

My Miniature Greenhouse!

Take-home Activity Snapshot

Related "My American Farm" Game



Farmers Market Challenge
Available at www.myamericanfarm.org

Grade Levels

- Third - Fifth

Content Area

- Science

Standards

NS.K-4.1, NS.5-8.1 Science as Inquiry

NS.k-4.3 Life Science

National Science Education Standards, National Academies of Science

What Will You Do?

In this activity you will create your very own miniature greenhouse, with the help of an adult!

Supplies You'll Need

- 1 empty 2L Soda Bottle
- Scissors
- Gravel or small stones from your yard
- Potting soil
- Seeds or small plants
- Water
- Tape

Getting Ready

This is an activity that is fun to do at home with your family. Farmers around America steward the land, which means they take care of it! You'll learn to take care of the land today as you create your very own miniature greenhouse using recycled products!

To get ready, find a safe space to work. You may want to cover a table if you're working inside, because we might get messy! Hunt around and find all of your supplies listed above. Ask an adult to help you, especially cutting the bottle. Be safe and have fun!

Build Your Mini-Greenhouse: Step-by-Step

Step 1: Your Greenhouse

With adult help, carefully cut your soda bottle in half, about 4-5 inches from the bottom. You'll end up with the base, which we will fill with soil, and the top, which will act like a greenhouse helping your plants grow!

Step 2: Drainage

Cover the bottom of your bottle with gravel or small rocks, about 1 inch deep. This will help water drain from the soil.

Step 3: Preparing the Soil

Cover the gravel with about 3 inches of potting soil. You can buy this at a gardening store, or you can dig up some soil from your yard if you have adult permission!

Step 4: Time to Plant!

If you are using seeds, you need to make some holes for your seeds in the soil. Gently poke your pointer finger into the soil, about half-way up your fingernail. Place your seed carefully in this hole. Do this for each seed, and make sure to space seeds evenly apart. When you are done, fill in the holes to cover the seeds with soil.





If you are using **small plants** or seedlings, your greenhouse will be ready in no time!

- Carefully remove seedlings from plastic containers. You can do this by pinching the bottom of the container and gently pulling at the base of the stem.
- Dig a hole big enough to completely hold the roots of your seedling. Place your seedling in the soil, and add some more soil on the top if you need. Make sure the roots are covered.
- You can even use small plants from your yard if you have adult permission. Carefully dig up small flowers or plants, and transplant them into your soil using the steps above.

Step 5: Water

Your plants are now ready to water! Use a watering can, or a cup, and carefully pour water onto the soil. Watch the gravel at the bottom, and make sure your water does not fill up over the top of the rocks. Your soil needs to have air in order for the roots to grow!

Step 6: Greenhouse!

Place the top of the soda bottle back on, to act as a greenhouse for your plants. This top will keep your plants warm and help them grow faster. Place one piece of tape on the back of the bottle to hold the top in place. Now you can flip the top back like a hinge.

Step 7: Sun

Place your mini-greenhouse in an area that gets plenty of light, inside or outside. If you start to notice a lot of condensation (water drops) on the inside of your bottle, open the top up for a few hours so that your plants don't mildew.

Step 8: Water

Don't forget to water! Every couple of days, carefully stick your finger in the soil. If the soil sticks to your finger because it is moist, the plants have enough water. If the soil is dry and falls off your finger, it is time to water!

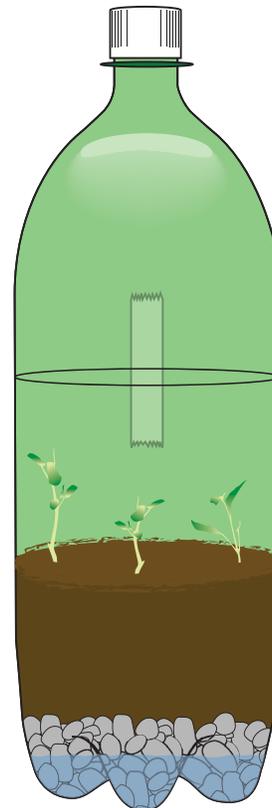


Step 9: Clean Up

Make sure to clean up your area and put all tools or supplies back where you found them.

Fun Enrichment Activity

Do you want to learn more about growing plants? Make a few greenhouses out of different types of plastic bottles, and conduct a science experiment to find out which bottle works best for growing plants!



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