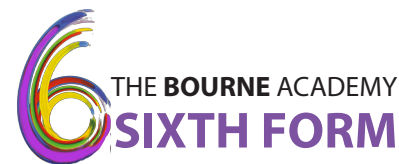


# MATHEMATICS

## A LEVEL (EDEXCEL)



Mathematics is the most popular A level. It is highly regarded by both employers and higher education. It provides a base for studying, not only Mathematics, but Engineering, Medicine, Sciences and Social Sciences. Mathematics is a two year course. It is linear with all assessment at the end of the two years.

### **What will you learn?**

In each year you will study two components, pure and applied. Pure maths covers topics such as algebra and calculus. These form the building blocks for all applications in mathematics. The applied topics look at areas in mechanics and statistics.

- In studying mechanics you will look at how forces act on objects and how objects move.
- In statistics you will predict outcomes of experiments and events based on analysing how similar events have turned out in the past. You will look at standard distributions, such as the Normal distribution, which is used widely for predicting outcomes in the real world.

### **How will you be assessed?**

Assessment is by exam at the end of the two years. There is a possibility to take an AS at the end of the first year, but this is separate from the final A level grade and most students will sit internal exams at the end of Year 12.

The course is examined at the end of Year 13 by sitting three equally weighted papers:

Paper 1 Pure Maths

Paper 2 Pure Maths

Paper 3 Statistics and Mechanics

(A calculator is expected to be used in all three papers).

### **Where will it take you?**

Mathematics is a prerequisite for courses such as Mathematics, Physics or Engineering. It will satisfy the requirement for one of the sciences for courses such as Medicine and Earth Sciences. It is a key element of Finance and Economics courses. In addition, it is very useful for Sciences and Social Sciences, where statistical analysis of research is a key element of work in the field. If you have not decided where you future will take you, Mathematics A level is a highly regarded qualification, because it requires logic, hard work and clear thinking skills.

### **Who to talk to:**

Please talk to Mrs Helanna Burt or email [Helanna.Burt@thebourneacademy.com](mailto:Helanna.Burt@thebourneacademy.com)

### **What do I need to study this course?**

You will need at least a grade 7 in Mathematics GCSE, though we will consider you for studying A level maths with a grade 6, dependent on your attitude to learning and the potential you showed for understanding difficult maths during your GCSE course. A level Mathematics is academically challenging, but if you enjoyed GCSE Mathematics, particularly algebra, and you are prepared to work hard, talk to us to find out if it is for you.