

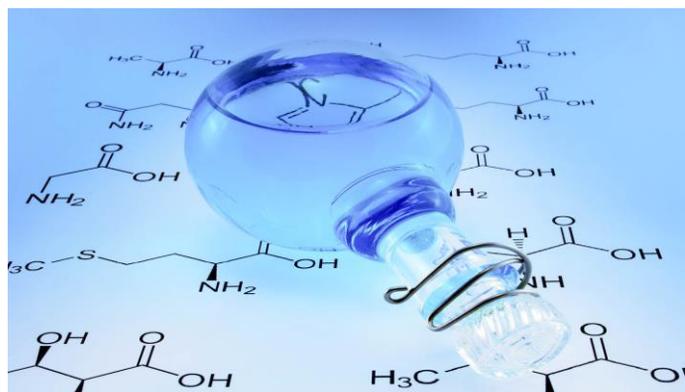
# Chemistry

## A Level

**Head of Department:**

Mrs C Dunham

**Exam Board:** AQA



### What is the course about?

Chemistry is the study of matter, its properties, how and why substances combine or separate to form other substances, and how substances interact with energy. You will be developing ideas first learned in GCSE and learning how chemistry relates to the world around us. You will need excellent maths skills as many topics will require calculations, particularly ratios, rearranging equations and logarithmic calculations. You will be carrying out a wide variety of practical work (mainly independently), using chemicals and procedures not used in previous GCSE work.

In a typical week in Chemistry

### What will I study in the first year?

In the first year you will study moles and equations (stoichiometry), making various solutions, energy in reactions, chemistry of hydrocarbons, organic chemistry including how to convert one chemical to another in various stages as is done in industry, and reversible reactions.

### What will I study in the second year?

In the second year you will study reversible gas reactions, how the rate of a reaction is affected by more than one chemical at a time, more complex organic reactions including amino acids and ring structure chemistry (aromatic and arene Chemistry), advanced acids and bases, and fuel cells/batteries. You will also look at spectroscopic techniques for analysing unknown substances in detail.

### How is the course assessed?

Assessment is 100% exam. Set practicals are carried out which are not assessed externally. However one of the final exams will test your knowledge of practical techniques.

### What skills will I develop in this course?

By the end of the course Chemistry students will have developed many high level skills which can be used in science or in many other disciplines. These include analysis, problem solving and maths skills,

### What does this subject offer for higher education and future careers?

This subject is considered to be one of the most difficult at A level and is therefore very highly valued by universities. Many courses need the subject such as medicine, forensics, marine biology and the Oil industry just to give a few examples. It is a subject which can open many doors into a career in science and there are excellent job prospects.