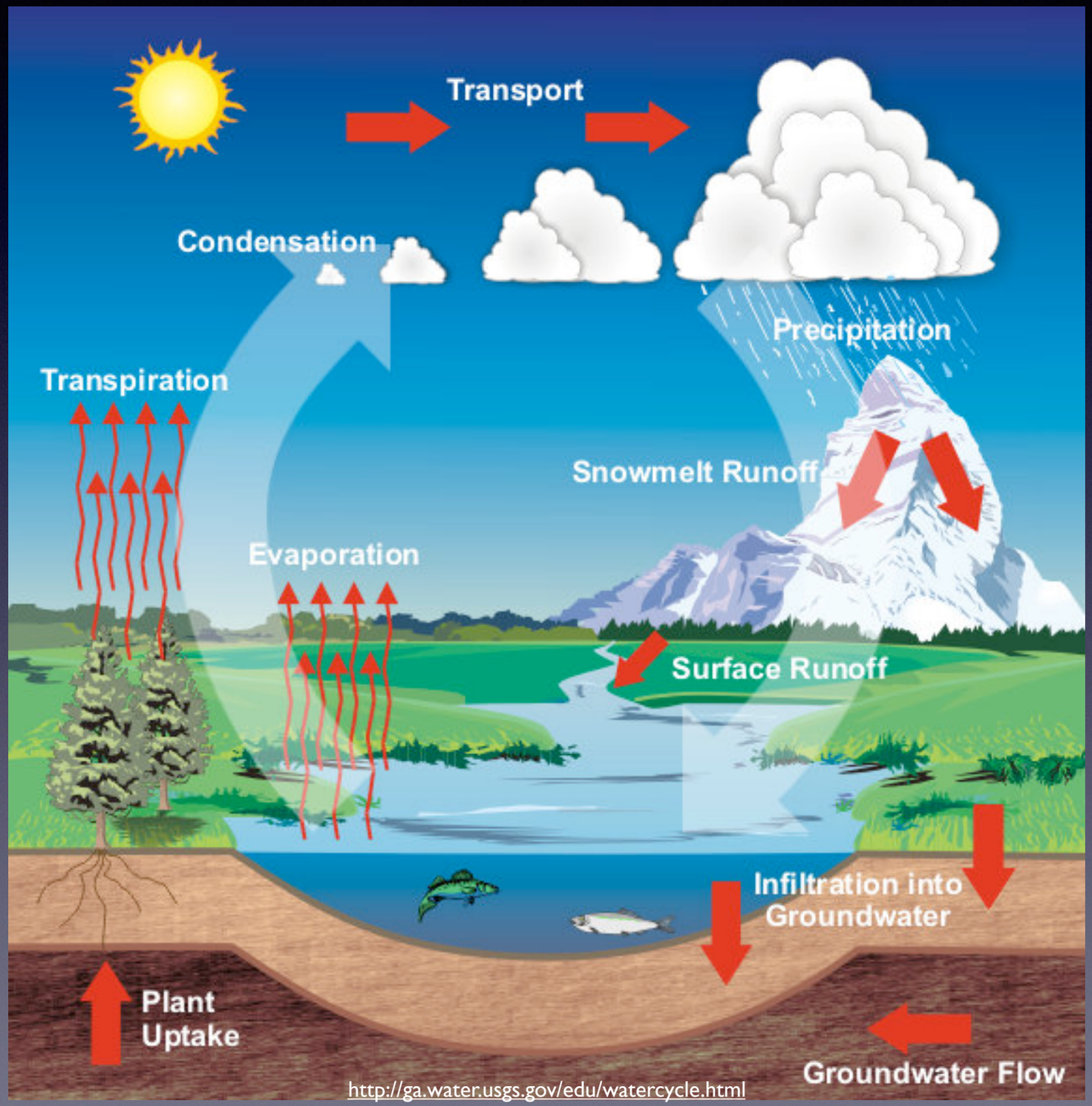
Water Cycle

Water Cycle: <u>Water moves continuously through the earth and atmosphere.</u>



http://ga.water.usgs.gov/edu/watercycle.html

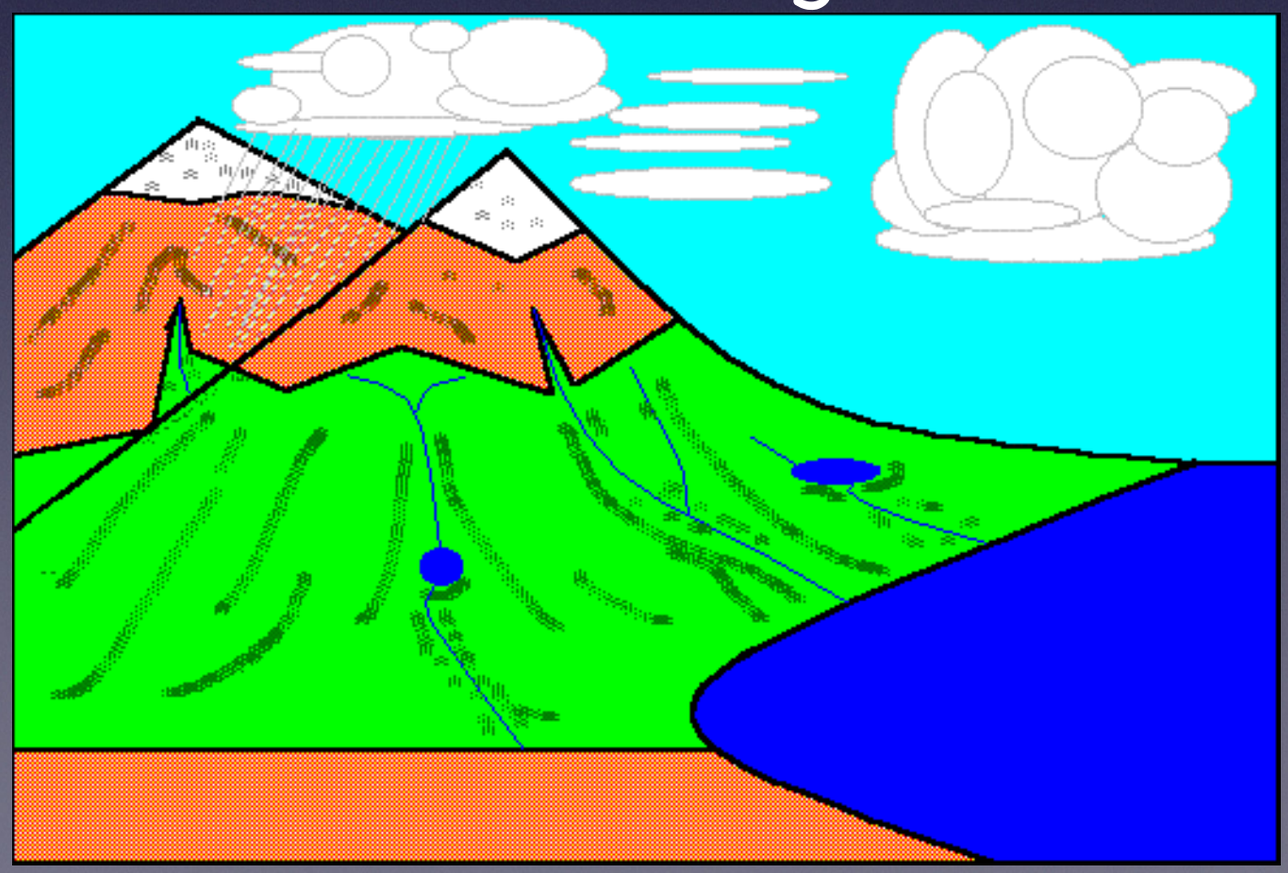
Where Is Water Found?

- The earth is unique because it has **Liquid** water on it's surface..... but not all liquid water is drinkable!
  - Oceans (salt water) **97%**
- Freshwater **3%**
  - Ice/Snow **2%**
  - Lakes, streams, rivers, and underground **1%**

Processes that make up the Water Cycle

1. **Evaporation:** Liquid water turns to gas water.

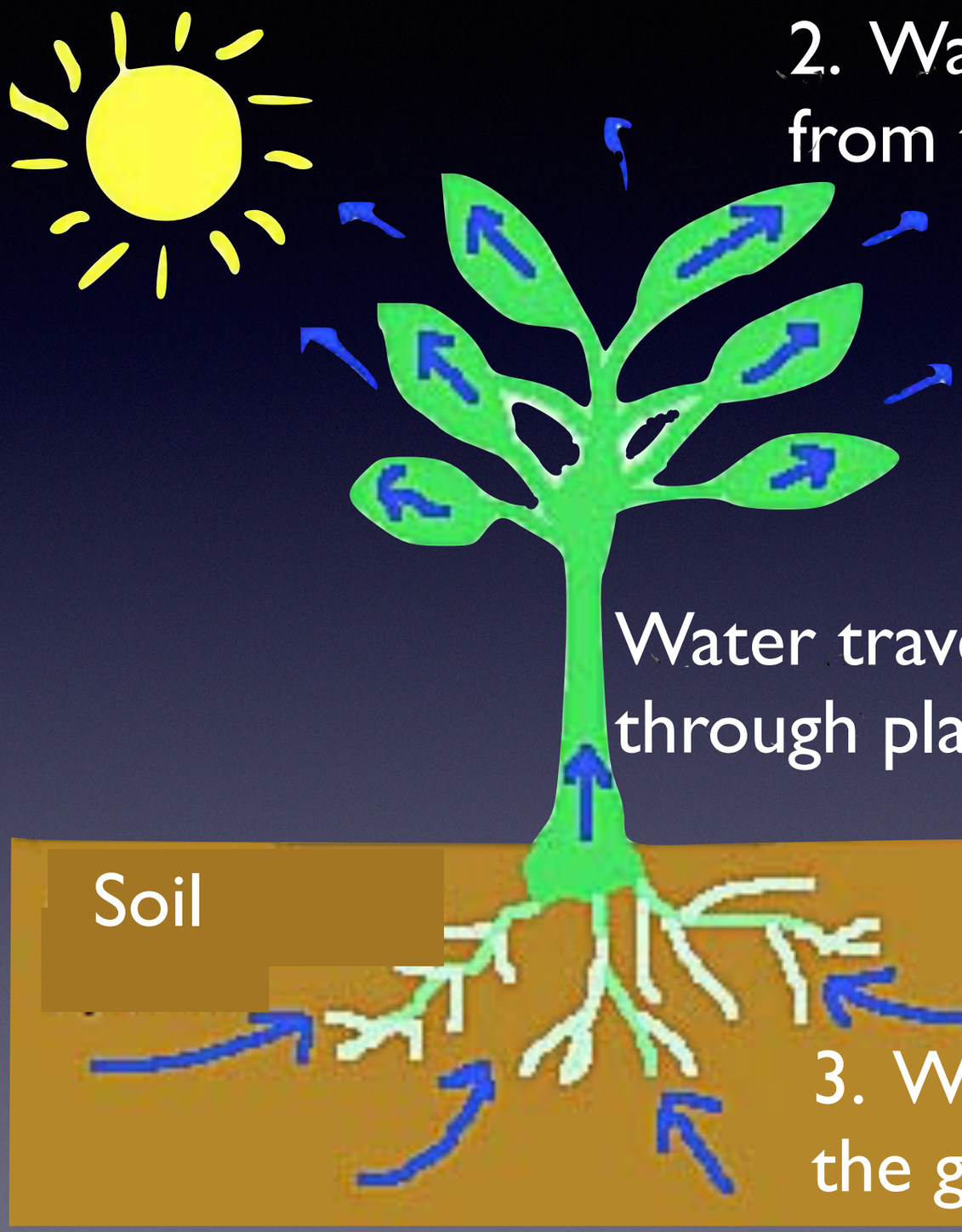
- The Sun's Energy heats up surface water in rivers, lakes, and oceans causing water to evaporate.



Evaporation:

Clean Water?

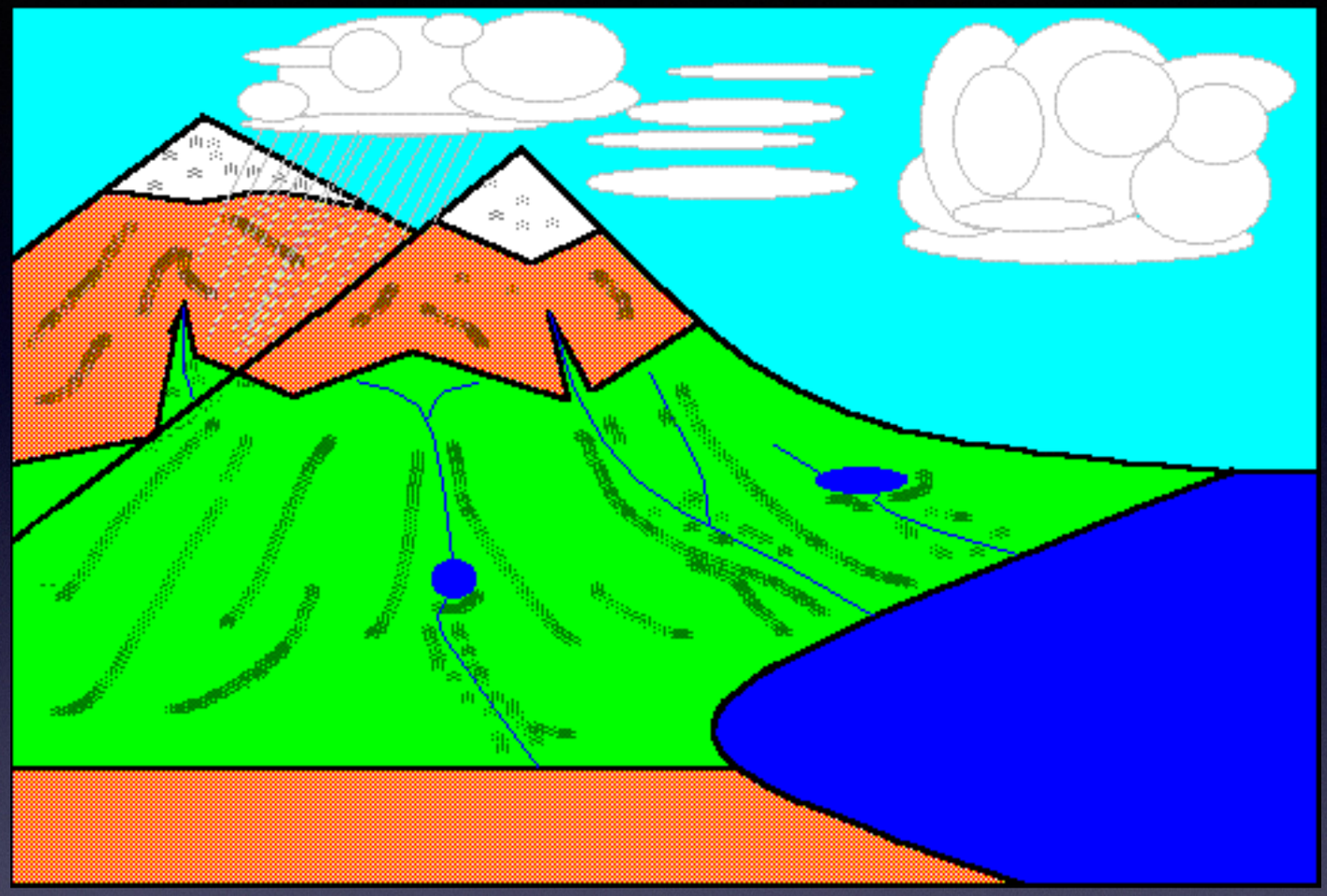
- When water turns from a Liquid to a Gas ,
impurities are left behind. Ex; evaporation



2. Water **transpires** from the leaves of plants.

3. Water is absorbed from the ground through the roots.

3. Condensation/Clouds:



- As gas water cools, it turns into __liquid__ water to form __clouds__.

Is it clean?

-Water condenses into liquid only when there are small dust particles in the air around which the droplet can form.

Condensation/Clouds: (cont.)

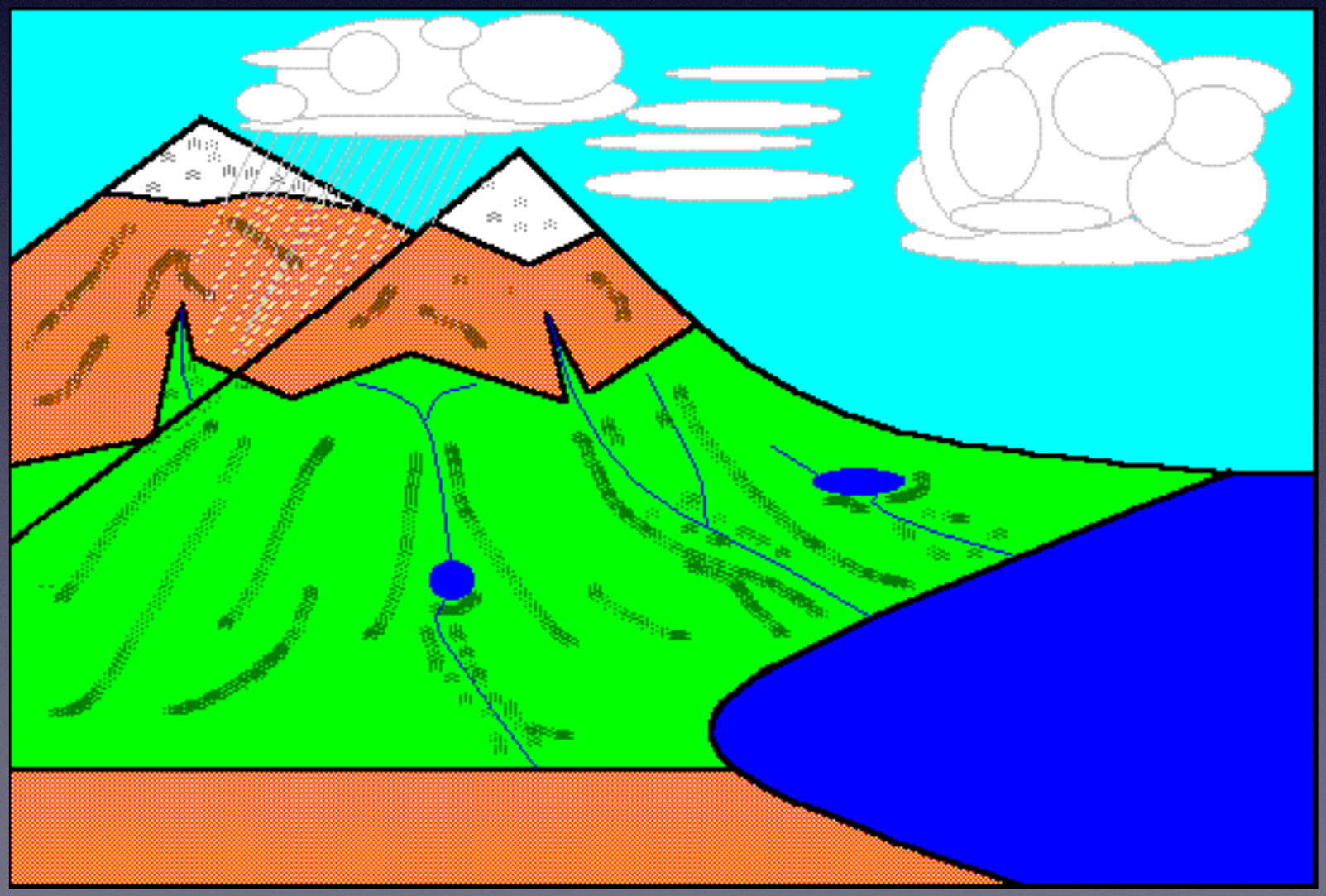
a. Fog: a cloud at or near the Earth's **surface**.

b. Dew: Water droplets **condenses** from the air onto **cool** surface.

How do clouds move?

Transportation:

- clouds and fog are pushed by WIND



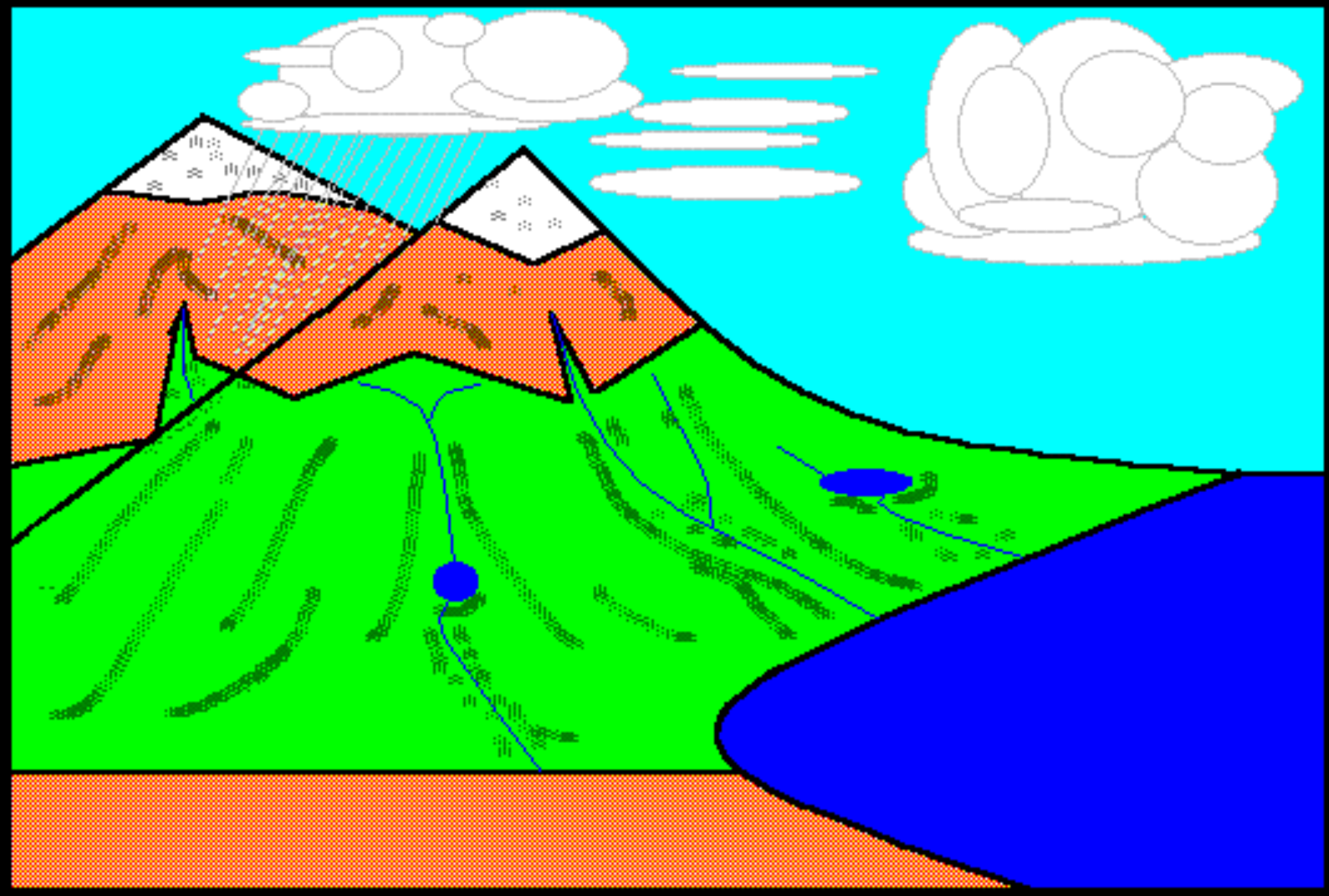
Forms of Precipitation

Rain

Sleet

Hail

Snow



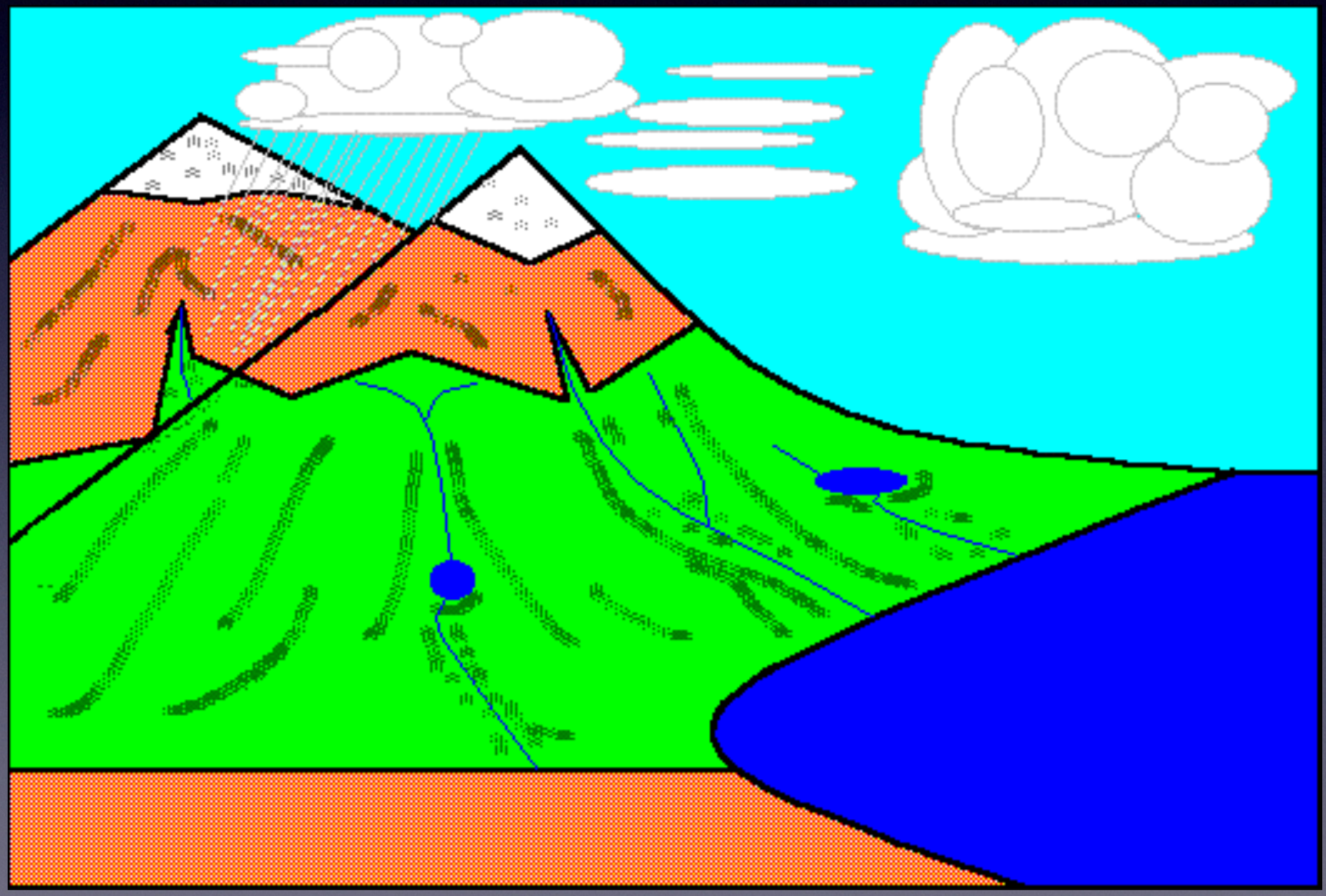
Acid Rain

- Factories, cars, and homes put pollution in the air that mixes with the clouds causing rain to be acidic.

✳ Impact:

- Plant growth and health decreases
- Decreased fish populations
- Chemical erosion on buildings/statues
- People/animals getting sick

5. **Surface Runoff**: Water moves downhill into streams, rivers, ponds, and lakes.



6. **Water Shed**: The land area from which the water ___drains___ to a given point.

- Small streams flow into ___larger___ streams, then into rivers, and eventually the water flows into the ___ocean___.

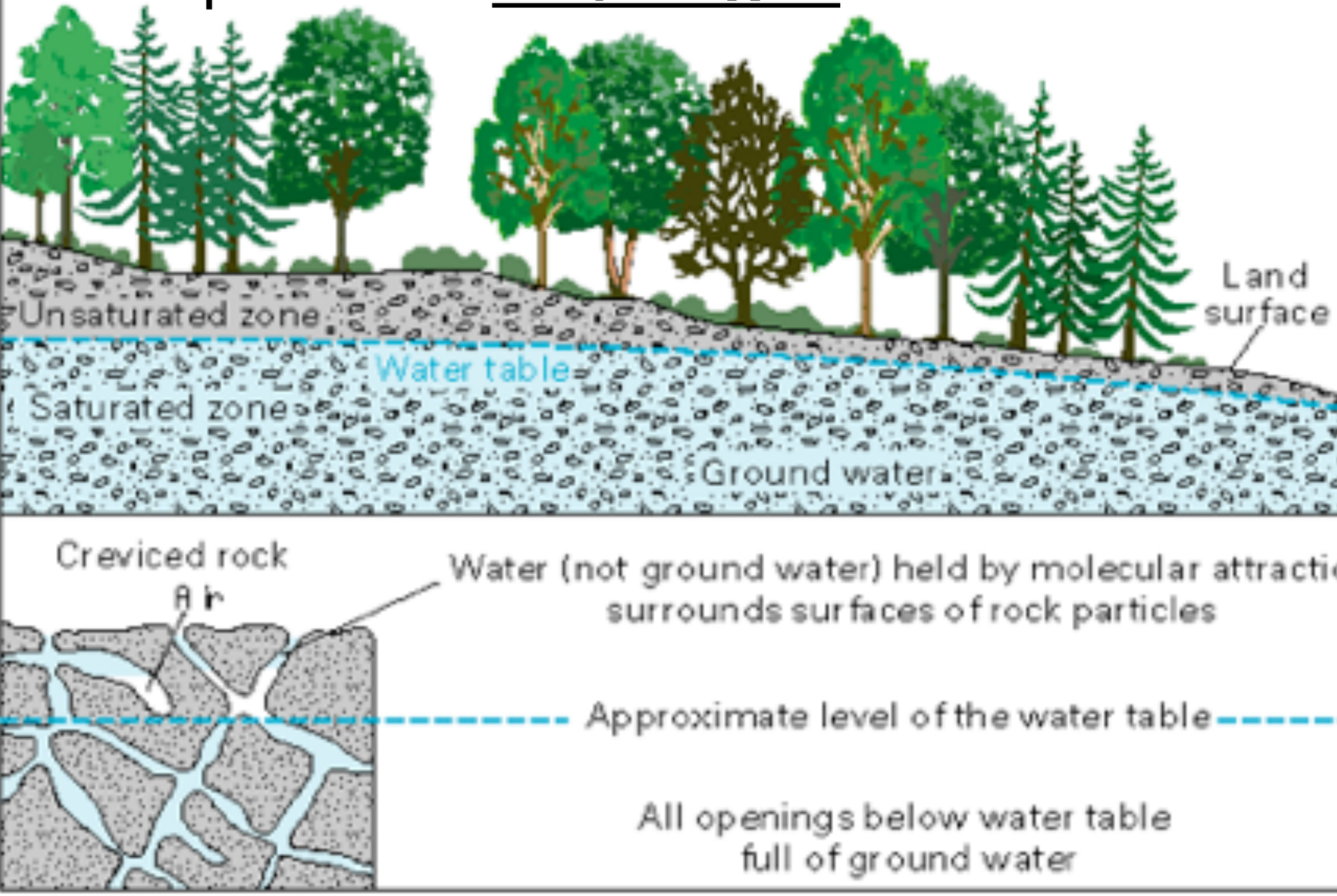
7. **Infiltration:** Water moves (soaks) into the ground through the process of infiltration.

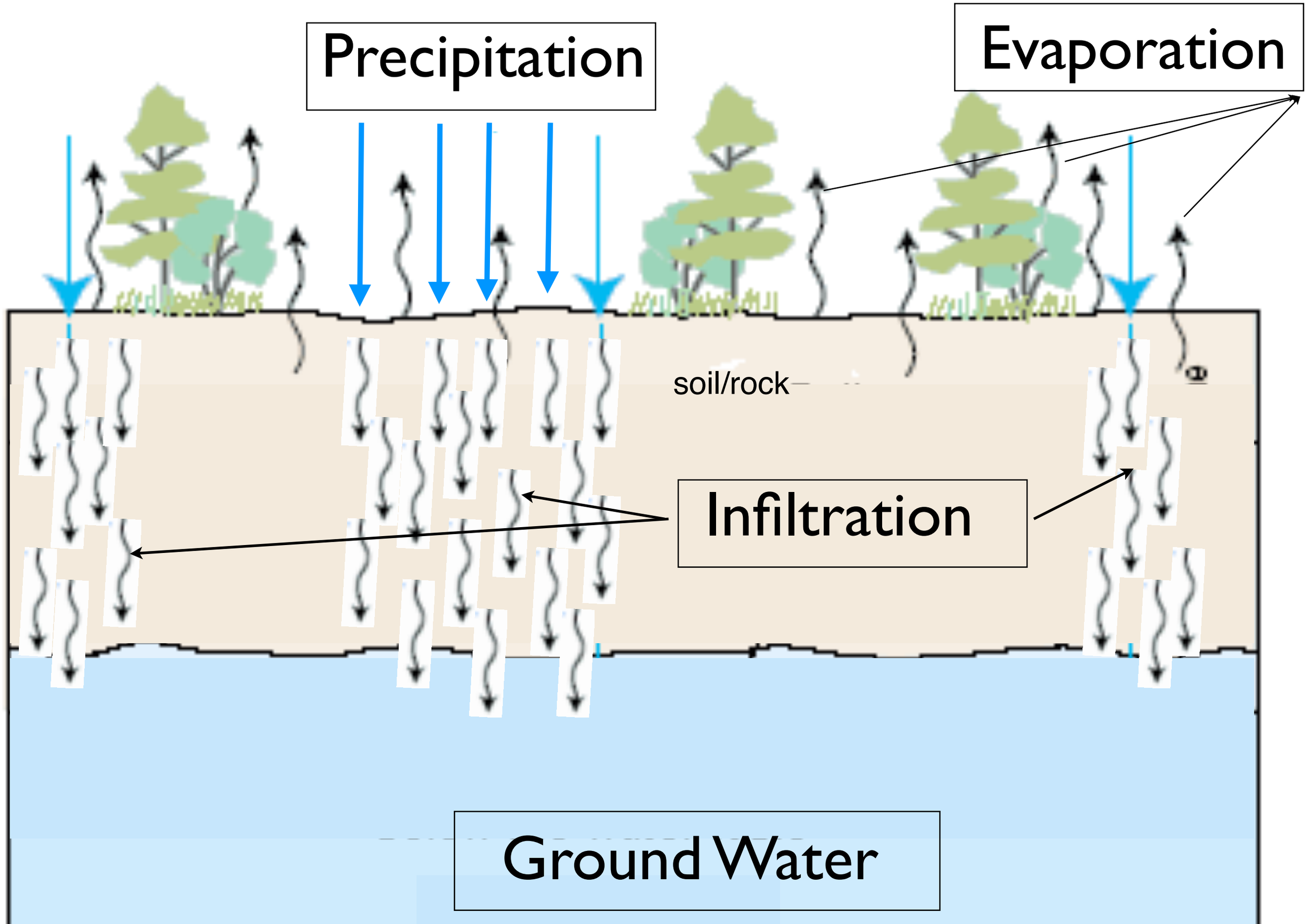
✳Clean Water?

-as water infiltrates through the soil and rock, many impurities are filtered out.

8. **Ground Water:** Water that remains underground is called __ground__ water.

Ground water moves slowly and can reach the surface again in low spots called __springs__ .




Precipitation
Evaporation
soil/rock
Infiltration
Ground Water

9. **Aquifers**:

- An underground layer of water within permeable rock, gravel, silt, clay, and/or sand where ground water is naturally stored.