

## Chemistry

Chemistry is the study of the materials that make up everything in our world. From metals to medicines, from fuels to fertilisers, at A-level you will explore the properties and interactions of a wide range of substances. Key ideas from GCSE are developed and explored, and theoretical models are constructed to help explain practical observations. Practical work is regularly used to illustrate theories. There will be ample opportunity to develop experimental skills across the entire course.

Prerequisite: Minimum grades 7/A in both I/GCSE chemistry and mathematics required. Grades 9/8/A\* in both recommended.

The AQA course is structured in a logical way and builds a secure foundation in the fundamentals of chemistry. It also includes the opportunity to apply your chemical knowledge to interesting topics such as cancer treatments and hydrogen fuel cells.

Topics that you will study include:

Atomic structure and bonding

Amount of substance, reaction kinetics and equilibria

Organic chemistry

Structure determination and spectroscopy

Electrochemistry

Transition metals and their compounds

Students will take three papers in the summer of U6, which are broken down as follows:

Paper 1:	Inorganic and Physical chemistry	2 hours	105 marks	35% of A level
Paper 2:	Organic and Physical chemistry	2 hours	105 marks	35% of A level
Paper 3:	Practical skills and synopsis	2 hours	90 marks	30% of A level

Chemistry is an essential subject for many scientific courses, and most girls chose at least one other science subject at A level. We love teaching the course, which provides a thorough grounding in all aspects of chemistry. It teaches students how to think logically and apply knowledge to unfamiliar situations – useful skills in any future career!

Mr JAMES COPLEY  
head of chemistry