

## ***CREATE A TREE***

<b>Focus</b>	To gain an understanding of the different parts of a tree and how they work together.
<b>Group Size</b>	Entire class
<b>Time Required</b>	20 minutes
<b>Materials</b>	No additional materials
<b>Physical Setting</b>	An open area , clearing on a trail
<b>Process</b>	<p><i>The idea is to create a tree and its elements using people as the building blocks. Read the instructions to the students as they go through the activity--explaining the roles of the different elements as they are created.</i></p> <ol style="list-style-type: none"><li>1. One child volunteers to be the <b>Heartwood</b> of the tree. He/she will stand up straight and sturdy, ready to support the following layers of the tree. To symbolize the heartwood, the child will thump her/his chest, simulating the sound of a beating heart.</li><li>2. The next element is the <b>Cambium</b> layer, the distinct, formative layer that lies between the Heartwood and the bark. It's here that water and nutrients flow up and down the tree, within the vascular tissues of the xylem and phloem. To represent the cambium, three or four children will clasp hands to form a ring facing inward, and surrounding the Heartwood. To show the flow of nutrients through the tree, the cambium will move their clasped hands, saying "UUUUUUP" and "DOWWWN" to match the movement of their hands.</li><li>3. Surrounding the cambium on a tree is the protective outer layer called <b>Bark</b>. To act out bark have six or more students surround the cambium layer, hook elbows (to symbolize a protective barrier) and face outward. These students will "BARK", like a watchdog, further symbolizing the protection bark provides a tree with.</li></ol>

4. Now the **Roots** must be made, so the tree can gather nutrients and water. Five or more students lie down with their feet pointing away from the tree circle and their hands to their sides. To simulate the intake action of the roots the children wiggle their feet and hands and make loud slurping noises.

5. The last elements are the **Branches and Leaves**. They are needed to acquire sunlight and produce energy through photosynthesis. To symbolize branches the remaining students put one arm on a Bark student, and have the other outstretched toward the sky, wiggling fingers on the free hand are their leaves. These students will "HUMMM" to represent the process of photosynthesis. If there are a lot of students, have those remaining be leaves by joining a hand to the branches and stretching the other to the sky. The branches will "RATTLE" and the leaves will make the photosynthetic "HUMMM".

**Variations:**

Add the element of wind into the game and make the tree sway. Pretend the sun is shining brightly and have the leaves hum louder, then have the weather become overcast and start to rain. Use your imagination and have fun!