

CREATE YOUR OWN TERRARIUM

Just like the eight researchers who experimented with creating a self-sustaining environment, we will attempt to create our own self-sustaining ecosystem that thrives on the cycling of energy and other materials, such as carbon.

Purpose

To create a self-sustaining closed ecosystem.

Materials

- Mason jar (or any clear jar with a lid)
- Cactus potting soil
- Aquarium sand/gravel
- Water
- Plants
- Activated charcoal (you can get this from a pet store)

Procedure

1. Wipe out the jar to ensure that it is clean.
2. Place 2–5 cm of aquarium sand at the bottom of the jar.
3. Add 1–2 cm of activated charcoal.
4. Next, add 5–10 cm of cactus potting soil.
5. You may choose to add in some rocks and/or a small piece of wood.
6. Insert your living organisms (plants).
**Optional:* You may add a couple of bugs to your ecosystem if you'd like.
7. Add enough water to make sure the sand is wet (not drowning in water, just wet).
8. Seal your jar with the lid. Place the ecosystem near the window or under a light source.



Adapted from Kenney, J. (2013). *How to Make a Mason Jar Terrarium. The Science Classroom.*

<https://thescienceclassroom.org/how-to-make-your-own-self-contained-ecosystem-biosphere/>