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.

CHEMISTRY NATIONAL 5

Details of Course Components

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.

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.

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

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

The course award it determined by:
Final exam — 100 marks
Assignment — an investigation written up in class and submitted to the SQA to be marked. 25 marks

The Course assessment is graded A–D. Your grade will depend on the total marks gained from the assignment and final exam.

FACULTY OF SCIENCE

Biology Staff :
Mr Alan Stickle, Miss Rowan Cannell, Miss Sue Rodwell

Chemistry Staff:
Mr Stephen McNeil (PT), Miss Kat Barnard,

Physics Staff:
Mrs Abi Gibbon, Mr Tom Court

Career Areas:

Careers in a chemistry-based discipline or related area, or in a wide range of other areas, such as oil and gas exploration, renewable energy development, engineering, technology, pharmaceuticals, environmental monitoring, forensics, research and development, management, civil service and education

Courses in Turriff Academy

Level 4 NPA Science & Technology
National 4 Chemistry
National 4 Physics
National 5 Biology
National 5 Chemistry
National 5 Physics
Level 5 NPA Applied Science
Higher Biology
Higher Chemistry
Higher Physics
Level 6 NPA Scientific Technologies
Advanced Higher Biology
Advanced Higher Chemistry
Advanced Higher Physics

Useful websites to help you with your choices:
www.myworldofwork.co.uk
www.skillsdevelopmentscotland.co.uk

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