

# What are Deserts and How are They Formed?

## What Is a Desert?

A desert is an area of land with very low rainfall. Deserts have very few plants as a result of their extreme climates. There are four main types of deserts: hot and dry, semi-arid, coastal, and cold.

In a hot desert, less than 25 cm of rain falls each year. The ground is usually dry and very hard. Whenever it does rain, the heat of the sun quickly dries up most of the water. This is called *evaporation*. Often, the rain evaporates before it even reaches the ground.

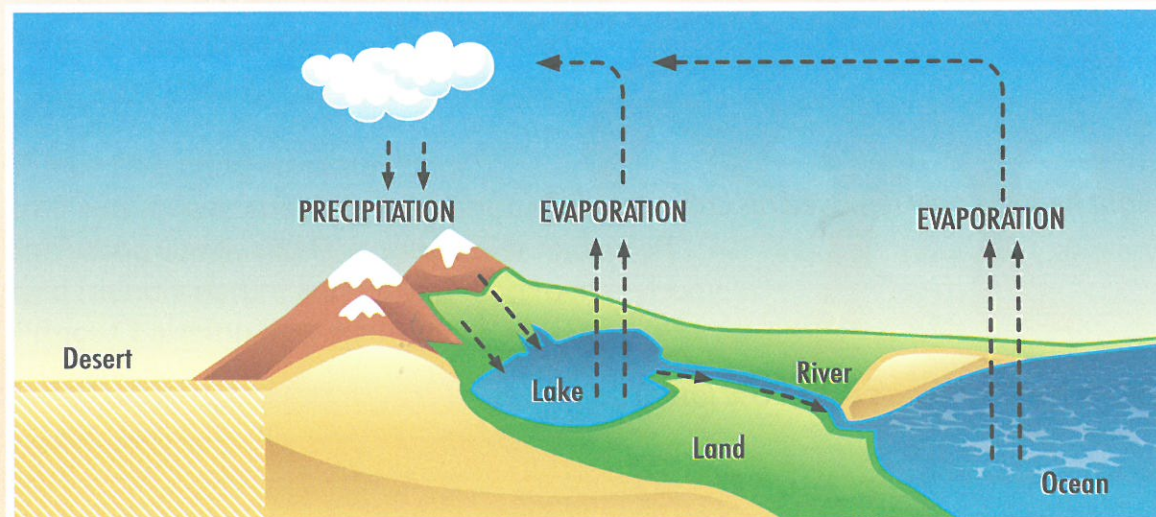
One reason for evaporation occurring is the extremely high daytime temperatures. During the day, the ground absorbs heat, and then releases this heat during the night. By day, the temperature in the desert can reach as high as 54°C. How hot is that? Most people are comfortable at about 21°C. Deserts can record temperatures more than twice that! Yet desert nights can be very cold; temperatures can drop as low as -18°C.

## How does a Desert Form?

Many deserts form as a result of being situated between mountain ranges. The mountains prevent moist ocean air from reaching the land between the ranges. *Precipitation* (rain, hail and snow) falls on one side of the mountains, but the air is dry by the time it reaches the area between the mountains, resulting in a desert forming.

Some deserts form because they are far away from bodies of water. Moisture from lakes and oceans is evaporated, forming clouds. The clouds move over the land, but they drop water long before they reach the desert. The clouds just do not travel as far as the desert.

How Water Moves Through the Environment



## Literal Questions

- 1 What do deserts have very few of? Why? \_\_\_\_\_
- 2 What is one reason for evaporation occurring? \_\_\_\_\_
- 3 What is precipitation? \_\_\_\_\_
- 4 Why do some deserts form? \_\_\_\_\_
- 5 Fill in the blank spaces.
  - a In a hot desert, less than \_\_\_\_\_ of rain falls each year.
  - b The temperature in the desert can reach as high as \_\_\_\_\_.
  - c The ground releases its heat \_\_\_\_\_.

## Focus: Interpreting Different Graphics and Illustrations

Always look at the pictures, maps or diagrams before you read the text. They will give you clues as to what the text will be about. They will also provide supporting information and extra details about the topic when you finish reading the text.

- 6 Look at the diagram at the bottom of the page. What does it show? \_\_\_\_\_
- 7 How did the diagram help you to understand the text? \_\_\_\_\_
- 8 Use the diagram to answer the following questions.
  - a What happens to the water in lakes and oceans? \_\_\_\_\_
  - b How does the water move from the lake to the ocean? \_\_\_\_\_

## Inference Questions

- 9 The purpose of this text is to
 

explain
persuade
entertain
- 10 Draw yourself in a desert. Think about what you would wear and why, what the sky and ground would look like and what would be around you.

