

Discovery Lab Post-Visit Activities Wonderful Water Grades K-2

We hope that you enjoyed your visit to the Orlando Science Center! As a means of enhancing and extending your students' Discovery Lab experience into the classroom, we are providing you with these post-visit materials to share with your class.

Discussion Topics:

- We use our five senses to gather information about the world around us. Sometimes we also use tools, like magnifiers. How do magnifying tools like microscopes help us make better observations?
- Adaptations are special body parts or behaviors that allow an organism to survive in its environment. In our Discovery Lab, we studied one particular ecosystem—a Florida pond. Many different types of living things have adapted to life in Florida ponds in many different ways. Make a list of living things found in a Florida pond. How have each of these organisms adapted to this particular environment?
- Living things grow and develop in predictable patterns. How do different living things change over time? What are some similarities and differences in how living things develop? How do the adult versions of various animals compare to the younger versions of those same animals?

In Class Activities:

- A plant is a living thing that needs sunlight, water, air, nutrients, and space to survive and grow. Explore what happens to a plant when its basic needs aren't being met. Select two plants of the same species and of similar size and decide which requirement to test (light, water, soil, or space). Supply one plant with the necessary requirement, while denying it of the other plant. After a period of time, compare the two plants. Measure both plants. Which plant grew the most? Which plant grew the least? Do the plants look different? If so, what caused the difference?
- Hunt for hidden prey in a relay race that demonstrates the value of camouflage. Gather 60 small, colored objects in equal amounts of at least 3 different colors. At least one color should match the playing surface. Scatter the "bugs" (colored objects) throughout the play area. Lead the students to the area where the bugs are hidden. Explain that the students will be hungry "birds" hunting for the hidden bugs. Ask students to predict which color bug might have the best camouflage for this environment. Divide the class into two teams and arrange them in relay race lines. The object of the relay race is to be the first team to get every bird fed. On "go," the first bird should fly over the area and pick up the first bug they see, then fly immediately back to the line to tag the next bird. When the last bird returns, the entire team should sit. The first team seated wins. Which color was the easiest to find? Hardest? Which type of bug had the best camouflage for its environment?

Math Problem:

There are five frogs swimming in a pond. Three more frogs jump in. How many frogs are there altogether?

Writing Prompt:

Frogs are amphibians. Like all amphibians, frogs live part of their life in the water and the remainder on land. Frogs lay their eggs in the water, where they hatch into tadpoles. Tadpoles have a tail for swimming and gills for breathing. As they grow, they lose their tail and develop legs and lungs for their life on land.

Create a multi-panel comic strip that tells the story of the life cycle of a frog, from an egg to a tadpole to a fully-grown adult frog.

Art Project:

Many animals are color coordinated with their habitat. Any coloration, body shape, or behavior that helps an animal hide in its environment is known as *camouflage*. Camouflage is a useful adaptation, for both predators and prey. Blending in with the environment helps prey avoid being eaten and helps predators sneak up on their prey unnoticed.

Divide the class into small groups and assign a habitat (such as a forest, desert, or coral reef) or minihabitat (such as a bush or tree) to each group. Provide each team with a length of butcher paper and markers and crayons. Each group should create a mural of their assigned habitat, including drawings or cutouts of camouflaged animals. Have each group write a list of the animals hidden within their habitat and display this list alongside each mural. Challenge students from other groups to visit each habitat mural and search for the listed animals. Can they find all of the camouflaged animals in each mural?

Additional Resources:

<u>The Salamander Room</u> by Anne Mazer & Steve Johnson (Dragonfly Books)
<u>From Tadpole to Frog</u> by Wendy Pfeffer (Collins)
<u>The Very Hungry Caterpillar</u> by Eric Carle (Philomel)