

# Maths KS3 Curriculum Map Year 7-9

			Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
ſ	Year 9	Focus:	<ol> <li>Algebra - Expressions</li> <li>Linear Equations</li> <li>Indices</li> <li>Quadratic Equations</li> </ol>	5. Standard Form 6. Rearranging Formulae 7. Fractions, Decimals and Bounds	<ol> <li>8. Proportion and Scales</li> <li>9. Angles</li> <li>10. Pythagoras and Trigonometry</li> </ol>	11. Substitution 12. Graphs	13. Inequalities 14. Transformations	<ul><li>15. Similarity and Congruency</li><li>16. Equations and Simultaneous</li><li>Equations</li><li>17. Area</li></ul>
		Assessment:	Assessment 1		Assessment 2	Assessment 3		End of Year
Ċ	Year 8	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
	U	Assessment:		Assessment 1	Assessment 2		End of Year	
	Year 7	Focus:	<ol> <li>Expressions</li> <li>Using a Calculator</li> <li>Probability</li> </ol>	<ol> <li>4. Expanding Brackets</li> <li>5. Rounding</li> <li>6. Angles 1</li> <li>7. Pie Charts</li> <li>8. Averages</li> </ol>	<ul><li>9. Factors, multiples, primes and factorising</li><li>10. FDP</li><li>11. Substitution</li><li>12. Decimals</li></ul>	13. Angles 2 14. Averages 2 15. Division	<ol> <li>16. Units of Measure</li> <li>17. Data Handling</li> <li>18. Representing Data</li> <li>19. Solving Equations</li> </ol>	<ul><li>20. Properties of Shapes</li><li>21. Area</li><li>22. Coordinates and Graphs</li></ul>
		Assessment:	Baseline	Assessment 1	Assessment 2		End of Year	



# Maths KS3 Curriculum Map Year 7-9

Year 7	CEIAG         •       Maths, Patterns and Symmetry in nature embedded in Sequences.         •       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.         Enrichment       •         •       Monthly Maths Mind Twister         •       Maths Surgery - one-to-one         •       UKMT Junior Maths Challenge
Year 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
Year 9	<ul> <li>CEIAG</li> <li>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.</li> <li>Standard Form used by Scientists when working with molecules and atoms, and Astronomers to measure large distances in space.</li> <li>Financial officers use Formulae to work out pricing structures for car hire, gas/electricity pricing.</li> <li>Interest and depreciation calculations covered in Percentages.</li> <li>Statisticians use Averages, Graphs and Probability to analyse results, see patterns in data and predict future trends.</li> <li>SMSC</li> <li>Using logic and mathematical reasoning to tackle problems faced in real life.</li> <li>Enrichment</li> <li>Monthly Maths Mind Twister</li> <li>Maths Surgery - one-to-one</li> <li>Problem-solving and Finance Day</li> <li>UKMT Intermediate Maths Challenge</li> </ul>



## Maths KS4 Curriculum Map Year 10

	Pathway		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
	GCSE	Focus:	Unit 5: Trigonometry	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						
Year 10	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 1: Number	Unit 2: Area & volume Unit 3: Statistics,	Unit 4: Expressions & Equations Unit 5: Real-life	Unit 6: Decimals & Ratio Unit 7:	Unit 8: Calculating with Fractions	
		Accoccmont			Graphs & Charts	Graphs	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	Circle Theorems Unit 17: More Algebra	Unit 18: Vectors & Geometric Proof Unit 19: Proportion & Graphs		
		Assessment:		Mock Examinations: No				
Year 11	Foundation	Unit 13: Probability Unit 14: Multiplicative Reasoning		Constructions, Loci &	Perimeter, Area &	Unit 19: Congruence, Similarity & Vectors Unit 20: More Algebra	Revision & Exam Preparation	
		Assessment:	Assessment: Mock Examinations: November & March				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	Two Way Tables	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