

# 6<sup>th</sup> Form Preparation work for Chemistry

## Week 3 and 4



**Complete** research on ITO – indium tin oxide. ITO is the main component of touch screen in phones and tablets. The element indium is a rare element and we are rapidly running out of it. Chemists are desperately trying to find a more readily available replacement for it. What advances have chemists made in finding a replacement for it? Write an information card to explain what you have learnt.

**Time: 1 hour**



**Listen** to the Chemistry for your life podcast explaining how hand warmers work. How do they get hot? Where does the heat come from? How do reusable ones work? Write a paragraph to explain the science behind hand warmers.

[Podcast: How do hand warmers get hot?](#)

**Time: 1 hour**



**Read** the article on catching a cheat using chemistry. Write an essay of 600-700 words to describe how we use chemical testing.

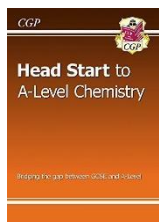
[Article: Catching a cheat](#)

**Time: 1 hour**



**Download** your free copy Of CGP Head start to Chemistry from kindle.

[CGP: Head start to chemistry](#)



**Watch** A brilliant history of the most mysterious of elements – mercury. This program shows you how a single substance led to empires and war, as well as showing you some of the cooler properties of mercury.

[Video: History of Mercury](#)

**Time: 30 mins**



**Complete** the questions on knowledge from GCSE Chemistry that you need to know to move on to A Level.

[Pre-knowledge Topic: Bonding](#)

**Time: 1 hour**



**Watch** the video where Professor Jim Al-Khalili talks about the basic building block of our universe, the atom. He shows discoveries like radioactivity, the atom bomb and the big bang. Write 10 interesting facts you learnt while watching.

[Video: Atoms 2 – The key to the Cosmos](#)

**Time: 1 hour**



**Complete** the questions practising the chemical calculations for moles, mass and relative formula mass.

[Calculations Practise: moles, mass and  \$M\_r\$](#)

**Time: 45 mins**



**Listen** to Melvin Bragg discuss chromatography as a means of separating mixtures, which is widely used when testing water and air quality, in forensics and drug manufacture.

[Podcast: Chromatography](#)

**Time: 45 mins**



**Read** the article on should we sanitise our shopping to protect ourselves from the coronavirus. Write a balanced argument for your opinion on this topic after reading the article.

[Article: Should we sanitise our shopping?](#)

**Time: 1 hour**

