Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_

**Q2 Quarterly Assessment REVIEW – Atmosphere, Weather, Forecasting, and Storms**

**Chapters A1, A2, and A3**

1. Draw a pie chart of the gases in the atmosphere. Label the sections with the correct gases and their percentage.
2. List 4 greenhouse gases.
3. What is the main cause of most greenhouse gases?
4. What would happen if greenhouse gases increased or decreased?
5. Which gas is the one that scientists are most worried about increasing?
6. Where in the atmosphere is the density and pressure of air the highest?
7. Where in the atmosphere is air pressure and density of air the lowest?
8. What causes Global Wind Belts?
9. How do global winds influence local climates (hint: think air masses)?
10. Write what happens at each step in the water cycle.

Evaporation Transpiration Condensation Precipitation Infiltration Runoff

1. What is the main energy source that keeps the water cycle going?
2. Where on Earth does most evaporation occur? Why?
3. Why are maritime/marine climates so humid?
4. What is the main characteristic of each of the following climates? Use the words: warm, cold, humid, dry
   1. Continental \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Maritime (marine) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Polar \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Tropical \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Which layer of the atmosphere contains most of the water vapor in the atmosphere?
6. In which layer is the ozone layer?
7. Why is the ozone layer important to life on Earth?
8. What might happen if much of the ozone layer disappeared?
9. Explain what a molecule of chlorine from CFCs does to the ozone layer.
10. How are the different layers of the atmosphere defined or determined?
11. Describe how the temperature pattern in each layer of the atmosphere shifts or changes.
12. Explain land breezes and sea breezes. You may draw a picture to help. Include the time of day they happen.
13. How does SMOG form and what is it made of?
14. Explain how fog is formed.
15. What does each weather instrument measure?
    1. Thermometer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    2. Barometer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    3. Anemometer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    4. Weather or Wind Vane \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
16. What causes there to be air masses with different pressures? (Also, can be worded: What causes differences in air pressure?)
17. What gives hurricanes their energy?
18. When is hurricane season for the east coast of the US?
19. Where do hurricanes form and under what general conditions?