



Maths GCSE

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-2015.html>

Course Title	Exam Board	Specification Code	Head of Department
GCSE Mathematics	Edexcel	1MA1	Mr B Harman

Course Mathematics has its place in many industries and subjects. It may be unlikely that you will need **Information** to use trigonometry if you plan to become a chef, but learning basic maths skills at GCSE level helps to build up other essential skills that are used on a daily basis.

Skills such as problem solving, data analysis, communication, logical thinking, attention to detail and accuracy. Simple maths skills are used every single day in the form of shopping, budgeting, baking, planning and driving.

Skills/Aptitude Required

- Strong number foundations
- Problem analysis and available solutions
- Data, statistics and presentations skills
- Logical thinking and realistic evaluation
- Time management skills

Next Steps A-Level Maths (Grade 7 minimum requirement)
A-Level Physics, Chemistry and Biology
A-Level Business or Computing

Future Careers

- Teaching
- Science
- Medicine
- Statistics
- Finance

The Course in Depth

Year 9 Topics Numbers

Covered Factors, primes, multiples, squares, cubes and index notation.

Algebra

Simplifying, substitution, expanding and factorising.

Graphs

Reading and representing data, tables, times series, pie charts and line of best fit.

Year 10 Topics Angles

Covered How to find interior and exterior angles.

Averages

Mean, median, mode and range.

Ratio

Using, writing and comparing ratios.

Trigonometry

Pythagoras' theorem, sine and cosine.

Year 11 Topics

Covered

- Constructions, loci and bearings.
- Quadratics – Graphs and equations.
- Perimeter, area and volume – Circles.
- Fractions, indices and standard form.

Internal Assessment

An end of unit assessment is done when each unit has been completed. These assessments let both teachers and students know which areas need to be revised and revisited so that progress and mastery can be your focus.

There are also mock examinations carried out throughout the GCSE course to let students and parents know what grade they are currently working at.

External Assessment

The entire mathematics curriculum is externally assessed at the end of Year 11. There are three exam papers, each 90 minutes long:

- Paper 1 – Non Calculator
- Paper 2 – Calculator
- Paper 3 – Calculator

“Pure mathematics is, in its own way, the poetry of logical ideas.”

Albert Einstein