Unit 9 Guided Notes

Climate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_over an area

Greenhouse Gases:

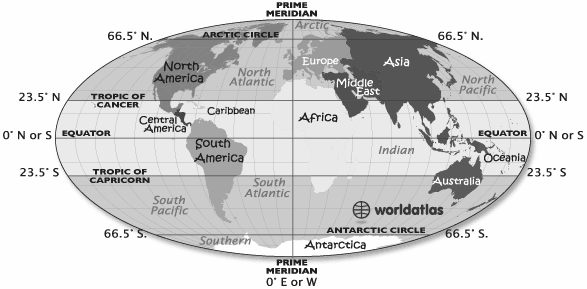
* These are gases that allow for our \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to be suitable to live
* The gases include: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Carbon dioxide, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and Nitrogen

Human Impact on Greenhouse Gases Brainstorm:

Koppen Classification System **---THINK AIR MASS LOCATIONS**  
Uses mean monthly and annual values of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| Group | Description |
| Humid Tropical | \_\_\_\_\_\_\_\_\_\_\_\_\_ temperatures year round and for their large amount of year round \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Humid Mid-Latitude | land/water differences play a large part. These climates have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ summers and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_winters. |
| Dry | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rain and a huge daily temperature \_\_\_\_\_\_\_\_\_ ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ) |
| Highland | Total precipitation is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and seasonal temperatures \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| Polar | These climates are part of areas where \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ice |

|  |  |
| --- | --- |
| Group | Example Locations |
| Humid Tropical |  |
| Humid Mid-Latitude |  |
| Dry |  |
| Highland |  |
| Polar |  |



Factors that Affect Climate:

1. Latitude

As latitude \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the intensity of solar energy \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
 Three Zones:

Tropical:

Temperate:

Polar:

1. Elevation

Higher the elevation is, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_the climate

Elevation determines amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it receives

1. Topography

Land features affect amount of precipitation that falls over an area  
Mountains cause a rain shadow event  
 One side has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

One side has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

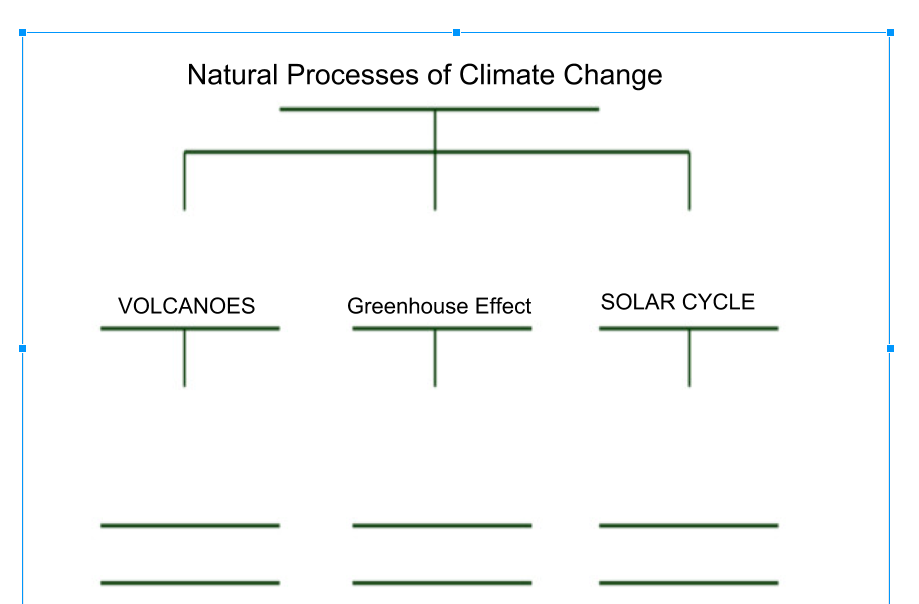
1. Water Bodies

Temperature of the water body \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the air above.

1. Global Winds

Winds distribute heat and moisture around the Earth  
 Warm air moves to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
 Cold air moves to the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

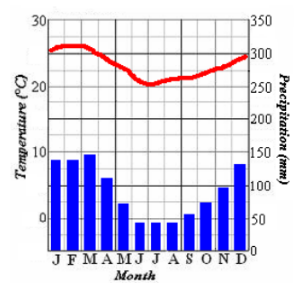
1. Vegetation --Affects both temperature and precipitation   
   **Temperature**  
   Influence how much of the sun’s energy is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and how quickly it is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   **Precipitation**  
   When plants release water vapor from its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Climographs:

Definition: what scientists create to show a particular location's \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ during the year

How to read a Climographs:





CO2 Fluctuations

* Changes in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rates

Carbon Sinks

* CO2 is absorbed by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and forms carbonic acid.
  + Decrease in the ocean’s pH levels in the ocean.
  + Coral Reefs: High levels of CO2 negatively affects corals photosynthesis
  + 50% of coral reefs have been destroyed
  + Ocean Acidification

