

# Claim the Rain

As your students have learned, drinking water comes from surface water (rivers, lakes, and reservoirs) and groundwater (aquifers). Of course, there's another common source of water: the rain clouds above your head! Harvesting rainwater is a great way to water lawns and gardens or wash a car. It doesn't use up valuable filtered water and it's free! With this activity, students will create a rainwater collection system that can be used at home or at school.

**Objective:** Use what students have learned to build a rainwater collection system.

**Materials:** large plastic barrel or 5-gallon buckets (should be clean and not have held chemicals or trash), fine mesh or nylon stockings, elastic rope, drill with  $\frac{7}{8}$ " spade bit (optional), spigot (optional), waterproof silicone caulk (optional)

**Time required:** 90 minutes

## What to do:

1. To build a large rain barrel for use at school, choose a large plastic barrel or clean plastic trash bin. If students are creating home collection systems, each should use a 5-gallon bucket.
2. *(This step is optional.)* Carefully drill a hole a few inches from the bottom of each bucket or barrel using a  $\frac{7}{8}$ " spade bit. Insert the spigot into the hole and seal around the spigot with waterproof silicone caulk. The spigot will allow water to be easily drawn from the bucket.
3. Stretch nylon stockings or fine mesh over the top of the bucket and seal tightly around the bucket's lip with elastic rope. This will keep mosquitoes from breeding in the collected rainwater.
4. Place the bucket(s) in a location that gets plenty of rain. After the next rainfall, ask students to check on their rain barrels to see how much water they collected. Measure the water using a yardstick. Discuss possible uses for the harvested rainwater such as watering plants, washing windows, etc.



Photos: rain barrel, © Ingo Bartussek/Fotolia.com; background, © Plainview/Stockphoto.

