




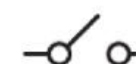



Key vocabulary	
Battery	Two or more primary cells connected together, usually in series, to provide a source of electric current.
Cell	A device for converting chemical energy into electrical energy.
Charge	The amount of energy.
Components	Objects that make up the circuit.
Electrical circuit	A complete route that an electric current can flow around.
Electricity	A form of energy that can be carried by wires.
Electron	A small piece of matter and energy.
Parallel circuit	In this circuit, components are connected in parallel and so there is more than one path along which the current can flow.
Series circuit	In this type of circuit, each component is connected one after the other, so the current must pass through each in turn and is the same at every point in the circuit.
Short circuit	A problem where two or more wires that are not supposed to do meet.
Voltage	The unit in which the electrical force is measured.

Key Knowledge	
Preceding	<ul style="list-style-type: none"> The simplest circuit is known as a series circuit. An electrical circuit consists of a cell or battery connected to a component using wires. If there is a break in the circuit, a loose connection or a short circuit the component will not work. A switch can be added to the circuit to turn the component on and off. Metals are good conductors so they can be used as wires in a circuit.
Current	<ul style="list-style-type: none"> Adding more cells to a complete circuit will make a bulb brighter, a motor spin faster or a buzzer make a louder sound. Adding more bulbs to a circuit will make each bulb less bright. When I draw a circuit, I use straight lines to show wires.

Scientific Enquiry	
Pattern Seeking	<p>Explain how the number & voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Battery</p> </div> <div style="text-align: center;">  <p>Wire</p> </div> <div style="text-align: center;">  <p>Bulb</p> </div> <div style="text-align: center;">  <p>Buzzer</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 10px;"> <div style="text-align: center;">  <p>Motor</p> </div> <div style="text-align: center;">  <p>Switch (off)</p> </div> <div style="text-align: center;">  <p>Switch (on)</p> </div> </div>