

MATHEMATICS

Course Content

KS3

In Years 7 and 8, learners follow a progression based programme the national curriculum, covering the areas of:

Number and algebra (including calculating, ratio, rounding, and graphs)

Geometry and measures (including properties of shapes, transformations, coordinates, compound measures, perimeter, area, volume)

Statistics and probability (including the data handling cycle, graphs and charts, averages, and probability)



covering

equations,

Pythagoras,
and

In Year 9, learners begin the GCSE course from September.

There is an emphasis throughout the course on developing mathematical skills, including:

Representing situations

Analysing, using mathematical reasoning and/ or the appropriate mathematical procedure

Interpreting and evaluating

Communicating findings to others and reflecting on different approaches.

KS4

In Years 9, 10 and 11, learners follow the Edexcel linear GCSE mathematics course. This course is 100% externally assessed via a non calculator and calculator examination at the end of the course.

There is an emphasis on application and problem solving in line with the new programme of study. We use many different teaching methods and resources to challenge and motivate students

Learners who are successful in completing their GCSE Maths in Year 10 are given the opportunity of to develop their mathematics further in Year 11 through the AQA Level 2 Certificate in Further Mathematics.

KS5

Mathematics continues to be a popular choice at A level where we follow the Edexcel specification for Mathematics and Further Mathematics. In Year 12, learners study C1, C2 and S1 modules as part of AS mathematics. In Year 13, learners study C3, C4 and M1 to complete the A level course.

A level learners are expected to complete 5 hours of private study per week.

How learners are assessed

Learners are assessed through their homework, classwork, assessments and both closed book and open book tests. Opportunities for self and peer assessment are provided.

Homework

Homework is set weekly for all learners. It is a vital step in consolidating and extending the knowledge and skills developed in class.

In KS3 and KS4, homework is primarily *mymaths* tasks, accessed via the mymaths.co.uk website. Each learner has their own unique log in and can track their own progress, as can the teacher. There is a wide range of supporting and booster material that learners can access through the website to support the development of home learning.

In KS5, homework tasks will usually be linked to the course book or to exam practice.

Revision, Intervention and Enrichment

There is a weekly homework help club every Wednesday in M10. This provides access to both computers and the help of mathematics teachers to support homework.

There are GCSE revision classes for higher and foundation on a Wednesday in the mathematics corridor. These classes are open to learners in Years 9, 10 and 11 following the GCSE course. The department also runs holiday booster sessions and revision classes for learners in KS4 and KS5 in the run up to examinations.

All learners following the GCSE course have been given a MathsWatch login to support independent study and develop vital mathematics knowledge and understanding.

AS and A2 revision classes run after school on Fridays in the General Teaching Room (GTR) in the Sixth Form block.