

Name: _____

Date: _____

Class: _____



CACTUS - A DESERT PLANT



A. Read the passage carefully.

A cactus is a special plant that grows mainly in hot and dry desert regions. Deserts receive very little rainfall, and the days can be extremely hot. Many ordinary plants cannot survive in such conditions because they need plenty of water. The cactus, however, has special features that help it live and grow in the desert.

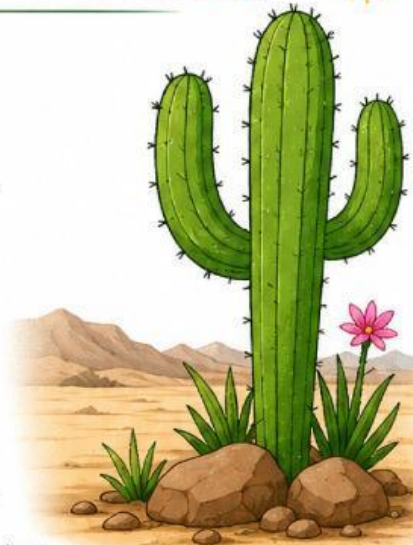
Most cactus plants have thick, green stems. Instead of having large, flat leaves like many other plants, a cactus has spines. The spines are actually modified leaves. They help protect the plant from animals that may try to eat it. The spines also reduce the amount of water lost from the plant.

The thick stem of a cactus acts like a water-storage tank. When rain finally comes to the desert, the cactus absorbs and stores a large amount of water in its stem. Its roots spread through the soil and quickly collect available water. The cactus can then use the stored water slowly during long periods without rain.

Cacti come in many different shapes and sizes. Some are tall and column-shaped, while others are short and round. Their stems are often covered with a waxy layer. This layer helps prevent water from escaping. Some cacti produce beautiful flowers and fruits. These flowers attract insects and other animals that help with pollination.

Cacti are useful to both people and animals. Some cactus fruits can be eaten, and certain cactus plants are used in traditional foods and medicines. Cacti also provide food and shelter for some desert animals. Their flowers and fruits are important sources of food for insects, birds, and other creatures.

The cactus shows us how plants can adapt to their habitats. Unlike plants that grow in cool mountains or wet coastal areas, the cactus is specially suited to a hot, dry environment. Its thick stem, spines, roots, and waxy covering help it survive where water is scarce. This makes the cactus one of the most interesting plants found in the desert.



B. Answer the Questions



- What type of habitat does the cactus mainly grow in?

- Where does the cactus store most of its water?

- Why does a cactus have spines instead of large, flat leaves?

- What are some ways in which cacti are useful to humans and animals?

- Why do you think the cactus has a thick stem and a waxy covering?

C. Fill in the Blanks

Word Bank:

spines desert stem water waxy roots flowers dry

- A cactus mainly grows in a hot and _____ habitat.
- The cactus stores water in its thick _____.
- Cactus _____ help protect the plant from animals.
- The _____ of a cactus help collect water from the soil.
- A _____ layer helps prevent water from escaping.
- Cacti need special adaptations because deserts are very _____.
- Some cacti produce beautiful _____.
- The cactus can store _____ for long periods without rain.

D. Multiple-Choice Questions

Circle the correct answer.

- Where does a cactus usually grow?
a) Rainforest b) Desert c) Pond d) Arctic region
- What part of the cactus stores water?
a) Flower b) Spine c) Thick stem d) Fruit
- What are the spines of a cactus?
a) Modified leaves b) Roots c) Flowers d) Seeds
- How do spines help a cactus?
a) They make the plant grow faster.
b) They help it swim.
c) They protect it and reduce water loss.
d) They collect sunlight only.
- Why is the cactus well suited to the desert?
a) It needs lots of rain.
b) It can store water and reduce water loss.
c) It has very large leaves.
d) It grows only in cold places.



Think and Infer



- A cactus lives in a place where it may not rain for a long time. How do you think its ability to store water helps it survive?

- Imagine that a cactus had large, thin leaves instead of spines. Why might this make it harder for the cactus to survive in the desert?



E. Compare Different Plant Habitats

Complete the table.

Plant Habitat	Example Plant	Climate	Leaf / Plant Features
 Desert	Cactus	_____	_____
 Mountain	Pine tree	_____	_____
 Coastal	Coconut tree	_____	_____

F. Think & Write

- How is a cactus different from a coconut tree? Write two differences.
a) _____
b) _____
- How are they alike? Write one similarity.



★ Challenge Question

A cactus and a pine tree both have features that help them survive in their habitats. Explain how the habitat of a plant can affect the way the plant looks and grows.

