

### Overview

A Level Chemistry is a rigorous and highly-regarded academic challenge. You will delve deeply into familiar topics such as atomic structure, carbon chemistry and energetics and be introduced to new areas such as redox chemistry and spectroscopy.

Chemistry is a practical subject and you will quickly learn how to use Quickfit apparatus and how to perform a successful titration. Your numeracy skills will be finally honed and it is expected that you will develop a real appreciation of the meaning of the numbers you are using and applying. You will be required to solve practical and theoretical problems so it is important that you are ready to try out different solutions and be ready to think flexibly.

### Curriculum and assessment

*Awarding Organisation:*  
AQA

*Minimum course requirements:*  
GCSE Grade 5-5+ in Trilogy Science (Higher Tier) or 5+ in Chemistry, and GCSE Grade 5+ in Mathematics. Students should also study A Level Maths or L3 Maths

*More information:*  
Miss J Fathers

#### YEAR 12

During this year you will cover the following key areas:

- Atomic structure and the periodic table
- Carbon chemistry
- Energetics
- Quantitative chemistry
- Spectroscopy
- Green chemistry

#### YEAR 13

During this year you will develop many of the themes encountered in Year 12.

- You will widen your appreciation of carbon chemistry through study of benzene and the aromatics
- You will enjoy the intellectual challenge of entropy and equilibrium
- You will gain some appreciation of chemistry in the real world in your studies of nmr and other analytical techniques

#### ASSESSMENT

Three 2 hour examinations  
Compulsory Practical Endorsement

### Post 18 opportunities

Chemists are excellent problem solvers who are highly numerate so they have a range of skills that are attractive to a very broad range of future employers. The specific technical skills directly relevant to chemistry-related careers include fine practical skills, collecting and collating data, research and report writing, sophisticated quantitative processing and thorough evaluation of experimental methods, published papers and data collected from a range of sources. Chemists are highly sought-after in the worlds of Finance and Law.

#### Destinations of students in the last two years:

Cardiff University – Bio Chemistry

Oxford University – Law

Cambridge University – Law

Oxford University – Chemistry

Manchester University – Paramedic Science

Nottingham University – Chemical Engineering

### Expenses

You will need to purchase text book and a lab coat. We will endeavour to attend at least one series of lectures to supplement the course.