

TEACHERS ACTIVITIES

Theme:

Learning to respect and conserve our natural resources is the first important step toward enjoying their beauty and wealth for years to come.

Topics For Discussion:

Discuss the characteristics of a tall tale (i.e., the characters are larger than life; story events and objects are exaggerated beyond belief; they are usually related to a particular geographic region or occupation; they become more exaggerated with each retelling; they are often based on a real person or event). Ask students to name some tall tale characters. Paul Bunyan, Johnny Appleseed, and John Henry were mentioned in the program. They might also name Pecos Bill, Davy Crockett, Casey Jones, Mike Fink, Jim Bridger, and story characters who are known primarily in their own region of the country (e.g., Annie Christmas, Joe Magarac, Old Stormalong, Febold Feboldson, and others). Help the students distinguish between real historical figures and invented characters.



Pose the question to the class that LeVar asked the children in the program, "If you were as big as Paul Bunyan, what would you do that you can't do now?"



After viewing the program, discuss with students why loggers cut trees.



In an animated segment of the program, a girl used a card catalog to find the folk tale section of the library. Few public and school libraries have card catalogs any more. Discuss with students how people now find where a book is located in a library. (If students have had little experience with actually locating books themselves, have the school library media specialist give an age-appropriate demonstration of how to use the on-line catalog.)

Curriculum Extension Activities:

With the help of the library media specialist, assemble a collection of tall tales. Divide the class into partners and have each pair read one of the tall tales. Have the students make a chart comparing the tall tales. Divide the chart into the following columns: Title of Book Read, Name of Tall Tale Character, Where Character Lived, and Amazing Feats, and Picture of Character (students draw a picture). After the class has filled in the chart, have each set of partners share their tall tale with the class.



Have the students give themselves tall tale names. (Names mentioned in the story include Sourdough Slim, Creampuff Fatty, Hardjaw Murphy, and Big Tim Burr. Others gathered from American folklore include; Dirty Shirt John, Pig's Foot Bob, Three Finger Jack, White Pine Mike, Broom-face Brooks, The Pancake Kid, Cougar Dick, Macaroni Joe, Dynamite Nell, Moose City Molly, Lumberjack Maude, Elk-tooth Annie, and similar names.) Provide supplies for them to make name tags and allow them to use their tall tale names in their activities all day.



Enlist some parent volunteers to help with the mixing and cooking and whip up a batch of flapjacks in the classroom. Enjoy them with some real maple syrup (and remind the students that this is yet another product from trees!). Obtain copies of these other tall tales retold and illustrated by Steven Kellogg: Pecos Bill, Johnny Appleseed, Mike Fink, and Sally Ann Thunder Ann Whirlwind Crockett. Read the stories to the class and discuss the characteristics that make them tall tales. Make the books available for students to look at on their own, as Kellogg often includes humorous details in the pictures that require close examination. Discuss how his illustrations make a funny story even funnier!



Using a copy of the feature book for reference, have students make an illustrated timeline of Paul Bunyan's life. On a large map of the United States, make word labels of the places he visited (or created), according to the book.

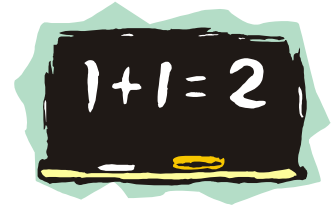


See *Once There Was a Tree*, for a variety of activities related to forests, conservation and appreciation of trees, and products from trees.

Do some yarn-spinning in the classroom. Tie knots at intervals in a fairly long piece of yarn and wrap it around a craft stick. Place the wrapped stick in a box with a hole cut in the top. Pull the end of the yarn through the hole. Decide on a topic for a story. Use Paul Bunyan, another tall tale character, a child in the classroom, or a made-up character for the story, such as "The Day Paul Went Fishing" or "The Time Paul Went Camping," etc. One child starts the story by pulling the yarn from the box. When that child reaches a knot in the yarn, she/he passes the box to the next child, who continues the story until another knot is reached. The purpose is to make the story as exaggerated as possible. Before they start telling the story, explain to students how yarnspinners used to describe their tales. For example, they used the following adjectives: bad, outrageous, outlandish, severe, hard, double, and triple; and these nouns: bellybender, sidebuster, windy, gallyflopper, whopper, blanket stretcher, and tonguewagger. By putting different combinations of adjectives and nouns together, they announced what type of story they were telling, i.e., "a double bad bellybender," "a triple severe tonguewagger," or "an outlandish blanket stretcher." Have students make up the type of story they are going to tell before they begin.



• **Comparing weights.** According to the video and the book, Paul Bunyan weighed 156 pounds when he was born. Ask children to bring in their weight when they were born and construct a weight “number line.” (To make the weight line especially enjoyable, have each child add a baby picture next to her/his weight. Have someone draw a picture of Paul next to his weight.) Construct a second number line with the students’ current weights. Have them compare the two lines and determine if the students appear in the same order. Have them think of different ways that they might determine Paul Bunyan’s weight at their age.



• **Finding examples of number and shape in nature.** Take the students on a nature walk to look at trees. Have them look for examples of shape and number by examining the trunk, crown, branches, leaf arrangement, etc., of both deciduous and evergreen trees. Discuss their findings. It is a good idea for students to take pencil and paper (or small notebooks) so that they can sketch at least one of the examples they see. (If an appropriate site is not available, use pictures of trees that show the trunk, crown, and close-ups of leaves.) For a more challenging activity, students might look for examples of the Fibonacci number sequence in nature, as in pine cones, pineapple, flower petals, leaf arrangements, etc.

• **Measurement in cooking.** The story of Paul Bunyan lends itself well to making flapjacks and popcorn balls. Use the cooking activity as an opportunity to discuss the size of the flapjacks that Paul’s crew made and the amount of popcorn it would take to have a blizzard. Use the following recipes or your own favorites.

Pancakes

- 1 1/4 cups flour
- 2 Tbsp. sugar
- 2 tsp. baking powder
- 1/2 tsp. salt
- 1 egg
- 1 cup milk
- 1 Tbsp. cooking oil

Directions: Beat egg, milk and oil with a mixer in a bowl. Add flour, sugar, baking powder, and salt to the mixture. Stir to mix well, but the batter will be lumpy. Rub a little oil on the griddle with a paper towel. Heat the griddle over medium heat. Use about 1/4 cup of batter for each pancake and pour on the hot griddle. When bubbles cover the surface of the pancake and the edges look dry, flip the pancake over. Cook until golden brown.

Sandy's Popcorn Balls

1/4 cup margarine
12 oz. miniature marshmallows
1/2 pkg. JellO™ (for flavoring)
4 quarts popped popcorn

Directions: Microwave the margarine and marshmallows 2-3 minutes on "high" until melted. Stir the JellO into the marshmallow mixture. Add the popcorn and stir until coated. Butter hands and shape the mixture into balls.

• **Estimation and measurement.** In the video and book, some of Paul's men are shown standing on each other's shoulders cutting down a very tall tree. Have students estimate how tall a tree would be if everyone in the class (including the teacher) built a tower by standing on each other's shoulders. Ask students to think of ways that they can measure to determine the actual height of their tree.

Do-At-Home Activity

• **Taking a survey of wood products.** Brainstorm with the students a list of wood products and prepare a take-home sheet similar to the sample on the next page. (Leave ample space for additional items.) Working together, parent and child search the house for products derived from trees. Have students return their lists to school and compile the data into a graph that shows different ways we use wood in our lives.

SUPPLEMENTARY BOOKLIST:

JACK AND THE WHOOPEE WIND
by Mary Calhoun, illus. by Dick Gackenbach (Morrow)

THE TEA SQUALL
by Ariane Dewey (Greenwillow)

THE NARROW ESCAPES OF DAVY CROCKETT
By Ariane Dewey (Greenwillow)

THEY CALL ME APPLESEED JOHN
by Andrew Glass (Doubleday)

SWAMP ANGEL
by Anne Isaacs, illus. by Paul O. Zelinsky (Dutton)

JOHN HENRY
by Julius Lester, illus. by Jerry Pinkney (Dial)

BEATS ME, CLAUDE
by Joan Lowery Nixon, illus. by Tracey Campbell Pearson (Viking)

IVA DUNNIT AND THE BIG WIND
by Carol Purdy, illus. by Steven Kellogg (Dial)

THE MORNING THE SUN REFUSED TO RISE
by Glen Rounds (Holiday House)

OL' PAUL, THE MIGHTY LOGGER
by Glen Rounds (Holiday House)

THE BUNYANS
by Audrey Wood, illus. by David Shannon (Scholastic)

Distributed by:

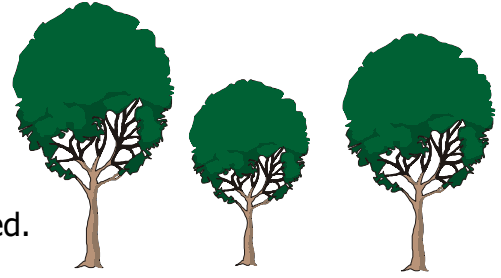


P.O. Box 80669
Lincoln, NE 68501-0669
Phone: 800-228-4630
Fax: 800-306-2330
Email: gpn@unl.edu
Web site: gpn.unl.edu

Class Tree Year Book

Key Words: trees, measurement

Concept: Trees have characteristics that can be described.



The fictional character, Paul Bunyan, was an extraordinary lumberjack who spent most of his time in the forest. To be a lumberjack you need to enjoy being outdoors around trees. Take a year and get to know a tree.

Materials: Area with trees, notebook, pencils, measuring tape, crayons, tape, aluminum foil, tree resource book.

1. Have students choose a tree to observe for the next year. Create a class tree journal and, working together, have students record as much information as they can about the tree including:

- The measurement of the tree's circumference.
- An estimate of the tree's height.
- A map showing the location of the tree.
- An impression of the bark using aluminum foil (tape it into the notebook).
- The type of tree and general information about it (use a tree resource book).

2. Have pairs of students take turns making monthly journal entries describing the tree. Ask them to include the following in each journal entry:

- The date, the season, and a description of the weather.
- A drawing of how the tree looks this month (to show the branches, the shape, and whether it has leaves or not)—and a tracing or rubbing of a leaf (to show the shape and size if it has leaves during this season).
- A description of the area around the tree including other living things near it such as mosses, fungi, lichens, grasses, plants, etc.
- A prediction of what the tree will look like next month.

Students will observe more changes in the appearance if they choose a deciduous tree. If they choose a coniferous tree or other plant, they will see changes in the weather, animals, and the plant as it bears fruit or produces seeds.

Tree Cookies

Key Words: trees, growth rings, bark, wood

Concept: You can tell the age of a tree by counting its growth rings.

In this episode LeVar tried his hand at sawing a log in a lumberjack contest. Thin slices sawed off the end of a log are sometimes called tree cookies. Use tree cookies for dendrochronology, the study of tree rings.

Materials: Tree cookies (thin slices of wood from a tree trunk or large branch; ask a Christmas tree farm for pieces cut off the ends of tree trunks or ask parents to cut thin slices from recently cut fire wood), pencils, index cards.

1. Give each small group a tree cookie. Ask students to describe their cookie by telling about its size, color, shape, and smell.
2. Help students identify the different layers of the tree and discuss their purpose.

The **bark** helps to protect the tree and can be used to identify the kind of tree. It is actually old layers of **phloem**, pronounced "flo em." The phloem, which is usually pinkish or reddish, carries the food produced by the leaves to all the parts of the tree. The **cambium**, which is very thin and may be too small for students to see, is the part of the tree that grows a new layer of wood and a new layer of phloem each year. The **wood** layer, which is most of the interior of the tree, helps support the tree and carries water, minerals, and salts up from the soil to the leaves. This is the part of the tree that contains the growth rings. It is also the part of the tree that carpenters use to build houses and furniture. The **pith** is the central core of the tree trunk and is the tree's first year of growth.

3. Have students count the number of growth rings in the wood to find the age of the tree their cookie came from. If the cookie is from a tree branch, the rings will tell the age of the branch which may be less than the age of the tree.
4. Explain that *dendrochronology* is the study of tree rings. Tree rings are studied to learn about past weather. Ask students to look carefully at the rings in their tree cookie. Tree rings from bad growing years (little rain or very cold) will be thin. Years that were mild with plenty of rain tend to be good growing years, so the rings from those years will be thick. Ask students to try to identify rings from good and bad growing years. They can compare tree cookies to see if there are similarities in the pattern of good and bad growing years.
5. Have them make a card telling the age of their tree cookie. Place all the tree cookies with their cards on a table so students can compare them. Mix-up the cards and challenge students to match each cookie with the correct card.