

Module 15 Quiz: Respiratory System

Name: _____ Date: _____

Part A: Multiple Choice (7 points)

Choose the best answer for each question. (1 point each)

1. Gas exchange in the lungs occurs in the:
 2. A) Bronchi
 3. B) Trachea
 4. C) Alveoli
 5. D) Bronchioles
6. The diaphragm contracts and flattens during:
 7. A) Exhalation
 8. B) Inhalation
 9. C) Holding breath
 10. D) Coughing
11. Most oxygen in the blood is transported by:
 12. A) Plasma
 13. B) White blood cells
 14. C) Hemoglobin
 15. D) Platelets
16. The primary stimulus for breathing is:
 17. A) Low oxygen levels
 18. B) High carbon dioxide levels

- 19. C) Low carbon dioxide levels
- 20. D) High oxygen levels
- 21. Surfactant in the alveoli functions to:
- 22. A) Trap pathogens
- 23. B) Reduce surface tension
- 24. C) Increase mucus production
- 25. D) Warm incoming air
- 26. External respiration refers to:
- 27. A) Breathing movements
- 28. B) Gas exchange in alveoli
- 29. C) Cellular respiration
- 30. D) Gas exchange in tissues
- 31. The structure that prevents food from entering the trachea is the:
- 32. A) Larynx
- 33. B) Pharynx
- 34. C) Epiglottis
- 35. D) Bronchus

Part B: Free Response (3 points)

Answer each question in complete sentences.

1. (1 point) Describe the mechanics of inhalation, including the role of the diaphragm.

1. (1 point) Explain how oxygen and carbon dioxide are transported in the blood.

1. (1 point) How is breathing regulated? What happens when CO₂ levels increase?
