# A Level Chemistry

## Why study A Level Chemistry?

A Level chemistry is about how matter and energy behave and interact with each other: from molecular changes in the eye responding to light that allow you to see; to fabricating and testing compounds to produce lifesaving drugs. Chemistry remains one of the most vigorous and demanding of A Levels, building skills in the application of mathematics, spatial awareness and logical puzzles – are you up for the challenge?

## What will I study?

You will build on your current understanding of chemistry as you gain a much deeper understanding of the subject.
We will delve into the mysteries of atomic structure; using the mole; explaining electronic structures and an introduction to the quantum world; a deep understanding of bonding/ structures and of course chemical reactions. We'll explore organic chemistry; the chemistry of global warming and the greenhouse effect; the ozone layer; its man made depletion and recovery. You will be developing your practical skills throughout the course as you work your way through a number of set practical experiments. You will use new equipment to make aspirin, and use your analytical skills to identify unknowns and create electricity using electrochemical cells amongst others.

## Assessment

100% examined.

**Paper 1**: Written exam 1 hour 45 minutes in length, consisting of multiple choice, short and long answer questions. Accounts for 30% of the A-level**.**

**Paper 2:** Written exam 1 hour 45 minutes in length, consisting of multiple choice, short and long answer questions. Accounts for 30% of the A-level**.**

**Paper 3:** Written exam 2 hours 30 minutes in length, consisting of multiple choice, short and long answer questions. Accounts for 40% of the A-level.

## Study trips, visits and events

ChemLab - an opportunity to experience the amazing university standard laboratories at the University of Bristol, carrying out an organic synthesis and enjoying lectures from the university staff. University of Bristol lectures - an explosive talk on chemistry of the atmosphere at A Level standard, including demonstrations that you wouldn't normally see in the classroom. Science forum - talk to early career researchers about the ground breaking science they are working on at our local universities.

## Subject entry requirements

6 in Chemistry or 6-6 in Combined Science, plus 6 in Maths.

## Student Perspective

"A Level chemistry truly is one of the most rewarding subjects available. Throughout my time as a chemistry student, I've developed skills and abilities that are perfect for a future career in chemistry, or for supporting a career in any scientific field. There's no denying it's a challenging subject, but the support from my teachers has really helped me fully understand the challenging concepts."

Alex, A Level Chemistry student