**Air Masses and Fronts**

**Air Mass**

* **Air Mass is a large body of air where temperature and moisture content are similar throughout.**
* **Moisture content and temperature are determined by the area over which the air mass is formed called source areas.**
* **Air Mass is designated by a two-letter symbol.**
  + **The first letter indicates moisture content.**
  + **The second letter represents temperature.**
  + **See chart**
* **Cold Air Masses**
  + **There are three polar air masses that influence the weather in the United States.**
  + **Continental polar, Maritime polar over the North Pacific Ocean, Maritime polar over the North Atlantic ocean**
* **Warm Air Masses**
  + **There are three warm air masses the influence the weather in the United States.**
  + **Maritime tropical that develops over the Gulf of Mexico, Maritime tropical that develops over the Pacific Ocean, Continental tropical**

**Fronts**

* **Fronts are the boundary between air masses of different densities and usually different temperatures.**
* **The four types of fronts are cold front, warm front, occluded front, stationary front.**
* **Cold Front**
  + **Forms where cold air moves under warm air, which is less dense, and pushes the warm air up.**
  + **Cooler weather follows cold fronts.**
  + **Cold fronts bring thunderstorms, heavy rain or snow.**
* **Warm Front**
  + **Forms where warm air moves over cold, denser air.**
  + **Warm fronts bring drizzly rain and are followed by clear warm weather.**
* **Occluded Front**
  + **Forms when a warm air mass is caught between two cooler air masses.**
  + **Occluded front has cool temperatures and large amounts of rain and snow.**
* **Stationary Front**
  + **Forms when a cold air mass meets a warm air mass.**
  + **A stationary front often brings many days of cloudy, wet weather.**

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