



# Year 6 Science Electricity

Subject Specific Vocabulary		Electrical symbols	Key Knowledge																								
<b>conductor</b>	Some materials let electricity pass through them easily. These materials are known as electrical conductors.	<table border="1"> <thead> <tr> <th>Component</th> <th>Symbol</th> <th>Purpose</th> </tr> </thead> <tbody> <tr> <td>Cell (Battery)</td> <td></td> <td>Provides electrical energy</td> </tr> <tr> <td>Power supply</td> <td></td> <td>Alternative to using cells</td> </tr> <tr> <td>Wire</td> <td></td> <td>Allows current to travel</td> </tr> <tr> <td>Bulb/light</td> <td></td> <td>Converts electrical energy into heat and light</td> </tr> <tr> <td>Motor</td> <td></td> <td>Converts electrical energy into movement energy</td> </tr> <tr> <td>Buzzer</td> <td></td> <td>Converts electrical energy into sound energy</td> </tr> <tr> <td>Switch</td> <td></td> <td>Allows circuit to be opened or closed</td> </tr> </tbody> </table> <div style="border: 1px solid blue; padding: 5px; text-align: center; margin-bottom: 10px;"> <b>Circuit with symbols</b> </div>	Component	Symbol	Purpose	Cell (Battery)		Provides electrical energy	Power supply		Alternative to using cells	Wire		Allows current to travel	Bulb/light		Converts electrical energy into heat and light	Motor		Converts electrical energy into movement energy	Buzzer		Converts electrical energy into sound energy	Switch		Allows circuit to be opened or closed	Using more motors or buzzers in a circuit will make each motor spin slower and each buzzer will be quieter.
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<b>insulator</b>	Materials that do not allow an electric current to flow freely through are insulators. Plastic, wood, glass and rubber are good electrical insulators.		Adding more bulbs to a circuit will make each bulb less bright.																								
<b>component</b>	An electrical component is the term for any part of an electrical circuit e.g. wires, switches, bulbs, motors, buzzers.		Adding more cells (or a battery with a higher voltage) to a complete circuit will make a bulb brighter, a motor spin faster or a buzzer make a louder sound.																								
<b>circuits</b>	Electricity can flow through the components in a complete electrical circuit. It needs a power source with wires connected to both the positive and negative ends.		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.																								
<b>cell</b>	An electrical cell is a device that is used to generate electricity, or one that is used to make chemical reactions possible by applying electricity. A battery is a cell.																										
<b>voltage (volts)</b>	Voltage is the name for the electric force that causes electrons to flow. The higher the voltage on a battery, the more power it has.																										