

Step up to A-Level Chemistry

This is a menu of tasks to help you get ready to study Chemistry at A-Level. Try to choose a 'balanced diet' of activities each week to ensure variety in your learning. Keep your completed work organised in a folder so that you can submit your transition work during your first Chemistry lesson.



Short reads

Explore the impact that the chirality of two molecules, methamphetamine and thalidomide has on their biological activity by reading the stories linked below.

Produce a newspaper article to report on **one** of the stories to the general public.

Thalidomide

[Thalidomide - Molecule of the Month](#)



Methamphetamine

[Methamphetamine - Molecule of the Month](#)



Video Clips, Films or Documentaries

These videos will get you thinking about how Chemistry will shape the future whether it be in amazing new materials, changes to the way we manage health or the important role chemistry will play in tackling climate change.

Select the topic which interests you the most. Record the key points of context or information that you found significant, alongside 5 subsequent questions that the video has spawned.

[Most AMAZING Materials Of The Future!](#)



[The pharmacy of the future?](#)



[Carbon Capture Explained](#)



Programmes and Podcasts

There is a huge array of scientific radio programmes and podcasts available. If you do not have a podcast app, or cannot sign in to BBC Sounds, this would be your first thing to remedy.

The links below will take you to a series of podcasts, each on a different element found in the Periodic table. Choose any **two** elements and make notes on ½ page of A4 covering what you have learnt about that element that you didn't already know.

[BBC Sounds - In Their Element](#)



[BBC Sounds - Elements](#)



Questions to Consider

The questions below are designed to get you thinking more broadly about some of the underlying issues within the course we study in Year 12. Choose a question and try discussing it with somebody else. Then write 500 words exploring different possible responses and explaining your own opinions.

Is Chemistry the central Science?

Do atoms really make up everything?



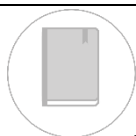
Debate

Task: Watch the linked video and read the linked page regarding the work of German scientist Fritz Haber. Evaluate the work of Fritz Haber. Is he a hero or a villain? Use the information from your reading and your own knowledge.

[The Man Who Killed Millions and Saved Billions](#)



[Fritz Haber's Nobel Prize - Collins | Freedom to Teach](#)



Books and Other Longer Reads

These books give a broader understanding of some of the themes we study in Chemistry. They are available to buy or download as e-books.

The Radium Girls
Kate Moore

Napoleon's buttons
Penny Le Couteur and Jay Burreson

What if?
Randall Munroe

And finally, just for fun, watch [World's Largest Elephant Toothpaste Experiment - YouTube](#)