|  |
| --- |
| Course name: GCSE Mathematics |
| Which course/ syllabus will I be following?  AQA GCSE Mathematics |
| Reason  Just look around. Some of civilisation's most prized and proud achievements are wholly reliant on mathematics. Planes flying seamlessly through the air, high availability of complex medicines, even the computer you are using now: all of these increasingly vital commodities rely on the use and study of numbers. At University, Mathematics is a reasonably neutral subject and so it is easily combined with other courses. Joint Honours like Mathematics & History, Mathematics & English, Mathematics & Spanish or Mathematics & Music are but a few of the increasingly broad range of Mathematics based courses available. This rich selection of study areas shows that a Mathematics degree does not have to be purely numerical, but can involve the arts to offer literary, musical or scientific nourishment.  Maths is one of the best subjects to develop your analytical, research and [problem-solving skills](https://successatschool.org/advicedetails/600/How-can-problem-solving-help-me-at-work%3F). Not only will studying maths help give you the knowledge to tackle scientific, mechanical, coding and abstract problems, it will also help you develop logic to tackle everyday issues like planning projects, managing budgets and even debating effectively.  "Not everything that counts can be counted. Not everything that can be counted counts." Albert Einstein |
| How is the course assessed?  GCSE Mathematics has a Foundation tier (grades 1 – 5) and a Higher tier (grades 4 – 9). Students must take three question papers at the same tier. All question papers must be taken in the same exam series (summer 2021).  Each paper is worth 80 marks and is 1 hour 30 minutes long. Paper 1 is non-calculator and papers 2 and 3 are calculator.  A brief course overview by topic:  Number, Algebra, ratio, proportion and rates of change, geometry and measures, probability and statistics. |
| Which careers/ post 16 courses will this course help me to prepare for?  Post 16 courses that are supported by GCSE Mathematics are AS/A levels in Physics, Chemistry, Biology, Mathematics, Further Mathematics, Business Studies and Statistics amongst many others.  All college courses and apprenticeships require students to achieve a grade 4 or higher in GCSE Maths or students will be required to re-sit the GCSE alongside their chosen post 16 qualification.  Being a competent mathematician could lead to a career in: [accounting](https://successatschool.org/careerzonesummary/17/Accountancy), [medicine](https://successatschool.org/careerzonesummary/23/Medicine-Healthcare), [engineering](https://successatschool.org/careerzonesummary/2/Engineering), forensic pathology, [finance](https://successatschool.org/careerzonesummary/19/Banking-Finance), business, consultancy, teaching, [IT](https://successatschool.org/careerzonesummary/28/IT-The-Internet), [games development](https://successatschool.org/advicedetails/738/game-jobs), scientific research, programming, the civil service, design, [construction](https://successatschool.org/careerzonesummary/30/Construction-Property) and astrophysics to name a few.  There are a number of career paths for which the study of maths would be compulsory. These include being an actuary, a business analyst, a software engineer, a technology analyst, an information engineer, a speech technology researcher, or a maths teacher. |