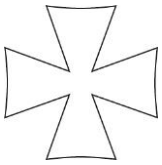

Mathematics GCSE

Mathematics is a core subject in the National Curriculum and, as such, is compulsory for all students. The importance of Mathematics as a core subject is reflected in the technical environment in which we live. It is an essential service subject for other disciplines and a good GCSE grade in Mathematics is a common prerequisite both in employment and in higher education.

GCSE Mathematics provides a broad, coherent and worthwhile course of study. The department aims to encourage students to develop confidence in Mathematics and a positive attitude towards the subject. We hope this means they will recognise the importance of Mathematics and learn to enjoy the challenge and satisfaction of solving problems. Teaching will also try to provide a strong mathematical foundation for students who go on to study post-16 courses in the subject.

Teaching in the department aims to:

1. Develop fluent knowledge, skills and understanding of mathematical methods and concepts
2. Acquire, select and apply mathematical techniques to solve problems
3. Reason mathematically, make deductions and inferences and draw conclusions
4. Comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.

Enrichment topics will be taught alongside GCSE Mathematics and includes the study of some branches of Mathematics which will not be directly examined. These facilitate our students to be better mathematicians and more able to achieve a top GCSE grade.

We follow the Edexcel GCSE Mathematics (9-1) Specification (1MA1) which can be found online:
http://qualifications.pearson.com/content/dam/pdf/GCSE/mathematics/2015/specification-and-sample-assesment/gcse-maths-2015-specification.pdf

After the Mid-GCSE Mocks in Year 10, students are given an opportunity to study an extra qualification: AQA Level 2 Further Mathematics. This is a challenging syllabus which includes some more advanced topics and provides a useful bridge to the A level Mathematics and Further Mathematics courses. Students opting into this course will be expected to study in their own time and entry into the final exam will depend on their performance in the Year 11 GCSE Mock Examinations in Mathematics and a mock examination for this qualification taken later in Year 11.

Structure of the Examination

Assessment is via three papers, all of which are taken in the summer of Year 11:

Paper 1	Paper 2	Paper 3
What's Assessed: 1. Number 2. Algebra 3. Ratio, proportion and rates of change 4. Geometry and measure 5. Probability 6. Statistics	**What's Assessed:** 1. Number 2. Algebra 3. Ratio, proportion and rates of change 4. Geometry and measure 5. Probability 6. Statistics	**What's Assessed:** 1. Number 2. Algebra 3. Ratio, proportion and rates of change 4. Geometry and measure 5. Probability 6. Statistics
How it is assessed: • Written examination • Calculator **not allowed** • 1 hour and 30 minutes • 80 marks available	**How it is assessed:** • Written examination • Calculator **allowed** • 1 hour and 30 minutes • 80 marks available	**How it is assessed:** • Written examination • Calculator **allowed** • 1 hour and 30 minutes • 80 marks available
Questions: A full range of question types including problem solving, proof and contextual problems	**Questions:** A full range of question types including problem solving, proof and contextual problems	**Questions:** A full range of question types including problem solving, proof and contextual problems