

10. What are the major components of clean, dry air?
11. Outline the stages in the formation of Earth's atmosphere. (see box 1-2)
12. What is responsible for the increasing carbon dioxide content of the air? What is one possible effect of increased carbon dioxide in the atmosphere?
13. Why are water vapor and dust important constituents of our atmosphere?
14. Why is ozone important to life on Earth?

15. What are CFC's and what is their connection to the ozone problem?

16. What are the effects on human health of a decrease in the stratosphere's ozone?

17. The atmosphere is divided vertically into four layers on the basis of temperature. List the names of these layers and their boundaries in order – from lowest to highest – and list as many characteristics of each as you can.

18. Why does temperature increase in the stratosphere?

19. Why are temperatures in the thermosphere not strictly comparable to those experienced near Earth's surface?
20. Distinguish between the homosphere and the heterosphere?
21. What is the primary cause of auroral displays?
22. Refer to the graph in figure 1-6. Which year had the greatest number of billion dollar weather disasters? How many events occurred that year? In which year was the damage amount greatest?

23. Use the graph of the atmosphere's thermal structure (figure 1-25) to answer the following:

- a. What is the approximate height and temperature of the stratosphere?

- b. At what altitude is the temperature lowest? What is the temperature at that height?

24. Use the web site (www.rsffa.com) to define the following terms. Go to the link for meteorology class.

- a. aerosols –

- b. air –

- c. atmosphere –

- d. aurora australis –

- e. aurora borealis –

- f. biosphere –

- g. climate –

- h. closed system –

- i. geosphere –

- j. hydrosphere –
- k. hypothesis –
- l. ionosphere –
- m. mesopause –
- n. mesosphere –
- o. meteorology –
- p. model –
- q. open system –
- r. ozone –
- s. radiosonde –
- t. stratopause –
- u. stratosphere –
- v. theory –
- w. thermosphere –

x. tropopause –

y. troposphere –

z. weather --