

Activity 1: Observing Earth’s Resources

Guiding Question: What are natural resources?

Key Words: *natural resources, renewable, nonrenewable*

Get Started:

1. Read the vignette found at the start of the unit. Examine the photo on the front cover of the Student Book. What are some questions you have about the phenomenon presented in the vignette? A *phenomenon* is an observable fact or event.

2. Separate the following list of words into two categories:
rocks, cars, trees, soil, air, airplanes, water, plastic

3. Explain why you chose these categories.

4. Read the introduction and Guiding Question to Activity 1, “Observing Earth’s Resources,” in your Student Book.

5. What are some natural resources that you use every day?

Do the Activity:

1. Read Procedure Steps 1-8 in your Student Book.

2. Watch the LABsent video (found here: <https://labaid.s3.us-east-2.amazonaws.com/labsent-videos/3e+Earths+Resources+Act+1.mp4>) to see the experiment being done. Each time the video says to record, you may want to pause the video to give you ample time to complete your observations. You will record your observations on Student Sheet 1.1, “Resource Observations,” which is attached to this Earth’s Resources 1

Name _____
packet.

Date _____

Analysis: You may have to wait to answer some of the Analysis items when you return to class.

1. Think about the natural resources you examined.

- a. What was the most valuable natural resource, according to the class?
- b. What was the least valuable natural resource, according to the class?
- c. What reasons did other students have for identifying a natural resource as more or less valuable?

2. What else would you like to know about these natural resources to help determine their value?
What other questions do you have about these natural resources?

3. Which resource(s) did you identify as renewable? Explain your thinking.

4. Look at the list of words shown below:

- oil
- natural resource
- salt
- air
- plastic

- a. Look for a relationship among the words. Cross out the word or phrase that does not belong.
- b. Circle the word or phrase that includes the others.
- c. Explain how the word or phrase you circled is related to the other words on the list.

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5. **Reflection:** What do you think makes a natural resource valuable?

Build Understanding:

1. The crosscutting concept focus of this activity is *connections to engineering, technology, and applications of science*. In particular, the focus is on how scientific knowledge can describe the consequences of actions. But scientific knowledge does not direct the decisions that society takes. Science can be used to describe natural resources. Science does not determine whether these resources should be extracted, in what quantities, and by what methods.

In the next few activities, you will learn that the use of natural resources has consequences for the environment. At the same time, natural resources are essential to meeting basic and modern quality of-life standards

Name _____

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STUDENT SHEET 1.1

RESOURCE OBSERVATIONS

Natural resource	Observation	Ranking	Reason for ranking	Renewable or nonrenewable?