



Fernhill School

Faculty of Mathematics and
Numeracy

Mission Statement


The Mathematics department at Fernhill School aims to provide a learning experience that supports, stimulates and challenges all pupils on their pathway towards achieving their Mathematical potential. We aim to encourage and develop independent thinking and logical problem solving skills, equipping all students with the mathematical skills essential for everyday life.





***Thanks for your interest in the Fernhill
Mathematics Department.***

We hope you enjoyed your visit!

To find out more why not check us out on
social media.

 www.fernhill-school.com

 [https://www.facebook.com/
fernhillschoolrutherglen/](https://www.facebook.com/fernhillschoolrutherglen/)

 Fernhill School
Mathematics Department

Enrichment

There are many enriching activities that take place within the Mathematics Department, below are a just a few:

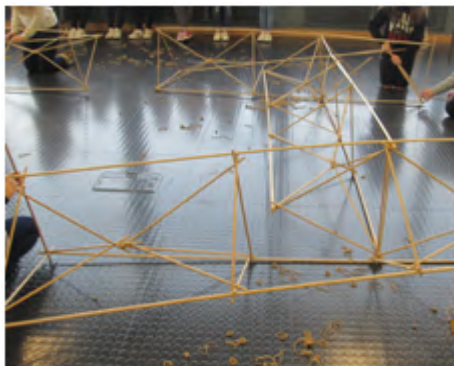
UKMT - Senior Maths Challenge

Fernhill Maths Challenge – A combination of both individual challenges and also team competitions.

Maths Week Scotland - Annual event to engage all pupils in everything Mathematical.

Co-Curricular—Threadcraft club, Maths Hub and Mastery classes for SQA exam preparation.

Trips — S1 and S2 attend a Maths trip with a focus on STEM.



Meet the Faculty

**Mrs N Stevenson, BSc (Hons),
PGCE**



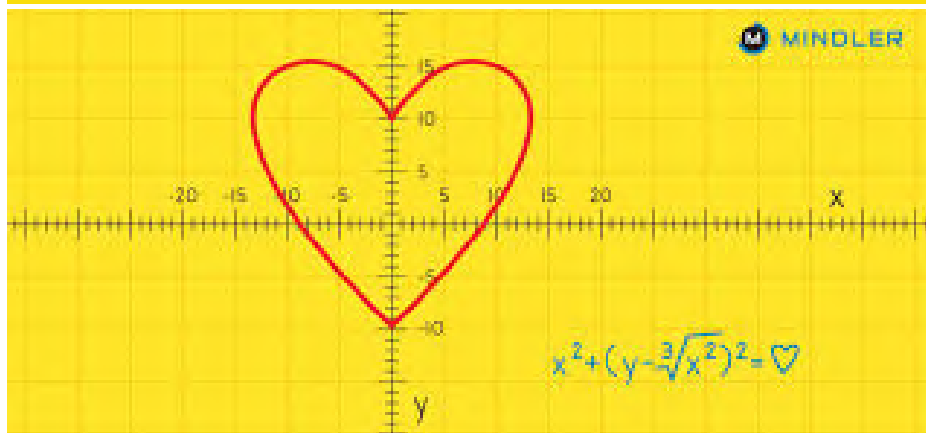
Mrs C Rooney, BSc (Hons), PGCE



Mrs P Kitchin, BSc (Hons), PGCE



Aims



- To set challenging targets with high expectations for all pupils.
- To offer a variety of approaches to teaching and learning to engage and motivate pupils and encourage their active participation.
- To smooth the transition for pupils between stages and ensure progression in teaching and learning throughout their time at Fernhill School.
- To explore enrichment opportunities outside the curriculum to enhance pupils' enjoyment of Mathematics.
- Give opportunity for students to work both independently and collegiately to help them develop their independent learning skills and their ability to communicate and share news ideas and methodology.

Curriculum Overview

Advanced Higher Mathematics

Advanced Higher is the SQA's highest level of National Course. It is very demanding. Advanced Higher extends students' knowledge and skills beyond Higher. Students will face new academic and personal challenges, requiring them to develop their knowledge and abilities, and to think and work independently.

The course aims to:

Motivate and challenge candidates by enabling them to select and apply complex Mathematical techniques in a variety of Mathematical situations
Extend candidates' skills in problem solving and logical thinking.

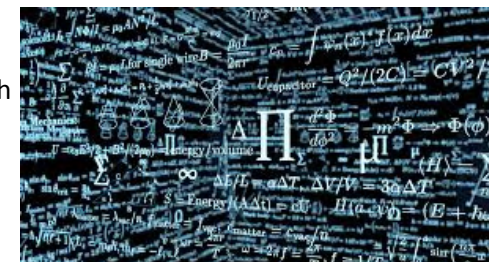
Clarify candidates' thinking through the process of rigorous proof.

Allow candidates to interpret, communicate, and manage information in Mathematical form, skills which are vital to scientific and technological research and development.

Develop confidence in the subject and a positive attitude towards further study in Mathematics and the use of Mathematics in employment.

Deliver in-depth study of Mathematical concepts and the ways in which Mathematics describes our world.

Deepen candidates' skills in using Mathematical language and exploring advanced Mathematical ideas.



Curriculum Overview

Higher Mathematics

The new Higher Mathematics course enables learners to select and apply Mathematical techniques in a variety of Mathematical situations. Learners interpret, communicate and manage information in mathematical form. The course extends some of the content covered in National 5 and introduces further skills in Algebra, Geometry and Calculus.

The course aims to:

Motivate and challenge candidates by enabling them to select and apply Mathematical techniques in a variety of Mathematical situations.

Develop confidence in the subject and a positive attitude towards further study in Mathematics and the use of Mathematics in employment.

Deliver in-depth study of Mathematical concepts and the ways in which Mathematics describes our world.

Allow candidates to interpret, communicate and manage information in mathematical form, skills which are vital to scientific and technological research and development.

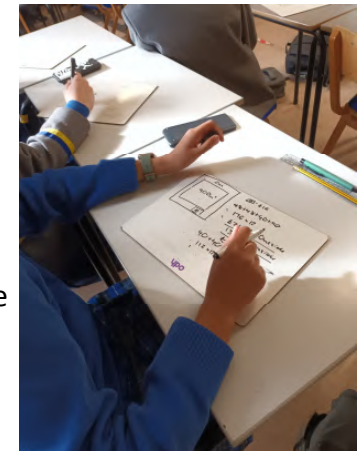
Deepen candidates' skills in using Mathematical language and exploring advanced Mathematical ideas.

Why Study Maths?

Mathematics is the means of looking at the patterns that make up our world and the intricate and beautiful ways in which they are constructed and realised. Numeracy is the means of making that knowledge useful.

Mathematics contributes to the school curriculum by developing pupils' abilities to calculate; to reason logically, algebraically, and geometrically; to solve problems and to handle data. Mathematics is important for pupils in many other areas of study, particularly Science and Technology. It is also important in everyday living, in many forms of employment, and in public decision-making.

It enables pupils to build a secure framework of Mathematical reasoning, which they can use and apply with confidence. The power of Mathematical reasoning lies in its use of precise and concise forms of language, symbolism and representation to reveal and explore general relationships. These Mathematical forms are widely used for modelling situations.



Curriculum Overview

S1 and S2

Classes are given a broad general education in Mathematics based on the Scottish Curriculum for Excellence. There is a strong emphasis on developing Numeracy Skills with pupils engaged with work on fractions, decimals, percentages, statistics, shape and algebra. Classes are in mixed groups and are continuously assessed throughout the year both formally and informally.

Senior Phase

National 5 Mathematics

The course develops important Mathematical techniques which are critical to successful progression beyond National 5 in Mathematics and many other curriculum areas. The skills, knowledge and understanding in the course also support learning in Technology, Health and Wellbeing, Science, and Social Studies.

The course aims to:

Motivate and challenge candidates by enabling them to select and apply Mathematical techniques in a variety of Mathematical and real-life situations

Develop confidence in the subject and a positive attitude towards further study in Mathematics

Allow candidates to interpret, communicate and manage information in Mathematical form: skills which are vital to scientific and technological research and development

Develop candidates' skills in using mathematical language and in exploring Mathematical ideas

Develop skills relevant to learning, life and work in an engaging and enjoyable way.

Curriculum Overview

National 5 Application of Mathematics

The National 5 Applications of Mathematics course explores the Applications of Mathematical techniques and skills in everyday situations, including Financial Matters, Statistics, and Measurement. The skills, knowledge and understanding in the course also support learning in other curriculum areas, such as Technology, Health and Wellbeing, Science, and Social Studies.

The course aims to:

Develop the ability to analyse real-life problems or situations with some complex features involving Mathematics

Develop confidence in the subject and a positive attitude towards the use of mathematics in real-life situations.

Develop the ability to select, apply, combine and adapt mathematical operational skills to new and unfamiliar situations in life and work to an appropriate degree of accuracy

Develop the ability to use Mathematical reasoning skills to generalise, build arguments, draw logical conclusions, assess risk, and make informed decisions

Develop the ability to use a range of Mathematical skills to analyse, interpret and present a range of information

Develop the ability to communicate mathematical information in a variety of forms

Able pupils will have the opportunity for dual SQA presentation for N5 Mathematics and N5 Application of Mathematics.

