



Electricity			
Key Knowledge			
Electricity		An Electrical Circuit	
What is Electricity?	<ul style="list-style-type: none"> - Electricity is created by generators which can be powered by gas, coal, oil, wind or solar. - The electrical energy can be converted into other types of energy such as light, heat, movement or sound. - Electricity is dangerous, so be careful when using electrical appliances. 	<p>A series circuit (One pathway around the circuit)</p>	
What are common appliances that run on electricity?	<p>Any appliances that need to be plugged in run on electricity. For example:</p> <ul style="list-style-type: none"> ⇒ Television ⇒ Computer ⇒ Microwave ⇒ Lights 	<ul style="list-style-type: none"> - Electricity can flow through the components in a complete electrical circuit. - A circuit always needs a power source, such as a battery, with wires connected to both the positive (+) and negative (-) ends. (A battery is made from a collection of cells connected together). - A circuit can also contain other electrical components, such as bulbs, buzzers or motors, which allow electricity to pass through. - Electricity will only travel around a circuit that is complete. That means it has no gaps. 	
Diagrams and Symbols		Electrical Conductors and Insulators	
			Conductors
	<p>A series circuit is a closed circuit in which the current follows one path</p>		Insulators
What is a switch?			
	<p>-You can use a switch in a circuit to create a gap in a circuit. This can be used to switch it on and off.</p> <p>-When a switch is open (off), there is a gap in the circuit. Electricity cannot travel around the circuit.</p> <p>-When a switch is closed (on), it makes the circuit complete. Electricity can travel around the circuit.</p>		
	Open circuit: an electrical circuit in which the continuity is broken so that current does not flow.	Closed circuit: a complete electrical connection around which current flows or circulates	
Electrical dangers		Key Vocabulary	
		Generator	A machine that makes electrical energy
		Component	A part of something (a part of a circuit)
		Circuit	A path through which electrical current flows
		Connected	Something that is joined or linked
Working scientifically			
<p>Which materials make the best conductors or insulators? How can we find out?</p> <p>How can we test if a circuit works? What happens if we add multiple components to a circuit?</p> <p>What happens if there is a break in a circuit? How does a switch work?</p>			