St Bernadette's Catholic Primary School -Sycamore Class Electricity

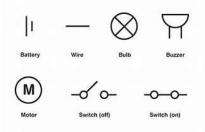
Gospel Value Awe and Wonder

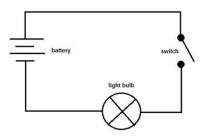
What I should know already-

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.

Key Knowledge

- Adding more cells to a complete circuit will make a bulb brighter, a motor spin faster or a buzzer make a louder sound. If you use a battery with a higher voltage, the same thing happens.
- Adding more bulbs to a circuit will make each bulb less bright. Using more motors or buzzers, each motor will spin more slowly and each buzzer will be quieter.
- Turning a switch off (open) breaks a circuit so the circuit is not complete and electricity cannot flow. Any bulbs, motors or buzzers will then turn off as well.
- You can use recognised circuit symbols to draw simple circuit diagrams.





Key Vocabulary

Circuit- A path that an electrical current can flow around.

Symbol- A visual picture that stands for something else.

Cell/Battery- A device that stores chemical energy until it is needed. A cell is a single unit. A battery is a collection of units.

Current- The flow of electrons, measured in angles.

Amps- How electrical current is measured.

Voltage- The force that makes the electric current move through the wires. The greater the voltage, the more current will flow.

Resistance- The difficulty that the electric current has when flowing around a circuit.

Electrons- Very small particles that travel around an electrical current.