

REUSE OVER RECYCLE:

When we look at the three R's: Reduce, Reuse, Recycle, recycling comes last- and there is a reason for that! Recycling should be the last step in dealing with waste. Let's think of this in terms of water bottles.

We <u>REDUCE</u> by choosing reusable water bottles instead of disposable ones, but sometimes we still end up with plastic bottles. When we do have plastic bottles, we usually <u>RECYCLE</u> them right away. Typically we see no harm skipping straight to recycling. However, recycling plastic is expensive and it has only gotten harder to do. Unfortunately, new plastic is much cheaper to make and is of higher quality, so it's easier to continue producing and using new plastic (for both the makers and buyers). Ultimately, only <u>10%</u> of our plastic has ever been recycled.

While recycling is still very important, the ultimate goal is to keep waste out of the waste stream. This means we have to come up with creative ways to REUSE materials before throwing them in the recycling bin.

Source: KKB Blog on Plastic Recycling



SELF-WATERING WATER BOTTLE PLANTERS:

Whether you are struggling to keep your plants watered or you want to start seeds to put in your garden, self watering containers are a great option!

HOW DOES IT WORK?

Through a process called <u>Capillary</u> action! Capillary action occurs because water is sticky thanks to the forces of <u>cohesion</u> (water molecules like to stay close together) and adhesion (water molecules are attracted and stick to other substances). As the soil gets dry, water will be attracted to the fibers on the string and move upward into the soil!

Source: USGS Water Science School

PREPARING YOUR BOTTLE FOR PLANTING

SUPPLIES NEEDED

- Plastic bottle
- Soil
- · Seeds or plant
- A pin, needle, or hole puncher
- Scissors
- String

- Start by removing the cap and cutting off the top one third of the bottle
 - Reapply the lid so it is not lost



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- Taking the top part of the bottle, use your hole puncher or pin to make a hole near the lid end of the bottle. Repeat on the other side directly across from the first hole.
- If you use a pin, you will need to use the tip or the pen or your scissors to make your hole wider
- Pull your string through the two holes so the loose ends hang down towards the cap
- Place the top part of the bottle back in the bottom part lid down.
- Make sure the sting is long enough to touch the bottom of the bottle, then tie it off in a knot to close the loop



For more activities and information visit www.keepknoxvillebeautiful.org

PLANTING IN YOUR BOTTLE

- Fill the bottom part of the bottle with water
- Only fill about 1/3 1/2 of the bottom with water, since the top needs some room to go on.



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- Carefully place the top with the lid facing down onto the bottom so the string is submerged in water
- Plant your seeds or repot a small plant in your soil! This is good for plants that like water (so no succulents).
 Pictured here are wildflowers native to Knoxville about to bloom!
- Lightly water the soil of your new plant, then place in a sunny window and enjoy!
- Remove the top and refill the bottom whenever water gets low
- If it is looking extra dry at the top of the soil add some water now and then
- Whenever the plant is ready to repot or you are done with this project, make sure to remove the string and rinse out the bottle so it can continue its life cycle to be RECYCLED

