

Key Stage 3 Curriculum Map 2019 - 2020

Term 2

Year Group: 8	Subject: science			
Focus/Topic	Objectives	Key Skills	Home Learning/Recommended Reading	
Baseline assessments, curriculur	n orientation and expectations			
Static electricityElectricity in the home	 To determine how static electricity is generated Identify the key parts of a plug Identify key components of the national grid 	 Recall, working scientifically 	 Start electricity home learning project. Use KS3 CPG book and BBC Bitesize to do further reading. 	
 Circuit symbols Series circuits	 To identify and draw circuit symbols To investigate current and voltage in a series circuit 	 Working scientifically, application and recall 	Continue electricity home learning project	
Parallel circuitsResistance	 To investigate current and voltage in a parallel circuit To develop an experiment to measure Ohm's law To identify an LDR and thermistor from a diagram 	 Recall, application, numeracy skills and working scientifically 		
Types of energy storesEfficiency	 To investigate energy stores in a variety of everyday items To calculate efficiency of an object 	 Working scientifically, numeracy skills 		
Changes in energySpecific heat capacity	 To calculate the kinetic energy and GPE of objects To recall the specific heat capacity equation 	 Working scientifically, numeracy skills, recall 		

 Reducing energy loss Renewable and non-renewable energy 	 To identify how homes are insulated and explain how energy is lost To state and give examples of renewable and non-renewable fuels 	Recall and application	 Finish electricity home learning project
	Mid Term Break		
 Features of a wave Amplitude, wavelength and frequency 	 To label a diagram of a transverse and longitudinal wave To interpret wave forms into the type of sound being produced 	Recall and application	 Start energy home learning project. Use KS3 CPG book and BBC Bitesize to do further reading.
 Hearing & extreme sounds Light absorption, scattering and reflection 	 To explain how we make sound and why we can hear it To understand how light reflects, scatters and absorbs 	Working scientifically, recall and application	
 Light refraction The wave equation Sound waves vs light waves 	 To investigate refraction To use the wave equation and explain similarities and differences between sound and light waves 	 Working scientifically, application, numeracy skills 	
Resultant forceSpeed, distance & time	 To work out resultant force of an object To calculate speed, distance and time 	Numeracy skills, recall	 Continue energy home learning project
Distance-time graphsStopping, thinking & breaking distance	 Investigate the density of different objects Understand the process of diffusion 	 Numeracy skills, recall and working scientifically 	
 Terminal velocity Force = mass x acceleration practical and graph drawing 	 To describe what is terminal velocity To explain how force, mass and acceleration of moving objects are linked 	 Working scientifically, recall, numeracy and application 	
Revision lessons	Reflecting on learning throughout term	 Revisiting all science skills 	 Finish energy home learning project

UAE Links across the term

Electricity: How is electricity generated in the UAE?

Energy: What is the main source of energy in the UAE? What type of renewable energy would you find in the UAE?

Waves: Create a soundproof room for Virgin radio in the UAE

Motion: Create a summary of the energy changes that take place when a car comes to a stop during traffic on Hessa Street.