

Year 11	Big Questions	Small Questions Foundation	Small Questions Higher	
Autumn 1	Algebra Revision	<ul style="list-style-type: none"> <li>• Substitution into expressions</li> <li>• Rearranging equations (make the subject)</li> <li>• Recap of drawing linear graphs</li> </ul>	<ul style="list-style-type: none"> <li>• Draw linear graphs</li> <li>• Calculate the gradient: from a line and a set of coordinates</li> <li>• Calculate the equation of a line</li> <li>• Calculate the gradient of a perpendicular line</li> </ul>	
	Graphs	<ul style="list-style-type: none"> <li>• Calculate the gradient of a linear graph: from the line and a pair of coordinates</li> <li>• Calculate the equation of a line from a graph</li> <li>• Calculate the equation of a line from coordinates</li> </ul>	<ul style="list-style-type: none"> <li>• Plot and use quadratic graphs</li> <li>• Sketch quadratic graphs</li> <li>• Plot and use cubic and reciprocal graphs</li> <li>• Sketch cubic and reciprocal graphs</li> </ul>	
		<ul style="list-style-type: none"> <li>• Plotting simple quadratic graphs</li> <li>• Identify properties of simple quadratic graphs</li> <li>• Plot more complex quadratic graphs</li> <li>• Use quadratic graphs to solve equations</li> </ul>	<ul style="list-style-type: none"> <li>• Translating graphs of functions</li> <li>• Reflecting graphs of functions</li> <li>• Stretching graphs of functions</li> </ul>	
	<b>MINI TEST</b>			
	Graphs	<ul style="list-style-type: none"> <li>• Plot simple cubic graphs</li> <li>• Plot simple reciprocal graphs</li> <li>• Draw and read distance time graphs</li> </ul>	<ul style="list-style-type: none"> <li>• Plot the graphs of sine, cosine and tangent</li> <li>• Understand the effect of graph transformations on the trigonometric graphs</li> <li>• Use the trigonometric graphs to find solutions</li> </ul>	
	Graphs / Pythagoras & Trig	<ul style="list-style-type: none"> <li>• Calculate the hypotenuse using Pythagoras</li> <li>• Calculate a short side using Pythagoras</li> <li>• Solve multi stage problems using Pythagoras</li> </ul>	<ul style="list-style-type: none"> <li>• Use the trapezium rule to estimate the area under a curve</li> <li>• Identify if the estimate is over or under</li> <li>• Plot equations of circles</li> <li>• Find the equation of a circle</li> <li>• Solve problems involving equations of a circle and linear graphs</li> </ul>	
		<ul style="list-style-type: none"> <li>• Identify sides in a right angles triangle</li> <li>• Know exact values for sin and cos of 0, 30, 45, 60, 90</li> <li>• Use trigonometry to calculate a missing side</li> </ul>	<ul style="list-style-type: none"> <li>• Use Pythagoras to find missing sides in right angled triangles</li> <li>• Use Pythagoras in 3D</li> <li>• Solve multi stage problems using Pythagoras</li> </ul>	

	<ul style="list-style-type: none"> <li>Use trigonometry to find a missing length</li> <li>Solve multi stage problems using Pythagoras and trigonometry</li> </ul>	<ul style="list-style-type: none"> <li>Know exact values for sin and cos of 0, 30, 45, 60, 90</li> <li>Use trigonometry to calculate a missing sides and angles in right angled triangles</li> <li>Trigonometry in 3D</li> <li>Solve multi stage problems using Pythagoras and trigonometry</li> </ul>
<b>MINI TEST</b>		
<p>Vectors (F)</p> <p>Trig Cont (H)</p>	<ul style="list-style-type: none"> <li>Draw simple vectors</li> <li>Use vectors to explain simple paths</li> <li>Add and subtract vectors</li> <li>Multiply vectors by a scalar</li> </ul>	<ul style="list-style-type: none"> <li>Use the Sine rule to find missing sides and angles</li> <li>Use the Cosine rule to find missing sides and angles</li> <li>Know when to use each rule</li> <li>Find the area of a triangle using <math>\frac{1}{2}ab\sin C</math></li> <li>Solve problems using trigonometry</li> </ul>
Revision/ Catch Up	Chance to catch up or revise any topics missed or rushed.	
<b>HALF TERM ASSESSMENT</b>		

Year 11	Big Questions	Small Questions Foundation	Small Questions Higher
Autumn 2	Frac, Dec & Perc (F)  Vectors (H)	<ul style="list-style-type: none"> <li>Simplify fractions</li> <li>Equivalent fractions</li> <li>Convert between improper and mixed numbers</li> <li>Convert between fractions, decimals and percentages</li> <li>Order fractions, decimals and percentages</li> </ul>	<ul style="list-style-type: none"> <li>Draw vectors</li> <li>Use vectors to explain simple paths</li> <li>Add and subtract vectors</li> <li>Multiply vectors by a scalar</li> <li>Use vectors to construct geometric arguments and proofs</li> </ul>
	Probability	<ul style="list-style-type: none"> <li>Use terminology associated with probability</li> <li>Calculate the probability of an event happening and not happening</li> <li>Experimental probability</li> </ul>	<ul style="list-style-type: none"> <li>Use terminology associated with probability</li> <li>Calculate the probability of an event happening and not happening</li> <li>Experimental probability</li> </ul>
	<b>MINI TEST</b>		
	Probability	<ul style="list-style-type: none"> <li>Understand the notation associated with Venn diagrams</li> <li>Sort numbers into Venn diagrams: double and triple</li> <li>Solve probability problems using Venn diagrams: double and triple</li> </ul>	<ul style="list-style-type: none"> <li>Understand the notation associated with Venn diagrams</li> <li>Sort numbers into Venn diagrams: double and triple</li> <li>Solve probability problems using Venn diagrams: double and triple</li> </ul>
	<ul style="list-style-type: none"> <li>Use sample space diagrams to list all possible outcomes</li> <li>Find probabilities from sample space diagrams</li> <li>Construct tree diagrams, with replacement</li> <li>Find probabilities from tree diagrams</li> </ul>	<ul style="list-style-type: none"> <li>Use sample space diagrams to list all possible outcomes</li> <li>Find probabilities from sample space diagrams</li> <li>Construct tree diagrams, with replacement</li> <li>Find probabilities from tree diagrams</li> <li>Use tree diagrams from conditional probability</li> </ul>	

<b>MINI TEST</b>			
	Sequences	<ul style="list-style-type: none"> <li>Continue a pattern given a rule</li> <li>Explain a sequence in words</li> <li>Extend visual patterns</li> <li>Generate a sequence from the nth term</li> </ul>	<ul style="list-style-type: none"> <li>Continue a linear sequence</li> <li>Generate a linear sequence from the nth terms</li> <li>Calculate the nth term of a linear sequence</li> <li>Use the nth term to prove a term is in a sequence</li> </ul>
		<ul style="list-style-type: none"> <li>Find the nth term of a sequence: include visual sequences</li> <li>Use the nth term to prove if a number is in a sequence</li> <li>Identify and continue special sequences: square numbers, triangular numbers, Fibonacci sequence</li> <li>Generate arithmetic and simple geometric sequences</li> <li>Use the nth term to generate simple quadratic sequences</li> </ul>	<ul style="list-style-type: none"> <li>Generate a quadratic sequence from the nth term</li> <li>Find the nth term of a quadratic sequence</li> <li>Identify and continue special sequences: square numbers, triangular numbers, Fibonacci sequence</li> <li>Generate arithmetic and geometric sequences</li> </ul>
<b>DECEMBER MOCK</b>			
<b>Yea</b>	<b>Big Questions</b>	<b>Small Questions Foundation</b>	<b>Small Questions Higher</b>
<b>11<sup>r</sup></b> <b>Spring 1</b>	Handling Data (F)	Revision based on identified weak areas - including weekly past paper.	
	Functions (H)	Revision based on identified weak areas - including weekly past paper.	
	Ratio & Proportion	Revision based on identified weak areas - including weekly past paper.	
		Revision based on identified weak areas - including weekly past paper.	
	Units &	Revision based on identified weak areas - including weekly past paper.	

	Proportional ity	Revision based on identified weak areas - including weekly past paper.
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<u>Year</u> <u>11</u>	<b>Big Questions</b>	<b>Small Questions Foundation</b>	<b>Small Questions Higher</b>
<b>Spring 2</b>	Equations & Inequalities	Revision based on identified weak areas - including weekly past paper.	
	Fractions	Revision based on identified weak areas - including weekly past paper.	
	Percentages	Revision based on identified weak areas - including weekly past paper.	
	Area & Volume	Revision based on identified weak areas - including weekly past paper.	
		Revision based on identified weak areas - including weekly past paper.	
	Angles	Revision based on identified weak areas - including weekly past paper.	
	<b>Half term to include MARCH MOCK</b>		

<u>Year</u>	<b>Big Questions</b>	<b>Small Questions Foundation</b>	<b>Small Questions Higher</b>
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<b>H</b>		
<b>Summer 1</b>	1	Revision based on identified weak areas - including weekly past paper.
	2	Revision based on identified weak areas - including weekly past paper.
	3	Revision based on identified weak areas - including weekly past paper.
	4	Revision based on identified weak areas - including weekly past paper.
	5	Revision based on identified weak areas - including weekly past paper.