

What is weather

Weather is The condition of the atmosphere at a particular time and place.

Water Cycle

The continuous movement of water from water sources. Such as lakes and oceans, into the air, onto and over land, into the ground and back to water sources.

Evaporation

Water changes from liquid to gas. (Water vapor)

Transpiration

The process by which plants release water vapor into the air through their leaves.

Condensation

When water vapor cools and changes back into liquid droplets. This is how clouds form.

Precipitation

Occurs when rain, sleet, snow, or hail, falls from the clouds onto Earth's surface.

Runoff

Water from precipitation that runs across the land into rivers, lakes, streams, and oceans. Some runoff will become ground water.

Humidity

The amount of water vapor in the air.

Temperature and Humidity Relationship

The amount of water vapor that the air can hold increases as the temperature increases.

Relative Humidity

The amount of moisture the air contains compared with the maximum amount it can hold at a particular temperature.

Condensation

The process by which water vapor becomes a liquid. The air must be 100% saturated to condense. When the temperature of air with 100% RH drops, the water vapor will condense.

Dew Point

The temperature at which air must cool to be 100% saturated and therefore condense.

Clouds

A collection of millions of tiny water droplets or ice crystals.

Formation of Clouds

Clouds form as warm air rises and cools. As the rising air becomes saturated, the water vapor changes to a liquid or solid depending on air temperatures. Water vapor will condense on tiny particles of dust when temperatures are higher.

Precipitation

Water in solid or liquid form which falls back to the surface from the air.

Snow

Snow forms when temperatures are so cold the water turns solid immediately.

Sleet

Sleet is also called freezing rain, forms when rain falls through a layer of freezing air.

Hail

Solid lumps of ice that usually form in cumulonimbus clouds due to updrafts carrying rain to high altitudes over and over again. The stronger the storm, the larger the hail.