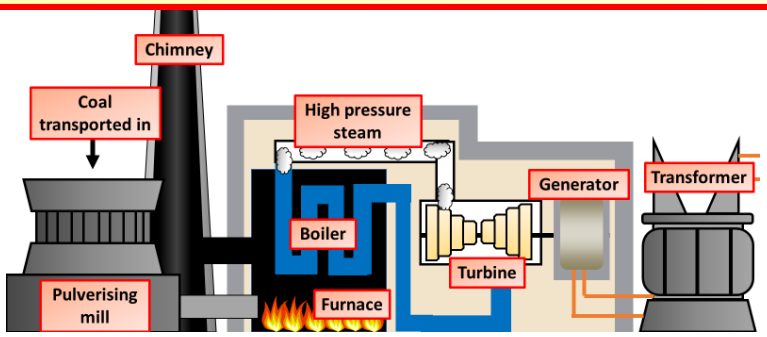
WHERE DOES ELECTRICITY COME FROM?

Specification Link:
Home School Project

Task:
Make a poster that shows where electricity comes from. Write a step-by-step description of how electricity is generated using coal and wind. Make a chain that shows the steps for generating electricity. Try to identify energy transfers



Done	You might have:
	• Draw a diagram to describe how electricity can be generated using coal. • Draw a diagram to describe how electricity can be generated using wind turbines. • Identify the renewable and the non-renewable resource. • State the original source of energy for both coal and wind. • Classify a few other resources as renewable or non-renewable.
	• Draw a diagram to explain how electricity can be generated using coal. • Draw a diagram to explain how electricity can be generated using wind. • Describe the difference between renewable and non-renewable resources. • Explain the original source of energy for both coal and wind. • On the diagrams, label some useful energy transfers.
	• On the diagrams, identify useful and non-useful energy transfers. • Describe some advantages and disadvantages of using each energy resource.
	• Draw a detailed diagram to explain how electricity can be generated using coal. • Draw a detailed diagram to explain how electricity can be generated using geothermal energy. • Explain the difference between renewable and non-renewable resources. • Explain the original source of energy for both coal and geothermal energy. • On the diagrams, accurately label useful and non-useful energy transfers. • Explain, in detail, the advantages and disadvantages of using each energy resource.

Highlight key points below

Crude oil, coal and gas are fossil fuels. They were formed over millions of years, from the remains of dead organisms:

- coal was formed from dead trees and other plant material
- crude oil and gas were formed from dead marine organisms

Generators in a power stations produce electricity when a coil of wire is in a changing magnetic field. This changing magnetic field is caused by spinning a magnet inside the coil.

Fossil fuel and nuclear power stations use the energy store to heat water and produce steam to turn a turbine which is connected to the magnet, causing it to spin.

Renewable energy is energy that is collected from renewable resources, which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.

Questions that you should ask yourself while completing this

What should I do first?

Is something confusing me?

Could I explain this to someone else?

Could I have used more scientific terms?

Where can I look for help?

Have I double checked what I need to include?

How can I do it better?