**Air Masses and Fronts:**

**Unit 3: Interactions of the Atmosphere and Hydrosphere**

**Mini-Unit:** Weather

**Goal 3: The student will demonstrate the ability to explain how the transfer of energy affects the water cycle.**

Objectives – The student will be able to:

* + Identify causes of vertical air motion and their effects on cyclones and anticyclones

**Textbook:** Unit 7, Chapter 24, pg. 600 & Chapter 25, pg. 630

**Air Masses:**

Air moves from areas of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pressure to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_pressure, which are caused by:

Air Mass:

Types of Air Masses:

* Classified by their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which are dependent upon the area over which they formed
1. Continental –
2. Maritime -
3. Tropical –
4. Polar –

|  |  |  |  |
| --- | --- | --- | --- |
| **Air Mass** | **Symbol** | **Formed Over** | **Weather** |
| Continental Tropical |  |  |  |
|  | cP |  |  |
|  |  | Warm water |  |
|  |  |  | Cold and wet |



**Fronts:**

Fronts:

Cold Front:



Warm Front:

Stationary Front:

Occluded Front:

**Cyclones and Anticyclones:**

Cyclone:

* Usually lasts several days
* Spin counter clockwise
* Follow storm tracks or routes



Anticyclones:





