F urther Maths

Further Mathematics has become an increasingly popular subject for keen and **gifted mathematicians**. Students wishing to apply for the **very best universities**, especially for courses in **Mathematics and Engineering**, will have a greater chance of gaining a good offer if they have studied Further Mathematics. Once at university, students also find that they cope much better with these courses having had some prior experience of the **extension topics** covered in Further Mathematics. Students who take Further Maths will be doing an extended curriculum to include A Levels maths also, with increased lesson time **of 8 periods per week.**

Course Outline
A-Level Mathematics:
As part of the curriculum, students will study Pure and Applied maths. The structure of the course is such that all AS and A2 content is learnt in year 12. **Pure A level mathematics** extends fundamental mathematical skills, such as *Algebra* and *Trigonometry* and introduces new topics such as *Calculus* and *Radian Measure*.
Applied A level mathematics includes *Statistics* and *Mechanics* modules, in which 'real world' situations are modelled mathematically. Our exam board for A Level maths is **Edexcel.**
A-Level Further Mathematics:
Beginning in year 13, students will study Core Pure 1 & 2 and two optional modules.
The **Further Mathematics** modules introduce pure mathematics topics beyond those covered by AS/A2 Mathematics, including Complex Numbers, Matrices, Proof, Polar Coordinates and Differential Equations.

Our exam board for A Level maths is **Edexcel.**

Assessment
A-Level Mathematics is assessed **by examination only**. Students sit **public examinations at the end of year 13.** There are three two hour exams (2 Pure/1 Applied) for the A2 qualification. The exams are **equally weighted** and the final grade is calculated as an average of all three examination results.
A-Level Further Mathematics is assessed **by examination only**. There are four 90-minute exams for further maths (2 core and 2 options – Further Pure 1 and 2). The exams are **equally weighted,** and the final grade is calculated as an average of all three examination results.

Preparing for assessments:
Throughout the year, A level mathematicians complete weekly diagnostic tests covering content from that week's lessons. These diagnostics allow students to practice exam style questions regularly and help them asses their own level of understanding.
Students build up a folder of classwork, homework, revision, and diagnostics test.
Practising full papers and unit tests also prepares students for assessments.
Here is the content plan for assessments this year:
- ✓ AUTUMN 2 MOCK1: Pure (topics covered so far)
- ✓ SPRING 2 MOCK2: Pure (full paper) and Applied (topics covered so far)

Entry requirements

GCSE Maths: **8** and Additional Maths <u>must</u> have been studied in Year 11