

Key Stage 4 Curriculum Map 2020 – 2021

Year 11 GCSE Combined Science

Term 1

Subject:	Year:	
Focus/Topic	UAE Links	Home Learning / Reading
<ul style="list-style-type: none"> Principles of homeostasis Controlling body temperature Metal ion required practical Forces between objects Resultant force Forces and elasticity 	Research and outline how a camel is adapted to regulate it's body temperature.	Guided reading
<ul style="list-style-type: none"> Controlling blood glucose Treating diabetes Speed Velocity and acceleration More about velocity time graphs 	Analyse data on diabetes within the UAE and outline the trends found.	Guided reading
<ul style="list-style-type: none"> Homeostasis end of topic test Titration required practical Using graphs Forces and acceleration Forces and braking 	Explore how the human body would regulate itself differently in the desert compared to the Antarctic	Guided reading
<ul style="list-style-type: none"> Photosynthesis required practical Resultant forces and forces and motion end of topic test Energy and work 	Outline why the dead sea enables you to float	Guided reading
<ul style="list-style-type: none"> Effects of exercise on the body required practical Kinetic energy Useful energy Energy and efficiency 	Design an investigation into how the effect of exercise on the body differs in the UAE when compared to the UK.	Guided reading

<ul style="list-style-type: none"> • Atomic structure revision • Energy demands • Energy from wind and water • Power from the sun and the earth 	Summarise how the UAE is utilizing renewable energy resources	Guided reading
<ul style="list-style-type: none"> • Structure and bonding revision • Cells revision • Energy and the environment • Forces and energy and energy resources end of topic test 	Outline how the UAE is combatting global warming	Guided reading
Half Term		
<ul style="list-style-type: none"> • The periodic table revision • Transport in cells revision • The nature of waves • Measuring waves • Reflection and refraction 	Evaluate whether the UAE should utilise reverse osmosis	Guided reading
<ul style="list-style-type: none"> • Metals revision • Cell division revision • Diffraction • The electromagnetic spectrum • Light, infrared, microwaves and radio waves 	Evaluate whether the UAE should invest in research into cell division.	Guided reading
<ul style="list-style-type: none"> • Electrolysis revision • Breathing revision • Reflection of light • Refraction of light • Communications 	Create a summary about respiratory disorders within the UAE	Guided reading
<ul style="list-style-type: none"> • Chemical analysis revision • Circulation revision • Ultraviolet rays, x-rays and gamma rays • X-rays in medicine • Sound waves 	Create a summary about coronary heart disease within the UAE	Guided reading
<ul style="list-style-type: none"> • Acids, bases and salts revision • Digestion revision • More about sound • General properties of waves, electromagnetic spectrum and sound end of topic test 	Justify why is fat stored in a camels hump.	Guided reading
<ul style="list-style-type: none"> • Quantitative chemistry revision • Nervous system revision 	Explore the UAE's restrictions with chemical movement	Guided reading

<ul style="list-style-type: none"> • States of matter • Specific heat capacity • Change of state 		
<ul style="list-style-type: none"> • Rates of reaction revision • Animal behavior revision • Specific latent heat • Conduction • Convection 	Compare the behavior of desert animals with the behavior of rainforest animals.	Guided reading
Winter Break		