

Respiratory System Test

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- _____ 1. Which organ filters blood that has collected wastes from cells throughout the body and maintains the homeostasis of body fluids?
- a. pacemaker
 - b. kidneys
 - c. heart
 - d. lungs
- _____ 2. Which of the following structures is the site of gas exchange during respiration?
- a. Bronchi
 - b. Alveoli
 - c. Larynx
 - d. Trachea
- _____ 3. Which of the following is associated with cellular respiration?
- a. ATP formation
 - b. metabolic processes
 - c. gas exchange in cells
 - d. all of these
- _____ 4. Where does air go after passing the epiglottis?
- a. Pharynx
 - b. Larynx
 - c. Stomach
 - d. Lungs
- _____ 5. What controls the rate of breathing?
- a. Cerebellum
 - b. Medulla oblongata
 - c. Hippocampus
 - d. Hypothalamus
- _____ 6. During the process of respiration,
- a. carbon dioxide is expelled from the body.
 - b. oxygen is used in cells to produce ATP.
 - c. oxygen is delivered to body cells.
 - d. all of these.
- _____ 7. Which of the following is true of breathing?
- a. coordinated process
 - b. involuntary process
 - c. homeostatic process
 - d. all of these
- _____ 8. The first branches off the trachea are called
- a. alveoli.
 - b. arterioles.
 - c. bronchi.
 - d. bronchioles.
- _____ 9. Which of the following is the shape of the diaphragm when it is in the exhaling position?
- a. dome shape
 - b. triangular
 - c. circular
 - d. flat
- _____ 10. Inside the alveoli, carbon dioxide and oxygen
- a. are transported along microscopic tubules.
 - b. are produced inside cells.
 - c. are exchanged between air and blood.
 - d. are exchanged for other gases.
- _____ 11. What antibodies does the sample shown in Figure 37-4 have?
- a. A
 - b. B
 - c. both
 - d. neither

- _____ 12. When the diaphragm contracts, the chest cavity becomes —
- smaller, causing decreased pressure in the chest.
 - smaller, causing increased pressure in the chest.
 - larger, causing decreased pressure in the chest.
 - larger, causing increased pressure in the chest.
- _____ 13. Which is the correct sequence for the path of oxygen through the respiratory system?
- nasal passages, trachea, bronchi, bronchioles, alveoli, blood, cells
 - nasal passages, bronchi, trachea, bronchioles, cells, blood, alveoli
 - nasal passages, blood, alveoli, bronchi, cells, trachea, bronchioles
 - cells, blood, alveoli, bronchioles, bronchi, trachea, nasal passages
- _____ 14. When you swallow, your epiglottis momentarily covers the top of the trachea so that
- you don't get food in your air passages.
 - you can swallow more easily.
 - you can breathe more easily.
 - you can cough up foreign matter.

True/False

Indicate whether the statement is true or false.

- _____ 15. When your diaphragm contracts, the space in the chest cavity becomes larger.
- _____ 16. Homeostasis in respiration is controlled by the cerebrum.
- _____ 17. As you exhale, the bronchioles in the lungs release most of their air.
- _____ 18. The respiratory system uses oxygen in the breakdown of glucose in cells in order to provide energy in the form of ATP.
- _____ 19. Carbon dioxide and oxygen are the waste products of cellular respiration.
- _____ 20. Relaxation of the diaphragm causes a slight vacuum in the lungs.