

Why study A Level Chemistry?

Everything you hear, see, smell, taste, and touch involves chemistry and chemicals or matter. Although there are countless types of matter all around us, this complexity is composed of various combinations of over one hundred chemical elements.

Chemistry is not limited to beakers and laboratories, it is literally all around us. The better we know chemistry, the better we know our world.

If you would like to conduct experiments to learn how elements work in different conditions, work out what elements are made up of (right down to the tiniest particle) and test how they mix, then A Level Chemistry is a must study subject for you.

What new skills will I learn?

A Level Chemistry aims to:

- develop knowledge and understanding of the concepts of Chemistry and the skills needed to use them in new and changing situations;
- raise awareness about how advances in information technology and instrumentation are used in Chemistry;
- appreciate the contributions of Chemistry to society and the responsible use of scientific knowledge and evidence;
- sustain and develop an interest in the subject;
- bring together knowledge of ways in which different areas of Chemistry relate to one another;
- develop an understanding of the link between theory and experiment.

Career routes with Chemistry

Whether you choose Chemistry because you enjoy it or simply because it will support your other subjects, we feel it will be a benefit to you.

Studying Chemistry will support your learning in a range of other subjects such as Geography, as well as the obvious ones like Physics and Biology.

There are many careers where a qualification in Chemistry is essential. These include medicine, pharmacy, veterinary science and dentistry. Chemistry is also useful in the agriculture, engineering and environmental science sectors.

Where there is no specific A Level requirement for a university course, then Chemistry is a very good choice as a numerate, central science.

Biology, Physics, Mathematics, Geography and PE all work well with A Level Chemistry.

Course Outline

Year 12

The first year of the course consists of three modules which provide an insight into atomic structure, bonding, electrons and patterns in the periodic table.

Organic Chemistry is also studied along with methods of chemical analysis.

Focus is also placed on energy and resources in view of the current environmental situation.

For the stand-alone AS qualification, all these areas are tested by two written exams.

Practical skills are also developed throughout the course in a final module, using a range of new techniques and apparatus.

Year 13

The second year builds on the foundations of the AS modules, investigating further into methods of chemical analysis and the production of modern polymers and medicines.

An emphasis is placed on Physical Chemistry and the techniques and concepts vital to the chemical industry.

In addition, the Transition Elements are studied in depth.

Throughout this year practical skills are integrated into all topics and lessons taught.

Lead Teachers: Mrs J Weir

Sixth Form Entry Requirements:

To study **Level 3** (academic A Level) courses students must have a minimum of at least **five** GCSEs at 9 - 4 grades (or equivalent).

These must include a grade 4 and 5 in English Language and Mathematics (either way round, but higher grade must support subject choices).

Additional requirements:

GCSE grades 6 / 6 or above in Science AND Grade 5 or above in Mathematics.

OR GCSE Grade 6 or above in GCSE Chemistry AND GCSE Grade 5 or above in Mathematics.

Exam Board: OCR

Assessment:

AS

AS (as a stand-alone qualification)
Two exams covering four modules.

A2

Three exams covering six modules.
In addition students also receive a practical endorsement for Chemistry which is reported separately, as a Pass, if the skills have been demonstrated during the course.

**Find out more ... visit our website www.bbs.calderdale.sch.uk
Here to help ... speak to the course tutor or your form tutor
Call us on 01422 328928. Email admin@bbs.calderdale.sch.uk**

