

Name _____

The Diaphragm: Your Breathing Buddy

Short Answer Key

1. The diaphragm is a dome-shaped muscle located just below the lungs. It attaches to the lower part of the ribcage (ribs) and the spine.
2. During inhalation, the diaphragm contracts and moves downward, creating more space in the chest cavity. This expansion allows the lungs to fill with air.
3. The diaphragm helps with the removal of carbon dioxide during exhalation by relaxing and moving up, causing the lungs to contract, which increases the pressure inside the lungs, pushing air out and expelling carbon dioxide.
4. The brain's respiratory center controls the diaphragm's movements during breathing. It adjusts the diaphragm and other respiratory muscles' activity based on the levels of oxygen and carbon dioxide in the blood. For example, during exercise, when more oxygen is needed, the brain signals the diaphragm to increase the breathing rate.
5. The diaphragm is crucial for the breathing process because it creates space in the chest cavity for the lungs to expand during inhalation and aids in the removal of carbon dioxide during exhalation. It contributes to overall health by ensuring proper oxygen supply and waste removal.

