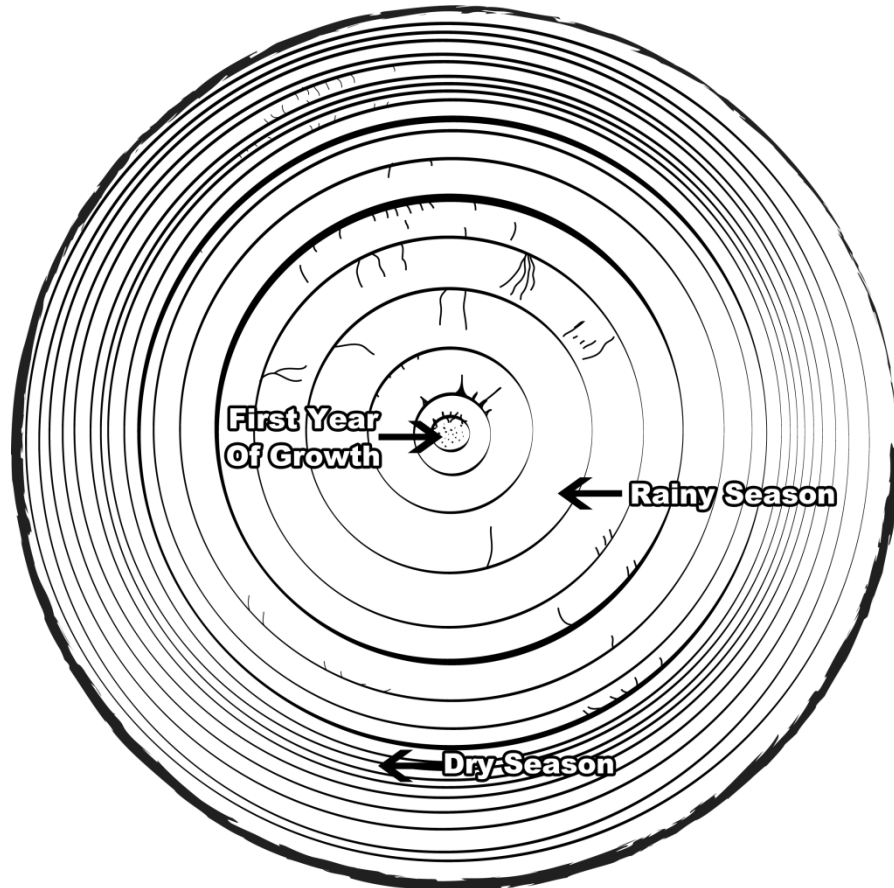**Background:**

Figure 1. A cross-section of a tree, just like looking at the top of a tree stump.

Trees grow from the center to the outside of the tree where the bark is. The center is also called the pith. Trees create rings of growth every year. The number of rings you see in a tree shows how old that tree is. In the example above the tree would be 19 years old. Sometimes tree rings can be large. The rings grow large when there is a lot of rain during the year. Rain gives the tree lots of nutrients to grow. Sometimes tree rings can be small. The rings grow smaller when there is not much rain and it is very dry.
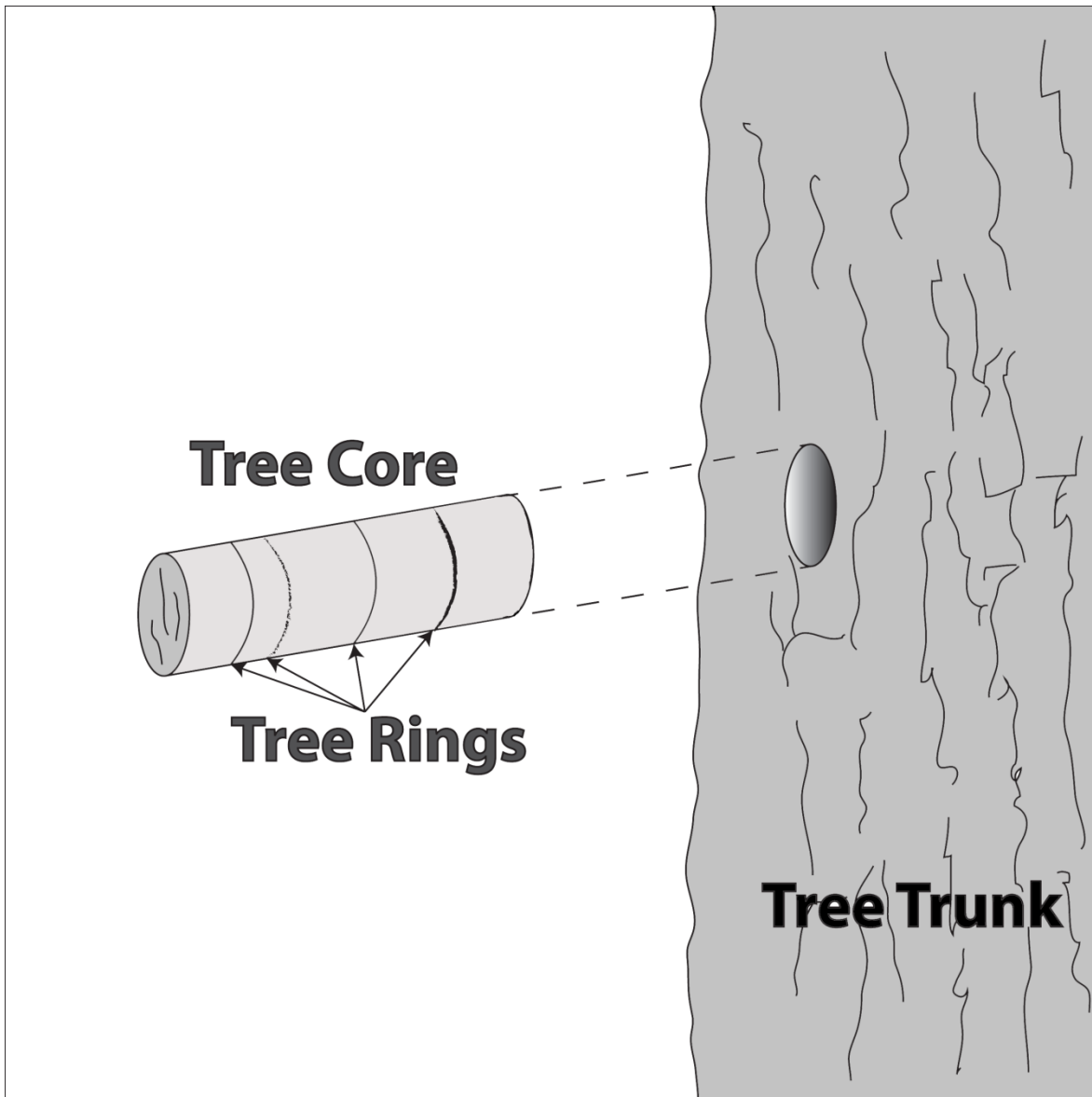
Figure 2. An illustration of where a tree-core comes from and how it shows tree-rings

Archaeologists can use tree-rings to determine the age of an archaeological site. Archaeologists take a core sample from a living tree and compare that to other cores taken from other trees. Archaeologists drill a hole into the tree using an auger and bring out a "core", a cylinder of wood taken from the tree (look at the picture above). Archaeologists match the cores that overlap with cores taken from many trees in an area so they can match up older and older trees.

This exercise contains six tree cores. Each core comes from a different tree. The oldest core comes from a cabin that has been around for a while. The newest core comes from a tree that was cut down in 2010, and comes from the same area as the lumber used for the cabin. It is important that the cores come from trees in or near the same area so that the tree-rings line up. Different areas will have different amounts of rain and other weather, which change the pattern of the tree rings.