

The Water Cycle

The water cycle is the continuous process by which water circulates throughout the Earth's atmosphere, land, and oceans. It begins with the evaporation of water from surfaces such as oceans, lakes, and rivers, where heat from the sun converts liquid water into water vapor. This water vapor rises into the atmosphere, where it cools and condenses to form clouds.

When the clouds become heavy enough, they release water in the form of precipitation, which can be rain, snow, or hail. Once the water reaches the ground, it can follow several paths. Some of it infiltrates into the soil, replenishing groundwater supplies, while some flows over the land as surface runoff, eventually making its way back to oceans and lakes.

Plants also play a key role in the water cycle. They absorb water from the soil through their roots and release water vapor into the air through a process called transpiration. This continuous movement of water is essential for sustaining life on Earth, as it provides fresh water for plants, animals, and humans, and helps regulate the climate.