

CHAPTER REVIEWChapter **16****Breathing****I. Vocabulary Review**

In the blank, write the word or words that best complete the sentence.

1. Clusters of thin-walled sacs found in the lungs are called _____.
2. A disease that causes alveoli to lose their ability to expand and contract is _____.
3. The passageway for moving air into and out of your body is the _____.
4. The substance in red blood cells that binds with oxygen is _____.
5. The thin sheet of muscle under your lungs is your _____.
6. Tiny hairlike structures that line nasal passageways, trachea, and lungs are _____.
7. Bronchial tubes become constricted in a lung disorder called _____.

II. Concept Review

If the underscored word or phrase makes the sentence true, write "TRUE" in the space provided. If the underscored word or phrase makes the sentence false, write the correct term or phrase in the space provided.

- _____ 8. An earthworm is a complex organism that doesn't need a trachea for respiration.
- _____ 9. During cellular respiration, oxygen combines with stored energy in cells.
- _____ 10. The gas that causes exhaled air to feel moist is carbon dioxide.
- _____ 11. Hemoglobin is a good oxygen carrier because it contains iron, which easily binds with oxygen.
- _____ 12. One way to keep your respiratory system healthy is to get plenty of exercise.

Number the following in their correct order.

13. Describe inhalation.

- _____ Air fills lungs.
- _____ Diaphragm contracts, and muscles pull ribs upward and outward.
- _____ Air pressure inside the lungs decreases.

14. Describe how oxygen gets to your heart.

- _____ Oxygen-rich blood moves to the heart.
- _____ Oxygen binds with hemoglobin in the red blood cells.
- _____ Oxygen diffuses into the capillaries.
- _____ Oxygen-rich air flows into the alveoli.

Chapter Review 16 (continued)

Answer the following in complete sentences.

15. Which way does air flow when you squeeze a plastic two-liter bottle? Explain in terms of air pressure. _____

III. Skills/Process Review

Use the information in the table to answer the following in phrases or complete sentences.

Activity	Time it takes solution to turn yellow (average of 3 trials)
sitting	25 s
vigorous exercise (15 min)	12 s
resting 1 min after exercise	15 s
resting 15 min after exercise	22 s

In an experiment, you measure the amount of time it takes a solution of bromothymol blue—a carbon dioxide indicator—to turn yellow after you exhale into it through a straw.

16. What is the control in your experiment? _____

17. What conclusion can you draw about exercise and the production of carbon dioxide?

18. Why does exercising cause you to exhale more carbon dioxide? _____

19. What causes the amount of carbon dioxide exhaled to eventually decrease? _____

IV. EYV Review

20. Science and Society: Cigarette Ads—Are They a Crime? How could a ban on cigarette advertising affect people’s jobs? _____
