

Name:

Date:

## The Water Cycle

The water cycle is an essential process that continuously moves water through our environment. This cycle consists of four main stages: evaporation, condensation, precipitation, and collection. Understanding these stages helps us appreciate how water supports all life on Earth and maintains our planet's ecosystems.

Evaporation is the first stage of the water cycle. This process occurs when the sun heats up water in rivers, lakes, oceans, and even small puddles. The heat causes the water to turn into vapor, which is a gas, and rise into the atmosphere. During evaporation, impurities and salts are left behind, making the vapor pure. This stage is crucial because it moves water from the surface into the air, starting the cycle.

The next stage is condensation. As the water vapor rises higher into the sky, it encounters cooler temperatures. The cooler air causes the water vapor to turn back into liquid water, forming tiny droplets. These droplets gather together to create clouds. You can see a similar process when water droplets form on the outside of a cold glass on a hot day. Condensation is essential because it transforms water vapor into liquid water, ready to fall back to Earth.

Precipitation occurs when these water droplets in the clouds become too heavy to stay in the air. They fall back to Earth in various forms, such as rain, snow, sleet, or hail, depending on the temperature and atmospheric conditions. Precipitation provides fresh water that is necessary for plants, animals, and humans. It replenishes our water sources and maintains the flow of rivers and lakes.

The final stage of the water cycle is collection. When water falls back to Earth as precipitation, it gathers in bodies of water such as rivers, lakes, and oceans. Some of this water also soaks into the ground, becoming groundwater, which plants and trees absorb through their roots. Groundwater is also an important source of drinking water for many people. Eventually, the collected water will once again evaporate, starting the cycle all over again.

The water cycle is a continuous and dynamic process that occurs all around us, even though we might not always see it. It plays a vital role in distributing fresh water across the planet, supporting all forms of life, and maintaining the balance of our ecosystems. By understanding the water cycle and taking steps to protect our water resources, we can help ensure that there is enough clean water for everyone and everything that depends on it.



# Questions



1. What are the four main stages of the water cycle?

2. What happens during the process of evaporation?

3. In what forms can precipitation occur?

4. Why is the process of evaporation important for the water cycle?

5. Why is it important for us to understand and protect the water cycle?



## 1. What are the four main stages of the water cycle?

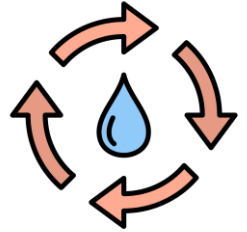
Evaporation, condensation, precipitation, and collection.

## 2. What happens during the process of evaporation?

Water is heated by the sun and turns into vapor, rising into the atmosphere.

## 3. In what forms can precipitation occur?

Rain, snow, sleet, or hail.



## 4. Why is the process of evaporation important for the water cycle?

Evaporation moves water from the surface into the air, starting the cycle and ensuring that water is purified as it turns into vapor.

## 5. Why is it important for us to understand and protect the water cycle?

Understanding and protecting the water cycle ensures that there is enough clean water for all living things, maintains ecosystems, and helps prevent water shortages.

