

Garden Adventure Pack (K– 2) Instructions

Get ready! You are about to go on a garden adventure of a lifetime! Choose five sites from the list below (see the map provided for the locations). For each site, this packet provides a brief description, a list of activities and a few follow-up activities that can be completed at your home or school.

In between each visit or throughout your adventure, have each student complete the **Garden Adventure Pack Scavenger Hunt worksheet**. When you return to your school or home, the pictures drawn on the worksheet can be compiled into a field trip journal.

1. Poison Dart Frog Display
2. Rainforest
3. Desert
4. Wetland Garden
5. Reflecting Pond
6. Rose Garden
7. Japanese Garden



Poison Dart Frog Display

Read Aloud

Poison Dart Frogs live in tropical rainforests. Their bright color and unique patterns warn predators that they are poisonous. Poison Dart Frogs got their name because the poison on their skin is used on the tips of hunting arrows. You might also see a sleeping Red-eyed Tree frog in the Costa Rica tank. They are sleeping because they are nocturnal, which means they sleep during the day and are awake at night.

Materials

None needed

Activities

1. Have the students count the frogs in each terrarium. How many different kinds of frogs are in each terrarium?
2. Discuss how each frog looks different. Are some frogs bigger than others? What colors are the frogs?
3. Have each student look for the things frogs need to live – water, air, food (small crickets and insects) and shelter (plants).
4. Discuss the life cycle of a frog. (egg – tadpole – frog)

Follow-up Activities

1. Design your own Poison Dart Frog – give each student a blank picture of a frog. Have them color it like a Poison Dart Frog.
2. Visit saveafrog.org and learn about the Atlanta Botanical Garden's Amphibian Conservation program.



Rain Forest

Read Aloud

Tropical Rainforests are warm habitats that gets lots of rain. In the rainforest it can rain up to 400 inches per year! The average temperature is 70 deg Fahrenheit year-round. Rainforests plants have learned to live in a place with lots of water and little sunlight by having gigantic leaves, pointy tips or red undersides. Other rainforest plants get a boost up to the sunlight by growing on top of other plants.

Materials Needed

1. Magnifying glasses

Activities

1. Ask: Is it warm or cold in the tropical rainforest? Is it wet or dry in the tropical rainforest? Is it sunny or shady in the tropical rainforest?
2. Look for the following plant adaptations. When you find one, read the brief description to the students.
 - a. Gigantic leaves – Some rainforests plants have very large leaves so that they can capture the most amount of sunlight possible.
 - b. Leaves with red undersides – Some rainforest plants have red undersides so that they can absorb more sunlight.
 - c. Leaves with pointy tips – Pointy leaves help the plant channel rainwater away from the roots. This keeps the plant from getting too much water.
 - d. Plants with other plants growing on them – Those plants are called Epiphytes and they like to grow on other tall plants so they can get more sunlight. They get their water and nutrients from the air. They do not harm the host plant.
3. Examine the leaves with your magnifying glasses. What do you see?
4. Look and listen for wildlife. Below is a list of what you might see with your group.
 - a. Saffron Finch (small yellow bird) – These birds like to fly around in the canopy. In the wild, they are found throughout South America.
 - b. Quail (large brownish birds walking on the ground) – There are three different kinds of quail living in the Conservatory: Scaled Quail and Valley Quail from the western U.S. and Mexico and the Japanese Quail from southeast Asia.
 - c. Poison Dart Frogs – These frogs are hard to spot, but easy to hear. If you hear a singing trill, it is a Poison Dart Frog trying to establish its territory or trying to find a friend.

Follow-up activities

1. Read stories about the rainforest like [If I Ran the Rain Forest: All About Tropical Rain Forests](#) by Bonnie Worth and Aristides Ruiz or [The Great Kapok Tree](#) by Lynne Cherry
2. Make a rain forest habitat out of items found around your schoolyard.



Read Aloud

Deserts are hard places to live. It rarely rains and the temperatures can rapidly change from very hot to very cold. As a result, desert plants are tough. They have small leaves so they do not burn in the sunlight and they store as much water as possible in their leaves and stems. Plants that store water in their leaves, stems or roots are called succulents. Do you see a plant with hairs or spines? The spines protect the plant from other hungry animals. Be careful not to touch those prickly plants!

Materials Needed

1. One container of aloe vera gel

Activities

1. Ask: Is it warm or cold in the desert house? Is it wet or dry in the desert house? Is it sunny or shady in the desert house?
2. Look for the following plant adaptations. When you find one, read the brief description to the students.
 - a. Small leaves – Deserts are extremely sunny. Sometimes a plant can get burned by the sunlight just like humans. To protect themselves against the sun, they have small leaves .
 - b. Thick juicy leaves or stems – Since plants in the desert do not get a lot of water from rain, they store it as long as possible in their leaves and stems .
 - c. Hairs and Spines – Desert plants protect themselves against hungry predators with sharp spines. Sometimes, the spines can have poison on them that will hurt the predator. Be careful!
3. Find a plant that we use for medicinal purposes (rosy periwinkle- found near the door to the rainforest; aloe vera- located near exit door). Compare aloe vera gel to the actual aloe plant. The sap of the aloe plant is a thick gel. It is this gel in the aloe vera plant that is used medicinally to treat burns, cuts, and rashes. There are many species of aloe, which are not all used medicinally like aloe vera. Some aloes can even have an irritating sap.

Follow-up activities

1. Make a model of your favorite desert plants using recycled items. Try to make your model look like something else and then name it after that item. For example, the living stone plant looks like a stone, and there is a “baseball plant” that looks like a baseball.
2. Make a desert container garden. Be creative. Use something like an old bowl. Be sure to put holes in the bottom for proper drainage. Mix equal parts of sand and soil to form a well-drained medium for your desert plants to thrive in. Paint the bowl with a desert scene. After you plant your desert plants, add some stones and some desert animal figures for fun. If you have questions about how to plant your desert plants, call our Plant Hotline at 404-888-4769.



Bog Garden

Read Aloud

Bogs, also called wetlands and swamps, are a habitat with wet soil and water loving plants. All plants need water, sunlight, air and nutrients to live. Bogs have plenty of water, sunlight and air, but they do not have a lot of nutrients in the soil. As a result, the plants living in bogs adapted by getting their nutrients from the insects that they capture and digest. The hardy carnivorous (insect-eating) plants living in this bog are called pitcher plants. Many of the carnivorous plants, like the pitcher plant and the Venus flytrap, are endangered in the southeastern United States due to habitat destruction and poaching.

Materials Needed

1. Magnifying glasses

Activities

1. Find a Pitcher Plant (see picture below) and read the following description to the students – Insects, like bees, butterflies and ants are attracted to the top of the pitcher plant because of its bright red color and sweet smell. As an insect begins to investigate the tempting treat, it loses its footing because of the slippery sides or because of the downward pointing hairs. The insect falls down into the pitcher that is filled with digestive fluids like the saliva in your mouth. The insect cannot escape because the sides are very slippery or in some pitcher plants because of downward pointing hairs.
2. Peek inside a pitcher plant and count how many bugs you can find.
3. Gently feel the hairs inside the purple pitcher plant. Which way do the hairs point, upward or downward? Those hairs prevent insects from crawling out of the pitcher plant.
4. Feel the soil in the bog. Is it wet or dry?



Trumpet Pitcher Plant

Follow-up activities

1. Make a “Save the Wetlands” poster or write to your local congressperson encouraging him/her to make efforts to save the wetlands.
2. Buy a Venus flytrap for the classroom. Make observations and record the changes.



Reflecting Pond

Read Aloud

The pond in front of the Conservatory contains exotic aquatic plants including hardy water lilies, umbrella grass, and lotus blossoms. It is also home to three types of goldfish (fan tails, darter and shobunkins), frogs, and visiting ducks. The fish are in the pond year-round and feed on the insects and other small aquatic life in the pond. The staff does not feed them. Coins should never be tossed into this pool. The metals from the coins have a negative effect on the plant and animal life.

Materials Needed

None Needed

Activities

1. Try to locate the three different types of goldfish in the pond. Count the total number of fish living in the pond.
2. Talk about what a fish needs to live – water, food, air and shelter. How do fish get air? What do they eat? Where can they hide from predators?
3. Try to locate a tadpole or a bullfrog. Discuss the life cycle of a frog (egg – tadpole – frog). It might be difficult to find frogs and tadpoles during the winter months because they hibernate throughout the winter.
4. As a group try to find the biggest fish and the smallest fish.

Follow-up activities

1. Make a model of your favorite fish or frog. Try to make your model out of recycled items like cans, plastic containers and plastic bottles. Give your fish or frog a name and come up with a short story describing your model. What does it eat, where does it live, etc.
2. Read a story about frogs like [Wide Mouth Frog](#) by Keith Faulkner and Jonathan Lambert or [The Teeny Weeny Tadpole](#) by Sheridan Cain and Jack Tickle.



Rose Garden

Read Aloud

The rose garden is home to colorful varieties of old fashioned and antique roses. These roses were chosen for their resistance to disease and pests. Because they naturally repel pests and diseases, the Atlanta Botanical Garden does not need to spray pesticides or harsh chemicals on the roses. Roses with their vibrant colors and delightful fragrances attract and feed many different types of pollinators such as bees and butterflies with the nectar they produce. What rose attracts you the most?

Materials Needed

1. Colored paper chips for matching game.
2. Magnifying lenses

Activities

1. Give each student a few different colored paper chips. Have them find a rose that matches with each color. Be sure to smell each rose that you match a color to and pick out your favorite and least favorite smelling rose. During the winter have the students find pansies that match their color chips .
2. Using the magnifying lenses, have the students try to find pollinators on the roses. Discuss how pollinators help the plant produce fruits and seeds.
3. Point out the spines on the rose stems. Discuss why roses would have spines on their stems (to protect themselves against predators).

Follow-up activities

1. Plant flowers at home or school that attract and feed pollinators. Here are a few plants that may help you get started - butterfly bush, coneflowers, geraniums, salvias, lantana, foxgloves, iris, day lilies, and verbena.
2. Order butterfly larvae from a science supply company like Carolina Biological Supply Company or Nature Watch. Then, you and your students can watch the metamorphosis (life cycle) of a butterfly.
3. Have your class or school participate in a butterfly count. For information on the count program and how to conduct a count write or email.

NABA Butterfly Counts
2533 McCart Rd.
Fort Worth, TX. 76110

OR email: naba@naba.org



Japanese Garden

Read Aloud

The initial and lasting impression of the Japanese Garden is a peaceful feeling. This garden was created to generate that feeling and to provide a setting for quiet reflection and inspiration. Rocks, bamboo, and water are elements found in all Japanese gardens. Rocks symbolize permanence and longevity. Bamboo symbolizes resilience or strength to overcome challenges and water symbolizes purity.

Materials Needed

1. Bamboo sample

Activities

1. Have the students stand quietly with their eyes closed for 30 seconds and listen for any sounds that they hear. Discuss what they heard. Did they hear new sounds that were not there before?
2. Locate and identify the three key elements of the Japanese Garden - Rocks, bamboo, and water. As you talk about the bamboo pass around the piece of sample bamboo. How does it feel?
3. Look at the colors present in the Japanese Garden. It is a monochromatic garden, which means that it has primarily one color – green. The plants are different because they have different shades of green, different sizes and unique textures.

Follow-up activities

1. Create your own miniature Japanese Garden. Be sure to include the three elements - rocks, bamboo or wood, and water or sand.
2. Find a quiet peaceful place around your school or home to sit and observe nature. Write a poem about what you see and how you feel.

