

Build-a-Tree Assessment

Assessing Declarative Knowledge:

- This assessment measures students' ability to demonstrate their understanding of the structure of a tree.
- This assessment is to be used after Activity One/Part 8 (pg. 19).

Criterion for a Complete Response:

- Accurately constructs a tree and verbally identifies four tree parts.

Materials Needed for Each Student:

- 1 piece of brown construction paper
- 1 piece of green construction paper
- 5-10 pieces of 3" long string
- 1 piece of 8 ½" X 11" manila paper

Directions for Students:

- "Decide which materials you will need to show all the important parts of a tree."
- "Use your adhesive to attach the pieces you have made to the manila sheet of paper."
- "Put your name at the top of the paper."
- "Build a tree. Include all four parts of the tree. Be ready to tell me about your tree."

Notes:

- When students are finished constructing their tree, leave the conversation you have with them as open ended as possible by starting with the following question...
"What can you tell me about your tree?"
- The more you scaffold the question, the less you will elicit from your students about their own thinking.
- Record student responses on their work.

Misconceptions:

- **Children may not understand the idea of a soil line and roots being covered by the soil.**
- **If this assessment reveals that this misconception is held by your students try one or more of these activities:**
 - **Use a real potted tree. Lift it out of the pot to show roots.**
 - **Cut the pot of a real tree to show roots.**
 - **Have students modify the tree posters to show soil line with either strips or chunks of paper.**

- **Show students how roots draw water up by demonstrating with a daffodil in colored water.**

Have students use straws to model root action.