

Year: 4

Term: Summer 2

Topic: Physics - Electricity

St Dennis Primary Academy

"Everyone matters, everyone succeeds, every moment counts"



Electrical appliances

Many appliances need electricity to work.

Most big appliances in our house have to be plugged in. These are powered by mains power.



Battery power

Battery powered appliances are portable which means you can use it anywhere without it having to be plugged into a plug socket.

There are different types of battery for different appliances.



Mains power

Mains power is produced mainly in a gas, coal or nuclear power station. Wind turbines, solar panels and hydroelectric dams are also used to produce mains power but are not used as often.



The electricity then travels from the power stations to our houses through overhead wires and pylons. We use the electricity in our house by plugging the appliance into a plug socket. Finally, the electricity enters the appliance's electrical circuit through the wires.



Glossary

- appliance** A device or piece of equipment that has been made to perform a specific task.
- battery** A small item used to power small appliances.
- circuit** A route through which electricity flows.
- components** The parts of a circuit.
- conductor** Allows electricity to flow through it.
- current** The rate of flow of electricity measured in amps.
- electrical** Something that uses electricity to work.
- insulator** Doesn't allow electricity to flow through it.
- mains power** Electricity provided by power stations.
- portable** Can be easily carried around.
- pylon** A tower used for keeping electrical wires above the ground.
- switch** A device for controlling the flow of

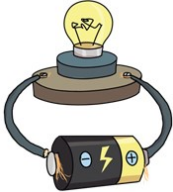
Switches

When we put a switch in an electrical circuit and turn it to the on position, it completes the circuit and allows electricity to flow around the circuit. When we turn the switch to the off position, this creates a break in the circuit meaning the electricity cannot flow anymore and the appliance will not work.



Insulators	Conductors
fabric	tin foil
plastic	tin can
paper	steel spoon
string	penny
wood	

Simple Circuit



The circuit has to be complete to allow the electricity to travel all the way around it.