

Study Guide for December Test (Storms, Climate)

- Use the questions on the other side of this sheet to refresh your memory. They are similar to test questions. There will be 47 multiple-choice and 3 fill-in-the-blank questions on the test. There will also be two essay questions on the honors test. The topics of those essay questions will be . . .
 - 1. The term “model” as it is used by meteorologists
 - 2. The connection between warm water and winds/precipitation in tropical storms
- There will be 47 multiple-choice questions.
 - Fronts and squall lines (5 questions) see notebook entry (Honors students MESPOWs and pages 555-557)
 - Thunderstorm hazards (8 questions) see notes handout
 - Latent Heat Lab (5 questions) see Latent Heat Lab
 - Mesocyclones/Tornadoes (8 questions) see notes handout
 - RADAR (2 questions) see notebook entry (NE)
 - Blizzard of '93 (8 questions) see Map Activity: The Blizzard of '93
 - Tropical cyclones (7 questions) see notes handout
 - Weather satellites (4 questions)
- There will be 3 fill-in-the-blank questions based on the notes handout titled, “Tropical Cyclones”.
- Here is how you should prepare for the test.
 1. Read over and think about all of the notebook entries and notes handouts. Try to anticipate questions as you do this.
 2. Make sure you understand the **Map Activity: The Blizzard of '93**. Again, read the questions and make sure you understand the answers. Make sure you understand the symbols on the map.
 3. Spend time looking over the **Microburst Lab**. Spend time thinking about the pre-lab questions and the follow-up questions.
 4. Go to Benson’s web site: www.bengalfrosh.com -> Benson’s site. Take advantage of the resources (PenCasts, etc.) posted over the past few weeks.
 5. Use the questions on the back to refresh your memory. **They are similar to some of the test questions.**

1. Why are thunderstorms more likely to form along cold fronts? (NE; honors MESPOW)
2. Why does Montana seldom get squall lines? (NE; honors MESPOW)
3. What kind of cyclone was the Blizzard of '93? (Map Activity: Blizzard of '93)
4. What is a storm surge? (Blizzard of '93, NE: Hurricanes)
5. Which front was associated with the snow? (Blizzard of '93)
6. How would you describe the general circulation around a center of low pressure? (NE)
7. List the 5 hazards associated with severe thunderstorms that you learned about in class? (NE)
8. Which state gets the most lightning? (discussed in class)
9. Why is it safe to be in a car when lightning is happening? (video, discussed in class)
10. What two contributions did Ben Franklin make to the area lightning? (video, discussed in class)
11. Why isn't it safe to camp in a canyon when there are thunderstorms in the area? (NE)
12. What causes microbursts? (Notes handout, Latent Heat Lab)
13. List several states in "tornado alley"? (discussed in class)
14. Why are there more tornadoes between Texas and the Great Lakes? (notes handout)
15. Name three phase changes that would make the surrounding air get colder. (Latent Heat Lab)
16. Which phase change is responsible for microbursts? (Latent Heat Lab)
17. Which phase change is responsible for the heat that causes Chinook winds? (Latent Heat Lab)
18. Which 4 cities in Montana have NEXRAD Doppler RADAR? (NE)
19. Why can RADAR be used to figure out where precipitation is falling and how hard it is falling? (NE)
20. Explain how meteorologists in Glasgow would be able to look at the precipitation pattern on the RADAR image of a thunderstorm and know that there is rotation. (NE)
21. When are tropical cyclones given a name? (notes handout)
22. When and where was the deadliest USA hurricane ever? (notes handout)
23. What causes a storm surge? (notes handout)
24. What is the correct progression (named steps) in the development of a hurricane? (notes handout)
25. How fast do the winds have to be for it to be upgraded to a hurricane? (notes handout)
26. Where do hurricanes get their energy and why do they fizzle out as they go over land? (notes handout)
27. What do we call the two weather satellites that monitor the USA? (NE)
28. What is the special name for the type of orbit that the weather satellites are in? (NE)
29. What is a cyclone? List the 3 kinds. (discussed in class several times)
30. What are the 3 types of images that weather satellites provide? (NE)
31. Which type of storm kills the most people worldwide? (notes handout)