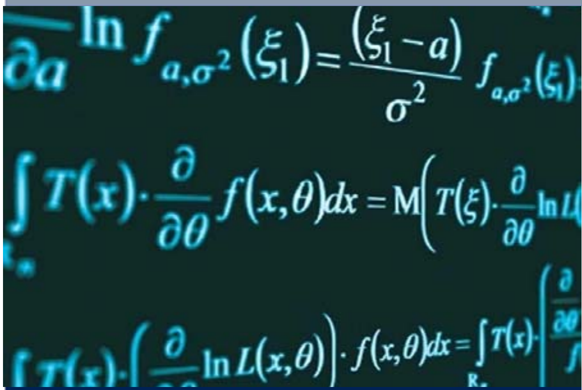

GCSE Mathematics

Compulsory Subject

Description

The Mathematics course enables students to acquire and use problem-solving strategies and thus developing confidence and satisfaction in solving Mathematical problems.
To apply mathematical techniques and methods in every day and real world situations by interpreting and communicating mathematical concepts in a variety of forms which are appropriate to the information and context to help students enjoy Mathematics and to appreciate its relevance to their future success in life long careers.

EXAMINATION BOARD: EDEXCEL– LINEAR (1MA1)

The New GCSE course focuses on using and applying Mathematics in the following areas:
Number - Fractions, Decimals, Percentages, Ratio, Proportion and Standard Form.
Algebra - Sequences, Indices, Graphs, Constructing and Solving Equations.
Geometry - Constructions, Trigonometry, Circle Theorems, and Vectors.
Measures - Maps and Scale Drawings, Conversions, Bearings and Compound Measures.
Probability - Theoretical and Empirical Probability, Outcomes, Tree Diagrams.
Statistics – Collecting, Representing and Analysing Data.

In addition, elements of Functional Mathematics are embedded into the course to enable students to have the necessary skills they need to use Mathematics in real life.

The teaching of Mathematics enables cross curricular work to take place which will require the extensive use of ICT and project work. Accessing the higher levels of learning will give students an insight into areas of Mathematics that will inspire them to continue studying at A-level, Further Mathematics and beyond.

Assessment

The Edexcel GCSE Mathematics qualification will require students to sit three externally marked papers. There is one non-calculator and two calculator papers each carry 1/3 of the marks available. Students will either sit the higher level papers which are aimed at the grades 9 to 4 or the Foundation Paper aimed at 5 to 1. The estimated equivalent of a C grade being a 4.
All teachers regularly assess students through their work in class, via assessments for each module and termly assessments based on the new curriculum.

Progression

Mathematics is universally recognised as a key qualification providing evidence of a student's ability to process information logically, demonstrate skills in problem solving and work creatively. We have a large cohort of students who stay on to study Mathematics at A Level at Slough and Eton. It is a subject which combines extremely well with Science, Languages or Art A-Levels.
Studying Mathematics beyond GCSE will open doors to a plethora of career opportunities from banking and investment, accounting, engineering, graphics designers, programmers etc.