

Name: _____

What is Weather?



Weather is what happens between the clouds and the ground. The atmosphere outside surrounds our planet Earth. The part of the atmosphere that is closer to earth is where the weather happens. This part of the atmosphere where weather happens in, is called the troposphere. The troposphere at the poles is 5 miles (8 Km) thick and at the equator, it is 11 miles (18 Km) thick. Air and water are always on the move, and these movements create the wind and the rain outside. Look outside, what is happening in the air all around you? The energy from the sun and the moisture in the air from the water cycle creates all of the weather that happens. Weather is how windy, how sunny, how rainy, how cold or how hot it is outside. The air outside has lots of moisture in it due to the fact that the surface of earth is covered in 70 percent of water. The sun controls the weather temperatures because the sun produces not only light, but it produces the heat that creates all weather. The sun heats up the moisture (water) on earth and turns it into water vapor which is what the clouds are made of. When the clouds get too full, they release the vapor into water which creates rain or precipitation. This process, when the vapor turns back to water is called condensing. The sun's heat also warms up pockets of air which will cause them to rise, when these pockets of air rise, cooler air fills the pockets and causes movement of air is what creates the wind outside. Weather also causes many disasters when it creates hurricanes, storms, tornadoes, flash floods or lightning that strikes objects. The weather outside influences how we dress and it often influences what we do. A weather forecaster is called a meteorologist. Weather is what it is like outside and in most areas, weather is always changing.

Questions:

- ❶ In your own words, explain what weather is.
- ❷ How does the weather outside influence you?
- ❸ Explain the sun's involvement in weather.
- ❹ Explain how weather can be destructive.