

Maths KS3 Curriculum Map Year 7-9

Ī			Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Year 9	Focus:	 Algebra - Linear and Quadratic Expressions Linear Equations Indices Quadratic Equations 		8. Proportion and Scales9. Angles10. Pythagoras and Trigonometry	11. Substitution 12. Graphs	13. Inequalities 14. Transformations	15. Similarity and Congruency 16. Equations and Simultaneous Equations 17. Area
		Assessment:	Assessment 1		Assessment 2	Assessment 3		End of Year
	Year 8	Focus:	 Fractions and FDP Solving Equations Ratio and Proportion Percentages 	5. Substitution6. Speed7. Real Life Graphs	8. Factors, Multiples, Primes9. Set Notation10. Product of Primes11. Constructions	12. Decimals13. Rounding and Estimation14. Pythagoras15. Linear Graphs	16. Quadratic Graphs17. Sequences18. Area and Perimeter19. Circles	20. Scatter Graphs 21. Volume 22. Density 23. Surface Area 24. Averages
		Assessment:		Assessment 1	Assessment 2		End of Year	
	Year 7	Focus:	 Expressions Using a Calculator Probability 	O. Aligies 1	9. Factors, multiples, primes and factorising10. FDP11. Substitution12. Decimals	13. Angles 2 14. Averages 2 15. Division	16. Units of Measure17. Data Handling18. Representing Data19. Function Machines20. Solving Equations	21. Properties of Shapes22. Area23. Coordinates and Graphs
		Assessment:	Baseline	Assessment 1	Assessment 2		End of Year	



Maths KS3 Curriculum Map Year 7-9

Year

7

Year

8

Year

9

CEIAG

- Exploration of Maths in real life, making connections to Units of Measure and Areas.
- 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.
- Ethics around probability and gambling.

Enrichment

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

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

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.
- Interest and depreciation calculations covered in Percentages.
- 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.

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
- UKMT Intermediate Maths Challenge



Maths KS4 Curriculum Map Year 10

	Pathway		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year	GCSE Higher	Focus:	4. Quadratics and Cubics5. Direct and Inverse	 6. Constructions and Loci 7. Rational and Irrational Numbers 8. Rearranging Formulae 9. Functions 	10. Arcs and Sectors11. Surface Area and Volumes12. Bounds13. Transformations	and Volume 15. Probability 16. Trigonometry in 2D/3D	18. Linear Inequalities – Regions 19. Quadratic Equations 20. Quadratic Inequalities 21. Data Processing – Mean from a table	22. Representing Continuous Data 23. Comparing Data 24. Sampling Methods 25. Circle Theorems 26. Growth and Decay 27. Completing the Square
10	GCSE Foundation	Focus:	 3. Percentages 1: Calculations with and without a calculator 4. Expanding Brackets and Factorising 5. Solving Linear Equations 		13. Frequency Tables	20. Linear Graphs21. Equation of a Line22. Linear Sequences23. Special Sequences	26. Area of 2D Shapes27. Circumference and Area of Circles28. Area of Composite Shapes29. Compound Measures	30. Real Life Graphs 31. Volume of Prisms 32. Surface Area of Prisms
		Assessment:		Assessment 1	Assessment 2	Mock Assessment		End of Year Assessment

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.

SMSC

- 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



Maths KS4 Curriculum Map Year 11

	Pathway		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1&2
Year	Higher	Focus:	Unit 12: Similarity & Congruence Unit 13: Further Trigonometry	Unit 14: Further Statistics Unit 15: Equations & Graphs	Circle Theorems Unit 17: More Algebra	Unit 18: Vectors & Geometric Proof Unit 19: Proportion & Graphs	
		Assessment:		Mock Examinations: N	Revision & Exam Preparation		
11	Foundation	Focus:	Unit 13: Probability Unit 14: Multiplicative Reasoning	Unit 15: Constructions, Loci & bearings Unit 16: Quadratic Equations & Graphs	Perimeter, Area &	Unit 19: Congruence, Similarity & Vectors Unit 20: More Algebra	GCSE Examinations
		Assessment:		Mock Examinations: N	ovember & March		

CEIAG

- 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.

SMSC

- Discovering proofs, seeking truth, articulating with logical reasoning/argument.
- Understanding financial terms through finance day

Enrichment

- Monthly Maths Mind Twister
- Maths Surgery: one-to-one
- Finance Day
- Boost and A-Level taster sessions
- GCSE Statistics
- Level 2 Further Maths