

Rainforest In A Bottle

There are so many different kinds of ecosystems around the world – rainforests, deserts, grasslands, tundra, and more! Each of these ecosystems are made up of living species and non-living things that keep it together. You will make your own miniature ecosystems in a terrarium and observe the parts working together!

TEKS:

- 4.9 Organisms and environment. The student knows and understands that living organisms within an ecosystem interact with one another and with their environment.
- 5.9 Organisms and environment. The student knows that there are relationships, systems, and cycles within environments.
- 5.9A The student is expected to observe the way organisms live and survive in their ecosystem by interacting with living and non-living elements.

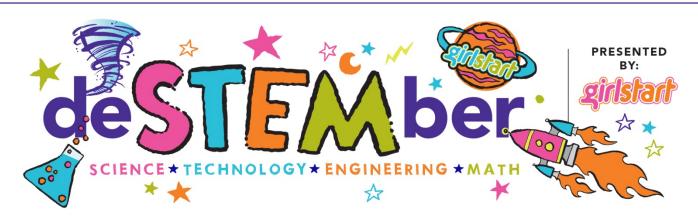
How To:

- 1. Prepare your terrarium cut the soda bottle in half around the middle.
- 2. Cover the mouth of the bottle with window screen; secure it with a rubber band.
- 3. Fill the bottom half of the soda bottle with water halfway.
- 4. Put the top half of the bottle into the bottom half upside down.
- 5. Put a layer of pebbles into the top half of the bottle, cover the pebbles with two inches of soil.
- 6. Bury seeds in the soil; slightly dampen the soil.
- 7. Cover the top of the bottle (the widest part) with a sheet of window screen.

Materials:

- 3-liter soda bottle (one per girl)
- Gravel
- Soil
- Grass/other plant seeds
- Rubber bands
- Water
- **Scissors**
- Window screen 2 sizes: one to cover the small mouth of the bottle and one to cover the thickest part of the bottle





Why Does It Work?

Ecosystems are made up of so many different living species and non-living things interacting. You have created a snapshot of an ecosystem. As your plants grow in the terrarium, observe how they interact with the soil, rocks, and water in order to survive. Think about all of the living things that are found in deserts, rainforests, grasslands, and tundras that interact with the non-living things around them!

Career Connection:

Biologists or biological scientists study life in all of its different forms, researching important processes and how organisms relate to their environment. Biologists research to explain the interactions and functioning of organisms.

Resources and Acknowledgments:

- Sarah Haegelin
- http://www.sciencekids.co.nz/sciencefacts/careers/biologist.html
- http://www.instructorweb.com/lesson/maketerrarium.asp
- http://www.srl.caltech.edu/personnel/krubal/rainforest/Edit560s6/www/whlayer s.html
- http://spikesworld.spike-jamie.com/science/ecology/c241-02-terrarium.html

