

MATHEMATICS

Our aims are:

- To develop students who are functional in mathematics and able to think independently in applied and abstract ways
- To enable students to reason, solve problems and assess risk
- To enable students to use mathematical thinking for personal decision making
- To develop creativity
- To enjoy mathematics for its own sake

Overview of KS3

During the two years of Key Stage 3, students will build on their knowledge of number, algebra, geometry & measures and handling data.

What will be studied in Year 7

Half Term 1 – Numbers and the number system

Half Term 2 – Basic algebra proficiency; presentation and use of data

Half Term 3 – Explore the use of fractions, decimals and percentages; identify and use number patterns; use and understand ratio and proportion

Half Term 4 – Visualise and construct shapes; investigate properties of shapes; mathematical movement

Half Term 5 – Introducing probability; measuring and calculating space

Half Term 6 – Checking, approximating and estimating; further calculating with fractions, decimals and percentages

What will be studied in Year 8

Half Term 1 – Numbers and the number system -

Half Term 2 – Basic algebra proficiency; presentation and use of data

Half Term 3 – Explore the use of fractions, decimals and percentages; identify and use number patterns; use and understand ratio and proportion

Half Term 4 – Visualise and construct shapes; investigate properties of shapes; mathematical movement

Half Term 5 – Introducing probability; Measuring and calculating space

Half Term 6 – Checking, approximating and estimating; further calculating with fractions, decimals and percentages

MATHEMATICS – GCSE

Examination Board:

The GCSE mathematics specification was examined for the first time in 2017. The format of the exam is three 1 hour 30 minutes exams, two of which are calculator papers and one non-calculator. There are two tiers of entry – Higher (grades 9 – 4) and Foundation (grades 5 – 1). Year 9 will begin a three year GCSE course based on the AQA specification. Year 10 will begin a two year GCSE course based on the AQA specification. Year 11 will complete the Edexcel GCSE specification.

Course content:

The new specification covers the following content headings:

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

Assessment:

Each assessment paper will cover a range of question types; some questions will be set in both mathematical and non-mathematical contexts.

The following Assessment Objectives will be covered in differing weightings by both tiers of entry

- AO1 Use and apply standard techniques
- AO2 Reason, interpret and communicate mathematically
- AO3 Solve problems within mathematics and other contexts.

Further information from Mr R Thomas