



# Mathematics

## (GCSE)

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### **Why study Mathematics?**

All students study the OCR GCSE (9-1) in Mathematics Specification J560.

Mathematics is a very versatile subject and a key skill in life and getting high grades at GCSE has never been more important. A GCSE in mathematics is a basic requirement for any university course and a lot of jobs of all descriptions. Besides this, mathematics is vital in everything from adding up your shopping bill to studying any science subject, both at GCSE and later, whether in A-levels or in other equivalent qualifications or even in vocational subjects and apprenticeships. It is for this reason that mathematics is compulsory at GCSE.

Our collective aim therefore needs to be to achieve the highest possible grades so that each student has the personal satisfaction of knowing that his/her results reflect their true potential and ensures that they have a solid understanding to bulked upon in future prospects.

### **What key knowledge, concepts and skills will I learn?**

The mathematics GCSE covers the five strands of mathematics:

- Number
- Algebra
- Ratio, proportion and rates of change
- Geometry and measures
- Probability and statistics

Some questions will fit across two or more of these areas.

## **What attitudes and qualities are required to do well?**

In Mathematics we expect every student do their very best at all times. Hard work, focus and determination is required to achieve your potential in this subject. We appreciate that often, new topics can be challenging in mathematics, but it is the perseverance and commitment of students that will make the real difference.

## **How will I be assessed?**

100% external examinations will be taken at the end of the course in Year 11.

You will be assessed across three examination papers, each one hour and 30 minutes long. Paper 2 is non-calculator with papers 1 and 3 being calculator.

Students sitting the Higher Tier papers will have the opportunity to achieve grades 4-9. Students sitting the Foundation Tier will have the opportunity to achieve grades 1-5.

## **Which other subjects link into this course?**

Mathematics is a subject that supports many others. Science requires the ability to solve equations and manipulate formulae, map reading skills are needed in Geography, scale and ratio are used in Art, Physical Education involves working with distances and speed. In addition, the logical and problem-solving skills developed in mathematics can be applied to any other subject.

## **What career options are open to me?**

Just about everything! People with a solid Maths knowledge and a good GCSE can go into: accounting, medicine, engineering, forensic pathology, finance, business, consultancy, teaching, IT, games development, scientific research, programming, the civil service, design, construction and astrophysics to name a few.

**For more information please visit:**

**GCSE specification:**

<https://www.ocr.org.uk/qualifications/gcse/mathematics-j560-from-2015/>