

MATHS GSA Curriculum Map 2023 - 2024

We aim to develop all students into mathematicians who:

- have a coherent framework of knowledge about the mathematical areas of Number, Algebra, Geometry and Measure, Probability and Statistics, Ratio and Proportion;
- become fluent in the language of mathematics, have the ability to reason mathematically and have confidence in solving increasingly complex problems by applying a combination of mathematical skills to routine and non-routine problems with increasing sophistication;
- understand the practical applications of mathematics, relish the challenge that studying mathematics provides and believe that by working hard at mathematics they can succeed.

Year 7						
	Autumn 1 (HT1)	Autumn 2 (HT2)	Spring 1 (HT3)	Spring 2 (HT4)	Summer 1 (HT5)	Summer 2 (HT6)
Mathematical Area Covered	Number	Number	Number	Algebra Geometry and Measure	Algebra Geometry and Measure	Algebra Number Ratio and Proportion
Knowledge Deepened	1. Place value (including decimals) 2. Order positive and negative numbers (including decimals) including number lines and inequality symbols 3. Inequalities and number lines 4. Four operations with integers, negatives and decimals	1. Order of operations 2. Special numbers - Primes - Squares/square root - Cubes/cube root 3. Prime factorisation 4. Factors and multiples (including HCF / LCM) 5. Introduction to fractions - Equivalent fractions - Mixed to improper fractions - Fraction of amounts	1. Rounding decimal 2. Multiply and divide fractions (including multiplying integers by fractions and reciprocals) places (up to 3 decimal places) 3. Order fractions and decimals 4. Add and subtract fractions 5. Perimeter	1. Algebraic convention 2. Substitution and formulae 3. Form and simplifying algebraic expression 4. Form and solve equations $ax + b = c$ including negative and fractional coefficient 5. Area of rectangles, triangles, parallelograms (not compound or trapezia)	1. Sequences - Term to term - Fibonacci sequence - Nth term 2. Draw, measure and estimate angles 3. Angle Facts - On a line - Around a point - In a triangle - Polygon (int/ext) - Vertically opposite 4. Bearings	1. Form and solve equations relating to angle reasoning (no further than $ax + b = c$ from half term 4) 2. Coordinates in all 4 quadrants and geometric problems 3. Using a calculator 4. Measures 5. Conversion graphs

					(not including back bearings)	
Skills developed	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.
Links to KS3 Nat. Curriculum	National Curriculum Ref: Number N1, N2, N4i, N6, N12i, N16	National Curriculum Ref: Number N3, N5, N11, R3	National Curriculum Ref: Number N2, N4ii, N5, N9, N13, G1i	National Curriculum Ref: Algebra A1, A2, A4i, A5, A7, G16	National Curriculum Ref: A14, A15, A16, G3, G10, G12, G16	National Curriculum Ref: A16, N12ii, N15, R1
Flagship Link						
Cross Curriculum Connections						Use of a calculator links to D&T Y7 HT5&6 'Problem Solving'
Resources to support learning	w Year 7 Half Term...	w Year 7 Half Term ...	w Year 7 Half Term ...	w Year 7 Half Term ...	w Year 7 Half Term ...	w Year 7 Half Term ...

Year 8

Mathematical Area Covered	Number Ratio and Proportion	Algebra Geometry and Measure Ratio and Proportion	Geometry and Measure	Geometry and Measure Probability and Statistics	Algebra Geometry and Measure	Probability and Statistics
Knowledge Deepened	1. Fraction, decimal, percentage equivalence 2. Percentages - Of amounts - Multipliers - % inc / dec 3. Ratio	1. Reverse percentages 2. Expand single brackets 3. Form and solve equations $a(b + x) = d$ with fractional, decimal and negative coefficients	1. Properties of 2D shapes (inc quadrilaterals and circles) 2. Properties of 3D shapes and 2D representations of 3D shapes (plans, elevations and nets) 3. Area and circumference of circles	1. Probability - Use of FDP - And / Or - Sample space diagrams - Relative frequency - Mutually exclusive	1. Recognise and sketch basic graphs (eg $y = x$, $y = -x$, $x = c$, $y = c$, c constant) 2. Transformations - Reflection and rotation (including symmetries)	1. Statistical diagrams - Collecting data - Data into tables - Line graphs - Bar charts - Pictograms

	<ul style="list-style-type: none"> - Equivalence - 1 : n and n : 1 including application to scale drawing - Simplifying - Recipes - Ratios as fractions and linear functions - Sharing - Problem solving 	<p>4. Factorise a single bracket</p> <p>5. Area and perimeter of trapezia (revision) and compound shapes (including algebraic with brackets and solving)</p>	<p>and part circles</p> <p>4. Volume</p> <ul style="list-style-type: none"> - cube / cuboid - prisms - cylinder - composite 	<ul style="list-style-type: none"> - Expected probability - Venn diagrams <p>2. Surface area</p> <ul style="list-style-type: none"> - cube / cuboid - prisms - cylinder - composite <p>3. Pythagoras in 2D</p>	<ul style="list-style-type: none"> - Enlargements about a point (inc fractional SF) - Translation (inc vector notation) - variance and invariant points throughout <p>END OF YEAR SUMMATIVE ASSESSMENT (Week 6)</p>	<ul style="list-style-type: none"> - Pie charts <p>2. Scatter graphs and correlation</p> <p>3. Averages and range (including from a frequency table – not grouped)</p> <p>4. Data handling cycle including data project - retrieval of prior knowledge</p>
Skills developed	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.
Links to the KS3 Nat. Curriculum	National Curriculum Ref: : Number N9, N10, N11, R2, R4, R5, R6, R7, R8	National Curriculum Ref: Algebra A4ii, A4iii, G2ii, G16, R8	National Curriculum Ref: Geometry & Measure G1ii, G5, G7, G15, G16	National Curriculum Ref: G14, G16, P1, P2, P3, P4	National Curriculum Ref: A10, G5, G8, G9	National Curriculum Ref: S1i, S1ii, S2, S3
Flagship Link					Maths and Physics - using formulae, algebra	D&T Y8 HT3&4 Collecting Data & Statistical Diagrams
Cross Curricular Connections			D&T Y7 HT3&4 Product Design - Design Communication (drawing in 2D and 3D)	Maths and Art - Portraits links with Maths Measures	Art Y7 H6 - Biscuits Observational Drawings with Enlargements in Maths	ICT Y8 HT3&4 Spreadsheet Modelling
Resources to support learning	w Year 8 Half Term...	w Year 8 Half Term ...	w Year 8 Half Term ...	w Year 8 Half Term ...	w Year 8 Half Term ...	w Year 8 Half Term ...
Year 9						

Mathematical Area Covered	Number Algebra	Number Algebra Ratio and Proportion	Algebra Ratio and Proportion	Geometry and Measure	Ratio and Proportion Geometry and Measure Statistics	Probability and Statistics
Knowledge Deepened	1. Rounding, estimation and bounds 2. Rules of indices (up to negative integer powers) 3. Standard form 4. Sequences review including geometric sequences	1. Equations and inequalities with unknowns on both sides 2. Expanding and Factorising 3. Change the subject of the formula (variable on one side only) 4. Compound measures	1. Straight line graphs: plotting and introducing $y = mx + c$ 2. Sketch and draw non-linear graphs 3. Real life graphs	1. Constructions 2. Loci 3. Angles on parallel lines (inc algebraic questions) 4. Congruence and similarity	1. Direct and inverse proportion 2. Proportion and Percentage 3. Trigonometry in right angled triangles 4. Pythagoras and trigonometry problem solving	Preparation for GCSE Teacher selected content based on analysis of assessment to revisit key prior knowledge and apply this in problem solving contexts. This could include: 1. Problem solving in money context 2. Problem solving with number 3. Problem solving with angles 4. Problem solving with algebra 5. Using data representation and interpretation
Skills developed	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.
Links to the KS3 Nat. Curriculum	National Curriculum Ref: Number N13, N8, N7 Algebra A16	National Curriculum Ref: Number N14 Algebra A4i, A4iii, A4iv, A5, A7 Ratio R1, R10	National Curriculum Ref: Algebra A7, A8, A9, A10, A11, A12i, A12ii, A13 Ratio R9	National Curriculum Ref: Geometry & Measures G4i, G4ii, G6, G9, G10, 13,	National Curriculum Ref: Ratio R9, Geometry & Measures G13, G14 Statistics S1ii, S2	

Flagship Link		Maths & Science (HT3) - Rearranging equations	Maths & Science (HT2) - Straight Line Graphs/Graph interpretation		Science (HT5) & (HT6) & Maths - converting measure and units	
Cross Curricular Connection			Science HT5 - Energy (rearranging equations)		Constructions & Loci link with Art - Year 8 HT2 project	Technology Y9 - HT5/6 - Problem Solving skills
Resources to support learning	w Year 9 Half Term...					
Year 10						
Mathematical Area Covered	Number Ratio, Proportion and Rates of Change Geometry and Measures Probability	Number Algebra Ratio, Proportion and Rates of Change Geometry and Measures Statistics	Algebra Geometry and Measures Statistics	Number Algebra Ratio, Proportion and Rates of Change Geometry and Measures	Number Algebra Ratio, Proportion and Rates of Change Geometry and Measures Probability Statistics	Number Algebra Ratio, Proportion and Rates of Change Geometry and Measures Probability Statistics
Knowledge Deepened	Perimeter and Area Factors and Multiples Basic percentages Basic probability Angles Fractions and Decimals	Ratio and Proportion Quadratic Expressions Pythagoras and basic Trigonometry Statistical measure Rounding Indices Circumference and Area	Sequences Collecting and representing data. Rearranging formulae Volume	Properties and Angles of Polygons Standard Form Quadratic Equations and graphs Calculating with percentages Coordinates and Linear Graphs Measures	Scale Drawing and Bearings Surds Further probability Growth and Decay Revision/Retrieval	Expressions, Formulae and identities Sketching Graphs Real Life Graphs Retrieval Responsive Teaching from PPEs.
Skills developed AQA Assessment Objectives	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.2, 1.3; AO2.1, 2.2, 2.3; AO3.1, 3.2, 3.3,	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.3; AO2.1, 2.2, 2.2; AO3.1, 3.2	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.3 AO2.1, 2.2, 2.3 AO3.2, 3.3, 3.4	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.2, 1.3; AO2.1, 2.4; AO3.1, 3.2, 3.3	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.2, 1.3; AO2.2, 2.3; AO3.1	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.2, 1.3; AO2.2, 2.3; AO3.1

Links to Specification	G1, G3a, G6a, G12, G16a, G17a,N4,N5, N1b, N2b, N8a, N10, N12a, R3, P1, P2, P3, P4, P5, P7, r9A, N12b,	A4b, G20, R12a, G6, G9, G17a,G18,N8d,N14, N15, N16, N6, N7, S2a, S4,a, S5, S1, N11, R4, R5, R6, R7, R8,	A23, A24a, A25, A5a, A21b, G16b, G17c, N8d,S2b, S3, S4b, S1	A17a,A18a,A11a,A12a, A21c, A8,G11, A9, A10, G1b, G3b, G4, G6c, N2c, N9, R9a, G14, N13, R1, R11	R2, G15, N8b, A24b,A4c, P6, P8, P9, R16,	A4d,A5b,A6,A14,R14b,
Flagship Link						
Cross Curricular Connection	Maths and Physics - Light, SDT/VDT graphs	Food Tech - Recipes Construction - Pythagoras Geography - Data analysis		Standard Form - Science - Physics and biology	Science - growth and decay of bacteria. Scale Drawings - Construction - scale drawing	Most subjects - Real Life Graphs
Resources to support learning	<ul style="list-style-type: none"> Geo01 Angles Geo02 Perimeter... Num02 Factors ... Num03 Fractions... Prob01 Basic Pr... RPR01 Basic Pe... 	<ul style="list-style-type: none"> Alg04 Quadratic ... Geo03 Circumfer... Geo04 Pythagor... Num04 Rounding Num05 Indices RPR02 Ratio and... Stat01 Statistical ... 	<ul style="list-style-type: none"> Alg03 Sequences Alg05 Rearrangin... Geo05 Volume Stat02 Collecting... 	<ul style="list-style-type: none"> Alg06 Coordinate... Alg07 Quadratic ... Geo06 Propertie... Num06 Standard... RPR03 Calculati... RPR04 Measures Geo06 Propertie... 	<ul style="list-style-type: none"> Geo07 Scale Dra... Num07 Surds Prob02 Further P... RPR05 Growth a... 	<ul style="list-style-type: none"> Alg08 Real Life ... Alg10 Expression... Alg11 Sketching ...
Year 11						
Mathematical Area Covered	Ratio and Proportion Geometry and Measure	Ratio and Proportion Geometry and Measure	Algebra Geometry and Measure Ratio and Proportion	Geometry and Measure	Exam preparation	
Knowledge Deepened	<p>Transformations inc. similarity and congruence</p> <p>Plans and elevations</p> <p>Scale drawing and bearings</p>	<p>Trig recap and extension</p>	<p>Circle Theorems</p> <p>Pre calculus area under the curve</p> <p>Gradients and Rates of Change</p>	<p>Vectors</p>	<p>Targeted GCSE revision using the QLA documents following the PPEs - targeted retrieval of prior knowledge</p>	<p>Targeted GCSE revision using the QLA documents following the PPEs - targeted retrieval of prior knowledge</p>

Teacher B interleaving revision lessons based on PPEs/QLA analysis and exam paper homework.						
Skills developed AQA Assessment Objectives	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.2, 1.3; AO2.1, 2.2, 2.3, 2.4, 2.5; AO3.1, 3.2, 3.3, 3.4, 3.5	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.2, 1.3; AO2.1, 2.2, 2.3, 2.4; AO3.1, 3.2, 3.3, 3.4	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.2, 1.3; AO2.1, 2.2, 2.3, 2.4; AO3.1, 3.2, 3.3, 3.4	Fluency, Problem Solving, Reasoning. AQA Assessment Objectives Ref: AO1.1, 1.2, 1.3; AO2.1, 2.2, 2.3, 2.4; AO3.1, 3.2, 3.3, 3.4	Fluency, Problem Solving, Reasoning.	Fluency, Problem Solving, Reasoning.
Links to Specification	AQA Spec:R12, G6 - 9, 19, 24	AQA Spec: R12, G20, G21, G22	AQA Spec: A15, R14, 15, G10	AQA Spec: G25		
Flagship Link						
Cross Curricular Connection	DT: Y11 Design project - scale drawings. Construction - Plans and elevations Scale drawing	Physics: Y10 Forces and Balance HT5 (SOHCAHTOA)	Science: Rates of Reaction HT4 Gradients of Graphs.			
Resources to support learning	W Y11 Autumn 1 Pl... W Y11 Autumn 1 S... W Y11 Autumn 1 Tr...	W Y11 Autumn 2 Fu...	W Y11 Spring 1 Circ... W Y11 Spring 1 Gra... W Y11 Spring 1 Vec... W Y11 Spring 1 Pre...			

Year 12 Mathematics (AQA - 7357 Course)

Knowledge Deepened	<p>Teacher A</p> <p><i>Pure Mathematics:</i></p> <ol style="list-style-type: none"> 1.Quadratics 2. Polynomials 3.Trigonometric Functions and equations <p>Teacher B</p> <p><i>Pure Mathematics:</i></p>	<p>Teacher A</p> <p><i>Pure Mathematics:</i></p> <ol style="list-style-type: none"> 1.Differentiation 2.Applications of Differentiation 3. Integration <p>Teacher B</p> <p><i>Pure Mathematics</i></p>	<p>Teacher A</p> <p><i>Pure Mathematics:</i></p> <ol style="list-style-type: none"> 1.Logarithms 2.Exponential <p><i>Mechanics:</i></p> <ol style="list-style-type: none"> 3. Vectors <p>Teacher B</p>	<p>Teacher A</p> <p><i>Mechanics</i></p> <ol style="list-style-type: none"> 1.Kinematics 2. Motion with Constant Acceleration 3. Forces and Newton's Laws <p>Teacher B</p>	<p>Teacher A</p> <p><i>Pure Mathematics:</i></p> <p>Review</p> <p><i>Mechanics</i></p> <ol style="list-style-type: none"> 1. Forces and Newton's Laws <p>Teacher B</p>	<p>Teacher A</p> <ol style="list-style-type: none"> 1.Exam Preparation and Revision - retrieval of prior knowledge 2.Year 13 Topics- Rational Functions and Partial Fractions, Functions. Radian
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	1.Indices and Surds 2.Using Graphs 3.Coordinate Geometry	1.Coordinate Geometry 2.Triangle Geometry 3. Binomial Expansion	<i>Statistics</i> 1.Working with Statistical Data 2.Pure Maths Review	<i>Statistics</i> 1. Probability 2.Statistical Hypothesis Testing <i>Pure Mathematics:</i> 3. Proof and Mathematical Communication.	<i>Statistics</i> 1.Large Data Set	Measure Teacher B 1.Exam Preparation and Revision - retrieval or prior knowledge 2.Year 13 Topics Further Transformations of Graphs, General Binomial Expansion,
Skills developed	Fluency, Problem P, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique
Links to specification Referring to AQA specification	Teacher A 1. B3 2. B6 3. E1 Teacher B 1 B1, B2 2 .B4, B5, B7, B9 3.C1 C2	Teacher A 1. G1,G2 2.G3 3. H1,H2,H3 Teacher B 1.C1, C2 2.E3,E5,E7 3.D1	Teacher A 1. F3, F4, F5 2. F1, F2, F6, F7 3. J1, J2, J3, J4, J5 Teacher B 1.L1, L2, L3, L4	Teacher A 1. P1 2.Q1, Q2, Q3, Q4 3. R1, R2, R3 Teacher B 1..M1, N1 2..K1, O1, O2 3. A1	Teacher A 1.R1, R2, R3 Teacher B 1.Sectoion 3.21.1	Teacher A B10,E1, E2, E3, E4 Teacher B B7, B9, D1,
Flagship Link			Standard deviation links with - Y12 Biology HT5 - Statistics			
Cross Curricular Connections		Physics Y10 HT5 Y12 Product Design - Trigonometric functions	Geography Y12, HT6			
Resources to support learning	<ul style="list-style-type: none"> 3. Quadratic Func... 4. Polynomials 10. Trigonometric ... 2. Indices & Surds 5. Using Graphs 	<ul style="list-style-type: none"> 20. Working with ... 13. Applications o... 14. Integration 6. Coordinate Ge... 11. Triangle Geo... 	<ul style="list-style-type: none"> 7. Logarithms 8. Exponential Mo... 15. Vectors 20. Working with ... 	<ul style="list-style-type: none"> 16. Kinematics 17. Motion with c... 18. Forces & Motion 21. Probability 22. Hypothesis te... 1. Proof 	<ul style="list-style-type: none"> 18. Forces & Motion 20. Working with ... 	<ul style="list-style-type: none"> 05 - Rational func... 07 - Radian Meas... 03 - Transformati... 06 - General bino...

	6. Coordinate Ge...	9. Binomial Expa...				
Year 13 Mathematics (AQA - 7357 Course)						
Knowledge Deepened	Teacher A: Further Trigonometry Functions Calculus of Exponential and Trigonometric Functions Further Differentiation Further Integration Techniques Teacher B: Sequences and Series Functions	Teacher A: Further Integration Techniques Further Applications of Calculus Differential Equations Teacher B: Functions Numerical Solutions	Teacher A: Numerical Integration Application of Vectors Projectiles, Forces in Context Teacher B: Proof Conditional Probability	Teacher A: Forces in Context Moments Exam Preparation - retrieval of prior knowledge Teacher B: The Normal Distribution Further Hypothesis Testing	Examination Preparation	
Skills developed	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	
Links to specification Referring to AQA specification	Teacher A: E4, E5, E6, E8, E9 G1, G2, H2, G4, G5 H5, H6 Teacher B: B8, B11 D2, D3, D4, D5, D6	Teacher A: H5, H6 G1, C3, C4, G5, H3 G6, H7, H8 A1 Teacher B: E1, E2, E3 B8, B11	Teacher A: R2, R4, R5, R6 P1, S1 I1, I2, I4 Teacher B: D2, D3, D4, D5, D6 M2, M3	Teacher A: I1, I2, I4 H4, I3 J1, J2, J3, J4, J5, Q3, Q4 J5, Q5 Teacher B: M2, M3 N2, N3 O1, O3		
Flagship Link						
Cross			Y13 PE - Moments	Y13 PE - Moments		

Curricular Connections			linking with Angular Motion Y13 HT1	linking with Projection Motion Y13 HT2	
Resources to support learning	<ul style="list-style-type: none"> 08 - Further Trigo... 10 - Further Differ... 11 - Further Integr... <ul style="list-style-type: none"> 04 - Sequences a... 02 - Functions 	<ul style="list-style-type: none"> 11 - Further Integr... 12 - Further appli... 13 - Differential E... <ul style="list-style-type: none"> 02 - Functions 14 - Numerical so... 	<ul style="list-style-type: none"> 15 - Numerical Int... 16 - Application of... 17 - Projectiles 18 - Forces in con... <ul style="list-style-type: none"> 01 - Proof and Ma... 20 - Conditional p... 	<ul style="list-style-type: none"> 18 - Forces in con... 19 - Moments <ul style="list-style-type: none"> 21 - The normal d... 22 - Further hypot... 	

Level 3 Mathematical Studies 'Core Maths' (AQA - 1350 Course)

Knowledge Deepened	<p>Teacher A: Types of data and collecting data</p> <p>Sampling data</p> <p>Representing data numerically</p> <p>Representing data diagrammatically</p> <p>Teacher B: Numerical Calculation Introduction to Spreadsheet Percentages Taxation: Income Tax and National Insurance Repayments and credit</p>	<p>Teacher A The Normal Distribution Analyse Critically Correlation and Regression</p> <p>Teacher B Repayments and credit Interest Rates Taxation: Value Added tax (VAT) Graphical representation Solutions to financial problems</p>	<p>Teacher A Correlation and Regression</p> <p>Probabilities and estimation</p> <p>Limits of Accuracy</p> <p>Teacher B Fermi Estimation</p> <p>Equation of a straight line</p> <p>Perimeter. Circumference and area</p> <p>Similarity and pythagorean theorem</p> <p>Surface area and similarity</p>	<p>Teacher A Probabilities and estimation</p> <p>Review of Preliminary Material for Paper 2A</p> <p>Teacher B Analyse Critically</p> <p>Review of Preliminary material for Paper 1</p>	Revision - retrieval of prior knowledge	
Skills developed	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	
Links to	Teacher A	Teacher A:	Teacher A:	Teacher A:	Analysis of preliminary	

<p>specification</p> <p>Referring to AQA Specification</p>	<p>D1.1 D1.2 D1.3 D2.1 D2.2 D3.1 D3.2 D4.1</p> <p>Teacher B</p> <p>F1.1 F1.2 F2.1 F2.2 F2.3 F2.4 F2.5 E1.2 F6.1 F4.1</p>	<p>C3.1 C3.2 S1.1 S2.1 S2.3</p> <p>Teacher B:</p> <p>F1.4 F4.1 F3.1 F3.2 F5.1 F6.1 F7.1 F7.2 F7.3 F7.4 E1.2</p>	<p>F1.3 F1.4 S4.1 S4.2 S5.1 S6.1 S7.1 S7.1 S8.1 S8.2 S8.3 S9.1 S9.2 S9.3 S9.4 S9.5 S10.1</p> <p>Teacher B:</p> <p>E2.1 S1.1 S2.1 S3.1</p>	<p>C1.1 F1.3 S4.1 S4.2 S5.1 S6.1</p> <p>Teacher B:</p> <p>C1.1 C2.1</p>	<p>material.</p> <p>Targeted revision based on past paper results.</p>	
<p>Flagship Link</p>						
<p>Cross Curricular Connections</p>	<p>Standard deviation links with - Y12 Biology HT5 - Statistics</p>	<p>Normal Distribution links with - Y12 Biology HT5 - Statistics</p>	<p>Correlation links with Y12 Biology - correlation and causation.</p> <p>Y12 D&T - Theory and Application of Knowledge - HT3</p>			
<p>Resources to support learning</p>	<ul style="list-style-type: none"> Core Maths HT1 - ... Core Maths HT1 - ... 	<ul style="list-style-type: none"> Core Maths HT2 - ... Core Maths HT2 - ... 	<ul style="list-style-type: none"> Core Maths HT3 - ... Core Maths HT3 - ... Core Maths HT3 - ... Core Maths HT3 - ... Core Maths HT3 - ... Core Maths HT3 - ... Core Maths HT3 - ... Core Maths HT3 - ... 	<ul style="list-style-type: none"> Core Maths HT4 - ... Core Maths HT4 - ... 		

Year 12 Further Mathematics (AQA - 7367 Course)

Knowledge Deepened	<p>Teacher A: Complex Numbers Loci in Complex Plane Roots of Polynomials</p> <p>Teacher B: Matrices Matrices Transformation</p> <p>Teacher C: Work, Energy and Power, Dimensional Analysis</p>	<p>Teacher A: Roots of Polynomials Sums & Series Proof by Induction</p> <p>Teacher B: Rational Functions Polar Coordinates</p> <p>Teacher C: Momentum and Collisions 1 and 2</p>	<p>Teacher A: Hyperbolic Functions Graph Theory Networks - Prims & Kruskals Algo</p> <p>Teacher B: Polar Coordinates Further Calculus Conics</p> <p>Teacher C: Work, Energy and Power 2</p>	<p>Teacher A: Linear Programming Network Flows Game Theory Binary Operations Critical Path Analysis</p> <p>Teacher B: Further Application of Vectors</p> <p>Teacher C: Circular Motion</p>	<p>Teacher A: Revision and preparation for PPE/External AS Exam</p> <p>Teacher B: Revision and preparation for PPE/External AS Exam</p> <p>Teacher C: Revision and preparation for PPE/External AS Exam</p>	<p>Teacher A: Flow Augmentation Simplex Algorithm Group Theory</p> <p>Teacher B: Further Matrices</p> <p>Teacher C: Circular Motion 1 (Horizontal circular motion in 3D)</p>
Skills developed	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique
Links to specification Referring to AQA specification	<p>Teacher A: B1-B7</p> <p>Teacher B: C1-C6</p> <p>Teacher C: MC1-MC3, MC7</p>	<p>Teacher A: D1-D4</p> <p>Teacher B: DA1 - DA6 DB1 - DB5 DD1 - DD2</p> <p>Teacher C: MA1-MA2 MB1</p>	<p>Teacher A: D6, A1</p> <p>Teacher B: D8 - D9 and D12 - D16</p> <p>Teacher C: MB2-MB3 MD1-MD3</p>	<p>Teacher A: F1, F3, F4, F6 H1, H3, H4, H6</p> <p>Teacher B: DG1 - DG5 DC1 - DC4</p> <p>Teacher C: MC2-MC6 MB2</p>	<p>Teacher A: E2, E3 G1, G2</p> <p>Teacher B: DE1 - DE4 and DE5 - DE6</p> <p>Teacher C: MB4</p>	<p>Teacher A: DC2, DC5, DC6, DC7 DD3, DD4</p> <p>Teacher B: DF1 - DF5 DF6</p> <p>Teacher C: MD4-MD5</p>
Flagship Link						
Cross Curricular Connections	Y12 Computer Science - HT2 - Programming and Fundamentals of Data structures					
Resources to support learning	<ul style="list-style-type: none"> ☰ Pure 01 Complex... ☰ Pure 02 Roots of ... ☰ Pure 07 Matrices ☰ Pure 08 Matrix Tr... ☰ Mech 01 Work E... 	<ul style="list-style-type: none"> ☰ Pure 11 Series ☰ Pure 12 Proof By ... ☰ Pure 05 Hyperboli... ☰ Discrete ☰ Mech 02 Dimensi... ☰ Mech 03 Moment... 	<ul style="list-style-type: none"> ☰ Pure 10 Further C... ☰ Pure 09 Further A... ☰ Mech 03 Moment... ☰ Mech 04 Circular ... 	<ul style="list-style-type: none"> ☰ Discrete ☰ Mech 05 Work, E... ☰ Mech 06 Moment... 	<ul style="list-style-type: none"> ☰ Discrete ☰ Mech 06 Moment... 	<ul style="list-style-type: none"> ☰ Mech 04 Circular ... ☰ Discrete

Year 13 Further Mathematics (AQA - 7367 Course)

Knowledge Deepened	<p>Teacher A: Vectors Hyperbolic Functions</p> <p>Teacher B: Further transformations of the ellipse, hyperbola and parabola. Further Graphs and Inequalities</p> <p>Teacher C: Work, Energy and Power with resolving Circular Motion 2</p>	<p>Teacher A: PPE Revision Further Calculus applied to inverse trigonometric and inverse hyperbolic functions.</p> <p>Teacher B: PPE Revision Further Polar Coordinates Maclaurin series and Limits</p> <p>Teacher C: Centre of Masses</p>	<p>Teacher A: Further Calculus Reduction Formula Arc Length & Area of surface of revolution De Moivre's Theorem</p> <p>Teacher B: Maclaurin series and Limits Differential Equations Applications of Differential Equations. Numerical Methods</p> <p>Teacher C: Centre of Masses Moments and Couples</p>	<p>Teacher A: Further Complex Numbers</p> <p>Teacher B: Applications of Differential Equations. Numerical Methods</p> <p>Teacher C: Moments and Couples</p>	<p>Teacher A: Revision - retrieval of prior knowledge</p> <p>Teacher B: Revision - retrieval of prior knowledge</p> <p>Teacher C: Revision - retrieval of prior knowledge</p>	<p>Teacher A: Revision until exam - retrieval of prior knowledge</p> <p>Teacher B: Revision until exam - retrieval of prior knowledge</p> <p>Teacher C: Revision until exam - retrieval of prior knowledge</p>
Skills developed	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique	Fluency, Problem Solving, Reasoning, Exam Technique
Links to specification Referring to AQA specification	<p>Teacher A: B8-B11</p> <p>Teacher B: C5-C11 D10, D11, D12, D15, D16</p> <p>Teacher C: MD5-MD6</p>	<p>Teacher A: H1, H2, H3, H5, H6 E4-E6</p> <p>Teacher B: D5 - D7 G3</p> <p>Teacher C: ME1-ME4</p>	<p>Teacher A: E7, E8</p> <p>Teacher B: I1 - I6 I7 - I11</p> <p>Teacher C: ME5 - ME6</p>	<p>Teacher A: F2, F3, F5, F6</p> <p>Teacher B: I7 - I11 J1 - J3</p> <p>Teacher C: MC1-MC7</p>	<p>Teacher A: All Content</p> <p>Teacher B: All Content</p> <p>Teacher C: All Content</p>	<p>Teacher A: All Content</p> <p>Teacher B: All Content</p> <p>Teacher C: All Content</p>
Flagship Link						
Cross Curricular Connections						
Resources to support learning	<ul style="list-style-type: none"> 02 - Further comp... 06 - Further Matri... 03 - Further transf... 04 - Further grap... 	<ul style="list-style-type: none"> 08 - Further hyper... 10 - Maclaurin Se... 09 - Further Calc... 07 - Further polar ... 	<ul style="list-style-type: none"> 11 - Differential E... 12 - Applications ... 08 Centre of Mass 09 Moments and ... 	<ul style="list-style-type: none"> 05 - Further Vectors 12 - Applications ... 13 - Numerical M... 05 Work, Energy ... 		

	04 Circular Motion	08 Centre of Mass				
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