

Year 4 - Spring 2 - Science Knowledge Organiser - Electricity



What I already know...

This will be the first time, that children have learnt about electricity in school.

They will build upon their general knowledge of batteries storing energy, electricity travelling down wires and switches turning things on and off.

Key Vocabulary

A container consisting of one or more cells in which battery chemical energy is converted into electricity. The electricity which is Mains delivered to homes and electricity businesses. A material which allows **Flectrical** electricity to travel though conductor A closed path that allows electricity to flow from circuit one point to another A power supply that uses chemical energy to make cell electricity.

What I will learn...

- how to make sure everyone is safe when using electrical items.
- how to create a circuit using a battery, wires, switch and bulb, motor or buzzer.
- the difference between mains and battery operated appliances..
- how to identify some materials which conductor electricity and some items which do not conduct electricity.
- to make a circuit which matches a diagram.
- how a switch works and be able to make their own functioning switch.



Making a difference at The Merton & beyond

Children will learn how to use electricity safely and some of the consequences of not being careful when working with or using electrical appliances.

They will use their scientific learning in Design and Technolgy to help them to design, make and evaluate an electrical product to help protect a rabbit from predators.

How to be a scientist:

Disciplinary Knowledge: skills I will learn...

- To ask relevant questions and use different types of scientific enquiries to answer them
- To set up simple practical enquiries, comparative and fair tests
- To make systematic and careful observations and take accurate measurements
- To gather, record, classify and present data in a variety of ways to help answer questions
- To record findings using simple scientific language, drawings etc.



Making a difference ● Inspiring success ● Building character ● Building relationships ● Promoting health and wellness