

Chemistry A Level

Preparation work: Pre-course Reading, Research and Tasks

Pre-reading and research will help you to become more familiar with the topics you are going to study on your A Level Chemistry course. If you complete the tasks below, they will also help you to become more confident when you start your course. Remember it is also a good idea to make sure you recap and consolidate your GCSE Chemistry knowledge as well.

Specification :

A good place to start to look at the A level specification and familiarise yourself with what you will be studying on the course:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/chemistry-2015.html>

Task 1:

Learn the names and the symbols for the first 30 elements, at A level we no longer write word equations, everything is done with symbols. So you need to get used to using and working with them, you don't need the order just the name and symbols.

Did you know that 2019 was the year of the periodic table? The Royal Society produced lots of interactive activities to help you learn more about the periodic table. See

<https://edu.rsc.org/resources/periodic-table> for lots of activities which will help you learn the symbols and what they mean.

Task 2:

An introduction to the atom, it is important that you understand this basic building block of chemistry.

Try <https://edu.rsc.org/download?ac=501330> is your atom stable or unstable?

Listen to <https://www.bbc.co.uk/programmes/b00d8yw8> looking at one of the most important particles in chemistry, the electron (I know it's done by a physicist, but we won't hold that against them)

For a bit of stretch and challenge try listening to "In our time" The proton

<https://www.bbc.co.uk/programmes/b09zt3mr>

Task 3:

It is important that you understand how we can join ions together to make neutral compounds

Watch and make notes on <https://www.youtube.com/watch?v=URc75hoKGLY> for simple ionic compounds and <https://www.youtube.com/watch?v=p9iQ5Qn42DM> for polyatomic ions

Websites for Further Research and Reading:

FutureLearn – <https://www.futurelearn.com/search?q=chemistry> Have a great selection of free online short courses run by some top universities

'Exploring everyday chemistry' run by the University of York is starting on 29th June, others you could look at include Food Fraud or just look through the list

In our time – A discussion between academics on a wide range of topics

<https://www.bbc.co.uk/programmes/p01gyd7j/episodes/downloads>

Books to Read:

- **Headstart to A level Chemistry** (at time of writing this is free on kindle)
- **The Disappearing Spoon** by S Kean
- **Stuff Matters** by M Miodownik
- **Periodic Tales** by H Aldersey-Williams
- For perspective Medics try anything by Atul Gawande - '**Complications**' is a good place to start

Progression Opportunities

Why choose Chemistry A Level:

Chemistry is a required subject for a wide range of degree courses including medicine and veterinary science as well as biochemistry, pharmacy and other science related courses. It is also useful for a range of other degree courses from engineering to law.

<https://edu.rsc.org/future-in-chemistry>

<https://www.youtube.com/user/wwwRSCorg>

We hope you enjoy completing these tasks and look forward to you joining the course.

