



Curriculum Overview

Curriculum Area: Mathematics Year: 11

This Curriculum Overview is a transition model as we move through our new Curriculum Map

Autumn Term

Higher Topics:

Unit 14/Unit 17/Revision for mock 1: Sampling and stratified sampling. Cumulative frequency and box plots. Drawing and interpreting histograms. Comparing and describing populations. Rearranging formulae, simplifying, and solving algebraic fractions. Working with surds. Functions and proof.

Foundation Topics:

Unit 17/ Unit 18/Revision for mock 1:

Circumference and area of a circle. Semi-circles, sectors and composite 2D shapes and cylinders. Pyramids, cones, and spheres. Multiplying and dividing fractions, using the laws of indices. Writing numbers in standard form and calculating in standard form. Revision lists or mock 1 will be provided to all pupils. Lessons will focus on exam technique and problem-solving strategies to prepare pupils for the mock exams.

Spring Term

Higher Topics:

Unit 18/Unit 19/Revision for mock 2:

Vectors, vector notation and vector arithmetic. Parallel and co-linear points and vector geometry. Direct and inverse proportion. Exponential functions and non-linear graphs. Transformations of graphical functions.

Foundation Topics:

Unit 19/Unit 20/Revision for mock 2: Similarity, enlargement, and congruence. Vectors, vector notation and vector arithmetic. Graphs of cubic and reciprocal functions. Non-linear graphs. Solving simultaneous equations graphically and algebraically. Rearranging formulae and proof.

Revision lists for mock 2 will be provided to all pupils. Lessons will focus on exam technique and problem-solving strategies to prepare pupils for the mock exams.

Summer Term

Revision for GCSE exams. This is bespoke for each class and focuses on re-visiting content and honing exam technique.

Internal Assessment

Class work is assessed during the lesson. Pupils self-assess their work in green pen, ensuring that misconceptions are captured, and progress is continuous. Teachers circulate the room, facilitate discussions, and use mini whiteboards and directed questions to assess progress and re-shape the learning where misconceptions occur.

The GCSE course is taught in units. Each curriculum unit is followed by an assessment. This demonstrates retention of core knowledge and the ability to apply this to exam questions.

All pupils will sit two sets of formal mock exams in December and March which will replicate full GCSE papers.

These are used to identify gaps in core knowledge and topics that require further study before the final GCSE exams.

Exam Board/Exam Paper Requirements/% Weighting

Key dates (mocks and final exams)

We study the Edexcel GCSE Mathematics (9-1) course at either Higher or Foundation Tier. Course code is 1MA1.

All final examinations are taken at the end of year 11.

The exam consists of 3 papers (90 minutes each) which all have equal weighting (33.3%) and combine to give a GCSE grade.

Paper 1H is a non-calculator paper and papers 2H and 3H are calculator.

Any part of the specification can be tested on any paper.

Helpful resources/revision guides/websites/exam preparation

The best way to revise maths is to do maths. Further practice outside of lesson time is vital for success. Pupils should work through questions/examples from their exercise books, attempt practice GCSE questions and watch the mathswatch tutorial videos, pausing and going back when they need to.

Along with being given a personal mathswatch login, pupils can purchase CGP 9-1 maths revision guides at the start of the year at a reduced price of £3.30 through Parent pay (rrp £5.95).

Revision lists are produced for formal assessments and include links to mathswatch tutorial videos.

Pupils are required to have their own scientific calculator (Casio fx-83GT X). These are widely available and are also available to purchase through parent pay for £10.

Recommended websites include:

Mathsgenie/onmaths/Corbettmaths/BBC bite size/YouTube.

There is also an array of excellent support materials on the Edexcel website, such as exam specifications and past papers.