

# Maths Curriculum Overview 2024 - Key stage 4/5

Course options	Units taught	Examinations
<b>GCSE 9 -1 Foundation</b>	Factors, multiples and primes	Students are entered for their final examination papers at different levels, according to prior individual progress and attainment: Higher level will award grades 3-9 (with 9 being the highest) Foundation level will award grades 1-5
<b>GCSE 9-1 Higher</b>	Decimals	
	Algebra: the basics	
	Expressions and substitution into formulae	Paper 1 (Non calculator exam) This exam is mainly applicable to those areas of maths which don't require a calculator as much depending on the tier classification (higher or foundation). Students undertaking Foundation will be using their maths mastery skills in topics such as algebra, shape, number and data representation. Higher classification students will be required to know additional topics such as surds, vectors and circle theorems. Paper 2 and 3 (calculator exams)  Paper 2 and 3 (calculator exams) These exams will require the student to be skilful in areas of maths which could require the use of a calculator. Such topics could be percentage growth and decay, volume of compound shapes, area of a circles and trigonometry. Higher students will be expected to know additional topics such as the sine & cosine rule and the tangent function
	Sequences	
	Mean mode median range	
	Tables, charts and graphs	
	Real-life graphs	
	Pie charts	
	Scatter graphs	
	Fractions, decimals and percentages	
	Fractions and reciprocals	
	Statistics, sampling	
	Indices, powers and roots	
	Similarity and congruence in 2D	
	Plans and elevations	
	Perimeter, area and volume	
	Ratio	
	Proportion	
	Probability	
	Straight-line graphs	Higher papers Students which are undertaking the higher GCSE course need to have the same skills as the foundation course students but also have mastery of more. Students will be expected to have a more in depth understanding of topics such as shape, algebra, graphs and trigonometry.
	Properties of shapes, parallel lines and angle facts	
	Interior and exterior angles of polygons	
	Percentages	
	Equations and inequalities	
	Quadratic equations: expanding and factorising	
	Quadratic equations: graphs	
	Indices and standard form	
	Circles, cylinders, cones and spheres	
	Right-angled triangles: Pythagoras and trigonometry	
	Multiplicative reasoning	
	Transformations	
<b>Edexcel Entry Level Certificate in Mathematics</b>	Topic 1 – Number: Count	The Pearson Edexcel Entry Level Certificate in Mathematics consists of one externally-set test and one externally-set task for Entry 1 and 2 and two externally-set tests and one externally-set task for Entry 3. Students must complete all their assessment at the same Entry Level.
<b>Entry Level 1</b>	Topic 2 – Number: Read, write and order	
<b>Entry Level 2</b>	Topic 3 – Number: Fractions and decimals	
<b>Entry Level 3</b>	Topic 4 – Number: Pattern	
	Topic 5 – Number: Facts	
	Topic 6 – Number: Operations	
	Topic 7 – Number: Equipment	
	Topic 8 – Algebra	
	Topic 9 – Ratio and proportion	
	Topic 10 – Geometry: 2D shapes	
	Topic 11 – Geometry: 3D shapes	
	Topic 12 – Geometry: Perimeter and area	
	Topic 13 – Geometry: Position, movement and pattern	

		Topic 14 – Geometry: Angles		
		Topic 15 – Measures: Unit		
		Topic 16 – Measures: Measuring instruments		
		Topic 17 – Statistics		
	<b>Functional Skills Mathematics Level 1</b>	Topic 1 - Number: Numbers to one million		The Pearson Edexcel Functional Skills Qualification in Mathematics at Level 1 consists of one externally assessed assessment. Each assessment comprises two sections – a non-calculator section (calculator prohibited) and a calculator section (calculator permitted).
		Topic 2 - Number: Negative numbers		
		Topic 3 - Number: Multiply by 10, 100, 1000		
		Topic 4 - Number: Division facts		
		Topic 5 - Number: Simple formula		
		Topic 6 - Number: Square numbers		
		Topic 7 - Number: Order of precedence		
		Topic 8 - Number: Fractions and mixed numbers		
		Topic 9 - Number: Fractions of amounts		
		Topic 10 - Number: Decimal numbers		
		Topic 11 - Number: Four operations with decimals		
		Topic 12 - Number: Rounding		
		Topic 13 - Number: Percentages		
		Topic 14 - Number: Percentage of amounts		
		Topic 15 - Number: Estimation		
		Topic 16 - Number: Equivalence		
		Topic 17 - Number: Ratio		
		Topic 18 - Measure: Interest		
		Topic 19 - Measure: Discounts		
		Topic 20 - Measure: Convert measurements		
		Topic 21 - Measure: Scales on maps		
		Topic 22 - Measure: Area and perimeter		
		Topic 23 - Measure: Volume		
		Topic 24 - Measure: 2D shapes		
		Topic 25 - Measure: Plans		
		Topic 26 - Measure: Angles		
		Topic 27 - Data: Charts and tables		
		Topic 28 - Data: Grouped data		
		Topic 29 - Data: Mean and range		
		Topic 30 - Data: Probability		
		Topic 31 - Data: Outcomes		