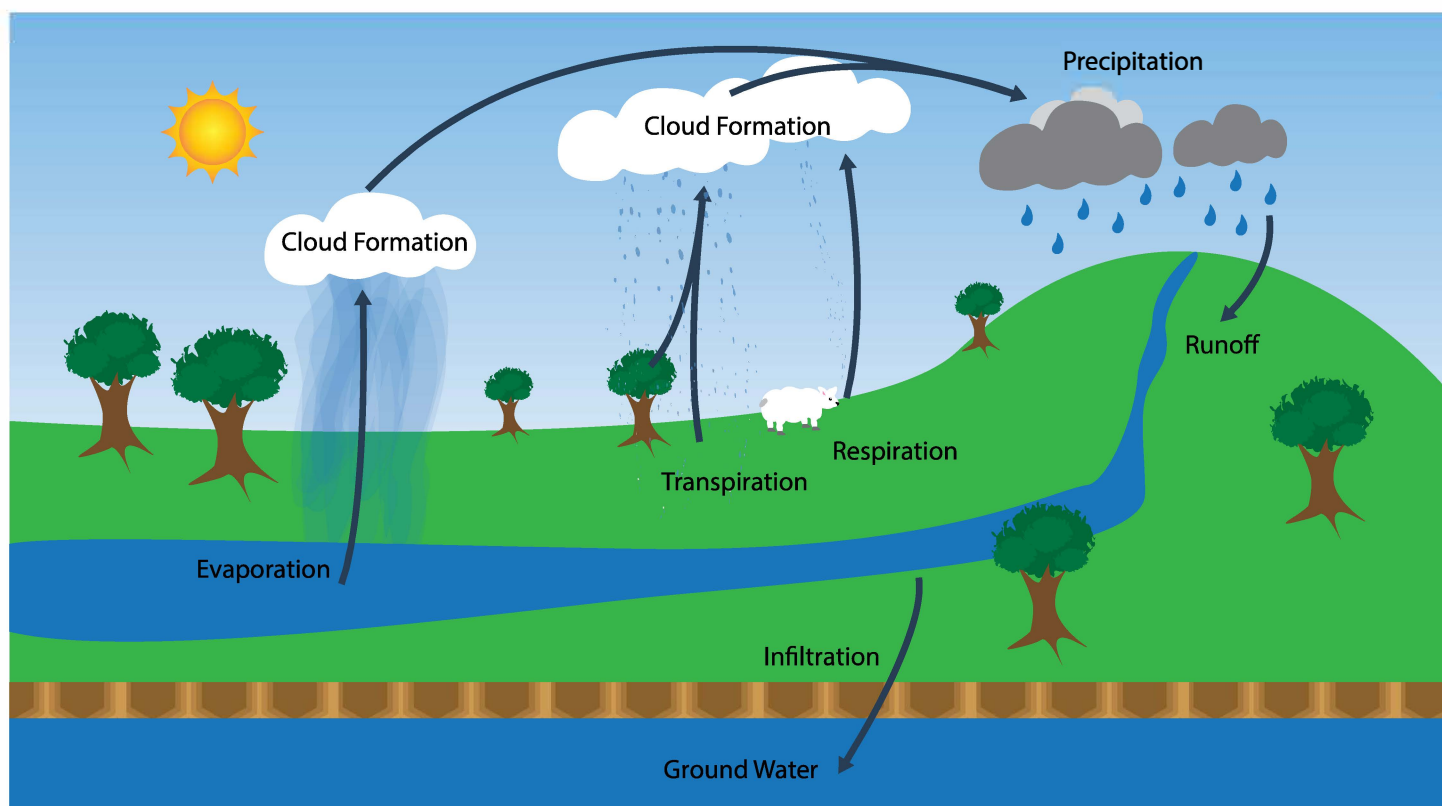


# The Water Cycle

Our bodies are made of 70% water. It is vital for all life on Earth. Almost 75% of the earth's surface is covered with water. Water is everywhere. The same water that existed on the earth millions of years ago is still present today. This is due to the water cycle. Earth's waters are constantly moving and changing from one state to another. The water cycle has been working for millions of years.

Vocabulary	
evaporation	transpiration
condensation	respiration
precipitation	runoff
ground water	molecule

The major processes of the water cycle are evaporation, condensation, and precipitation. The sun drives the water cycle. The sun heats the waters of the oceans, causing them to change from a liquid to a gas or water vapor. The heat energy breaks apart the bonds connecting the liquid water molecules and they easily slip into the atmosphere. This process is called **evaporation**.



**Condensation** is the opposite of evaporation. It is the process where water vapor in the atmosphere is changed back into liquid water. As water vapor moves to the upper atmosphere, it begins to cool off. Clouds form when the rising air and water vapor cool off and clump together. It takes millions of water vapor molecules to form a droplet of water that weighs enough to fall to the ground. When enough of these drops form, they fall to the ground in the form of rain, sleet, or snow. This process is called **precipitation**.

**Transpiration** and **respiration** also contribute to the water cycle. Transpiration is the release of water from plants. Water is carried from the roots of the plant throughout the plant to the underside of the leaves where it evaporates off into the atmosphere. Animals also release water vapor to the atmosphere when they breathe out. This is called **respiration**.

The earth stores some of the water that falls to the ground. It infiltrates the ground and moves horizontally into streambeds or vertically until it meets the water table. This is called **ground water**. Precipitation can also run off the surface of the land as it flows down hills into ponds, lakes, and streams. This is called **runoff**.