

CLIMATE FACTORS

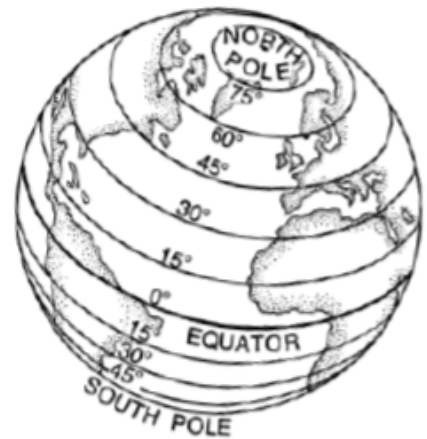


WHAT IS CLIMATE?

Think about the climate in the area that you live. Is it typically warm and dry? Is it cool and wet? Or do you live in an area that has different conditions depending on the season? Climate is the general weather of an area over a _____ period of time and includes seasonal changes in _____. The terms CLIMATE and WEATHER are NOT the same thing! Recall that weather is simply the conditions of the atmosphere at a particular _____ and _____ and can change _____ and frequently. Climate is a more general snapshot of the weather conditions over a long period of time. There are several factors that affect the climate of an area.

LATITUDE

Latitude is the distance (measured in degrees) of a location _____ or south of the _____. Places closest to the equator are generally _____ because they get more direct _____. Different _____ correspond to specific latitude regions.



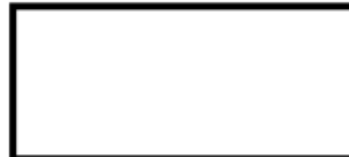
ALTITUDE

_____ above _____ impacts climate. There are _____ molecules of air the _____ up you go. So, there are fewer molecules to absorb heat and temperatures are _____ at higher elevations. Temperatures go down about 33°F for every 1,000 feet or 6°C for every 1,000 meter increase in elevation.



WATER VS. LAND

Water takes _____ than land to _____ and cool down. There is _____ fluctuation in temperature in coastal areas.



OCEAN CURRENTS

Waters of the world's oceans are always on the _____ and impact weather _____.

Global ocean currents affect coastal climates.

_____ are the _____ pattern ocean currents move in.

_____ : Earth rotates from _____ to _____. This _____ the path of the winds. If the Earth didn't rotate, wind would blow _____ toward the _____.

Winds curve because of Earth's _____.



WIND

The uneven heating of Earth by the _____ creates global wind patterns. Wind is formed when air moves from an area of _____ pressure to an area of _____ pressure.



Sand 100°F



Water 71°F

The _____ is a narrow band of _____ moving air that encircles the Earth. A jet stream forms at the boundaries between _____ and _____ air masses. Jet streams move from the west to east because of Earth's _____.



LANDFORMS

Mountains affect _____ patterns. Mountains have a rainy side and a dry side. Warm, moist air _____. As it rises, it cools and then condenses forming _____. The air is then _____ and there is no more moisture in it, so the other side of the mountain is left dry, forming what is known as a _____.

