

# CAREERS INFORMATION



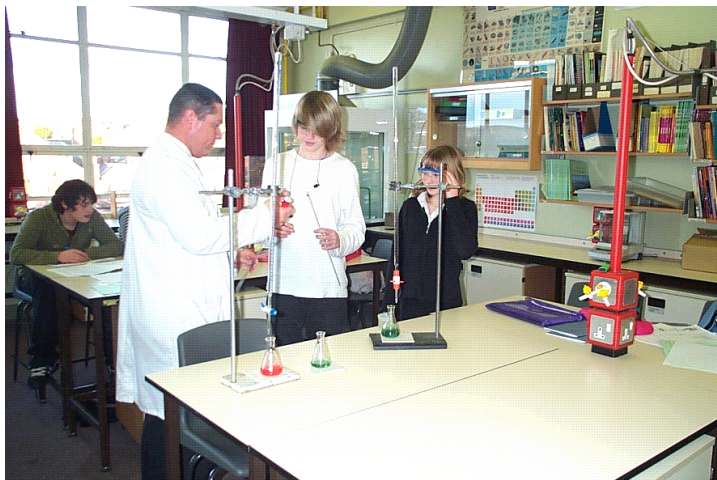
## Career Areas

Further advice and information on these options is available from your

- Animals, Land and Environment
- Hairdressing & Beauty / Beauty
- Health and Medicine
- Manufacturing Industries
- Science and Mathematics / Chemistry / Food Science & Technology

# OTHER INFORMATION

STAFF:- Mr C Dubbels and Miss K Barnadr



# Science

# Chemistry National 5



TURRIFF ACADEMY

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# COURSE INFORMATION

## Why Chemistry?

Chemistry is vital to everyday life and allows us to understand and shape the world in which we live. You will learn about the applications of chemistry in everyday contexts such as medicine, energy and industry, as well as its impact on the environment and sustainability. You will learn how to think creatively and independently, and analyse and solve problems.

## Course Outline

You will learn about how we use the Earth's resources, the chemistry of everyday products and environmental analysis. You will find out how chemistry affects our environment and our everyday lives. This will help you to make your own decisions on contemporary issues where scientific knowledge is constantly developing.

The course has **three** compulsory units plus an **added value** unit that assesses your practical skills. The units are the same as those for **National 4** but you will have to achieve a higher standard of work.

### Chemical Changes and Structure

In this unit you will:

- develop scientific skills and knowledge of chemical reactions
- investigate rates of reaction, energy changes of chemical reaction, and the reactions of acids and bases and their impact on the environment
- research atomic structure and bonding related to properties of materials.
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### Nature's Chemistry

In this unit you will:

- research the Earth's rich supply of natural resources
- investigate how fossil fuels are extracted and processed for use, including the chemistry of using fuels and their effect on the environment
- explore plants as a source of fuels, carbohydrates and consumer products
- find out how chemists use plants in the development of everyday products.

### Chemistry in Society

In this unit you will:

- investigate the chemical reactions, properties and applications of metal and alloys
- compare and contrast the properties and applications of plastics and new materials
- investigate the use of fertilisers, the formation of elements, and the presence of background radiation
- research the use of chemical analysis for monitoring the environment.
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### Added Value Unit: Chemistry Assessment

In this unit you will:

- carry out an investigation using the skills and knowledge you developed in the other three units
- investigate a topical issue in Chemistry from a selection
- produce a written summary of the research and development ideas that inspired your work.

# ASSESSMENT

Your work will be assessed by your teacher on an ongoing basis throughout the course. Items of work might include:

- practical work - such as practical experiments
- written work - research assignments and reports
- projects
- class-based exams.

You must also sit a written exam marked by the Scottish Qualification Authority (SQA).

You must pass all the course units, including the practical assessment, and the written exam to be awarded the course qualification. The course assessment is graded A-D. Your grade will depend on the total mark for all the units in your course.

# PROGRESSION

Successful completion of this course may lead to:

Higher Chemistry

# FURTHER COURSES IN TURRIFF ACADEMY

In S5/6

**Chemistry Higher**  
**Chemistry Advanced Higher**

