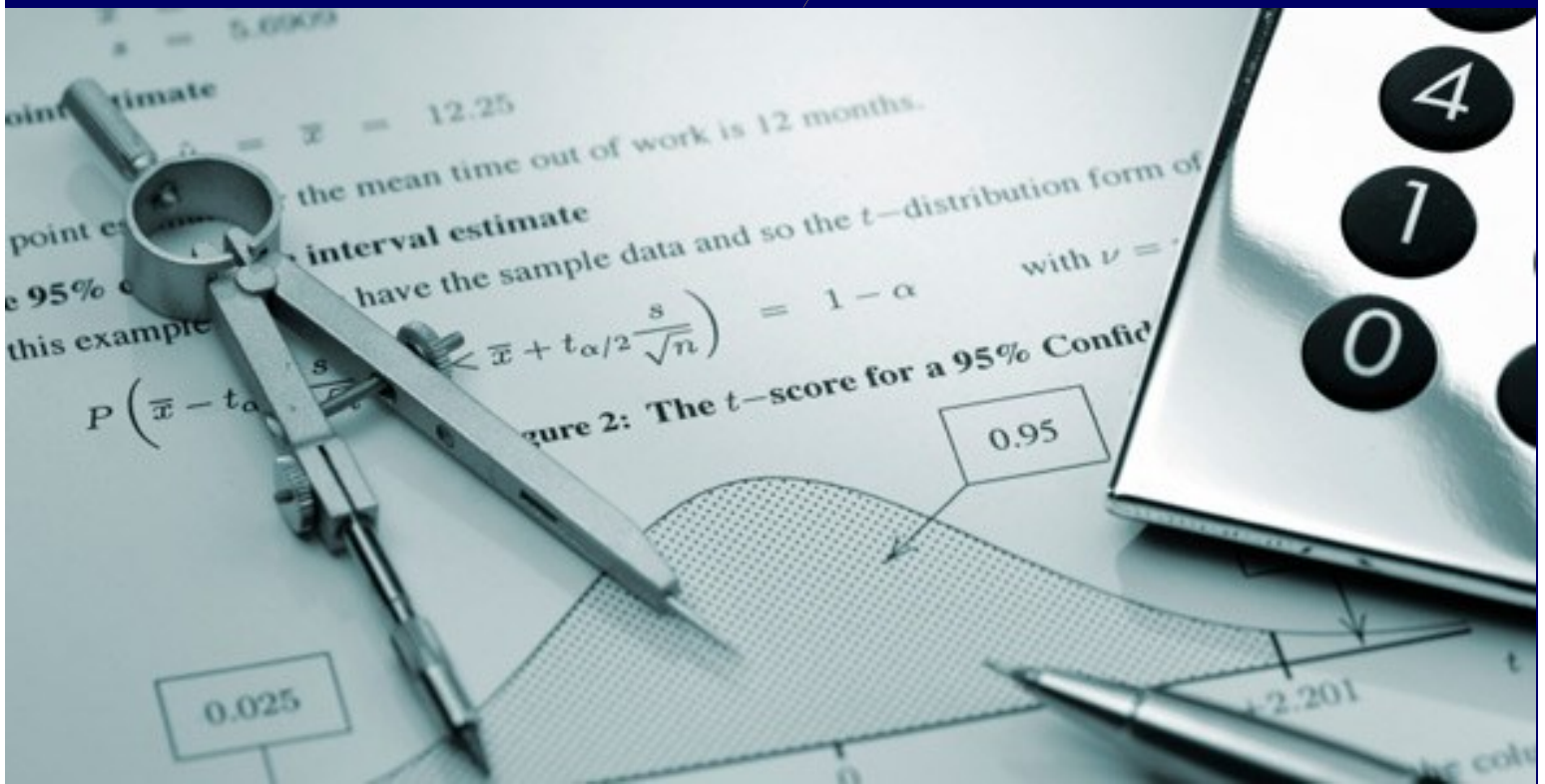


# FEVERSHAM ACADEMY



Maths Department

*KS3 Overview*

*GCSE Maths*

*A-Level Mathematics*

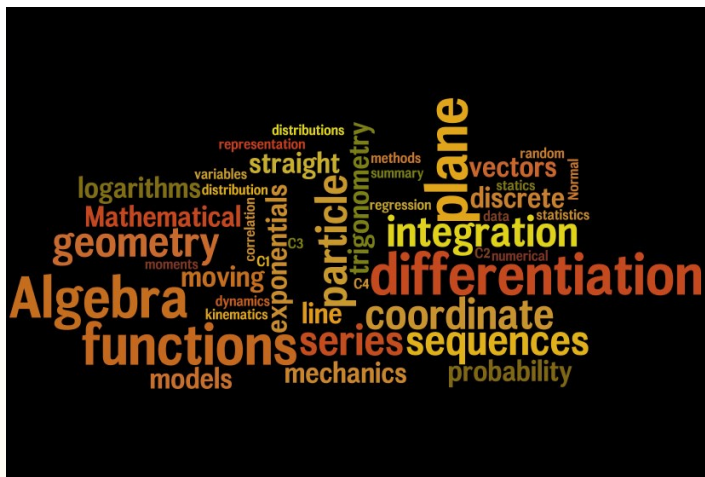
*Level 3 Mathematical Studies (Core Maths)*

## KS3 Overview

Maths at Feversham Academy is taught in a variety of different ways to engage, excite and encourage mathematical thinking. It can stimulate moments of pleasure and wonder for all students when they solve a problem for the first time, discover a more elegant solution, or notice hidden connections. Students who are functional in mathematics are financially capable and able to think independently in applied and abstract ways, and can reason, solve problems and assess risk.

Our best Mathematicians will have the opportunity to enter the UKMT Maths Challenge at Bronze, Silver or Gold level.

	<b>Term 1</b>	<b>Term 2</b>	<b>Term 3</b>
<b>Year 7</b>	Number, Algebra, Ratio, Geometry, Probability and Statistics	Number, Algebra, Ratio, Geometry, Probability and Statistics	Number, Algebra, Ratio, Geometry, Probability and Statistics
<b>Year 8</b>	Number, Algebra, Ratio, Geometry, Probability and Statistics	Number, Algebra, Ratio, Geometry, Probability and Statistics	Number, Algebra, Ratio, Geometry, Probability and Statistics
<b>Year 9</b>	Number, Algebra, Ratio, Geometry, Probability and Statistics	Number, Algebra, Ratio, Geometry, Probability and Statistics	Number, Algebra, Ratio, Geometry, Probability and Statistics



## GCSE Mathematics

### OVERVIEW

This course will encourage students to develop confidence in, and a positive attitude towards, mathematics and to recognise the importance of mathematics in their own lives and to society.

You will be taught in a variety of ways. In the Mathematics department this will include:

- Paired and group work
- Individual work
- Teacher led work
- Student presentation of work

	Term 1	Term 2	Term 3
Year 10	Number, Algebra, Ratio, Geometry, Probability and Statistics	Number, Algebra, Ratio, Geometry, Probability and Statistics	Number, Algebra, Ratio, Geometry, Probability and Statistics
Year 11	Number, Algebra, Ratio, Geometry, Probability and Statistics	Number, Algebra, Ratio, Geometry, Probability and Statistics	Revision & Exam

### WHAT QUALIFICATION WILL I GET?

GCSE Mathematics

### WHICH EXAM BOARD?

AQA

### HOW WILL I BE ASSESSED?

There are two levels:

Higher                      Grades 4-9  
 Foundation                Grades 1-5

The examination board is AQA and the Syllabus is Linear.

Paper 1 – Non -calculator

1hr 30mins

80 marks worth 33 <sup>1</sup>/<sub>3</sub> of the GCSE

Paper 2 - Calculator

1hr 30mins

80 marks worth 33 <sup>1</sup>/<sub>3</sub> of the GCSE

Paper 3 - Calculator

1hr 30mins

80 marks worth 33 <sup>1</sup>/<sub>3</sub> of the GCSE

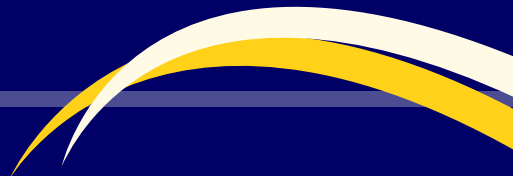
**There is NO coursework**

### FUTURE OPPORTUNITIES?

Level 3 Core Maths and Mathematics A Level, a 2 year course.

This supports courses such as A-Level Sciences, Psychology and Business Studies.

Most subjects require a good knowledge of Mathematics.



## ENTRY REQUIREMENTS

3 A\*-B grades, grade 5-9 in GCSE English Language and 7-9 in GCSE Maths. Students will also need to pass an initial assessment.

## WHAT QUALIFICATION WILL I GET?

A-Level Mathematics

## WHICH EXAM BOARD?

AQA

## HOW WILL I BE ASSESSED?

### AS at the end of Year 12

Paper 1 - written exam.

1hr 30mins

80 marks worth 50% of qualification

Paper 2—written exam

1hr 30mins

80 marks worth 50% of qualification

### A2 at the end of Year 13

Paper 1—written exam

2 hrs

100 marks worth 33<sup>1/3</sup> of qualification

Paper 2—written exam

2hrs

100 marks worth 33<sup>1/3</sup> of qualification

Paper 3—written exam

Paper 2

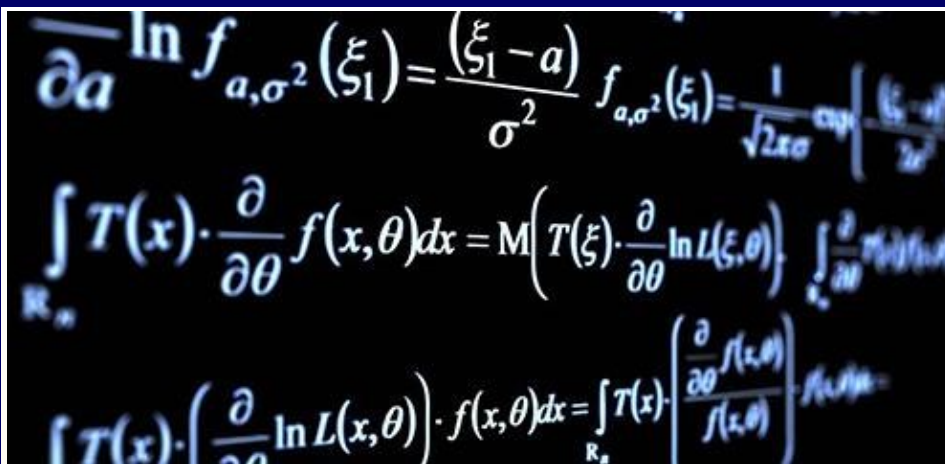
2hrs

100 marks worth 33<sup>1/3</sup> of qualification

There is no coursework for A-Level Maths.

## FUTURE OPPORTUNITIES?

Your AS/ A2 will be nationally recognised by all universities and institutions and will contribute to your points score for entry into higher education.



## A-Level Mathematics

### OVERVIEW

A-Level Maths provides students with a thorough grounding in the mathematical tools and techniques often needed in the workplace. The logic and reasoning skills developed by studying A-Level Maths make sure the qualification is widely respected even in non-mathematical arenas.

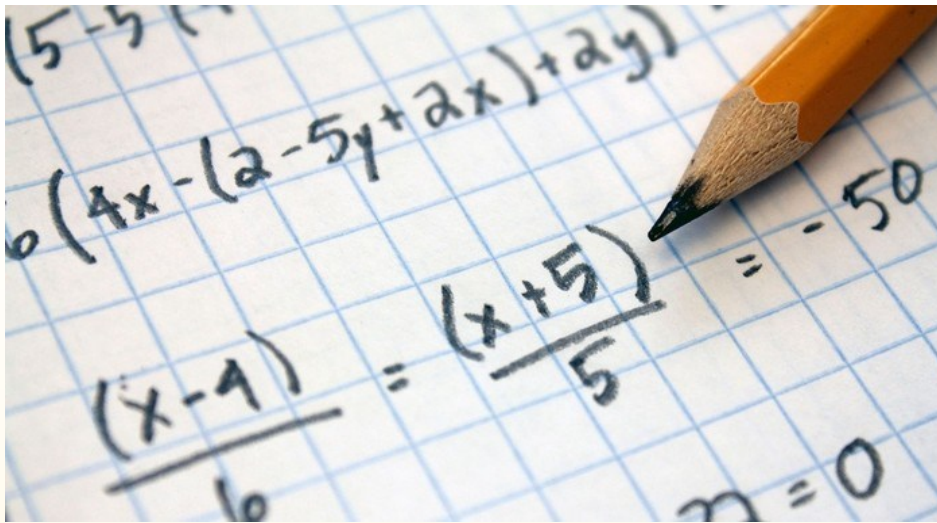
Mathematics has always been the language of science and technology. As our society becomes increasingly technological it becomes increasingly important to be able to speak and reason in that language. Those who are able to do this find themselves very attractive employees.

	Term 1	Term 2	Term 3
Year 12	C1	C2 and C3	Complete D1 and Summer Exams. Start C3
Year 13	C3	C4 and S1	Complete S1 and Summer Exams

Some of the topics covered on this course include:

- Algebra and Functions
- Trigonometry
- Exponentials and Logarithms
- Differentiation
- Integration
- Numerical Methods
- Coordinated geometry
- Vectors
- Probability

A-Level Maths is a linear course lasting 2 years. Students study Pure Mathematics Mechanics and Statistics. **All** content is compulsory.



## Core Maths

### OVERVIEW

This is a qualification designed for students who have achieved a grade 5 or above in GCSE Maths.

It will help to build students' confidence and competence in applying mathematical techniques to solve a range of problems and introduce them to new techniques and concepts that will prepare them for future study and future employment within a broad range of academic, professional and technical fields.

It helps to develop students' mathematical, thinking and reasoning skills. It supports courses such as A-Level Sciences, Psychology and Business Studies.

	Term 1	Term 2	Term 3
<b>Year 12</b>	Analysis of Data	Maths for personal finance	Estimation & critical analysis
<b>Year 13</b>	Statistics including: Normal distribution Population estimates including confidence intervals	Statistics including: Correlation Regression	Revision and external exams

### COURSE CONTENT

Core Maths is a two year course and is a linear qualification. The following are some of the topics that will be covered in the qualification:

- Critical analysis of Data
- Maths for personal finance
- Mathematical modelling, evaluating and reasoning skills
- Graphical methods
- Statistical techniques
- Critical path analysis
- Cost benefit analysis
- Rates of change
- Exponential growth and decay

### ENTRY REQUIREMENTS

3 A\*-B grades, grade 5-9 in GCSE English Language and 7-9 in GCSE Maths. Students will also need to pass an initial assessment.

### WHAT QUALIFICATION WILL I GET?

Level 3 Mathematical Studies (Core Maths)

### WHICH EXAM BOARD?

AQA

### HOW WILL I BE ASSESSED?

This qualification is Linear. Linear means that students will sit all the exams at the end of the course (in June of Year 13).

The assessment consists of two papers that are both 1 hour 30 minutes long.

Calculators will be allowed for both papers.

### FUTURE OPPORTUNITIES?

Your AS/ A2 will be nationally recognised by all universities and institutions and will contribute to your points score for entry into higher education.