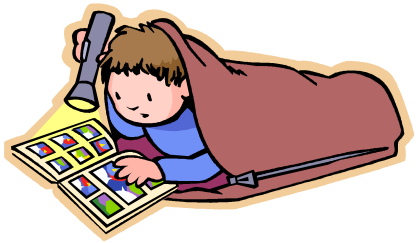
Electrical Circuits 1

Make a basic electrical circuit. Kids will learn about the basics of how electricity flows by making a simple circuit- a flashlight or simple lamp. Other applications include how radiation detection works.

This session will include a demonstration using a small computer called Raspberry Pi. This programmable digital circuit will be used to flash lights at different intervals. There is an additional page for this device.

We will learn about the basic parts to a circuit. We will use a simple circuit that can turn on a light bulb using wires, a power source (battery), and switches.

Visible light can be used to change the resistance of a device called a photocell. After exploring a circuit that includes batteries, light bulbs, and switches, a photocell will be added to the circuit. Each child will receive a flashlight to be used to activate this photocell and investigate how it works. The students get to **TAKE HOME** the flashlight that they've used.



If time allows, we will also investigate different materials to see if they can conduct electricity and help the electrons flow through the circuit. Does plastic let electrons flow? What about a penny?