

# The Water Cycle

## Cycling Water

Water water everywhere and always moving around. Even the smallest water molecule at the bottom of the ocean is moving. It just moves really slowly. We're going to talk about the hydrologic cycle. This is the path water takes when it moves through the oceans, through the sky and through life on land. It's a never ending cycle that keeps life on Earth alive.

## Just Flowing Through

Water cycles and flows through **ecosystems**. Water is recycled on a global scale. It may flow from one ecosystem to another on its way from the air to the land and back to the oceans. Also, a great amount of fresh water below the surface of the Earth cycles over long periods of time.

## The Overview

Even though there is no real starting place, we'll start the cycle in the **atmosphere**. Water in the atmosphere is found in clouds and water vapor. Slowly the entire atmosphere circulates around the planet. When weather is created one of the most common results is **precipitation**. Precipitation is the process of water **condensing** in the atmosphere. It could be rain, snow, drizzle, fog, dew, or hail. Whatever path, the water comes out of the atmosphere and makes it to the surface. Scientists also use the term **hydrological cycle** to when discussing water's movement through the biosphere.

Once on the surface, water is still moving around. Snow can melt and become rivers that flow into the oceans. Water can collect underground (**groundwater**). Water can collect in the oceans. Over 60% of the surface of the planet is covered by water. Beyond collecting, water can return to the atmosphere. Water moves from the ground or oceans into the atmosphere through a process called **evaporation**. It's a process that happens on a molecular level when the molecules of water are really energized and rise into the air.

Now you've got water in the air and water on land. Organisms all over

the Earth need water to survive. Although it's a small amount when compared to oceans, every living creature is filled with water. Our cells are mainly composed of water. The human body is 80% water. Eventually, when an organism dies, the water is returned to the system, but you should know that living things borrow water on a regular basis.

### Life Of A Water Molecule

So you're a water molecule. Chances are you'll stay a water molecule and won't ever be broken down. The world likes to keep its water around. You're moving through the hydrologic cycle. You evaporate, fall in rain, and drain in a river. Not a lot of excitement. But how much time does it take? Scientists think that if you are lucky enough to be evaporated into a cloud that you spend about ten days floating around the atmosphere. If you're unlucky enough to be at the bottom of the ocean, or stuck in a glacier, you might spend tens of thousands of years without moving.

**Label the diagram with words from the article:**

