

GCSE Mathematics (Higher) BHES
Year 11

Autumn Term						
Term 1			Term 2			
7 weeks		28hrs	7 weeks		28hrs	
Area	Topic	Hours	Area	Topic	Hours	
Number	Number Revision	4				
Statistics	Further Statistics	11	Ratio & Proportion	Multiplicative Reasoning	12	
	<i>Subject</i>	<i>Grade</i>		<i>Subject</i>	<i>Grade</i>	
	Sampling	4		Growth and Decay	5	
	Cumulative Frequency	6		Compound Measures - calculation using rate - Speed = distance / time problems	5 3	
	Box Plots	6		Further Compound Measures - converting area and volume measures	4	
Extension	Drawing Histograms - frequency density - drawing histograms	7/8	Extension Extension	Ratio and Proportion - direct and indirect proportion - using relationships involving ratios - recognising graphs of $y=1/x$ and $y=x$	7 6 6/7	
Extension	Interpreting Histograms	8				
Extension	Comparing and describing populations - comparing 2 data sets	8				
Algebra	Further Algebra	13	Geometry & Measure	More Trigonometry	16	
	<i>Subject</i>	<i>Grade</i>		<i>Subject</i>	<i>Grade</i>	
	Rearranging Formulae - involving power in subject - where the subject appears twice	5 6	Extension	Graph of Sine Function	8	
	Simplifying Algebraic Fractions	6	Extension	Graph of Cosine Function	8	
Extension	Algebraic Fractions - adding and subtracting	8	Extension	Graph of Tangent Function	8	
Extension	- multiplying and dividing - changing the subject (variable in denominator)	8 5				
Extension	Surds - manipulating - simplifying	7 8		Calculating area and the Sine Rule	7	
	Solving Algebraic Fraction Equations - finding LCM of two fractions - solving quadratic equations by factorisation	5	Extension	The Cosine Rule and 2D trig problems - use of Cosine rule - solving bearing problems using trig	7 8	
Extension	Functions - using function notation	6	Extension	Solving problems in 3D - using Pythagoras Theorem - using trigonometry	7 8	
Extension	- finding composite functions - finding inverse functions	8 8				
Extension	Proof - proving using simple logic - proving a result using Algebra	4 7				

Spring Term						
Term 3			Term 4			
6 weeks		24hrs	7 weeks		28 hrs	
Area	Topic	Hours	Area	Topic	Hours	
Geometry & Measure	Circle Theorem	10	General	Numbers Review	4	
	<i>Subject</i>	<i>Grade</i>		Extension Work	9	
	Radii and Chords	8		<i>Subject</i>	<i>Grade</i>	
	Tangents	8		Grade 6 / 7 Topics Not Covered		
	Angles in Circles - understand and use facts about angles subtended from the centre - understand and use facts on angles in a semicircle - finding missing angles using theorems	8		Topic Review		
	Further angles in a circle - understand and use facts about angles subtended from the circumference - understand and use facts about cyclic quadrilaterals - understand and use facts about angles in the same segment - prove alternative segment theorem	8				
Extension	Applying Circle Theorems to Solve Problems	8/9				
Geometry & Measure	Vectors & Geometric Proofs	14	General	Extension Work	13	
	<i>Subject</i>	<i>Grade</i>		<i>Subject</i>	<i>Grade</i>	
	Vectors and vector notation - correct use of notation - determining the magnitude of a vector	6		Grade 6 / 7 Topics Not Covered		
	Vector Arithmetic	6		Topic Review		
Extension	Further Vector Arithmetic - solving problems	7				
Extension	Parallel Vectors and Collinear Points	8				
Extension	Solving Geometric problems using Vectors	8/9				

Summer Term			
Term 5		Term 6	

5 weeks		20 hrs	7 weeks	28 hrs	
Area	Topic	Hours	Area	Topic	Hours
	Revision Past Papers Extension Exercise			GCSE Examinations	

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