Creating a Nature Diorama

What is a Diorama?

It’s a miniature landscape contained within a box. It can be made with nearly any collection of materials, and can display a variety of scenes and historic or fictional events.

Why Make a Diorama?

A diorama is a fun way to foster creativity in children and students by requiring them to think dimensionally and to fill a space in a visually appealing way. It also creates an understanding of how an ecosystem works, and how all the different parts interact to create a natural balance in the world. An arboretum, like Purdue’s, is simply a man-made terrestrial ecosystem – a green space within an otherwise urban area.

How is it Made?

1) **Scale**: The first step is choosing a scale, so that the diorama becomes believable to an extent. Select a figure that will become the focus of the scene, such as a toy animal or figurine. Everything else should be fit for size according to its relationship with the object of focus. If it becomes too difficult to guess, try using a 1 inch to 10 foot scale; for example, a 40 foot tree becomes a 4 inch twig in the diorama. Sometimes it helps to do a little brainstorming of what should go in it on paper before they begin.

2) **Container**: Next, pick a box or container to mount the objects in. Popular choices are shoeboxes and moving boxes with lids. Again, keep scale in mind when selecting one. In reality, anything that provides a backdrop and horizontal surface for your scene will work. Make sure it’s lightweight but sturdy so that it can be moved easily.
3) **Materials:** After considering what kind of image to create, begin collecting materials.

- **Desert scene:** Collect sand, toy lizards and snakes, and cacti (fake)
- **Ocean scene:** Find plastic sea animals, sea shells, and plastic seaweed and plants that you might find in an aquarium
- **Arctic scene:** Collect penguin figures, marshmallows, or cotton balls
- **Galaxy scene:** painted Super Balls®, glitter pens, and loose glitter
- **Forest scene:** In order to educate students about the Purdue Arboretum, we encourage them to make forest dioramas! Collect twigs from various evergreen and deciduous trees, bark, grass, rocks, pine cones, acorns, moss, etc. Please be respectful of Arboretum property by using only materials found on the ground. A leaf or two from a tree is also acceptable in moderation. For a more in-depth project, create a scene with a seasonal focus.

Make sure students grab more than they think they might need, as the process for making a diorama is mostly trial-and-error. Anything that’s needed for the scene that isn’t found in nature can be made from clay, paper, pipe cleaners, Styrofoam™, etc. Stickers can also be fun and useful. If they want to add buildings, use building blocks or Legos®. Get creative!

4) **Background:** Decide on a background that makes sense for the scene. Paper, paint, and fabric are good materials for creating one. Emphasize the importance of horizon placement – it should be positioned roughly halfway between the top and bottom of the box to force the proper perspective. The top half should include sky and tree line, and the bottom should include the forest floor and any water features they may want to include. This should be continued to the bottom of the box to create the “forest floor”. Dried leaf crumbles, moss, pine, dirt, needles, and paint work well for this.
5) **Placement:** Finally, working from the back of the box to the front, place all of the three-dimensional objects using a hot glue gun. Larger objects should go towards the back, and smaller towards the front. Also, don’t forget that there is a “roof” in these dioramas – hang clouds, birds, tree branches, or the sun from the top of the box. Then step back, and admire! Happy diorama-making!