

# MATHEMATICS

Students in Year 10 and 11 are currently following the linear GCSE course offered by Edexcel (specification code 1MA1F/H).

## Aims of the Course

Students who study for GCSE Mathematics will be expected to:

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

## Content

The content of the GCSE Mathematics specification has been grouped into the following topic areas:

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

Students will be familiar with some topic areas, as it will build upon knowledge learnt at Key Stage 3. New topics will also be introduced across Years 10 and 11. Some of these new areas of maths will include: surds; trigonometry; advanced probability; direct and inverse proportion; and solving simultaneous and quadratic equations.

## Assessment

The GCSE is assessed at the end of the two-year programme of study. It is assessed by three examination papers, all equally weighted and each lasting 90 minutes. There are two tiers of entry: higher tier and foundation tier. The higher tier awards grades 4 – 9, and the foundation tier awards grades 1 – 5. Pupils will be entered for the tier that is most appropriate for them, and will provide them the best opportunity to fulfil their potential.

We anticipate that the following sets will be undertaking the tiers stated:

**10M1 to 10M4: Higher tier**  
**10M5 to 10M8: Foundation tier**

There will be regular assessment across Key Stage 4. Students will sit formal assessments in November, February and May of Year 10, as well as bi-monthly assessments in Year 11. The assessment and feedback is used to inform students of their learning, and areas that they need to improve.

## CASE STUDY

*Caitlin, Year 10*

*My favourite part of maths so far has been learning about rearranging and solving equations.*

*I have also enjoyed learning about data specifically using graphs to work out averages.*

*In the future I am hoping to be a surgeon and I will need to study maths at a higher level to help me to achieve this goal.*

*Year 9 students should make clear notes that are easy to look back on and they should review topics regularly to prepare them for examinations.*



**For further information contact: Mr Sarcevic or Miss Stone**