



People Use Natural Resources

Lesson 2; Pre- Field Trip

Resource: Closing the Loop, *K-3 Module, Unit 1, Lesson 2*

Objectives

In order for students to better understand where things come from, it is important for them to be able to trace objects to the category of natural resources from which they were *manufactured*. In this lesson students will identify some of the natural resources that people need in order to live. By gaining a basic understanding of the uses of natural resources, students will better understand the importance of the 4Rs concept.

Time

30 minutes for lesson preparation; 50 minutes to implement the lesson.

Preparation

1. Make a sample “Earth Pocket”
 - a. Cut out the “Outline for an Earth Pocket” (included) and paste to the bottom of each of two paper plates.
 - b. Staple the paper plates together, leaving a 4-inch opening at the top (to make a pocket).
 - c. Staple the end of a piece of string/yarn (approximately 24”) to an illustration of an object (such as a pencil) on a card made from re-used material (e.g. cardboard from a cereal box; the inside of a paper juice/milk container; etc.). Make sure the card is labeled, ‘pencil’ and is longer than the 4” opening of the pocket.
 - d. Make 2-3 additional cards (3”x2.5”) and label/illustrate them with the most immediate material from which the item in (iii) were made (i.e. pencil→ wood→ plants). The list should lead to the natural resource from which the first object was made.
 - e. Staple the smaller cards to the lower half of the string/yarn. Make sure to put them in order and leave a 3” space between each card. The last card should be approx. 4” from the bottom end of the string/yarn.
 - f. Attach the end of the string/yarn to one of the paper plates, and fold the smaller cards into the pocket.
2. Make 2 copies of the “Outline for an Earth Pocket” for each student/group.
3. Make cards (using reusable source) for use in the “Earth Pocket” for each student/group. The cards need not be illustrated (see Part 1D).

*If time permits, it is a good exercise to have students cut and illustrate their own cards.

Pre-Activity

Ask students: 'What things (products) do people make out of natural resources?'

- List the name of some products (and the natural resource from which they were made) on a piece of butcher paper and post the list in the classroom. Ask students to add to the list during the lesson.

Example:

Natural Resource	Products
Plants	cardboard telephone pole shirts/pants
Minerals	water pipes glass vitamins
Animals	shoes honey violin bow/guitar strings

Procedure

Part I (This activity can be completed individually, or in groups of 2-3).

- A. Show students the previously made "Earth Pocket". Make sure that only the top-most card is sticking out of the pocket.
 - Ask the students what the object is made from (i.e. pencil → wood).
 - Lead them to list each item written on the cards inside the pocket. As they say each item, pull the corresponding card out of the pocket.
- B. Brainstorming with students, make a list of the things that they use every day. Write these on the list previously started.
- C. Ask students/groups to select an item from the list of things used everyday. They should then list the steps (or sources) from the natural resource to the item. This item will be used for students to make their own "Earth Pocket".
- D. Distribute materials for students/groups to make "Earth Pockets".
 - Have students illustrate cards for the object they choose and the subsequent sources from which it was made. *Teachers may wish to have item cards made prior to beginning the activity.*

Part II (Optional)

- A. Discuss with students which of the Earth's natural resources are needed by humans in order to live, and how each of these natural resources will be used (e.g. air→ breathe; water→ *hydration*; plants/animals→ food and clothing; etc...)
- B. Help students/groups make a mobile that shows the different natural resources that people need.
 - Provide students with cardboard, string/yarn, and cards (made from re-used material).
 - Label the cardboard, 'Natural Resources That People Need' and label/illustrate each card with a category of natural resources.
 - Punch holes along the bottom of the cardboard and hang the cards from the cardboard using the string/yarn. (Make sure the cards hang at different lengths.)

*Part II can be done as a class exercise, using the chalkboard.

Discussion / Questions

1. Why are natural resources important? *They provide us with the things we need in order to live.*
2. How do people use natural resources? *For making things; producing energy; providing food.*
3. Can there be shortages of natural resources? *Yes, if we use too much of them.*

Application

- A. Ask students to describe on their writing sheets two natural resources that they need, and how they use them. *You may ask students to share their journal entries.*
- B. Show students the 'Earth Pocket' you made in the Preparation section of the lesson.
 - If you used 'Pencil' as the object, then ask students what natural resources plants need in order to live (e.g. soil, air, water, and sunlight).
 - Cut the 'Plants' card from the pocket and attach to it smaller cards labeled with the natural resources identified by students as being needed by plants. (*This need not be done in any particular order.*)
 - Ask students to explain, based on what they just observed, additional ways in which people depend on natural resources.
- C. Develop a 'natural resource' guessing game with clues that will lead students to identify an object in the classroom (e.g. 'I spy an object that is made from plants...What is my object?').

Outline for an Earth Pocket

