MATHEMATICS

"Mathematics is not about numbers, equations, computations or algorithms: it is about understanding".

William Paul Thurston

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Exam board:

AQA

The Ferrers Sixth Form

Why study A Level Maths?

Mathematics is one of the most studied and respected A levels, highly valued by both employers and universities. As part of the course, students will explore theory and work on logical skills, statistics and problem solving. They will also learn to hone and refine their research and critical thinking skills whilst working independently. Many universities view mathematics A level as a vital pre-requisite for studying STEM subjects at degree level.

What will you study?

In Year 12, you will learn both pure and applied mathematics. The pure modules consist of 10 different topics including differentiation, integration and logarithms. The applied topics are statistics and mechanics. Statistics looks at data representation, probability and hypothesis testing. The mechanics topics are split into kinematics, forces, Newton's laws and moments.

Year 13 builds on the year 12 topics looking deeper into each branch of mathematics and applying problem solving skills.

How will you study?

As in GCSE mathematics, the teacher will lead the learning and you will be expected to study, revise and consolidate subject knoweldge as you move through the course.

How will you be assessed?

The course is linear and there is no coursework element. Assessment is undertaken during the Year 13 exam series; this consists of three exam papers..

What do I need to study the course?

Entry requirements: APS of 5.5+ Minimum Grade 6 GCSE Maths

Skills and attributes: Successful students need confidence when dealing with the four strands in mathematics; number, algebra, geometry and data.

Successful students tend to have intellectual curiosity, a logical and methodical approach and are open to independent exploration of new concepts.

Which subjects combine well with Maths?

Business, physics, biology, chemistry, geography and many more.