

Name _____
Date _____
Section _____ SSW

World Geography-Asia

Oil

Directions: As you read, think of the following questions

1) What did you learn? 2) What confirmed, changed or challenged your thinking? 3) What surprised you?

Make notes about your thoughts on those questions in the margins. Then answer questions and do the assignment

Oil fuels your world. That means challenges for your future.

inner voice

Oil is part of nearly all of our lives. Whether you live in the United States, Kenya, or Brazil, you use oil. You even use oil in ways you would never guess.

Take skateboarding, for example. Picture yourself on a skateboard. You kick your board onto a curb to do a railslide. You think about keeping your balance as you glide along the curb. You should think about oil too.

You may wonder what oil has to do with your ride. To find out, tap your helmet. The helmet is plastic. So are your kneepads. Now flip your board over and look at the wheels. What are they made of? You guessed it—plastic. Many plastics are made from oil.

You may not have thought oil was part of skateboarding. You may not know that it is part of nearly everything you do. Do you eat? There may have been oil in the fertilizers that helped grow your food. Do you use roads? A sticky kind of oil is used to pave streets. Do you take medicine? Even some pills have oil in them!

Yes, we have an amazing thirst for this **natural resource**. A natural resource is something useful found in nature. Worldwide, people use more than 80 million barrels of oil a day. Each barrel is equal to 42 large milk jugs. That's 3,360,000,000 jugs a day. Let's look at how oil became so important.

EARLY DAYS OF OIL

The oil we use today has been around for a long time. It actually comes from plants and animals that lived millions of years ago. When they died, their remains fell to the seafloor. Layers of dead things piled up.

Sand and dirt covered the layers of plant and animal remains. Ever so slowly, the sand and dirt turned to rock. The rock pressed down on the bodies. It squeezed them together. That turned the remains into oil. Most oil stayed underground. Some of the oil seeped up to the surface. Puddles of oil formed.

People began using oil they found in the puddles thousands of years ago. They burned the oil in lamps. They spread tar on their roofs to keep water out. Tar is a sticky kind of oil.

Those were about the only ways ancient people used oil. Things changed in the 1800s. That's when people really started using oil. Inventors found that they could separate oil into different chemicals by heating it to 400° Celsius (750° Fahrenheit). This process is called **refining**.

People then used the chemicals to make a whole range of new products.

One of the products was a fuel called kerosene. People used it in lamps. The lamps helped people light their homes in the days before electricity. Another product of refining is **gasoline**. It makes a great fuel for cars, which were invented in the late 1800s. Making gasoline is one of the main ways we use oil today.

THIRSTY FOR OIL

Soon nearly everyone was buying a car. In 1900, about eight thousand cars bumped along roads in the United States. Just 20 years later, eight million cars zoomed down our roads.

Some people choose to buy cars before putting bathrooms in their houses. "You can't go to town in a bathtub," one woman explained. Other inventors figured out how to make plastic from refined oil. Soon everything from forks to phones was being made from plastic.

To find all the oil we need, people drill deep into Earth. You can find oil wells all over the world. You can even find them rising from the ocean.

FACING THE FUTURE

Today, we use oil as if we had an endless supply of it. We don't. Oil takes millions of years to form, and Earth only has so much of it. We've already used up a lot of Earth's known oil.

That means we have to find oil in new places. Scientists are looking for other sources of oil. They've found oil trapped in sand. They've also found rocks that hold oil the way sponges hold water. Unfortunately, getting oil from sand or rock is very expensive.

Finding enough oil isn't the only problem, though. Drilling for it can damage the **environment**. Ships carrying oil sometimes spill oil, harming wildlife.

Worse yet, burning oil puts harmful gases into the air. Too many of these gases cause the air to trap more heat than it should. That causes **global warming**. It is a worldwide rise in Earth's average temperature.

SEEKING SOLUTIONS

So what do we do? For starters, we can practice **energy conservation**. That means using less energy. Doing so will help Earth's oil supplies last longer. People burn oil to make electricity. So one way to save oil is to use less power. Turn off TVs and computers when not in use. Switch to low-energy lightbulbs. People also burn oil to make heat. You can save oil by putting on a cozy sweater and turning the heat down a bit.

Scientists are also looking for new sources of energy. They are looking for ways to turn corn and other plants into fuels for cars. They want to use wind and sunlight to make electricity. Some scientists even want to use ocean waves to make power.

As you can see, fueling our future will be a challenge. Will we face a bumpy road or a smooth ride? That depends on the choices we make today.

Article by Catherine Fox. "Oil" appears on page 16 of the Jan.-Feb. 2008 issue.

Answer the following questions. Use full sentences.

1. What are three ways we use oil?

3. What is gasoline?

2. Where does oil come from?

3. What is a natural resource?

3. What are three disadvantages of using too much oil?

4. What are some alternatives to using so much oil?

Assignment: The U.S. consumes more oil than any other country. Make a poster or write a paragraph showing a)why this is a problem and b)some ways to reduce the use of oil. Be sure to use information from the article.