

Maths KS3 Curriculum Map Year 7-9

		Pathway		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
•		Advanced	Focus:	Number	Algebra	Data Handling	Fractions, Ratio & Percentages	Angles & Trigonometry	Graphs	
			Assessment:	End of Unit Assessments						
	year 9	Core	Focus:	Number	Algebra	Data Handling	Fractions & Percentages	Angles	Equations, Inequalities & Sequences	
			Assessment:		End of Unit Assessments					
	Year 8	Core 2 (including depth & support as required)	Focus:	Unit 1: Number Unit 2: Area & Volume	Unit 8: Calculating with Fractions	Unit 3: Statistics, Graphs & Charts Unit 4: Expressions & Equations	Unit 6: Decimals & Ratio	Unit 10: Percentages, Decimals & Fractions	Unit 7: Lines & Angles	
			Assessment:		Assessment 1	Assessment 2	Assessment 3	End of Year Assessment		
	Year 7	Core 1 (including depth & support as required)	Focus:	Unit 9: Sequences & Coordinates Unit 1: Analysing & Displaying Data	Unit 2: Number Skills Unit 3: Expressions, Functions & Formulae	Unit 4: Decimals & Measures Unit 5: Fractions	Unit 6: Probability	Unit 7: Ratio & Proportion	Unit 8:Lines & Angles	
			Assessment:		Assessment 1	Assessment 2	Assessment 3		End of Year	



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Year 7	 CEIAG Maths, Patterns and Symmetry in nature embedded in Sequences. Exploration of Maths in real life, making connections of Place Value, Percentages and Fractions to real life, including money, sales, borrowing. Statisticians use Averages, Graphs and Charts to analyse results, see patterns in data and predict future trends. SMSC Developing an enquiring mind, a sense of wonder, using logic, problem-solving. Articulating and discussing mathematical ideas. Enrichment Monthly Maths Mind Twister Maths Surgery - one-to-one UKMT Junior Maths Challenge
⁄ear 8	CEIAG • Area, Perimeter and Volume used by Designers and Engineers, who need to know exact areas and volumes when designing projects. • Percentages, Decimals and Fractions used in Business and Retail, to calculate percentage profit and discounts on their products. • Statisticians use Averages, Graphs and Probability to analyse results, see patterns in data and predict future trends. SMSC • • Describing and modelling reality. • Learning to look out for misleading graphs and charts. Enrichment • • Monthly Maths Mind Twister • Maths Surgery - one-to-one • UKMT Junior Maths Challenge
⁄ear 9	 CEIAG Percentages used by a Sports Analyst to measure performance and track improvement and also in the Financial Sector, to calculate investment performance, borrowing and lending costs. Standard Form used by Scientists when working with molecules and atoms, and Astronomers to measure large distances in space. Financial officers use Formulae to work out pricing structures for car hire, gas/electricity pricing. Interest and depreciation calculations covered in Percentages. Statisticians use Averages, Graphs and Probability to analyse results, see patterns in data and predict future trends. SMSC Using logic and mathematical reasoning to tackle problems faced in real life. Enrichment Monthly Maths Mind Twister Maths Surgery - one-to-one Problem-solving and Finance Day UKMT Intermediate Maths Challenge



Maths KS4 Curriculum Map Year 10

Year 10	Pathway		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	GCSE	Focus:	Unit 5: Trigonometry Unit 6: Graphs	Unit 7: Area & Volume	Unit 8: Transformations & Constructions	Unit 9: Equations & Inequalities	Unit 10: Probability	Unit 11: Multiplicative Reasoning
	Higher	Assessment:	End of Unit Assessments					
	GCSE Foundation	Focus:	Unit 6: Equations, Inequalities & Sequences	Unit 7: Averages & Range Unit 8: Perimeter, Area & Volume 1	Unit 9: Graphs	Unit 10: Transformations	Unit 11: Ratio & proportion	Unit 12: Right-angled Triangles
		Assessment:	End of Unit Assessments					
	10F3	Focus:	Unit 9: Sequences & Graphs	Unit 10: Transfor- mations	Unit 2: Area & volume	Unit 4: Expressions & Equations	Unit 6: Decimals & Ratio	Unit 8: Calculating with Fractions
				Unit 1: Number	Unit 3: Statistics, Graphs & Charts	Unit 5: Real-life Graphs	Unit 7: Lines & Angles	
		Assessment:	End of Unit Assessments					

CEIAG

- Transformations / Enlargement used by Designers, who draw plans to scale.
- Pythagoras and Trigonometry used in navigation by Sailors to calculate distances and bearings and by Surveyors and Architects to calculate angles and lengths.
- Area calculations required for decorating, whether painting, tiling or laying carpets.
- Statisticians use Averages, Graphs and Probability to analyse results, see patterns in data and predict future trends. Linked to Sciences and Geography at 'A' level and University degrees.

<u>SMSC</u>

- Harder problem-solving and real-life applications.
- Recognising bias and misleading graphs and questionnaires.
- Multiplicative reasoning used to determine best value for money.

Enrichment

- Monthly Maths Mind Twister
- Maths Surgery one-to-one
- UKMT Intermediate Maths Challenge



Maths KS4 Curriculum Map Year 11

	Pathway		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1&2
	Higher	Focus:	Unit 12: Similarity & Congruence Unit 13: Further Trigonometry	Unit 14: Further Statistics Unit 15: Equations & Graphs	Unit 16: Circle Theorems Unit 17: More Algebra	Unit 18: Vectors & Geometric Proof Unit 19: Proportion & Graphs	
		Assessment:		Mock Examinations: No	ovember & March		Revision & Exam Preparation
Year 11	Foundation	Focus:	Unit 13: Probability Unit 14: Multiplicative Reasoning	Unit 15: Constructions, Loci & bearings Unit 16: Quadratic Equations & Graphs	Unit 17: Perimeter, Area & Volume 2 Unit 18: Fractions, Indices & Standard Form	Unit 19: Congruence, Similarity & Vectors Unit 20: More Algebra	
		Assessment:		Mock Examinations: No	GCSE Examinations		
	11 F3	Focus:	Indices: Powers & Roots, Laws of Indices Standard Form. Pythagoras Factors, Multiples & Primes Area & Perimeter	Fractions, Ratio, Percentages & FDP Multiplying & Dividing Decimals Money Problems Averages	Stem & Leaf Diagrams Two Way Tables Probability Scatter Graphs 3D Shapes Transformations	Angles Estimation Ratio & Proportion Sequences	
		Assessment:		Mock Examinations: No	ovember & March		

<u>CEIAG</u>

- Architects and Designers produce accurate plans using Construction techniques.
- Standard Form used by Scientists when working with molecules and atoms, and Astronomers to measure large distances in space.

<u>SMSC</u>

• Discovering proofs, seeking truth, articulating with logical reasoning/argument.

Enrichment

- Monthly Maths Mind Twister
- Maths Surgery: one-to-one
- Boost and A-Level taster sessions