

Deadly Deserts

If you have ever been to a **desert** then you know that they are a land of extremes. Some deserts have names that reflect their harsh conditions like "Death Valley." Most people know that it gets extremely hot and dry in a desert, but they may not know that many deserts get quite cold at night.

Deserts with temperatures in the 100s during the day can get down into the 40s and 50s at night. This change in temperature from night to day is due to desert's lack of **humidity**. In other biomes, water vapor in the air acts as a blanket that traps heat in during the night. Deserts have very low humidity, so without this insulation the temperature drops very quickly once the sun goes down. Rainfall in deserts is very sporadic. There can be long periods without any rain at all.

Deserts can be divided into two main categories: **hot** and **cold**. A cold desert is the USA's Great Basin where the Great Salt Lake is found. Our focus will be hot deserts like the Mojave Desert found in the southwestern USA. The largest desert in the world is the **Sahara Desert** located in Northern Africa. Some parts of this desert get no rain at all for years at a time.

Surprisingly, deserts have a large variety of living things in them. The large variety of plants found in deserts all have adaptations to help them store water and reduce water loss. Many desert plants have **succulent** leaves that can store water inside of them. These leaves are thick and tough to reduce water loss.

A common desert image is the Saguaro cactus found in the Sonoran desert. The stem of a Saguaro cactus is where it stores its water and where photosynthesis occurs. It also has a large net of roots underground to help it collect water. Another type of desert plant life is prickly pear cacti. These cacti store water in their spongy tissue. To prevent animals from eating them for moisture, they are covered with thorns.

Name _____

Date _____

Deadly Deserts (cont'd)

Being an animal in a desert is hard. They have to be able to withstand high temperatures and a lack of water. Some animals never drink but get all their water from seeds and plants they eat. Many animals are **nocturnal**, which means they are active only at night when the temperatures are cooler. An interesting desert creature is the Gila monster. Gila monsters have short tails that they use for food storage. They are the only venomous lizards. Spade foot toads are another fascinating creature. They survive in the desert by spending most of the year underground.

Name _____

Date _____

Deadly Deserts Questions

1. True or False. Deserts are hot all the time.
2. Deserts have big temperature changes between night and day because they have very low _____.
3. The two types of deserts are _____ and _____.
4. What type of desert is the Mojave Desert?
 - a. cold
 - b. hot
5. The largest desert in the world is the
 - a. Mojave
 - b. Great Basin
 - c. Sonora
 - d. Sahara
6. What are the two key things that desert plant must be able to do?
7. Many desert plants have _____ leaves which are thick and tough to reduce water loss.
8. What are two things that happen in the stem of a Saguaro cactus?
9. What does it mean to be nocturnal?
10. What adaptation do Spade foot toads have to living in the desert?

Deadly Deserts Answers

1. True or **False**. Deserts are hot all the time.
2. Deserts have big temperature changes between night and day because they have very low **humidity**.
3. The two types of deserts are **hot** and **cold**.
4. What type of desert is the Mojave Desert?
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 - a. Mojave
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 - d. **Sahara**
6. What are the two key things that desert plant must be able to do?
Store water and reduce water loss
7. Many desert plants have **succulent** leaves, which are thick and tough to reduce water loss.
8. What are two things that happen in the stem of a Saguaro cactus?
Water storage and photosynthesis
9. What does it mean to be nocturnal? **Active at night**
10. What adaptation do Spade foot toads have to living in the desert?
They stay underground most of the time.