

Forestry Bingo

Reinforce principles of the forest while playing bingo.

National Science Standards Correlations:

- **Science**

Life Science

-Organisms and their Environments

Evidence, Models and Explanation

-Diversity, Interrelationships, and Systems

Earth and Space

-Properties of Earth Materials

Science & Technology

-Abilities to Distinguish Between Natural Objects and Objects Made by Humans

Science in Personal and Social Perspectives

-Types of Resources

-Personal Health

- **EE standards**

Knowledge of Environmental Process and Systems

-Learners understand basic similarities and differences among a wide variety of living organisms. They understand the concept of habitat.

-Learners understand basic ways in which organisms are related to their environments and to other organisms.

-Learners understand how people are connected at many levels—including the global level—by actions and common responsibilities that concern the environment.

-Learners understand that people depend on, change, and are affected by the environment.

-Learners understand the basic concepts of resource and resource distribution.

Objectives:

Participants will understand trees are a renewable resource.

Participants will become familiar with the role trees play in their daily lives.

Participants will realize that trees play a role in the water cycle.

Vocabulary Words:

Cellulose- A complex carbohydrate, is composed of glucose units, forms the main constituent of the cell wall in most plants, and is important in the manufacture of numerous products, such as paper, textiles, pharmaceuticals, and explosives.

Lignin - A polymer found extensively in the cell walls of all woody plants, Lignin, one of the most abundant natural polymers, constitutes one-fourth to one-third of the total dry weight of trees.

Wildfire- Any fire occurring on Wildlands that does not meet management objectives and thus requires suppression.

Renewable resource- A resource that has the capacity to be replaced through natural processes.

Biomass – Organic matter from plants and animals containing stored energy from the sun.

Biomass from wood, crops, manure and even some garbage can be used to heat homes and businesses or make steam for producing electricity.

Dendrochronologist – A person who uses scientific method of dating based on the analysis of patterns of tree-rings. Dendrochronology can date the time at which tree rings were formed, in many types of wood, to the exact calendar year.

Materials:

- Tokens such as, corn, popcorn, small stones, dry beans or 16 reused container caps per participant to be used as markers
- One Forestry playing card per student

Instructions:

TOKEN OPTIONS: Use small stones, corn, popcorn, dry beans or have students each collect and bring in 16 caps that have been washed and dried. Caps can come from milk jugs, water bottles, detergent bottles, shampoo bottles, mustard bottles, etc. These will be used as the “markers” for Forestry Bingo. Run off copies of the bingo cards distribute one to each student. Read the clues to the class. Each clue matches a picture on the game card. The first participant to achieve a straight, horizontal, vertical, 4 corners, diagonal or design of your choice wins!

Forestry Bingo Clues

1. I taste good on a hot summer day and contain cellulose from trees. (ice cream)
2. I am fun to skate on and I contain lignin from trees. (cement sidewalk)
3. I help protect people, animals, property and entire ecosystems by responding to wildfires. (Wildland Firefighters)
4. I am a renewable resource. (tree)
5. It can take up to 100 years or more to make 1 inch of me. (soil)
6. I can be used as a fuel source because of my biomass. (logs)
7. I am Sustainable Forestry. When trees are harvested for human use, new trees are planted to replace them. (Forestry employee planting tree.)
8. Trees help filter and clean me so that I am safe for you to drink. (water)
9. I grow on trees and I am a great snack full of potassium. (bananas)
10. I am made from trees, I can be found in the restroom, and you use me every day. (toilet paper)

11. I am made of wood and you couldn't get upstairs without me. (stairs)
12. A lot of trees are used to build me and I put a roof over your head. (house)
13. You wouldn't be able to live or use me without the oxygen that is made by trees and plants. (nose)
14. A lot of wildlife lives in the forest. A tree is my home. (raccoon)
15. Dendrochronologists study me to find out about changes in the climate, years when there was a droughts or even how old the wood is at an archaeological site. (tree rings)
16. I love spending time in the forest. There is always something to see and do. I like to hike, ride, picnic and camp among the trees. (cyclist)
17. Add more with questions from your own community or change some of the ones above to reflect locations or information from your community. Have the participants/students write some of their own questions by looking at the photos and making connections to trees and forests.