Every Drop Counts Post Visit

Thank you for your visit to the Putnam Museum. We strive to provide high-quality programs and hope that you and your students enjoyed your time with us. We appreciate your time and all you do for your students. Thank you for letting us be a part of their learning.

Sincerely,
Kara Fedje
Education Specialist

Additional Activities for your Classroom:

How to Make a Rain Barrel

Now that you know just how important water is for humans, plants, and animals, you may want to reduce your consumption of water. One way I reuse water is through grey water. Grey water is water that runs off from the roof of your house or comes down through natural rainwater. You can collect rain water by making your own rain barrel.

List of Materials: Drill with a one inch drill bit, clean garbage bin, Â¾" hose bib spigot, locknut, silicone or waterproof glue, Teflon tape, two cinder blocks

Directions:

1. Always ask a parent or adult for permission to help you create your very own rain barrel.
2. Drill a 1" hole just off the bottom of the container for the spigot assembly. I put mine as low as possible to maximize easy water use. It's designed to be used with a stand. I use two cinder blocks.
3. Drill a 1" hole an inch or so below the rim for your overflow. This hole should go in the front of the barrel about one inch from the top. This is where excess water will flow.
4. Use that 1" bit to drill a dozen or so holes in the lid. This is where the water will flow through. If you want a filtering lid with screen, trace the outline of the lid on a mesh fiberglass screen and then cut it out. Screw on, if necessary, or just tighten ring around cap to secure. This screen is designed to keep mosquitoes out.

5. Wrap the barrel end of the spigot three times around with Teflon tape and then screw in the spigot squarely. It should go on by hand.

6. Screw on the locknut and finish tightening by turning the spigot while holding the locknut with a wrench or needle nose pliers. You may need a second person to turn while you hold or vice versa

7. Take a tube of all-purpose silicone "goop" and apply a bead where spigot meets the inside and the outside of the barrel. Allow time to dry before using.

8. If catching water from drain pipe, you can shorten your drain pipe by sawing off the bottom. Measure the height of the rain barrel (i.e.: garbage can) on top of cinder blocks before you cut the drain pipe.

9. Place the rain barrel underneath the drain pipe and you will collect water as soon as it rains. Empty water from the spigot to water your garden, yard, and plants.

Learning Probe:

The following trivia questions should be posed to your students both before and after the students visit the museum. The idea of a learning probe is to evaluate or measure their knowledge pre-visit and post-visit. This helps the teachers provide a proper assessment of the exposure of information.

1. If a gallon of water represents the entire earth's water, how much of that gallon would be freshwater available for humans to drink? 1 half gallon, 1 pint, 1 cup, ½ cup, 1 tablespoon, 1 drop (answer: 1 drop)
1. What are some materials that can filter water?
   (Answer: gravel, sand, cloth or paper, active carbon)
2. What is a non point source pollutant?
   (Answer: A non-point source pollutant is a pollutant that does not result from a specific single location but generally results from pollution and rain mixing)
3. What are some tests that scientists do when looking for pollutants?
   (Answer: pH, temperature, phosphate, nitrate, dissolved oxygen, etc.)
4. What are some ways you would clean up an oil spill?
   (Answer: use straw or sawdust, water pressure, burn it, pumps, polymers)