

# A Level Chemistry (OCR)

A Level Chemistry will give you an exciting insight into the contemporary world of chemistry. It covers the key concepts of chemistry and practical skills are integrated throughout the course. This combination of academic challenge and practical focus makes the prospect of studying A Level Chemistry highly appealing.

You will learn about chemistry in a range of different contexts and the impact it has on industry and many aspects of everyday life. You will learn to investigate and solve problems in a range of contexts.

## Key features

- Simple straightforward assessment through examinations.
- Course based on key concepts in chemistry.
- Opportunities to build practical skills through a range of experiments and investigations and achieve the practical endorsement qualification.

## Entry requirements

We look for 5 GCSEs graded 5 to 6 or above, including maths and English plus one of the following:

- Grade 6 in both grades of combined science
- Grade 6 in GCSE chemistry

## How will I be assessed?

- Total of 6 hours of examinations (2 x 2 hours 15 minutes and 1 x 1 hour 30 minutes papers) taken at the end of the course.
- A wide range of question types including multiple choice, short answer and extended response questions.
- Opportunity to demonstrate your knowledge of both theory and practical skills through the examinations.

## Practical Endorsement

To achieve a Practical Endorsement you will be expected through a range of experiments to display your competency in:

- Following procedures.
- Applying an investigative approach when using instruments and equipment.
- Working safely.
- Making and recording observations.
- Researching, referencing and reporting.



### Course content

- Atoms, compounds, molecules and equations enthalpy, entropy and free energy
- Amount of substance redox and electrode potentials
- Acid–base and redox reactions transition elements
- Electrons, bonding and structure organic chemistry
- The periodic table and periodicity polymers
- Group 2 and the halogens organic synthesis
- Reaction rates and equilibrium analytical techniques (IR and MS)
- pH and buffers Chromatography and spectroscopy (NMR)

Emphasis throughout the course is on developing knowledge, competence and confidence in practical skills and problem solving. You will learn how society makes decisions about scientific issues and how sciences contribute to the success of the economy and society.

### Where can A Level Chemistry take me?

A Level Chemistry forms part of an excellent basis for a university degree in healthcare such as medicine, pharmacy and dentistry as well as the biological sciences, physics, mathematics, pharmacology and analytical chemistry. Chemistry can also complement a number of arts subjects.

A range of career opportunities including chemical, manufacturing and pharmaceutical industries and in areas such as forensics, environmental

protection and healthcare. The problem solving skills are useful for many other areas, too, such as law and finance.

### What are the benefits?

An interesting and challenging experience to link key chemical ideas and understand how they relate to each other.

The development of transferable skills including investigation, problem solving, research, decision making, mathematical skills and analytical skills.

Opens up a range of possibilities for further study and careers associated with the subject.

### Are you...

- Wanting to be a doctor?
- Wanting to work in the chemical industry?
- Wanting to understand how chemistry can impact the environment?
- Interested in the world around you?
- A problem solver?
- Keenly interested in science?

