

## Science Topic: Electricity

Year 4 Summer 2



### Prior Learning

In Years 1, 2 and 3, we learnt that materials have different properties and that some of the materials can conduct electricity. We found out that electricity can be used to create light sources which emit both light and heat. We also learnt that filament light bulbs heat up until they glow and fluorescent light bulbs glow when electricity adds energy to a gas.

### What? (Key vocabulary)

<b>Circuit</b>	A complete pathway that an electric current can flow around.
<b>Electrical Appliance</b>	A machine that works because of electricity, such as a television or fridge.
<b>Charge</b>	A property of electromagnetic particles. Electrons have a negative charge while protons have a positive charge.
<b>Electron</b>	Tiny particles that are found in all materials which have a negative charge and create electricity when pushed around a circuit.
<b>Current Electricity</b>	The flow of electrons around a closed circuit.
<b>Battery</b>	An object which contains chemicals which produce an electrical current when connected in a circuit. This is also known as a <b>cell</b> .
<b>Terminals</b>	The two ends of a power source that the electric current flows between. One end is positive and the other negative.
<b>Switch</b>	Part of a circuit that can be opened and closed to control the flow of electric current.
<b>Static Electricity</b>	When particles on two surfaces of objects become electrically charged due to friction and then discharge electricity upon contact.
<b>Voltage</b>	The unit of measurement for the strength of the push that a battery gives to electrons, which shows how much current can flow through a circuit.

### Who? (Significant people)

<b>Benjamin Franklin</b>	Conducted experiments with kites and found out that lightning is a form of electricity.
<b>Thomas Edison</b>	Invented a long-lasting Incandescent Electric light bulb by studying how to lower the voltage of the electric current.