

Plant Diversity Around the World

Week 28 — Monday | Plants in Different Habitats

Reading Time

Earth is home to millions of different types of plants, and they live in almost every place you can imagine. From freezing mountains to hot, dry deserts, plants have found ways to survive in almost any environment. Scientists call the natural home of a plant its **habitat**. Each habitat has unique conditions like temperature, rainfall, sunlight, and soil type. Plants that live in the same habitat often share similar features because they face the same challenges.

In **desert habitats**, water is scarce and temperatures swing from extremely hot during the day to cold at night. Desert plants like cacti have thick, fleshy stems that store water, and instead of broad leaves, they have sharp spines to reduce water loss and protect themselves from animals. In **rainforest habitats**, there is plenty of rain and warm temperatures year-round. Rainforests are layered, with a tall **canopy** at the top where most plants get sunlight. Many rainforest plants have large, waxy leaves to catch rain and shed it quickly, and some grow high up on trees (called **epiphytes**) to reach the light.

In cold **tundra and arctic habitats**, the ground is often frozen, the growing season is short, and winds are strong. Plants here grow close to the ground to avoid the wind and trap heat. They often have small, thick leaves that stay on the plant year-round. In **temperate habitats** (like forests and grasslands where four seasons change), plants go through yearly cycles. Deciduous trees drop their leaves in autumn to save energy during winter, while evergreen trees keep their needles. Grasses in temperate grasslands have deep root systems to survive dry summers and cold winters.

Reading Questions

1. What is a plant's habitat?

2. How do cacti adapt to life in the desert?

3. Why do rainforest plants have large, waxy leaves?

4. Compare plants in tundra habitats with plants in temperate habitats. How do their strategies for surviving cold weather differ?

Vocabulary Grid

Write a definition or draw a picture for each word.

 **Habitat**

 **Desert**

 **Rainforest**

 **Canopy**

 **Tundra**

 **Temperate**

 **Epiphyte**

 **Adaptation**

 Match the Plant to Its Habitat

Draw a line or write the letter connecting each plant description to its habitat.

Plant Description	Habitat
A tall tree that drops its leaves in the fall.	Desert
A plant with spines instead of leaves that stores water.	Rainforest
A small shrub that grows close to the frozen ground.	Temperate
A broad-leafed plant that grows high up on other trees.	Tundra

 Comparing Plant Adaptations

Fill in the chart to compare how plants adapt to different environments.

Habitat	Challenge Plants Face	Plant Adaptation	Example Plant
Desert			
Rainforest			
Tundra			
Temperate			

 Draw Plants from Different Habitats

Draw one plant from each habitat. Label its special features.

Desert plant — show water storage or spines.

Rainforest plant — show broad leaves or tall growth.

 Think About It

If you took a desert cactus and planted it in a rainforest, do you think it would survive? Explain why or why not.

✓ True or False — Circle Your Answer

- ☐ 1. A habitat is the natural environment where a plant lives.
- ☐ 2. All plants have the same features because they all need sunlight.
- ☐ 3. Cacti use spines instead of leaves to reduce water loss.
- ☐ 4. The canopy is the lowest layer of the rainforest.
- ☐ 5. Tundra plants grow close to the ground to avoid wind.
- ☐ 6. Deciduous trees keep their leaves all year round.
- ☐ 7. Epiphytes are plants that grow on other plants for support.
- ☐ 8. An adaptation is a feature that helps an organism survive in its environment.

Fill in the Blanks

Word Bank: habitat adaptation canopy epiphyte desert tundra deciduous temperate

- 1. The natural home of a plant is called its _____.
- 2. A feature that helps a plant survive is an _____.
- 3. The upper layer of a rainforest where most trees grow is the _____.
- 4. A plant that grows on another plant is an _____.
- 5. A very dry environment with little rain is a _____.
- 6. A cold habitat with frozen ground is called the _____.
- 7. Trees that lose their leaves in autumn are _____.
- 8. Regions with four distinct seasons are _____ habitats.

Observe Local Plants

Look outside or in a park. Find two different plants and record what you see.

Plant Name/Type	Leaf Shape/Size	Where It Grows (Sun/Shade/Wet/Dry)
Plant 1		
Plant 2		

Think About It

If you could create a new habitat for plants, what would it be like? What kind of plants would live there and how would they be special?
