YEAR 11	Autumn 2020		Higher			
DATES	UNIT / LESSON	PRIOR KNOWLEDGE	GRADE FROM …	GRADE TO …	OBJECTIVES	Corbett
Begin with 4/5 weeks to recap work from last year as required, with particular emphasis on the summer term topics						
05/10/2020	**week to include** TEST					
	18 Vectors and geometric proof	Use vectors to describe translations. Recall and use Pythagoras' Theorem. Recall the properties of triangles and quadrilaterals. Express the relationship between two quantities as a ratio. Simplify surds.	**6**	**9**		
12/10/2020	18.1 Vectors and vector notation	Use vectors to describe translations. Recall and use Pythagoras' Theorem. Simplify surds.	**6**	**7**	Understand and use vector notation. Work out the magnitude of a vector.	353a
	18.2 Vector arithmetic	Understand the components of a vector and use vectors to describe translations. Recall properties of triangles and quadrilaterals.	**7**	**7**	Calculate using vectors and represent the solutions graphically. Calculate the resultant of two vectors.	
19/10/2020	18.3 More vector arithmetic	Use properties of a parallelogram to identify equal and parallel lines. Add two column vectors.	**7**	**8**	Solve problems using vectors. Use the resultant of two vectors to solve vector problems.	
HALF TERM						
02/11/2020	18.4 Parallel vectors and collinear points	Identify parallel column vectors. Add and subtract column vectors.	**7**	**9**	Express points as position vectors. Prove lines are parallel. Prove points are collinear.	353
09/11/2020	18.5 Solving geometric problems	Understand the relationship between ratio and fractional parts Identify parallel vectors	**9**	**9**	Solve geometric problems in two dimensions using vector methods. Apply vector methods for simple geometric proofs.	
	19 Proportion and graphs	Draw linear and quadratic graphs. Recognise linear and quadratic graphs. Calculate the gradient of a linear function between two points. Recall transformations of trigonometric functions. Write statements of direct proportion and forming an equation to find values. Recognise a graph showing direct proportion. Recall and use the formula speed = distance ÷ time.	**4**	**9**		
16/11/2020 23/11/2020	19.1 Direct proportion	Recognise direct proportion Write equations for quantities in direct proportion.	**6**	**7**	Write and use equations to solve problems involving direct proportion.	254
30/11/2020	19.2 More direct proportion	Use direct proportion. Find the constant of proportionality.	**7**	**7**	Write and use equations to solve problems involving direct proportion. Solve problems involving square and cubic proportionality.	255
07/12/2020 14/12/2020	19.3 Inverse proportion	Using inverse proportion to solve simple problems. Write equations for quantities in direct proportion.	**7**	**8**	Write and use equations to solve problems involving inverse proportion. Use and recognise graphs showing inverse proportion.	