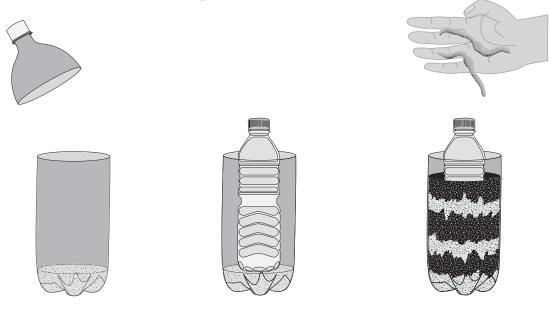
Directions for Earthworm Habitat Construction and Observations

- 1. Gather all necessary materials.
- 2. Use scissors to carefully cut the top off of a plastic two-liter bottle.
- 3. Put the empty, small plastic bottle inside the center of the two-liter bottle.
- 4. While one person holds the small bottle in place, another person can pour alternating layers of sand and garden soil into the space between the wall of the small plastic bottle and the two-liter bottle until it is about two-thirds full, as shown in the illustration. This design will keep the worms near the interface of the soil and two-liter bottle wall so we can see them.
- 5. Do not pack the soil down, it should remain loose so the earthworms can easily burrow through.
- 6. Use a spray bottle to squirt enough water onto the soil to make the layers damp but not soggy.
- 7. Earthworms like their habitat to be dark. Cut a strip of brown paper bag that can be taped around the habitat to keep the light out.
- 8. Sprinkle your selected earthworm foods on top of the soil.
- 9. Once your teacher has inspected your habitat, you will receive two earthworms to gently place on top of your soil. Cover your earthworm habitat with cheesecloth and secure with a rubber band.
- 10. Place your earthworm habitat in a cool, dark place for two or three days before uncovering the paper cover to observe earthworm behavior.
- 11. Replenish habitat with food and dampen soil as needed every few days.



Keep worm habitats in a cool, dark place. Be careful not to let the habitat dry out or get too hot, this could kill the worms. Food waste that is too salty or contains a lot of acidic remnants like tomatoes and citrus can also kill worms.

Directions for Earthworm Habitat (continued)

Journal Observations

Each time you uncover the paper cover from your earthworm habitat, use a piece of binder paper to record the following observations:

- □ Date
- □ Conditions of the habitat (water, food, etc.)
- □ What foods did earthworms eat from the last time you fed them? What foods remain uneaten?
- □ What food did you provide today, if any?
- \Box Can you see the worms? If so, describe their location in the habitat.
- \Box What evidence is there of worm activity?

Concluding Paragraph

At the end of the two-week observation period, write a paragraph or create a slideshow presentation or video to explain the following:

- How this earthworm habitat is a model of how matter cycles among plants, animals, decomposers, and the environment.
- How earthworms can help reduce waste that people throw away, giving examples from your own household.