

THE FORESTER'S JOB

Teacher Discussion Guide

LEVELS

Grades 4-5

SUBJECTS

Science
Social Studies
Language Arts
Math

CONCEPTS

Different careers require different skills and training.

Managing resources requires analysis and planning.

Special tools play an important role in some resource management.

SKILLS

Analyzing
Comparing
Contrasting
Discussing
Data Gathering
Interpreting
Observing
Researching

OVERVIEW

Forestry experts, called foresters, manage the forest for its best use. In order to understand the best way to manage the forest, they use many different tools to measure the trees.

DISCUSSION AND STUDY TOPICS

The measurement tools of the forester can be used in the context of many different areas of learning. Here are some suggestions:

Science

- **Measuring.** What types of things are measured? Why are they measured? Are different things measured in different ways? Why? What do you learn from taking measurements? (*class discussion*)
- **Measuring tools.** In early times, people used their bodies (hands, feet, fingers) to take measurements. Have students measure their desks with different parts of their bodies. Then have them use a ruler. Did everyone's measurements come out the same? Why or why not? How accurate were the measurements? (*class experiment, class discussion*)
- **Measurement standards.** Why is it important for foresters to measure a tree at the same height every time (Diameter at Breast Height)? How would the measurement be different if the tree was measured at 1 foot? 2 feet? Could you compare the size of two trees if they were measured at different heights? What other things are measured according to strict standards? (*research project, class experiment, class discussion*)

Social Studies

- **Famous and historic trees.** Some trees are very old and played an important role in history. Have students research famous trees in history. Are there any famous old trees in your town or city? (*research project, essay topic, class discussion*)
- **My life as a tree.** Have students draw "tree rings" on a paper plate to represent their own age. They can use crayons or labels to identify the age at which important events took place in their lives such as when they were born or when they started school. (*art project, essay topic*)

* *Note:* Flag poles, the school building, or other tall structures can be used as an alternative to trees in the activity on the back of **The Forester's Job** booklet.

In addition to providing beauty and recreation, forests supply raw materials to help meet society's needs for housing, paper, containers and thousands of other products used by consumers every day. As one of the country's leading forest products providers, Georgia-Pacific Corporation has a long-term interest in and commitment to the health of our nation's forests.

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THE FORESTER'S JOB

Activity Sheet

TREE TOOLS FILL IN THE BLANK

Which of the following statements describe the forester's job or tools used in the forest? Refer to **The Forester's Job** for help with the answers. You will use each of these words or phrases once:

• bristlecone pine • clinometer • compass • cruising vest • data recorder • dibble • forest • harvest • increment borer
• regeneration • soil sampler • tally book • tape measure • timber cruise • tree rings

1. A _____ is used to test the quality of the dirt where trees grow.
2. Foresters used to record tree measurements in a _____ so they could total up the information later.
3. The bright orange _____ helps people easily identify foresters in the woods.
4. You don't have to be a forester to use a _____ to help find your way around.
5. _____ is the process resulting from foresters planting and growing new trees.
6. When planting seedlings, foresters use a _____ to dig a hole in the ground.
7. The main part of a forester's day is spent in the forest on a _____ to measure and sample trees in a stand.
8. Today, foresters use a _____ or hand-held computers to summarize information about the forest and its resources.
9. A 4,900-year-old _____, found on Wheeler Peak in Nevada, is the oldest living tree.
10. The _____ can be used to see how old and healthy a tree is without cutting it down.
11. Foresters decide when to _____ trees so they can be used to make paper or building products.
12. Using geometry and a _____, foresters can determine the height of a tree.
13. _____ provide clues about the climate or weather of an area over time where trees grow.
14. A complex natural community that supports plant and animal life is called a _____.
15. To measure the diameter of a tree, a forester uses a _____.

