

# Twig Observation - Indoor Match Game

*This is a good activity to refresh student observation skills at any age. Best, you don't need to know the names of the trees!*

**Science, ELA**

**Grade(s):** gr. 4-6, variations for gr. 1-3 and gr. 7 and up

**Objective(s):** Students will explore properties of tree branches, learn vocabulary, and then match their twig with another student's twig.

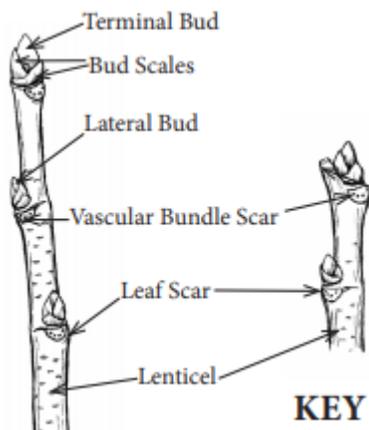
**Procedure:**

1. Note the number of students in your class. Before class, go outside and collect that same number of woody twigs as students (about 1 foot long) of different species of trees and shrubs. For example, if you have 30 students, collect 30 twigs. Make sure you have at least two samples of each species. Students will form pair matches.

*Note: Harvest each type of twig from the same tree or shrub. Don't remove the leader branch, which is the topmost twig on a sapling. You may want to flag the tree to remember where the twigs came from.*

*Make sure to remove any leaves!*

2. Put all the twigs on a table.
3. Let each student choose one twig. Tell them to observe it closely, and use as many senses as possible—touch, smell, sight.
  - Have students look for patterns (such as opposite and alternate bud arrangements).
  - Ask students what they observe and record their responses on the board.
  - Build vocabulary by drawing a sample twig on the board and identify parts (buds, bud scars, lenticels, hairs, etc.). Some species may have all or fewer of the parts in the diagram below.



**Terminal bud:** The bud formed at the tip of the twig

**Bud scales:** Small scale-like structures that are modified leaves covering the bud during its winter dormancy

**Lateral bud:** The buds formed on the side of the twig, not the bud at the end of the twig

**Vascular bundle scars:** A small mark on a leaf scar indicating a point where a vein from the leaf was once connected with the stem

**Leaf scar:** A scar left on the twig when the leaf fell off

**Lenticel:** A small corky area or speck serving as a breathing pore



Example of a twig with alternate bud arrangement



Example of a twig with opposite bud arrangement

4. After observing and going over vocabulary, have each student find a person in the room who has a twig with similar features.
5. Optional: Take students outside to the flagged trees where you harvested the twigs. Challenge students to find the tree that their twig came from.

### Assessment Opportunity

Have students draw their twig and label the twig's features using vocabulary. Or tape their twig to a piece of paper and label features on the paper.

### Modifications

**Grades 1-3:** Collect just two or three types of twigs and give one to each student. Have the students find the other students in the class to match their twigs and to form two or three large groups of students.

**Gr 7 and up:** After matching pairs of twigs, have students use a [Winter Tree ID Dichotomous Key](#) to identify their twig.

**Adults:** Use the basic activity as an icebreaker. As people match their twigs have them introduce each other.

*Twig diagram image from the Wisconsin LEAF Program's [Winter Tree ID Dichotomous Key](#)*