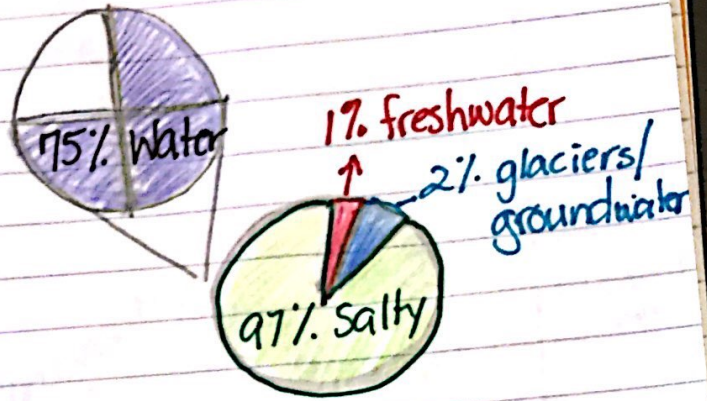


Unit 4 lesson 1 Notes ①

Water Cycle

- 75% of Earth covered in water
- H_2O
- most H_2O is salty
- 1% freshwater
- 2% glaciers / groundwater

$$75\% = \frac{3}{4} = .75$$



Water Cycle

- the movement of H_2O between Earth's surface and the atmosphere

Atmosphere



- mixture of gases that surround

Sun (star)

- Powers the Water Cycle
- * Provides heat (thermal) energy to move H_2O

Evaporation:

- Change from a liquid H_2O to a gas form

↓
Water vapor

Sun

heats up H_2O particles

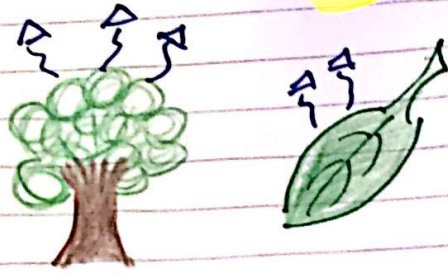


Evaporation

Unit 4 Lesson 1 Notes (2)

Transpiration:

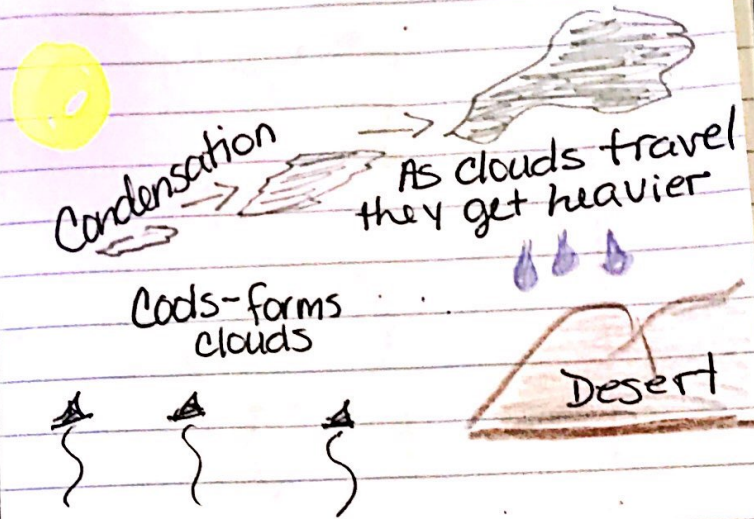
- Evaporation of H_2O from leaves of plants



Condensation:

- gas changes to a liquid (opposite evaporation)

- ① Water vapor rises
- ② It cools (condenses) and forms clouds
- ③ H_2O droplets form around particles of dust & salt
- ④ Droplets collide to form precipitation



* Clouds transport H_2O from place to place

Ocean: major source of H_2O for Evaporation

Dew:

H_2O (water) vapor that condenses on surfaces



grass

Fog:

H_2O vapor condensing near the ground (low stratus cloud)



FOG

Unit 4 Lesson 1 Notes ③

Precipitation:

- H₂O that falls from the clouds to Earth's surface

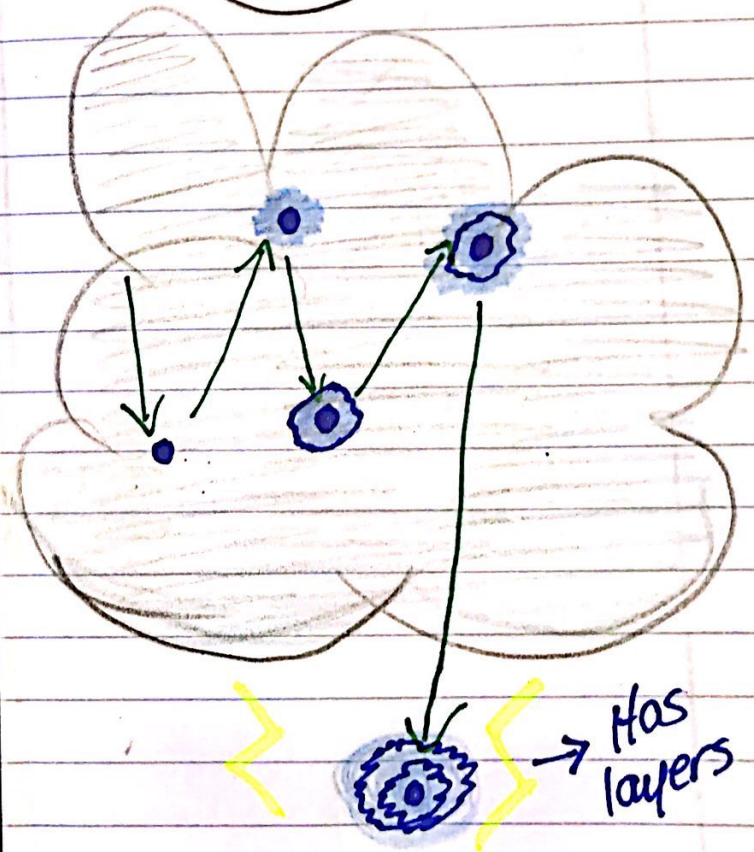
* Rain - (liquid form)
• water droplets

* Snow - (solid form)
• Forms when H₂O vapor cools quickly without going through the liquid phase.

Freezing Point
= 0°C
= 32°F

* Hail (Solid Form)
• Forms in thunderstorms - cumulonimbus clouds
• Balls of ice moving up and down in the clouds every time forming a layer of ice - making the ball bigger

Sleet: (Solid Form)
• During winter
• Only falls once
• Small pellets which start to melt - mixture of rain & snow



Unit 4 lesson 1 Notes (4)

The movement of H_2O after Precipitation

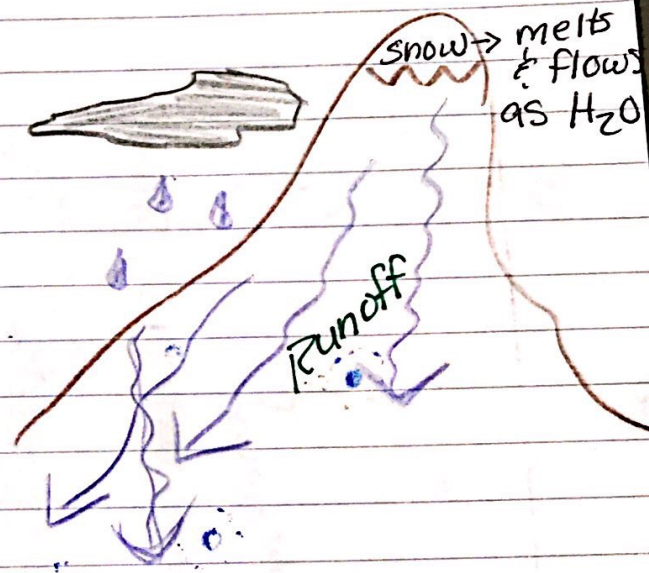
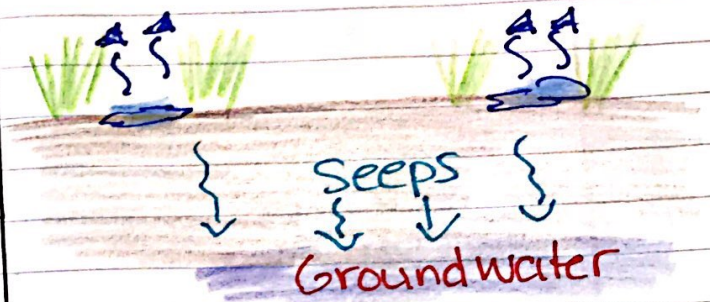
Puddles \rightarrow evaporate

H_2O seeps into the ground
Groundwater (collection)

- H_2O is stored underground
 - aquifers
 - Some H_2O will reach a river, lake, or the ocean - very slow

Run off: H_2O that does NOT seep into the ground flows across Earth's surface

- Flows downhill because of gravity



Glaciers

- large, slow, moving masses of ice
 - melting due to rising temperatures
 - getting smaller
 - Affecting the polar bears population

