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Minnesota School Forest Program

Twig Observation – Indoor Match Game



This is a good activity to refresh students' observation skills at any age. I've used it as an icebreaker with adults and with students as a way to teach science observation or using a dichotomous key. -Laura Duffey, Minnesota PLT and School Forest

Grade(s): K-12, adult

Materials: pairs or groups of twigs; bag or box

Objective(s): Students will be able to match twigs. Students will explore similar and different properties of tree branches.

Procedure: First, note the number of students in your class.

Before class, go outside and collect the same number of woody twigs as students (about 1 foot long). Students will form pair matches, so collect different species of trees and shrubs making sure you have at least 2 samples from each species. Remove the leaves, if any. Put all the twigs in a bag or box.

If there are not a lot of tree species in your area, it's ok to provide more than one pair of each species and let groups of 4 or 6 find each other. For younger grades (K-3), this will make the matching easier.

Let each student choose a twig from the bag. Tell them to observe it closely, using as many senses as possible—touch, smell, sight. Ask them to note the placement of buds on the twig. Are the buds opposite each other as in the photo above? Or are they staggered alternately along the twig as in the photo below? Notice the bark, leaf scars, buds, and pith of the twig.

Next, have each student find a person in the room who has a twig with similar features. If you have time and it's age-appropriate, provide tree ID books and let each small group try to figure out what species of twig they have. (Using dichotomous keys is grade 7 Minnesota science standard.)

Notes: It's best to harvest twigs from the end of the branches. Don't remove the leader branch, which is the topmost twig on a sapling.

Removing the leaves replicates the typical leaf-off conditions of deciduous trees during a typical Minnesota school year, and gives participants a little more confidence in identifying trees without relying on leaf shape.



Twig with alternate (staggered) buds