Key Stage 4 Subject Timeline Year 9 to 11

Subject: Mathematics (Foundation)   **Exam Board: Pearson**

	Year 9					
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Topics	Factors, multiples and primes Basic algebra Indices Fractions Ratio and proportion	Factorising Tables, charts and graphs Substitution Scatter graphs/pie charts Fractions revision	Fractions, decimals, percentages Percentages in depth Properties of shape (angles, parallel lines, interior/exterior angles)	Equations Inequalities Venn diagrams Proportion	Perimeter and area Sequences Surface area 3D shapes and volume	Angles Transformations Revision for PPE and feedback
Key skills and Concepts	Factors, multiples Expansion Rules of indices Ratio as a concept	Factorising Algebraic manipulation Understanding correlation Basic fractions calculations Prime factors	Understanding fractions and percentages Spotting angle rules in parallel lines Understanding reverse percentages and compound interest	Solving equations and recap solving quadratics Solving inequalities Understand and use Venn diagrams, including correct notation and finding probabilities	Perimeter and area of compound shapes, circles and more complex 2D shapes Nth term and substitution Surface area Volume of 3D shapes	Interior and exterior angles Angle rules in parallel lines 4 transformations
Threshold Concepts	Find factors and multiples Basic knowledge of algebra	Basic averages Understand concept of fractions Basic algebra skills	Basic percentages and fractions Basic angle understanding	Basic probability Solving one and two step equations Understand inequality signs	Substitution Area of triangle, rectangle and an understanding of perimeter	Basic transformations How to use a compass/angle measurer
Endpoints	Understand how to find HCF, LCM Index laws Basic fraction and ratio questions	Know how to factorise linear expressions Algebraic manipulation Understanding correlation Basic fractions calculations Prime factors	Understanding fractions and percentages Spotting angle rules in parallel lines Understanding reverse percentages and compound interest	Solving equations and recap solving quadratics Solving inequalities Understand and use Venn diagrams, including correct notation and finding probabilities	Perimeter and area of compound shapes, circles and more complex 2D shapes Nth term and substitution Surface area Volume of 3D shapes	Interior and exterior angles Angle rules in parallel lines 4 transformations
Assessment	Individual class formative assessment	End of term assessment for all classes	Individual class formative assessment	Individual class formative assessment	Individual class formative assessment	PPE

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	Year 10					
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Topics	Straight line graphs Ratio Proportion Angles in parallel lines Exchange rates Conversion graphs Real life graphs Revision of ratio/proportion Probability Pythagoras	Trigonometry Equations, factorising, inequalities revision Compound shapes Fractions and reciprocals Revision and exam preparation	Constructions, loci and bearings Circles, cylinders, cones and spheres Quadratics Converting units Surface area	Revision for PPEs Feedback and corrections Revision on averages/sampling Sample space diagrams Inverse proportion BIDMAS Tree diagrams	Probability Simultaneous equations Rearranging formulae Decimal calculations Standard form Bounds Vectors Interest	Cubic and reciprocal graphs Transformations Indices and standard form Quadratic equations Fractions Financial maths Scatter graphs
Key skills and Concepts	Straight line graphs Basic ratio Understanding probability Pythagoras	Understanding trigonometry Solving equations and quadratics Fractions calculations Exam practice	Constructing triangles and bisectors Calculating area/volume of circles, cylinders, spheres and prisms.	Revision Finding averages Sampling	Probability Solving simultaneous equations Changing the subject of a formula	Graphs Transformations Index laws Standard form Solving quadratics
Threshold Concepts	Basic probability Substitution Some knowledge of Pythagoras	Use of calculators Solving one and two step equations Factorising Basic fractions	Using compasses Area of a circle Circumference of a circle Factorising	Understanding of mean, mode, median and range	Basic algebra Basic probability	Substitution Basic index laws Factorising Basic transformations
Endpoints	Straight line graphs Basic ratio Understanding probability Pythagoras	Understanding trigonometry Solving equations and quadratics Fractions calculations Exam practice	Constructing triangles and bisectors Calculating area/volume of circles, cylinders, spheres and prisms.	Worded questions on averages Confident with data questions	Probability Solving simultaneous equations Changing the subject of a formula	Graphs Transformations Index laws Standard form Solving quadratics
Assessment	Individual class formative assessment	Individual class formative assessment	Individual class formative assessment	PPE	Individual class formative assessment	End of year assessment

Key Stage 4 Subject Timeline Year 9 to 11

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		Year 11				
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Topics	Revision of: Basic algebra, quadratics, factorising Simultaneous equations Fractions, decimals, percentages Ratio Angles Pythagoras and Trigonometry bounds Perimeter, area, circles Graphs	Revision of: Transformations Vectors Probability Similarity/congruency Collecting data Graphs, charts Averages, scatter graphs Factors, multples, primes Probability PPE	Standard form/indices Inequalities Decimals Rearranging Construction/loci Real life graphs Proportion Angles and shapes PPE feedback and corrections	Bespoke SOW following PPEs	Bespoke SOW following PPEs	
Key skills and Concepts	Factorising Converting fractions, decimals and percentages Basic ratio Using Pythagoras and Trigonometry Calculating perimeter and area Substitution into graphs and calculating gradient	Using data and drawing charts Factors, multiples and primes Basic probability Transformations				
Threshold Concepts	Revision so previous knowledge from year 9 and 10 content	Revision so previous knowledge from year 9 and 10 content				

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Endpoints	Factorising Converting fractions, decimals and percentages Basic ratio Using Pythagoras and Trigonometry Calculating perimeter and area Substitution into graphs and calculating gradient					
Assessment	In class formative assessment	PPE	PPE	Preparation for GCSE	GCSE	GCSE