## 🌎 The Water Cycle

The water cycle, also known as the hydrological cycle, describes how water moves on, above, and below the surface of the Earth. This continuous process is vital for maintaining life and ecosystems.

The main processes involved in the water cycle are:

- **Evaporation**: This is the process by which water from oceans, lakes, and rivers turns into water vapor due to heat from the sun.
- **Condensation**: As water vapor rises and cools, it changes back into liquid form, forming clouds.
- **Precipitation**: When water droplets in clouds combine and become heavy, they fall back to Earth as rain, snow, sleet, or hail.
- **Collection**: The fallen water is collected in bodies of water like rivers, lakes, oceans, or infiltrates into the ground to become groundwater.

Other important concepts:

- **Transpiration**: Plants also contribute to the water cycle through transpiration, where they release water vapor from their leaves.
- **Infiltration**: Water seeps into the soil and replenishes underground aquifers.

The water cycle is driven by solar energy and gravity. It is a closed system, meaning the total amount of water on Earth does not change, but its form and location constantly do.