

Tree Products

Treasure Hunt

Science Activity | Grades 3-5

Standards: 5-ESS3 (Earth & Human Activity,
Connection Literacy - W.5.8)

3-LS-2 (Ecosystems: Interactions, Energy, and Dynamics)

3-LS4-2 (Biological Evolution: Unity & Diversity,
Connection Mathematics - 3-MD.3)

3-ESS3-1 (Earth & Human Activity)



Overview:

Provide students with the opportunity to learn how much we depend on trees in our everyday life by gathering and sorting tree products.

Materials:

Bulletin board paper for mural and graphs, glue or tape, bags for collecting garbage, plastic gloves for hands (ask at a restaurant or butcher shop you frequent), old sheet to cover the floor for easy clean-up.

Talk with the group about all the great things trees produce. Trees can produce anything from food to household items, to paper, to hard wood products.

Trees also contain a compound called *cellulose* (main form of all plant tissue and fiber) that helps provide the tree with rigidity and support. The cellulose is extracted and used in many products including some ice creams, syrups, plastic bottles, film and rayon clothing. *Tree resin* (pitch) can be used to make soaps and varnishes. Corks, astringent lotions and medicines come from the bark and leaves. Tree fruit and nuts produce spices, juices, dyes and of course, yummy things to eat! People need trees and trees need people!

This is a good time to brainstorm non-tangible things that trees also offer like shade, jobs of farmers and farm workers, climbing fun, cooling our homes in the summer so less air-conditioning is needed, homes for animals and sometimes a tree just makes a person feel good, etc. **After this brainstorming session, send your students off on a three-day journey to find tree products in their own lives:**

DAY ONE: Send a note home regarding this activity and have students bring one or more products to share made from wood. Encourage them to look on labels to see if they see the word 'cellulose'. They can bring labels, pictures or small items. Tell students to see how many products made from trees or parts of trees you and your classmates can find!

DAY TWO: Share the items and create a mural of all the tree products. Look around the classroom, are there more things that can be added? Ask: How can we slow the need for *rapid tree harvesting* (gathering a crop of trees)? Introduce: REDUCE how much we throw away. REUSE as much as we can. RECYCLE whenever possible. Talk about the products they brought in and brainstorm ways to use *alternate* (in place of another, substitute) products not made from trees.

Tree Tidbit:

More than 5,000 products are made from wood either in its natural state or a by-product.

Find ways to reuse tree products without throwing them away. Ask the group:

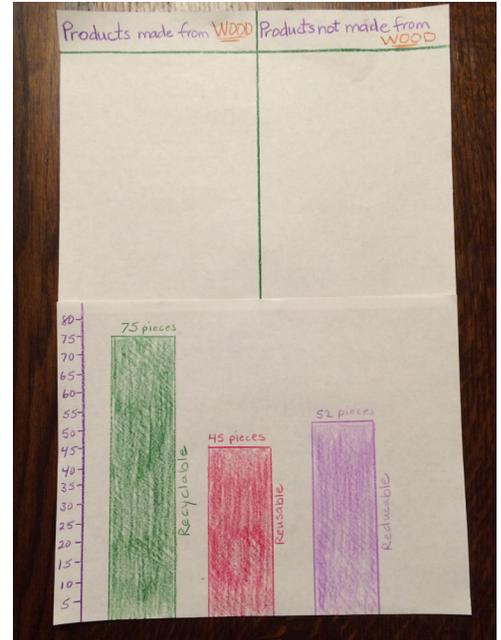
- Which tree products could be recycled so they can be remade into new products?
- What are the products that get thrown in the trash the most?
- Which products do we use the most?

How can we **conserve** (to protect from loss or depletion) these **natural resources** (materials supplied by nature such as forests and water, etc.) in our daily lives? (**reuse, reduce, recycle**)

DAY THREE: Collect garbage around your school campus or pour out the waste baskets in you room. Sort the products into tree (wood) and non-tree (wood) products; create a graph. Or graph reusable, reducible, recyclable, other. Let the students come up with categories and solutions.

As your three-day journey comes to an end, make sure your students remember that if we are going to cut down a tree, we need to remember four things:

1. Have a very good reason
2. Preserve **old growth trees** (large very old tree) and carefully plan where we cut trees down for products
3. Use as much of the tree as possible
4. REPLANT!



Additional Activities:

- 1) Students can write riddles about their tree products or any product on the mural using the following format: I am (size), (color), (shape), (texture), (odor), (general use). What am I?
- 2) **Additional materials needed: construction paper, crayons, colored pencils or pens, writing paper and pencils.** Students create posters individually or in groups entitled: PEOPLE NEED TREES AND TREES NEED PEOPLE! Posters depict tree products people use and the things people can do to help take care of trees (reduce, reuse, recycle, replant)!
- 3) SONG - sing to the tune of *Twinkle Twinkle Little Star*: "Think Earth Think Earth Is Our Song, Everyone Can Sing Along. Don't Waste Paper, Save A Tree. It Is Good For You And Me! Think Earth Think Earth Is Our Song, Everyone Can Sing Along."

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