



Fossil Fuels from the Forest

Where Does Coal Come From?

Activity Guide

Have you ever wondered where coal comes from? Check out the coal samples in the bag. They used to be ancient plants!

Try This!

Step 1: Explore the coal sample in the bag. Don't worry if you get some black stuff on your hands, its just carbon!

Step 2: Turn the pages of the Life Cycle of Coal story book to learn how coal was created and mined from the earth.

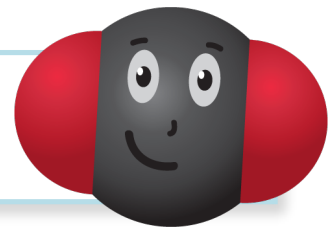
What happens to coal when it is burned to produce electricity?

What are some ways that we can reduce the amount of energy we use?

Climate Connection

Coal is made from ancient plants that were put under extreme heat and pressure for long periods of time, a process similar to what makes a fossil. Carbon dioxide is removed from the atmosphere by plants. When humans burn coal for electricity, we release this ancient stored carbon back into the atmosphere, which contributes to climate change.

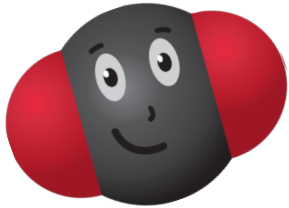
***Did you know?** Oil is another fossil fuel that is non renewable because it is made of ancient animal matter. It takes hundreds of thousands of years for oil to form.*



Turn the page over to learn more!

What's Happening?

Other renewable energy sources include wind, solar, geothermal, and water!



Coal is one of our main sources of energy for electricity. Coal is made from ancient plants that were put under extreme heat and pressure for long periods of time, a process similar to what makes a fossil. This is why coal is known as a **fossil fuel**. Coal takes millions of years to form, so we consider it a **non-renewable energy source**. This means that once all the coal is gone, we won't be able to get more of it for hundreds of thousands of years.

Coal is made up of carbon atoms that originally came from ancient plants. When we burn coal, we access all the energy that is stored in its carbon atoms. This energy is used to power our homes and cities. Burning coal also releases **carbon dioxide** (CO₂) into our atmosphere. Carbon dioxide is a greenhouse gas that traps heat and contributes to climate change.

The side effects of mining for coal is another thing to consider when we use coal for energy. To access coal deposits, or all of the stored carbon in fossilized plant matter, we need to mine the surface of the earth. This has many negative implications on both the ecosystem and human health. Mining can also impact wildlife and their habitat. Remember, the places on earth's surface where we remove natural resources will never be the same and they can't be put back together again.

Climate Detective Challenge

Find the answer to this question on the Activity Map!

What is coal made of?

