

# HUMAN ANATOMY

## THE RESPIRATORY SYSTEM

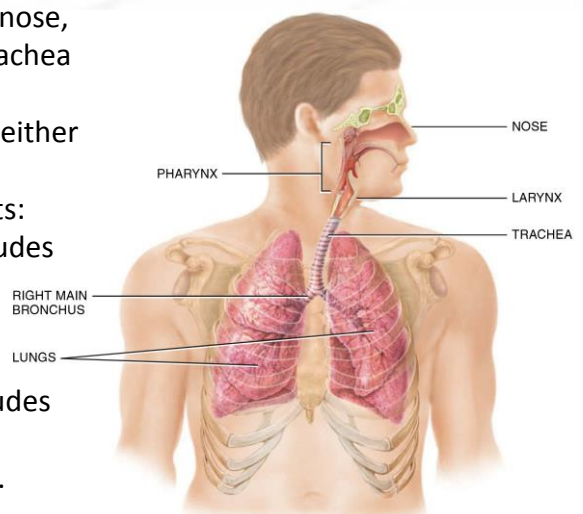
AYDIN ÇÖL

### Respiratory System Anatomy

The respiratory system consists of the nose, pharynx (throat), larynx (voice box), trachea (windpipe), bronchi, and lungs.

Its parts can be classified according to either structure or function. Structurally, the respiratory system consists of two parts:

- (1) The upper respiratory system** includes the nose, nasal cavity, pharynx, and associated structures;
- (2) The lower respiratory system** includes the larynx, trachea, bronchi, and lungs.



# Respiratory System Anatomy

Functionally, the respiratory system also consists of two parts.

(1) **The conducting zone** consists of a series of interconnecting cavities and tubes both outside and within the lungs.

These include the

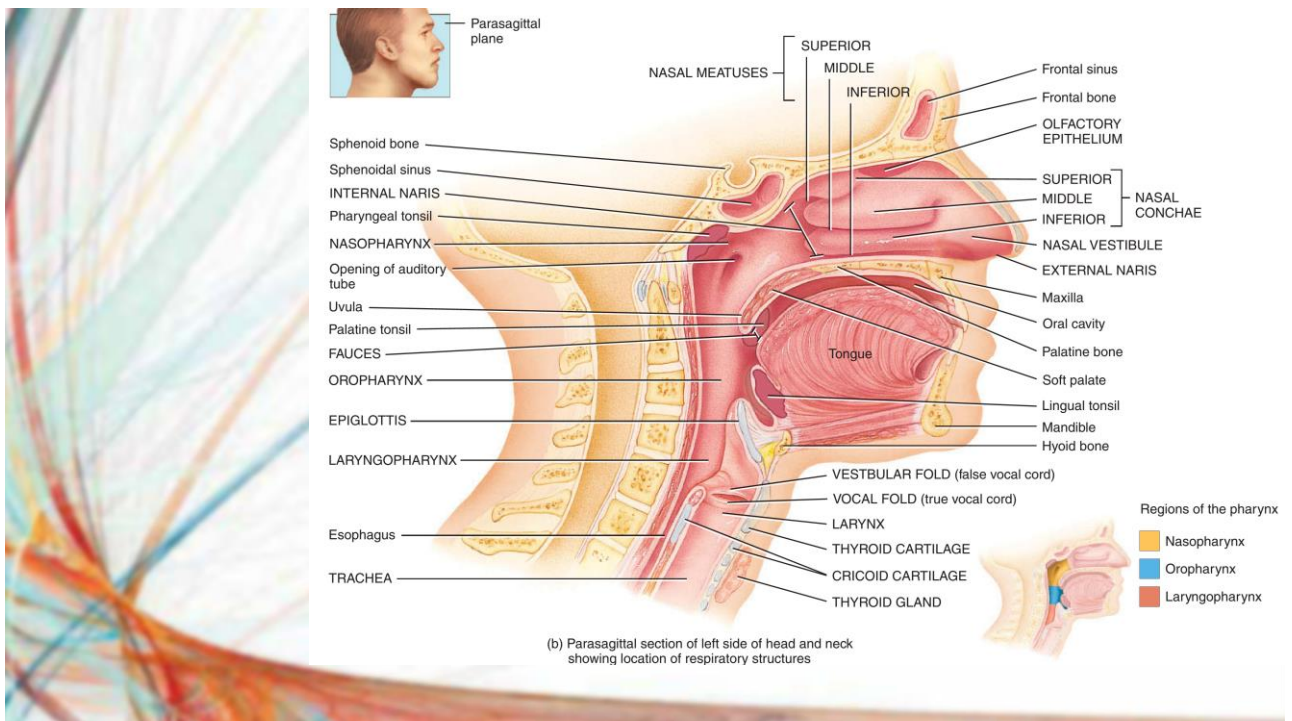
Nose, Nasal cavity, Pharynx, Larynx, Trachea, Bronchi, Bronchioles, and Terminal bronchioles;

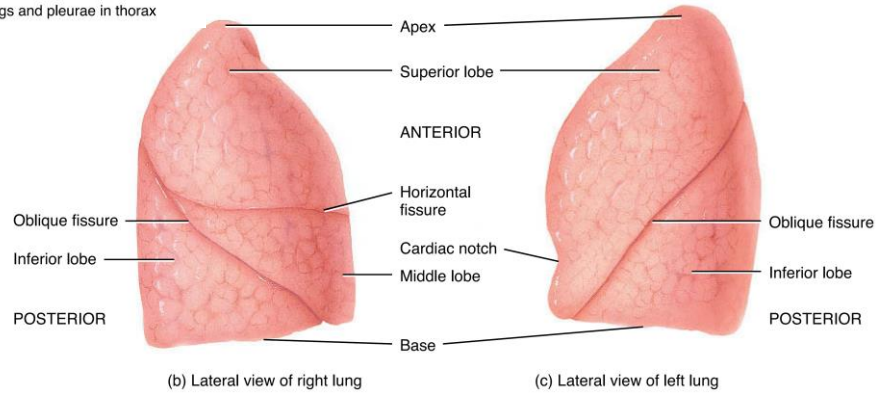
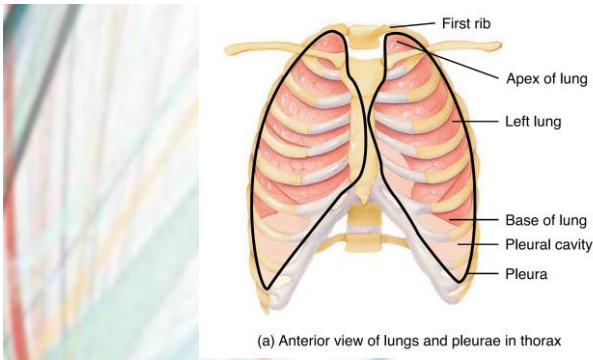
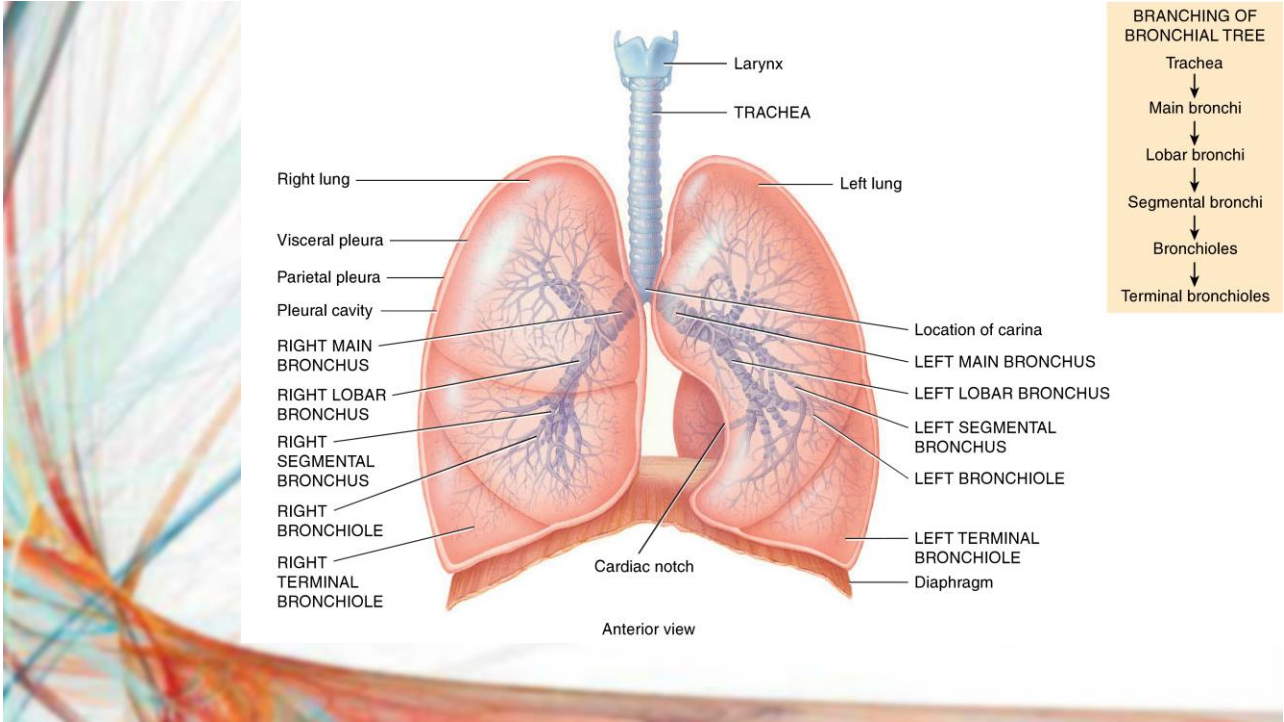
their function is to **filter**, **warm**, and **moisten** air and conduct it into the lungs.

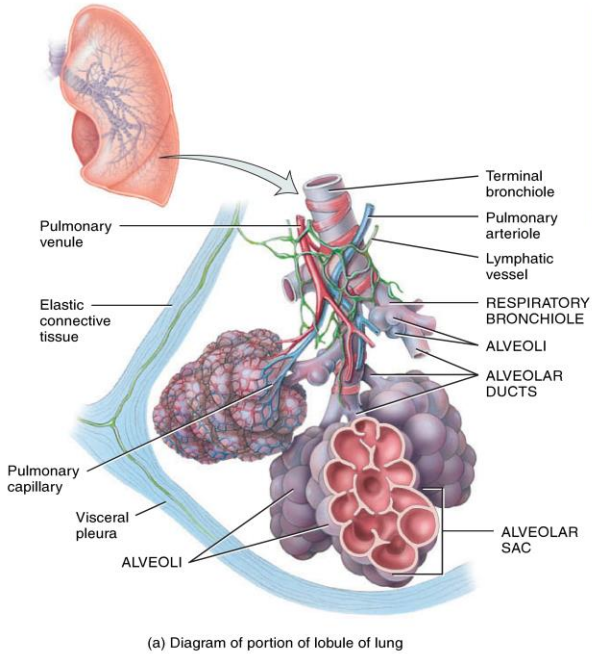
(2) **The respiratory zone** consists of tubes and tissues within the lungs where gas exchange occurs. These include the

Respiratory bronchioles, Alveolar ducts, Alveolar sacs, and Alveoli

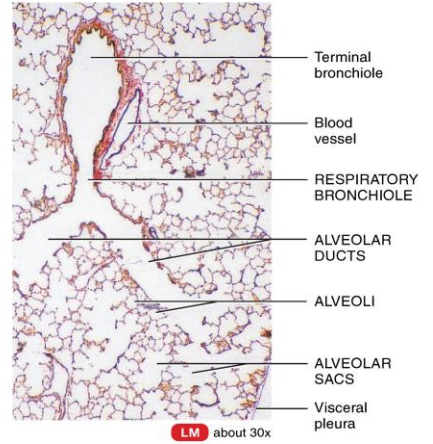
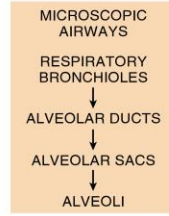
They are the main sites of gas **exchange** between air and blood.





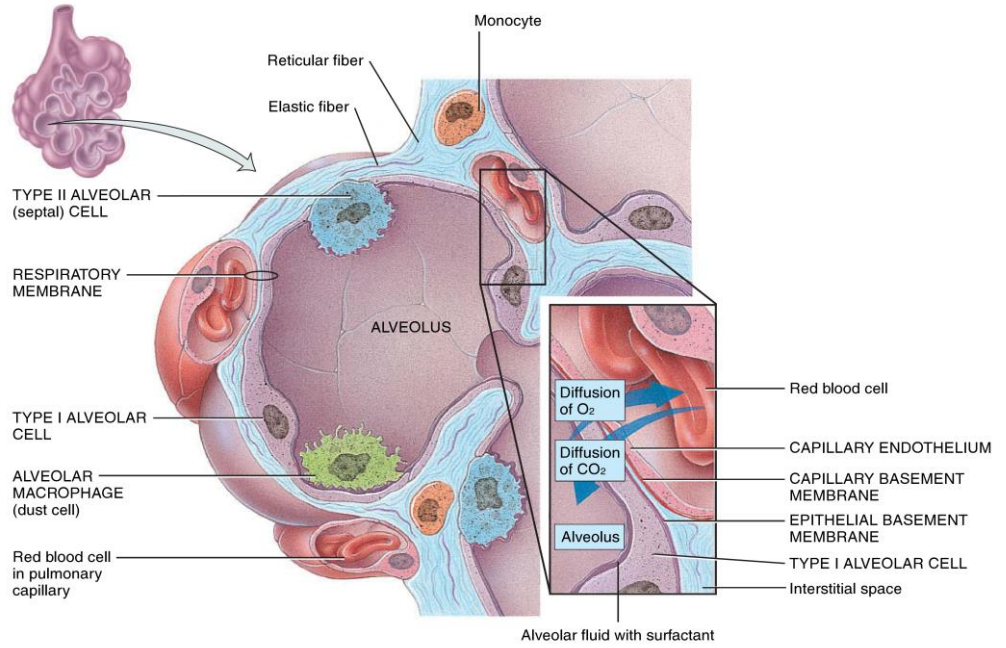


(a) Diagram of portion of lobule of lung



(b) Lung lobule

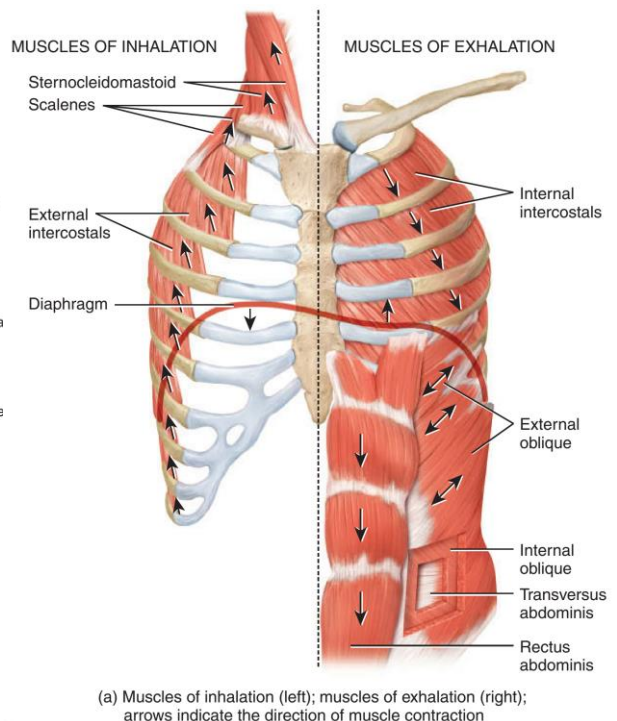
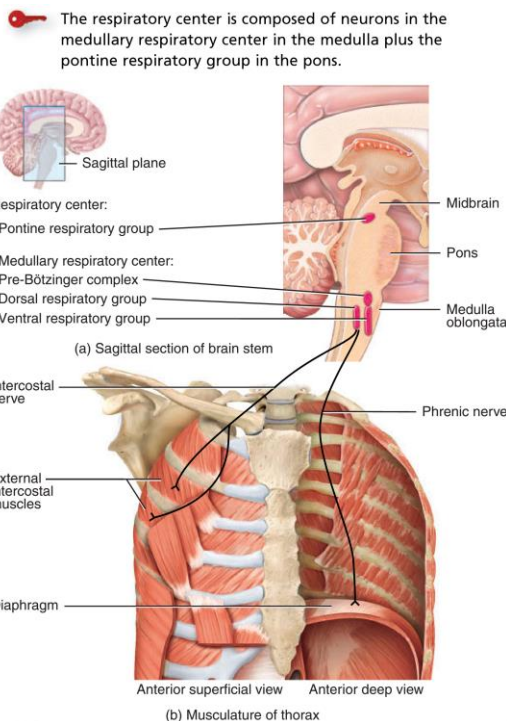
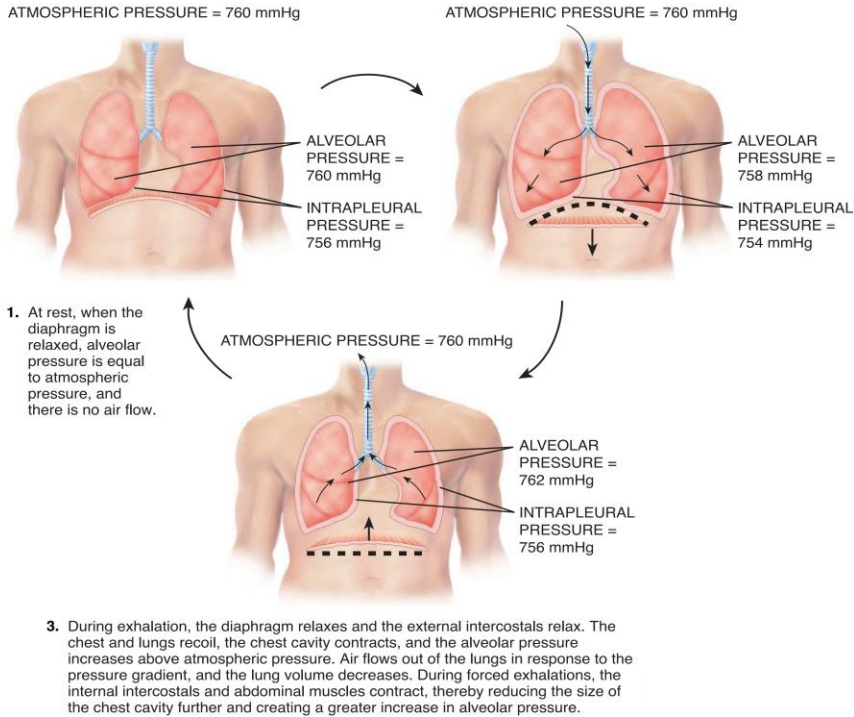
The exchange of respiratory gases occurs by diffusion across the respiratory membrane.

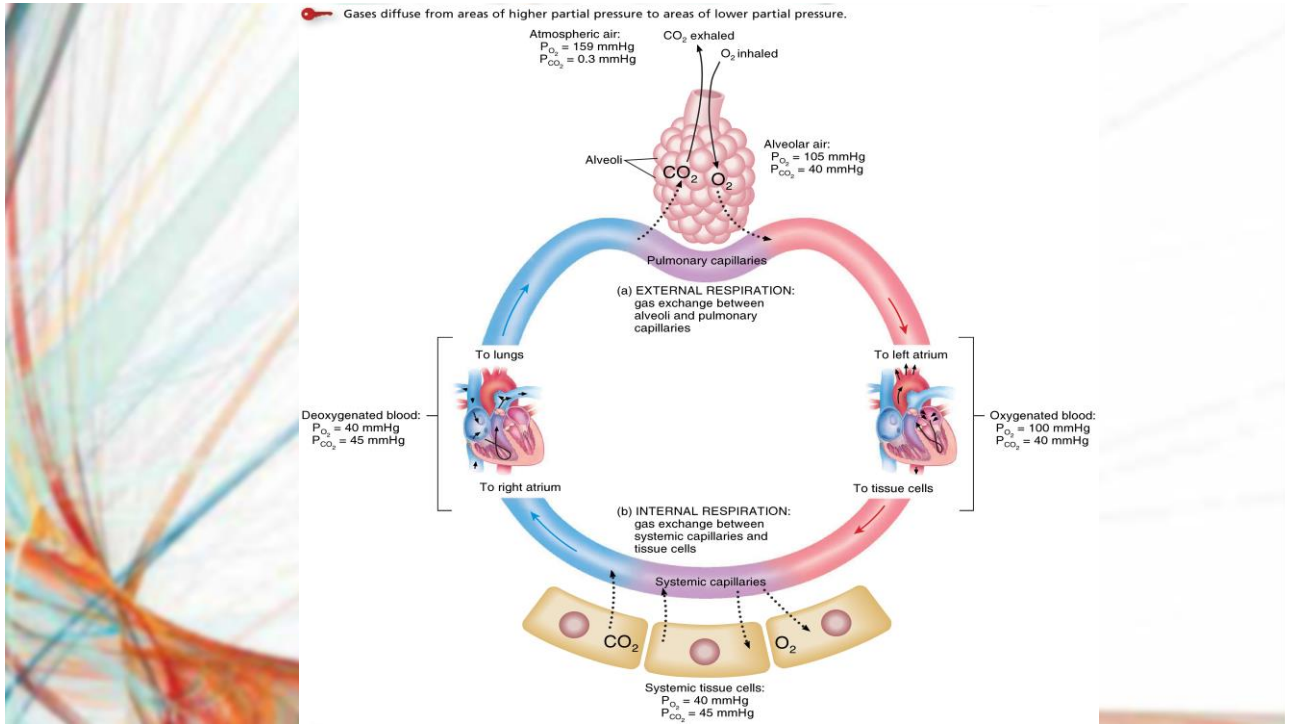


(a) Section through alveolus showing cellular components

(b) Details of respiratory membrane







# QUESTIONS?

An abstract background featuring a dense collection of thin, overlapping lines in various colors including teal, orange, and light blue. The lines radiate from the bottom-left corner towards the top-right, creating a sense of movement and depth. The overall effect is a soft, textured backdrop for the text.

HAVE A  
WONDERFUL  
DAY

*Thank you for being my students!*