

The Water Cycle: An Introduction

The water cycle, also known as the hydrologic cycle, is the continuous process by which water is circulated between the Earth and the atmosphere.

It is a vital process that sustains life on our planet.

Key Terms

Evaporation: the process by which water is converted from its liquid to its gas state.

Condensation: the process by which water vapor in the air is cooled and changed back into its liquid state.

Precipitation: the process by which water falls to the Earth's surface in the form of rain, snow, sleet, or hail.

The Water Cycle Process

1. **Evaporation:** Water from the oceans, lakes, and rivers evaporates into the air as water vapor.
2. **Condensation:** Water vapor in the air cools and condenses into tiny droplets, forming clouds.
3. **Precipitation:** Water droplets in the clouds become too heavy to remain suspended, and fall to the Earth's surface as precipitation.
4. **Collection:** Precipitation collects on the ground, in oceans, and in other bodies of water, and the cycle begins again.

Case Study: Water Scarcity

In many parts of the world, water scarcity is a pressing issue. Droughts, climate change, and population growth are all contributing factors.

Understanding the water cycle is crucial for developing effective solutions to this problem.

References

1. National Geographic. (n.d.). *The Water Cycle*. Retrieved from <https://www.nationalgeographic.org/encyclopedia/water-cycle/>.
2. NASA. (n.d.). *Water Cycle*. Retrieved from <https://climate.nasa.gov/vital-signs/water-cycle>

