

Make Your Own

Rainforest Terrarium



Thanks for taking the time to check out this Rainforest product. I hope you and your kids will find it educational and easy to use.

Student Directions to Build a
Rainforest Terrarium (Booklet)
Reading Level Grades 3-5

A Rainforest Rendezvous:

Make Your Own Rainforest

You may not be able to take your students to visit a rainforest, but you can bring a mini rainforest to them by including a classroom terrarium filled with rainforest plants, and representative animals in your science center or classroom museum. Building a terrarium with your students will not only help them learn more about the rainforest, it will provide a home for all those little critters they often bring into the classroom, and it will be a beautiful artifact of your rainforest study for Open House.



A terrarium is a microcosm of any biome represented. It's a really useful observation tool.

Materials:

- a clear container large enough to hold several 2" potted plants with enough room for them to grow (an aquarium works very well)
- a lid for the container (use aluminum foil if necessary)
- small gravel (1") to cover the bottom of the container (You can have your students collect rocks from the playground.)
- a thin layer of sand (Do you have a sandbox at school?)
- potting soil or playground soil (You'll need a layer 4 inches deep.)
- leaf debris
- 3"-6" rocks (again, have the children collect them.)
- several 2"-4" potted plants or cuttings of plants found in rainforests (pathos, philodendrons, ferns, bromeliads, spider plants, orchids)
- water

Preparation:

1. Collect the materials.
2. Run off the terrarium booklet (pages 2-5) on cover stock or copy paper, double sided, 1 or more copies.
3. Laminate the booklet, trim, and cut the pages on the dotted line.
4. Fold the pages and assemble the booklet, making sure the pages are in the right order. Staple.
5. Run off the rainforest backdrop image (pages 6-7) ONLY if you want to attach it to the back of your terrarium. Run on cover stock, trim margins, tape it together on the back, and laminate it. Then cut it to fit your container.
6. Decide if you are going to have a parent build the terrarium for you, or if you'll build it with your students (preferred).
7. Follow the directions in the booklet to make the terrarium.



Green Leaf! Photo by Fern Embrook, via Public Domain Pictures.net.

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Rainforest



A Little Slice of Earth



Add water to your terrarium and put on a lid. You will be able to watch the water cycle, as clouds form, and rain falls. If there is too much water, wipe some off the sides of your terrarium until it's just right.

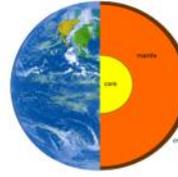
13



Your terrarium will be a very tiny model of a small slice of the earth. Gently place a layer of rock at the bottom of your terrarium to form the crust. Extra water will filter down into the rock to help keep your plants healthy, just as it does in the earth.

2

The surface of the earth is covered with a layer of rock. It was made when magma inside the earth cooled to form a hard crust. In fact, it's called the earth's crust.



1

Taking Care of Your Terrarium

1. Make sure you don't have too much water. Pour just a little in at a time. Gradually add more until the plants begin to thrive. It's better to start with too little water than too much.
2. The earth is surrounded by a layer of air called the atmosphere. It acts like a lid on the earth. Your terrarium needs a lid, too, but take it off for a few hours each day to let the air move around.
3. Don't place the terrarium directly in the sun. It needs light, but sunlight shining through the glass or plastic walls will burn the plants. Put it in a bright place, but not in direct sunlight.
4. Put a couple of worms, crickets, or flies in your terrarium. Use a screened lid when you do, and be very careful the plants don't dry out during that time.
5. A frog could live in your terrarium for a few days. Give it a bowl of water and some bugs to eat. Then return it to the wild.
6. What other animals would be at home in your tiny world?

14

Wind, snow, rain, and acid in the rain, break the crust into tiny pieces of sand.



Sand On The Beach! Photo by Fern Embrook, via Public Domain Pictures.net.

3



Add some rocks to your terrarium. Arrange them to make some dark places for animals to hide. Then tape the rainforest picture to the back of your terrarium.

12

Over time, water and the movement of the earth push rocks up toward the surface of the soil. Underneath the rock is a good home for many arthropods (ARTH row podz).



After Our Forest Floor! Photo by Fern Embrook, via Public Domain Pictures.net.

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Add a thin layer of sand on top of the rock. Sand mixes with soil to provide the minerals a plant needs to grow.

4

Because rainforest soil is shallow, many plants have developed "air roots" which let them get their food from the rain and the air. Lichen and moss are air rooted plants (called epiphytes, EP uh fites).



Over Our Moss Lichen! Photo by Fern Embrook, via Public Domain Pictures.net.

9



Add a layer of soil 4 inches deep. Then add a layer of plant debris (duh BREE). The decomposing leaves add nutrients (NOO tree units), food, for the living plants.

6

Old leaves, dead plants, and dead animals fall on the ground. Plants and animals called decomposers (deecum PO serz) change dead things into soil.



Arithmetic! Photo by Fern Embrook, via Public Domain Pictures.net.

5



Look around the playground to see if you can find some twigs or branches with epiphytes growing on them. Don't worry if the plants are dried out—they'll plump right up in your tiny rainforest!

10

Plants grow in many different kinds of soil. Rainforest soil is very shallow and does not have many nutrients. The rain washes them away. Plants have to find other ways to get food.



The Forest Floor! Photo by Fern Embrook, via Public Domain Pictures.net.

7



Add plants to the terrarium. Gently shake them from their containers and place them in holes in the soil. Mixing the leaves into the dirt will help them break down, giving food to your plants. Add some more dead leaves on top of the soil after the plants are all in.

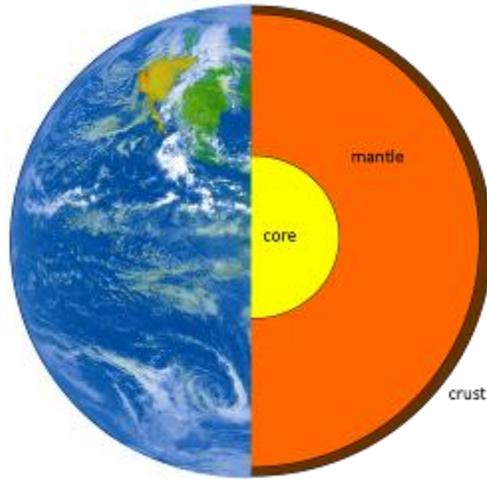
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16 Page Booklet (1/4 letter size)
Compares the layers of the terrarium with the layers of the rainforest floor



Includes a Backdrop image for your terrarium (11X17).

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Sand On The Beach: Photo by Petr Kratochvil, via Public Domain Pictures.net..

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