

GROW YOUR PALS PROGRAM GUIDE



THE NATIONAL FFA MENTORING PROGRAM

Sponsored by



LESSON 48

Tree Timelines

Unit:
PLANT SCIENCE

PRECEPTS

- J. Mental Growth
- J2. Think creatively

NATIONAL STANDARDS

NL-ENG.K-12.6 Applying Knowledge
NS.K-4.3 Life Science



Lesson Type:
Small Group

STUDENT LEARNING OBJECTIVES

As a result of this lesson, the student will ...

- 1 Determine a tree's age from its rings.
- 2 Create a "tree timeline" reflecting his/her life events.





TIME

Instruction time for this lesson: **35 minutes.**



RESOURCES

None



TOOLS, EQUIPMENT AND SUPPLIES

- ✓ **crosscut of a log and knowledge of the date cut** – 1 per student
- ✓ **PALS.48. AS.A** – 1 per student
- ✓ **paper plates** – 1 per student
- ✓ **markers**
- ✓ **white paper for posters**
- ✓ **PALS.48.TM.A** – 1 set of 5 per student



KEY TERMS

The following term is presented in this lesson and appears in ***bold italics***:
tree cookie

INTEREST APPROACH

This interest approach allows students to touch and observe various crosscut sections of logs. As the students observe the slices of logs, have them complete PALS.48 AS.A to find out what they already know about tree rings.



Take a look at these crosscuts of logs. Each person is going to get one of these slices today. Come on up here and grab one log and one worksheet.

Look at your crosscut section of log. This is called a ***tree cookie***. On your worksheet, write everything you think you might know about ***tree cookies*** or tree rings. Write this in the box with a K in it.

After you finished that, write some ideas or things you want to know more about. Write this in the box with a W in it.

SUMMARY OF CONTENT AND TEACHING STRATEGIES

OBJECTIVE 1. | Determine a tree's age from its rings.



Do a *Go- Get-It Moment* with tree facts. Have five tree facts from PALS.48.TM.A scattered throughout the room. There needs to be enough that each student is able to have one of each. Instruct them that they are to find five different pieces of information relating to **tree cookies** and bring them back to their seats.



Around the room, you will find five very important pieces of information all about **tree cookies**. When I say BAKE, hurry as fast as you can to collect five different **tree cookie** facts and then bring them back to your table. How many facts are you collecting? Five.

BAKE!

Once students are back to their table, instruct them on creating a poster that represents their tree cookie facts they just gathered. The information gathered is as follows:

Each growth ring in a tree trunk represents one year.

The center part is the hardest wood and takes the longest to grow.

Each year of growth has a dark ring and a light ring.

Very narrow rings mean that the tree went through a drought.

Wide rings mean that the tree had plenty of water to drink.



Now that we have our five facts, we are going to create an eye-catching poster to share the facts with everybody in our school. Using the white paper and markers, create a poster with the following items: A title, the five facts you gathered and two pictures that sum up the facts about **tree cookies**.

If wide rings mean that the tree had plenty of water to drink? What does that mean about the tree's amount of growth that year? *Answers should include that the tree had much growth because it was getting plenty of nutrients drawn up in the roots.*

If that is true for trees, what does it mean for our own bodies if we eat and drink healthy food? *Answers should include that we can experience healthy growth in our bodies if we plan to eat and drink in a healthy manner.*

*Now that your student has had the opportunity to look at the **tree cookies** and make a poster about **tree cookie** facts, help them determine their **tree cookie**'s age.*



Our trees were cut down _____ years ago. Using this information, let's count the number of rings and determine how old our tree is.



Remind students to count only light or dark rings, as together they equal one year. Also, have the student find their birthday year on the tree cookie.

OBJECTIVE 2. | Create a “tree timeline” reflecting his or her life events.



Students will create a timeline of their life using concepts of tree rings. Give each student a paper plate and markers to use to complete the activity.



Now that we have learned information about how to determine a tree's age and other facts about tree rings, we are going to create a cross section of a tree that represents our life.

Everyone should have a paper plate and a few markers. Take your paper plate and draw the bark on the outer edge.

As you go through the steps, be sure to model these activities with your students.



If you take a look up here, you can see my tree section to help you understand the steps we are taking.

Next, draw the same number of rings as your age onto your plate.

After students have drawn the number of rings on their paper plates, explain some important life events that they could include on their tree.



Now we are going to label the tree with all the important things that have happened to us. We should definitely put our birthday on there! What are some other ideas you might put on there? When I started school. When I learned how to ride a bike. What are some others you can think of?

After each student is finished, have him or her share his or her life as a tree with the class.



As I was walking around the room, I saw some interesting life events. I am sure everyone would love to hear about important events in each of our lives. Let's go around the room and share some of the ideas we wrote down on our plates.



REVIEW / SUMMARY / EVALUATION

For the review, have students get their PALS.48.AS.A worksheets back out. Have them finish the worksheet by writing in information they have learned about tree rings.



APPLICATION

One-on-One Suggestion: *Work one-on-one with your PALS and use a **tree cookie** to mark down directly on the cookie the events that have occurred in their lives.*



Large Group Suggestion: *Gather different types of **tree cookies** to use in class. Compare and contrast the differences and similarities in the tree rings.*

PALS.48.TM.A

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