

## Key Stage 4 Curriculum Map 2019 - 2020

## Term 2

Subject: Physics	Year: 11	
Focus/Topic	UAE Links	Home Learning / Reading
Magnetic Fields, Electromagnets	Where do we use electromagnets in the UAE?	Physics and maths tutor past papers and guided reading for
Motor Effect, Generator Effect	Where do we use the motor and generator effect in Dubai?	
Alternators and Dynamos, Transformers in action	Why do we have transformers in Dubai?	
Nature of waves, reflection, refraction and diffraction	What are the differences between the waves in the Arabian Gulf and light waves?	
Waves and the electromagnetic spectrum	What are the differences between the waves in the Gulf of Oman and sound waves?	
Communications and X-rays in medicine	How do doctors use X-rays in Dubai?	
Sound and ultrasound	How, where and why do doctors use ultrasound in the UAE?	
Mid Term Break		
<ul> <li>Reflection, refraction, Refractive index and total internal reflection</li> </ul>	What examples of reflection, refraction and total internal reflection can you state that happen in Dubai?	Physics and maths tutor past papers and guided reading for every lesson. Always prepare the next lesson.
Lenses and the eye, using lenses	Can you state some uses of lenses in the UAE?	
<ul> <li>Atoms and radiation, alpha, beta and gamma radiation, discovery of the nucleus</li> </ul>	Do you know any sources of radioactivity in the UAE?	
Half-life, radioactivity, nuclear reactions, Nuclear fission and fusion, nuclear reactors	How does the UAE get its electricity? Do you know anything about the new Nuclear Power Plant in Abu Dhabi?	
Space	What do you know about Hazzaa Ali Almansoori?	
Assessment Weeks		
Spring Break		