

Tree Terrarium



This soda bottle terrarium is a learning experiment, which will help you understand the life cycle of your tree. A terrarium allows you to observe your tree as it grows from a seed.

Terrarium Materials:

- One 2-liter bottle of soda (with cap)
- Potting Soil
- A handful of small stones or pebbles
- A Marker
- Scissors
- Seeds from your tree
- Not required: activated charcoal and sphagnum moss

Terrarium order of assembly and explanations:

1. Pebbles

- The pebbles at the bottom allow excess water to flow to the bottom of the bottle. This will prevent it from soaking the soil and making it muddy. As the temperature inside the bottle rises from sunlight the water will be drawn up into the bottle. It becomes like the earth with a nice cycle of water flow just like rain. Dew will even collect on the inside top of your bottle then slowly drip down onto the plants like rain.

2. Activated Charcoal

- If you put a thin layer of charcoal (1 - 1.5 cm) in your terrarium it acts as a filter purifying the water as it flows up and down. The tree and the bacteria in the soil can cause the inside of the terrarium to get very dirty and even to rot.

3. Sphagnum or Spanish Moss

- The moss simply acts as a screen to prevent your soil from settling down into the rocks yet it allows the water to flow smoothly.

4. Soil

- This is the nutrition for the plants. They will absorb the nutrients from the soil with their roots.

5. Tree seed

- Plant the seed a few centimeters within the soil.



How to make the terrarium:

1. Draw a line around the bottle about six inches up from the bottom. To make your line straight, rest the marker on the top of an upside down coffee cup then I rotate the 2 liter bottle. It makes a nice straight line.
2. Cut the bottle along the line with a pair of scissors. You may need to start a small hole in the bottle before you can cut it with the scissors.
3. Place a handful of stones in the bottom half of the bottle. About 1-2 inches deep should be good.
4. Add soil to the bottle terrarium
5. Place your other materials in the bottle. The charcoal, then the moss and then the soil. If you are not using charcoal or moss then put just the soil in. fill it to about 2.5 cm from the top.
6. Now plant your seeds! You should plant 2 to 4 seeds and later as they grow you can pluck out some of the weaker ones.
 - a. Don't forget to water your terrarium before placing the top on. The soil should be moist but not soaked.
7. Place the top on. You can squeeze the top onto the bottom so the top is on the outside.
8. If you have trouble fitting the two pieces together you can cut a small slit down the bottom half of the bottle. This will help it close up a bit and make it easier to fit the top over



Taking Care of Your Soda Bottle Terrarium

1. There are two important factors you have to consider when it comes to your terrarium: the amount of sunlight it gets and the amount of water that is inside.
2. Once the plants have sprouted you should make sure it gets sunlight but do not leave it in direct sunlight for the entire day. It is a closed environment and it can get very hot inside.
3. Water - Look carefully at the soil in the terrarium. It should look moist but not soaked or too dry. Beads of water should form on the top inside near edge and these will drip down the sides and continue to water the soil. If it appears to be too wet you can take the top off and leave it uncovered for a day or two.