

# MATHEMATICS

## INTRODUCTION

Every scholar at AGFS takes GCSE Mathematics. It is a core subject and develops not only confidence and mastery of Mathematics specifically, but also vital transferable skills built through our Power Standards of Numeracy, Literacy (Key Terms), Knowledge, Application, Interpretation and Reasoning.

## THE COURSE

AGFS scholars follow the Edexcel 9-1 Curriculum. The 2-year Edexcel Scheme of Work has been analysed and amended to suit the needs of our scholars, including increasing the maximum level of difficulty in earlier units to allow for all scholars to make progress.

The GCSE is examined across three equally-weighted exam papers at the end of Year 11. There is one non-calculator paper and two calculator papers, and each is 1 hour and 30 minutes long. Units are not tied to a specific paper each year, but are spread across the three papers.

Scholars begin their GCSE journey in Year 9, so your child has already completed the first two units in the Autumn term - **Basic Number** and **Basic Algebra**. Completing the course over three years allows for additional and personalised revision and refinement time in order to ensure all scholars reach their full potential.

For more information, please follow the link to the specification [here](#).

## NEEDED SKILLS

The best Mathematics scholars combine their mastery of our Power Standards with: proactivity through consistent participation, a willingness to make mistakes and refine until they are masters of their subject, and timetabled independent study sessions.

### What can you do to prepare:

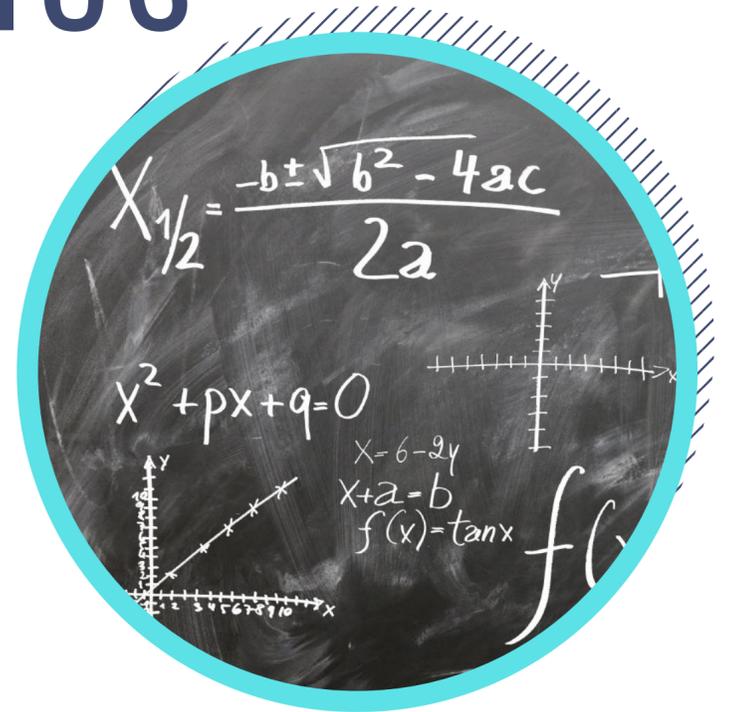
- Practise Numeracy on TimesTables Rockstars - <https://trockstars.com/>
- Revise Key Terms using Quizlet and test yourself using the PRTs.
- Revise Knowledge and Application on Mathswatch - <https://vle.mathswatch.co.uk/vle/>
- Practise Interpretation and Reasoning using past papers - <https://www.mathsgenie.co.uk/papers.html>

## THE FUTURE

Not only is a pass in Mathematics GCSE essential for many careers, but a Grade 7-9 in Mathematics opens up doors to Grammar School and Private provision at Post-16 regardless of your career goals. Mathematics A Level/IB Higher Level Maths are also widely respected among universities, and Mathematics degrees provide one of the highest salaries of all degree courses.

**Future careers to explore:** Accounting, Actuarial Science and Trading.

For further information on Maths, please contact Ms Barratt, Head of Mathematics.



### Course Areas

- **Number:** Basic Number; Fractions, Decimals, Percentages and Ratios;
- **Algebra:** Basic Algebra; Equations and Inequalities; Sequences; Graphs
- **Ratio, proportion and rates of change:** Fractions, Decimals, Percentages and Ratio; Ratio and Multiplicative Reasoning
- **Geometry and measures:** Area and Volume; Angles and Lengths; Vectors; Transformations and Constructions; Circle Theorems
- **Probability**
- **Statistics**