



Pop Bottle Ecosystem

An ecosystem is a biological community of interacting organisms and their physical environment. Learning about them can be fun and exciting! Below are the steps to build your very own pop bottle ecosystem!

1. Start with a 2-liter bottle, clear is best so you can see through it. Cut the top off the bottle, just below where the straight sides begin on the bottle.
2. Next add some aquarium rocks, some water, and a few goldfish. Make sure you use water your goldfish are acclimated to temperature wise. If you leave the water sitting out at room temperature for a few hours before you add it to the goldfish water, it will be fine.
3. Now get two coffee filter papers and cut two small holes in the center. Cut a piece of string long enough so it can reach from the top of the bottle down to the water with the goldfish. Tie a knot in one end of the string. Thread the un-knotted end through the top of the filter papers, through the little holes you made. Set the filter paper down inside the inverted top of the bottle that you already cut off.
4. Get a plant from the garden center and place it into the coffee filter inside the inverted top of the pop bottle. You may need a little extra gardening soil to fill up the space. The base of the plant should end up about level with the upper cut edge of the pop bottle.
5. Place the plant and top of the bottle into the lower part of the bottle, the part with the goldfish in it, so that the string dangles down into the water.
6. Poke a small hole in the side of the lower part of the bottle, above the water line, but low enough that your child can put a flake or two of fish food through the hole to feed the fish each day. The water, rich with nutrients from the fish, will pick up the string to water your plants. You have made a little ecosystem with a plant, animals, water, soil, rocks, air, sunlight, and food that you replenish every day.
7. Once built discuss the different aspects of the ecosystem and don't forget to feed your new pet!

Below are a couple of videos on ecosystems to enjoy!

What is an Ecosystem? <https://www.youtube.com/watch?v=JPHqUxxyLsY>

Learning About Ecosystems <https://www.youtube.com/watch?v=tQjbqgPxKc0>

Any questions, contact Annette King at twinkings2@gmail.com!