

# Mathematics

## Qualification

**Edexcel GCSE in Mathematics**

## Objectives

While studying mathematics you will be expected to:

- use mathematical skill and knowledge to solve problems
- use logic and reason to solve problems
- break down problems into small steps in order to solve them
- use the mathematics that you learn to solve problems that might happen in real life
- learn to use a calculator to solve problems quickly and effectively

## Overview

Mathematics is one of the most useful subjects you learn at school. It gives you vital tools needed to study many degree subjects, particularly among the lab and social sciences, as well as in engineering and technology. It also teaches you a wide range of transferable skills that will benefit you in whatever jobs you take. And it provides you with the numeracy required to take control of your daily lives, whether managing your finances or judging the latest government statistics. You will probably not notice a lot of difference in your mathematics lessons when you start this course as your teacher will be able to carry on from the work you did at Key Stage 3.

## Skills

During the course you will develop the following skills:

- How to solve problems
- Analytical thinking
- Conceptual ability
- Communication skills

## Course Content

GCSE Mathematics covers a wide range of basic mathematical knowledge and skills, grouped together into four areas:

- Number and Algebra
- Shape, Space and Measures
- Data Handling

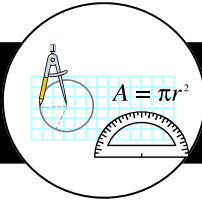
The fourth area teaches you how to use and apply the mathematics contained in other areas to a range of problems.

## Assessment

GCSE Mathematics is now solely assessed by external examinations. These will take place in the summer term of Year 11. The assessment will be in the form of two written papers; Paper 1 is non-calculator; Paper 2 is a calculator-required exam. There are two tiers of entry: Higher (A\*-D) and Foundation (C-G).

Written Exam

100%



# Additional Mathematics with Statistics

## Qualification

**Additional Mathematics: Free Standing Mathematics Qualification  
OCR Specification 6993  
Statistics: Full Course GCSE Specification 1ST0**

## Objectives

Extend your mathematical skills used in the GCSE Mathematics full course GCSE to a greater depth. To improve your algebraic and statistical skills which will enable you to be comfortable with A level Mathematics.

## Overview

GCSE\ Statistics continues the work on Handling Data that students have studied at Key Stage 3. Additional Mathematics provides candidates with an introduction to the mathematics studied in AS and A Level GCE modules. As an Advanced Level Free Standing Mathematics Qualification it carries UCAS points.

## Skills

During the course you will develop the following skills:

- High level thinking and reasoning,
- problem solving,
- statistical analysis
- proof
- communication

## Course Content

The content consists of four areas in Pure Mathematics: Algebra , Co-ordinate Geometry , Trigonometry and Calculus Each of these is used to support a topic from a recognised branch of Applied Mathematics.

## Assessment

GCSE Statistics is assessed by a single 2 hour examination in the summer of Year 11 which is worth 75% of the final GCSE grade and an extended controlled piece of work worth 25%. Additional Mathematics is assessed by a single 2 hour examination in the Summer of Year 11.

### Statistics

Coursework

25%

Written Exam

75%

### Additional Maths

Written Exam

100%

Students are entered for the Higher Tier GCSE Statistics and can achieve a grade of A\* - D only.

The Additional Mathematics exam uses the same grading system as GCE A Level - A, B, C, D, E or U.