

The Water Cycle

What is the Water Cycle?

The water cycle is the continuous movement of water through the land, air, and back again. Water is recycled over and over through this natural process.

The water cycle includes:

- Evaporation
- Condensation
- Precipitation
- Collection

Fun Fact: The amount of water on Earth always remains the same. It is constantly being reused and recycled. The water you drink today might have been part of the ocean millions of years ago!

Stages of the Water Cycle

Evaporation : The sun heats up water from rivers, lakes, oceans, and the land. The water turns into water vapor (gas) and rises into the air.

Example:

- Puddles disappearing after a hot, sunny day.
- Clothes drying in the sun.

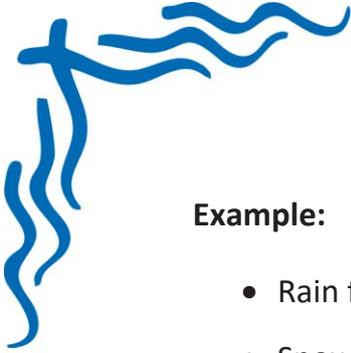
Condensation : As the water vapor rises, it cools down and changes back into tiny drops of liquid water. These tiny drops form clouds.

Example:

- Clouds forming in the sky.
- Water droplets on the outside of a cold glass.

Precipitation : When the clouds become heavy, the tiny water droplets combine and fall back to the ground. This happens in the form of:

- i. Rain
- ii. Snow
- iii. Hail



Example:

- Rain falling during a storm.
- Snowflakes in winter.

Collection : The water falls on the land and flows into rivers, lakes, and seas. Some water soaks into the ground and becomes groundwater. The cycle begins again.

Example:

- Rainwater flowing into rivers and oceans.
- Water seeping into the soil.

Importance of the Water Cycle

Recycles water: Ensures that water is continuously reused.

Supports life: Provides freshwater for drinking, farming, and daily use.

Maintains weather patterns: Causes rain and snow, affecting the climate.

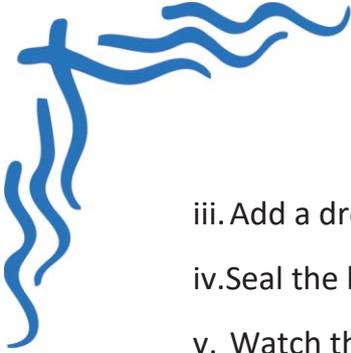
Cleans the environment: Rain helps to clean the air by washing away dust and pollutants.

Activity: Water Cycle in a Bag

- Materials Needed:
- A ziplock bag
- Water
- A marker
- Blue food coloring (optional)
- Sticky tape

Instructions:

- i. Draw the water cycle on the ziplock bag using a marker:
 - Sun (evaporation)
 - Clouds ☁ (condensation)
 - Raindrops (precipitation)
- ii. Fill the bag with a small amount of water.



iii. Add a drop of blue food coloring (optional) to make the water visible.

iv. Seal the bag and tape it to a window.

v. Watch the process over time:

- The water evaporates in the sunlight.
- It condenses into tiny droplets inside the bag.
- You will see tiny water droplets fall down the sides of the bag.

Observation: You will observe a mini water cycle happening in the bag:

- Evaporation → Water turns into vapor.
- Condensation → Vapor forms droplets.
- Precipitation → Droplets fall down.

Conclusion

The water cycle keeps water moving and recycling. It involves evaporation, condensation, precipitation, and collection. This natural process is essential for life on Earth!