
Where do fuels come from?

Read about where fuels come from below. Then answer the questions that follow.

Fossil fuels

Fossil fuels come from animals and plants that died millions of years ago.

Fossil fuels cannot be replaced once they have been used, because they take so long to form. One day they will run out.

Biofuels

Biofuels come from animals and plants that are living now.

Supplies of biofuels can be replaced if we grow new plants and animals to replace the ones we use. Biofuels will not run out.

Fuels

All fuels give out energy when they are burned.

Burning any fuels gives off pollution.

Using biofuels instead of fossil fuels will help to save fossil fuels for other uses.

Questions

1 When were fossil fuels made?

2 When were biofuels made?

3 What must we do to make sure biofuels don't run out?

4 Why will fossil fuels run out?

5 Which types of fuels give out pollution when burned?

6 Which types of fuels give out energy when burned?

7 What is the advantage of using biofuels?

How coal is formed

You are going to build a model of how coal forms.

- 1 Take two beakers. Put a thin layer of twigs and some leaves in the bottom of one beaker.
- 2 Add a little water.

This is what happened millions of years ago when the trees died and fell into swamps.

- 3 Add a layer of soil.

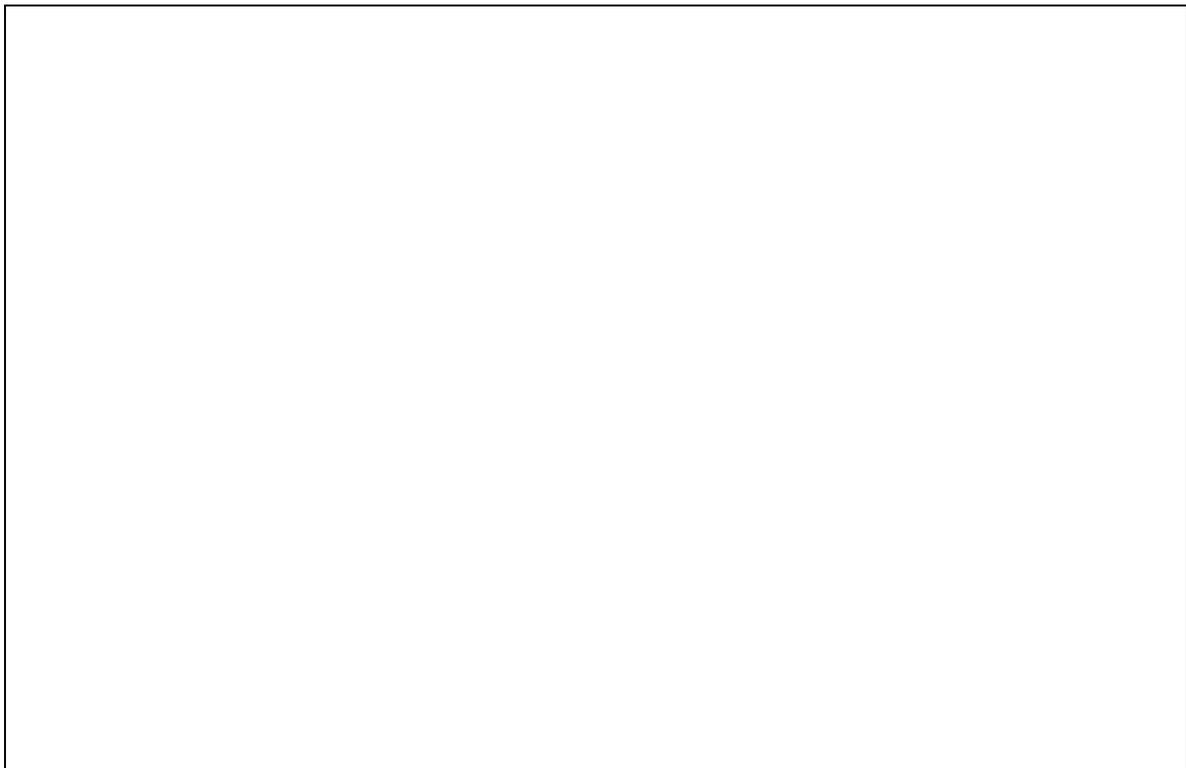
Layers of material covered the plants and pressed down on them. No oxygen could get to the plants so they could not rot.

- 4 Add another layer of soil on top, and press it down.

The plants were pressed harder under the weight as more layers formed on top. As the pressure increased, the trees started to heat up in the Earth's crust.

This process took millions of years.

- 5 Add a final layer of twigs to show that this process is still going on.
- 6 Draw a picture of the layers in your beaker. Label the part of your model that represents where coal is forming.



- 7 Take another beaker. Put a layer of coal in the bottom, and cover it with soil and water. This shows what forms after the trees have been in the swamps for millions of years.
- 8 Study some pieces of coal closely, perhaps using a magnifying glass or hand lens. Does coal look anything like the plant material it was made from?