Resource 1 : Power for the People
The supply of electricity in the UK

Task 1: Our reliance on electricity

If it's available, watch minutes 00:00 to 6:36 of the video 'Electricity for the Future', then do the following activities

a) List all the ways you use electricity in a typical school day.

b) Locate the approximate position of your home on the map in Resource 1. Mark your house with a dot and add to the key: 'My House'.

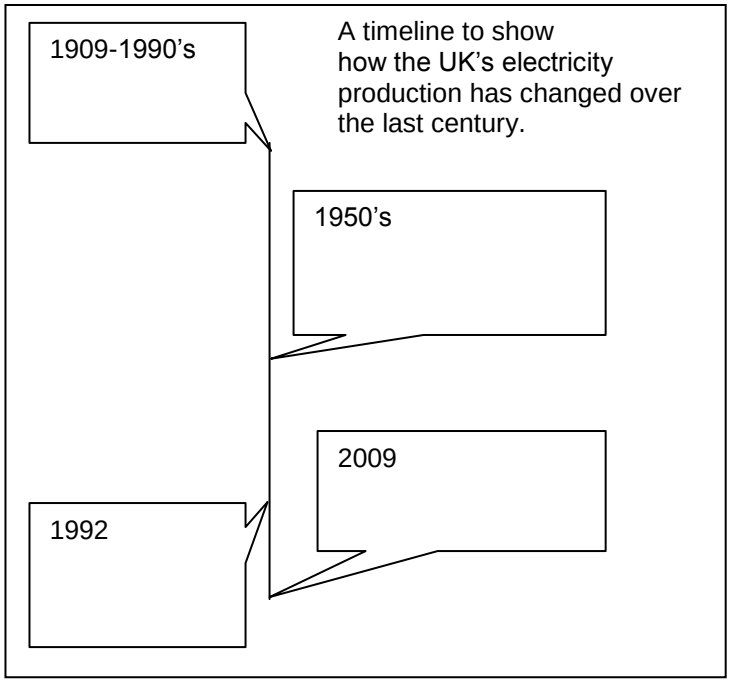
c) Using the map, find the nearest power station to your house. How is your electricity produced?

d) Discuss the term **sustainable**. How sustainable is the electricity supply in your area?

e) The UK relies on electricity generation. Create a mind map to show the **problems** we might face if we are unable to produce enough electricity.

Task 2: How have energy sources been changing?

a) Show how the UK's electricity production has been changing over the last century. Copy and annotate the time line using the information about energy sources.



b) Explain why gas fired power stations have increased in the UK recently.

EXT - **Develop your writing style**. Write a paragraph to describe how the UK energy sources have been changing.

Task 3: What sources of electricity are being used in 2009?

a) Below are the types of power stations in the UK. Find them on the key in Resource 1. The definitions have been mixed up so you need to sort them out:

Type of power station	Definition
Pumped storage	Controlled nuclear reactions that split uranium atoms to create heat. The heat produces steam and then electricity.
Nuclear	Burning coal to create heat to power an electricity generator
Hydro	The option of burning gas, coal or liquefied fuel such as diesel, furnace oil or liquefied natural gas
Coal-fired	Power produced from pumping stored water from a low level to a higher level when there is a low demand for electricity and releasing it to produce electricity at peak times
Oil-fired	Producing power by the gravitational force of falling or flowing water
Gas-fired	Burning oil to create heat to power an electricity generator
Dual-fired	Burning gas to create heat to power an electricity generator

b) Study the map that shows 'The electricity supply in Great Britain. Describe the distribution pattern of i) hydro power stations ii) coal-fired power stations iii) nuclear power stations iv) others

c) Give geographical reasons why the power stations may be located in these areas.

Task 4: What are the UK's future energy sources?

a) What are renewable energy sources?
b) List 4 examples of renewable energy sources in the UK
c) Give 2 reasons why renewable energy sources are needed in the UK