

Mathematics GCSE

Mathematics course overview

Mathematics is for everyone. It is diverse, engaging and essential in equipping students with the right skills to reach their future destination, whatever that may be. In terms of the curriculum, our programme focuses on the five key elements of Mathematics; Number, Algebra, Geometry and Proportion alongside a study of Statistics. All of these are covered throughout KS4 and are enriched with opportunities to develop the ability to solve unfamiliar problems. Our current scheme of learning has recently been updated to embrace the changes to more accurately reflect the focus of the national curriculum on fluency, reasoning and problem solving. There is also a strong focus on the quality of written communication meaning that students must show and explain all their working in a logical order.

How is the course assessed?

The GCSE is assessed at the end of Year 11 with 100% Written Examination. There is no coursework in GCSE Mathematics.

There are two tiers: Foundation (awards grades 1-5) and Higher (awards grades 4-9). There are three written papers:

- Paper 1 Calculator 100 marks
- Paper 2 Non-Calculator 100 marks
- Paper 3 Calculator 100 marks

All three question papers cover a mix of skills and topic areas and have a mix of question styles. There are short, single mark skills questions, questions that require mathematical reasoning and multi-step problems to solve.

Throughout Year 10 and 11 students will be assessed by their teachers through half termly assessments, exit tickets and homework tasks in addition to calendared Mocks that will emulate the final exams at the end of Year 11.

Students are expected to bring the correct equipment to lessons. This includes pen, pencil, ruler, protractor, compass and scientific calculator.

TCOLC Approach

At TCOLC, we have designed the scheme of learning to support and enable students to engage with, enjoy and succeed in maths.

In Mathematics, students are set according to their ability and their tier of entry. These sets are regularly reviewed to ensure students are accessing the course content. We believe in teaching students according to their stage of mathematical learning. This approach means we are able to cater to the individual needs of each student and stretch students no matter what their age or current ability is. Some students may get the opportunity to participate in the National team and individual UK Maths challenges.

In addition to the Mathematics GCSE, we will be offering students of high ability, the opportunity to study an extra qualification. The Level 2 Certificate in Further Maths is equivalent to a GCSE qualification with a strong emphasis on the algebraic skills and also introduces calculus and matrices. required. It also introduces two new concepts in Mathematics, calculus and matrices. This course allows the strongest students to really excel and provide an excellent platform from which students can go on to study both Mathematics and Further Mathematics at A-Level.

What could this lead to?

Mathematics graduates can be found working in just about every industry, however those popular with graduates include: accountancy, banking, medicine, insurance, finance, education, health and other commercial and management careers. There are also rapidly-growing opportunities in the technology sector.

Who can I contact for further advice or support?

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Exam Board: OCR
Course Code: J560

