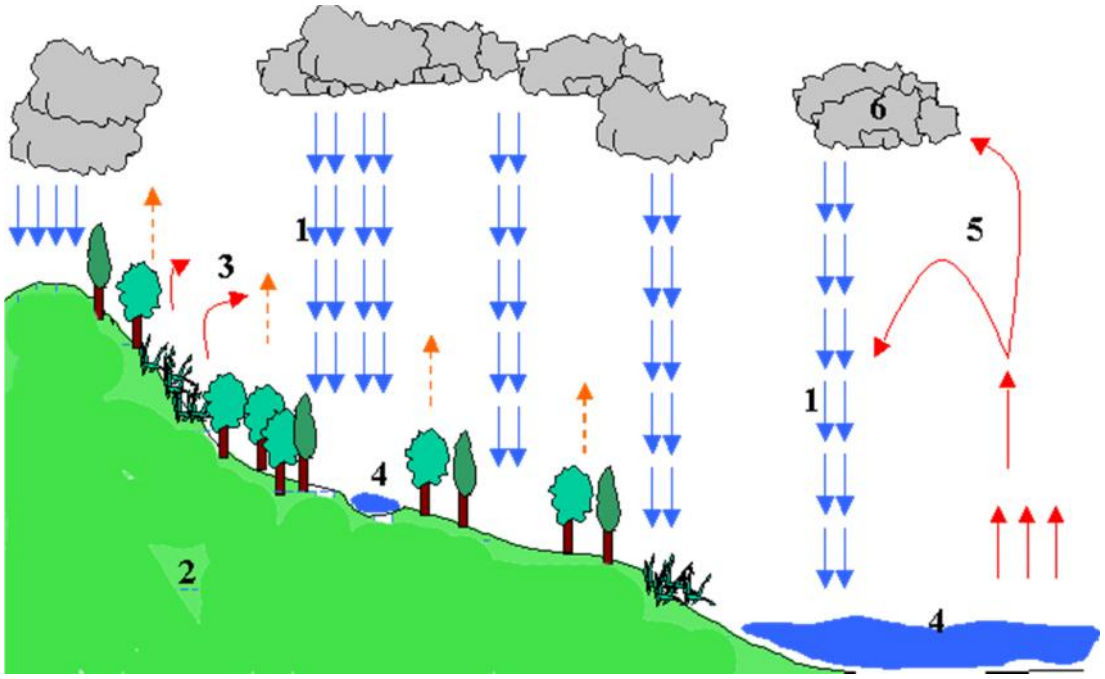
The Water Cycle



1. Precipitation

Transported through the circulating atmosphere the clouds move themselves inland, as a result of gravity, and lose their water as it falls back unto the ground. This phenomenon is called rain or precipitation.

2. Infiltration

Rainwater infiltrates into the ground and sinks to the saturated zone, where it becomes groundwater. Groundwater slowly moves from places of high elevation and pressure to places with low elevation and pressure. It moves from the area of infiltration through an aquifer and out to a discharge area, which can be either a sea or an ocean.

4. Transpiration

Plants and other forms of vegetation take up water from the soil and excrete it again as water vapour. About 10% of the precipitation that falls on the ground vapourizes again through transpiration of plants, the rest evaporates from seas and oceans.

5. Surface run-off

The rainwater that does not infiltrate into the soil will directly reach the surface water, as it will run-off to rivers and lakes. After that it will be transported back to the seas and oceans. This water is called surface run-off.

6. Evaporation

Due to the influence of sunlight the water in oceans and lakes will warm up. As a result of that it will evaporate and rise up into the atmosphere. There it will form clouds that will eventually cause rainwater to fall back on earth. The evaporation of oceans is the most important kind of evaporation.

7. Condensation

In contact with the atmosphere the water vapour will transform back to liquid, so that it will be visible in the air. These accumulations of water in the air are what we call clouds.