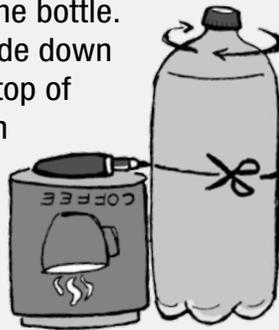


MAKE YOUR OWN CLOUD FOREST TERRARIUM

The Andean cloud forest is found on the eastern slope of the Andes Mountains. The warm, **humid** air from the **Amazon basin** makes its way up the mountains where it is blocked by cold, **denser** air there. The trapped air drops its moisture in the form of clouds and mist, quenching the thirst of the plants that grow in this unique **ecosystem**. A terrarium made from a soda bottle works like the cloud forest. The moist air near the **soil** rises up and is blocked by the top of the bottle where it condenses, creating ideal growing conditions for moisture-loving plants.

Hint: Ask an adult for help cutting the bottle.

1 Remove the label from the bottle. Turn the coffee cup upside down and then rest the marker on top of it. Hold the bottle upright with the marker resting against it about 6 inches up (15 centimeters). Rotate the bottle to draw a straight line all the way around it.



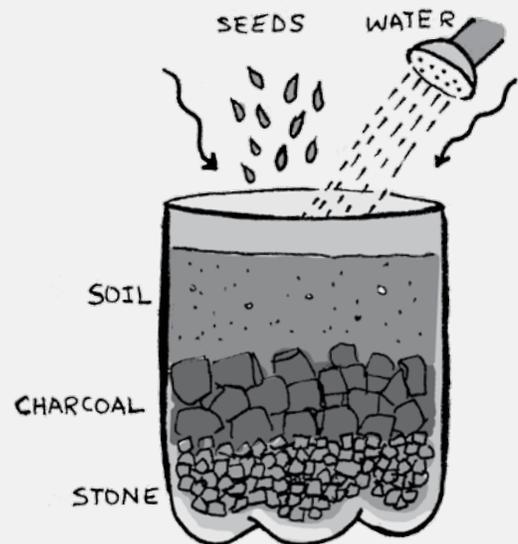
2 Cut the bottle along the line with a pair of scissors. You may need to start a small hole in the bottle before you can cut it with the scissors. Please ask a parent or adult to help you with the cutting.

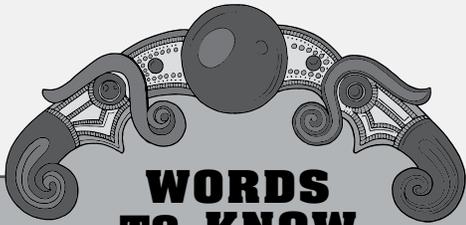
3 Place a handful of stones in the bottom half of the bottle, about 1–2 inches deep (2½ to 5 centimeters).

4 Place the charcoal and then the soil in the bottle. Fill it to about 1 inch from the top of the cutoff section of the bottle (2½ centimeters).

SUPPLIES

- 2-liter soda bottle with cap
- coffee cup
- marker
- scissors
- handful of small stones or pebbles
- handful of activated charcoal
- 2 cups of potting soil (500 milliliters)
- seeds or seedlings (ferns, thyme, and oregano work well)
- water





WORDS TO KNOW

humid: when the air has a lot of moisture in it.

Amazon basin: the land area in central and eastern South America that the water flows across or under to reach the Amazon River.

dense: when something is tightly packed in its space.

ecosystem: a community of living and nonliving things and their environment. Living things are plants, animals, and insects. Nonliving things are soil, rocks, and water.

soil: the top layer of the earth.

5 Plant your seeds or seedlings. You should plant six to ten seeds. Later, as they grow, you can pluck out some of the weaker ones and leave the two or three best ones.

6 Water your terrarium before placing the top on it. The soil should be moist but not soaked.

7 Squeeze the top piece of the bottle onto the bottom half so the top is on the outside. If you have trouble fitting the two pieces together, cut a slit partway up the top half of the bottle.

8 Once the plants have sprouted you should make sure the bottle gets some sunlight, but not too much sunlight. Don't leave it in direct light for the entire day. It is a closed environment and can get very hot inside.

9 Look carefully at the soil in the terrarium. It should look moist but not soaked or too dry.

Beads of water should form on the inside of the top of the bottle. Moisture should drip down the sides and continue to water the soil. If it appears to be too wet you can always take the top off and leave it uncovered for a day or two.

