Key Vocabulary

Amps How electric current is measured.

Circuit A path that an electrical current can flow around.

Cell/Battery A device that stores chemical energy until it is needed. A cell is a single unit. A battery is a collection of cells.

Current The flow of electrons, measured in amps.

Electrons Very small particles that travel around an electrical circuit.

Generate To make or to produce.

Renewable A source of electricity that will not run out. These include solar, nuclear, geothermal 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. These include fossil fuels – coal, oil and natural gas.

Resistance The difficulty that the electric current has when flowing around a circuit.

Voltage The force that makes the electric current move through the wires. The greater the voltage, the more current will flow.

Etwall Primary School

Electricity

Year 5**/6**

Electricity is an energy. This energy can be used to power electrical items such as toasters, kettles, cookers, televisions and computer tablets. Electrical energy is caused by electrons (the particles in atoms) moving about to make a current. **Series Circuit** A circuit that has only one route for the current to take. If more bulbs or buzzers are added, the power has to be shared and so they will be dimmer or quieter. If just one part of this series circuit breaks, the circuit is broken and the flow of current stops.



Lightning and static electricity are examples of electricity occurring naturally but for us to use electricity to power appliances, we need to make it.

Coal, oil and natural gases are fossil fuels which, when burnt, produce heat which can be used to generate electricity. 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 split. This creates heat which can be used to generate electricity. Geothermal energy is heat from the Earth that is converted into electricity.







Circuit Symbols						
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buzzer	switch (open)	switch (closed)	cell/battery	bulb	wire	motor