

A-level Chemistry attempts to answer the big question 'what is the world made of' and it's the search for this answer that makes this subject so fascinating. From investigating how one substance can be changed drastically into another, to researching a new wonder drug to save millions of lives, the opportunities that chemistry provides are endless.

Topics covered

AS Chemistry lasts one year, with exams at the end.

A-level Chemistry lasts two years, with exams at the end of the second year. The table below shows what you'll learn in each year.

AS and first year of A-level	Second year of A-level
<p>Physical chemistry Including atomic structure, amount of substance, bonding, energetics, kinetics, chemical equilibria and Le Chatelier's principle</p>	<p>Physical chemistry Including thermodynamics, rate equations, the equilibrium constant K_p, electrode potentials and electrochemical cells</p>
<p>Inorganic chemistry Including periodicity, Group 2 the alkaline earth metals, Group 7(17) the halogens</p>	<p>Inorganic chemistry Including properties of Period 3 elements and their oxides, transition metals, reactions of ions in aqueous solution</p>
<p>Organic chemistry Including introduction to organic chemistry, alkanes, halogenoalkanes, alkenes, alcohols, organic analysis</p>	<p>Organic chemistry Including optical isomerism, aldehydes and ketones, carboxylic acids and derivatives, aromatic chemistry, amines, polymers, amino acids, proteins and DNA, organic synthesis, NMR spectroscopy, chromatography</p>

Practicals

Chemistry, like all sciences, is a practical subject. Throughout the course you will carry out practical activities including:

- measuring energy changes in chemical reactions
- tests for identifying different types of compound
- different methods for measuring rates of reaction
- studying electrochemical cells
- preparation of organic solids and liquids
- an advanced form of chromatography for more accurate results.

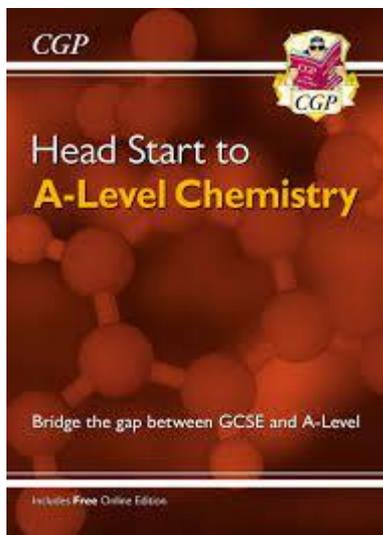
Exams

There is no coursework on this course. However, your performance during practicals will be assessed.

There are three exams at the end of the two years for A-level, all of which are two hours long. At least 15% of the marks for A-level Chemistry are based on what you learned in your practicals.

The AS has two exams at the end of the year. Both are 1 hour 30 minutes long.

Summer Bridging Project



Task 1: Purchase **one large lever arch folder with dividers** and **one A4 small folder with dividers** along with a **pad of A4 paper**.

Task 2: Complete the *Head Start to A-Level Chemistry*. Please purchase one of these books and complete in an exercise book given to you. Available for £3.71 from Amazon or WHSmith.

This bridging project will be **graded**, and this mark will go towards your **Unit 1 report** that is sent home in **October**.

Task 3: Be ready for September, tick off your first day checklist:

- Black Pen x 3
- Green Pen x 2
- Highlighters
- Pencil
- Ruler
- Rubber
- Calculator
- Mini White Board
- Mini White Board Pen
- A4 Folder with dividers
- Laptop/ Tablet
- Small A4 folder with dividers
- A4 Pad of lined paper
- Bridging project

Have a lovely summer and enjoy your bridging project.
We look forward to teaching Chemistry to you in September.

Mr Chapman and Ms Duncan