









<p>6th Form Preparation work for A Level Chemistry</p>	 <p>1 - Complete a table comparing the different types of bonding; ionic, covalent, metallic. Include the structure of each, an example of a substance that displays this type of bonding and information about their properties. Use the link below to BBC Bitesize to help you. Bonding, structure, and the properties of matter https://www.bbc.co.uk/bitesize/topics/z33rrwx</p>	 <p>2 – Play the balancing equations game and record your highest score! Balancing chemical equations is the stepping-stone to using equations to calculate masses in chemistry. There are loads of websites that give ways of balancing equations and lots of exercises in balancing Balancing chemical equations https://phet.colorado.edu/en/simulations/balancing-chemical-equations</p>	 <p>3 - Complete the 'My skills My life' quiz to help you identify your personality type and to help you find role models with successful STEM careers. My skills my life https://www.wisecampaign.org.uk/my-skills-my-life/</p>
 <p>4 - Read about some of the careers that studying chemistry could lead you into. Create a shortlist of some possible career pathways that interest you. A future in chemistry https://edu.rsc.org/future-in-chemistry/career-options</p>	<p>5 - Watch the video which explains how a mass spectrometry works. Research who discovered mass spectrometry and who won Nobel prizes for their work in this area. Outline four areas mass spectrometry is used in everyday life. Mass Spectroscopy https://www.youtube.com/watch?v=mBT73Pesiog</p>	<p>6 – Research how organic molecules are named and write a step-by-step guide to use in class. At GCSE you would have come across hydrocarbons. At A-level you will learn about a range of molecules that have had atoms added to the carbon chain. These are called functional groups and they give the molecule certain physical and chemical properties that are going to be incredibly useful to us. How to name organic compounds. https://www.chemguide.co.uk/basicorg/conventions/names.html#top</p>	 <p>7 - Complete a timeline to visually show the history of the development of the atomic model. History of the atomic model https://www.compoundchem.com/2016/10/13/atomicmodels/</p>
 <p>8 - Watch the Ted talk about the Haber process. Is it the most important discovery of the last century? Explain why this is arguably correct. The chemical reaction that feeds the world. https://www.youtube.com/watch?v=o1_D4FscMnU</p>	 <p>9 -Research Find out about a scientist that is not well known, perhaps from an under-represented group or a woman who was overlooked. Write a profile of the scientist including information about their background, their work, why you have chosen them. You may want to find out about someone who has similar interests as you or a similar background or culture or ethnicity. You may even want to write about a family member!</p>	 <p>10 - Watch the TED talk and consider the role chemistry plays in sustainability. Fighting pollution with green chemistry https://www.ted.com/talks/dr_sumaira_jawad_fighting_pollution_with_green_chemistry</p>	