Directed Number</li> <li>Basic Algebra</li> <li>2-D Shapes</li> </ul>	<ul style="list-style-type: none"> <li>Properties of Number</li> <li>Angles</li> <li>Sequences</li> <li>Coordinates</li> </ul>	<ul style="list-style-type: none"> <li>Straight Line Graphs</li> <li>Calculator Skills</li> <li>Rounding</li> <li>Averages &amp; Range</li> </ul>	<ul style="list-style-type: none"> <li>Proportion and Ratio</li> <li>Probability</li> <li>Decimals</li> <li>Charts and Graphs</li> </ul>	<ul style="list-style-type: none"> <li>Constructions</li> <li>Percentages</li> <li>Solving Equations</li> <li>Fractions</li> </ul>	<ul style="list-style-type: none"> <li>FDP Equivalence</li> <li>Transformations</li> <li>Metric Units and Conversion Graphs</li> <li>3-D shapes</li> </ul>
Assessment	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Main Y7 exam</b> (calculator &amp; non-calculator parts)</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>

  

Year 8						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<ul style="list-style-type: none"> <li>Directed number</li> <li>Expressions and Substitution</li> <li>Properties of Number</li> <li>2-D Shapes</li> </ul>	<ul style="list-style-type: none"> <li>Sequences</li> <li>Rounding and Estimating</li> <li>Angles</li> <li>Straight Line Graphs</li> </ul>	<ul style="list-style-type: none"> <li>Area and Perimeter</li> <li>Using Tables and Charts</li> <li>Ratio and Proportion</li> </ul>	<ul style="list-style-type: none"> <li>Describing &amp; Comparing data</li> <li>Solving Equations</li> <li>Circles</li> <li>Probability</li> </ul>	<ul style="list-style-type: none"> <li>Fractions</li> <li>Constructions</li> <li>Bearings</li> <li>Percentages</li> <li>Transformations</li> </ul>	<ul style="list-style-type: none"> <li>Units of Measurement</li> <li>FDP Conversions</li> <li>3-D Shapes</li> <li>Volume</li> </ul>
Assessment	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Main Y8 exam</b> (calculator &amp; non-calculator parts).</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>



Year 9						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<ul style="list-style-type: none"> <li>Expressions</li> <li>Angles</li> <li>Sequences</li> <li>Pythagoras Theorem</li> <li>Index Number Laws</li> </ul>	<ul style="list-style-type: none"> <li>Representing Equations as Graphs</li> <li>Averages from Tables</li> <li>Estimation and Measurement Error</li> <li>Area</li> <li>Ratio &amp; Map Scales</li> </ul>	<ul style="list-style-type: none"> <li>Correlation and Scatter Graphs</li> <li>Equations</li> <li>Percentages</li> <li>Draw Loci</li> <li>Circles</li> </ul>	<ul style="list-style-type: none"> <li>Standard form</li> <li>Probability</li> <li>Fractions</li> </ul>	<ul style="list-style-type: none"> <li>Transformations</li> <li>Compound Measures</li> <li>Volume of a Prism</li> <li>Inequalities</li> <li>Interpreting Graphs</li> </ul>	<ul style="list-style-type: none"> <li>KS4 Transition, including review of number work and problem-solving tasks.</li> </ul>
Assessment	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Main Y9 exam</b> (calculator &amp; non-calculator parts)</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>



**Subject: Mathematics – Higher Ability Sets**

Year 7						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<ul style="list-style-type: none"> <li>Rules of algebra</li> <li>Negative numbers</li> <li>Sequences</li> <li>Angles</li> </ul>	<ul style="list-style-type: none"> <li>Coordinates</li> <li>Straight line graphs</li> <li>Calculator skills</li> <li>Rounding</li> <li>Averages including tables</li> <li>Perimeter &amp; area</li> </ul>	<ul style="list-style-type: none"> <li>Circles</li> <li>Charts &amp; graphs</li> <li>Algebra - Expand brackets &amp; solve equations</li> <li>Transformations</li> </ul>	<ul style="list-style-type: none"> <li>Fractions and decimals</li> <li>Probability</li> <li>Types of number</li> <li>Construction – triangle &amp; bisectors</li> </ul>	<ul style="list-style-type: none"> <li>FDP equivalence</li> <li>Percentages</li> <li>Ratio &amp; proportion</li> <li>Metric &amp; imperial units</li> </ul>	<ul style="list-style-type: none"> <li>2D &amp; 3D shapes</li> <li>Interpreting graphs including travel graphs</li> <li>Bearings</li> </ul>
Assessment	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Main Y7 exam</b> (calculator &amp; non-calculator parts).</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>



The King's Academy: Maths KS3 Curriculum Overview

Year 8						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<ul style="list-style-type: none"> <li>Sequences &amp; formulae</li> <li>Drawing graphs</li> <li>Negative numbers</li> <li>Properties of number</li> <li>Using algebra, including equations</li> </ul>	<ul style="list-style-type: none"> <li>Describe &amp; compare datasets</li> <li>Charts &amp; graphs</li> <li>Written calculations</li> <li>Estimation</li> <li>Area &amp; perimeter</li> </ul>	<ul style="list-style-type: none"> <li>Circles</li> <li>Mental calculations</li> <li>Using ratios</li> <li>Angles</li> <li>Bearings and scale drawing</li> </ul>	<ul style="list-style-type: none"> <li>Equations</li> <li>Probability</li> <li>Transformations</li> </ul>	<ul style="list-style-type: none"> <li>Enlargement</li> <li>Recurring decimals</li> <li>Percentages</li> <li>Pythagoras</li> </ul>	<ul style="list-style-type: none"> <li>Congruent shapes</li> <li>3D drawing</li> <li>Volume of a prism</li> <li>Construction &amp; loci</li> <li>Quadratic expressions</li> <li>Data collection methods</li> </ul>
Assessment	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Main Y8 exam</b> (calculator &amp; non-calculator parts).</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>



Year 9						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<ul style="list-style-type: none"> <li>• Index numbers</li> <li>• Standard form</li> <li>• Surds</li> <li>• Algebra, including double brackets &amp; algebraic fractions</li> <li>• Changing the subject</li> <li>• Shape review</li> </ul>	<ul style="list-style-type: none"> <li>• Compound measure</li> <li>• Travel graphs</li> <li>• Trigonometry</li> <li>• Sequences including geometric</li> <li>• Handling grouped data</li> <li>• Scatter graphs &amp; the line of best fit</li> </ul>	<ul style="list-style-type: none"> <li>• Geometric reasoning</li> <li>• Congruent &amp; similar shapes</li> <li>• Mathematic proof</li> <li>• Recurring decimals</li> <li>• Estimation &amp; error bounds</li> <li>• Drawing 3D shapes</li> <li>• Percentage change</li> </ul>	<ul style="list-style-type: none"> <li>• Draw &amp; sketch graphs</li> <li>• Area &amp; volume problems</li> <li>• Simultaneous equations – graphical &amp; algebraic methods</li> </ul>	<ul style="list-style-type: none"> <li>• Probability, including Venn diagrams &amp; set notation</li> <li>• Transformations – single &amp; combined</li> <li>• Representing &amp; solving Inequalities</li> <li>• Construction &amp; loci</li> </ul>	<ul style="list-style-type: none"> <li>• KS4 Transition, including review of number work and problem solving tasks.</li> </ul>
Assessment	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>Main Y9 exam</b> (calculator &amp; non-calculator parts).</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• Half termly maths assessments</li> </ul>



**Subject: Mathematics – Support Groups**

Year 7						
	Autumn 1 (N1 & N2)	Autumn 2 (N3)	Spring 1 (N4 & N5)	Spring 2 (G1 & N6)	Summer 1 (G2 & G3)	Summer 2 (D1)
Learning	<ul style="list-style-type: none"> <li>Arithmetic, mental &amp; written</li> <li>Place value</li> <li>Time</li> </ul>	<ul style="list-style-type: none"> <li>Powers of 10</li> <li>Types of number</li> <li>BIDMAS</li> </ul>	<ul style="list-style-type: none"> <li>FDP</li> <li>Fractions</li> <li>Percentages</li> <li>Rounding</li> <li>Estimation</li> </ul>	<ul style="list-style-type: none"> <li>Shape (2D &amp; 3D)</li> <li>Measure</li> <li>Area (rectangles and triangles)</li> <li>Perimeter</li> <li>Negative numbers</li> </ul>	<ul style="list-style-type: none"> <li>Angles</li> <li>Coordinates in 4 quadrants</li> </ul>	<ul style="list-style-type: none"> <li>Averages – mode and median</li> <li>Tally charts</li> <li>Pictograms</li> <li>Bar charts</li> <li>Frequency tables</li> </ul>
How is this learning being assessed?	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Main Y7 exam</b> (calculator &amp; non-calculator parts)</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>



Year 8						
	Autumn 1 (N7 & N8)	Autumn 2 (A1 & N9)	Spring 1 (G4, G5 & N10)	Spring 2 (A2 & N11)	Summer 1 (G6 & G7)	Summer 2 (D2 & D3)
Learning	<ul style="list-style-type: none"> <li>Addition &amp; Subtraction</li> <li>Multiplication &amp; Division</li> <li>Place value</li> <li>HCF and LCM</li> <li>Powers and roots</li> </ul>	<ul style="list-style-type: none"> <li>Expressions</li> <li>Substitution</li> <li>Sequences</li> <li>FDP</li> </ul>	<ul style="list-style-type: none"> <li>Area</li> <li>Volume (cuboid/cube)</li> <li>Nets</li> <li>Scale drawing</li> <li>Percentages</li> </ul>	<ul style="list-style-type: none"> <li>Equations</li> <li>Ratio</li> <li>Proportion</li> <li>Best buys</li> </ul>	<ul style="list-style-type: none"> <li>Angles</li> <li>Symmetry</li> <li>Reflection</li> <li>Rotation</li> </ul>	<ul style="list-style-type: none"> <li>Probability</li> <li>Averages and range</li> <li>Two-way tables</li> <li>Pie charts</li> </ul>
How is this learning being assessed?	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Main Y8 exam</b> (calculator &amp; non-calculator parts).</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly general maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li>Half termly maths assessments</li> </ul>



Year 9						
	Autumn 1 (N12 & A3)	Autumn 2 (A4, N13 & N14)	Spring 1 (N15, N16 & G8)	Spring 2 (A5, G9 & G10)	Summer 1 (D4 & D5)	Summer 2 (N17 & A6)
Learning	<ul style="list-style-type: none"> <li>• Number review</li> <li>• Directed number</li> <li>• Evaluating higher powers</li> <li>• BIDMAS with indices</li> <li>• Laws of Indices</li> <li>• Expressions with brackets</li> <li>• Substitution</li> <li>• Sequences</li> </ul>	<ul style="list-style-type: none"> <li>• Drawing linear graphs</li> <li>• Fractions</li> <li>• Decimals</li> <li>• Percentages</li> <li>• Rounding</li> <li>• Estimation</li> </ul>	<ul style="list-style-type: none"> <li>• Ratio</li> <li>• Proportion</li> <li>• Best buy</li> <li>• Factors and multiples review</li> <li>• Prime factor trees</li> <li>• Area, including compound shapes</li> <li>• Review of previous shape work</li> </ul>	<ul style="list-style-type: none"> <li>• Equations</li> <li>• Angles</li> <li>• Reflection</li> <li>• Translation</li> </ul>	<ul style="list-style-type: none"> <li>• Probability</li> <li>• Systematic listing</li> <li>• Venn diagrams</li> <li>• Frequency trees</li> <li>• Range</li> <li>• Comparing data</li> <li>• Using charts</li> </ul>	<ul style="list-style-type: none"> <li>• Review Ratio</li> <li>• Review Percentages</li> <li>• Review FDP</li> <li>• Percentage profit/loss</li> <li>• Equations (unknowns on both sides)</li> <li>• Algebra with negative numbers</li> </ul>
How is this learning being assessed?	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• Half termly maths assessments</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>Main Y9 exam</b> (calculator &amp; non-calculator parts).</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• Half termly maths assessments</li> </ul>



Year 10						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	NUMBER REVIEW ALGEBRA GRAPHS, CHARTS & TABLES	FRACTIONS & PERCENTAGES EQUATIONS, INEQUALITIES & SEQUENCES ANGLES	AVERAGES & RANGE PERIMETER, AREA & VOLUME (1)	ALGEBRAIC & REAL-LIFE GRAPHS RATIO & PROPORTION	TRANSFORMATIONS RIGHT-ANGLED TRIANGLES	PROBABILITY MULTIPLICATIVE REASONING
Assessment	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing
	Autumn topics-specific test (to be drawn from pre-2017 material)		First KS4 rehearsal exam round (to be drawn from post-2017 material)		Student-specific revision programme to be issued for the summer break	
Year 11						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	CONSTRUCTION, LOCI & BEARINGS QUADRATIC EQUATIONS & GRAPHS	PERIMETER, AREA & VOLUME (2) FRACTIONS, INDICES & STANDARD FORM	CONGRUENCE, SIMILARITY & VECTORS MORE ALGEBRA	TARGETED REVISION FOR SUMMER GCSE EXAMINATIONS	TARGETED REVISION FOR SUMMER GCSE EXAMINATIONS	
Assessment	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Final GCSE exams	
	Second KS4 rehearsal exam		Third KS4 rehearsal exam		GCSE Exams	



Year 10						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	NUMBER REVIEW ANGLES & TRIGONOMETRY ALGEBRA	FURTHER STATISTICS INTERPRETING & REPRESENTING DATA	FRACTIONS, RATIO & PERCENTAGES  GRAPHS  AREA & VOLUME	TRANSFORMATIONS & CONSTRUCTIONS  EQUATIONS & INEQUALITIES	PROBABILITY  MULTIPLICATIVE REASONING  SIMILARITY & CONGRUENCE	MORE TRIGONOMETRY  EQUATIONS & GRAPHS
How is this learning being assessed?	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing
	Test on Autumn 1 Topics	Test on Autumn 2 Topics	Test on Spring 1 Topics	Test on Spring 2 Topics	Test on Summer 1 Topics	Two past GCSE papers
Year 11						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	BESPOKE YEAR 10 REVISION COURSE	CIRCLE THEOREMS  MORE ALGEBRA	VECTORS & GEOMETRIC PROOF  PROPORTION & GRAPHS	TARGETED REVISION FOR SUMMER GCSE EXAMINATIONS	TARGETED REVISION FOR SUMMER GCSE EXAMINATIONS	
How is this learning being assessed?	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework Summative testing	Classwork Class discussion Homework	
	First KS4 rehearsal exam round		Second KS4 rehearsal exam round	Third KS4 rehearsal exam round	GCSE Exams	

## A-Level Maths Curriculum Overview

Year 12 – Pure and Mechanics 3 lessons per week – AS Pure teaching to be shared between both teachers to February Half Term						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<b>AS Pure (share of):</b> <ul style="list-style-type: none"> <li>Basic algebra</li> <li>Surds and powers</li> <li>Quadratics work</li> <li>Equations and inequalities</li> <li>Transformations and sketching graphs</li> <li>Straight line graphs</li> </ul>	<b>AS Pure (share of):</b> <ul style="list-style-type: none"> <li>Circles, tangents and normals</li> <li>Basic factor and remainder theorem</li> <li>Binomial expansion</li> <li>Trigonometry</li> </ul>	<b>AS Pure (share of):</b> <ul style="list-style-type: none"> <li>More Trigonometry - Identities and Radians</li> <li>2D vectors</li> <li>Differentiation</li> <li>Integration</li> <li>Logs and exponentials</li> </ul>	<b>AS Mechanics:</b> <ul style="list-style-type: none"> <li>Modelling</li> <li>Constant Acceleration</li> <li>Forces and motion</li> </ul>	<b>AS Mechanics:</b> <ul style="list-style-type: none"> <li>Connected particles</li> <li>Variable acceleration</li> <li>Moments</li> </ul>	<b>A2 Mechanics:</b> <ul style="list-style-type: none"> <li>Forces at any angle</li> <li>Projectiles</li> </ul>
Assessment	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>October progress test</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>January Mock Exam</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>End of Year Exam</b></li> </ul>

Year 12 – Pure and Statistics 2 lessons per week AS Pure teaching to be shared between both teachers to February Half Term						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<b>AS Pure (share of):</b> <ul style="list-style-type: none"> <li>Basic algebra</li> <li>Surds and powers</li> <li>Quadratics work</li> <li>Equations and inequalities</li> <li>Transformations and sketching graphs</li> <li>Straight line graphs</li> </ul>	<b>AS Pure (share of):</b> <ul style="list-style-type: none"> <li>Circles, tangents and normals</li> <li>Basic factor and remainder theorem.</li> <li>Binomial expansion</li> <li>Trigonometry</li> </ul>	<b>AS Pure (share of):</b> <ul style="list-style-type: none"> <li>More Trigonometry - Identities and Radians</li> <li>2D vectors</li> <li>Differentiation</li> <li>Integration</li> <li>Logs and exponentials</li> </ul>	<b>AS Statistics:</b> <ul style="list-style-type: none"> <li>Data processing, presentation &amp; interpretation</li> <li>Measures of location and spread</li> </ul>	<b>AS Statistics:</b> <ul style="list-style-type: none"> <li>Representations of Data</li> <li>Large dataset</li> </ul>	<b>AS Statistics:</b> <ul style="list-style-type: none"> <li>Probability (including A2 probability content)</li> <li>Statistical distributions</li> </ul>
Assessment	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>October progress test</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>January Mock Exam</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>End of Year Exam</b></li> </ul>

## A-Level Maths Curriculum Overview

Year 13 Pure and Mechanics – 2 lessons a week (maybe Split up the Further Integration)						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<b>A2 Pure:</b> <ul style="list-style-type: none"> <li>Further Differentiation</li> <li>Trig functions and modelling</li> </ul>	<b>A2 Pure:</b> <ul style="list-style-type: none"> <li>Trig functions and modelling</li> </ul> <b>A2 Mechanics:</b> <ul style="list-style-type: none"> <li>Applications of forces</li> </ul>	<b>A2 Pure:</b> <ul style="list-style-type: none"> <li>Further Integration</li> </ul>	<b>A2 Pure:</b> <ul style="list-style-type: none"> <li>3D Vectors</li> </ul> <b>A2 Mechanics:</b> <ul style="list-style-type: none"> <li>Further Kinematics</li> </ul>	Past Paper Revision	
Assessment	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Diagnostic test in September</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>November progress test</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>January Mock Exam</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Final Mock</b></li> </ul>	Past Paper Revision	

Year 13 Pure and Statistics – 3 lessons a week						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Learning	<b>A2 Pure:</b> <ul style="list-style-type: none"> <li>Algebraic fractions</li> <li>Partial fractions</li> <li>Functions and modelling</li> <li>Binomial theorem</li> <li>Radians, areas and perimeters</li> </ul>	<b>A2 Statistics:</b> <ul style="list-style-type: none"> <li>Correlation and regression (includes AS correlation content)</li> </ul>	<b>A2 Pure:</b> <ul style="list-style-type: none"> <li>Sequences and series</li> <li>Parametric equations</li> <li>Numerical Methods</li> </ul>	<b>A2 Statistics:</b> <ul style="list-style-type: none"> <li>Normal Distribution</li> </ul>	Past Paper Revision	
Assessment	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Diagnostic test in September</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>November progress test</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>January Mock Exam</b></li> </ul>	A combination of: <ul style="list-style-type: none"> <li>Classwork</li> <li>Homework</li> <li><b>Final Mock</b></li> </ul>	Past Paper Revision	

A Level Overview (2021-22)

Year 12						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 1
Learning	<p><b>Pure:</b></p> <ul style="list-style-type: none"> <li>• Matrix algebra</li> <li>• Transformations</li> </ul> <p><b>Mechanics for Further Maths (FM) Maths:</b></p> <ul style="list-style-type: none"> <li>• Modelling</li> <li>• Constant acceleration</li> <li>• Forces and motion</li> </ul>	<p><b>Pure:</b></p> <ul style="list-style-type: none"> <li>• Complex numbers, radians, Argand diagrams</li> <li>• Proof by induction</li> <li>• Roots of polynomials</li> </ul> <p><b>Mechanics for FM:</b></p> <ul style="list-style-type: none"> <li>• Variable acceleration</li> </ul> <p><b>Further Mechanics:</b></p> <ul style="list-style-type: none"> <li>• Momentum and impulse</li> </ul>	<p><b>Pure:</b></p> <ul style="list-style-type: none"> <li>• Summation of series</li> <li>• Volumes of revolution</li> </ul> <p><b>Further Mechanics:</b></p> <ul style="list-style-type: none"> <li>• Work, energy and power</li> </ul>	<p><b>Pure:</b></p> <ul style="list-style-type: none"> <li>• 3D vectors, scalar product, plane geometry</li> </ul> <p><b>Further Mechanics:</b></p> <ul style="list-style-type: none"> <li>• Elastic strings and springs</li> </ul>	<p><b>Pure</b></p> <ul style="list-style-type: none"> <li>• Exponential form of a complex number</li> <li>• De Moivre's theorem</li> </ul> <p><b>Further Mechanics</b></p> <ul style="list-style-type: none"> <li>• Elastic collisions in 1 dimension</li> </ul>	<p><b>Pure</b></p> <ul style="list-style-type: none"> <li>• Series, inc. Maclaurin</li> </ul> <p><b>Mechanics for FM</b></p> <ul style="list-style-type: none"> <li>• Moments</li> <li>• Forces at any angle</li> </ul> <p><b>Further Mechanics</b></p> <ul style="list-style-type: none"> <li>• Elastic collisions in 2 dimensions</li> </ul>
Assessment	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>October Progress Test</b></li> </ul>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> </ul>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>January Mock Exam</b></li> </ul>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> </ul>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> </ul>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>End of Year Exam</b></li> </ul>

A Level Overview (2021-22)

Year 13						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 1
Learning	<p><b>Pure:</b></p> <ul style="list-style-type: none"> <li>• Polar coordinates</li> </ul> <p><b>Mechanics for FM:</b></p> <ul style="list-style-type: none"> <li>• Projectiles</li> <li>• Applications of forces</li> </ul>	<p><b>Pure:</b></p> <ul style="list-style-type: none"> <li>• Hyperbolic functions</li> </ul> <p><b>Mechanics for FM:</b></p> <ul style="list-style-type: none"> <li>• Further kinematics</li> </ul> <p><b>Further Mechanics:</b></p> <ul style="list-style-type: none"> <li>• Centres of mass of plane figures</li> </ul>	<p><b>Pure:</b></p> <ul style="list-style-type: none"> <li>• Further integration</li> </ul> <p><b>Further Mechanics:</b></p> <ul style="list-style-type: none"> <li>• Motion in a circle</li> </ul>	<p><b>Pure:</b></p> <ul style="list-style-type: none"> <li>• Differential equations</li> </ul> <p><b>Further Mechanics:</b></p> <ul style="list-style-type: none"> <li>• Further kinematics - variable acceleration</li> </ul>	<p><b>Pure:</b></p> <ul style="list-style-type: none"> <li>• Proof</li> </ul> <p><b>Further Mechanics:</b></p> <ul style="list-style-type: none"> <li>• Simple harmonic motion</li> </ul>	
Assessment	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>September diagnostic test</b></li> </ul>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>November Progress Test</b></li> </ul>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>January Mock Exam</b></li> </ul>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>Final Mock</b></li> </ul>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>• Classwork</li> <li>• Homework</li> <li>• <b>Past Paper Revision</b></li> </ul>	