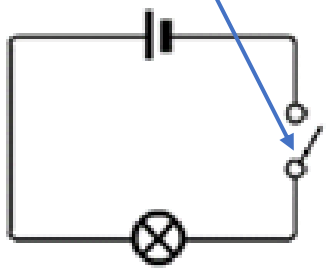
Electricity – Year 6

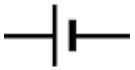
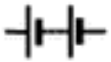
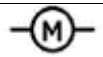
Key vocabulary	
circuit	A complete path that an electric current can flow around. It flows from the battery, through wires and devices before returning to the battery. If the circuit is not complete the electric current cannot flow.
circuit symbol	A symbol used to represent various electronic components or functions in a diagram of a circuit.
circuit diagram	A visual representation of an electrical circuit using symbols to represent the electrical components.
cell	A single electrical energy source.
battery	A device consisting of one or more cells.
switch	An electrical component that can make or break an electrical circuit. When a switch is open (off), there is a gap in the circuit and electricity cannot flow around the circuit.
voltage	Volts are a measure of the energy of a flow of electricity. Mains electricity carries a voltage of 210-240 volts. A typical cell in school has 1.5 volts.

Switch turned off (open).



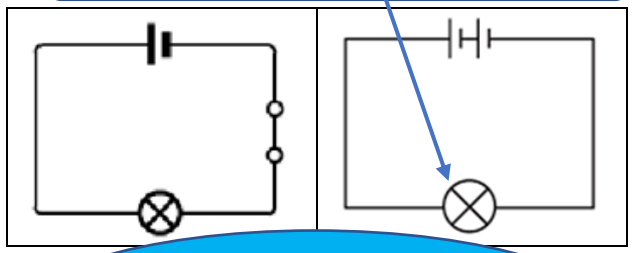
This breaks the circuit so it is not complete and electricity cannot flow. The bulb will turn off.

Circuit symbols

cell	
battery	
wire	
bulb	
buzzer	
motor	
switch	

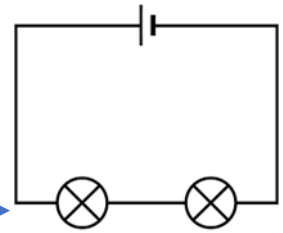
Adding more cells to a circuit makes a bulb brighter:

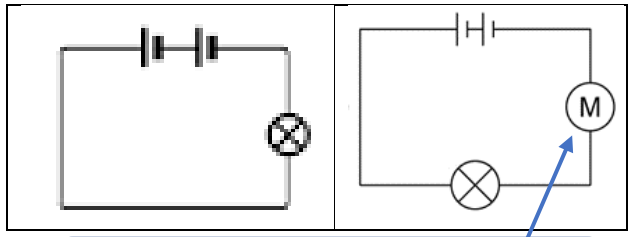
The bulb in this circuit will be brighter.



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.