



Nature | Education

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**GRAB N' GO ACTIVITY:**  
**Discovering Tree Ages**

### OVERVIEW:

In this activity, students will trace environmental and historical changes using a cross section of a tree, or "tree cookie."

### MATERIALS:

- Tree Cookie/Cut tree in yard/Printed Image
- Paper/Notebooks
- Pencil

### INFORMATION:

One way to learn about tree growth is to look at annual rings. Tree rings show patterns of change in the tree's life as well as changes in the area where it grows.

By counting a tree's growth rings, you can tell the age of that part of the tree at the time it was cut. Every growth season, a tree adds a new layer of wood to its trunk and limbs



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SOURCED & ADAPTED FROM: <http://www.forestfoundation.org/nature-activity--the-fallen-log>

**Ages:** 5 - 12

**Time:** 30 - 45 minutes

### PROCEDURE:

**Step 1:** Pass out a "tree cookie," find a cut tree in your woods, or photocopy the tree rings image in the activity guide.

**Step 2:** Have the kids estimate how old this part of the tree was when it was cut. Ask the kids how they estimated the age.

**Step 3:** Explain how to count the rings to find the age of a cross section (count only the light or only the dark rings). Count the number of rings on the "Tree Cookie Parts" cross section. Then, using their trees, have them count the rings to determine the age of the section they have.

**Step 4:** Using the Background information, explain the different kinds of markings that tree cookies display (scars from a forest fire or a dead branch, narrow rings from insect attacks or drought, etc.).

**Step 5:** Have them look for clues in their tree's markings, and guess what might have happened to the tree that time. Discuss their responses. (See the box on the activity guide for answers.)

**Step 6:** Distribute hand lenses to the kids. Have them look for small holes in the outside and heartwood of the tree. The tiny channels enable water and nutrients to travel up the trunk and branches of the tree.



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One way to learn about tree growth is to look at annual rings. Tree rings show patterns of change in a tree's life as well as changes in the area where it grows. In this activity, you can trace environmental and historical changes using a cross section of a tree, or a "tree cookie."

Have you ever counted tree rings? Every growth season a tree adds a new layer of wood to its trunk and limbs. This means you can determine the age of a tree by counting its layers, or rings. Have children learn more about a tree's life by examining a tree cookie and asking:

- How old was this part of the tree when the tree cookie was cut?
- Can you see different markings? Evidence of scars or narrow, misshapen rings?
- What might have happened to the tree to cause these different markings?

Use a hand lens to get a closer look at the tree cookie's texture. Can you see any holes or channels that might allow water and nutrients to travel up the tree? Finally ask the children to draw a tree cookie the same age as them. What can they do to show when important events in their lives took place?

