

The Living Planet

Post-Visit Activities

3rd and 4th Grades



Revised January 2009

Post –Visit Activities

These activities are intended for use after your visit to the Virginia Air and Space Center. Your students should recall the information and activities from the Living Planet program in order to do these activities. All of the activities can be tailored to your specific classroom needs, and the procedures listed are suggestions for teaching.

Toothpick Camouflage

Objective: How does color help an animal survive?

Materials

- A box of colored toothpicks.
- 1 square meter of green cloth or this can be done outside in the grass
- Timer

Directions

Sort out the toothpicks, which will represent insects, into different piles according to their color. Count each pile and record how many toothpicks are in each pile. Then mix all the toothpicks together again and toss them onto the square of green cloth or toss them outside on a grassy area.

Depending on where the toothpicks have been tossed, give one student, who is the “bird” 15 seconds to collect as many toothpicks as possible (if it is on the green cloth), or five minutes to collect as many toothpicks as possible (if it is outside in the grass). After the time is up, sort the toothpicks that that have been found by their color, count each pile, and complete the graph. Repeat to give more students an opportunity to “look for insects” by collecting the toothpicks. All students should record data on a graph. See the attachment for graph page.

Questions

- * Which color was the hardest to see?
- * How many toothpicks were found?
- * What color was the easiest to see?
- * If birds were looking for insects in the grass, which color would be the hardest for birds to see?
- * Would color help protect an insect from a bird?
- * What color is a protective color?
- * How does protective color help an animal adapt to its environment?

Trip of the Monarch Butterfly

Even though butterflies might look really fragile, they are actually very strong. While many butterflies migrate, Monarch butterflies go the farthest of them all. Monarchs that live west of the Rocky Mountains fly to the California coast, but Monarchs that live east of the Rocky Mountains must fly farther south to Mexico. Some of them travel as much as three thousand (3,000) miles, which is about the distance from the east coast to the west coast of the United States. Some scientists believe that they float on air currents in order to travel so far. They fly in big groups often spending the winter months in the exact same tree as they did the year before.

Objective: To show how migration helps the Monarch Butterfly survive by creating a migration pattern using a map and describing a Monarch Butterfly's typical trip.

Materials

- Access to research materials on the Monarch Butterfly
- Access to maps
- Paper, pencil, and coloring materials if desired

Directions

Read about the Monarch Butterfly and decide which trip the butterfly will travel. Using a map, create the Monarch Butterfly's migration trip. Give some interesting facts about the trip.

Questions to consider

- * About how long will the trip take?
- * What important landmarks will the Monarch Butterfly fly over?
- * How far does the butterfly travel?
- * What stops will the Monarch Butterfly make?

Dependence and Interdependence of Ecological Systems

Objective: Students explore how a missing part of an ecological system might change the balance that is necessary for the rest of the system to live.

Materials

- Book *The Great Kapok Tree* by Lynne Cherry
- Yarn
- Labels to identify inhabitants of tree and markers or crayons
- Map to show location of Brazil

Directions

Locate Brazil and the rainforest on a map for the students, and explain that the story, *The Great Kapok Tree*, takes place in the Brazilian Amazon. Read the story aloud and discuss it with the children. List all the rainforest inhabitants that are mentioned in the book on the board or chart paper. Discuss how the survival of the rainforest plants and animals is interdependent.

Write the name of each inhabitant on a label so each student can act out a part. Those mentioned are: boa constrictor, bee, flower, tree, monkey, soil, toucan, macaw, cock-of-the-rock, tree frog, jaguar, birds, four tree porcupines, several anteaters, three-toed sloth and a Yanomami child. The child who is acting out the kapok tree stands in the middle of a circle holding one piece of yarn for each child in the class. Each piece should be about 6 feet long. Reread the story aloud. When an inhabitant of the rainforest is mentioned, the kapok tree gives a piece of yarn to the animal mentioned, and still holds onto the other end of the yarn.

At the end of the story, the tree should be in the center, linked to all the inhabitants of the rainforest! This should clearly show the web of interdependence. Now, what if the kapok tree were cut down? Discuss the impact of cutting down one kapok tree, and what kind of impact this would have on other plants and animals of the rainforest.

Here is a list of websites that may be helpful:

<http://www.learner.org/jnorth/>

This is a free internet-based global program where children can study seasonal changes and animal migrations.

<http://www.rainforest-alliance.org/education/treehouse/>

This is an interactive site where students can go on a virtual trek through the rainforest's many layers and trace the production of many of our most popular foods.

http://www.rainforest-alliance.org/education.cfm?id=rainforest_stories

The site has 8 stories with colorful pictures about the amazing animals of the rainforest and how the people are working to protect them and their habitats.

<http://www.alleghany.k12.va.us/animal%20adaptation%20webpage/index.htm>

A good website to review adaptation, camouflage, and mimicry, with activities that can be done in the classroom.