

# COWLEY

SIXTH FORM COLLEGE

A-LEVEL

## MATHEMATICS

### Teaching staff

Mr Mercure

Mrs Frohwein

Mr Howarth

### Overview

Mathematics is a highly regarded and enjoyable A-Level, with the added bonus for students in that the modern world needs mathematicians!

In Year 12, you will study:

- Coordinate Geometry
- Calculus: Differentiation & Integration
- Trigonometry
- Logarithms
- Vectors
- Sequences: Arithmetic & Geometric
- Statistics & Probability, including the Binomial and Normal Distributions
- Hypothesis Testing
- Mechanics, including Newton's Laws (forces)
- SUVAT
- Moments and kinematics

### What to expect in lessons

Most lessons will deliver new content and will have some opportunity for practice of the work. All topics will come with compulsory homework activities, which will consolidate and extend work from the lesson.

### Outside the classroom

Maths students have the opportunity to attend lectures at The University of Liverpool. This year's lectures have included a mathematical look at:

- Code breaking
- What you need to do to study maths at university
- Whether men are better drivers than women

### Equipment that you will need

Calculator: must be the Casio Classwizz fx-991EX as this will be used in all lessons – very important! You will be able to buy this from college in the first week of term, if you prefer.



Maths goes really well with science subjects. Maths is a subject that I am considering studying at university.

In terms of Sixth Form, the college is friendly and the staff are really supportive."



### Grace McCarthy

Currently studying:

A-Level Mathematics

A-Level Biology

A-Level PE



## Progression

Many of our students have continued their studies at university, studying: Mathematics, Engineering, Astrophysics, Chemistry and Veterinary Science