# Mathematics in Year 7

## Aims

- To reinforce the mathematical skills learnt during key stage 2 and deepen students' understanding of key topics.
- Introduce new topic areas and techniques required for students to access the key stage 3 curriculum.

## Overview of topics

| Autumn Term | Spring Term | Summer Term |
|---|---|---|
| Collecting and Organising Data | Introduction to Algebra | Angles |
| Calculator Skills | Fractions | Symmetry |
| Positive Numbers or adding and subtracting | Ratio or Percentages | Perimeter and Area |
| Negative Numbers or multiplying and dividing | | Volume and Surface Area |

## Teaching Groups

The students are grouped into 9 teaching groups. Initially these groups are based on key stage 2 SAT results and subsequently they are adjusted based on our own assessments to ensure all students are placed to make best progress.

## Assessments

- Class work is continually assessed by each class teacher and homework is set as appropriate, which is usually once per week.
- Written assessments take place prior to the schools review points, the first of these assessments is a baseline test taken by all students in the year group and the final assessment is an end of year assessment designed to inform the grouping of students for year 8.

## How you can support your child at home

- Practising core mathematical skills such as multiplication tables and written methods with your child.
- Ensure that students complete and hand in their homework.
- Ensure that your child has access to specialised mathematical equipment, which is needed at different points within the year. For example, a calculator, a protractor and a pair of compasses.
- Encourage your child to use the mymaths website to complete online homework tasks or to reinforce new skills.

# Mathematics in Year 8

## Aims

- To continue the development of skills from the groundwork set in Year 7.

- To introduce new areas and techniques needed to access the Key Stage 3 Mathematics curriculum.

- Encourage students to engage in problem solving tasks to help them prepare for the GCSE course.

## Overview of topics

| Autumn Term | Spring Term | Summer Term |
|---|---|---|
| Integers, factors and multiples | Algebraic expressions or Percentages | Perimeter and Area |
| Four operations or approximation | Equations and inequalities | Surface Area and Volume |
| Fractions or Rates and Speed | Coordinates and functions | Statistical Graphs |
| Decimals or Percentages | Number patterns | |
| Transformations and coordinates | Angles | |

## Teaching Groups

The students are grouped into 9 teaching groups. These groups are based on the year 7 teaching groups and were reviewed extensively on the basis of the end of year 7 assessment. These teaching groups are continually reviewed throughout the year to ensure all students are placed to make best progress.

## Assessments

- Class work is continually assessed by each class teacher and homework is set as appropriate, which is usually once per week.
- Written assessments take place prior to the schools review points, two of these assessments are more formal tests designed to give students early exposure to some of the challenges of GCSE papers. All the assessments are used to review the grouping of students and the final assessment of the year is used to inform the grouping of students for year 9.

## How you can support your child at home

- Practising core mathematical skills such as multiplication tables and written methods with your child.
- Ensure that students complete and hand in their homework.
- Ensure that your child has access to specialised mathematical equipment, which is needed at different points within the year.  For example, a calculator, a protractor and a pair of compasses.
- Encourage your child to use the mymaths website to complete online homework tasks or to reinforce new skills.

# Mathematics in Year 9

## Aims

- To continue the development of skills from the groundwork set in Years 7 & 8.

- To introduce new areas and techniques needed to access the GCSE Mathematics curriculum.

- Encourage students to engage in problem solving tasks to help them prepare for the GCSE course.

## Overview of topics

| Autumn Term | Spring Term | Summer Term |
|---|---|---|
| Indices and standard form | Rate and Speed | Pythagoras Theorem |
| Proportion | Properties of shapes | Trigonometry |
| Algebraic manipulation | Constructions | Volume and Surface Area |
| Functions and Graphs | Congruence and similarity | Data Analysis |
|  |  | Probability and Sets |

## Teaching Groups

The students are grouped into 9 teaching groups. These groups are based on the year 7 teaching groups and were reviewed extensively on the basis of the end of year 7 assessment. These teaching groups are continually reviewed throughout the year to ensure all students are placed to make best progress.

## Assessments

- Class work is continually assessed by each class teacher and homework is set as appropriate, which is usually once per week.
- Written assessments take place prior to the schools review points, two of these assessments are more formal tests designed to give students early exposure to some of the challenges of GCSE papers. All the assessments are used to review the grouping of students and the final assessment of the year is used to inform the grouping of students for year 10.

## How you can support your child at home

- Practising core mathematical skills such as multiplication tables and written methods with your child.
- Ensure that students complete and hand in their homework.
- Ensure that your child has access to specialised mathematical equipment, which is needed at different points within the year.  For example, a calculator, a protractor and a pair of compasses.