Name:                                        Period

Review using Pressure Systems

Testing your understanding of Fronts

Station 1: On your map build the front(s) that can explain the weather changes below….

1.      Texas has been experiencing almost constant rain and nimbostratus cloud cover for the past 2 days. What type of front is this? (Build this front on your map and include the pressure found in this zone).

2.      Temperatures in Southern Iowa dropped 20 degrees overnight and wind shifted from a SW wind to a wind from the NW. What type of front is this? (Build this front on your map and include the pressure found in this zone).

* Is there a possibility of an occluded front occurring on your map? Support your decision with evidence.

* What type of pressure would be found in both Texas and Southern Iowa? How do you know?

Station 2: On your map build the front(s) that can explain the weather changes below…

1.       Kentucky experienced light rain last night for 3 hours. After the rain stopped, people in the area noticed an increase in temperatures because wind was now coming from the Southeast. What type of front is this? (Build this front on your map and include the pressure found in this zone).

2.      Northern Michigan has been trapped in a haze of clouds and rain for the past 4 days. While the rain has not been heavy and the storm is not severe, the area has been receiving constant rain from Monday-Thursday. What type of front is this? (Build this front on your map and include the pressure found in this zone).

* Is there a possibility of an occluded front occurring on your map? Support your decision with evidence.
* What type of pressure would be found in Kentucky and Northern Michigan? How do you know?

Testing your understanding of pressure systems

Station 3:

If meteorologists know the location of low pressure or high pressure systems, they can make weather predictions more easily.   Using the high and low pressure symbols already positioned on your map, design the weather conditions that could be occurring in those areas. Get your map symbols checked before you write these down on your paper.

* Using a dry erase marker, draw the movement of wind using the pressure systems displayed on your map. Explain why wind moves like this.

* Why are high pressure systems associated with nice sunny weather?

Station 4:

If meteorologists know the location of low pressure or high pressure systems, they can make weather predictions more easily.   Using the high and low pressure symbols already positioned on your map, design the weather conditions that could be occurring in those areas. Get your map symbols checked before you write these down on your paper.

* Using a dry erase marker, draw the movement of wind using the pressure systems displayed on your map. Explain why wind moves like this.
* Why are high pressure systems associated with nice sunny weather?

Map Sleuth

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.



Conclusion: Use your knowledge of pressure to fill in the chart below.

|  |  |  |
| --- | --- | --- |
|  | High Pressure | Low Pressure |
| Caused By… |  |  |
| Type of weather found here |  |  |
| Direction of Rotation |  |  |