

Key Stage 4 Curriculum Map 2021 - 2022

Year 10 GCSE Chemistry

Term 2

Subject: Chemistry				
Focus/Topic	UAE Links	HPL LINKS	Home Learning / Reading	
<ul style="list-style-type: none"> • Metals <ul style="list-style-type: none"> - Identify transition metals - Usefulness of alloys - Reduction - Extraction of iron 	Link to rusting that can be seen on vehicles in everyday life	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"> • Metals <ul style="list-style-type: none"> - Analysing different metals in water - Compare n construct reactivity series - Describe displacement reaction - Construct oxidation, reduction, and redox equations 			Guided reading	
<ul style="list-style-type: none"> • Metals <ul style="list-style-type: none"> - Decomposition of metal carbonates - Naming product when metal carbonate react with acid - Construct formula for different metal carbonates 			ACP: Analysing Critical thinking: <i>The ability to deduct, hypothesise, reason, seek</i>	Guided Reading
<ul style="list-style-type: none"> • Electrolysis <ul style="list-style-type: none"> - Introduction - Electrolysis of solutions 			This topic will be linked to the common uses of electrolysis in items such	Guided reading

<ul style="list-style-type: none"> - Oxidation and Reduction 	<p>as batteries. Research the initiatives in place in the UAE for the recycling of different batteries such as from mobile phones and laptops.</p>		Guided reading
<ul style="list-style-type: none"> • Electrolysis <ul style="list-style-type: none"> - Redox equations - Extracting aluminium - Electrolysis of brine - Electroplating 			
<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 	<p>Students will consider the advantages of different types of cells for batteries and their different real-life applications.</p>		Guided reading
HALF TERM			
<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 • Ionic formula 	<p>Students challenged to link the breakdown of statues/buildings made from carbonates in the UAE from acid rain</p>	<p>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></p> <p>ACP: Linking Connection finding: <i>The ability to use connections from past experiences to seek possible generalisations</i></p>	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 <ul style="list-style-type: none"> - Calculation relative formula mass - Calculating moles 			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 			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
SPRING BREAK			