

Bishop Milner Catholic College



Curriculum Plan-Subject: **Mathematics**

Stage 11

Autumn Term	Spring Term	Summer Term
<p>Investigating Properties of Shape - Solve problems using Pythagoras' Theorem in 3-D. Know and use the trigonometric formula for non-right angled triangles (14 hours)</p> <p>Calculating - Simplify expressions given in surd form, including rationalising the denominator. (6 hours)</p> <p>Solving Equations and Inequalities I -Solve quadratic equations by completing the square, using the quadratic formula or by iterative processes. (6 hours)</p>	<p>Algebraic proficiency: visualising I - Sketch graphs of exponential and trigonometric functions. Sketch translations an reflections of functions (6 hours)</p> <p>Analysing statistics - Sketch and use Histograms with unequal class widths.(6 hours)</p> <p>Algebraic proficiency: visualising II - Find links between quadratic functions and their graphs. Apply concepts of average rate of change. (8 hours)</p> <p>Mathematical movement II - Use vectors to construct proofs(4 hours)</p>	
HALF TERM		
<p>Mathematical movement I - Describe and use transformations on a co-ordinate grid including negative scale factors (2hours)</p> <p>Algebraic proficiency: tinkering - Use composite functions. (2 hours)</p> <p>Proportional reasoning - Set up and solve equations using direct and inverse proportion (6 hours)</p> <p>Pattern sniffing - Use geometric sequences involving surds or other rational numbers(2hours)</p> <p>Solving equations and inequalities II - Solve quadratic inequalities graphically or algebraically. (8 hours)</p>		

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