Year 10 Maths Overview

Unit	Duration (lessons)	Learning Objectives/Outcomes
Algebra	25	• To be able to change the subject of a formula • To be able to plot and find the gradient of straight line graphs • To interpret and analyse straight line graphs • To interpret straight line graphs
Number	10	• To convert a recurring decimal into a fraction • To manipulate with surds
Algebra	20	• To plot a quadratic function • To solve a quadratic equation across different method • Find the nth term of a quadratic sequence
Geometry & Measure	20	• Interpret a range of scales • Convert to and from a range of imperial and metric measures • To be able to describe and perform transformations
Number	10	• Convert to and from standard form • To calculate with standard form
Geometry & Measure	25	• To interpret a scale drawing • To draw and describe bearings • To make accurate constructions (include Loci) • Use Pythagoras' theorem in 2D and 3D
Algebra	5	• To work with co-ordinates in 3D
Geometry & Measure	5	• To use basic trigonometry to solve problems in 2D and 3D • To use advanced trigonometry to solve problems in 2D and 3D • To use advanced trigonometry to find the area of a triangle
Algebra	15	• To solve simultaneous equations using a variety of methods • To solve simultaneous equations – quadratic and linear • To solve inequalities and represent solutions on a number line

Geometry & Measure	10	• To use trigonometry across topics
Algebra	10	• To calculate an unknown quantity from quantities that vary in direct or inverse proportion • To solve problems using proportionality
Geometry & Measure	25	• To know the properties of quadrilaterals • To know and use circle theorems to solve problems • To calculate arc lengths and sector areas • To calculate area of segments • To find surface area and volumes of complex solids
Number	10	• To calculate upper and lower bounds working with measurements • To solve problems, involving geometry and measure, using upper and lower bounds