## Maths Year 11 foundation curriculum map



Year 11	T1	T2	Т3	T4	T5	Т6
Content / Topic for Term	Pythagoras and trigonometry Quadratic equations Perimeter, area and volume Linear and simultaneous equations	Number recap and surds Worded questions Transformations Vectors	Congruence and similarity Linear and quadratic graphs Constructions and loci Ratio and proportion recap	Data and probability recap Exam prep Lessons planned following PPEs	Exam prep Lessons planned following PPEs	Exam prep Lessons planned following PPEs
Key knowledge for acquisition, recall and application in assessment or exam	<ul> <li>Pythagoras' Theorem</li> <li>SOHCAHTOA ratios</li> <li>Exact trigonometric values</li> <li>Define factorise/expand</li> <li>Steps to factorise a quadratic</li> <li>Define equation/identity/formulae/inequality</li> <li>Know the formulae for 2D and 3D shapes</li> <li>Label the parts of a circle</li> <li>Define and recognise a prism</li> </ul>	<ul> <li>Define a surd</li> <li>Formula for percentage change</li> <li>Four types of transformations and key aspects of each</li> <li>Describe a vector and how to denote it</li> </ul>	<ul> <li>Define congruence and similarity</li> <li>Use SSS/ASA/ SAS/RHS to explain congruence</li> <li>Define tessellation</li> <li>Define and use gradient and intercepts</li> <li>Define the terms parallel and perpendicular</li> <li>Know where vertex/lines of symmetry/</li> </ul>	<ul> <li>Understand linear interpolation and extrapolation</li> <li>Define union, intersection and complement of an event</li> <li>Know the probability laws</li> </ul>		



Key skills to apply in	<ul> <li>Know the difference between area/ surface area and volume</li> <li>Methods of elimination and substitution</li> <li>Apply Pythagoras's Theorem to worded</li> </ul>	• Four operations with fractions	<ul> <li>intercepts are on a parabola</li> <li>Steps needed to construct an SSS/ASA/SAS triangle</li> <li>Define the term loci</li> <li>Define unitary method</li> <li>Recognise graphs of direct/inverse proportion</li> <li>Find a scale factor</li> </ul>	• Use the terms interpolation and	
assessment or exam	<ul> <li>Problems to worded problems/3D problems</li> <li>Use SOHCAHTOA to find missing side/angle (more complex problems/3D problems)</li> <li>Expand one or two brackets</li> <li>Factorise one or two brackets</li> <li>Calculate the area/perimeter/ volume of a 2D/3D</li> </ul>	<ul> <li>Four operations with surds</li> <li>Calculate and interpret percentage change</li> </ul>	<ul> <li>Find missing sides/shapes in similar shapes</li> <li>Tessellate shapes and explain why they tessellate</li> <li>Find the equations of parallel and perpendicular lines</li> <li>Use roots/line of symmetry/vertex to find the equation</li> </ul>	<ul> <li>extrapolation and extrapolation in context</li> <li>Draw an accurate line of best fit</li> <li>Plot points on a scatter graph</li> <li>Use the probability laws for AND/OR</li> </ul>	



	<ul> <li>shape using the formulae</li> <li>Solve a multi-step linear equation</li> <li>Solve a pair of linear simultaneous equations</li> </ul>	and geometrical problems	<ul> <li>Use protractor and compasses to construct triangles</li> <li>Use protractor and compasses to construct perpendicular bisector/angle bisector/loci</li> <li>Apply unitary method for a best buy</li> </ul>		
Title of Knowledge Organiser	Pythagoras' Theorem Right-angled trigonometry Simultaneous equations	Vectors	Congruence and similarity	Basic probability	