A Level
Mathematics

Why study Mathematics?

Mathematics is the science that deals with the logic of shape, quantity and arrangement. Mathematics is all around us, in everything we do. It is the building block for many things in our daily lives, including mobile devices, architecture, art, money, engineering, and even sports.

Overview of course content

Exam Board:
edexcel

A Level Mathematics
(specification code: 9MA0)

Examination	% of total qualification
Paper 1 - Pure Mathematics 1 Exam duration: 2 hours (100 marks)	33.3%
Paper 2 - Pure Mathematics 2 Exam duration: 2 hours (100 marks)	33.3%
Paper 3 - Statistics and Mechanics Exam duration: 2 hours (100 marks)	33.3%

All three papers allow the use of a calculator.

Pure Mathematics - this section contains further algebra, trigonometry, coordinate geometry, sequences and series, differentiation and integration, exponentials and logarithms

Statistics - you will cover representation and summary of data, probability, correlation and regression, discrete distributions and the Normal distribution

Mechanics - you will cover distance, velocity and acceleration of a body moving in a straight line, force, momentum and impulse, friction and moments of a force.

Careers/Future Opportunities

Mathematics is a highly sought after qualification. It is of direct relevance to future studies or careers in areas such as engineering, finance and computing, but is also valuable in subjects such as architecture, economics and medicine.

If you have any questions, please contact:
office@kennetschool.co.uk

A Level Further Mathematics
(specification code: 9FM0)

Examination	% of total qualification
Paper 1 - Core Pure Mathematics 1 Exam duration: 1 hour 30 minutes (75 marks)	25%
Paper 2 - Core Pure Mathematics 2 Exam duration: 1 hour 30 minutes (75 marks)	25%
Paper 3 - Further Mathematics (Option 1) Exam duration: 1 hour 30 minutes (75 marks)	25%
Paper 4 - Further Mathematics (Option 2) Exam duration: 1 hour 30 minutes (75 marks)	25%

In the first year you will complete the full A Level in Mathematics content although examination will only take place at the end of Year 13.

The second year topics include more pure mathematics, including complex numbers, matrices, further calculus, further vectors, polar coordinates, hyperbolic functions and differential equations, along with two additional applied topics (the applied topics will come from either statistics, mechanics, decision mathematics or further pure mathematics).

Decision Mathematics has applications to such different problem solving as the design of circuits on microchips to the scheduling of tasks required to build a new supermarket.

Statistics has applications to any studies that involve collecting data for analysis such as psychology, medicine and biology.

Mechanics has applications in the varied types of engineering and physics.

Please note that no particular additional reading is required, but you will be encouraged to read around the subject.