

## Assignment #5

name:

### **Reminder**

As assignments are graded and returned to you, keep them in a folder in the classroom where you are working. Have the supervising teacher keep them in a safe place. The reason for this is so that you have proof that you have completed an assignment if Mr. Benson doesn't have the grade in his book. This folder with all of the completed assignments must be turned in to Mr. Benson at the end of the course.

1. Read the paragraph in the box above. What are you supposed to do with the assignments once they are returned to you?

2. What is the reason for this?

### **COLD FRONTS**

Go to <http://formontana.net> and then click on picture # 2. Look at the image and read the explanation below the image.

3. List the Montana cities have National Weather Service RADAR devices? Underline the one that is closest to the place where you live.

4. What is a "squall line"?

5. Why aren't squall lines common in Montana?

6. Explain how a cold front helps clouds to form. (What does it do to the warmer air?)

7. What is the meaning of the colors shown on the RADAR image at the top of the page?

8. Click on the Hot Link titled “understanding RADAR”. Explain why RADAR can be used to tell where it is raining or snowing, etc.

9. What is “virga” and why does it present a problem for RADAR?

## **PRECIPITATION**

Go to back to <http://formontana.net> and then click on picture # 14.

10. According to the map, which part of Montana gets the most precipitation? Be specific.

11. What larger town (more than 3,000 people) in southwestern Montana gets less than 10 inches of precipitation annually? (It starts with a “D”.)

12. Use your Montana Highway Map and the precipitation map to figure out how many inches fall in Helena.

13. Compare the precipitation map to the image at the bottom of the web page. Do you see a correlation (connection) between the shape of the land and precipitation amounts? Explain.

14. How do mountains contribute to cloud formation? (What do they force air to do?)

15. Why do the west sides of Montana’s mountains get more precipitation than the east sides? (What is the air doing on the west sides that it is not doing on the east sides?)