

# STEM

*starts now*

## Terrarium

**Recommended Age:** 53-60 Months

**STEM concepts:** Science (life science), Technology (simple tools), Engineering(Engineering), Math(counting)

**Materials:** 2-Liter soda bottle, gravel, sphagnum or peat moss, activated charcoal(-pet stores sell this), potting soil, spoon, packing tape, a spray bottle with water, small plants(local nurseries can recommend plants or look for tropical houseplants)

**What to do:** Cut the top third of the soda bottle off. Put a thin layer of gravel at the bottom. Add a thin layer of sphagnum or peat moss. Add a thin layer of activated charcoal. Add 2-3 inches of potting soil. Have your child make a hole in the soil for their plant. Gently press the soil around the plant. Use a spray bottle to add water to the soil, making it moist. Place the top of the bottle back on and seal with packing tape. Dont seal it to tight that airflow is cut off. You'll want a little bit of air flow. If done correctly it will not need anymore water. (If you seal it too tight, you may consider poking a small hole with a tack or pin on the side of the terrarium to allow the air needed) Place in a well lit area and observe it working over the next few weeks.

**Language and Communication:** Ask your child, "What do plants need to grow?"(air, light, water, and soil) Talk about why the soda bottle is good for a terrarium. (It can hold water. It is translucent, this means see through.)

Ask your student if they see anything happening, if anything is changing or occuring. Have your child count the leaves they see on the plants as they grow to show growth. Remind your child that this growth only occurs because it has its 4 essentials.

**Expand the Activity:** Instead of planting grown plants, plant seeds and see if this changes the way it grows. Add an additional inch to the terrarium if you choice this route.

