

Maths – KS3 (Year 7 & Year 8)

Context

The mathematics department aims to provide all students with the confidence and mathematical skills required in everyday life and the work place. Our KS3 Syllabus is led by the National Curriculum with a range of tasks that emphasize problem solving, investigations and practical activities. This encourages students to become independent learners.

Students are set from year 7 through to year 11 and are able to move between sets depending on their progress. Students are also encouraged to work with mathematics they encounter in everyday life, cost of shopping bills, comparing supermarket offers, reading maps and trains time tables, food recipes and developing their understanding of money management (budgeting, bank accounts/credit cards interests, cost of mortgages).

We take part in a variety of annual mathematical competitions aimed to enrich pupils mathematical understanding. These include UKMT (Junior & Senior Challenge), UKMT Team challenge, Mayor's London Mathematical challenge and we have a weekly Mathematics Problem that pupils can enter to solve and win prizes.

Syllabus Details

We use Pearson Maths Progress books and a range of resources to cater for all students' abilities.

Mathematics KS3 Assessment Guide

Terms	Year 7	Year 8
Autumn	<ul style="list-style-type: none">• Numbers• Analysing data• Sequences• Area/perimeter/volume• Expressions• Functions/formulae	<ul style="list-style-type: none">• Numbers• Factors/primes• Expressions/equations• Area/volume• Real life graphs
Spring	<ul style="list-style-type: none">• Decimals/fractions• Probability• Ratio/proportion	<ul style="list-style-type: none">• Decimals/fractions/• Percentages• Ratios/proportion• Multiplicative reasoning• Graphs
Summer	<ul style="list-style-type: none">• Lines/angles• Graphs• Transformations	<ul style="list-style-type: none">• Lines/angles• Constructions/Loci• Probability• Transformations

Homework

One piece per week:

- Written piece of work
- Online homework
- Revision for an assessment

Recommended Resources

Pupils will be given a standard textbook to use in school. Access to the Internet is vital for online homework and home learning. A scientific calculator is essential.

Recommended Revision Book

KS3 Mathematics The Revision Guide (CGP) or any other standard KS3 revision guide.

Recommended Websites

There are numerous sites available but these are some of the best: -

- www.mymaths.co.uk – excellent interactive website for home learning and online homework
- www.methodmaths.co.uk – pupils will have access to a range of worksheet and past papers
- www.mathswatch.co.uk – pupils have access to video clips and worksheets