



Chemistry



The course develops pupils' curiosity, interest and enthusiasm for chemistry in a range of contexts. Pupils will develop an appreciation of the impact of chemistry on their everyday lives by applying their knowledge and understanding of chemical concepts in practical situations. The course provides opportunities for pupils to think analytically, creatively and independently, and to make reasoned evaluations. The course enables pupils to make their own decisions on issues within a modern society, where the body of scientific knowledge and its applications and implications are ever developing.

Candidates develop a range of skills that are valued in the workplace, providing a secure foundation for the study of chemistry in further and higher education. The course also provides a knowledge base that is useful in the study of other sciences.

Topics Covered

☐ **Chemical Changes & Structures**

In this area we cover periodicity, structure and bonding and oxidising and reducing agents.

☐ **Nature's Chemistry**

In this area we cover systematic carbon chemistry, alcohols, carboxylic acids, esters, fats and oils, soaps, detergent and emulsions, proteins, oxidation of food, fragrances and skin care.

☐ **Chemistry in Society**

In this area we cover getting the most from reactants, controlling the rate, chemical energy, equilibria and chemical analysis.

☐ **Researching Chemistry**

In this area we cover common chemical apparatus, general practical techniques and reporting experimental work.

Skills Gained

- ☐ *Applying knowledge of chemistry to new situations, analysing information and solving problems*
- ☐ *Develop scientific analytical thinking skills*
- ☐ *Planning, designing and carrying out experiments to test hypotheses*
- ☐ *Develop skills of independent working*
- ☐ *Use scientific literacy to communicate ideas and issues and the make scientifically informed choices*

Assessment Breakdown

The course assessment has three components.

1. Question paper 1 – Multiple choice, 25 marks completed in 40 minutes
2. Question paper 2 – 95 marks completed in 2 hours and 20 minutes
3. Assignment – 20 marks scaled to 30 marks completed over 8 hours during class time

Progression & Possible Career Paths

Progression:

- ☐ Advanced Higher Chemistry
- ☐ College/University Courses

Possible Career Paths:

- ☐ Chemical Engineering
- ☐ Pharmaceutical
- ☐ Forensic Science
- ☐ Environmental Science
- ☐ Education

Entry Requirements and advice

This course is suitable for pupils who have securely attained their National 5 Chemistry. The expectation is that pupils have achieved an A or B at National 5. Progression for candidates who have achieved a C at National 5 is possible. It is important that pupils have developed strong literacy and numeracy skills.

