Whingate Primary School – Science

Electricity

Year 6

What should I already know?

-Identify common appliances that run on electricity.

-Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.

-Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.

-Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.

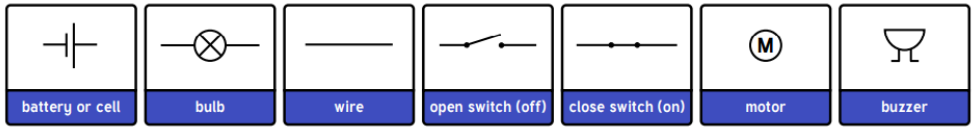
-Recognise some common conductors and insulators, and associate metals with being good conductors.

Vocabulary

Appliance - a device or piece of equipment that has been made to perform a specific task.
Battery - a small item used to power small appliances.
Bulb – a glass bulb which provides light by passing an electrical current through a filament.
Buzzer – an electrical device that makes a buzzing noise and is used for signalling.
Cell – a device containing electrodes that is used for generating current.
Circuit – a complete and closed path which a circulating electrical current can flow.
Components - the parts of a circuit.
Conductor - allows heat or electricity to flow through it.
Electricity – a form of energy resulting from the existence of charged particals.
Insulator - doesn't allow electricity to flow through it.
Mains power - electricity provided by power stations.
Motor – a machine that turns electrical energy into movement.
Portable - can be easily carried around.

Diagrams

Scientific Symbols



Thomas Edison (1847 – 1931)

Thomas Edison was born in 1847 and died in 1931. He lived in the state of New Jersey in the United States of America (USA).

He is known as one of the greatest inventors in history.

He invented the light bulb, the phonograph (which could record and play sound) and an early video camera called the Kinetograph. The films were then watched on a Kinetoscope, which he also invented.

What will I know by the end of this unit?

-Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.
-Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
-Use recognised symbols when representing a simple circuit in a diagram.

		Pylon - a tower used for keeping electrical wires above the ground. **Voltage** – a force that makes electricity flow through a wire (measured in volts).		