The water cycle, also called the hydrological cycle, is the continuous movement of water on, above, and below the surface of the Earth.

It plays an essential role in maintaining life and weather patterns on our planet.

Let's explore the main stages of this fascinating process!

Stage 1: Evaporation

Evaporation occurs when the sun heats up water from oceans, lakes, and rivers, causing it to change into water vapor. This vapor rises into the atmosphere.

It is the first step of the water cycle and is powered by solar energy.

Stage 2: Condensation

Condensation happens when the water vapor rises and cools down in the atmosphere.

The vapor changes back into tiny water droplets, forming clouds.

This process helps store water temporarily in the sky before it returns to Earth.

Stage 3: Precipitation

When clouds become heavy with condensed water droplets,

the water falls back to the Earth as precipitation ? this can be rain, snow, hail, or sleet.

Precipitation replenishes water in rivers, lakes, and oceans.

Stage 4: Collection

After precipitation, water collects in oceans, rivers, and lakes.

Some of it soaks into the ground and becomes groundwater, which can be stored or flow back to the sea.

This completes the water cycle and begins the process again.

Why the Water Cycle Matters

The water cycle keeps Earth's water in motion,

ensuring that plants, animals, and humans always have access to this vital resource.

It also influences weather patterns, supports agriculture, and regulates the climate.

Without the water cycle, life as we know it could not exist.