

DIRECTED READING WORKSHEETS 1-1

Name _____ Date _____ Section _____

Chapter Introduction

Section 1: Characteristics of the Atmosphere (p. 4)

1. Why is the atmosphere important to us? (Circle all that apply.)

- a. It contains the oxygen we breathe.
- b. It keeps the clouds close to the Earth.
- c. It protects us from the sun's harmful rays.
- d. It holds us onto the Earth's surface.

Composition of the Atmosphere (p. 4)

Mark each of the following statements True or False.

2. _____ The atmosphere contains some solids. True or False? (Circle one.)
3. _____ Oxygen is the most abundant gas in Earth's atmosphere. True or False? (Circle one.)
4. _____ Water in the liquid and gas form are in Earth's atmosphere. True or False? (Circle one.)

Atmospheric Pressure and Temperature (p. 5)

5. Why do your ears pop when you ride up or down in an elevator in a tall building? _____

6. Gravity holds the atmosphere around the Earth. True or False? (Circle one.)

7. Air pressure _____ as you move away from Earth's surface. (increases or decreases)

8. Differences in temperature between layers of the atmosphere are mainly due to the way energy is absorbed by gases as it moves downward through the atmosphere. True or False? (Circle one.)

Layers of the Atmosphere (p. 6)

9. In which of the following atmospheric layers does temperature decrease as altitude increases? (Circle all that apply.)

- a. troposphere
- b. stratosphere
- c. mesosphere
- d. thermosphere

10. The pressure of the Earth's atmosphere becomes _____ as you move away from the Earth's surface. (greater or lesser)

11. Most of the mass of the Earth's atmosphere is in the _____ (troposphere or thermosphere)

12. You live in the troposphere. True or False? (Circle one.)

13. Take a look at Figure 5 at the bottom of page 7. Ozone is made up of oxygen atoms. How is ozone different from the oxygen you breathe? _____

14. The ozone in the atmosphere absorbs _____ . (ultraviolet radiation or gamma rays)