

Prior Knowledge

- Know common appliances that run on electricity
- Know how to construct a simple electrical circuit identifying and naming its basic parts including cells, wires, bulbs, switches and buzzers
- Recognise that a switch opens and closes a circuit by knowing whether or not a lamp lights in a simple circuit

Key Knowledge

- Adding more cells to a complete circuit will make a bulb brighter, a motor spin faster or a buzzer make a louder noise
- If you use a battery with a higher voltage, the same thing happens
- Know that:
 - adding more bulbs to a circuit will make each bulb less bright
 - using more motors will make each motor spin slower
 - using more buzzers will make each buzzer quieter
- Turning a switch off (open) breaks a circuit so the circuit is not complete and electricity cannot flow
- When a circuit is broken, any bulbs, motors or buzzers will turn off too
- You can use recognised circuit symbols to draw simple circuit diagrams

How are electricity and artificial light sources linked?

Change

Adaption

Hardship

Strength



Key Vocabulary

circuit	A pathway which allows electricity to flow from the battery, through wires and devices before returning to the battery		
complete circuit	A complete path that an electrical current can flow around		
circuit symbol	A symbol used to represent different electrical components		
circuit diagram	A visual representation of an electrical circuit using symbols		
cell / battery	A source of electrical energy		
voltage	A measure of how strong the electrical current is in a circuit		
bulb	buzzer	motor	switch

cell		open switch	
battery		closed switch	
wire		buzzer	
bulb		motor	