

## Meteorology Test 7

Name:

1. What is the name of the troposphere's upper limit?
2. The upper limit of the troposphere is the highest in (warm, cold) regions. It reaches a height of about \_\_\_ miles.
3. The upper limit of the troposphere is the lowest in (warm, cold) regions. It reaches a height of about \_\_\_ miles.
4. Most weather on earth occurs in the troposphere, with only a few cumulonimbus clouds reaching into the stratosphere. Why is most weather confined in these boundaries?
5. The temperature increases with altitude in the stratosphere because of \_\_\_\_\_.  
How does this help warm the atmosphere?
6. The average speed of molecules in the air is a measure of \_\_\_\_\_.
7. What is the difference between sensible and latent heat?
8. When liquid water evaporates, it (releases, absorbs) latent heat.
9. When water vapor condenses, it (releases, absorbs) latent heat.

10. \_\_\_\_\_ takes place when tiny droplets of condensed water vapor within a cloud merge to form larger raindrops. When the raindrops grow large enough, they fall from the sky as precipitation. This process is one of the \_\_\_\_ ways that precipitation can form.
11. What is the adiabatic lapse rate?
12. Meteorologically speaking, what is the opposite of lifting?
13. What is an air mass?
14. What air masses typically affect North America?
15. \_\_\_\_ air masses originate over the Gulf of Mexico.
16. \_\_\_\_ air masses originate over Canada and the Northern US.
17. What type of air mass affects Washington?
18. What type of air mass affects Kansas?
19. Kansas' severe weather often results from interactions between what two air masses?
20. Draw the three cell circulation model below:

21. Why are the areas between 30 degrees N/S and 35 degrees N/S called the horse latitudes?

22. Who discovered the Coriolis effect?