



# 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	<ul style="list-style-type: none"><li>• Rounding and checking</li><li>• Indices and roots</li><li>• Factors, multiples and primes</li><li>• Standard form and surds</li><li>• Sequences</li><li>• Algebraic manipulation</li><li>• Averages and spread</li></ul>	<ul style="list-style-type: none"><li>• Representing and interpreting data</li><li>• Fractions and percentages</li><li>• Ratio and proportion</li><li>• Polygons and parallel lines</li></ul>	<ul style="list-style-type: none"><li>• Pythagoras' Theorem</li><li>• Trigonometry</li><li>• Real life graphs</li><li>• Coordinate geometry</li></ul>	<ul style="list-style-type: none"><li>• Other graphs</li><li>• Perimeter, area and circles</li><li>• 3D shapes</li><li>• Accuracy and bounds</li></ul>	<ul style="list-style-type: none"><li>• Transformations</li></ul>	<ul style="list-style-type: none"><li>• Constructions, loci and bearings</li><li>• Solving quadratic equations</li><li>• Solving simultaneous equations</li><li>• Inequalities</li><li>• Probability</li><li>• Multiplicative reasoning</li><li>• Similarity and congruence</li></ul>
Sets 3 to 5	<ul style="list-style-type: none"><li>• Rounding and checking</li><li>• Indices and roots</li><li>• Factors, multiples and primes</li><li>• Standard form and surds</li><li>• Sequences</li><li>• Algebraic manipulation</li><li>• Averages and spread</li></ul>	<ul style="list-style-type: none"><li>• Representing and interpreting data</li><li>• Fractions and percentages</li><li>• Ratio and proportion</li><li>• Polygons and parallel lines</li></ul>	<ul style="list-style-type: none"><li>• Pythagoras' Theorem</li><li>• Trigonometry</li><li>• Real life graphs</li><li>• Coordinate geometry</li></ul>	<ul style="list-style-type: none"><li>• Other graphs</li><li>• Perimeter, area and circles</li><li>• 3D shapes</li><li>• Accuracy and bounds</li></ul>	<ul style="list-style-type: none"><li>• Students 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</li></ul>	
Set 6	<ul style="list-style-type: none"><li>• Integers and place value</li><li>• Decimals</li><li>• Indices, powers and roots</li><li>• Factors, multiples and primes</li><li>• Algebraic manipulation</li><li>• Equations and inequalities</li></ul>	<ul style="list-style-type: none"><li>• Sequences</li><li>• Tables, charts and graphs</li><li>• Pie charts and scatter graphs</li><li>• Fractions, decimals and percentages</li></ul>	<ul style="list-style-type: none"><li>• Percentages</li><li>• Polygons, parallel lines and angle facts</li></ul>	<ul style="list-style-type: none"><li>• Sampling and averages</li><li>• Perimeter, area and volume</li><li>• Real life graphs</li><li>• Straight line graphs</li></ul>	<ul style="list-style-type: none"><li>• Transformations</li></ul>	<ul style="list-style-type: none"><li>• Ratio and proportion</li><li>• Pythagoras' Theorem</li><li>• Trigonometry</li><li>• Probability</li><li>• Multiplicative reasoning</li></ul>

### 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	<ul style="list-style-type: none"><li>• Further trigonometry</li><li>• Trigonometric graphs</li><li>• Further algebra</li></ul>	<ul style="list-style-type: none"><li>• Collecting data</li><li>• Cumulative frequency</li><li>• Histograms</li><li>• Circle theorems</li></ul>	<ul style="list-style-type: none"><li>• Circle geometry</li><li>• Further algebra 2</li></ul>	<ul style="list-style-type: none"><li>• Rates of change</li><li>• Area under a curve</li><li>• Vectors</li></ul>	<ul style="list-style-type: none"><li>• Past paper revision</li></ul>	
Sets 4 to 6	<ul style="list-style-type: none"><li>• Plans and elevations</li><li>• Construction, loci and bearings</li><li>• Quadratics</li><li>• Circles and cylinders</li></ul>	<ul style="list-style-type: none"><li>• Fractions</li><li>• Indices</li><li>• Standard form</li><li>• Congruence and similarity</li></ul>	<ul style="list-style-type: none"><li>• Vectors</li></ul>	<ul style="list-style-type: none"><li>• Rearranging formulae</li><li>• Simultaneous equations</li></ul>	<ul style="list-style-type: none"><li>• Past paper revision</li></ul>	




# 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			<div>Kennet Resources</div> <ul style="list-style-type: none"><li>Core Questions</li><li>Knowledge Organisers</li><li><a href="#">Learning Habits</a></li></ul> <div>External Resources</div> <ul style="list-style-type: none"><li><a href="http://www.mymaths.co.uk">www.mymaths.co.uk</a></li><li><a href="http://www.bbc.com/bitesize">www.bbc.com/bitesize</a></li></ul> <div>You can also find additional revision material on Frog</div> 
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	<ul style="list-style-type: none"><li>Core knowledge taught until that point in the academic year</li></ul>	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) <ul style="list-style-type: none"><li>Rounding and checking</li><li>Indices and roots</li><li>Factors, multiples and primes</li><li>Standard form and surds</li><li>Sequences</li><li>Algebraic manipulation</li></ul> Averages and spread <ul style="list-style-type: none"><li>Representing and interpreting data</li><li>Fractions and percentages</li><li>Ratio and proportion</li></ul> Polygons & parallel lines <ul style="list-style-type: none"><li>Pythagoras' Theorem</li><li>Trigonometry</li><li>Real life &amp; other graphs</li><li>Coordinate geometry</li><li>Perimeter, area and circles</li></ul>	Core (Set 3 – 5) <ul style="list-style-type: none"><li>Rounding and checking</li><li>Indices and roots</li><li>Factors, multiples and primes</li><li>Standard form and surds</li><li>Sequences</li><li>Algebraic manipulation</li></ul> Averages and spread <ul style="list-style-type: none"><li>Representing and interpreting data</li><li>Fractions and percentages</li><li>Ratio and proportion</li></ul> Polygons & parallel lines <ul style="list-style-type: none"><li>Pythagoras' Theorem</li><li>Trigonometry</li><li>Real life graphs</li><li>Coordinate geometry</li><li>Other graphs</li><li>Perimeter, area and circles</li></ul>	Foundation (Set 6) <ul style="list-style-type: none"><li>Integers and place value</li><li>Decimals</li><li>Indices, powers and roots</li><li>Factors, multiples and primes</li><li>Algebraic manipulation</li></ul> Equations & inequalities <ul style="list-style-type: none"><li>Sequences</li><li>Tables, charts and graphs</li><li>Pie charts and scatter graphs</li></ul> Fractions, decimals & percentages <ul style="list-style-type: none"><li>Percentages</li></ul> Polygons, parallel lines & angle facts <ul style="list-style-type: none"><li>Sampling and averages</li><li>Perimeter, area and volume</li></ul>	




# 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 September		Autumn Term December	
Style of Assessment	Paper 1: Non-Calculator; Paper 2: Calculator; Paper 3: Calculator		Paper 1: Non-Calculator; Paper 2: Calculator; Paper 3: Calculator	<p>Kennet Resources</p> <ul style="list-style-type: none"><li>• Core Questions</li><li>• Knowledge Organisers</li><li>• <a href="#">Learning Habits</a></li></ul>
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	<p>External Resources</p> <ul style="list-style-type: none"><li>• <a href="http://www.mymaths.co.uk">www.mymaths.co.uk</a></li><li>• <a href="http://www.bbc.com/bitesize">www.bbc.com/bitesize</a></li></ul> <p>You can also find additional revision material on Frog</p> 
	<p>Higher (Sets 1 – 6):</p> <ul style="list-style-type: none"><li>• Indices</li><li>• Surds</li><li>• Standard Form</li><li>• Estimating &amp; Accuracy</li><li>• 2D Shapes &amp; Angles</li><li>• Circle Geometry</li><li>• Expanding &amp; Factorising</li><li>• Sequences</li><li>• Expressions</li><li>• Pythagoras' Theorem</li><li>• Fractions &amp; Decimals</li><li>• Transformations</li><li>• Percentages</li><li>• Ratio &amp; Proportion</li><li>• Scatter Graphs</li><li>• Constructions &amp; Loci</li><li>• Formulae</li><li>• Simultaneous Equations</li><li>• Inequality</li><li>• Graphs</li><li>• Trigonometry</li><li>• Vectors</li><li>• Measures</li><li>• Quadratic Equations</li></ul>	<p>Foundation (Sets 7 – 12):</p> <ul style="list-style-type: none"><li>• Number skills</li><li>• Averages &amp; Spread</li><li>• Fractions, Decimals &amp; Percentages</li><li>• 2D Shapes</li><li>• Equations, Expressions &amp; Inequalities</li><li>• Directed Numbers</li><li>• Collecting &amp; Recording Data</li><li>• Transformations</li><li>• Calculating with Fractions</li><li>• Angles</li><li>• Calculating with Decimals</li><li>• Perimeter &amp; Area</li><li>• Probability</li><li>• Graphs &amp; Coordinates</li><li>• Real life Graphs</li><li>• Ratio &amp; Proportion</li><li>• Powers and roots</li><li>• Circumference &amp; area of circles</li><li>• Pythagoras's Theorem</li></ul>		