Renewable & Nonrenewable Resources Lesson Plan

Keywords: natural resources, renewable, nonrenewable

Grade Level: 3rd/4th

Setting: classroom, playground, or home

Subjects Covered: Science, Reading (possible supplemental activity)

Goals:
Students will be capable of describing a natural resource.
Students will name renewable resources.
Students will name nonrenewable resources.
Student will recognize renewable and nonrenewable resources in a given environment.

Materials:
Renewable and Nonrenewable Resources flier (from Environment & Ecology Series) – 1 per student or pair of students
Whiteboard or chalkboard
Dry erase markers or chalk
Pencils – 1 per student
Appendix 1 – 1 per student or pair of students

State Standards Addressed: E & E Standards: 4.2.4.B, 4.2.4.C

Educator Preparation:
Read through entire lesson and the *Renewable and Nonrenewable Resources* flier to ensure understanding of the material and activities. Have all materials before beginning lesson. In case of inclement weather, choose a favorite picture book read aloud, or have multiple copies of picture books for student use. (Books will be used to browse and identify renewable and nonrenewable resources within the pictures.)

Lesson Steps:

1. Introduce the lesson. ***"Today we will learn about two types of natural resources, renewable, and nonrenewable resources. Can anyone identify or define natural resources? What does it mean to renew something?, etc."*** Accept responses to develop an initial interest or connection.

2. Distribute *Renewable and Nonrenewable Resources* fliers to each student or pair of students. Direct students to look at picture on the cover. As a class, brainstorm any connections between the cover picture and subject of natural resources.

   possible discussion may include:
   **two children recycling aluminum cans (man made)*
   **plastic garbage can (man made)*
   **tree/grass (natural resource)*
   **clothing (man made)*
   **stone sidewalk (natural resource)*
   **concrete holding stone in place (man made)*

3. Tell students that after reading this flier, they will have a better understanding of natural resources, both renewable and nonrenewable. Place the following T-chart on the board to highlight learning throughout the interactive reading of the flier.

Natural Resources	
Renewable	**Nonrenewable**

4. Direct students to open the flier and focus on first column, where they will first learn about renewable resources. Ask for volunteers to read aloud. Ask, ***"What is a natural resource?"*** *materials or things people use from the earth* ***"What is a renewable resource?"*** *a resource that will never run out, a resource that can regrow or be replaced within a person's lifespan* ***"What are some examples of renewable resources?"*** Add the following to the T-chart**.**

Natural Resources	
Renewable	**Nonrenewable**
trees animals air water sun energy wind energy corn	

5. Continue to have student volunteers read aloud the second column in the flier to develop an understanding of nonrenewable resources. Ask, ***"What is a nonrenewable resource?"*** *non-living things, they don't regrow, and there are fixed amounts* ***"What are some examples of nonrenewable resources?"*** Add the following to the T-chart.

Natural Resources	
Renewable	**Nonrenewable**
trees animals air water sun energy wind energy corn	fossil fuels (coal, oil, natural gas) rocks & minerals

6. Continue reading and discussing the green column of text text in the middle of the flier about trees. Using the T-chart for discussion, ask, ***"What are some products made from renewable and nonrenewable resources?"*** Use pictures in the flier for discussion. Allow students to make personal connections to these items.

Renewable	*Nonrenewable*
**clothing – from cotton*	**clothing – from polyester/nylon from oil*
**food – meat, dairy, grains, fruit, etc.*	**brick, cement – from minerals*
**furniture, paper, rayon cloth, rubber, bark mulch, sawdust for fuel, animal bedding, particle board, medicine, – all from trees*	**plastic – from oil* **glass – from minerals* **metal – from minerals*

7. Conclude reading aloud the flier and discuss how reducing, reusing, and recycling will help preserve our natural resources, regardless of whether they are renewable or nonrenewable.

8. To enable students to make further connections to their environment, distribute copies of Appendix 1, and allow students to explore their home, classroom, or playground independently or with a partner and record any renewable or nonrenewable resources they discover. Picture books may be used as an alternative source for discovering and recording renewable and nonrenewable resources.

Resource: *Renewable and Nonrenewable Resources* (a flier in the *Environment & Ecology Series*)
This flier is available free-of-charge; however there is a $5 shipping and handling charge for all bulk orders (> 2 in quantity). Thus, a teacher can order 25 for his/her class and only pay $5, or 50 for two classes, and still pay only $5. Other fliers in the *Environment & Ecology Series* can be ordered at the same time and they will also be included under the $5 shipping and handling charge.

Available Through:

The Publication Distribution Center
College of Ag Sciences
The Pennsylvania State University
112 Agricultural Administration Building
University Park, PA 16802

Orders can also be made by calling (toll-free) The Publication Distribution Center at: 1-877-345-0691 (must use a credit card for shipping charge)

Internet Sites: http://sftrc.cas.psu.edu
http://pbskids.org/eekoworld
www.dnr.state.wi.us/org/caer/ce/eek

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Appendix 1

Discovering Natural Resources

Directions: Explore your classroom, your home, or the playground. Try to discover and record as many renewable and nonrenewable resources as you can.

Renewable	Nonrenewable