

## Jungle in a Jar

**Let's Create!** Close your eyes and imagine a jungle. If you've seen pictures or videos or have even been lucky enough yourself to visit the jungle, you'll know based on what you've seen that jungles are lush and green, and full of plants, and wildlife. Jungles are their own perfect ecosystem, and we can replicate that perfect jungle in our own homes by making a terrarium. A terrarium is a mini ecological environment, like a jungle, that's made and sealed in a clear glass container, like a jar or old bottle, and filled with plants. Once you make your terrarium and seal it, it becomes its own world. A terrarium, like our big world, uses the moisture from the plants and soil we seal inside to create its own microscopic-weather cycle to keep everything alive and thriving. If you make a terrarium right it can become a contained environment that can pretty much take care of itself. So you'll have your own mini jungle that doesn't even need watering! Pretty cool, right? Let's get making!



### How-to video

<https://youtu.be/4JncPhqu5qY>

### Materials:

- A clear jar or bottle that seals. You want it to be clear so the sun can get through the glass.
- Plants that like moisture
- Potting soil
- Small rocks or pebbles to help with drainage so your plants don't get soggy
- And some activated charcoal or moss to help filter the air and water. If you don't have activated charcoal or moss, you could help to filter the air and environment by opening your jar for a couple hours every day.
- Optional: any decorations for your jungle!



1. **Prep your container.** Since we're creating an entire ecological environment within a closed container, we want to make sure our container starts off as clean as possible to give our jungle it's best chance. Scrub your glass container and its lid with some warm soapy water, rinse well, and dry with a clean cloth.
2. **Prep your space.** If you can, it might be best to build your jungle outside. If that's not possible, set up your making-space with newspaper or an old sheet to contain any potential mess.
3. **Add rocks.** Now we get to making! First up, add your rocks to your container. You want a good inch of rocks within your container to act as a drainage system to help move along the water cycle and to keep your plants roots from getting too soggy.
4. **Add charcoal.** Now add your activated charcoal on top of your rocks. This helps filter the water that comes through the plants and soil so it's clean when the water cycle starts again. Measure out about half an inch on top of your rock layer.
5. **Add soil.** Add enough so it fills up about half of your glass container. If you're using fully grown plants, dig a little hole for each so the plant and its roots can fit. If you're using seeds, you can poke some holes in the soil with your finger and drop your seeds in. If you're using moss, no holes are needed.
6. **Add plants.** Add your plants, seeds, or moss. If you added plants or seeds, cover with more soil so everything is locked-in and safe.
7. **Add water!** You want your soil to be fully saturated to kick off a productive water cycle, so moisten but don't overwater! Add just enough so your soil is saturated all the way through. If you happen to overwater, it's okay! Just leave the lid off your jar for a day or so, so the extra water can evaporate.
8. **Cover.** Now that you've created an environment that's built to thrive, put your container lid on tight.
9. **Put in a bright spot.** Carefully move your jungle in a jar to a bright spot in your home. It's most helpful if the space is bright so the heat from the sun can help with evaporation and thus move along the water cycle, but not in direct sunlight where the rays might hurt your plants.
10. **Adjust in the first few weeks!** Your jungle in a jar should generally take care of itself, but it might need some extra help in the first few weeks. Take some time each day to see how your plants are faring. Maybe your jungle needs a bit more water, maybe it needs to be moved to a different spot. Keep an eye on your jungle and help it along if it needs some extra care at first, so it can take care of itself in the long run.
11. **Observe!** Once your jungle is up-and-running take some time to observe your tiny world! What does the water cycle look like, how often does it "rain" in your jar? How are the plants thriving?



**Bonus!** If you don't have plants and still want to make a terrarium you totally can! Get creative and try making one out of found-materials from around your house! Maybe you have a bunch of LEGO bricks and toys that could mimic the different layers of a jungle environment, or you can even use fabric and felt to sculpt your own soft terrarium. There are tons of different ways to create your own jungle in a jar. What will you make?

**Caregiver Tip!** If you and your learner want a more guided way to create an observation process for monitoring your tiny ecosystem, check out our Observation Journal video!