## A Level Chemistry OCR A

## Why study Chemistry?

Chemistry is the study of matter and how the basic elements of matter combine and interact with one another. From solving crimes to curing disease, from developing new materials to improving the flavour of your favourite food, chemistry is essential in the modern world

Chemistry is one of the hardest A levels but also one of the most rewarding, both in the knowledge and skills you gain but also in the value universities attribute to it. A level Chemistry builds on your maths skills, problem solving skills, and practical skills in a way that not many other subjects can.

Degrees and careers which make use of chemistry include:
Patent Law
Chemical Analys $\dagger$
Polymer Scientist
Forensic Analyst
Biochemical Engineering
Flavour Chemist
Environmental Scientis $\dagger$
Doctor
Dentist
Vet Research
Chemist (pharmaceutical, cosmetic, food, environment, biotech, ceramics...)
Alternative energy
Petroleum Industry
Education
And many more!
About the course
A Level Chemistry provides an excellent basis for further study in any science or science-related field. It is a compulsory subject for almost all medicinal, dentistry and veterinary degrees. Due to the complex and highly rewarding nature of the course, it is one of the few subjects that "opens more doors than it closes".

Year 12
In Year 12 you will be introduced to the concepts of organic chemical synthesis and chemical analysis. You will also build on GCSE to understand the chemistry of groups 2 and 7 , calculations involving masses, solutions and gas volumes, and the heat change of chemical reactions

Year 13
In Year 13 you build upon the foundations of Year 12 even further to explore Benzene and Phenol Chemistry, advanced organic synthesis and analysis, the reactions of buffers, pH , rates of chemical reactions and transition metal chemistry

Assessment
Assessment occurs via a practical endorsement and three exams. $2 \times 2 \mathrm{hr} 15 \mathrm{mins}$ and $1 \times 1 \mathrm{hr} 30 \mathrm{~min}$ at the end of Year 13 .

## Entry criteria

Students must have a grade 6 in GCSE Chemistry (If Combined Science, a grade 6 in both chemistry papers) and a grade 6 in Maths.

## Outside the classroom

Students will have the opportunity to visit either a university science department, and/or a local laboratory.


