

The Amazon Rainforest

The Amazon is the world's largest tropical rainforest. It covers an area of nearly 2.8 million square miles, which is nearly the size of the continent of Australia. The Amazon Rainforest gets its life from the majestic Amazon River, the world's second largest river, which runs directly through the heart of the region. The rainforest itself is simply the drainage basin for the river and its many tributaries. The vast forest itself consists of four layers, each featuring its own ecosystems and specially adapted plants and animals.

The forest floor is the lowest region. Since only two percent of the sunlight filters through the top layers to the understory, very few plants grow here. The forest floor, however, is rich with rotting vegetation and the bodies of dead organisms, which are quickly broken down into nutrients integrated into the soil. Tree roots stay close to these available nutrients and decomposers, such as millipedes and earthworms, use these nutrients for food.

The understory is the layer above the forest floor. Much like the forest floor, only about 2- 5 percent of the sunlight reaches this shadowy realm. Many of the plants in the understory have large, broad leaves to collect as much sunlight as possible. The understory is so thick that there is very little air movement. As a result, plants rely on insects and animals to pollinate their flowers.

The layer above the understory is the canopy. This is where much of the action in the rainforest occurs. Many canopy leaves have specially adapted leaves which form "drip tips". Drip tips allow water to flow off the leaves which prevents mosses, fungi, and lichens from occupying the leaves. Leaves in the canopy are very dense and filter about 80 percent of the sunlight. The canopy is where the wealth of the rainforest's fruits and flowers grow. Bromeliads, cup-like plants, provide drinking pools for animals and breeding locations for tree frogs.

The emergent layer is above the canopy, and is the top layer of the rainforest. Trees in the emergent layer break through the canopy and may reach heights of 200 feet. Leaves in the emergent layer are small and covered with a special wax to hold water. Seeds are blown to other parts of the forest. Trees which rise to the emergent layer are massive. Many are braced by huge buttress roots. Trunks can be 16 feet in circumference. Many animals that survive in the emergent layer never touch the ground.

1.) The Amazon Rainforest covers an area nearly the size of the continent of _____.

2.) Which of the following is not a layer of the rainforest?

- A. Understory
- B. Canopy
- C. Subcanopy
- D. Emergent

3.) Which layer of the rainforest is right above the forest floor?

- A. Canopy
- B. Emergent Layer
- C. Understory
- D. Forest Floor

4.) Most of the fruits and flowers of the rainforest grow in its _____.

- A. Understory
- B. Emergent Layer
- C. Forest Floor
- D. Canopy

5.) _____ provide drinking pools for animals and breeding locations for tree frogs.

6.) Many trees in the _____ of the rainforest are braced by huge buttress roots.

- A. Canopy
- B. Emergent Layer
- C. Forest Floor
- D. Understory

7.) Animals that live in the _____ may never touch the ground.

- A. Emergent Layer
- B. Canopy
- C. Forest Floor
- D. Understory

8.) Why do few plants grow in the understory?

- A. Their leaves are too large.
- B. There is not enough water.
- C. There is not enough sunlight.
- D. There are not enough nutrients.

9.) Why do plants in the understory have to rely on insects to pollinate them?

- A. There is very little wind in the understory.
- B. There are very few butterflies in the rainforest.
- C. The sun is too bright in the understory.
- D. The wind is too strong and seeds blow into the Amazon River.

10.) Which of the following is NOT true?

- A. The Amazon Rainforest is located in South America.
- B. The Canopy is higher than the Emergent Layer.
- C. Leaves in the canopy are very dense and filter a high percentage of sunlight.
- D. The Understory is below the Canopy.