

Name _____

The Breath of Life: Taking in Oxygen and Getting Rid of Carbon Dioxide

Short Answer Key

1. The trachea serves as the main passage for air to enter the bronchi and lungs, ensuring the air reaches its destination.
2. Gas exchange in the alveoli is vital because it allows oxygen to enter the bloodstream and carbon dioxide to exit, ensuring our cells have the oxygen they need for energy and preventing the buildup of harmful carbon dioxide.
3. The brain adjusts your breathing rate based on the levels of oxygen and carbon dioxide in your blood. This is important to ensure that your body receives the right amount of oxygen and removes excess carbon dioxide.
4. Nose breathing filters and prepares the air, while mouth breathing allows for larger and quicker air intake. Both have advantages and can be used depending on the situation.
5. The diaphragm contracts during inhalation, creating more space in the chest cavity and allowing the lungs to expand. Other respiratory muscles also play a role in expanding and contracting the chest cavity to facilitate breathing.

