



HECKMONDWIKE
GRAMMAR SIXTH FORM

Chemistry

Exam Board: AQA



Chemistry



Career Opportunities

Chemists are employed in industry, the scientific civil service or in education. Chemistry also provides an opportunity for careers in medicine, veterinary science, dentistry, geology, environmental science and engineering, as well as pharmacy, pharmacology, forensic science, environment and health, dietetics and food science.

Apprenticeships with companies such as EDF are also a future option.

Course Content

YEAR 12

Physical Chemistry

In this section you will study atomic structure, mole calculations, structure and bonding, energetics, kinetics, chemical equilibrium and redox chemistry, together with many key practical skills.

Inorganic Chemistry

This section comprises periodicity alongside trends in Group 2 and Group 7 of the periodic table.

Organic Chemistry

This introduces you to organic chemistry and in particular Alkanes, Alkenes, Alcohols, Halogenoalkanes and organic synthesis.

Course Content

YEAR 13

Physical Chemistry

Building on the solid foundation in year 12 you will study rate equations, thermodynamics and equilibrium constants as well as acids and bases and electrochemical cells.

Inorganic Chemistry

This further extends your study of periodicity to include transition metals and the properties of period 3 elements, together with reactions of ions in aqueous solution and catalysis.

Organic Chemistry

This extends your knowledge and understanding of organic chemistry to include optical isomerism, and a range of organic substances including amino acids, polymers, and aromatic compounds, together with more detailed analytical techniques of Nuclear Magnetic Resonance (NMR) and Chromatography.

Assessment

Paper 1

2hr written exam on Physical and Inorganic Chemistry plus practical skills.

105 marks (35% of total A level)

Paper 2

2hr written exam on Physical and Organic Chemistry topics plus practical skills.

105 marks (35% of total A level)

Paper 3

2hr written exam
Any content from the specification and practical skills.

90 marks (30% of total A level)

Extended Learning

- Cambridge Chemistry Challenge
- Links with Huddersfield University
- Royal Society of Chemistry
- Olympia
- HE+ Extension Activities
- Royal Society of Chemistry
- Young Analyst's Competition.