

## FOUNDATION UNITS

### Number

Students develop their calculation strategies, including those with fractions and negative numbers. They extend their understanding about how fractions, decimals and percentages interconnect. Students explore properties of numbers, including factors, multiples, squares, primes and cubes.

### Algebra

Students develop their ability to manipulate algebraic expressions and solve equations. They explore connections between sequences, functions and graphs.

### Shape and Space

Students investigate and apply angle properties of 2-D shapes and parallel lines. They transform 2-D shapes and calculate areas, perimeters, volumes and surface areas. Students also develop their understanding of a variety of measures.

### Data Handling

Students develop strategies for collecting, presenting and analysing data. They also calculate theoretical and experimental probabilities.

## COURSEWORK DEADLINES/EXAMS

## WHEN

YEAR 11 GCSE PREP EXAM 1	NOVEMBER 2018
YEAR 11 GCSE PREP EXAM 2	JANUARY 2019
YEAR 11 GCSE EXAM	JUNE 2019
YEAR 10 ASSESSMENTS	EVERY HALF TERM
YEAR 10 END OF YEAR EXAM	MAY/JUNE 2019
YEAR 9 ASSESSMENTS	EVERY HALF TERM
YEAR 9 END OF YEAR EXAM	MAY/JUNE 2019

## HIGHER UNITS

### Number

Students develop their calculation strategies, including those with fractions, percentages and numbers written in standard form. They extend their knowledge of indices.

### Algebra

Students develop their ability to manipulate algebraic expressions and solve equations and inequalities. They explore connections between equations and graphs. Students perform calculations relating to direct and inverse proportion.

### Shape and Space

Students investigate and apply circle theorems. They transform 2-D shapes and calculate areas, perimeters, volumes and surface areas. Students also solve problems using trigonometry.

### Data Handling

Students develop strategies for collecting, presenting and analysing data. They also calculate theoretical and experimental probabilities.

### Exam Board and Specification

We follow the Edexcel GCSE syllabus which places a significant emphasis on students' problem solving skills. Students will sit the exam at either foundation or higher level.

### Textbooks

Year 9, 10 and 11 use the Cambridge SMP Interact and Hodder series of textbooks.

### Homework and Revision

Year 9, 10 and 11 homework is set once a week, sometimes using [vle.mathswatch.co.uk](http://vle.mathswatch.co.uk). Useful websites for revision are [www.marbartonmaths.com](http://www.marbartonmaths.com) and [www.corbettmaths.com](http://www.corbettmaths.com). The department also have a subscription to [www.justmaths.co.uk](http://www.justmaths.co.uk) and all students will have an individual account for mathswatchvle.com.

### Equipment

Scientific calculators, construction kits and GCSE revision guides can be purchased from the front office. Students should have a pen, pencil, ruler and calculator for every lesson.

### Contacts

If you have any queries, please telephone the school or contact [pwilson@samuelward.co.uk](mailto:pwilson@samuelward.co.uk)