



Mathematics

Exam Board: AQA

Contact teachers: Dr A Brown, Mr J Roberts

Why study Maths?

Maths provides the foundations for how all scientific work is approached. Much of what you have learned at GCSE seems disconnected from the world, but A level is where all the pieces begin to fit together and you begin to see the huge number of uses for topics like quadratics, trigonometry, etc.

Course details

The course is split into two broad areas of mathematics:

Core	Includes the fundamental underpinning mathematical concepts - algebra, coordinate geometry, trigonometry, calculus, exponentials and logarithms, sequences. This is a natural extension to your work at GCSE and develops much of the level 7-9 maths.
Applied	Includes core applications of mathematics to the wider scientific understanding - mechanics (vectors, kinematics [how things move], forces and Newton's laws) - statistics (sampling, data presentation and interpretation, probability, binomial and normal, hypothesis testing)

How is the course taught and assessed?

All the content will be taught in lessons, with example question and modelled solutions with expected layout and method outlined. There will be some practice questions during lessons, but the majority of consolidation time will be outside lessons, with arising issues addressed during subsequent lessons. Topic assessments will give a 'running total' on how you are doing, but all exams are at the end of the year. There is no coursework.

Entry requirements

Students need to have achieved at least a grade 7 in Maths (although an 8/9 is preferred) and should enjoy Maths.

Career routes and popular combinations

A-level Maths provides a good background for science, engineering, design, technology, and medicine. Even if maths doesn't appear to have direct application to your future studies or job, it is a very valuable A level to have as evidence of logic and reasoning, analytical and critical thinking, and problem-solving.