Name _____

Read the selection. Then answer the questions that follow.

Tree Rings

If you studied a tree stump, you would notice a pattern of circles radiating from its center to its outside edge. These circles, or rings, show the age of the tree. A tree produces new wood around its trunk every year. Usually, one layer of wood grows annually. Each layer has two colors of wood: a light-colored layer that grows in spring and summer and a darker, denser layer that grows in autumn and winter. When you count up all the layers, you can determine how old the tree is.

You do not have to cut down a tree to study its rings. A narrow metal tube can be drilled into its trunk from its outside edge to its center. This way you remove a slender core of wood and get a sample to analyze. This does not injure trees. It can be done with living trees or dead ones.

Tree rings do not tell just the tree's age. They also provide a glimpse into what the weather was like each year. Tree rings grow thin in dry years and thick in wet years. In California, where the weather is dry and preserves wood, scientists have studied ancient wood found at archaeological sites. The weather information collected from these tree rings dates back 8,000 years.

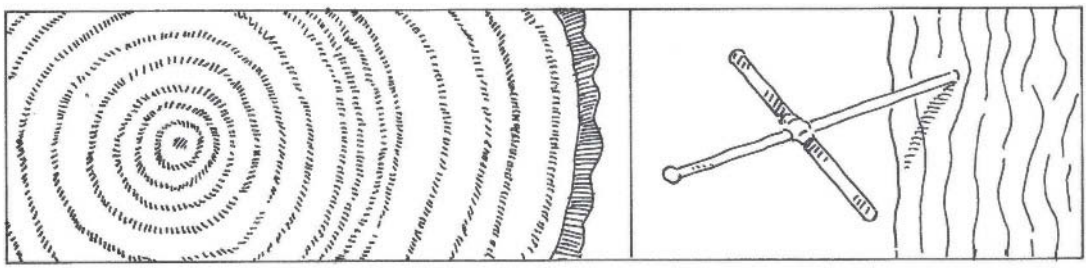

Figure A **Figure B**

Turn the page.

Answer the questions below.

1 **One way that all tree rings are *alike* is that**

- ◯ The oldest rings are exact circles.
- ◯ The rings are a way to figure out the age of a tree.
- ◯ The rings stack up from the ground to the tree's top.
- ◯ The thickest rings are the same size in wet years.

2 **According to the selection, which of the following statements is true of all tree rings?**

- ◯ They are created from ancient wood.
- ◯ They can provide a current weather report.
- ◯ They are dense but light-colored.
- ◯ They can show the growth of a tree.

3 **The picture labeled B shows**

- ◯ how a person counts up light and dark tree rings.
- ◯ what the weather must have been like years ago.
- ◯ how a person collects a core sample from a tree.
- ◯ what tree rings would look like on an older tree.

4 **Based upon the information in the selection, why do scientists usually study tree rings?**

5 **What can you say in general about how all trees grow thicker?**

Common Core State Standards

Questions 1, 2, 4, 5: Informational Text 1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. **Informational Text 3.** Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. **Question 3: Informational Text 7.** Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).