

Transition materials – Chemistry

Do you know...

The difference between ammonia and ammonium?

Why chlorine has a relative atomic mass of 35.5?

Why graphite conducts electricity but diamond does not, even though they are both made solely of carbon atoms?

The difference between but-1-ene and but-2-ene?

The most important thing you can do to prepare for A-level Chemistry is to ensure you are (still?) very familiar with GCSE Chemistry material.

In particular, fundamental ideas such as atomic structure, the periodic table, bonding and structure types should be really secure, you should be confident in working out formulae of ionic compounds, and writing balanced symbol equations for simple reactions. There will be plenty of practice of moles calculations in the A-level course, but you will be very well prepared if you are already able to calculate reacting masses using a moles approach.

If you have studied Combined Science for GCSE, rather than separate GCSE Chemistry, don't panic, as the course is designed to follow on from Combined science, but it will be to your advantage if you can look at the following separate Chemistry topics: moles in solution and titrations, dynamic equilibria, and hydrocarbons and polymers before you begin the A-level course.

Required prior work

Complete the Essentials 1 worksheet and bring your work to show me in September.

Recommended preparation

If you are not confident in your recall of GCSE Chemistry material, I recommend working through [this book](#). You do not need to complete all the sections – use it to help identify your weaknesses and address them.

Alternatively, use your preferred source of revision notes or videos to check through some key GCSE material. I like [Cognito](#). Topics 1-3 are the most important.

Optional Extras

Either

Take a selfie in some of the following iconic Chemistry-related places in Cambridge, and be prepared to show us your photography skills...

- The plaque commemorating the discovery of the electron, in Free School Lane
- The DNA helix outside the Eagle Pub on Benet Street
- The amazing display of gemstones and their structures in the Sedgewick Museum of Earth Sciences on Downing Street

Or

Read one of these articles and be prepared to tell us about it

[Storing CO₂ in seawater](#)

Chemistry and baking

A material that conducts electricity but not heat