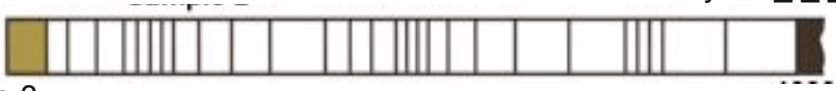
Dendrochronology	Name	Period

Dendrochronology is the study of growth rings in trees for the purpose of analyzing past climate conditions or determining the dates of past events. Because trees grow more slowly in periods of drought or other environmental stress than they do under more favorable conditions, the size of the rings they produce varies. Analyzing the pattern of a tree's rings provides information about the environmental changes that took place during the period in which it was growing. Matching the pattern in trees whose age is known to the pattern in wood found at an archaeological site can establish the age at which the wood was cut and thus the approximate date of the site. By comparing living trees with old lumber and finding overlapping ring patterns, scientists have established chronological records for some species that go back as far as 9,000 years. Core samples are often taken from living trees or cut wood, so the wood can continue to be used.

When was the fire? (Marked by **) The year of the fire: _ _ _ _
Use these core sample simulations to determine the date of the fire marked with a **.

Sample 1:
From a living tree from the Pinetown Forest, July 1993 at ___ years old.

Sample 2:
From a tree in the Pinetown Christmas Tree Farm in the year _ _ _ _ at ___ years old.

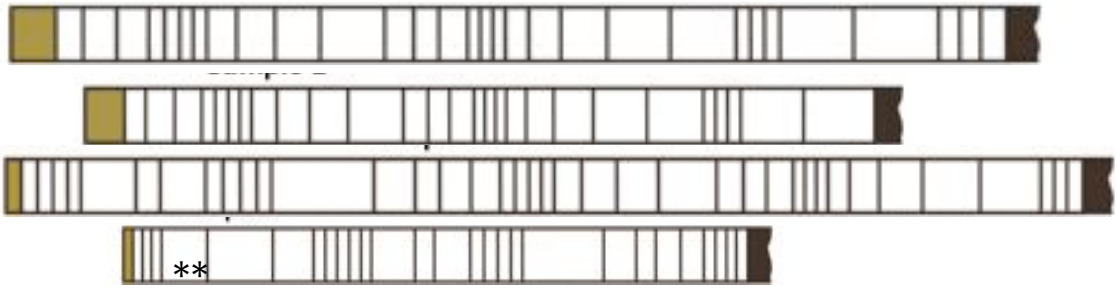


Sample 3:
From a log on the main trail in Pinetown Forest, cut in the year _ _ _ _ at ___ years old.

Sample 4:
From a barn beam in Pinetown Hollow. The beam was cut in _ _ _ _ at ___ years old.

CUT these samples out and tape together or tape next to each other. **REATTACH HERE.**

1
2
3
4



Key

Sample	Age of Tree	Year Cut or Cored	Year Growth Began
1	31 years	1993	1962
2	28 years	1990	1962
3	39 years	1988	1949
4	28 years	1970	1942