

Key Stage 4 Overview for Mathematics 2018-19

Year 10

Autumn Term

Calculate with indices & standard form. Growth & decay including compound interest. Linear & non-linear sequences. Enlargement. Similar shapes. Bearings. Trigonometry in right-angled triangles.

Spring Term

Algebraic arguments. Geometric reasoning. Equations of parallel lines. Vectors. Properties of 3-D shapes. Surface area & volume of pyramids, cones & spheres. Estimation & limits of accuracy. Loci. Geometric proof.

Summer Term

Probability including sample spaces, tree diagrams & Venn diagrams. Expand & factorise quadratics. Quadratic equations. Simultaneous equations. Graphs including cubic & reciprocal. Graphical solutions of equations.

Year 11

Autumn Term

Arcs & sectors of circles. Direct & inverse variation. Geometric & algebraic proof. Statistical representation & interpretation. Correlation & lines of best fit.

Spring & Summer Terms

During the Spring & Summer terms the **Higher Level** GCSE students study functions, transformation of graphs, numerical methods, gradient of curves & area under graphs.

The **Foundation Level** students consolidate their learning and revise & practice their basic skills.

All students practice examination questions and problem solving in context in preparation for the GCSE examination.

Curriculum

Students follow the Maths Mastery curriculum plan. They are supported & challenged to develop a depth of understanding enabling them to apply their knowledge & skills confidently in the GCSE examination to gain maximum marks.

Students take the Edexcel mathematics GCSE.

Examinations

Year 10 Full GCSE as mock examination in June.

Year 11 Full GCSE as mock examination in November and February.
GCSE examination in May/June.

Paper 1 (non-calculator) 1 hour 30 minutes

Paper 2 (calculator) 1 hour 30 minutes

Paper 3 (calculator) 1 hour 30 minutes