

CAREERS INFORMATION



OTHER INFORMATION

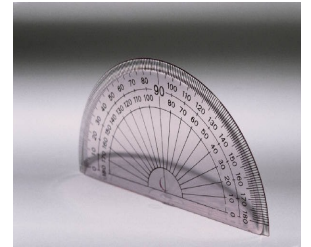
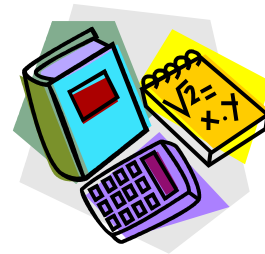
STAFF: Mrs Tocher, Mrs Murdoch, Mrs Massie,
Mrs Drysdale, Mrs Nicoll, Miss Mitchell

Mathematics

CHALLENGES

Mathematical Challenge
UKMT Mathematical Challenge
Enterprising Mathematics
Maths in the Pipeline

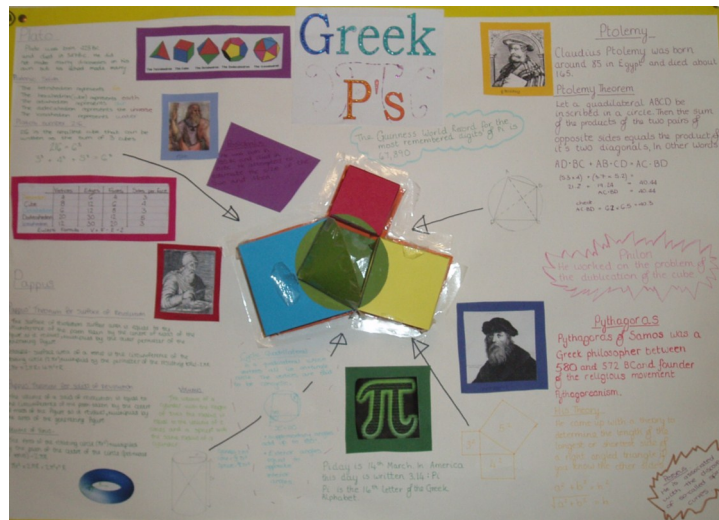
Mathematics Higher



Career Areas

- [Construction](#)
- [Computing & ICT](#)
- [Engineering](#)
- [Finance](#)
- [Science & Mathematics](#)
- [Health & Medicine](#)
- [Transport & Distribution](#)
- [Manufacturing Industries](#)

Further advice and information on these options is available from your subject teacher, guidance teacher and careers adviser.



TURRIFF ACADEMY

Email: turriff.aca@aberdeenshire.gov.uk

COURSE INFORMATION

Why Mathematics?

Mathematics is important in everyday life, allowing us to make sense of the world around us and to manage our lives. Using mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions. This course enables you to build on your previous mathematical experience in the areas of algebra, geometry and trigonometry and introduces you to elementary calculus. The skills you learn in this course are useful in many careers involving engineering, medicine, technology, business and the physical sciences.

Course Outline

The course consists of **three** compulsory units and the course assessment unit.

Mathematics: Expressions and Functions

- develop knowledge and skills that involve the manipulation of expressions, the use of vectors and the study of mathematical functions
- cover aspects of algebra, geometry and trigonometry, and also skills in mathematical reasoning and modelling.

Mathematics: Relationships and Calculus

- develop knowledge and skills that involve solving equations and to introduce both differential calculus and integral calculus
- cover aspects of algebra, trigonometry, calculus, and also skills in mathematical reasoning and modelling.

Mathematics: Applications

- develop knowledge and skills that involve geometric applications, applications of sequences and applications of calculus
- cover aspects of algebra, geometry, calculus, and also skills in mathematical reasoning and modelling.

ASSESSMENT

Your work will be assessed by your teacher on an ongoing basis throughout the course. You must pass all three units and the course assessment to gain the course qualification.

The course assessment has two question papers:

- Paper 1 – Non-Calculator (60 marks)
- Paper 2 – Calculator may be used (70 marks).

The question papers will assess your numerical, algebraic, geometric, trigonometric, calculus and reasoning skills. The question papers will be set and marked by SQA.

The course assessment is graded A-D.



PROGRESSION

If you complete the course successfully, it may lead to:

- **Advanced Higher Mathematics**
- **Advanced Higher Mathematics (Statistics)**
- **Advanced Higher Mathematics (Mechanics)**

FURTHER COURSES IN TURRIFF ACADEMY

In S5/6:

Mathematics Advanced Higher

Lifeskills Mathematics