
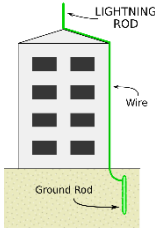


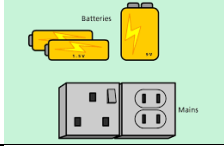
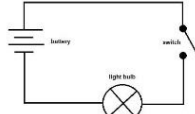



Topic	Electricity	Term	Summer	Year Group	4
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Vocabulary	
Electricity	The flow of an electric current through a material, e.g. from a power source through wires to an appliance.
Renewable	A source of electricity that will not run out. These include solar, nuclear, geothermal, hydro and wind.
Non-renewable	This source of energy will eventually run out and so will no longer be able to be used to make electricity.
Generate	To make or produce.
Appliances	A piece of equipment or a device designed to perform a particular job, such as a washing machine or mobile phone.
Battery	A device that stores electrical energy as a chemical.
Nuclear energy	Energy created when atoms split.
Geothermal energy	Heat from the earth that is converted into electricity.
Circuit	A pathway that electricity can flow around. It includes wires and a power supply and may include bulbs, switches or buzzers.
Electrical Conductor	A material which will allow electricity to flow through it.
Electrical Insulator	A material which does not allow electricity to flow through it.

Concepts and Knowledge	
	<p>Benjamin Franklin (1706 – 1790)</p> <p>The well-known inventor Franklin made important discoveries about harnessing electricity.</p> <p>He was sure that there was electricity in lightning and that it could be harnessed. He invented the lightning rod. The rod conducted electric energy from lightning and prevented structures from being damaged by a strike.</p> <p>Lightning and static electricity are examples of electricity occurring naturally but for us to use electricity to power appliances, we need to make it.</p>
	
	<p>Coal, oil and natural gases are fossil fuels which, when burnt, produce heat which can be used to generate electricity.</p>
	<p>Electricity can be generated from wind power used to turn windmills and hydroelectric power from water used in dams. The Sun's rays can be converted into electricity by solar panels. Nuclear energy is created when atoms are split. This creates heat which can be used to generate electricity. Geothermal energy is heat from the Earth that is converted into electricity.</p>
	<p>There are two types of electric current. Mains electricity and Battery electricity.</p>
	<p>Electricity can only flow around a complete circuit that has no gaps.</p> <p>Switches can be used to open or close a circuit.</p>
	<p>Metals are good conductors. Wood, plastic and glass are good insulators.</p>