

Year 4

Electricity



How are you working Scientifically?

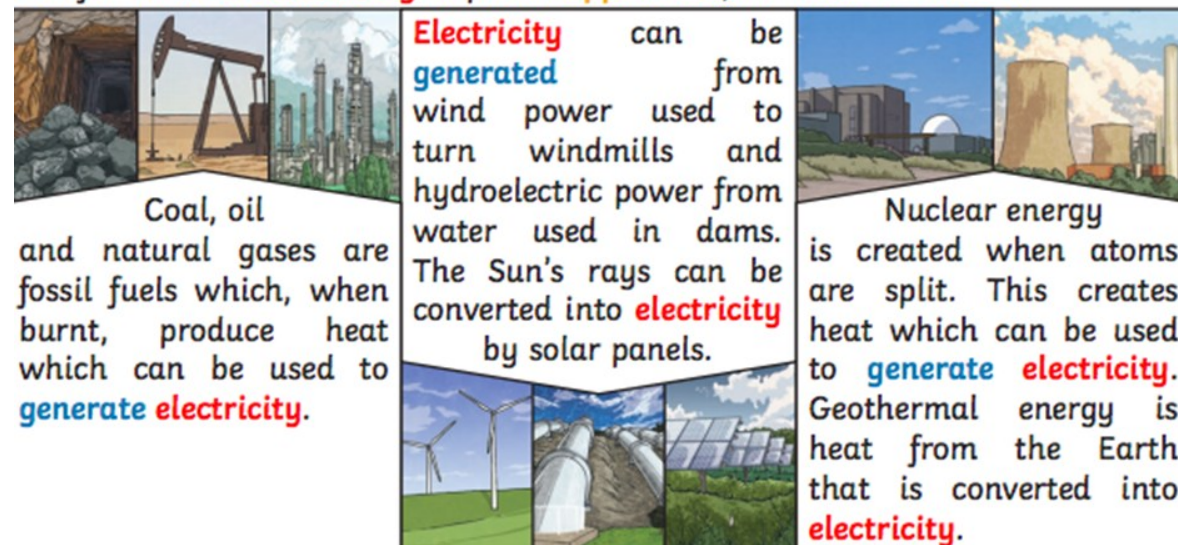
Set up simple practical enquiries, comparative and fair tests
Make systematic and careful observations
Gather, record, classify and present data in a variety of ways
Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
Report on findings from enquiries
Use results to draw simple conclusions
Identify differences, similarities or changes related to simple scientific ideas and processes



Pre existing knowledge

- Electricity is a form of energy that can be carried by wires and is used for heating and lighting, and to provide power for devices.
- Sources of light and sound may need electricity to work.

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



Vocabulary

Circuit	A pathway that electricity can flow around. It includes wires and a power supply and may include bulbs, switches or buzzers.
Electricity	The flow of an electric current or charge through a material, eg. from a power source through wires to an appliance.
Generate	To make or produce.
Battery	A device that stores electrical energy as a chemical.
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. These include fossil fuels – coal, oil and natural gas.
Appliances	A piece of equipment or device designed to perform a particular job, such as a washing machine or mobile phone.

What are electrical conductors and insulators?

Objects that are made from materials that allow electricity to pass through create a complete circuit and are called **electrical conductors**.

Objects that are made from materials that do not allow electricity to pass through and do not complete a circuit are called **electrical insulators**.

