

Climate Zones

Geographers divide the earth in several different ways. One of the ways that they divide the earth is by dividing it into bands that are parallel to the equator. These bands help to describe the climate of the regions of the earth. The farther a place is from the equator, the colder the climate is.

Far to the north of the equator is an imaginary boundary called the Arctic Circle. Everything north of the Arctic Circle is called the Arctic Region. The lands of the Arctic Circle form a ring around the Arctic Ocean. Much of the Arctic Ocean stays frozen throughout the year. Packs of ice float on the surface of this ocean. This is called the polar ice cap. The North Pole is at the center of the Arctic Circle. The Arctic Circle is located about 67 degrees north of the equator.

Directly opposite the Arctic Circle is the Antarctic Circle. It is in the Southern Hemisphere. The Antarctic Circle begins around the line of latitude located at 67 degrees south. The Antarctic climate is colder than the climate in the Arctic. The South Pole is located at the center of the Antarctic Circle. The southern polar ice cap is located in the Antarctic Circle. This ice cap holds over 75% of the world's fresh water.

There are two more imaginary circles used to describe the different climates of the earth. They are called the Tropic of Cancer and the Tropic of Capricorn. Both of these circles are parallel to the equator and lie at a latitude of roughly 23 degrees. The Tropic of Cancer lies to the north whereas the Tropic of Capricorn lies to the south of the equator. The names of these circles come from ancient astronomers who named them after two constellations: Cancer (which means crab in Latin) and Capricorn (which means goat horn in Latin). The Tropic of Cancer and the Tropic of Capricorn mark the northern and southern boundaries of the region known as the Tropics.

There are bands that lie between the circles discussed that help describe climate zones. The world has several different climates. Climates can be classified as frigid, temperate, or tropical. Frigid means that the climate is very cold. In a temperate climate, it is neither very cold nor very hot; the weather in a temperate climate is moderate. Tropical climates are quite hot.

These different climates are divided into climate zones. These zones are created by lines of latitude. The Greeks thought that climate would remain constant along any line of latitude. While this is typically true, it is not always the case.

Climate zones do not exactly match the different circles of the earth, but they are close. The North Frigid Zone begins at 60 degrees north of the equator and continues to the North Pole. As such, it includes everything in the Arctic Circle and some of the areas outside of the Arctic Circle. The South Frigid Zone begins 60 degrees south of the equator.

Name _____

Date _____

Climate Zones (Cont'd)

There are two Temperate Zones. One is located north of the equator. The other is located south of the equator. Both zones include all areas between 30 and 60 degrees. The northern zone contains all lands located between 30 degrees north of the equator and 60 degrees north of the equator. The southern temperate zone includes all land located between 30 degrees south of the equator and 60 degrees south of the equator.

The last zone is the Tropical Zone. This zone is located closest to the equator and is the warmest zone. The Tropical Zone includes all areas located between 30 degrees north of the equator and 30 degrees south of the equator.

Name _____

Date _____

Climate Zones Questions

Multiple Choice:

1. Everything north of the Arctic Circle is called the:
 - a. equator
 - b. tropics
 - c. Arctic Zone
 - d. Temperate Zone

2. Frigid means that the climate is very:
 - a. hot
 - b. cold
 - c. watery
 - d. mild

3. The weather in a temperate climate is:
 - a. very hot
 - b. moderate
 - c. very cold
 - d. frigid

4. The farther a place is from the equator, the _____ the climate is:
 - a. warmer
 - b. wetter
 - c. windier
 - d. colder

True or False:

- ____ 5. Geographers divide the earth by dividing it into bands that are parallel to the equator.

- ____ 6. There are five Temperate Zones.

- ____ 7. The Arctic Circle is located about 67 degrees north of the equator.

- ____ 8. Two imaginary circles used to describe the different climates of the earth are called the Tropic of Cancer and the Tropic of Climate.

- ____ 9. The Tropical Zone includes all areas located between 30 degrees north of the equator and 30 degrees south of the equator.

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Climate Zones Answers

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