



MATHEMATICS IN THE SIXTH FORM

WHY STUDY MATHEMATICS?

Well done! You've made it through over a decade of compulsory education, and from now on it's up to you to choose what you study. Whatever your plan, a qualification in Maths will impress both prospective employers and university admission tutors. What

types of skills do employers look for? Problem solving, analysis, data handling and communication skills to name just a few. These transferable skills are useful in any job.

Think about answering a question in your Maths lessons. It might be to solve an equation, calculate an area, anything. Whatever you're asked, the approach is the same: pick out the important parts of the problem, work out the knowledge and skills you need to apply, and figure out the answer. Employers need people who know how to solve problems, and once you know how to do it in Maths, you can do it in anything.

Once you've solved a problem, you need to tell people the answer. Maths helps you communicate complicated ideas in a clear and unambiguous way. People working in science, business and many other areas use Maths to explain complex situations, like analysing a company's profits or checking that a building will stay standing. Maths also teaches you how to handle and interpret data, sifting through the numbers to come up with a solution.

A LEVEL MATHEMATICS

Mathematics is a strong academic subject, which universities, including Oxbridge, respect and value. Students who have a level 7, 8 or 9 at GCSE/IGCSE should be able to cope with the content, but your teacher will advise you. Students study the OCR A Level specification. The course is linear, allowing students to develop an understanding of how different branches of Mathematics are connected, without any coursework. All students will study Pure and Applied Mathematics. The subject is assessed by three written papers (2 hours each) at the end of the course.

Pure Mathematics is studied throughout the course. It extends your knowledge of algebra, trigonometry, geometry, vectors and calculus.

Applied Mathematics is made up of statistics and mechanics. Statistics is the analysis and interpretation of data and Mechanics applies Maths to physical problems.

FURTHER MATHEMATICS

Further Mathematics is suitable for keen, able mathematicians and is particularly suitable for those considering reading Mathematics, or a mathematics related discipline such as engineering, at university. Support is available for students who wish to take STEP/AEA papers, or the Oxford MAT.



CAREERS

We encourage students to go on to university courses with a substantial mathematical content. Careers followed recently include Mathematics, Engineering, Natural Sciences, Physics, Chemistry, Medicine, Veterinary Science, Economics, Actuarial Science, Architecture and Business Management.

SUBJECTS THAT COMBINE WELL WITH MATHS

Many subjects, such as Physics, Chemistry, Biology and Economics have a substantial mathematical content at A Level. Degrees in Economics and Geography can be very numerical and students who have studied Mathematics in the Sixth Form will have an advantage.



CO-CURRICULAR ACTIVITIES

Each year, all students take part in the UK Mathematics Trust's Senior Maths Challenge, with many students being awarded certificates. A group of students also take part in the team competition against other schools. Year 12 attend the 'Maths in Action' conference in London, which broadens and enriches the curriculum in an enjoyable way. Additional workshops and lectures are available for the further mathematicians.

A LEVEL RESULTS 2019

GRADE	A*	A	B	C	D	E
Mathematics	14%	27%	27%	23%	4.5%	4.5%
Further Mathematics	75%				25%	