Rainbow Readers

Title: How It's Made: From Fossils to Fuel

Word Study

Fill in the blanks using the words.

additives	carbon	cement	fossil	geologists

1. Geologists tell us that the center of the earth is very hot.

2. The sidewalks in my neighborhood are made of cement.

3. They put additives in gas to try to make it burn cleaner.

4. Scientists can learn a lot about how old an animal is if they find a fossil.

5. Carbon is one of the most common elements in the universe.

Reading Comprehension

A. Circle T for true or F for false.

1. Fossil fuels are made from fossils found in the ground. T / F

2. Carbon is in all living things. T / F

3. Peat turns into coal over time because of heat and pressure. T / F

4. The first step in making crude oil useful is separating its parts. T / F

5. Dirt, sand, and gases sometimes have to be cleaned out of natural gas. T / F

B. Circle the correct word(s).

1. The world was warmer and (drier / wetter) 300 million years ago.

2. The harder coal is the (more / less) energy it has in it.

3. Oil and (natural gas / coal) are often found near each other.

4. Scientists can find oil and gas in the ground by using (vibrations / sound).

5. Humans might run out of fossil fuels within (our lifetime / the next 100 years).

C. Choose the best answer.

1. What would sometimes happen to animals 300 million years ago?

a. They would eat dead ocean animals.
b. They would die because it was so warm.
c. They would get stuck in mud.
d. They would not have water to drink.

2. What influences the kind of fossil fuel that is made from decaying plants and animals?

a. The kind of plants and animals
b. How long and hard the layers were pressed
c. What kind of mud and soil the animals died in
d. The kind of weather in the region

3. Why is oil found in shallower parts of the Earth?

a. Because oil needs to have some air mixed in it to form
b. Because there is too much pressure placed on oil deeper down in the Earth
c. Because oil needs less heat to form and the Earth gets warmer deeper down
d. Because the high presser found further down in the Earth turns oil into coal

4. Which is one way that coal is different from oil and gas?

a. Coal does not have to go to a refinery before it can be used.
b. Oil and gas can only be found in the oceans.
c. Companies don’t have to dig to find oil and gas.
d. Coal mining makes a lot more money than oil and gas mining.

5. An oil derrick is a type of _____.

a. drill
b. tower
c. platform
d. pump

Summary

Fill in the blanks with the words.

refinery	layers	explore	separated	decayed

There are three kinds of fossil fuels: oil, natural gas, and coal. Fossil fuels develop from the remains of living plants and animals. These living things got buried under many layers of soil. While they decayed, the carbon in them changed form. Over millions of years, pressure and heat turned them into fossil fuels. Today, companies explore the Earth to find them and dig them up. The companies are helped by geologists, who tell them where the fuels are likely to be. When natural gas and oil are brought out of the ground, they have to go to a(n) refinery. This is where they are cleaned, separated and changed into something we can use. Coal can just be cleaned and then used. We use these fuels to power cars, heat houses, and make electricity and plastics. However, burning fossil fuels heats the Earth. This is bad for the environment and for us. We are also running out of these fuels. We need to find new sources of energy.