



The Missing Piece

Teachers Instructions

Time: 30 minutes

Group Size: 3 students

Goals: To highlight that every part of habitat makes a difference; systems thinking exploration of dependency and connections

Materials (per group):

Part 1

4 pieces of newspaper

6 pipe cleaners

Scotch Tape (one roll per group with a tiger sticker on it)

Part 2

4 pieces of newspaper

6 pipe cleaners

Tools: Scissors (if desired)

Activity Plan:

Part 1:

1. **Introduction:** Point out that a home or habitat depends on the resources available.
2. **Materials Distribution (Part 1):** Create a collection of materials for each group. Do not give groups their materials until they have shown you a sketch of a possible building.
3. **Planning:** Encourage groups to make a sketch of how they think they will be able to make the tallest building possible in 15 minutes. Have groups show you their sketches before allowing them to build.
4. **Give groups approximately 15 minutes to build their structure.** It may be helpful to give each group a piece of felt (9in. X 12 in.) to build on. Make sure that the groups understand that they should not tape their building to the felt (i.e., building should be free-standing)
5. Take some time to praise/discuss each building. Leave the structures intact.

Part 2:

Environmental Change: *For Part 2, tape is not available!* Compare its' loss to extinction of a species or to deforestation.

6. **Distribute the materials listed for Part 2.** Challenge the groups to try to build the same structure (as a default, they can build a different one) without using any tape.
7. **Allow about 10-15 minutes. Have groups share their experiences building with one less element (tape) and how it impacted their structures.**

Learning Goal:

Point out that they can think of the missing tape as something missing in the habitat. It can be an animal, a plant, water, etc. One missing piece can make the whole system fall apart. A missing piece can also create changes called adaptations. Ask students if they can identify any “adaptations” that they needed to make when the tape was missing.

