

Breathing and Respiration in Living Organisms

Biology · Answer Key · 20 Questions

1. What is the process of taking in oxygen-rich air into our body called?

- A) Exhalation
- B) Breathing
- C) Inhalation**
- D) Respiration

2. What is the process of giving out air that has more carbon dioxide called?

- A) Inhalation
- B) Breathing
- C) Respiration
- D) Exhalation**

3. Inhalation and exhalation are collectively called what?

- A) Respiration
- B) Breathing**
- C) Gas Exchange
- D) Metabolism

4. What is respiration defined as?

- A) The process of taking in oxygen
- B) The process of releasing energy without breaking down food
- C) The process of using oxygen to break down food and release energy**
- D) The exchange of gases with the environment

5. Why is respiration also called the universal chemical process?

- A) Because it only happens in plants
- B) Because it occurs in every living cell to survive**
- C) Because it only involves the lungs
- D) Because it releases carbon dioxide

6. Which statement correctly describes respiration?

- A) It is an extracellular process and no energy is released.
- B) It is an intracellular process and energy is released.**
- C) It is an extracellular process and energy is released.
- D) It is an intracellular process and no energy is released.

7. Which statement correctly describes breathing?

- A) It is an intracellular process and energy is released.
- B) It is an extracellular process and no energy is released.**
- C) It is an intracellular process and no energy is released.
- D) It is an extracellular process and energy is released.

8. How do earthworms and leeches exchange gases?

- A) Through gills
- B) Through lungs
- C) Through air holes (spiracles)
- D) Through their skin**

9. What are the small openings on the sides of an insect's body used for gas exchange called?

- A) Trachea
- B) Gills
- C) Spiracles**
- D) Alveoli

10. What network of tubes carries oxygen to different parts of an insect's body?

- A) Spiracles
- B) Bronchioles
- C) Trachea**
- D) Alveoli

11. How do fish get oxygen for respiration?

- A) They breathe air through lungs.
- B) They absorb oxygen dissolved in water through their skin.
- C) They absorb oxygen dissolved in water through their gills.**
- D) They absorb oxygen from the air through spiracles.

12. What are the specialized structures in fish used for gas exchange called?

- A) Lungs
- B) Spiracles
- C) Trachea
- D) Gills**

13. Frogs use their skin for gas exchange when they are in which environment?

- A) On land
- B) In the air
- C) In water**
- D) In burrows

14. What is respiration through the lungs called?

- A) Buccal respiration
- B) Cutaneous respiration
- C) Pulmonary respiration**
- D) Tracheal respiration

15. What is respiration through the skin called?

- A) Pulmonary respiration
- B) Buccal respiration
- C) Tracheal respiration
- D) Cutaneous respiration**

16. Which type of respiration do frogs use when floating on water, involving the lining of the buccal cavity?

- A) Pulmonary respiration
- B) Cutaneous respiration
- C) Buccal respiration**
- D) Tracheal respiration

17. In humans, what are the tiny air sacs at the end of bronchioles called?

- A) Bronchi
- B) Trachea
- C) Alveoli**
- D) Nostrils

18. What is the cage-like structure formed by ribs that surrounds the lungs called?

- A) Buccal cavity
- B) Diaphragm
- C) Ribcage**
- D) Nasal cavity

19. Which lung in humans is slightly smaller to accommodate the heart?

- A) The left lung**
- B) The right lung
- C) Both lungs are the same size
- D) Neither lung is smaller

20. What is the function of alveoli in the lungs?

- A) To warm and filter air
- B) To transport air to the bronchioles
- C) To facilitate the exchange of gases**
- D) To produce mucus