

Name _____

**Day
1**

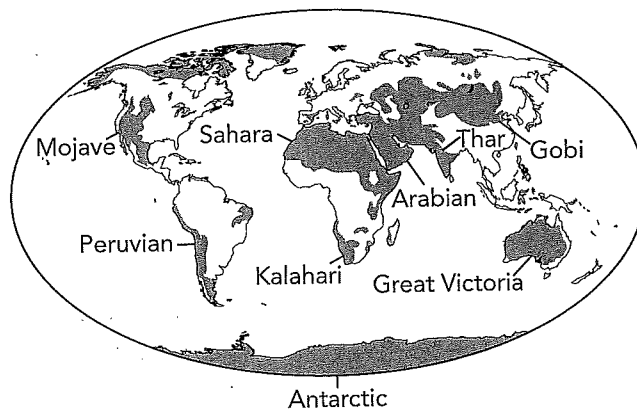
Weekly Question

What makes deserts so dry?

Deserts can be found anywhere in the world, from the Mojave (moh-HAH-vee) Desert in California to the Gobi (GOH-bee) Desert in Asia. When you picture these places, you probably imagine long stretches of barren sand dunes with a burning sun overhead. But did you know that the largest desert on Earth isn't the famous Sahara in Africa, but the frigid ice fields of Antarctica?

The fact is that deserts are determined by how much water they receive, not how hot they are. On average, a desert gets less than 10 inches of rainfall per year. Since the North and South Poles receive very little precipitation, these places are considered to be deserts.

- A.** The shaded areas on the map below represent the world's deserts. Use the map to answer the questions.



1. On how many continents are there deserts? _____
2. Besides Antarctica, which continent is made up almost entirely of desert? _____

- B.** Check the box next to each word or phrase that correctly completes the sentence.

Deserts are found in places that are _____.

- | | |
|-------------------------------|---|
| <input type="checkbox"/> hot | <input type="checkbox"/> near the ocean |
| <input type="checkbox"/> cold | <input type="checkbox"/> far from the ocean |

Daily Science

**Big
Idea 3**

WEEK 3

Name _____

Daily Science

Big Idea 3



WEEK 3

Day 2

Weekly Question

What makes deserts so dry?

To understand why deserts have so little rainfall, it's important to know how wind, along with the shape of the land, determines where precipitation falls. **Prevailing winds** carry moisture from the oceans inland. The water vapor typically condenses over areas of high elevation, such as a mountain. As the clouds rise in elevation, they release their moisture as rain. By the time they reach the top of the mountain, however, there is very little moisture left.

The rain that is released drains down one side of the mountain through a **watershed** that distributes moisture throughout the area. The other side of the mountain, however, is in a **rain shadow**, meaning that little rain reaches it because the mountain itself is in the way. Many deserts are the result of rain shadows. These deserts are dry because the wind that finally passes over them doesn't contain a lot of moisture.

Vocabulary

prevailing winds

prih-VAY-ling WINDZ
winds that blow in one direction for most of the time

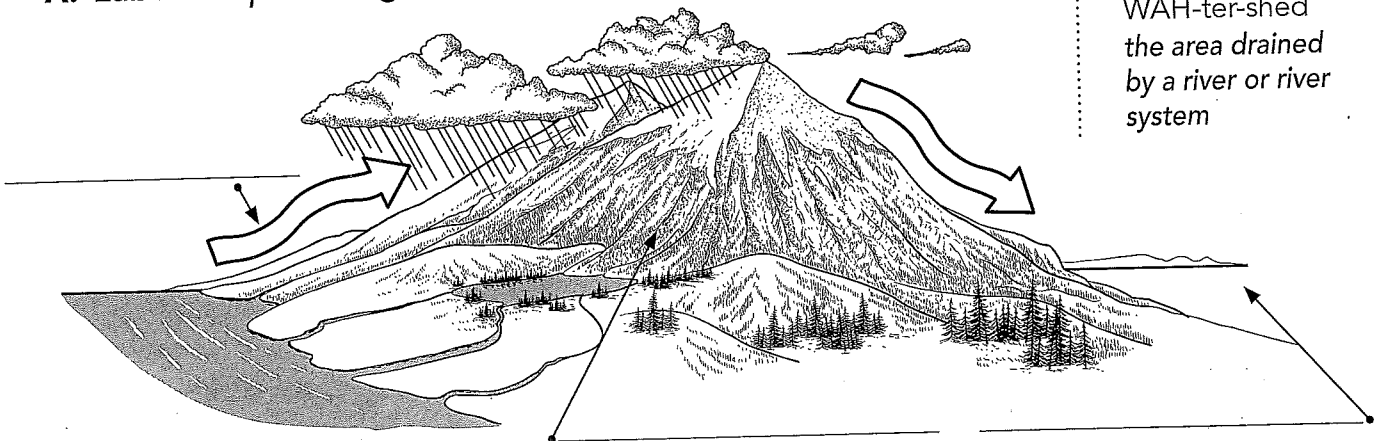
rain shadow

RAYN SHA-doh
an area that has little rain due to the effect of a barrier

watershed

WAH-ter-shed
the area drained by a river or river system

A. Label the *prevailing winds*, *watershed*, and *rain shadow*.



B. Fill in the bubble next to the word or phrase that completes each sentence.

1. In a rain shadow, there is very little _____.

- (A) sunlight (B) soil (C) precipitation (D) elevation

2. Deserts are *not* located in a _____.

- (A) watershed (B) windy area (C) rain shadow (D) cold climate

Name _____

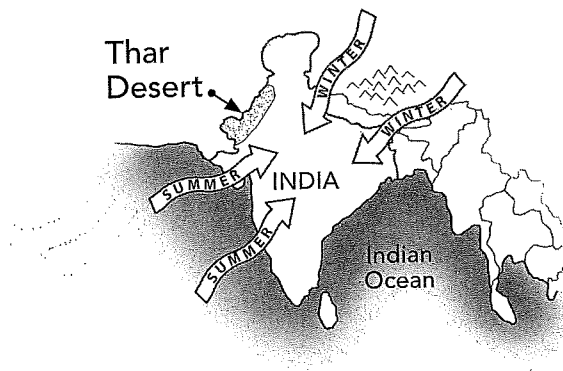
**Day
3**

Weekly Question

What makes deserts so dry?

Not all deserts are formed by a rain shadow behind a mountain. Some regions, such as the Sahara Desert, have very low moisture because the air is too warm for water to condense. The sun shines directly on the ground and heats up the land, evaporating any moisture. Other regions, such as the Tengger Desert in China, are impacted by dry prevailing winds that blow over land instead of water. The winds have already dropped all their moisture by the time they reach these regions.

Some deserts do receive seasonal rainfall, however. This happens when the prevailing winds reverse direction. A wind that changes direction with the seasons is called a **monsoon**. Monsoons bring rainfall for a certain period of time to areas that are otherwise dry. The Thar Desert in India is a monsoon desert that receives some rainfall from June to September, during India's monsoon season.



A. During winter in the Thar Desert, the winds blow from the dry Himalaya Mountains and Siberia. Why do you think it rains so much when the winds switch direction in the summer? Use the map above to help you.

B. Name two reasons that deserts form, besides rain shadows.

1. _____

2. _____

Daily Science

**Big
Idea 3**



WEEK 3

Vocabulary

monsoon

mon-SOON

a wind that
reverses direction
when the seasons
change

Name _____

Daily Science

Big Idea 3

WEEK 3

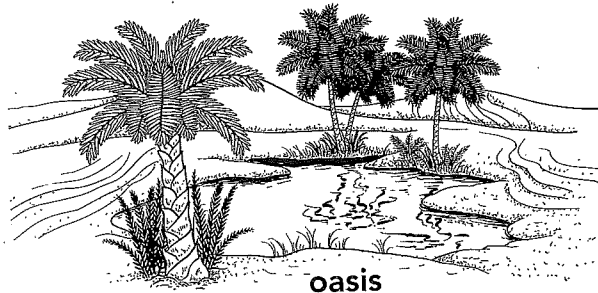
Day 4

Weekly Question

What makes deserts so dry?

Even though deserts contain very little water, people are still able to live in them. That's because many desert communities are formed near an **oasis**. An oasis is a small, isolated area where vegetation grows because there is an underground water source. Oases (oh-AY-seez, the plural of oasis) usually form where the water table is just below the surface. Water bubbles up through the ground in natural springs, or can easily be reached by wells.

People in desert communities also survive dry seasons by pumping water from sources that are farther away, such as **reservoirs**. The water is transported from the reservoirs to desert towns in canals called *aqueducts*. Even in the driest desert climates, reservoirs can provide enough fresh water to build thriving cities. In fact, Phoenix, Arizona, is one of the United States' biggest cities, and it is located in the middle of the Sonoran Desert!



Vocabulary

oasis

oh-AY-siss
a fertile place in the desert

reservoir

REH-zih-vwar
an artificial body of water stored for future use

A. Which of the following statements do you think are true based on what you just read? Check all that apply.

- ☐ Desert animals can often be found near an oasis.
- ☐ Phoenix, Arizona, does not get a lot of rain.
- ☐ A reservoir must be built someplace dry and warm.
- ☐ Natural springs are common throughout the desert.

B. Look at the word *reservoir*. What other words do you know that might be related to it, based on their spellings and meanings? Write two related words and their definitions.

1. _____

2. _____

Name _____

**Day
5**

Weekly Question

What makes deserts so dry?

Daily Science

**Big
Idea 3**



WEEK 3

A. Use the words in the box to complete the paragraphs.

reservoir watershed prevailing winds
oasis monsoons rain shadow

Many deserts are formed by a _____, an area behind a mountain that receives very little rain. _____ bring moisture from the ocean inland, but that moisture is deposited only on the ocean side of the mountain, resulting in a _____. Still, some deserts do receive rain when the winds change and bring seasonal _____.

Water is also present in deserts under the ground. In some spots, an _____ forms, allowing vegetation to grow and people and animals to live there. People also live in deserts by bringing water from a _____ into the region, using an aqueduct.

B. Name two ways that deserts form.

1. _____
2. _____

C. Describe what happens during a monsoon.
