

Key Stage 4 Curriculum Map 2021 - 2022

Year 11 GCSE Chemistry

Term 2

Subject: Chemistry			
Focus/Topic	UAE Links	HPL LINKS	Home Learning / Reading
<ul style="list-style-type: none"> Atomic Structure Revision Organic Molecules 	Compare the states of matter of different materials they experience in the UAE Evaluate the use of radioactive isotopes for Nuclear Energy in the UAE. Consider if this is a good alternative to using fossil fuels.	VAA: Empathetic Collaborative: <i>The ability to seek out opportunities to receive responses to your work; present your own views and ideas clearly and concisely; listen to the views of others; be willing and able to work in teams; take a variety of roles and be able to evaluate your own ideas and contributions.</i>	Guided reading
<ul style="list-style-type: none"> Structure and Bonding Revision Organic Molecules 	Research the use of metals in the UAE and relate their properties to their use. Analyse the percentage of different gases found in the air within the UAE and determine their structure and bonding.	ACP: Analysing Critical thinking: <i>The ability to deduct, hypothesise, reason, seek supporting evidence</i>	Guided reading
<ul style="list-style-type: none"> The Periodic Table Revision Organic Molecules 	Reflect on the use of common elements in the UAE and consider how their abundance could impact the UAE in the future. Compare and contrast the use of different metals in electrical cables for the UAE.		Guided reading

	Consider if copper is the best option.		
• Metals and Electrolysis Revision	This topic will be linked to the common uses of electrolysis in items such as batteries. Research the initiatives in place in the UAE for the recycling of different batteries such as from mobile phones and laptops. Students will consider the advantages of different types of cells for batteries and their different real-life applications.		Guided reading
• Quantitative Chemistry Revision			Guided reading
• Quantitative Chemistry Revision			Guided reading
HALF TERM			
• Chemical Analysis Revision	Students asked to apply their knowledge to a scenario based in the UAE where they must produce a sample of drinkable water when stranded on Jumeirah Beach. Students are challenged to explore the importance of inks and dyes for example within the UAE Flag. Research how chemical analysis can be used to support Forensic Investigations.	VAA: Agile Open minded: <i>The ability to take an objective view of different ideas and beliefs; become more receptive to other ideas and beliefs based on the arguments of others; change ideas should there be compelling evidence to do so.</i> ACP: Linking Connection finding: <i>The ability to use connections from past experiences to seek possible generalisations</i>	Guided reading
• Acids, Bases and Salts Revision	Students challenged to link the breakdown of statues/buildings made from carbonates in the UAE from acid rain.		Guided reading
• Organic Molecules Revision	Research the use of alternative fuels and renewable energies in the UAE. Explore the initiatives in place to reduce the carbon footprint of the		Guided reading

	UAE and to reach a more sustainable lifestyle.		
<ul style="list-style-type: none"> • Rate and Extent of Rate Revision 	Link to the industrial production of pharmaceuticals and why catalysts can be useful for industry e.g. Pharmax or Life Pharma. Students challenged to explore the use of fertilisers to promote plant growth in the UAE conditions (Biology link)		Guided reading
<ul style="list-style-type: none"> • Energy Changes Revision 	Link to the use of cold packs for athletes competing in the Dubai Fitness Challenge		Guided reading
SPRING BREAK			