

## Curriculum Overview

Maths Year 11

	<b><u>HT1</u></b>	<b><u>HT2</u></b>	<b><u>HT3</u></b>	<b><u>HT4</u></b>	<b><u>HT5</u></b>	<b><u>HT6</u></b>
<b><u>Topic</u></b>	Quadratic Equations, Perimeter, Area and Volume.	Fractions, Indices and Standard form.	Congruence, Similarity and Vectors. Algebra.	Revision	Revision	
<b><u>Key Objectives</u></b>	Use and interpret algebraic manipulations. Calculate area, perimeter of all 2d shapes and and volume of some 3d shapes.	Use fractions and fractional indices to perform accurate calculations. Calculate using roots and standard form.	Apply properties of shapes to satisfy congruence or similarity. Construct shapes and use column vectors. Rearrange algebraic formulae and solve complex equations.	Revise and identify any gaps n pupils learning and complete intervention as required. .	Revise and identify any gaps n pupils learning and complete intervention as required. .	
<b><u>Assessment Opportunities (F&amp;S)</u></b>	Work in class and problem solving Topic test and review	Work in class and problem solving Topic test and review	Work in class and problem solving Topic test and review	Work in class and GCSE exam style problem solving questions	Work in class and GCSE exam style problem solving questions	

<b><u>CEIAG</u></b>	Links to building and horticulture.	Pharmaceutical companies use for development of treatments.	Work in design and construction. Engineering industr	Various careers in different industries	Various careers in different industries	
<b><u>Cultural Capital</u></b>	Consider application of quadratic equations to projectiles e.g. cannon fire. Consider the volume of packaging and relate this to cost of postage. Complete minimum packaging/cost problems. Make predictions then compare the volume different prisms.	Be challenged to discover the laws of indices Use standard form in the context of space and the world around us. Consider accurate calculations and some of the results of errors e.g. NASA space probe loss	Develop the skill of creating a logical argument whilst working on congruence and similarity Apply vectors to movement in sport. Use formulas that relate to real life (e.g. SDT converting currency or temperature and calculating bills) Develop logical problem-solving skills with the use of algebra	Set Smart Targets relating to maths revision Develop skills of prioritising workload Develop assessment skills	Set Smart Targets relating to maths revision Develop skills of prioritising workload Develop assessment skills	
<b><u>Cross-Curricular Links</u></b>	Construction building bird boxes, wall building. Science looking at volumes of liquids Art perspective drawing in 2D and 3D	Motor vehicle's using micrometres converting speed distance and time. and spanner sizes. Sport calculations form exercise and games.	Sport movement within a sporting activity ICT computer programme setting up formulas Science chemistry and physics formulas	Revision links across all areas of the school curriculum	Revision links across all areas of the school curriculum	