









# LESSON: TREE SOURCE SCAVENGER HUNT

**Grade Level:** 4th through 5<sup>th</sup>

**4-ESS3.A.** Energy and Fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways

**5-ESS3-1**. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

#### INTRODUCTION

The Redlands Plant-A-Thon is celebrating the 50<sup>th</sup> anniversary of Earth Day through tree planting and supplemental classroom content. This activity is being provided to increase student awareness of the area around us, teach a sense of responsibility for the environment and encourages development of this knowledge in a free-form, group exercise. The suite of concepts and vocabulary covered will depend on the length of activity facilitated by the participating teacher, but at any length should increase student preparation for program participation. It would also be suitable for post-program facilitation, to reinforce concepts and vocabulary covered during the program for maximum content retention.

### **OBJECTIVE**

The student will compare finished products with the raw materials from which they were made.

- The student will determine how consumption will impact the availability of the natural resources found in the forest.
- The student will create an advertisement for one product, identifying trees as a necessity in making that product.

#### SUMMARY

Many household items are made from wood or wood materials. Students can take an active role in helping to conserve our forests and make wise choices when purchasing everyday products.

#### MATERIALS

- Item list taken from "Tree Source" insert (bottom of page)
- items from the list brought in by students
- large sheet of paper

• poster art supplies (markers, crayons, scissors, glue, and so on)

#### BACKGROUND

It takes 17 trees to make 1 ton of paper. Over 5,000 everyday products are made from trees, including paper which requires 17 trees to produce one ton. Of the products made from trees, those that are made from non-recycled sources are particularly high-impact and in many cases unnecessarily so, given the range of products created from recycled materials and/or not essential for maintenance of quality of life.

One of the highest-impact actions possible for reducing personal environmental impact is reduction in use of resources, including trees. Awareness of the impact on trees and forests of production of everyday products is essential for long-term behavioral change focused on lessening personal ecological footprint.

#### SKILLS

- Critical thinking
- Collaboration

## DIRECTIONS

- 1. For homework assign students a scavenger hunt at home.
- 2. They are to find as many items on the list as possible and check off each item found. Bring one item from each tree source on the list to school. (they may bring in pictures of larger items) As you find each one, look at it to see if you can figure out what all of these items have in common.
- 3. You may want to separate the class into groups of 4 to 6. Ask students to show the items they brought from home.
- 4. Have students cover/hide the "Tree Source" page and, as a group, try to identify which tree source their items were made of and list them. Allow time for student discussion.
- 5. Have students compare their finding with their Tree source list.
- 6. Go over some of the items with the students.
- 7. Discuss how some of these items have had other materials added to them to make the current product. Notice some of the items do not look or feel like wood but, trees were still necessary to create them. Also discuss the impact on the environment in creating these items.
- 8. Explain to students that we need to control our use of these materials so that the resources will be around for a long time. By being aware of our future purchase and recycling, we will help to conserve trees and reduce waste.

### EXTENSION

Have students create an advertisement poster and present the finished assignment to the class. Display those posters where students at the school will see them. They may include the *tree source* of the item as well as reasons why we need to conserve.

# "Tree Source" Products from Live Trees and Sap:

Almonds **Aspirin** Bar soap Chewing gum Chocolate w/ almonds Cinnamon Clean water (photo) Coconuts Electrical tape Eucalyptus oil Latex gloves Lemonade Maple syrup Paint Rubber Toothpaste Shampoo Vanilla

## **Products from Solid Wood**

Airplane propellers Baseball bat Basket
Bird house Bridges Charcoal
Chop sticks Flooring (hard wood) Furniture
Lumber Moldings Pencils

Plywood Popsicle sticks Roller coasters
Row boats Wood box Wood toys

## **Products from Bark and Cork**

BaseballBike HelmetsBottle corksDart boardsFishing netsGolf ballsLife jacketsLinoleumShoes

## **Products from Pulping of Wood**

Art paper Bed sheets Blankets **Books** Cardboard boxes Cellophane Cereal boxes Coffee filters Cosmetic puffs Disposable diapers Egg carton Crayons Greeting cards Grocery bags Envelopes Jigsaw puzzles Magazines Milk cartons Money **Napkins** Newspaper

Notebooks Oil filters Paper plates & cups

Paper towelsPicturesPlaying cardsRayon (fabric)SandpaperTea bagsToilet paperToilet seatsponges