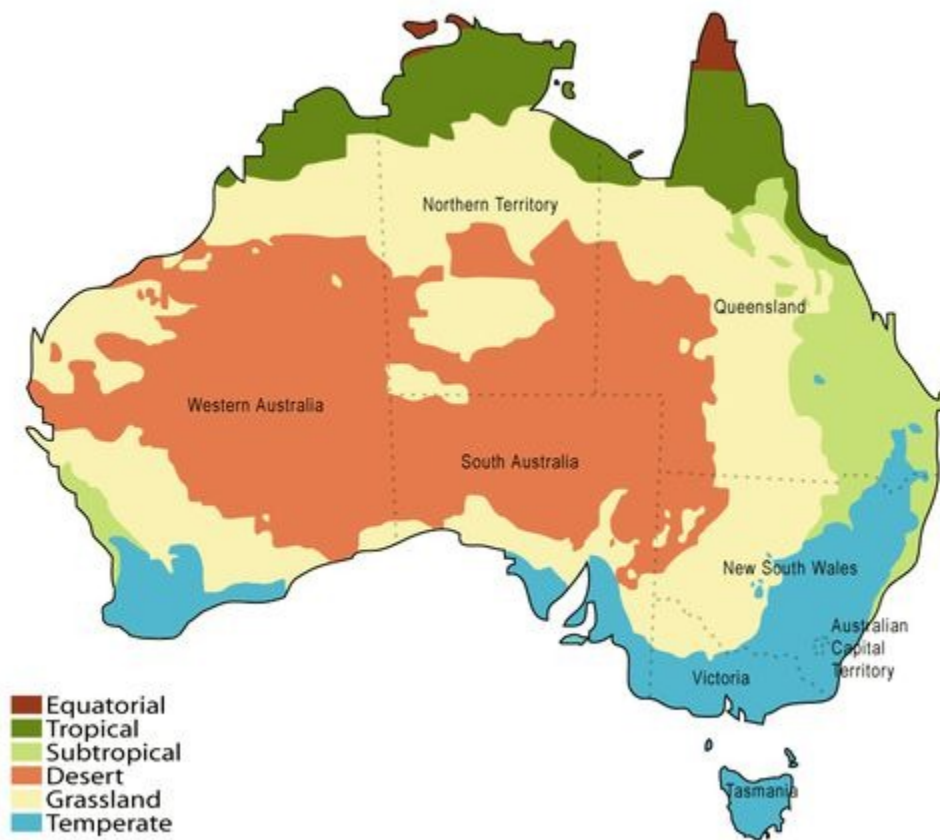


Climates: Climate Groups

by ReadWorks



climate map of Australia

The Earth's surface is made up of many different climates. Climatologists (scientists who study climates) have organized the climates by grouping climates that are similar. The most widely used climate organization system groups climates based on the same kinds of vegetation, average temperature, and precipitation. Here's a look at the five groups.

Tropical Climates

Many areas near the equator have tropical climates. Most places with tropical climates are between 15 degrees north and 15 degrees south latitude. Tropical climates receive a lot of sunlight and are usually very warm. Some places often experience heavy rainfall. Rain forests are an example of places with a tropical climate. Hot and muggy conditions in rain forests provide a habitat for many different types of plant and animal species.

Dry Climates

Areas with dry climates barely receive any rain. Usually the average rainfall for an entire year is less than 20 inches. Hot deserts are an example of places with a dry climate. Sometimes it is so hot in a hot desert that when rain does fall, it can evaporate even before it reaches the ground! Hot deserts often receive full sunlight because there are very few clouds to filter the sun's rays. At night deserts can be extremely cold. Very little life thrives in the desert. Cacti are one exception. The cactus plant has evolved so that it stores water. The stem of the cactus stores water and allows very little to leave the plant. Some famous deserts include the Sahara in northern Africa and the Mojave in the United States.

Moderate Climates

Areas with moderate climates have cool or cold winters and warm or hot summers. The weather patterns are heavily influenced by their distance from the sea. Places closer to the sea have less of a temperature difference between summer and winter. Some examples of areas with a moderate climate are places near the Mediterranean Sea, New Zealand, and parts of China.

Continental Climates

Areas with continental climates can only be found in the Northern Hemisphere. They can mostly be found between 40 degrees and 70 degrees north latitude. Compared to places with mild climates, areas with continental climates have colder winters. Examples of places with continental climates include most of the United States and Canada.

Polar Climates

Polar climates are found mainly above 60 degrees north latitude or below 60 degrees south latitude. They are the coldest climates on Earth. These places get less of the sun's direct rays because of the tilt of Earth's axis. Temperatures are extremely low during winter! Precipitation is rare and almost always in the form of snow.

Name: _____ Date: _____

1. According to the text, which of the following climates barely receive any rain?

- A. tropical climates
- B. desert climates
- C. moderate climates
- D. continental climates

2. What does the text list and describe?

- A. differences between hot and cold deserts
- B. plant and animal species found in different climates
- C. different climates
- D. countries with tropical climates

3. Based on the text, how are dry climates and polar climates similar?

- A. They both don't get a lot of precipitation.
- B. They both get less of the sun's direct rays.
- C. They both get more of the sun's direct rays.
- D. They both get a lot of precipitation.

4. Which type of climate is similar to continental climates?

- A. tropical climates
- B. polar climates
- C. moderate climates
- D. desert climates

5. What is the main idea of this text?

- A. Compared to places with mild climates, areas with continental climates have colder winters.
- B. Climatologists are scientists who study climates..
- C. There are five main groups of different climates.
- D. Many areas near the equator have tropical climates.

6. Describe dry climates. Use evidence from the text to support your answer.

7. Compare two different climates discussed in the text. Use evidence from the text to support your answer.

8. Choose the answer that best completes the sentence.

_____ Polar regions get less of the sun's direct rays, they are the coldest climates on Earth.

- A. Because
- B. Although
- C. However
- D. Consequently

Name: _____ Date: _____

1. What is a meaning of the word **equator**?

- A. a map line dividing Earth halfway between the poles
- B. official documents or identification, as a passport
- C. the month following September and preceding November

2. What is another meaning of the word **equator**?

- A. a circle dividing a sphere or other surface into two usually equal and symmetrical parts
- B. a sport in which two opposing teams of five players strive to put a ball through a hoop
- C. rhodesian statesman who declared independence of Zimbabwe from Great Britain (born in 1919)

Please use each answer choice only once. Choose the one word that best completes the sentence.

3. Lines of latitude circle the globe parallel to the _____.

- A. equator
- B. equatorial

4. Only the _____ forests have these conditions.

- A. equator
- B. equatorial

5. Please write your own sentence using the word **equator**.

6. What would you like to remember about the meaning of the word **equator** so that you can use it when you write or speak?
