



A Level Chemistry

Exam Board: www.aqa.org.uk**Chemistry for Your Future**

Chemistry is a great choice of subject for people who want a career in health and clinical professions, such as medicine, nursing, biochemistry, dentistry or forensic science, as well as careers in industry.

Chemistry will give you logical thinking skills and a greater depth of understanding of the world around us. Chemistry is also desirable for degree subjects like Law and Accounting.



Progression onto **A Level Chemistry** will require at least 5 GCSEs at grade 4 or above. You will need to achieve grades 6/6 in **Combined Science** GCSE, or in **Separate Science** (*with 6 in Chemistry*), with at least a grade 4 in **English Language** GCSE, and a grade 6 in **Mathematics** GCSE.

Please talk to the **Head of Department** if you are interested in this subject.

Our new Chemistry A Level course is split into 3 main areas of chemistry which are studied throughout the two year course.

1. Physical Chemistry:

Atomic structure, amount of substance, bonding, energetics, kinetics, chemical equilibria, oxidation, reduction and redox, thermodynamics, rate equations, equilibrium constant, electrode potentials and electrochemical cells, acids and bases.

2. Inorganic Chemistry:

Periodicity, Group 2, Group 7, properties of period 3 elements and their oxides, transition metals, reactions of ions in aqueous solution.

3. Organic Chemistry:

Introduction to organic chemistry, alkanes, halogenoalkanes, alcohols, organic analysis, optical isomerism, aldehydes and ketones, carboxylic acids and derivatives, aromatic chemistry, amines, polymers, amino acids, proteins and DNA, organic synthesis, nuclear magnetic resonance spectroscopy, chromatography.

Practical Chemistry:

- Practical assessments have been divided into those that can be assessed in written exams and those that can only be directly assessed whilst students are carrying out experiments. A Level grades will be based only on marks from written exams.
- A separate endorsement of practical skills will be taken alongside the A Level. This will be assessed by teachers and will be based on direct observation of students' competency in a range of skills that are not assessable in written exams.

Examined: 3 Papers at end of 2 year course

Inorganic and Physical Chemistry (35%), Organic and Physical Chemistry (35%), Paper 3 (30%)

