

Layers of the Tropical Rainforest

A Pre-Visit Lesson to *Rainforest Rendezvous*

Objectives: To identify and explain the layers of the tropical rainforest.

Curricular Area: Science

Skills: Communication
Cooperation
Creativity

Time: One class period

Background Information:

- * Emergent Layer—includes the tallest trees of the rainforest which can tower as much as 200 feet above the forest floor. They receive the greatest amount of sunlight, but must also endure high temperatures, low humidity, and strong winds.
- * Canopy Layer—includes trees that range from 60 to 90 feet above the ground. The branches of these trees are often covered with other plants called epiphytes. (Epiphytes are plants that live attached to another plant. Epiphytes include many orchids and bromeliads. Epiphytes are not parasites. Instead, they get their water and nutrients from the air—not the host.) The canopy is home to 90% of the organisms found in the rainforest.
- * Understory Layer—receives only 2 to 15% of the sunlight that falls on the canopy. This layer is a dark place that is relatively open. The understory contains young trees and leafy herbaceous plants that can tolerate low light.
- * Forest Floor—receives less than 2% of the sunlight. As a result, little grows here except plants that have adapted to very low light. A thin layer of decaying leaves, seeds, fruits, and branches can be found on the forest floor.

Teacher Preparation:

Copy and glue information about the four layers of the tropical rainforest onto a class set of index cards. Only put the information for one of the layers onto each card. Please note that you will need to gather more information about the layers of the rainforest for your index cards than what is listed in the above background information. You can find more about rainforest layers at the following websites:

<http://www.mbgnet.net/sets/rforest/index.htm>

http://www.world-builders.org/lessons/less/biomes/rainforest/tropi_rain/rain.html

Materials: Pre-made Index Cards (enough for each student to have their own card)

Procedure:

1. Pass out an index card to each student.
2. Instruct the students to divide themselves into the four layers of the rainforest. If groups are too large, you may want to create two groups that will represent each layer of the rainforest.
3. Allow time for the students to read index cards.
4. Instruct each group of students to create a poem, a song, or a skit about their particular layer of the rainforest using their information from their index card.
5. Students will then perform their poem, song, or skit for their classmates.
6. Once all groups have had a chance to perform, the teacher should review the four layers of the rainforest.

Extension:

Ask students to research a plant or animal that lives in one of the layers of the tropical rainforest.