Note from the author: This lesson can be used for Kindergarten through fourth grade! This is a good way to introduce the students to three parts of a tree and how they function. Extensions can be easily added such as studying the tree rings for evidence of disease, fire, and other detrimental effects on a tree. E-mail me if you need any tree lesson plans and I will try to assist you!

#### Objectives:

- -- TLW identify and explain the significance of a tree's annual rings
- -- TLW recognize and define the importance of the bark, cambium, and the heartwood of a tree
- -- TLW create a model of their own "life as a tree," and explain it to their classmates.

#### Set:

Does anyone know the purpose of the bark on a tree? Does anyone know what the words cambium and heartwood mean? Has anyone ever seen the "rings" inside of a tree? Does anyone know what a tree's "rings" represent? Today we will learn the meaning and importance of these parts of a tree.

#### Instruction:

TTW explain the significance of the bark (protects tree), cambium (helps tree make new bark), and the heartwood (supports tree on the inside).

TTW utilize a poster to show these 3 layers.

TTW ask and answer any questions to check for comprehension.

TTW explain one significance of the annual rings on a tree. (tell its age)

TTW show the students how to properly count a tree's rings in order to calculate its age. (Count only the dark or light shades not all of the shades)

TLW count the number of rings on a tree cookie.

TTW ask and answer any questions to check for comprehension.

TTW give each student a paper plate, and brown, red, and green crayons.

TTW instruct the students to color the bumpy outside part of the plate brown, just like the bark on a tree.

TLW draw a green circle around the plate to represent the cambium.

TLW draw a red heart symbol in the center of the plate to represent the heartwood.

TTW ask and answer any questions to check for comprehension.

TTW tell each child to put the same number of rings as their age on the plate.

TTW will give each child a pencil and 2 sticky labels.

TLW place the label beside at least two important events in their life-birth, when started school, learned how to ride a bike etc.

TLW share their life as a tree with their classmates.

### Closure:

What did we learn today? What are the three parts of a tree? What do these parts do for a tree? What do the rings inside of a tree tell us?

### Assessment:

TLW identify and describe the three parts of a tree by pointing to them on a poster.

TLW tell what the annual rings of a tree are and point to them on a poster.

TLW show and explain their "My Life As A Tree" plate to their classmates.

### Materials

Crayons (green, red, brown), pencils, paper plates, sticky labels, tree cookie poster, real tree cookie

## Subject(s):

• Science/Botany

#### **OVERVIEW:**

The environment is an issue of great importance. The more knowledgeable a person is about the world around them, the better prepared they are to maintain it.

## **PURPOSE:**

The purpose of this activity is designed to increase students' awareness and knowledge of trees. They will be involved within the world around them at home and at school and hopefully will become caretakers of their environment.

**OBJECTIVES:** As a result of this activity, the students will:

- 1. Adopt and identify a specific tree of choice.
- 2. Take a bark rubbing, draw a picture, read, and research about a particular tree.
- 3. Each student will write an original piece about their tree to include at least three facts. It can be a story, poem, song, play, acrostic, etc.
- 4. Document changes throughout the year on their adopted tree.
- 5. Learn the difference between deciduous and coniferous trees.

### **RESOURCES/MATERIALS:**

### **Teacher materials:**

Several literature books about trees. Resource books for identification about trees. Any other materials you might already have concerning trees. Project Learning Tree and Project Wild books are a great source.

### Student materials:

construction paper, paper for the bark rubbing, crayons, pencil, notebook paper.

# **ACTIVITIES AND PROCEDURES:**

- 1. At the end of a class period, with no rationale, ask students to take a piece of paper and draw a tree or trees. Don't ask for a particular type of tree or size, etc. Give them a good amount of time, at least 15 minutes. They can keep the paper.
- 2. The next class period, take the students on a nature walk. Walk around and observe the trees in the area surrounding your school(if possible). Ask the students to describe the trees to you. Ask them to be specific about what they see. Notice differences and similarities.
- 3. Return to the classroom and give the students a piece of paper and ask them to draw a tree or trees. Give them a good amount of time, at least 15 minutes. Then have the students compare the two sets of drawings and discuss what they see. Were the second drawings more detailed? Were they more aware of the shape of the trees, etc.?
- 4. Read the book The First Forest by John Gile, The Giving Tree by Shel Silverstein and or other pieces of literature about trees. Discuss some of the specifics about trees, using vocabulary and identifying parts of the tree. Discuss the difference between coniferous and deciduous trees.
- 5. Then take the students outside a second time and allow them to adopt a tree. The students will take a bark rubbing, a leaf, and draw a picture of their tree. When they return to the class the students will use reference books and each other to try to identify their tree.

- 6. When the students have researched a little about their tree, they will write three facts about their tree in any form they wish. They can write a story, a poem, a song, a play, an acrostic, etc.
- 7. Take all of the information from each student in the class and put together a class scrapbook.

## TYING IT ALL TOGETHER:

- 1. Put the students materials together into a scrapbook. I put the picture with the name of the tree, the bark rubbing, and leaf on the first page. Then I put the original piece the student created on the second page. I faced each students work toward each other.
- 2. To draw in their parents, ask the students to go home and see if they happen to have the same type of tree on their property at home. When they return with the results, tally everyone's information and graph it. The students can compare each of the classes and see if students happened to choose a particular tree because it was familiar or not.
- 3. When the scrapbook is finished allow the children to take the book home for their families to see and allow their families to write comments about the book in the back of the book on a comment page.
- 4. After the families have viewed the scrapbooks, have them available in the library for viewing and check out
- 5. You could also have other grades look at the scrapbook and then pair up students and take the visiting grade on a nature walk and show them your tree.
- 6. You could also make a map of the campus and try to identify where your tree is on the map.
- 7. If you choose to do this activity in the fall, have the students watch their tree throughout the year and have them document the changes that occur as the seasons change. This is fun for the students to see their tree change. They learn a lot.
- 8. If you feel like this would be too difficult for one student, pair students together and have them work in groups.