

Are you looking for something to do to keep your brain active and engaged? We're here to help with Science at Home! This activity is meant for adults, or teens with adult supervision. You can also visit us at the Museum's [Science at Home](#) page for additional resources.

Making a DIY Rain Barrel



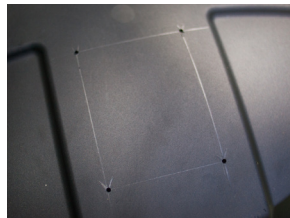
Materials Needed:

- Plastic trash can with lid
- Cinder blocks (4–8)
- Drill with 3/4" spade bit & utility knife
- Hacksaw if gutter is metal*
- Hose spigot 3/4" threaded
- Small tube of waterproof caulk
- 3/4" washer
- #11 rubber O-ring

Instructions:



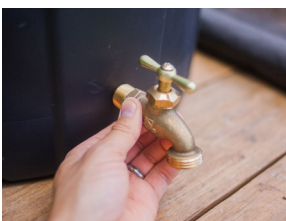
Step 1: Scout a location under a drain spout near your garden for your rain barrel. Create a level platform for your rain barrel with blocks and set your barrel on top. Mark and cut your gutter spout with a utility knife or hacksaw so that the bottom ends inside your barrel.



Step 2: Use your cut-off gutter spout as a template to draw an opening on your barrel lid. Use a utility knife to cut along the lines, creating an entry point for the gutter spout.



Step 3: Plug the gutter spout into your rain barrel lid to begin collecting water.



Step 4: Drill or cut a 3/4" hole about 3 inches above the bottom of your barrel.



Step 5: Add an O-ring and washer to your spigot inlet and screw it in. Add a bead of caulk behind the washer and allow to dry to make it watertight.



Step 6: Your rain barrel is now ready to go! Rain will run off your roof into the barrel and be ready whenever you need to fill your watering can. You can even hook up your hose to the spigot if you want to!

What We've Learned

Instead of using your well or city water supply in the garden, you can easily create your own reservoir. By harnessing the renewable power of the rain and collecting runoff from the gutter on your roof, you can have your own handy supply of water that replenishes every time it rains. You can complete this project with a very small investment and it will pay itself off quickly from the savings on your water bill. Conserving our natural resources is a great way to be a responsible global citizen. A DIY rain barrel is an essential resource for any backyard gardener.

Everyday Connections

Did you know that the average US family can waste 180 gallons of water per week? That is 9,400 gallons a year! If the average lawn is watered for just 20 minutes a day, it is like taking 800 extra showers in the year. Simple steps like reusing rain water for tasks that do not require potable water can help save a lot of water. Another easy way to conserve water is by turning off the tap while you brush your teeth. This can save 8 gallons of water per day! Assuming you brush your teeth twice daily, you could save almost 6,000 gallons a year just by brushing your teeth without the water running.

Having Fun?

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