



Years 10 & 11 Curriculum

GCSE: Mathematics



Year 10	Term 1 (Autumn)		Term 2 (Spring)		Term 3 (Summer)	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Set 1 to 2	• Rounding and checking • Indices and roots • Factors, multiples and primes • Standard form and surds • Sequences • Algebraic manipulation • Averages and spread	• Representing and interpreting data • Fractions and percentages • Ratio and proportion • Polygons and parallel lines	• Pythagoras' Theorem • Trigonometry • Real life graphs • Coordinate geometry	• Other graphs • Perimeter, area and circles • 3D shapes • Accuracy and bounds	• Transformations	• Constructions, loci and bearings • Solving quadratic equations • Solving simultaneous equations • Inequalities • Probability • Multiplicative reasoning • Similarity and congruence
Sets 3 to 5	• Rounding and checking • Indices and roots • Factors, multiples and primes • Standard form and surds • Sequences • Algebraic manipulation • Averages and spread	• Representing and interpreting data • Fractions and percentages • Ratio and proportion • Polygons and parallel lines	• Pythagoras' Theorem • Trigonometry • Real life graphs • Coordinate geometry	• Other graphs • Perimeter, area and circles • 3D shapes • Accuracy and bounds	• Pupils will move to either Higher (the same content as Set 1 to 2) or Foundation (the same content as Set 6) tier content dependent on the outcomes from their Mock Exams and their work in class	
Set 6	• Integers and place value • Decimals • Indices, powers and roots • Factors, multiples and primes • Algebraic manipulation • Equations and inequalities	• Sequences • Tables, charts and graphs • Pie charts and scatter graphs • Fractions, decimals and percentages	• Percentages • Polygons, parallel lines and angle facts	• Sampling and averages • Perimeter, area and volume • Real life graphs • Straight line graphs	• Transformations	• Ratio and proportion • Pythagoras' Theorem • Trigonometry • Probability • Multiplicative reasoning

Year 11	Term 1 (Autumn)		Term 2 (Spring)		Term 3 (Summer)	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Set 1 to 3	• Further trigonometry • Trigonometric graphs • Further algebra	• Collecting data • Cumulative frequency • Histograms • Circle theorems	• Circle geometry • Further algebra 2	• Rates of change • Area under a curve • Vectors	• Past paper revision	
Sets 4 to 6	• Plans and elevations • Construction, loci and bearings • Quadratics • Circles and cylinders	• Fractions • Indices • Standard form • Congruence and similarity	• Vectors	• Rearranging formulae • Simultaneous equations	• Past paper revision	



Year 10 Assessment Mathematics



All pupils will sit several knowledge tests, a progress test and a mock examination in Year 10.

Year 10	Knowledge Tests	Formal Assessment	Mock Exam			Revision Resources
	Autumn/Spring Terms	Autumn Term	Summer Term			<i>Kennet Resources</i> - Core Questions - Knowledge Organisers - Learning Habits <i>External Resources</i> www.mymaths.co.uk www.bbc.com/bitesize
Style of Assessment	Each knowledge test will consist of 20 multiple-choice questions	Paper 1: Non-Calculator Paper 2: Calculator	Paper 1: Non-Calculator Paper 2: Calculator			
Topics Assessed	Core knowledge taught until that point in the academic year	All topics up until Year 10 November	The exam will assess any content taught up to this point in the year or any previously taught content. The units covered are listed below. A revision list and revision materials will be provided prior to the assessment			
			Higher (Set 1 – 2) - Rounding and checking - Indices and roots - Factors, multiples and primes - Standard form and surds - Sequences - Algebraic manipulation Averages and spread - Representing and interpreting data - Fractions and percentages - Ratio and proportion Polygons & parallel lines - Pythagoras' Theorem - Trigonometry - Real life & other graphs - Coordinate geometry - Perimeter, area and circles	Core (Set 3 – 5) - Rounding and checking - Indices and roots - Factors, multiples and primes - Standard form and surds - Sequences - Algebraic manipulation Averages and spread - Representing and interpreting data - Fractions and percentages - Ratio and proportion Polygons & parallel lines - Pythagoras' Theorem - Trigonometry - Real life graphs - Coordinate geometry - Other graphs - Perimeter, area and circles	Foundation (Set 6) - Integers and place value - Decimals - Indices, powers and roots - Factors, multiples and primes - Algebraic manipulation Equations & inequalities - Sequences - Tables, charts and graphs - Pie charts and scatter graphs Fractions, decimals & percentages - Percentages Polygons, parallel lines & angle facts - Sampling and averages - Perimeter, area and volume	



Years 10 & 11 Assessments *(continued)*

Mathematics



In Year 11, pupils will sit an assessment and a mock examination.

Year 11		Assessment	Mock Exam	Revision Resources
		Autumn Term	Autumn Term	
Style of Assessment	Paper 1: Non-Calculator; Paper 2: Calculator; Paper 3: Calculator		Paper 1: Non-Calculator; Paper 2: Calculator; Paper 3: Calculator	<i>Kennet Resources</i> • Core Questions • Knowledge Organisers • Learning Habits <i>External Resources</i> • www.mymaths.co.uk • www.bbc.com/bitesize
Topics Assessed	This assessment will be made up of three GCSE paper, covering all content covered in Year 10		This mock exam will be made up of three full GCSE papers. These cover all GCSE content	
	<i>Higher (Sets 1 – 6):</i> • Indices • Surds • Standard Form • Estimating & Accuracy • 2D Shapes & Angles • Circle Geometry • Expanding & Factorising • Sequences • Expressions • Pythagoras' Theorem • Fractions & Decimals • Transformations • Percentages • Ratio & Proportion • Scatter Graphs • Constructions & Loci • Formulae • Simultaneous Equations • Inequality • Graphs • Trigonometry • Vectors • Measures • Quadratic Equations	<i>Foundation (Sets 7 – 12):</i> • Number skills • Averages & Spread • Fractions, Decimals & Percentages • 2D Shapes • Equations, Expressions & Inequalities • Directed Numbers • Collecting & Recording Data • Transformations • Calculating with Fractions • Angles • Calculating with Decimals • Perimeter & Area • Probability • Graphs & Coordinates • Real life Graphs • Ratio & Proportion • Powers and roots • Circumference & area of circles • Pythagoras's Theorem		