



FOSSIL FUELS



Introducing...

Dr. H. Carbon

who will
reveal
some
fascinating
facts about
fossil fuels.



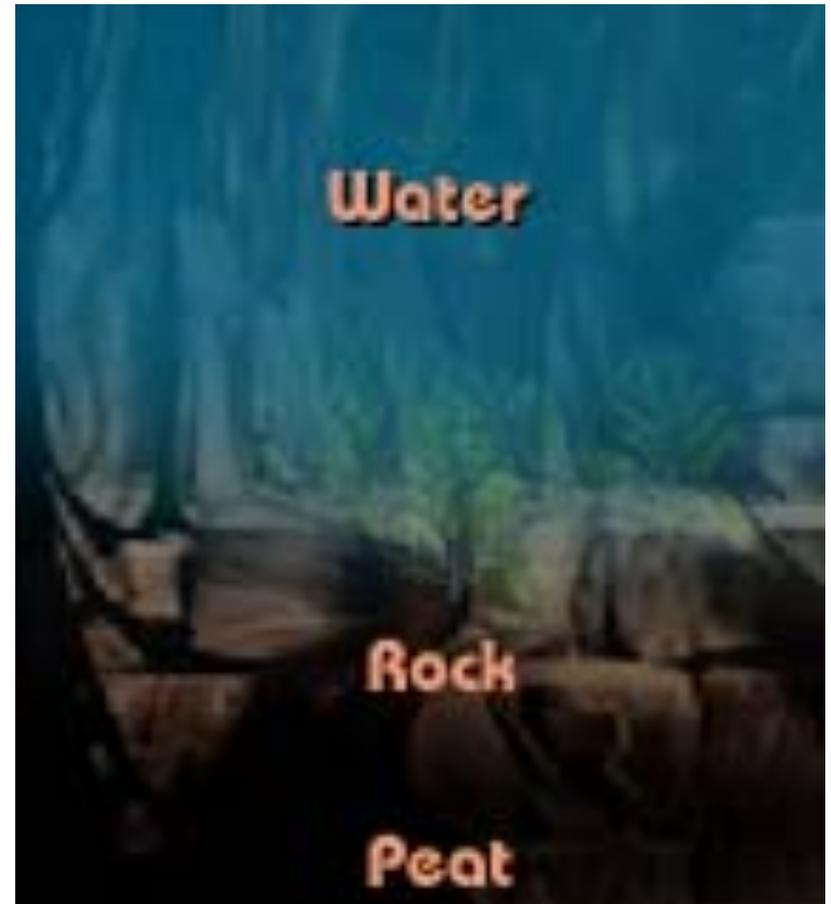
Contrary to what many people believe, fossil fuels are not the remains of dead dinosaurs. In fact, most of the fossil fuels we find today were formed millions of years before the first dinosaurs



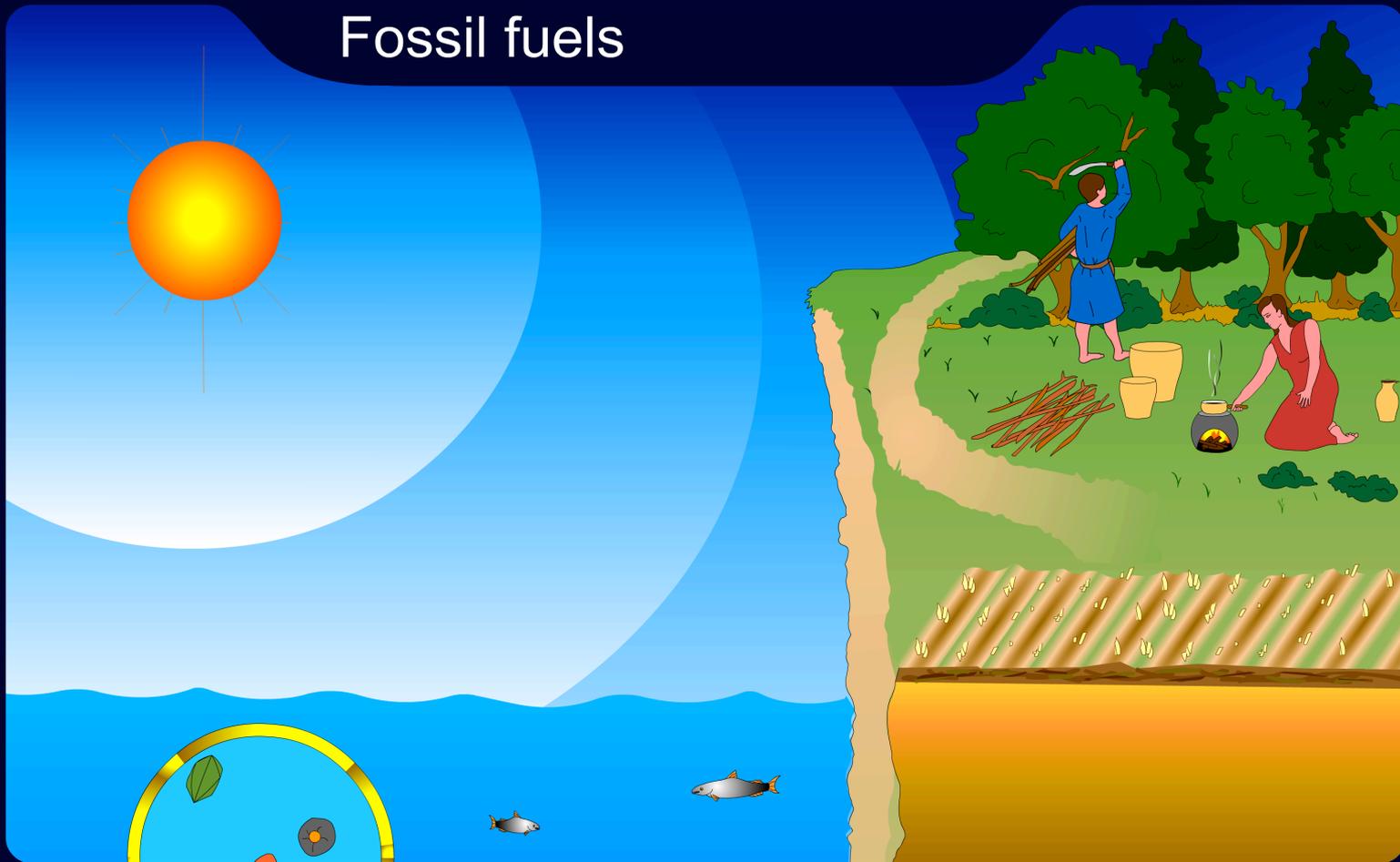
Fossil fuels, however, were once alive! They were formed from prehistoric plants and animals that lived hundreds of millions of years ago.



- Over time the plants and animals died and decomposed under tons of rock and ancient seas



Fossil fuels



How coal was formed

About 300 million years ago, plants photosynthesized and stored the Sun's energy.

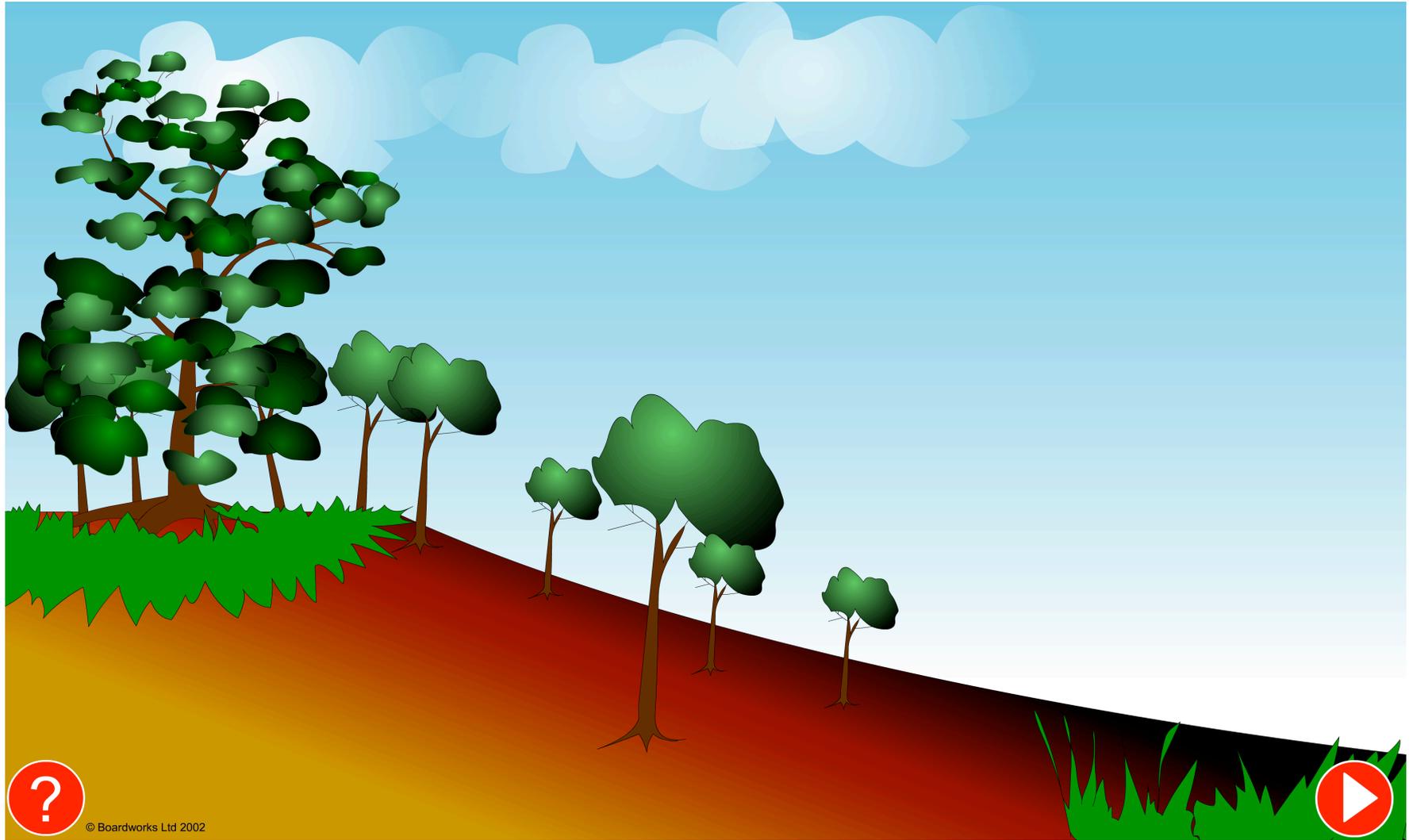


Dead plants fell into swampy water and the mud stopped them from rotting away.

Over the years, the mud piled up and squashed the plants.

After millions of years under this pressure, the mud became rock and the plants became coal.

Coal Formation

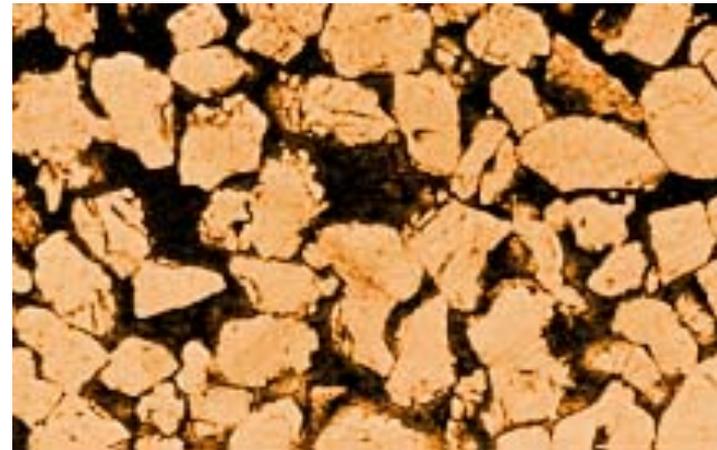


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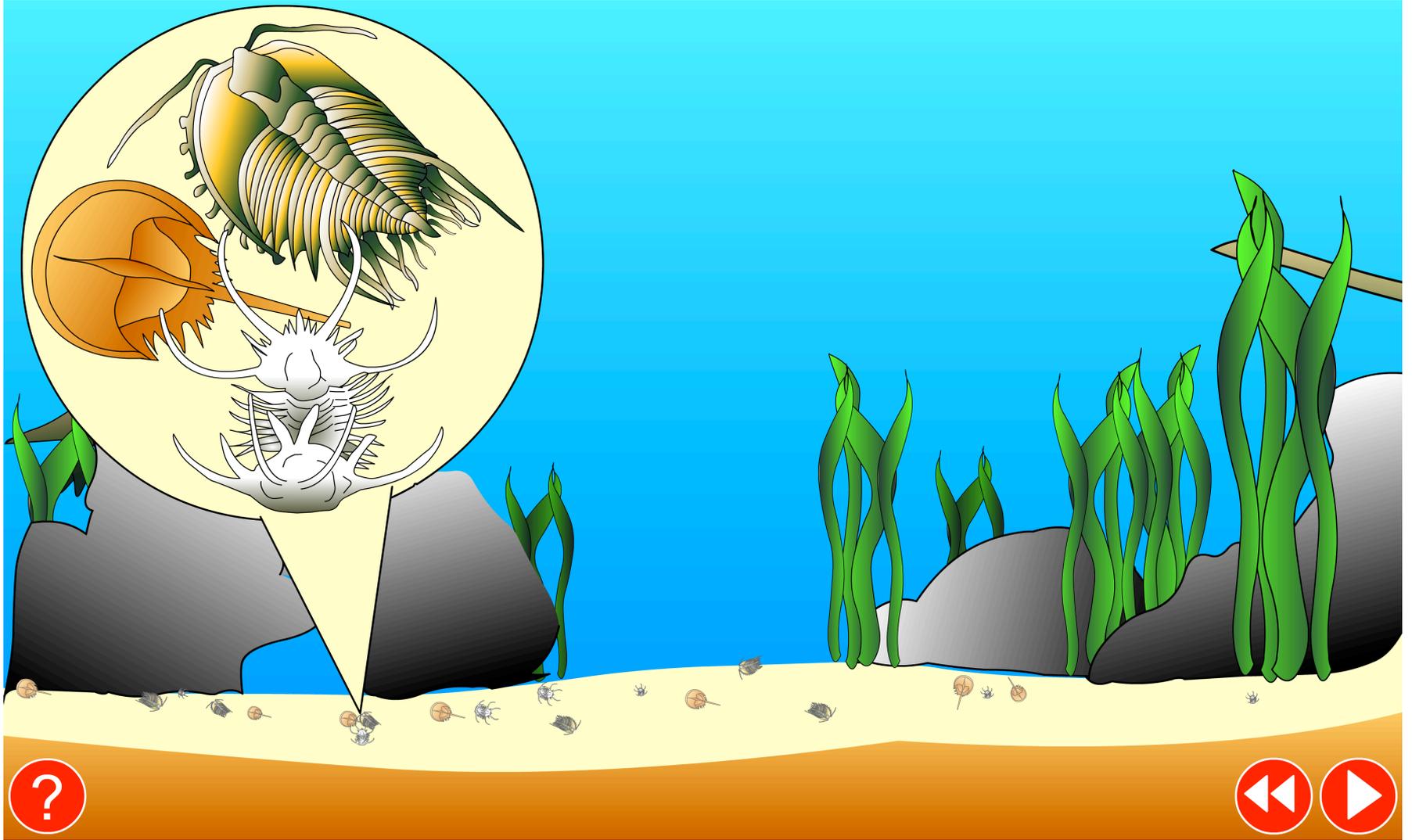


Oil

- Oil exists underground as tiny droplets trapped inside the open spaces, called "pores," inside rocks.
- The droplets cling to the rock, like drops of water cling to a window pane.



Oil formation



Natural gas is colorless, shapeless, and in its pure form, odorless.



For many years, it was discarded as worthless. Even today, some countries still get rid of it by burning it in giant flares, so large they can be seen from the Space Shuttle. Yet, it is one of the most valuable fuels we have.

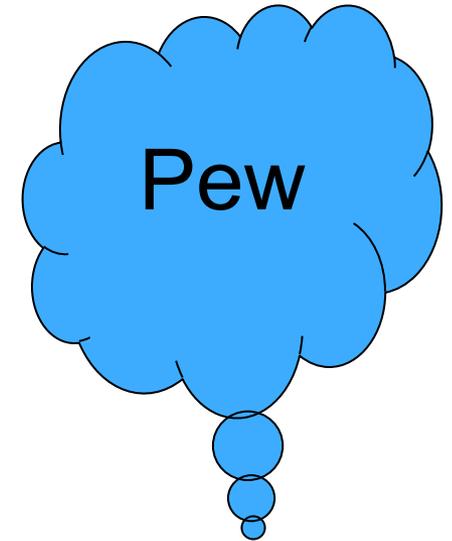


**NATURAL
GAS** fueling the blue flame

Natural gas is made up mainly of a chemical called methane. There is no ash and very little air pollution.



Incidentally, Methane is also a greenhouse gas. Methane is also common gas found in swamps and is also the byproduct of animals' digestive system.



It is especially important for cooking, heating, and for fueling other types of home appliances.

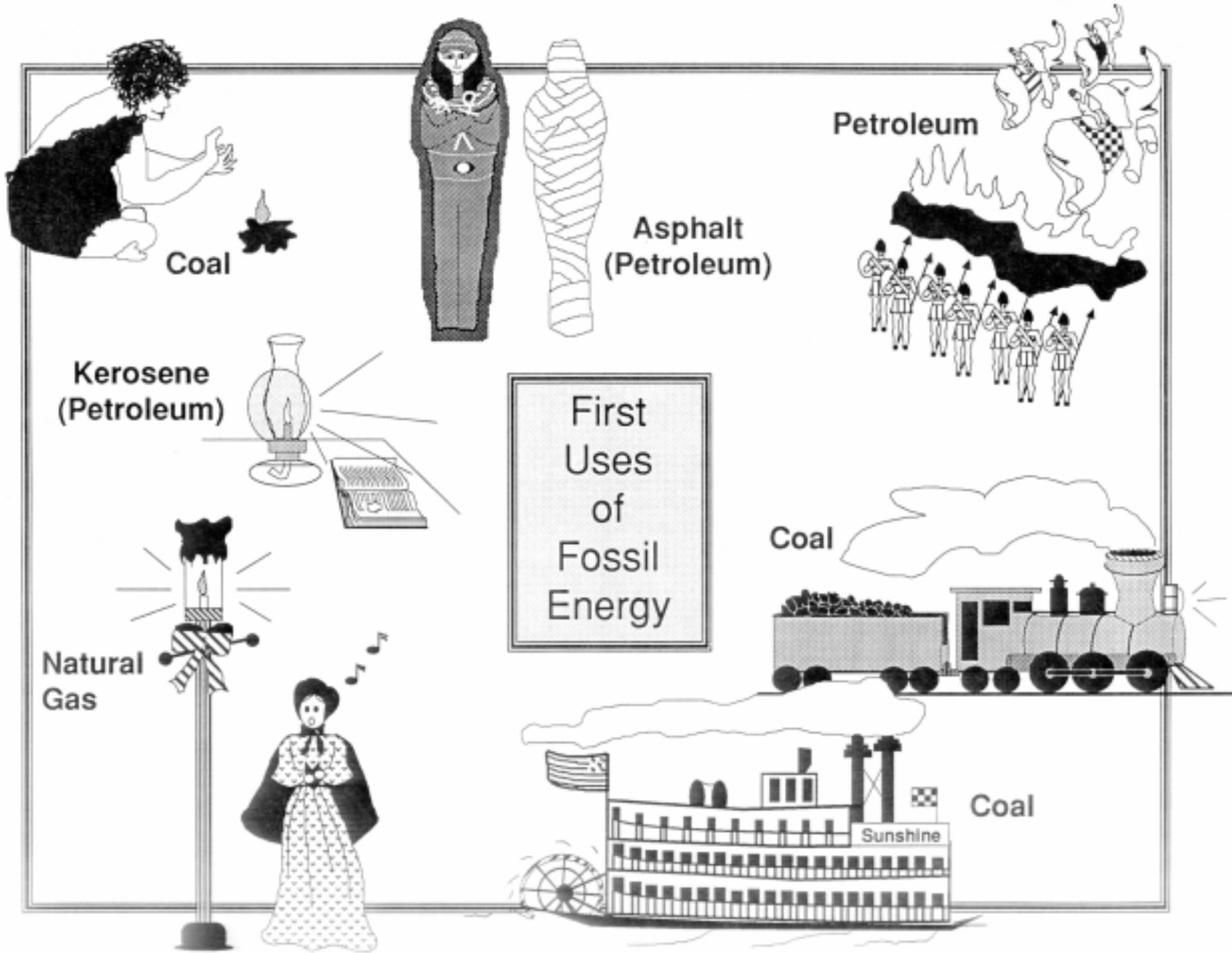


NON RENEWABLE

Fossil fuels, coal, oil and natural gas, are a non-renewable source of energy.

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Cave Man

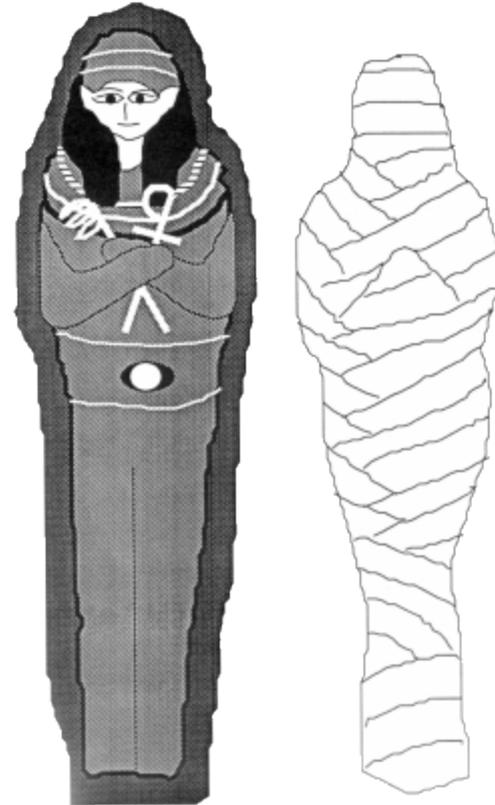
- The cave man used the coal for heating and, later, for cooking.
- Burning coal was easier because coal burned longer than wood and, therefore, did not have to be collected as often.

First
Uses
of
Fossil
Energy



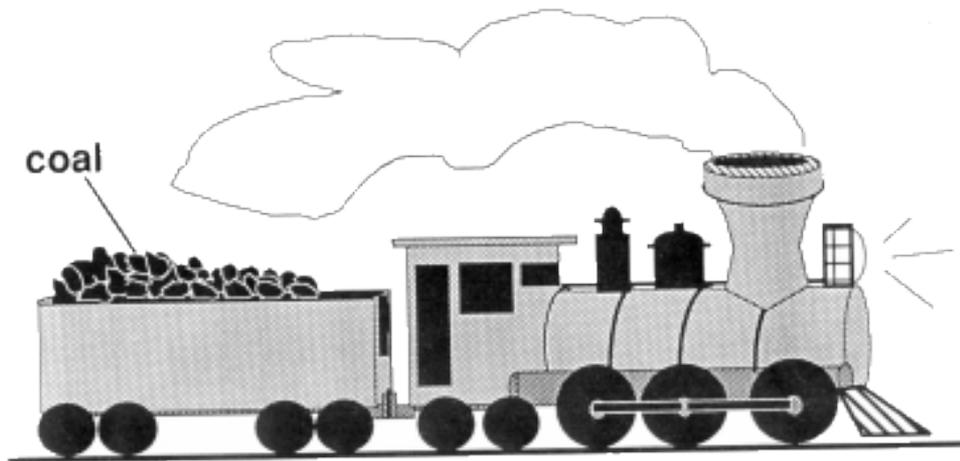
Mummies

- Archeologists have found that in the ancient times of the pharaohs
- Egyptians used asphalt, a form of petroleum, to preserve human remains.



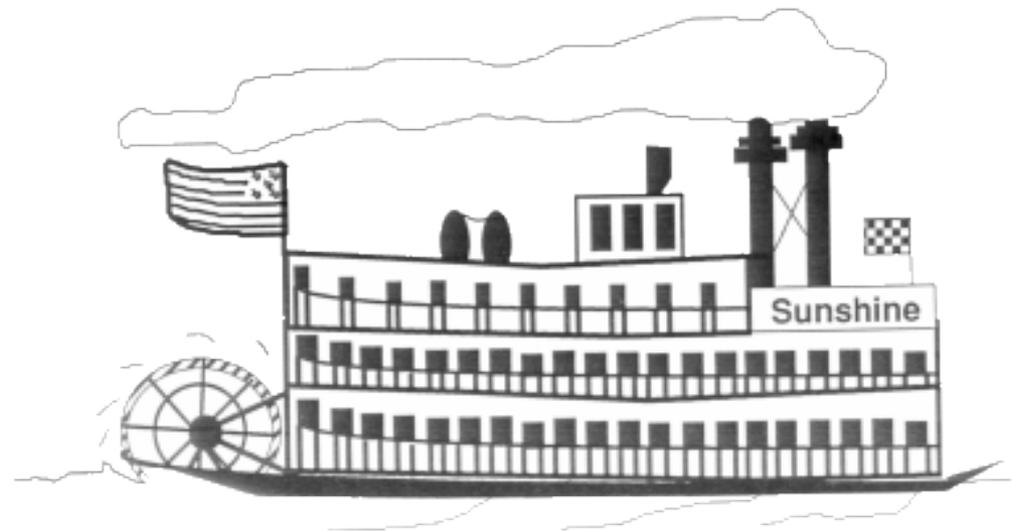
- Alexander the Great burned petroleum to scare away the war elephants of his enemies





Even after electricity began being used to power lights and small machines, coal continued to be the major fuel used to run trains and ships

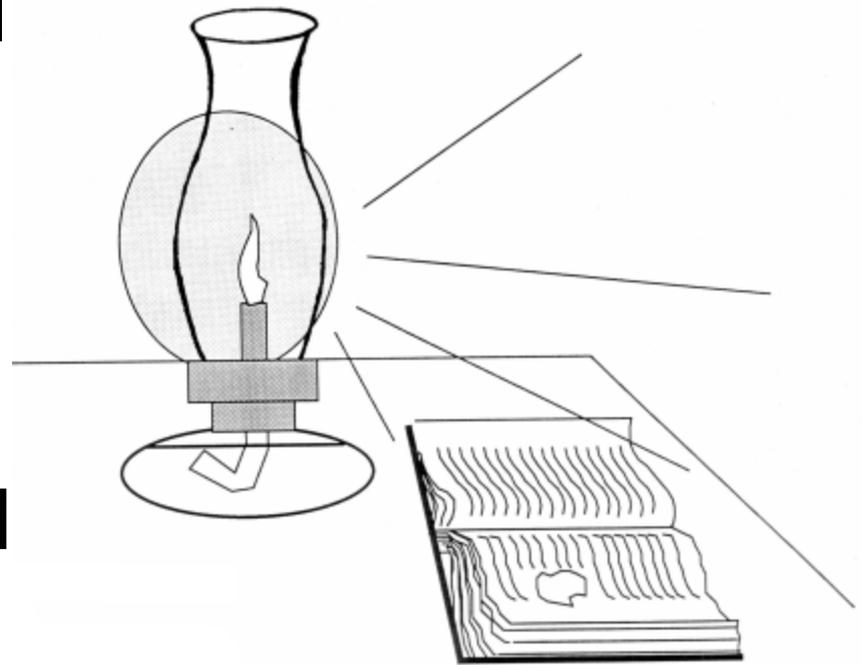
First
Uses
of
Fossil
Energy



- Natural gas was first used commercially for lighting in homes and businesses.

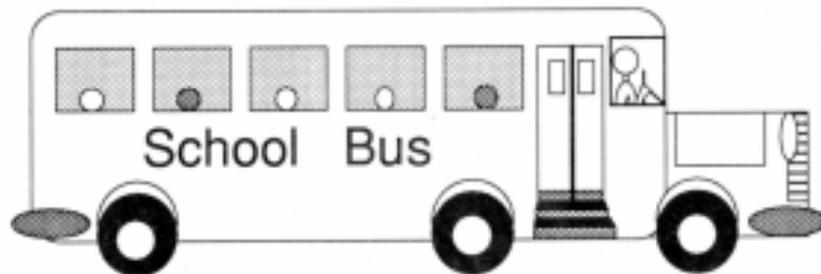


- The first commercial oil well provided crude oil from which kerosene was created and used to fuel lanterns needed for home lighting.



Today's Fossil Fuel Uses

Paint

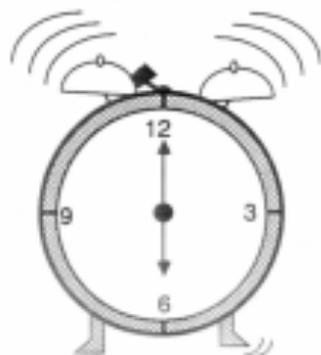


Fuel

Synthetic Rubber



Dyes



Each Item Shown Here Either
1) Was Made From A Fossil Fuel Product,
2) Was Manufactured With Machines
That Used Fossil Energy For Heat or Power,
Or 3) Used A Fossil Fuel As Energy To Move

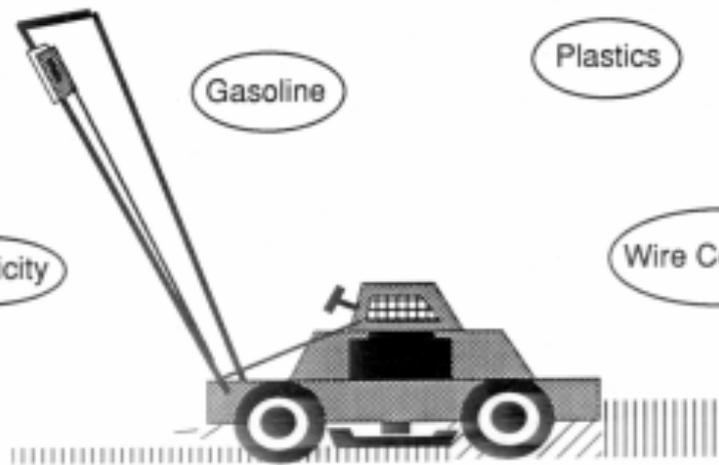
Vinyl Seats



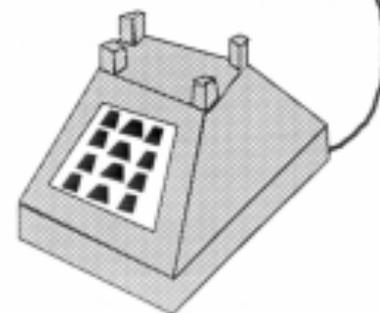
Gasoline

Plastics

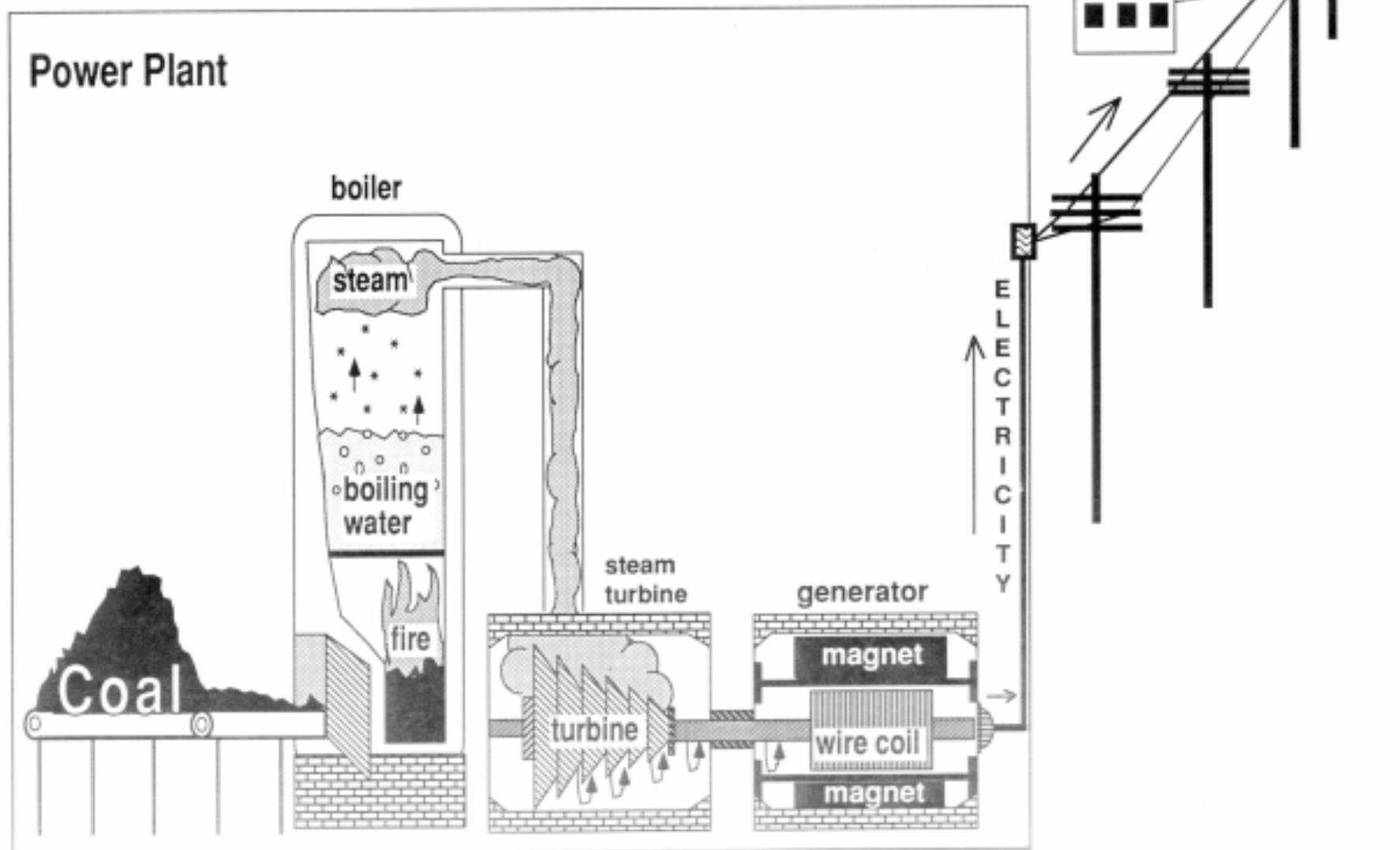
Electricity



Wire Coatings



BURNING COAL TO MAKE ELECTRICITY



THE END
