



Year 8

Pathway 2/3/4

Science - Summer - Term 1

Learning Intention: . Physics - Electricity and Forces/Energy and Magnets

Energy and Magnets

To gain further understanding of what is meant by the term 'stored energy', and that different foods contain different amounts of stored energy. To understand that some materials transfer energy better than others. To explain how to tell when an electric circuit is complete and recall electrical components and symbols used in Science to identify them.

To extend their understanding of how we hear sound and how the ear works and to recap knowledge of forces in context of magnets.

Key knowledge that should be learned during this SoW

All (Pathway 2)

Most (Pathway 3)

Some (Pathway 4)

Concept:

Topics that will be covered include energy transfers, and energy in foods. Electrical circuits including parallel circuits. How sound travels, how the Ear works and revisit the different forces acting on objects..

Knowledge:


Key Skills:

To create a safety poster for electricity.

Investigate the effects of air resistance.

To test how air resistance helps slow down a parachute.

Language and/or communication skills:			
Curricular Links	Links to other learning within the subject are: Science/Resistant Materials/ PSHCE/PE		

	Year 8	Pathway 2/3/4	Science - Summer - Term 2
<p>Learning Intention: <u>Physics</u> - Scientific Enquiry</p> <p><u>Electricity</u></p> <p>Students will have the opportunity to learn and extend their understanding of the different types of rock; and gain more understanding of how the rate of cooling affects the size of crystals formed. They will investigate how sound is absorbed better by some materials than others. They will extend their learning from year 7 what they have learnt and investigate floating and sinking by designing their own rafts and test to see which will hold the highest number of coins or weights. To make a solution, recall what dissolving means and investigate the variables that affect the rate of dissolving.</p> <p>They will further their understanding of 'how Science works' by carrying out a set of STEM investigations. The emphasis of KS3 is on practical and investigative work with a constant effort to relate what we teach to the world around them.</p>			

Key knowledge that should be learned during this SoW	All (Pathway 2)	Most (Pathway 3)	Some (Pathway 4)
Concept:	How to ask questions and test theories and concepts ,assessing hazards and taking precautions to minimise the associated risks,using appropriate apparatus and techniques,observation, enquiry and problem solving.		
Knowledge:			
Key Skills:			
Language and/or communication skills:			
Curricular Links			