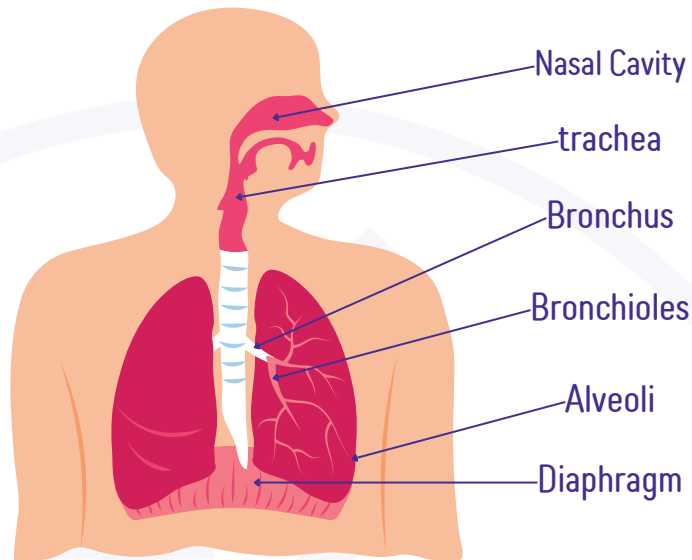


THE RESPIRATORY SYSTEM

Key Concepts

- The respiratory system helps us breathe in oxygen and breathe out carbon dioxide.
- Oxygen is needed for energy in cells.
- Key parts: lungs, trachea, bronchi, alveoli.



Key Facts to Remember

- Gas exchange happens in the alveoli, which are tiny air sacs in the lungs surrounded by capillaries.
- The diaphragm is a dome-shaped muscle that helps you breathe by contracting and relaxing.
- Oxygen enters the blood and carbon dioxide leaves it through diffusion in the alveoli.
- The trachea, or windpipe, carries air to the lungs and is supported by rings of cartilage to keep it open.
- Bronchi branch off the trachea and lead to each lung, further dividing into smaller bronchioles.
- Breathing is controlled by the brain, which sends signals to the diaphragm and intercostal muscles.

Quick Questions

1. Where does gas exchange occur?
2. What does the diaphragm do?
3. Name the gas we breathe out.
4. What is the function of the trachea?
5. Which structures branch into bronchioles?
6. How is breathing controlled?
7. What surrounds the alveoli to allow gas exchange?
8. How does oxygen enter the blood?

Fun Fact

You take about 20,000 breaths every day!