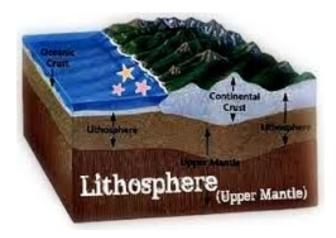
Water Cycle

REVIEW

Lithosphere: includes the Earth's crust and upper mantle



Water



Steam



Cloud



fog



rain



puddle



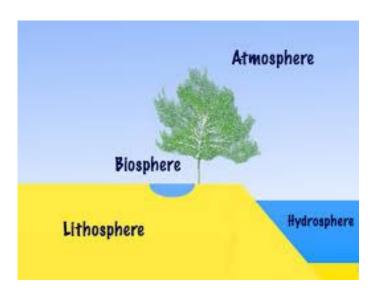
ice



snow



hydrosphere



polar



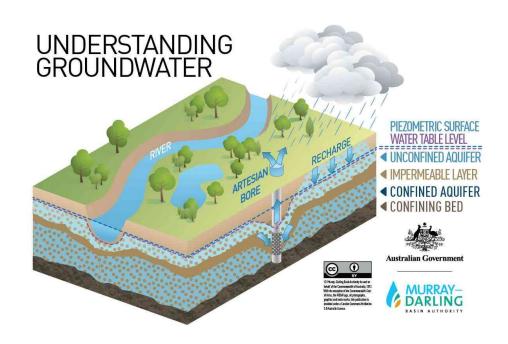
ice cap



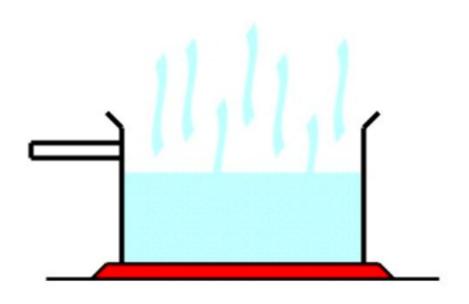
glacier



groundwater



evaporation



transpiration



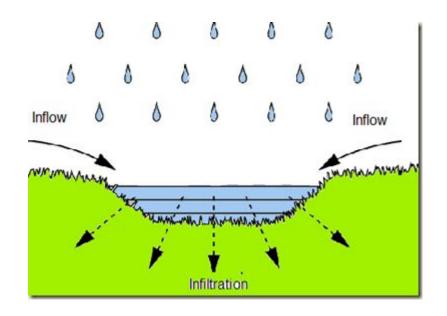
Condensation



Precipitation



Infiltration



Aquifer Transpiration by vegetation Unsaturated zone Water table Water table Stream Unconfined aquifer Confined aquifer

Hydrosphere

The <u>hydrosphere</u> is the water on and in the Earth's crust (el suministro de agua y en la corteza terrestre.)

- 97% of Earth's water is found in the oceans
- 3% of water is found in landmasses (masas de tierra)



Water on Earth

Of the freshwater on Earth... (del agua fresca en la Tierra)

90% is in the form of polar ice caps and glaciers

Most of the remaining water is...

groundwater

Only a small fraction is in...

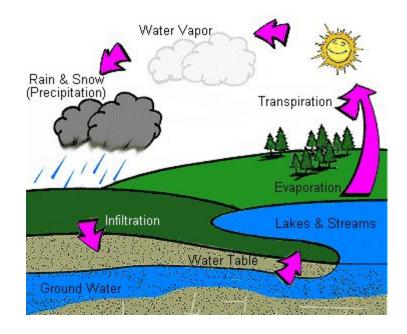
rivers, lakes and streams



What is the water cycle?

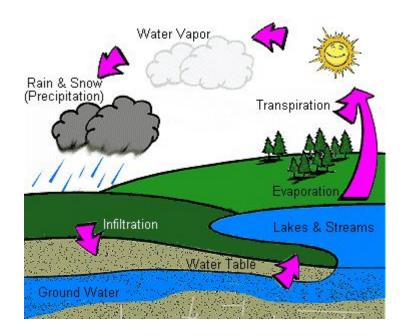
The <u>water cycle</u> is the infinite circulation of Earth's water supply.

Water constantly moves among the oceans, the atmosphere, the solid Earth, and the biosphere.



The Water Cycle

- 1. Evaporation
 - a. Transpiration
- 2. Condensation
- 3. Precipitation
- 4. Infiltration
- 5. The Ocean



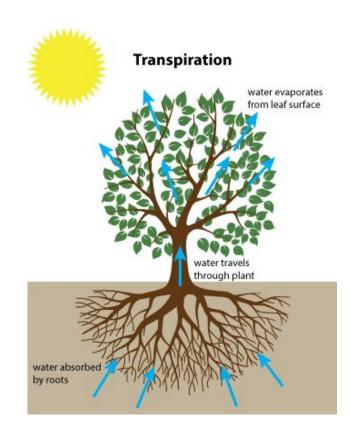
1. Evaporation

- Evaporation: Water changes from a <u>liquid</u> to a gas or <u>vapor</u>
- Makes up about 90% of moisture in atmosphere
- Water changes to <u>steam</u>



1a. Transpiration

- **1a. Transpiration** occurs when plants release water into the atmosphere.
 - Makes up about 10% of moisture in the air.



2. Condensation

- **2. Condensation** occurs when water vapor cools as it rises. It changes back into a liquid.
 - Forms <u>clouds</u>
 - Opposite of evaporation



3. Precipitation

3. Precipitation is when water is released from clouds in the form of rain, sleet, freezing rain, snow, or hail.



Precipitation (continued...)

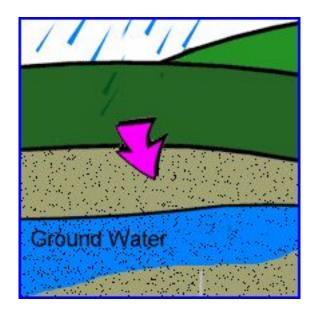
- Condensed water vapor builds up in clouds.
- 2) The millions of droplets combine.
- The droplets get too heavy for the clouds.
- 4) The droplets fall to the ground.

 Most precipitation falls to the ground in the form of rain.



4. Infiltration

- 4. Infiltration is when water is soaked (remojado) into rock and soil through cracks (grietas) and pore spaces (espacios porosos).
 - This is referred to as **ground water**.
 - Some of the water can refill <u>aquifers</u> that hold fresh drinking water!
 - Water can stay in shallow soil layers.
 Eventually it seeps into streams by moving horizontally through the earth. (El agua puede permanecer en capas de suelo de poca profundidad. Con el tiempo se filtra en arroyos moviendo horizontalmente a través de la tierra)



Runoff

<u>Runoff</u> is water flowing down a slope of Earth's surface (el agua que fluye por una pendiente de la superficie de la Tierra)

