

# ELECTRICITY

## Knowledge Organiser

Year 6, Autumn 1: Electricity  
Science Strand: Biology

### Key Vocabulary

battery	A device consisting of one or more cells.
cell	A single electrical energy source.
circuit	A complete path that an electric current can flow around.
circuit symbol	A symbol used to represent various electronic components or functions in a diagram of a circuit.
switch	An electrical component that can make or break an electrical circuit.
voltage	Volts are a measure of the energy of a flow of electricity. Mains electricity carries a voltage of 210-240volts. A typical cell in school has 1.5volts.

Scientific Enquiry Approaches  
that we can use this term:



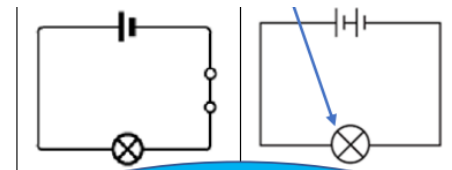
### What will I know about electricity by the end of this topic?

- 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 (e.g. the brightness of bulbs, the loudness of buzzers).
- Be able to use recognised symbols when representing a simple circuit in a diagram.

### Circuit Symbols

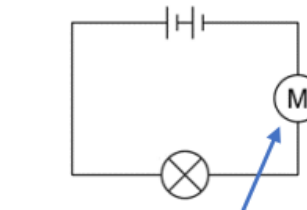
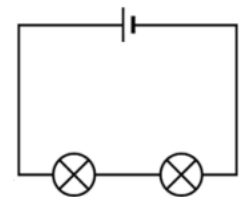
	wire
	cell
	battery
	bulb
	motor
	buzzer
	open switch
	closed switch

Adding more cells to a circuit makes a bulb brighter.  
The bulb in this circuit will be brighter.

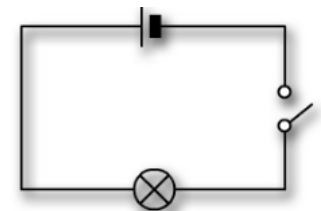


If you use a battery with a higher voltage, the bulb would also be brighter.

Adding more bulbs to a circuit will make each bulb less bright.



If we add a motor into a circuit with a single bulb, the bulb will be less bright.  
If we then add more motors to the circuit, each motor will spin more slowly.



The switch in this circuit is turned off (open). This breaks the circuit so it is not complete and electricity cannot flow. The bulb will turn off.