

## Respiratory Anatomy Labeling Quiz Answer Key PDF

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**What is the primary function of the nasal cavity?**

- A. Sound production
- C. Air filtration and humidification ✓**
- D. Blood circulation
- C. Gas exchange

**Which structure connects the pharynx to the trachea?**

- A. Larynx ✓**
- C. Alveoli
- D. Diaphragm
- C. Bronchi

**How many lobes does the left lung have?**

- A. One
- C. Three
- D. Four
- C. Two ✓**

**Describe the pathway of air from the nasal cavity to the alveoli.**

**Air enters the nasal cavity, passes through the pharynx, larynx, trachea, bronchi, bronchioles, and finally reaches the alveoli.**

**Which of the following are functions of the diaphragm in respiration?\*\*\* (Select all that apply)**

- A. Assists in inhalation ✓**
- C. Produces digestive enzymes

- D. Assists in exhalation ✓
- C. Separates thoracic and abdominal cavities ✓

**What physiological changes occur in the diaphragm during inhalation and exhalation?**

The diaphragm contracts and moves downward during inhalation, and relaxes and moves upward during exhalation.

**Identify two common respiratory disorders and explain their impact on the respiratory system.**

Asthma and chronic obstructive pulmonary disease (COPD) are two common respiratory disorders that affect the respiratory system by causing inflammation, narrowing of the airways, and difficulty in breathing.

**Which structures are directly involved in the process of gas exchange? (Select all that apply)**

- A. Alveoli ✓
- C. Bronchioles
- D. Trachea
- C. Capillaries ✓

**What structure serves as the entry point for air into the respiratory system?**

- A. Mouth
- C. Trachea
- D. Larynx
- C. Nose ✓

**Discuss how the structure of the alveoli facilitates efficient gas exchange with the blood.**

The alveoli are tiny, balloon-like structures in the lungs that have very thin walls (one cell thick) and are surrounded by a dense network of capillaries, which facilitates efficient gas exchange by allowing oxygen to diffuse into the blood and carbon dioxide to diffuse out quickly.

**Which muscle is essential for breathing?**

- A. Pectoral muscles

- C. Abdominal muscles
- D. Trapezius
- C. Diaphragm ✓**

**What is the main function of the trachea?**

- A. Gas exchange
- C. Blood filtration
- D. Nutrient absorption
- C. Air passage to the bronchi ✓**

**Explain the role of the pleura in respiratory function and how it aids in lung movement.**

**The pleura consist of the visceral pleura, which covers the lungs, and the parietal pleura, which lines the chest wall. They create a pleural cavity filled with pleural fluid that reduces friction and allows the lungs to expand and contract easily during respiration.**

**What is the role of the pleura?**

- A. Produces mucus
- C. Filters air
- D. Facilitates gas exchange
- C. Protects the lungs and reduces friction ✓**

**Which of the following structures are part of the lower respiratory tract?\*\*\* (Select all that apply)**

- A. Trachea ✓**
- C. Alveoli ✓**
- D. Pharynx
- C. Bronchi ✓**

**How do the structures of the upper respiratory tract contribute to protecting the lower respiratory tract from infections?**

**The upper respiratory tract protects the lower respiratory tract by filtering out pathogens and particles through mucus and cilia, warming and humidifying the air, and providing immune responses.**

**Which part of the respiratory system is primarily responsible for gas exchange?**

- A. Bronchi
- C. Trachea
- D. Pharynx
- C. AlVeoli ✓**

**Which of the following are components of the upper respiratory tract?\*\*\* (Select all that apply)**

- A. Nasal cavity ✓**
- C. Larynx ✓**
- D. AlVeoli
- C. Pharynx ✓**

**Which structures are involved in protecting the respiratory system from pathogens?\*\*\* (Select all that apply)**

- A. Nasal hairs ✓**
- C. Cilia ✓**
- D. AlVeoli
- C. MUCUS ✓**

**What are the functions of the respiratory system?\*\*\* (Select all that apply)**

- A. Oxygen delivery ✓**
- C. Blood filtration
- D. Nutrient absorption
- C. Carbon dioxide removal ✓**