

## 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
YEAR 12	MOCKS	
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<ul> <li>Inorganic         <ul> <li>Periodicity</li> <li>Trends in the Properties of Period 3</li> <li>Trends in Ionisation energy</li> </ul> </li> </ul>	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> <li>Inorganic         <ul> <li>The physical and chemical properties of Group 2</li> <li>Trends in Group 2</li> </ul> </li> </ul>	· ·	Guided reading
<ul> <li>Inorganic         <ul> <li>The physical and chemical properties of Group 7</li> <li>Trends in Group 7</li> <li>Reactions of halide ions</li> <li>Uses of chlorine</li> </ul> </li> </ul>	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
Inorganic revision and assessment		Guided reading
Half 1	lerm .	
<ul> <li>Organic         <ul> <li>Introduction to Organic Chemistry</li> <li>Revision of alkanes, alkenes, alcohols and carboxylic acids</li> <li>Structure and bonding of organic molecules</li> </ul> </li> </ul>		Guided reading
<ul> <li>Organic         <ul> <li>Fractional Distillation and Cracking</li> <li>Alkanes (naming, structure, properties)</li> <li>Reactions of Alkanes (combustion)</li> </ul> </li> </ul>	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

	how does this compare to other	
	countries.	
Organic	Students link free radical chain reactions	Guided reading
-Reactions of Alkanes (free radical reactions)	to the use of this process in suncream to	
<ul> <li>Halogenalkanes (naming, structure, properties)</li> </ul>	prevent sun damage to skin. They must	
- Reactions of Halogenalkanes (nucelophilic substitution)	consider why this is so important in the	
	UAE and how this links to the goals to	
	have a healthy community.	
Organic	Students challenged to research and	Guided reading
- Reactions of Halogenalkanes (elimination)	discuss the initiatives in place in the UAE	
- Reactions of alkenes (combustion, addition, polymers)	to improve recycling of plastics and	
	increase sustainability.	
Organic	Students challenged to determine if	Guided reading
<ul> <li>Alcohols (naming, structures, properties)</li> </ul>	bioethanol would be a suitable	
- Reactions of alcohols (combustion, oxidation)C	alternative fuel in the UAE. How would	
	this compare to the use of bioethanol in	
	Brazil	
Enc	l of term 2	