

Wonders



Mc
Graw
Hill
Education

Literature Anthology

Rain Forests

By Nancy Smiler Levinson

Illustrated by Diane Dawson Hearn



Essential Question

What makes different parts of the world different?

Read about the different plants and animals that live in rain forests.



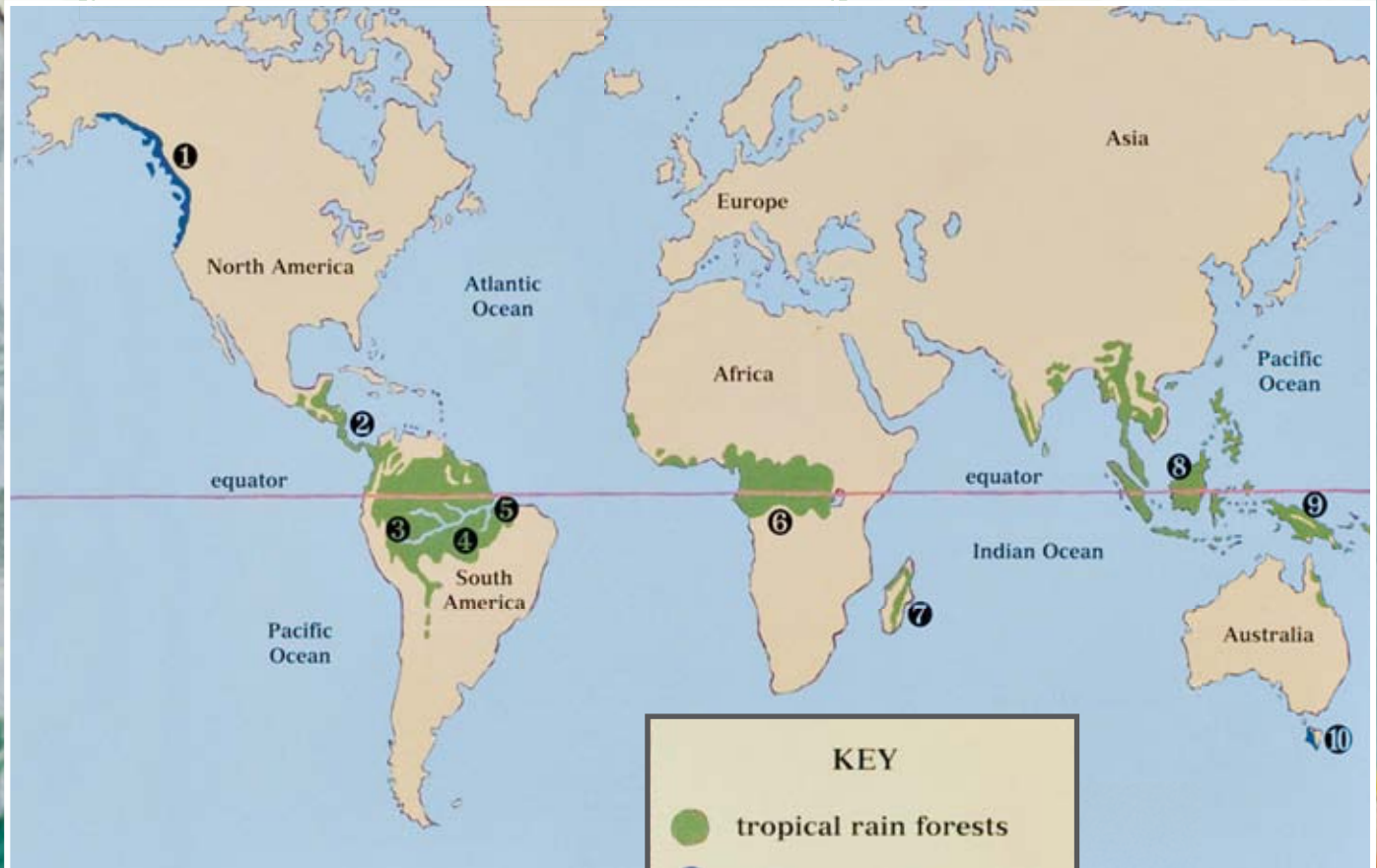
Go Digital!



A rain forest is a wet forest. It is thick with many kinds of trees and plants. Many animals live in it. Rain falls most of the year.



Most rain forests grow in hot places near the equator. They are tropical rain forests. Some grow in cool places. They are **temperate** rain forests.



- KEY**
- tropical rain forests
 - temperate rain forests
 - 1** Pacific Northwest
 - 2** Costa Rica
 - 3** Peruvian Amazon
 - 4** Brazilian Amazon
 - 5** Brazilian Coast
 - 6** Congo Basin
 - 7** Madagascar
 - 8** Borneo
 - 9** New Guinea
 - 10** Tasmania

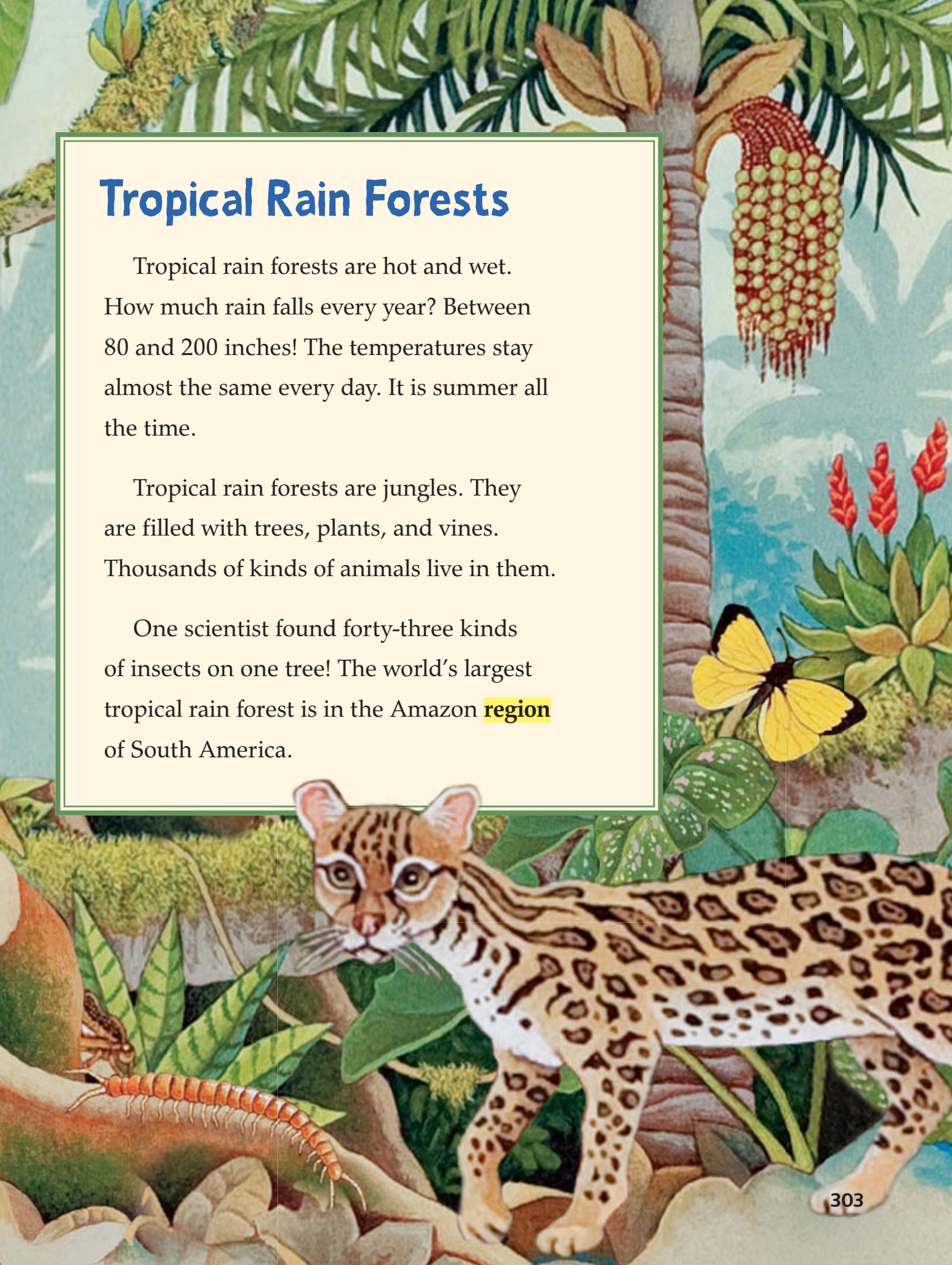


Tropical Rain Forests

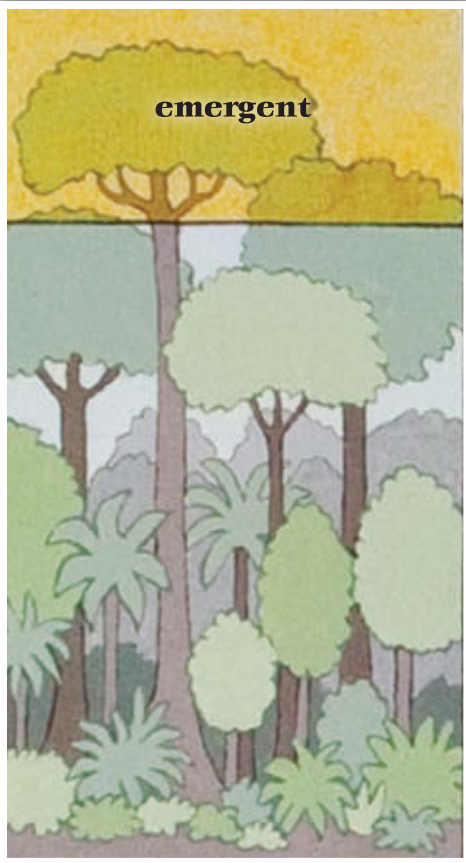
Tropical rain forests are hot and wet. How much rain falls every year? Between 80 and 200 inches! The temperatures stay almost the same every day. It is summer all the time.

Tropical rain forests are jungles. They are filled with trees, plants, and vines. Thousands of kinds of animals live in them.

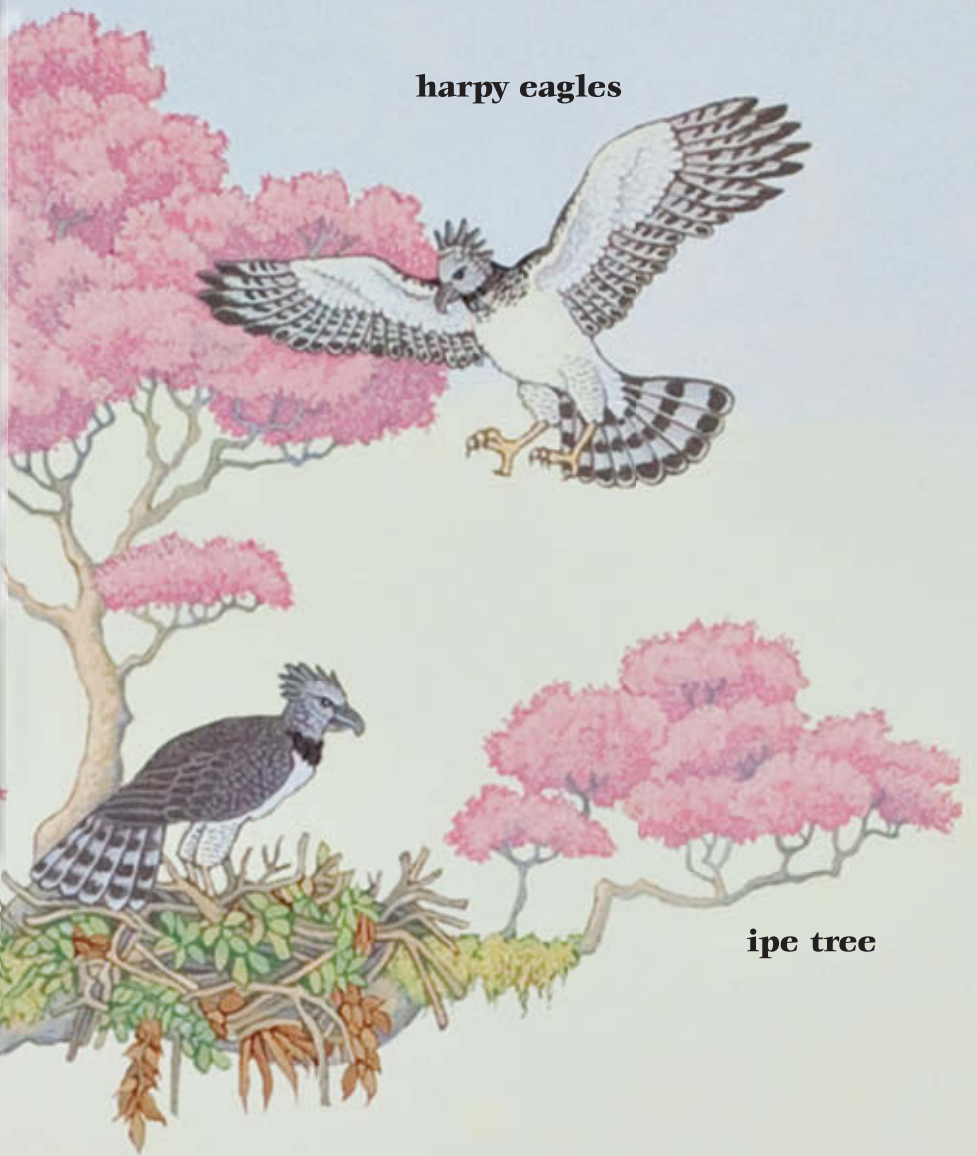
One scientist found forty-three kinds of insects on one tree! The world's largest tropical rain forest is in the Amazon **region** of South America.



emergent



harpy eagles



ipe tree

blue-headed parrots

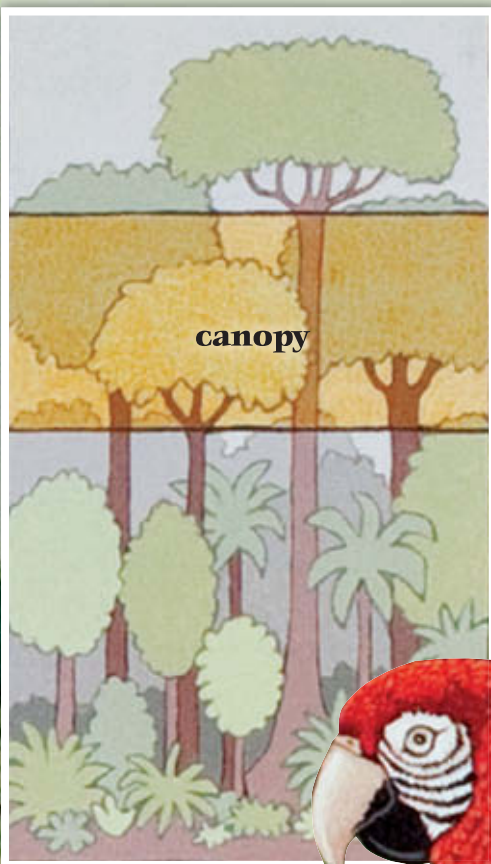


Rain forests have four **layers**.
Each layer has its own life-forms.
The top layer is called *emergent*. The
emergent trees poke above the rest
of the forest into the sunlight. Eagles
and parrots live there.

**kapok
treetop**

**red howler
monkeys**





canopy

The second layer is a closed *canopy*. It is a living roof that covers the forest below. It is formed by treetops that grow close together.



**scarlet
macaws**

tayra

Monkeys eat berries and fruits. Butterflies and hummingbirds drink nectar from flowers. Big stinging wasps crawl across leaves. This is the most **lively** layer of all.

wasp

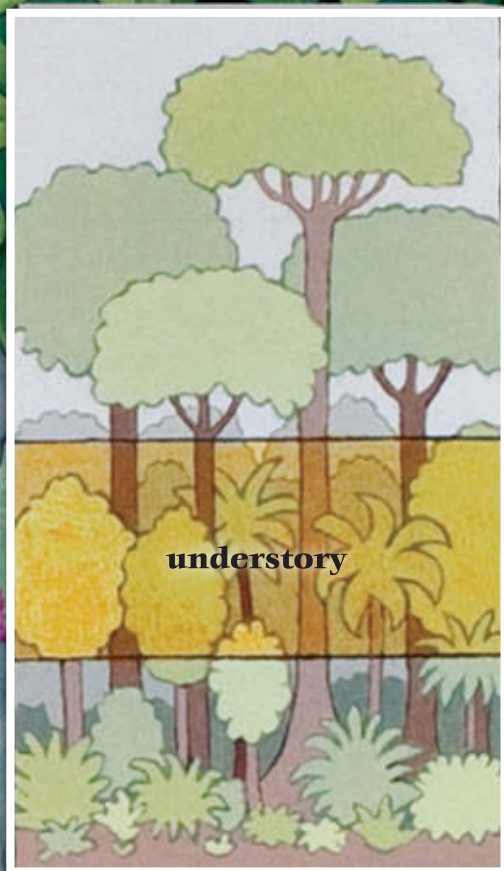
pygmy
marmoset

orchid

swallowtail
hummingbird

yolk
butterfly

squirrel
monkey

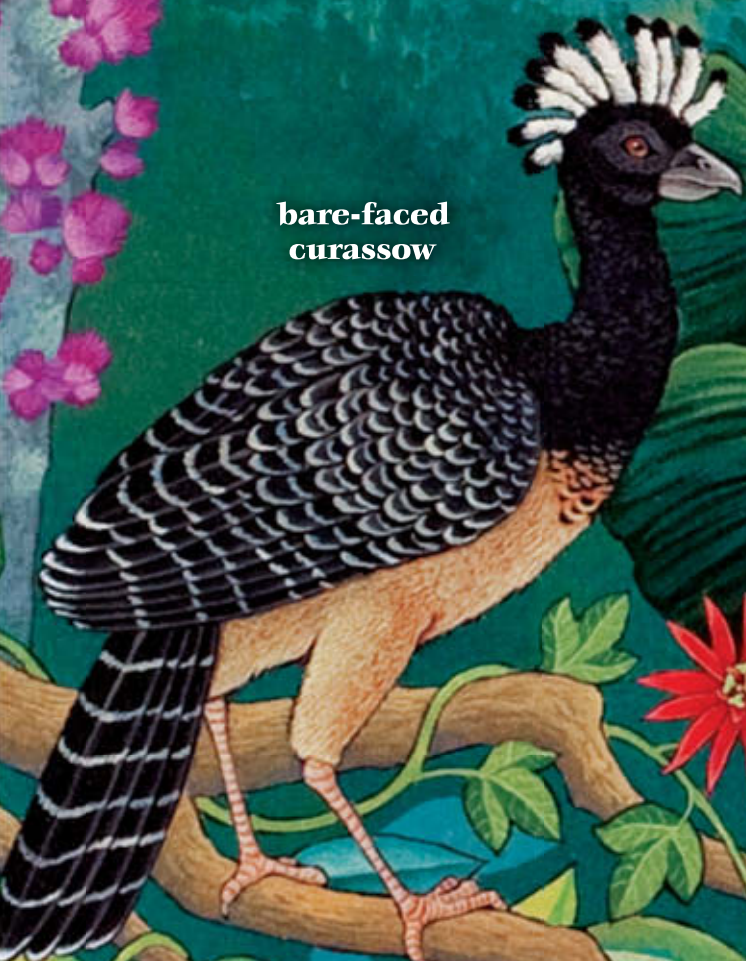


understory



**cannonball
tree**

coatimundi



**bare-faced
curassow**



**collared
puffbird**

**passion
flower vine**

A detailed illustration of a jaguar in a lush jungle. The jaguar is shown in a crouching position, looking towards the left. Its fur is a mix of orange, black, and white, with prominent black rosettes. The background is filled with various tropical plants, including large green ferns and a tree trunk with more foliage. A blue butterfly is visible on the ground near the jaguar's front paws.

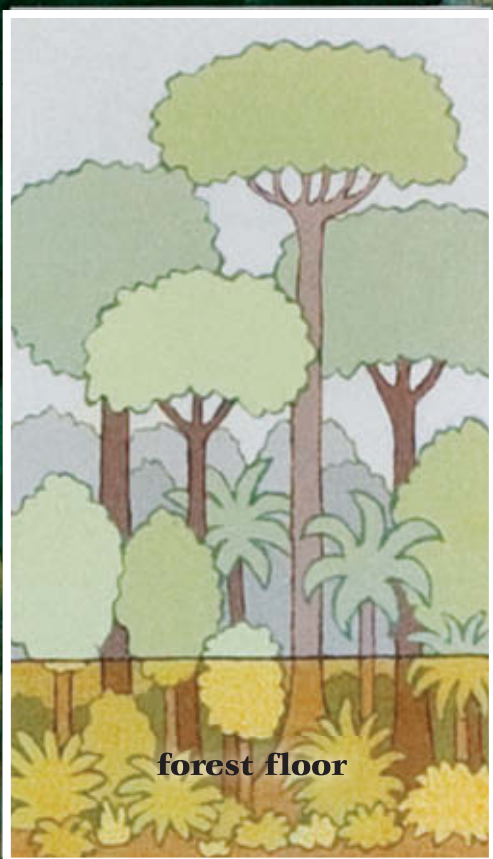
jaguar

staghorn
fern

morpho
butterfly

palm
fern

The third layer is the *understory*. It gets little sunlight. Sun cannot get through the canopy. Few flowers grow. Jaguars wait in trees to leap down and catch prey on the ground.

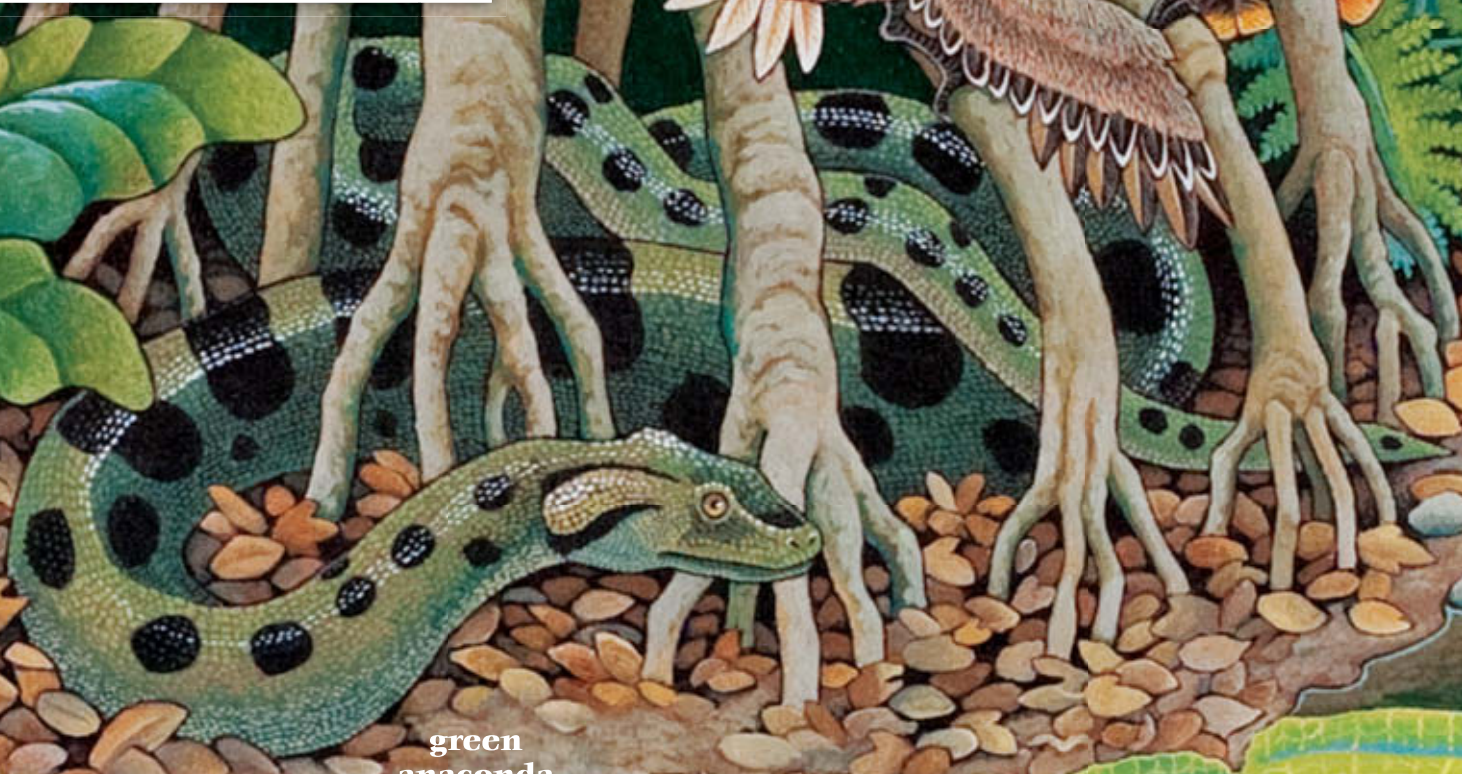


forest floor

hoatzin
and baby



green
anaconda



moss

Victoria
amazonia
water lily



The fourth layer is the *forest floor*. It is dark and **eerie**. It is filled with plants, mosses, ferns, dead leaves, and billions of ants.

capybara

ground
fern

apple snail

caiman



brocket
deer

saddleback
caterpillar

pink-toed
tarantula

heliconia

army ants

stink
beetle

Army ants march in swarms and eat everything in their paths. Termites live in colonies and eat wood. Deer and wild pigs are hard to see, but insects can be seen everywhere!



termite nest

tapir

cocoa tree

collared peccary

wild ginger

agouti

harlequin beetle



**three-toed
sloth**

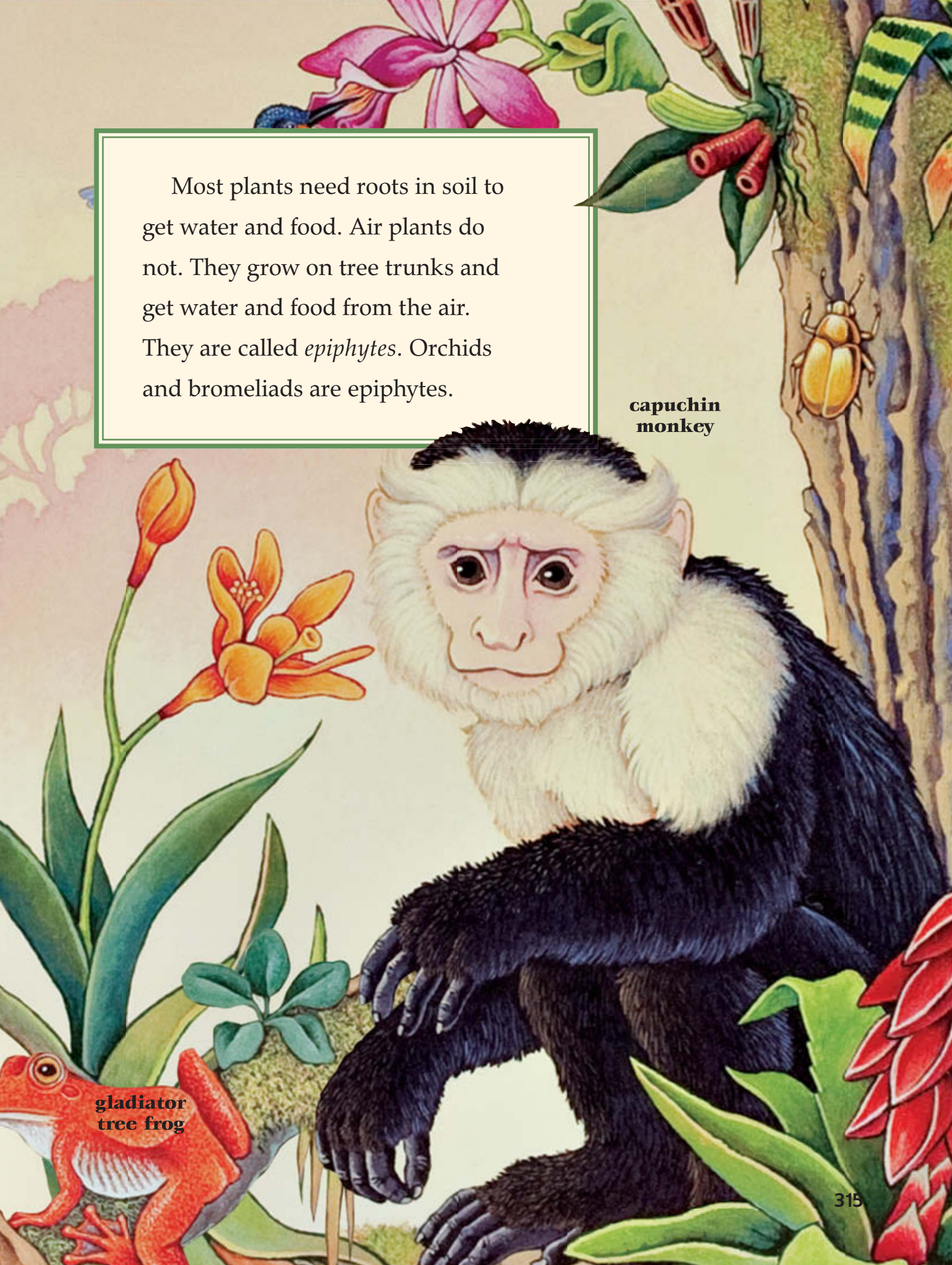
**eyelash
viper**

Many animals live in the trees most of their lives. Some tree frogs never touch the ground. They have sticky toe pads to help them climb slippery leaves. Sloths hang upside down all the time — even when they eat and sleep.

STOP AND CHECK

Reread Why do some tree frogs never touch the ground? Reread to check your understanding.

**glass
frog**



Most plants need roots in soil to get water and food. Air plants do not. They grow on tree trunks and get water and food from the air. They are called *epiphytes*. Orchids and bromeliads are epiphytes.

capuchin
monkey

gladiator
tree frog

A detailed illustration of a temperate rain forest. In the upper left, a northern spotted owl is perched on a mossy branch. To its right, a Sitka spruce tree is shown. In the upper right, a bald eagle is in flight. In the lower left, a mule deer stands in a clearing. In the center foreground, a black bear cub is climbing a tree trunk. In the lower right, a cougar is standing on a rock. The background features more trees and a misty atmosphere.

northern
spotted owl

Sitka spruce

bald eagle

Temperate Rain Forests

Most temperate rain forests grow in the Pacific Northwest of North America. How much rain falls every year? About 100 inches! The **seasons** do change.

Fog and mist from the Pacific Ocean bring warm summers and cool winters. Temperate rain forests have layers, too. But they do not look like tropical rain forests. Sun rays shine down to the forest floor. Some trees are giant old-**growth** trees. A Sitka spruce may be a thousand years old!

mule deer

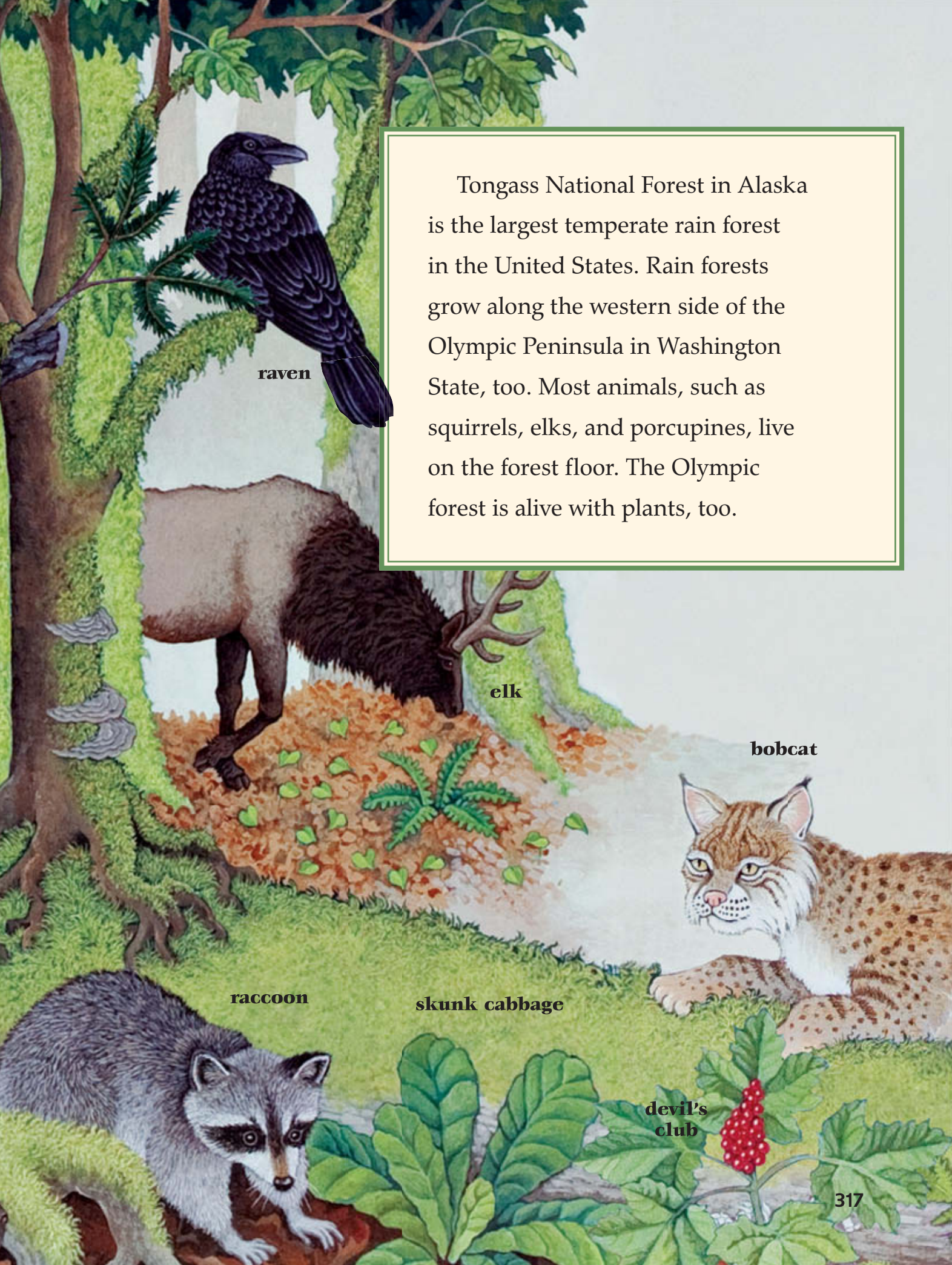
black bear cub

cougar

STOP AND CHECK

Ask and Answer Questions

How do temperate rain forests look different from tropical ones? Go back to the text to find the answer.



Tongass National Forest in Alaska is the largest temperate rain forest in the United States. Rain forests grow along the western side of the Olympic Peninsula in Washington State, too. Most animals, such as squirrels, elks, and porcupines, live on the forest floor. The Olympic forest is alive with plants, too.

raven

elk

bobcat

raccoon

skunk cabbage

**devil's
club**

About the Author and Illustrator

Nancy Smiler Levinson

became interested in writing children's books when she began reading to her kids. Nancy likes to research and write nonfiction books because they let her share the things that interest her. She also writes fiction. People sometimes ask her whether she likes writing fiction or nonfiction best. She usually replies, "Both!"



Diane Dawson Hearn has illustrated more than fifty books. Diane draws everything from funny cartoon characters to beautiful pictures of real plants and animals. She worked for two years on the illustrations for *Rain Forests*.



Author's Purpose

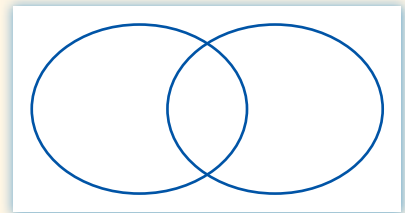
How does Nancy use diagrams and illustrations to help you understand the layers of the rain forest?



Respond to the Text

Summarize

Use important details from *Rain Forests* to summarize the selection. Information from your Compare and Contrast chart may help you.



Write

How does the author organize the information about tropical rain forests? Use these sentence starters:

The author discusses the forest layers...

The author describes animals and plants...

The author uses diagrams and illustrations to show...

Make Connections



What makes rain forests different? **ESSENTIAL QUESTION**

Tell about a plant or animal you learned about that lives in the rain forest. **TEXT TO WORLD**

Compare Texts

Read about a special region in Africa.

African Savannas

Plants and Animals

A savanna is a special **region** in Africa. In this part of Africa tall grasses grow. The savanna does not have groups of trees like in a forest. It has lots of single trees scattered across the grassland. Acacia (uh kay shuh) trees grow in the savanna. They have huge thorns. The leaves of this tree are a favorite food for giraffes. Baobab (bay oh bab) trees grow here, too. They are some of the oldest trees in the world. They can grow to be as wide as a house! Just one baobab can be a home for lizards, snakes, frogs, and birds for their entire life.

Many different kinds of animals live in the savanna. Zebras, lions, and meerkats all make the savanna their home.



Herds of zebra roam the savanna. Here they are next to an acacia tree.

There are more types of hoofed animals in the African savanna than anywhere else in the world. Elephants, antelopes, giraffes, buffaloes, and rhinos are just some of the hoofed animals found in the savanna.

Seasons

Think about where you live. What is the weather like in each season? African savannas have a rainy season and a dry season. During the rainy season, it may rain for hours each day. The rain lasts for months. Then, there may be five months with no rain at all.

An African savanna is near the Equator, the imaginary line that is in the middle of Earth. That makes a savanna a warm **location** all year. A savanna is a special place, filled with interesting animals and plants.



Make Connections

What makes an African savanna different? **ESSENTIAL QUESTION**

How are a savanna's land features different from those of another region you have read about? **TEXT TO TEXT**

