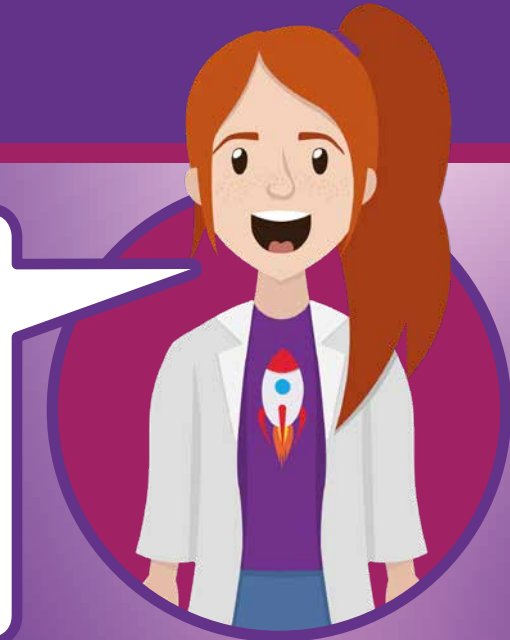


Energy and Sound



Overview

This term our Science topic is energy and sound. Our children will learn that energy can exist in many different forms but are generally grouped into either kinetic or potential energy types. The energy associated with motion is called kinetic energy and the energy associated with position is called potential energy.

Here are some key topics we'll be studying;

1. Different types of energy
2. How energy can be transferred
3. Sound energy
4. Potential energy
5. Kinetic energy



Key investigations

Our children love practical science and they will be involved in a number of investigations that really help them to develop their scientific skills; planning, data capture and analysis and evaluation.

This term they'll be doing investigations into the following;

- The kinetic and potential energy in pendulums
- The thermal energy and mysterious melting ice blocks (a little introduction to the second law of thermodynamics!)
- Sound energy using from a singing balloons and pan pipes
- Spud guns and kinetic energy
- Making their own elastic powered boats!

It's a great unit for real hands on science!

Exciting things

Did you know that energy can never be created or destroyed, but only transferred from one form to another. This is the first law of thermodynamics and scientists who have worked in this field among many others are Albert Einstein, James Prescott Joule, Nikola Tesla. You can see their legacy in energy related terms used today.

The very famous equation from Einstein $E = MC^2$ (Energy = Mass x the speed of light squared) effectively tells us that everything in the universe is made from.... Energy!



Things to do at home

Energy is all around us at home. Some of your children may have seen some wind turbines that harness the energy created by the wind. Why not show them how to make their own pin-wheel wind turbine by using this simple template and instructions on this link

http://www.alliantenergykids.com/wcm/groups/wcm_internet/@int/@aekids/documents/document/mdaw/mdiy/~edisp/022821.pdf

Share your wind turbine online using the hashtag #empiriboxscience and join in the fun!

