

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

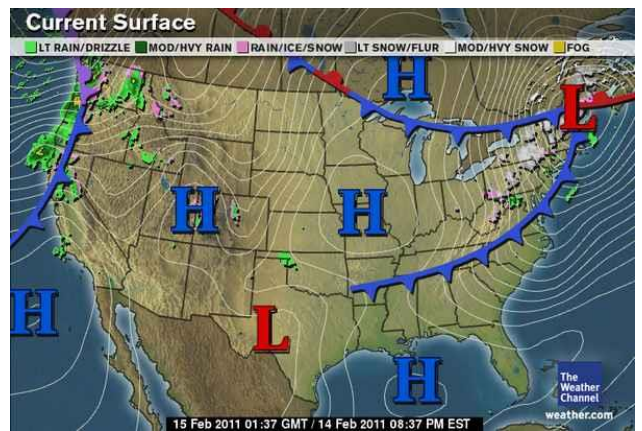
## Atmosphere and Weather Exam Study Guide

1. What are the five steps to the water cycle?
2. What does alto mean?
3. What does nimbo mean?
4. What are the two most abundant gases in the atmosphere?
5. What is the most abundant gas in the atmosphere?
6. What percentage of the atmosphere does oxygen make up?
7. How does heat from the sun heat us?
8. Winds are caused by uneven heating of the Earth's surface by \_\_\_\_\_.
9. The transfer of heat from direct contact of an object and how the Earth is heated is called \_\_\_\_\_.
10. How does the Jet Stream effect weather in the Northern Hemisphere?

11. How does water turn into water vapor?

12. What do isobars measure?

13. Based on the map to the right, what type of front is headed to Raleigh?



14. What type of pressure system is over Texas? What type of weather does this bring?

15. What type of pressure system is over the Gulf of Mexico, what type of weather does this bring?
16. What is the Coriolis effect?
17. What causes winds?
18. What direction do the prevailing westerlies travel?
19. How do clouds form?
20. What type of clouds form at high altitudes and are made of ice crystals?
21. What type of clouds blanket the sky and bring precipitation?
22. What type of front will cause a thunderstorm typically?
23. What is a tornado and draw a picture?
24. What pressure system do hurricanes form in?
25. Describe a warm front and draw a picture.
26. Describe a cold front and draw a picture.
27. Describe a stationary front and draw a picture.
28. What does the ozone layer protect us from?

29. How are the layers of the atmosphere classified?
30. Which layer does weather occur in?
31. What happens to density as you increase altitude?
32. What happens to temperature as you increase altitude?
33. What happens to air pressure as you increase altitude?
34. Draw and label each weather tool and what they measure: thermometer, barometer, anemometer
35. Why has weather forecasting improved in the past 10 years?
36. What are the characteristics of a continental tropical air mass?
37. What are the characteristics of a polar air mass?
38. What are the characteristics of a maritime tropical air mass?
39. What are the characteristics of a maritime polar air mass?

**ON A SEPARATE SHEET OF PAPER ANSWER THE FOLLOWING QUESTIONS:**

40. Using the same surface area map from question 12-13, write a detailed current and 3 day forecast for Raleigh
41. Draw the layers of the atmosphere. Include thickness, temperatures, and what can be found in each layer.
42. Explain how altitude affects temperature, pressure, and density.
43. What is an environmental steward? Explain what you can do now and in the future to be an environmental steward, and why it is important to be an environmental steward