Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period:\_\_\_

Weather Fronts Stations Activity

**Testing your understanding of Air Masses**

**Station 1:** On this map you need to \*\*1-draw and \*\*2-identify/label the following air masses and \*\*3-show the direction of their movement using dry erase markers.

1. A warm wet air mass that formed near the equator moves northwest from Florida and meets a dry cool air mass which is currently sitting in Iowa.

Questions:

1. What type of fronts might these air masses produce?
2. What will determine the type of front that occurs when these 2 air masses meet?

**Station 2:** On this map you need to \*\*1-draw and label the air masses involved, \*\*2-describe what the air masses are like (temp & humidity), and \*\*3-show the direction of their movement using dry erase markers.

1. A continental tropical air mass moves north, stalls out over Illinois, and encounters a continental polar air mass on the move over lake Michigan.

**Questions:**

1. What type of front might these air masses produce? Explain.

**Testing your understanding of fronts**

**Station 3:** On your map **build the front(s)** that can explain the weather changes below….

1. Florida has been experiencing almost constant rain and nimbostratus cloud cover for the past 24 hours.
2. Temperatures in Southern California dropped 10 degrees overnight, the wind shifted and is now coming from the NW.
3. Colorado just experienced 3 hours of gentle rain and is now enjoying winds from the SW.

**Questions:**

1. What front type is missing from your map? Is there possibility that this front could still occur in the next day or so?

**Testing your understanding of fronts Continued…..**

**Station 4:** On your map **build the front(s)** that can explain the weather changes below….

1. The only type of air on the ground over Kentucky is cold.
2. Tennessee and Alabama are experiencing severe weather events including tornadoes, hail over 3/4in, and winds upwards of 50 mph.
3. Virginia and West Virginia experienced an increase in temperature of 20 degrees in the past 5 hours.
4. Wyoming is experiencing constant rain and has been for the past 9 hours.

**Questions:**

1. What front type is missing from your map? Is there possibility that this front could still occur in the next day or so? Explain.

**Testing your understanding of pressure systems**

**Station 5:** Find the 3 mistakes present on this map, explain how you know these items are incorrect, and fix the map to make it correct.

**Station 6:** Find the 3 mistakes present on this map, explain how you know these items are incorrect, and fix the map to make it correct.