# Maths KS3 and KS4

# What are the aims of the course?

- To provide numerical, analytical, logical and problem-solving skills.
- To provide levels of numeracy and a qualification that will enable students to pursue careers in their chosen subjects.

### What is the content of the course?

- To develop fluent knowledge, skills and understanding of mathematical methods and concepts.
- To acquire, select and apply mathematical techniques to solve problems.
- To reason mathematically, make deductions and inferences and draw conclusions.
- To comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.

The course is arranged in the following two tiers, each with a maximum and a minimum grade:

- Foundation this tier will give access to grades 5-1.
- Higher this tier will give access to grades 9-4.

The course content is split between:

- Number (foundation 25% of exam and higher 15% of exam).
- Ratio, Proportion and Rates of Change (foundation 25% of exam and higher 20% of exam).
- Geometry and Measures (foundation 15% of exam and higher 20% of exam).
- Statistics and Probability (foundation 15% of exam and higher 15% of exam).
- Algebra (foundation 20% of exam and higher 30% of exam).

#### What will be assessed during the course?

This is a linear course with exams at the end of the course.

In the exam the emphasis will be on problem-solving and mathematical reasoning, with more marks now being allocated to these higher-order skills and students will now also be required to memorise formulae.

All students will take three separate exam papers and the marks from each paper will then be added together to determine the grade. One of the papers will be non-calculator and the other two will be calculator.

# What equipment will be required?

In two of the three exams, students will be allowed to use a scientific calculator. This highlights the importance of students having their own calculator in class, so that they can benefit from being taught how to use them.