

Unit 4 Lesson 6 Notes ①

Climate

Weather: describes what the atmosphere is like at a given time & Place →

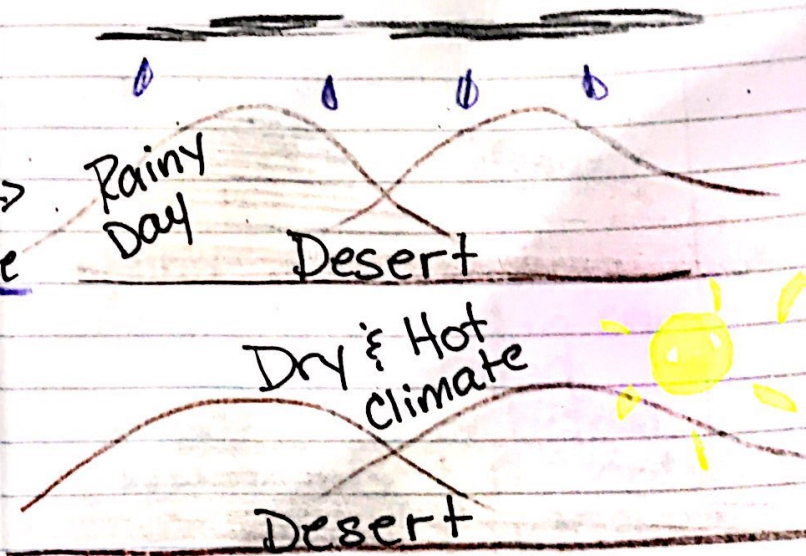
Climate: the long-term weather patterns in an area

Factors to determine Climate:

- * **Average** weather conditions
 - temperature
 - wind speed
 - wind directions
 - cloud cover
 - air pressure
 - amount of precipitation

Climate Zones
• Zones with similar average temperatures and precipitation

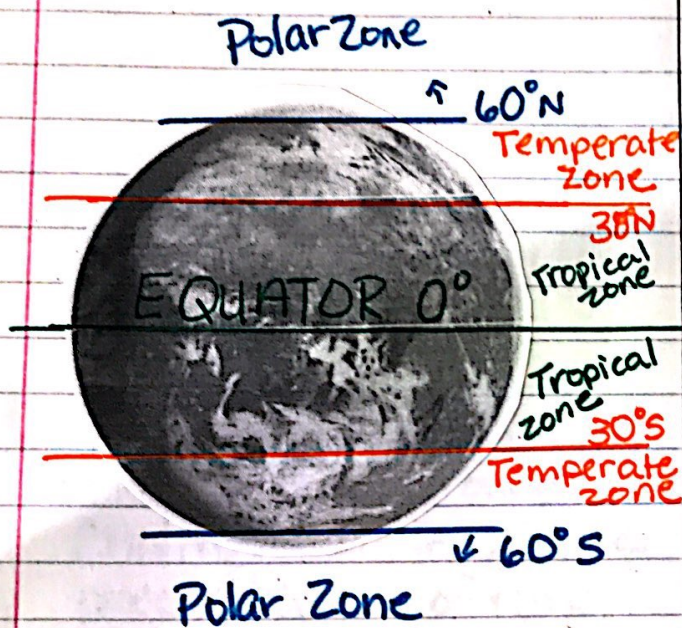
Climate Zones **Differ** by:
• Distance from the equator
• Elevation
• Distance from bodies of water
• Landforms



over a **LONG** period of time

3 climate zones:
• Polar Zone
• **Temperate Zone**
• Tropical Zone

Unit 4 Lesson 6 Notes (2)



Polar Zone

- Farthest from Equator
 - Near the poles
 - Sun is never too high
 - Generally covered in snow & Ice year-round
 - Temp. 10°C or below
 - Few plants & Animals
- Special Adaptations:
- Fur
 - Extra Fat

Temperate Zone

- Between the Polar & Tropical
- Moderate temperatures
- Varies in precipitation
- Temp. between 10°C - 18°C
- Much of U.S.
- 4 distinct seasons
 - * Deciduous trees
 - lose their leaves

Tropical Zone (Florida)

- Near the Equator
- Sun is overhead nearly all year
- Greater than 18°C Temp.
- Generally moist/wet plants
- lush/diverse forests (vegetat fauna)
- Tropical Rain Forest

Unit 4 Lesson 6 Notes (3)

Environments

Deserts

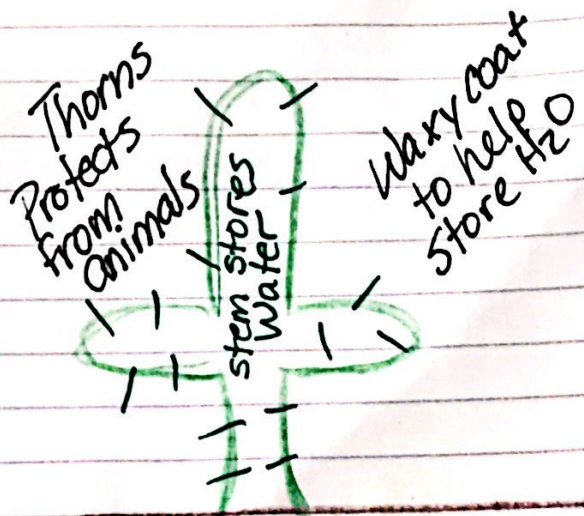
- Dry
- Hot during day / cold during night
- Plants / animals need little water
(Tropical / temperate)

Swamp

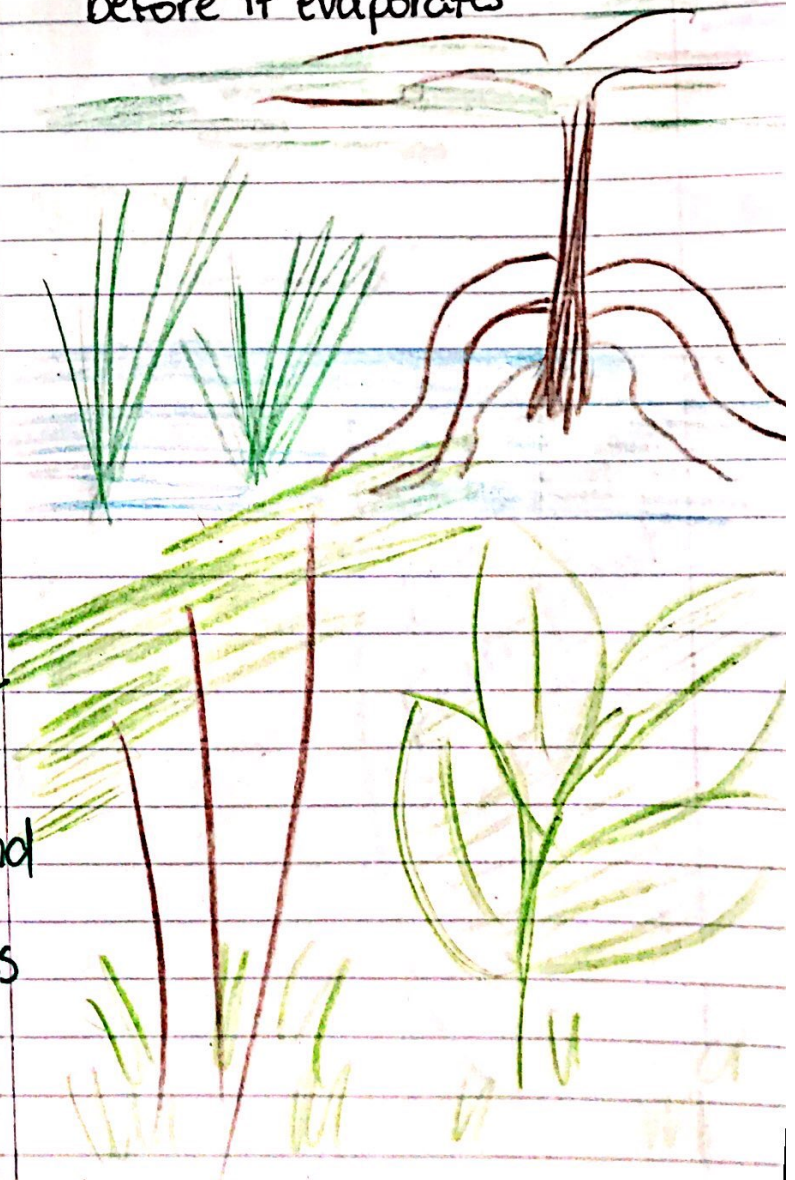
- covered in water
salty ↓ Fresh
Brakish
- occur where ground CANNOT soak in all the precipitation of runoff
- Hot temperatures
- Mostly in tropical zones

Tropical Rain Forest

- Found in warm/wet climate
- Same amount of sunlight year long
- Plants cover most of the land
- Provides food & shelter to a wide variety of animals
- Tropical Zone



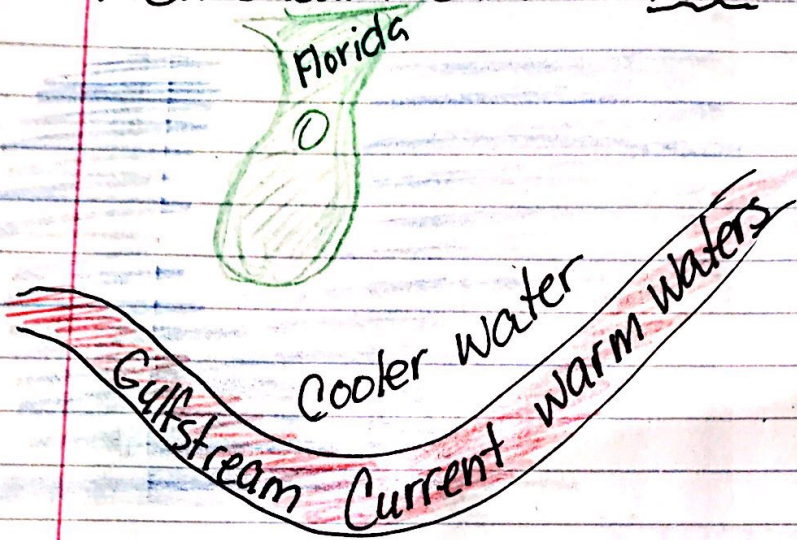
- roots near top of ground
- soaks up H₂O right away before it evaporates



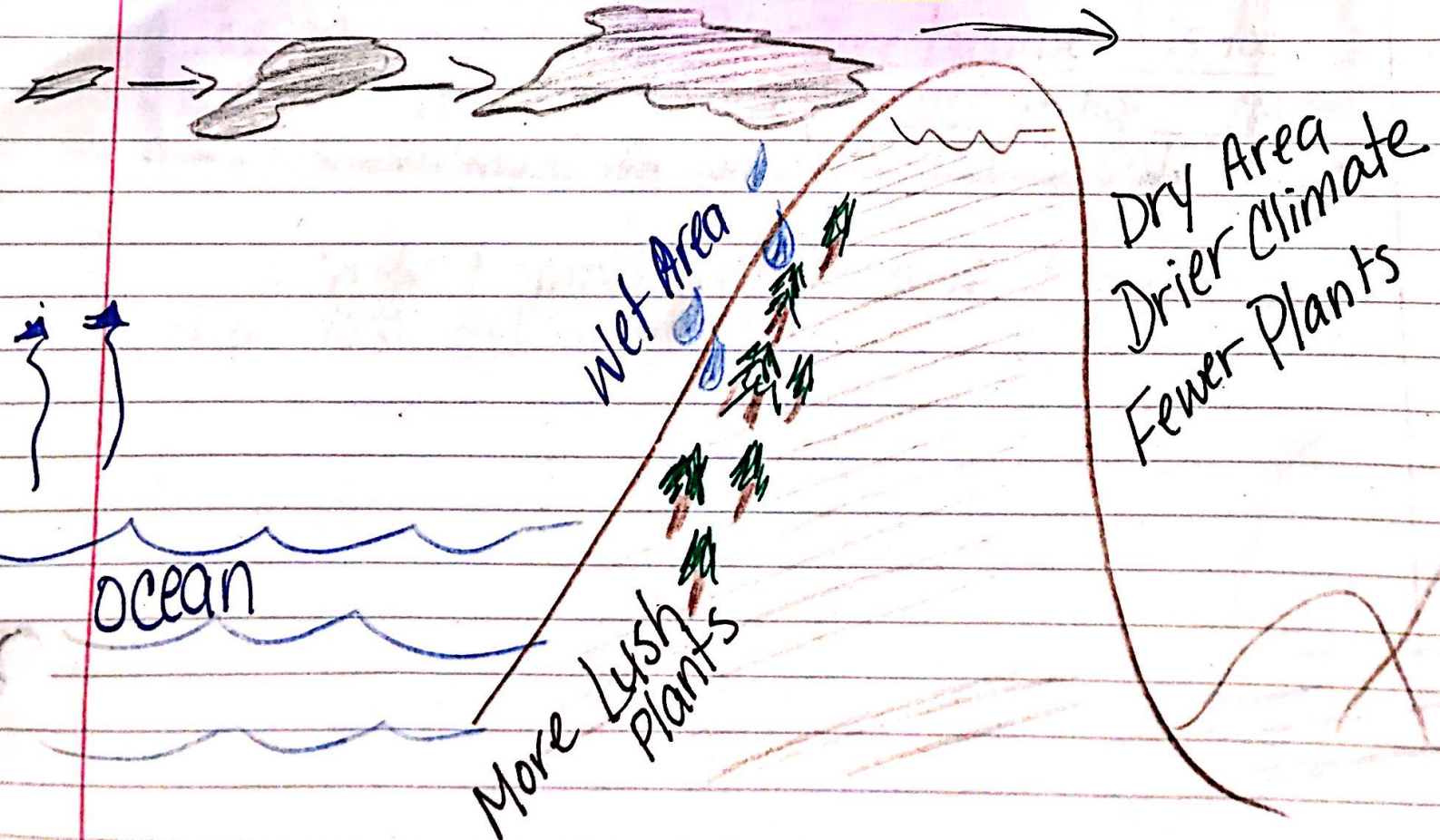
Unit 4 lesson 6 Notes (4)

* Water cools slower than land

* Gulfstream Current: warm ocean current: near the equator

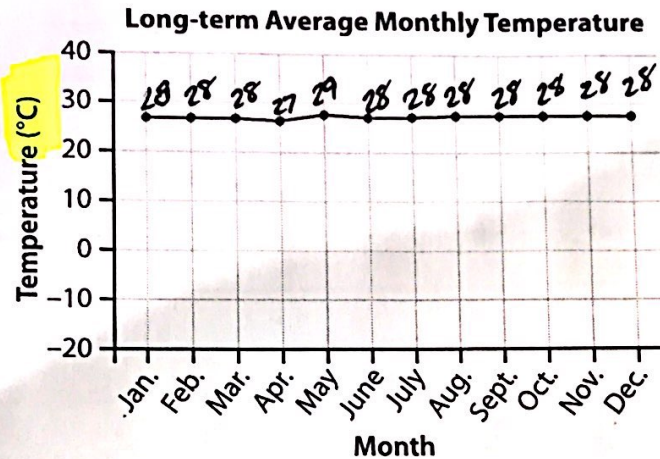


Rain Shadow Effect - ON TEST



ON Test - Know How to Read a Line Graph

- 6 The graph below shows the long-term average monthly temperature of a place. In which climate zone is this place likely to be found? Explain.



About
28°C
All year
84°F
All year

This area is not in the Polar Zone because it is too warm. It is not temperate because it has 4 seasons and we would see the temperatures fluctuate.

(or change)

It is in the tropical zone because it is greater than 18°C ALL year long.