| Year 11 | T1 | T2 | T3 | T4 | T5 | T6 |
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| Content/ <br> Topic for Term | Pythagoras and trigonometry Quadratic equations Perimeter, area and volume Linear and simultaneous equations | Number recap and surds <br> 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 | - Pythagoras' Theorem <br> - SOHCAHTOA ratios <br> - Exact trigonometric values <br> - Define factorise/expand <br> - Steps to factorise a quadratic <br> - Define equation/ identity/formulae/ inequality <br> - Know the formulae for 2D and 3D shapes <br> - Label the parts of a circle <br> - Define and recognise a prism | - Define a surd <br> - Formula for percentage change <br> - Four types of transformations and key aspects of each <br> - Describe a vector and how to denote it | - Define congruence and similarity <br> - Use SSS/ASA/ SAS/RHS to explain congruence <br> - Define tessellation <br> - Define and use gradient and intercepts <br> - Define the terms parallel and perpendicular <br> - Know where vertex/lines of symmetry/ | - Understand linear interpolation and extrapolation <br> - Define union, intersection and complement of an event <br> - Know the probability laws |  |  |


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

## Maths

Year 11 foundation curriculum map
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