

SECTIONS: 4A,B,C,D,E

| DATE | HOMEWORK | PARENT SIGNATURE |
|-------------|---|-------------------------|
| Monday | → Read and complete "Natural Resources" passage and questions | |
| Tuesday | → Read and complete "Energy for Life" passage and questions. | |
| Wednesday | → Everglades Field Trip-No Homework | |
| Thursday | → Everglades Field Trip-No Homework | |
| Friday | → Have a fantastic Spring Break!!! | |

Reminders

- **Parents:** Don't forget to initial your child's HW Cover Sheet every night.
- **HW due Monday, March 16th**
- **Everglades Field Trip March 4th and 5th**

Science VOCABULARY

A **renewable resource** is replenished by natural processes.

A **nonrenewable resource** is used faster than the environment's capacity to replace them.

Natural Resources

Cross-Curricular Focus: History/Social Sciences



People often have decided where they wanted to live based on the **natural resources** that were available in the area. Natural resources are things that are useful to people and come from the earth. Materials for building shelter are natural resources. So are food sources such as fruits and vegetables, animals that could be caught or hunted and water.

A region's climate and landforms let certain things grow in different areas. They also determine which organisms will be able to survive there. Regions with very rich soil make good farming communities. Poor soil may send farmers looking for better conditions. However, areas with poor soil may attract those who have other purposes for the land. Poor soil doesn't matter if you want to build a factory or if the land has grass for ranching.

Each area attracts people based on their interests and purposes. Areas that support many different interests will naturally have larger populations. While you may not think of the mountains, lakes, or oceans as natural resources, they are. Villages and cities built near water sources have been the most successful. People who want to catch fish for a living can do that by the ocean, but cannot in the desert. People living near water can use it to meet their daily needs. Water can also be used to transport goods to other areas to be sold.

Places that are difficult to reach will naturally have fewer people living in them. Places that are high on mountain tops are not very desirable to some people. Neither are places that are in the middle of hot, dry deserts.

For too long, humans have destroyed resources. We have been using up those that cannot be easily replaced. Renewable resources are those that can be replaced easily. We are fortunate to have many resources that are renewable, such as sun, wind, water and trees. We need to focus more on using renewable resources. This will protect our planet from further harm.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) Think about the natural resources near you. What are the things that made your family decide to live where you do?

2) What is a renewable resource?

3) Give some examples of shelter.

4) When you become an adult, will you choose to live the same place as your parents did? Why or why not?

5) What natural resources are available on the coast that might not be available somewhere else?

Energy for Life

by ReadWorks



ENERGY IS THE KEY

We use a lot of energy to live. Whether we're playing, studying or eating, energy makes these activities possible. We also use energy for production-to run machines, for instance. Much of this energy comes from fuels like oil, coal or natural gas. These fuels are used to make the blacktop and basketballs at recess, as well as generate the electricity for the lights all around you. Think of all the energy required to plant, grow, harvest, transport and cook your lunch, and you can start to understand that energy is a key to life!

NATURAL, BUT NOT FOREVER

Fuels like natural gas, oil and coal are important natural resources. They are known as fossil

fuels and take millions of years to form. We've used them for hundreds of years, and they've powered everything from planes and trains to cars and computers. Unfortunately, fossil fuels are non-renewable forms of energy. Our power plants burn them faster than nature makes them, and when they are burned, power plants create emissions harmful to the environment.

To use fossil fuels, we first need to get them out of the earth with technologies like oil rigs, coal mines and natural gas wells. The drilling, mining and pumping of these natural resources often requires very large operations. These procedures result in producing the important energy we need, but they need fossil fuels themselves to operate and can often negatively impact the land where these fuels are found.

POWERING THE FUTURE

Fortunately, there are forms of renewable energy out there. They also come from nature and don't harm the environment as much as fossil fuels. Furthermore, they aren't consumed to produce energy, so we can use them again and again. One form of renewable energy is solar energy. Solar energy uses solar panels, which collect sunlight and convert it directly into electricity.

Another form of renewable energy is wind energy. Like an extremely large pinwheel, wind turbines have blades that rotate when the wind blows, and this movement generates electricity. Some solar and wind energy power plants are connected to batteries so they can supply electricity even when the sun isn't shining or the wind isn't blowing.

One form of renewable energy that has been around for a very long time is hydropower. Hydropower is energy produced by falling and running water. Hydropower technologies can be as simple as a watermill on a stream or as complex as a hydroelectricity dam.

Hydropower is a great source of renewable energy: in Washington state (in the USA), for instance, it produces approximately 75% of the entire state's energy!

THE RIGHT PLAN

Using renewable energy is a good way to reduce our dependence on fossil fuels, though renewable energies have some negative impacts on the earth as well. Solar power plants are usually built in deserts where sunshine is reliable and strong, but the desert land that is disrupted for the construction and operation of these power plants is actually rich with plant and animal life.

Wind energy power plants are called wind farms and require a lot of land. Though each turbine only takes up a small area of land, wind farms can easily have hundreds or thousands of turbines. With that many turbines together, their presence can easily affect birds, bats and

other wildlife in the area.

Hydropower plants can generate a lot of energy and electricity, but their existence can dramatically alter the environment around them. Many hydropower plants use dams to create the electricity. Fish can be easily blocked by a dam and prevented from swimming to important spawning grounds. Dams can also fail and cause massive flooding. Also, in the event of a drought, the electricity produced could truly be limited to a trickle!

However, by carefully planning the locations of renewable energy power plants, their harmful impact to the planet can be minimized and their renewable and sustainable benefits maximized.

LOOKING FORWARD

Almost everything we do requires some sort of energy. It's important to understand where our energy comes from, how it is produced and what effect each type has on our environment. As technology improves, we can balance the use of non-renewable fossil fuels with renewable energy for a healthier planet.

Name: _____ Date: _____

1. What do people use energy for?

- A. People use energy to cause massive floods.
- B. People use energy to create more oil and coal.
- C. People use energy to play, study, and live.
- D. People use energy to minimize sustainable benefits from the sun.

2. What does the passage compare and contrast with fossil fuels?

- A. The passage compares and contrasts playing, studying, and eating with fossil fuels.
- B. The passage compares and contrasts coal mines and natural gas wells with fossil fuels.
- C. The passage compares and contrasts Washington State with fossil fuels.
- D. The passage compares and contrasts forms of renewable energy with fossil fuels.

3. Humans use energy from several different sources.

What evidence from the passage supports this statement?

- A. People use energy to play, study, eat, make basketballs, and generate electricity.
- B. People use energy from natural gas, oil, coal, the sun, wind, and water.
- C. Wind turbines can affect birds, bats, and other wildlife around them.
- D. When a dam that produces hydropower fails, it can cause massive flooding.

4. What is true of all types of energy discussed in the passage?

- A. They are all non-renewable.
- B. They are all renewable.
- C. They all have some negative impacts on the earth.
- D. None of them has any negative impacts on the earth.

5. What is this passage mainly about?

- A. the importance of energy and where energy comes from
- B. watermills, dams, and other forms of hydropower
- C. planting, growing, harvesting, transporting, and cooking food
- D. the different ways children play and study

6. Read the following sentences: "Fortunately, there are forms of **renewable** energy out there. They also come from nature and don't harm the environment as much as fossil fuels. Furthermore, they aren't consumed to produce energy, so we can use them again and again."

What does the word **renewable** mean?

- A. harmful to the environment
- B. able to be used more than once
- C. produced by falling and running water
- D. made in the United States of America

7. Choose the answer that best completes the sentence below.

Wind is a form of renewable energy; _____, oil is not renewable.

- A. for example
- B. particularly
- C. soon
- D. on the other hand

8. Where does hydropower come from?

9. What effects does hydropower have on the environment?

10. The passage states that it is "important to understand where our energy comes from, how it is produced and what effect each type has on our environment." Explain why understanding these things is important, using evidence from the passage.
