

SELF-WATERING SEED STARTER

Be an urban farmer! Get a jump on a summer garden by starting your seeds inside with this self-watering seed starter made from a re-purposed pop bottle. Growing your own food is fun and you will likely find that veggies you grow yourself taste even better than the store-bought kind!

you'll need:

- Recycled pop or water bottle with cap
- Pen knife + scissors
- Nail and hammer or a drill with small drill bit
- Thick string or yarn
- Potting soil
- Seeds

how does this work?

Water is a molecule made up of one oxygen atom and two hydrogen atoms arranged sort of like a Mickey Mouse hat. Water is a polar molecule (the hydrogen side has a slightly positive charge and the oxygen side a slightly negative charge) and is attracted to other water molecules. Water is wicked up the string through capillary action and surface tension from the bottom water reservoir and into the soil where your seeds are growing. Water is pretty amazing and the unique properties of water make life, as we know it on earth, possible. Why not research some of water's other special characteristics?

For more ideas on exploring nature with your family visit the Young Naturalists' Club at www.ync.ca. If you are already a member of the YNC, remember you can use the Self-Watering Seed Starter as part of your Action Awards Quest! This activity was adapted with permission from www.seattlesundries.com.



what to do:

1. Cut the bottle approximately in half. You may want to start the cut with an x-acto knife and then use scissors to complete it. You may need an adult to help you with this task or do this part for you.
2. Make a hole in the bottle cap. You can use a nail, awl or even a drill. Put the cap back on the bottle top.
3. Cut a length of yarn or thick string about 30-45 cm in length. Double it over and tie a knot at the top making knotted a loop.
4. Thread the string length through the cap, leaving the loop inside the cap and the string ends dangling outside.
5. Place the top of the bottle inside the bottom, cap end down, fill with soil and plant your seeds. It is a good idea to label each pot to help you remember what you planted.
6. The first time you water you will want to water from the top to make sure the soil is wet. Add enough water so that a couple of inches accumulate in the bottom of your grower, ensuring the string is submerged in the water.
7. As the soil dries, water will be sucked up the string* in just the right amount to keep the soil moist enough for your growing plant.
8. When you notice the water level in the reservoir getting low, add more water. If the soil dries out completely, water again from the top.
9. Place your grower in a sunny location, such as a windowsill and wait for your seeds to sprout!



Image courtesy of YNC