MATHS
at SCGSG

Where can it take me?

A-Level Mathematics is a highly regarded and marketable qualification whether proceeding on to higher education or work.

It is of value in Higher Education courses or careers in Mathematics, Statistics, Engineering, Computing, Physics, Chemistry, Biology, Economics, Finance, Business Management, Medicine, Teaching, Architecture and Psychology.

Some of our students have gone on to courses such as:

- Mathematics at the University of Bath
- Neuroscience at University College London
- Civil Engineering at Imperial College London
- Medicine at Birmingham University
- Politics and International Relations at the University of Nottingham
- Law at the University of Leeds

Why study Mathematics?

The whole development of Western civilisation - its commerce, its technology, and more recently its social organisation - is rooted in mathematics and in the reliability and power of its methods of analysis.

This dependence on mathematics has accelerated dramatically in the last 50 years. During the Second World War mathematics was indispensable in code breaking, ballistics and planning large operations. Mathematics now controls large parts of day-to-day life. For example the development of the internet and all the associated activities depend on mathematics. Digital music and online shopping would be impossible without mathematics.

It is therefore not surprising that Mathematics A-Levels are amongst the most marketable and that a Mathematics degree is amongst the most sought after and most flexible of university courses, leading to a wide choice of careers.

Recommended links with other subjects

Mathematics is of help to studies in Physics, Chemistry, Biology, Geography and Business Studies in school and in the future.

What will I study?

You will have 10 hours of Maths lessons each fortnight with two teachers. One teacher will cover all the pure content, this comprises of methods and techniques which underpin the study of all other areas of mathematics, such as, proof, algebra, trigonometry, calculus, and vectors. Your other teacher will cover the applied content, this is equally split between Statistics and Mechanics.

Personal Qualities

Success in Mathematics at this level requires a commitment to consistent work throughout the course. Written assignments will be set each week and, due to the hierarchical nature of the subject, it is essential that these are completed and understood. If difficulties occur, the staff of the department are always willing to offer extra help and advice.

It is also necessary to be well organised and motivated to learn new techniques and methods. Most problems require the use of new knowledge, which can only be acquired by putting in appropriate time and effort. When one has acquired the knowledge and skills, many problems are relatively and sometimes surprisingly easy.