**\_\_\_\_\_\_\_\_Points Earned/50 Points Possible \_\_\_\_\_\_\_\_%**

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

Earth Science Mr. Standifer

**Unit 13 – Weather Notes Review**

1. Changes in our weather are caused by the interactions of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. What is an air mass?
3. Describe humidity.
4. If a certain volume of air is holding half as much water vapor as it possibly can, what is the relative humidity? \_\_\_\_\_\_\_\_%
5. Complete the following table about the types of air masses: **(12 points)**

|  |  |  |
| --- | --- | --- |
| **Type of Air Mass** | **Characterized by...** | **Causes what type of weather?** |
| Continental Arctic (cA) | Very cold and very dry | Can cause extreme cold waves |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

1. Changes in weather are caused by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is a front?
3. Complete the table about the different types of fronts: **(9 points)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Front:** | **Description:** | **Weather produced:** | **Diagram:** |
| Cold | boundary between an advancing cold air mass and the warm air mass it is replacing | severe thunderstorms or snow showers |  |
| Warm |  |  |  |
| Occluded |  |  |  |
| Stationary |  |  |  |

1. Compare and contrast low and high pressure systems. **(2 points)**
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_are small particles in the atmosphere around which cloud droplets can form.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_occurs when wind encounters a mountain and the air has no place to go but up.
4. Describe coalescence.
5. What three things are required for a thunderstorm to occur? **(3 points)**
6. What is the most dangerous stage of a thunderstorm? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**(2 points)**
   1. What can occur during it?
7. Thunderstorms usually form along \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_fronts and are associated with \_\_\_\_\_\_\_\_\_\_\_\_pressure systems.
8. Describe lightning and thunder. **(2 points)**
9. A violently rotating column of air that usually touches the ground is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. What is the difference between a tornado watch and a tornado warning? **(2 points)**
11. Whirling tropical cyclones that produce winds of at least 119 kilometers per hour are known in the United States as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
12. What is the calmest part of a hurricane? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. What is the difference between a hurricane watch and a hurricane warning? **(2 points)**
14. What are the three characteristics of a blizzard? **(3 points)**