

Tier 3 Vocabulary

battery	a series of cells
cell	a single battery that supplies power to the circuit
circuit	A circuit is a complete path around which electricity can flow. It must include a source of electricity, such as a battery.
complete	A circuit that doesn't have any gaps in it
current	Current is the flow of an electric charge
electrons	Makes up electricity: negatively charged particles
filament	The very thin wire, like that in a fuse, and that is inside a bulb
fuse	a safety device that will melt and make a break in a circuit if there is too much electricity
Resistors	something that makes up part of a circuit such as a bulb or wire
Electrons	a very small particle that has a negative charge of electricity and travels around the nucleus of an atom.
Voltage	Voltage is a force that makes electricity move through a wire. It is measured in volts.
Solar	Solar power is power generated directly from sunlight. Solar power can be used for heat energy or converted into electric energy
Terminal	A terminal is the point at which a conductor from a component, device or network comes to an end
Renewable	Renewable energy uses energy sources that are not "used up". For example, solar power from the sun is renewable as we won't "use up" all the sunlight from the sun
Mains	<i>Mains</i> electricity is just a big circuit so when you plug something in at home, you complete the circuit from your house to the power station and back again.

Working and thinking scientifically

We are being scientists by:

- Children can describe what happens when they use resistance wire in a circuit.
- Children carry out fair tests to answer their questions and give reasons for their results.
- Children apply their knowledge of circuits including circuit diagrams and can use standard symbols to draw their circuit.
- Children work independently to research and communicate their work
- Children use the circuit symbol cards to draw a circuit.
- Children read and make the circuits diagram and can explain why they do and do not work.
- Children can report and present findings from enquiries, including conclusions.
- Children can compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off switches.

Key Facts

To reduce, or lessen, the amount of electricity moving through the circuit is called a:	Resistor
4 types of renewable energy are:	Sun, coal wind and oil
Power generated by the sun is called:	Solar
Electricity can be made from:	Wind, water, sunlight and animal poo
Electricity travels at the:	Speed of light.
Power stations make energy by:	Burning fuels such as coal or gas
Rubbing a balloon on your hair or on a nylon jumper can:	Generate energy
Almost everything we need to create energy was dis-	Thomas Edison

Pictures and Diagrams

		BULB
		BUZZER
		MOTOR
		WIRE
		VOLTMETER
		BATTERY/ CELL
		SWITCH