

Key Stage 5 Curriculum Map 2020 - 2021

Year 12 AS level Chemistry

Term 2

Subject: Chemistry	Year: 12	
Focus/Topic	UAE Links	Home Learning / Reading
<ul style="list-style-type: none"> • Inorganic <ul style="list-style-type: none"> - Periodicity - Trends in the Properties of Period 3 - Trends in Ionisation energy 	Students challenged to explore the uses of the Period 3 elements within the UAE e.g. for building, for technology, for transport.	Guided reading
<ul style="list-style-type: none"> • Inorganic <ul style="list-style-type: none"> - The physical and chemical properties of Group 2 - Trends in Group 2 		Guided reading
<ul style="list-style-type: none"> • Inorganic <ul style="list-style-type: none"> - The physical and chemical properties of Group 7 - Trends in Group 7 - Reactions of halide ions - Uses of chlorine 	Students challenged to explore the uses of the halogens, specifically chlorine and bromine, for water treatment in the UAE. Consider the advantages and disadvantages of this process.	Guided reading
<ul style="list-style-type: none"> • Inorganic revision and assessment 		Guided reading
MOCKS		
MOCKS		
Half Term		
<ul style="list-style-type: none"> • Organic <ul style="list-style-type: none"> - Introduction to Organic Chemistry - Revision of alkanes, alkenes, alcohols and carboxylic acids - Structure and bonding of organic molecules 		Guided reading
<ul style="list-style-type: none"> • Organic <ul style="list-style-type: none"> - Fractional Distillation and Cracking - Alkanes (naming, structure, properties) 	Students challenged to research the use of crude oil in the UAE. The volume of petrol used in the UAE every year and	Guided reading

- Reactions of Alkanes (combustion)	how does this compare to other countries.	
<ul style="list-style-type: none"> • Organic <ul style="list-style-type: none"> -Reactions of Alkanes (free radical reactions) - Halogenalkanes (naming, structure, properties) - Reactions of Halogenalkanes (nucleophilic substitution) 	Students link free radical chain reactions to the use of this process in suncream to prevent sun damage to skin. They must consider why this is so important in the UAE and how this links to the goals to have a healthy community.	Guided reading
<ul style="list-style-type: none"> • Organic <ul style="list-style-type: none"> - Reactions of Halogenalkanes (elimination) - Reactions of alkenes (combustion, addition, polymers) 	Students challenged to research and discuss the initiatives in place in the UAE to improve recycling of plastics and increase sustainability.	Guided reading
<ul style="list-style-type: none"> • Organic <ul style="list-style-type: none"> - Alcohols (naming, structures, properties) - Reactions of alcohols (combustion, oxidation) 	Students challenged to determine if bioethanol would be a suitable alternative fuel in the UAE. How would this compare to the use of bioethanol in Brazil.	Guided reading
SPRING BREAK		