

Key Stage 4 Curriculum Map 2020 - 2021

Year 10 GCSE Chemistry

Term 2

Subject: Chemistry	Year: 10	
Focus/Topic	UAE Links	Home Learning / Reading
<ul style="list-style-type: none"> • Electrolysis <ul style="list-style-type: none"> - Introduction - Electrolysis of solutions - Oxidation and Reduction 	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
<ul style="list-style-type: none"> • Electrolysis <ul style="list-style-type: none"> - Redox equations - Extracting aluminium - Electrolysis of brine - Electroplating 		Guided reading
<ul style="list-style-type: none"> • Electrolysis <ul style="list-style-type: none"> - Planning an electrolysis experiment - Observing an electrolysis experiment (demo) - Interpreting results from an electrolysis - Writing a report for an electrolysis 		Guided reading
<ul style="list-style-type: none"> • Quantitative Chemistry <ul style="list-style-type: none"> - Writing formula <ul style="list-style-type: none"> (i) Simple molecular formula (ii) Complex molecular formula (iii) Ionic formula 		Guided reading
<ul style="list-style-type: none"> • Quantitative Chemistry <ul style="list-style-type: none"> - Writing word equations - Writing chemical equations - Writing balance chemical equations 		Guided reading
<ul style="list-style-type: none"> • Quantitative Chemistry 		Guided reading

<ul style="list-style-type: none"> - Calculation relative formula mass - Calculating moles 		
Half Term		
Year 10 Mock Week		
<ul style="list-style-type: none"> • Chemical Analysis <ul style="list-style-type: none"> - Separating Mixtures - Paper Chromatography - Paper Chromatography Practical (Demo) 	<p>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.</p>	Guided reading
<ul style="list-style-type: none"> • Chemical Analysis <ul style="list-style-type: none"> - Testing for gases - Testing for positive ions - Testing for negative ions 	<p>Students are challenged to explore the importance of inks and dyes for example within the UAE Flag.</p> <p>To explore changing states, students are expected to discuss the issues with condensation when the temperature increases in the Summer and there is a constant use of air conditioning.</p>	Guided reading
<ul style="list-style-type: none"> • Acids, Bases and Salt <ul style="list-style-type: none"> - The pH scale - Acids and Bases - Neutralisation 	<p>Students challenged to link the breakdown of statues/buildings made from carbonates in the UAE from acid rain</p>	Guided reading
<ul style="list-style-type: none"> • Acids, Bases and Salt <ul style="list-style-type: none"> - Neutralisation continued - Ammonia - Metal carbonates 		Guided reading
End of term 2		