

PCHS Curriculum Information

Course Title: A Level Maths	Exam Board: AQA	Specification Code: 7357
How will students be assessed? A level Mathematics is a linear course which is formally assessed at the end of year 13 with three examinations. Each exam is marked out of 100 and lasts for 2 hours. The papers are all calculator papers and are equally weighted, each being worth 33% of the final mark. Each paper has a mix of question styles varying from short single mark questions to longer unstructured questions. Paper one examines Pure Mathematical methods only. Paper two examines topics from Pure Mathematics and Mechanics, paper three is Pure Mathematics and Statistics. Throughout the course students will be informally assessed using regular topic tests and more formally with termly papers utilising exam questions. The A level syllabus requires students to demonstrate their skills and knowledge through the application of problem-solving techniques and with the use of clear, precise and appropriate mathematical language.		

KEY CONTENT Delivered by two teachers, one delivering pure content and the other applied.
Half Term 1 <u>Core content:</u> Coordinate geometry Differentiation Integration <u>Applied content:</u> Vectors Kinematics
Half Term 2 <u>Core content:</u> Recap Surds and Quadratic equations Polynomials – dividing and factor theorem Exponentials and logarithms Modelling with logarithms Trigonometry <u>Applied content:</u> Forces and Newton's Laws Differentiation from first principles Variable acceleration
Half Term 3 <u>Core content</u> Binomial expansions Equation of a circle Simultaneous equations and the discriminant Inequalities

Applied content:

Sampling

Data presentation and interpretation

Probability

Half Term 4

Core content

Transformations

Proof and set notation

Applied content:

Binomial distributions

Working with a large data set

Half Term 5

Core content

Problem solving

Begin Year 13 content:

Applied content:

Hypothesis testing

Half Term 6

Begin Year 13 content:

Further differentiation, including the product rule, the quotient rule and the chain rule.

Radians and further trigonometry

Functions