

# Deserts

Name: \_\_\_\_\_

## **Vocabulary for this reading:**

**Biome (Life Zone):** region with its own life forms and climates

**Drought:** a long period of dry weather with little to no rain



*Sahara Desert in northern Africa*



*Kalahari Desert in southern Africa*

## **Location**

Deserts cover close to 30% of our planet. Deserts occur on all seven continents. The largest desert is the Sahara which covers most of Africa north of latitude 15°N.

## **Climate**

Deserts are the driest **biome** (life zone) on Earth. A desert is a region in which less than 10 inches of rain falls per year. All deserts are dry, but low rainfall is the only characteristic they share. Deserts tend to be a place of extremes. Some are nothing but rock, while others are all sand. Some deserts have temperatures as high as 136.4° F (recorded in the Sahara Desert) while others have temperatures as low as -128.6° F (recorded in Vostok, Antarctica).

Desert air is very dry and seldom still. Winds blowing across the Sahara are hot, dusty and strong during the day and tend to die down at night. The Sahara Desert has an average rainfall of 0.7 inches a year. The average temperature in the Sahara Desert is 86° F, but in the cold season the average temperature is about 55° F. The temperature drops by 26-30° F every night when the sun sets. Desert plants and animals adapt to these large daily changes in temperature.

## **Plants**

Plants have evolved special ways of living in the desert. They have to be able to survive long periods of **drought**. When rain comes, it is unpredictable and can be a little sprinkling or a heavy rainstorm. Many plants deal with these extremes by using every drop of moisture they can take up in their roots, storing it in their roots or in underground tubers (thick, fleshy roots). Some of these roots can grow as far as 80 feet down into the soil (that's like growing roots from the 8<sup>th</sup> floor of Bank Street down to the street!). Although some plants can survive in this harsh climate, there are areas where there are no plants for many miles.

References: Encyclopedia Britannica: <http://www.britannica.com/EBchecked/topic/516375/Sahara/37013/Climate>  
*Biomes of the Earth: Desert*, Michael Allaby  
*Life in the Desert*, Ron Fridell

## Deserts

Some plants that grow in the Sahara include:

Date Palms are a medium sized tree that grow in the desert and are cultivated for their sweet fruit. They probably originated in the desert oases of northern Africa.



**Tamarisks** are shrubs or small trees that often grow on sandy soils near coasts. In the Taklimakan Desert of western China sparse thickets of tamarisk shrubs are able to grow because there is groundwater within 10-15 feet of the surface.



**Acacia Trees** are thorny trees that grow in Australia and Africa. Their broad, leafy branches spread into a thick canopy above the deserts.



## Deserts

**Eragrostis** can be used as livestock feed, the seeds appear to be of extremely high nutritional value at least in some species, but they are also extremely tiny and collecting them for food is awkward and not usually done.



**Panicum** is a large, hearty grass that can grow to be 3-6 feet tall.



## Deserts

### **Animals:**

During the daytime, most animals in the desert stay below ground or beneath rocks to stay cool. Deserts are a hard place to survive. The animals that live in deserts need to be able to survive extreme temperatures and very dry conditions. All of the sand makes it difficult to travel so animals that live in the desert have adapted in a number of ways. The scales on a lizard's toes give them extra traction (grip) on the sand while rodents have their own way of traveling on the slippery sand, jumping or hopping.

Some animals that live in the Sahara include:

**Jerboas** resemble mice with long tufted tails and very long legs. They are found in both the sandy and stony deserts of North Africa, Arabia and Iran.



**Fennec Foxes** are small nocturnal foxes found in the Sahara Desert of Northern Africa. Their coats are a sandy color, which allows them to blend in well with their desert surroundings.





## Deserts

The **Addax** is an antelope that lives in the Sahara desert far away from water. It is a vegetarian, and it doesn't need to drink much water.



**Horned Viper** is a snake that lives in the deserts of North Africa. It thrives in the desert in the shelter beneath overhanging rocks or in crevices.



**Scorpions** are nocturnal animals that have poor eyesight but can detect vibrations in the air or ground in order to make attacks. They have a raised tail that they use to sting when they are handled or touched.

