GCSE Mathematics

Key contacts: **Mrs L Davies and Miss C Pyne**
Exam Board: **Edexcel**

Overview of the course:

In Years 10 and 11 students will have eight Mathematics lessons a fortnight. Students are taught in sets for Mathematics and this is determined by their mathematical ability, their attainment at the end of Year 9 and teacher recommendation. Students will follow a linear GCSE programme of study completing their examinations in Year 11.

Within the framework of the National Curriculum, we aim to:

- Consolidate basic skills and introduce students to appropriately challenging work
- Develop the numerical and practical skills of students
- Encourage students to apply their mathematical knowledge and understanding to solve problems
- Teach them to communicate mathematically, in a clear, logical, creative and elegant way
- Enable students to acquire the skills needed to use technology effectively
- Encourage cooperative, independent, practical and investigative work as appropriate
- Develop an appreciation for the place and use of mathematics in society and apply concepts to various situations
- Stimulate interest in and enjoyment of the subject
- Encourage a firm foundation for further study

What will you study?

All students will have experience of the six areas of the National Curriculum:

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

Problem solving is an integral element of GCSE Mathematics. All the areas of the National Curriculum are drawn together in solving problems based on the real world.

Students will use a mixture of texts, online resources and supplementary materials, as appropriate. All students are expected to have their own scientific calculator which they will need to use throughout the course and which can be purchased from the Mathematics Shop in College. Revision Guides will be available from the Mathematics Department.

Assessment

Assessment is based on the National Curriculum and GCSE Syllabus guidelines. Students' attainment and achievement is monitored throughout the course.

The scheme of assessment consists of two tiers:

- Foundation Tier assesses Grades 1 - 5
- Higher Tier assesses Grades 4 - 9

Students are entered for a particular tier according to their mathematical ability and attainment throughout the course. There is no coursework and all examinations will include elements of problem solving and real-life applications.

Possible career path:

Mathematics at GCSE is fundamental to the further study of mathematical based subjects, science subjects, and engineering and technology. It is very useful in economics, in business and management studies, accountancy, banking, and education, to name a few. Graduates of mathematical based courses can go on to highly paid careers, in some cases substantially higher than other disciplines.