

Water, Water

Everywhere . . .

How does the water cycle affect weather?

Weather is the short-term state of the atmosphere, including temperature, humidity, precipitation, air pressure, wind, and visibility. These elements are affected by the energy received from the sun and the amount of water in the air. To understand what influences weather, then, you need to understand the water cycle.

The water cycle is the continuous movement of water between the atmosphere, the land, the oceans, and living things. In the water cycle, shown to the right, water is constantly being recycled between liquid, solid, and gaseous states. The water cycle involves the processes of evaporation, condensation, and precipitation.

Evaporation occurs when liquid water changes into water vapor, which is a gas. Condensation occurs when water vapor cools and changes from a gas to a liquid. A change in the amount of water vapor in the air affects humidity. Clouds and fog form through condensation of water vapor, so condensation rain, snow, sleet, or hail falls from the clouds onto Earth's surface.

Active Reading

- 5 List Name at least 5 elements of weather.

Visualize It!

- 6 Summarize Describe how the water cycle influences weather by completing the sentences on the picture.

A Evaporation affects weather by _____

B Condensation affects weather by _____

C Precipitation affects weather by _____

Visualize It!

- 7 Identify What elements of weather are different on the two mountain tops? Explain why.

Runoff