

**You need a book and your**  
**notes out please!**

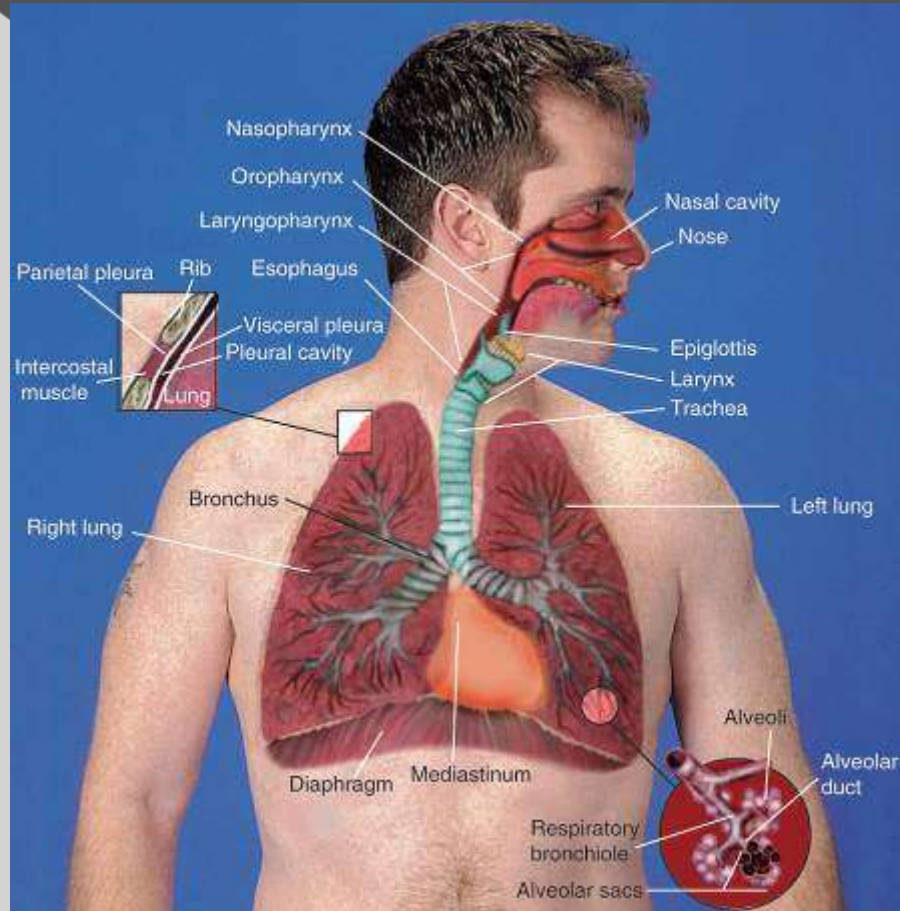
also have supplies for notebooking 😊

Warm Up – For  
every word part  
write 2 terms that  
use that word  
part (in NB)

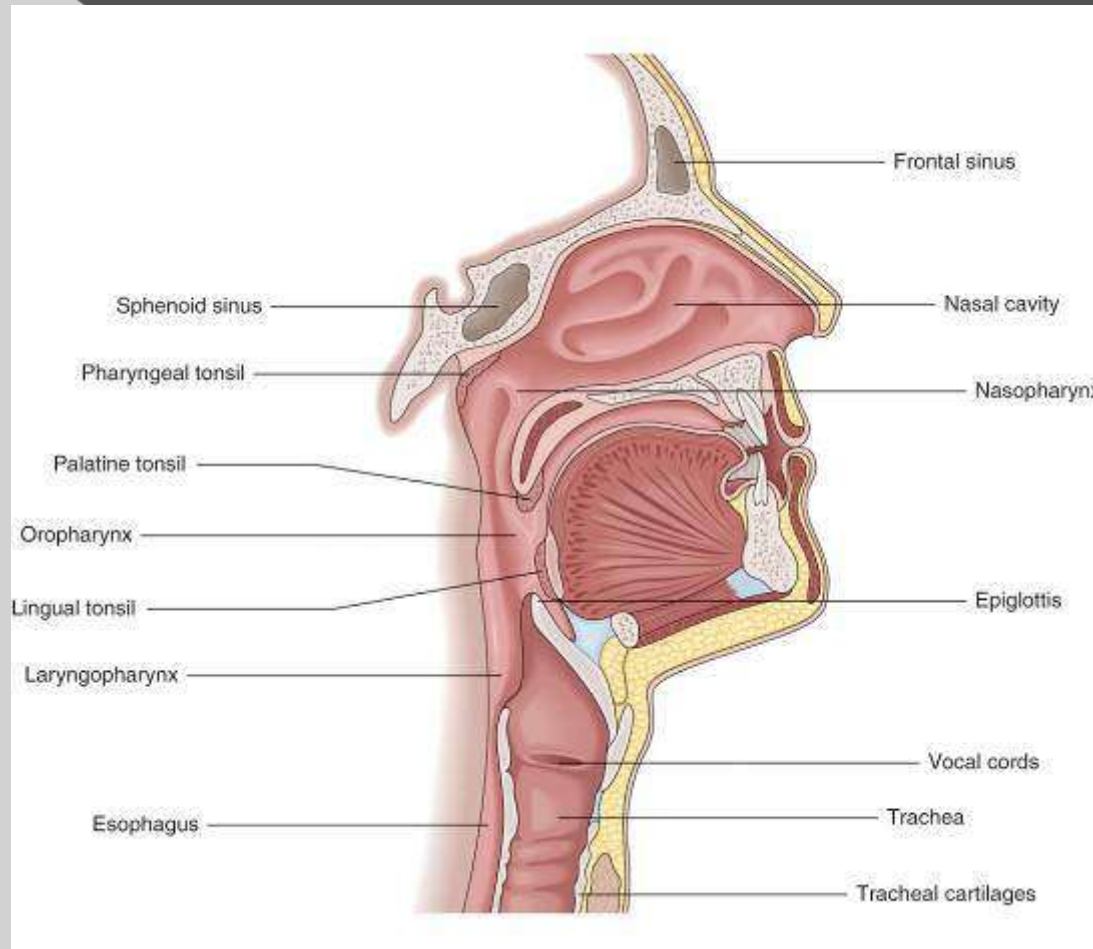
## Chapter 7

### The Respiratory System

# Structures of the Respiratory System

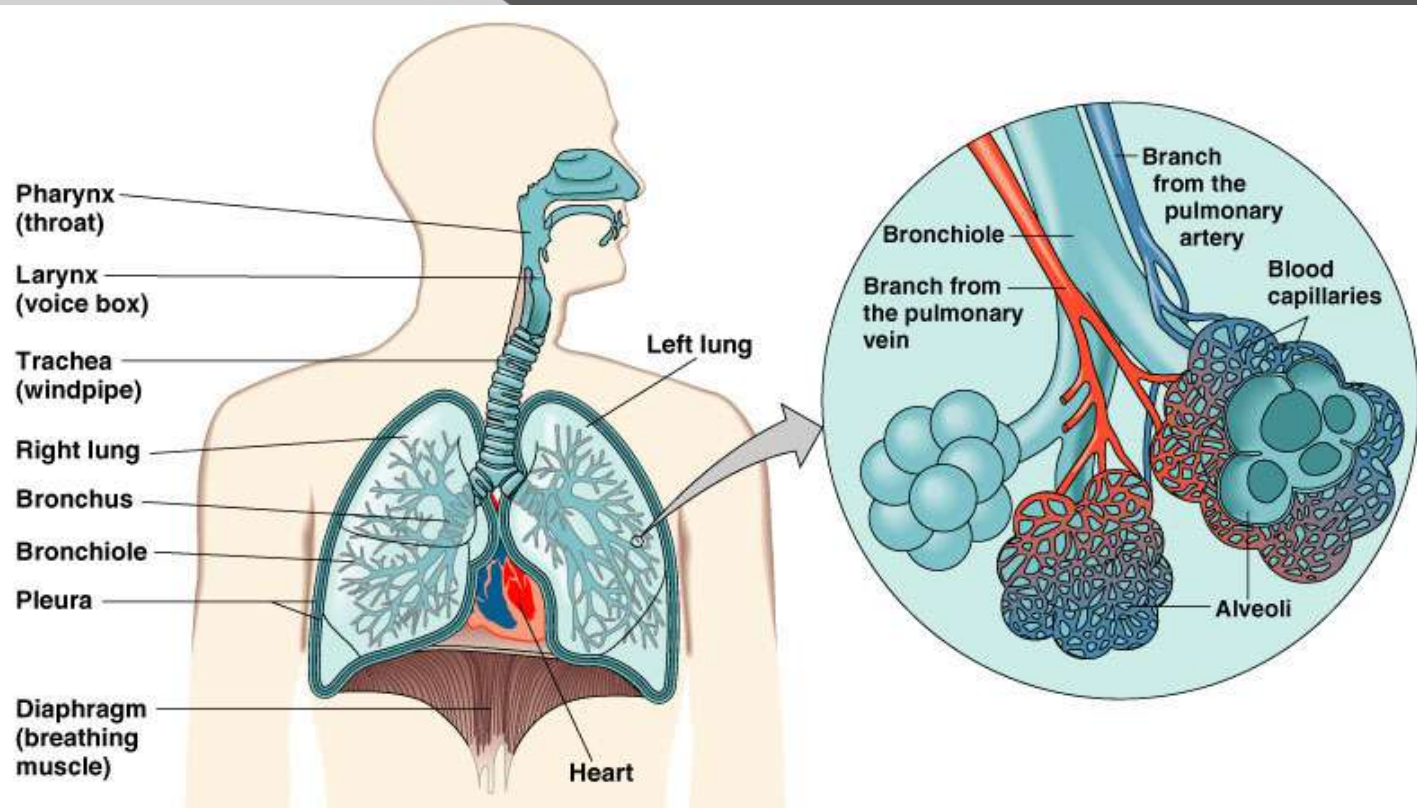


# Structures of the Upper Respiratory Tract



# The Lower Respiratory Tract

● Consists of bronchial tree and lungs.



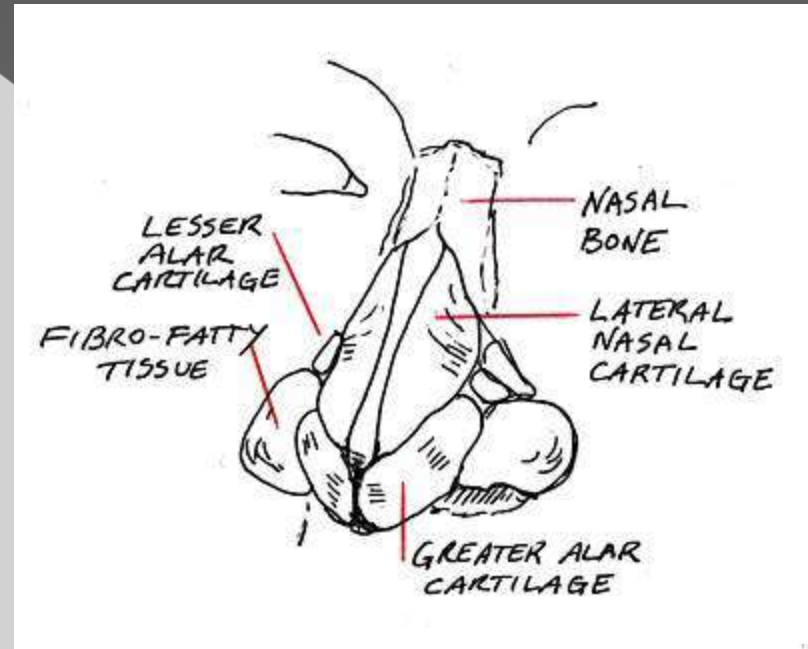
# Nose

## Primary Functions

- Exchanges air during inhaling and exhaling.
- Warms, moisturizes, and filters inhaled air.

## Related Combining Forms

- nas/o
- rhin/o



# Sinuses

## ◎ Primary Functions

- Provides mucus.
- Makes bones of the skull lighter.
- Aids in sound production.

## ◎ Related Combining Form

- sinus/o

# Pharynx

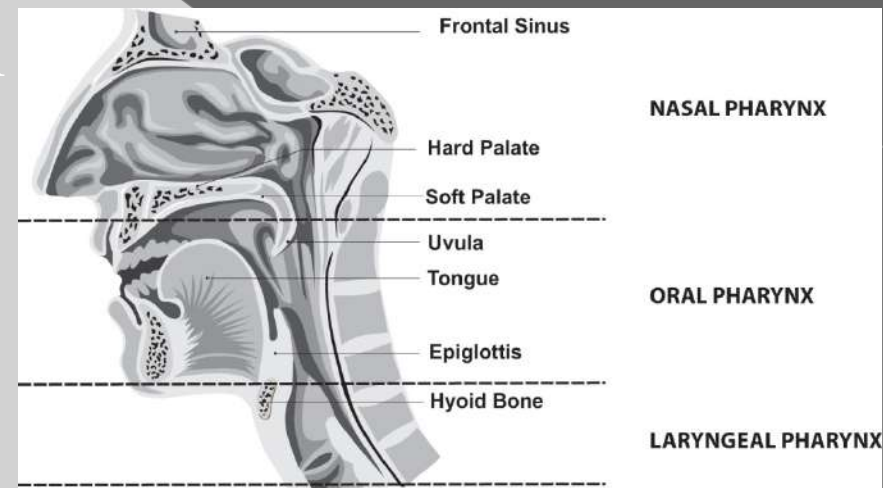
Commonly called the throat ( has 3 divisions: naso, oro & laryngo)

Primary Function

- Transports air to and from the nose to the trachea
- .

Related Combining Form

- **pharyng/o**





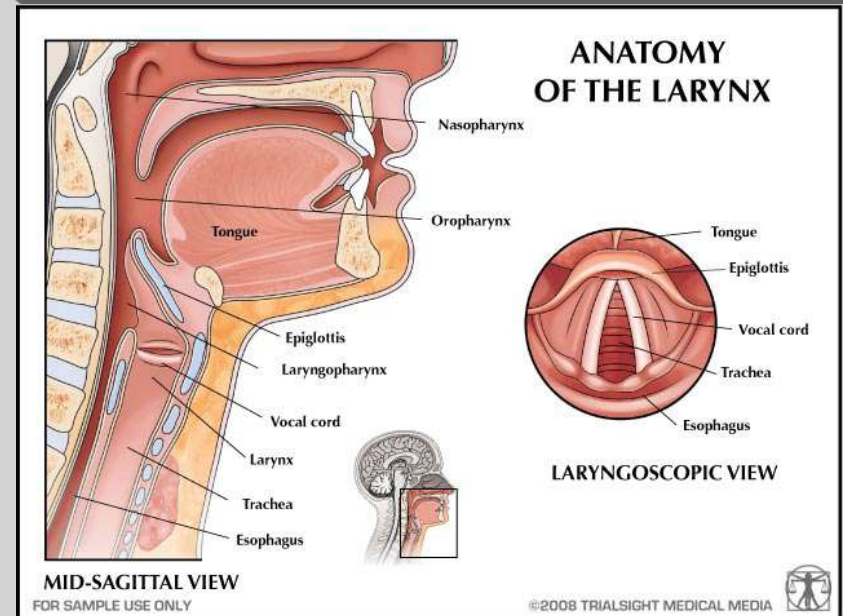
# Larynx

## Primary Function

- Makes speech possible.

## Related Combining Form

- laryng/o





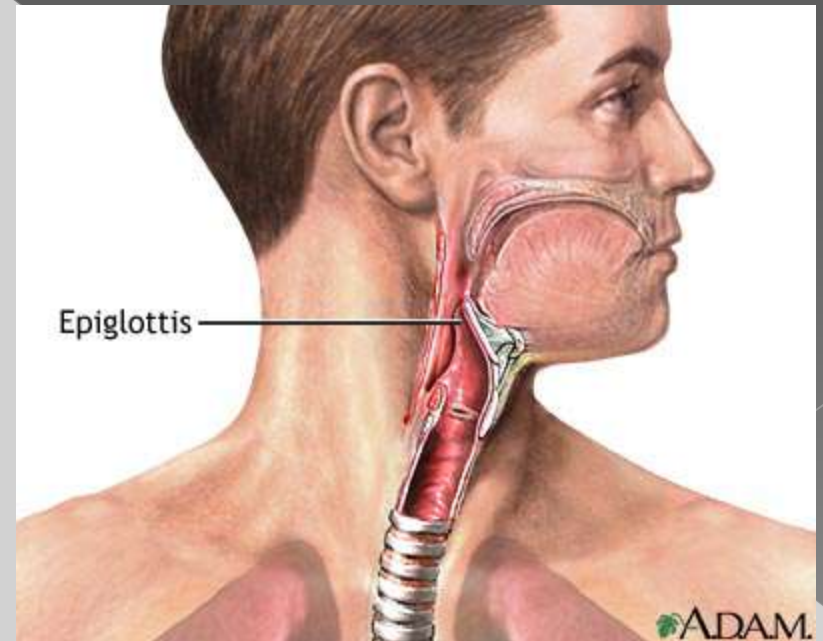
# Epiglottis

## Primary Function

- Closes off the trachea during swallowing.

## Related Combining Form

- **epiglott/o**



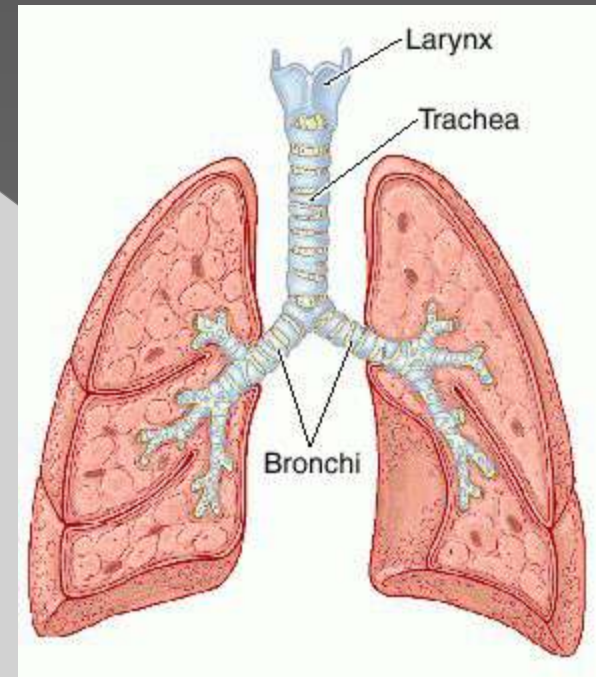
# Trachea

## Primary Function

- Transports air to and from the pharynx to the bronchi.

## Related Combining Form

- **trache/o**



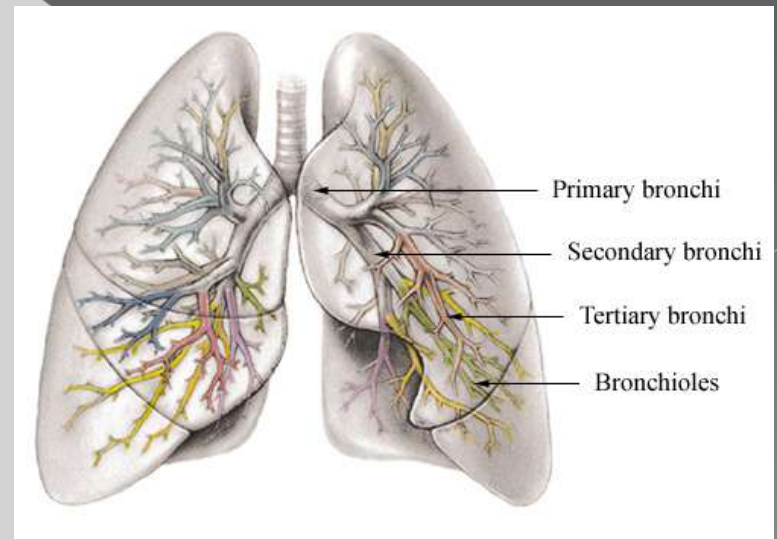
# Bronchi

◎ Primary Function –branch off of the trachea. One branch into each lung. In the lung subdivides into bronchioles

- Transports air from the trachea into the lungs.

◎ Related Combining Forms

- **bronch/o, bronchi/o**



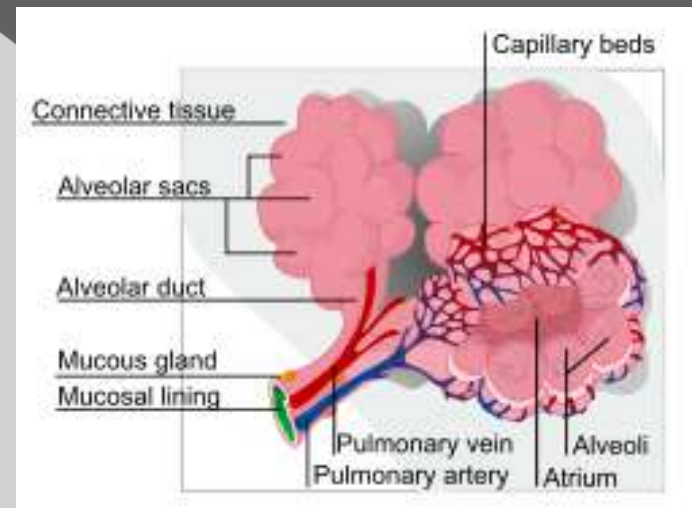
# Alveoli

## Primary Function

- Air sacs that exchange gases with the pulmonary capillary blood.

## Related Combining Form

- alveol/o



# Pleura

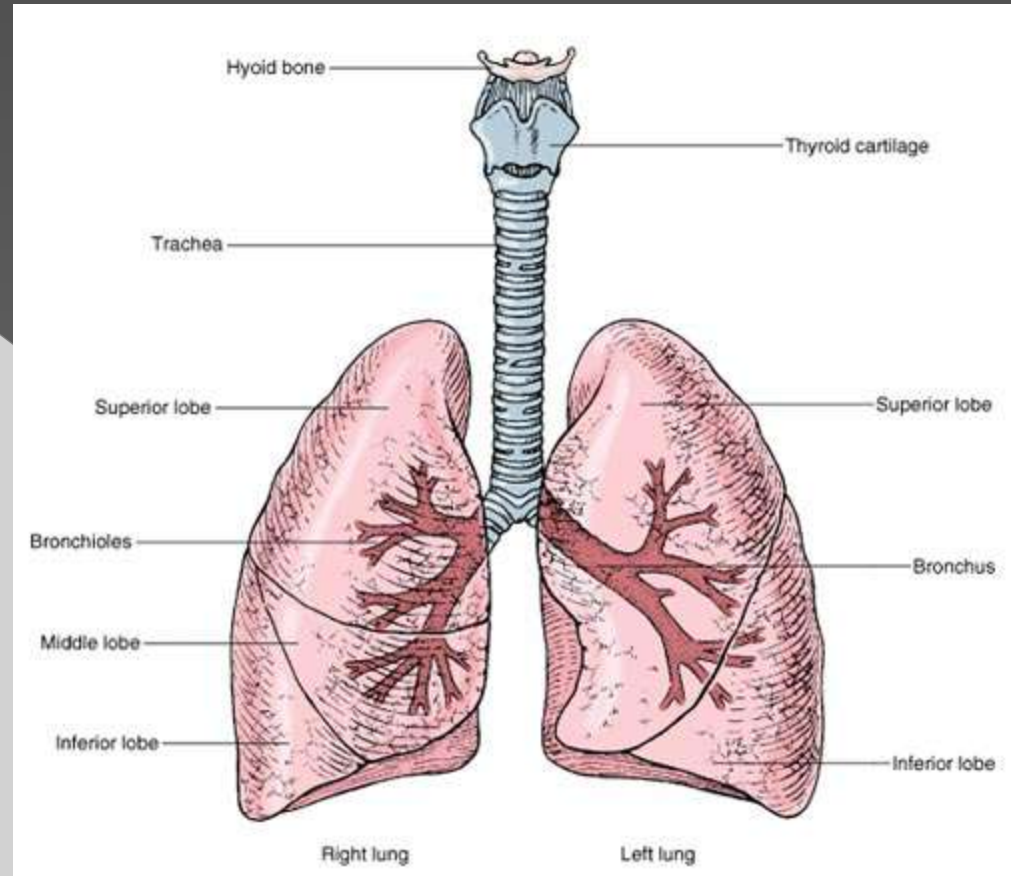
- Is a multilayered membrane that surrounds each lung with its blood vessels and nerves
- Pleura Cavity: airtight space between the folds of the pleural membrane
  - Function: contains a watery lubricating fluid that prevents friction when the membranes rub together during respiration

# Diaphragm

- Is the muscle that separates the thoracic cavity from the abdomen
- It is the contraction and relaxation of this muscle that makes breathing possible

# Lungs

- Lobe – division of the lungs
- Right Lung – has three lobes: the superior, middle and inferior
- Left Lung – has two lobes: the superior and inferior





# Respiration

- Breathing- brings air into & out of the lungs.
- Inhalation- breathing in, diaphragm contracts
- Exhalation- breathing out, diaphragm relaxes
- Internal respiration is the exchange of gases within the cells of the body.

# Careers related to Respiratory System

- ◎ **Pulmonologist**-doctor that specializes in the diagnosis & treatment of the lungs.
- ◎ **Respiratory Therapist**-treats patients with lung problems by administering oxygen or treatments under the supervision of a physician.

# Lung Diseases

- ◎ **COPD**- group of conditions which is characterized by chronic impairment of airflow.
- ◎ **asthma**- breathing difficulty, due to swelling of the airways. Treated with bronchodilators.
- ◎ **Emphysema**-decreased lung function, destruction of the alveoli.

# Respiratory Diseases

- ⦿ **“allergies”**: **allergic rhinitis**- Allergic reaction to airborne allergens.
- ⦿ **Influenza**-viral respiratory infection. Spread by droplet( cough & sneezing).
- ⦿ **Pneumonia**-inflammation of the lungs in which the air sacs fill with pus & other fluid.

● **Cystic Fibrosis**-genetic disease which causes the lungs to be clogged with abnormally large amounts of thick mucus.

# Procedures

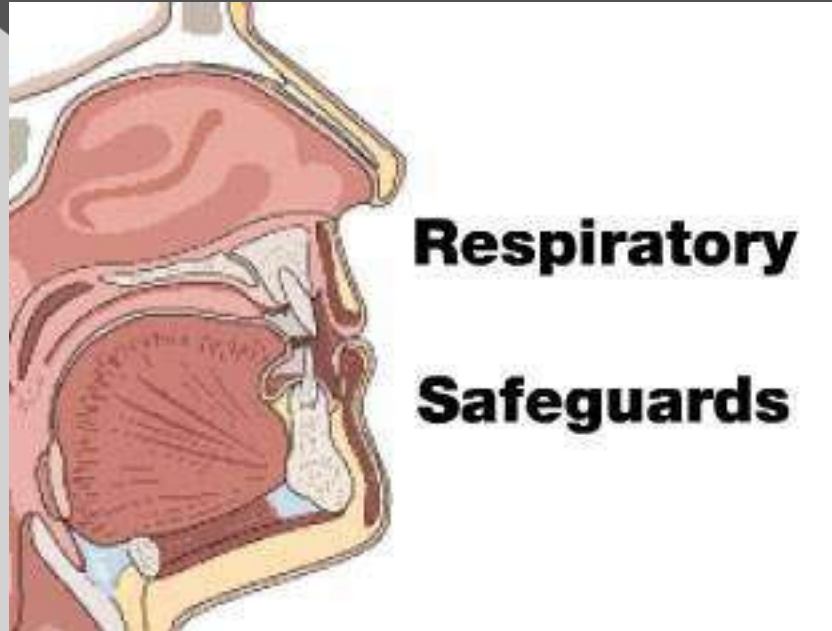
- ⦿ Bronchoscopy
- ⦿ Spirometry- tests to record amount of air inhaled & exhaled.
- ⦿ Chest xrays- will show pneumonia, tumors, emphysema.

# Treatments

- ⦿ Bronchodilators- opens the lungs, used to treat asthma.
- ⦿ Oxygen
- ⦿ Ventilators
- ⦿ Thoracotomy-surgical incision into the chest.

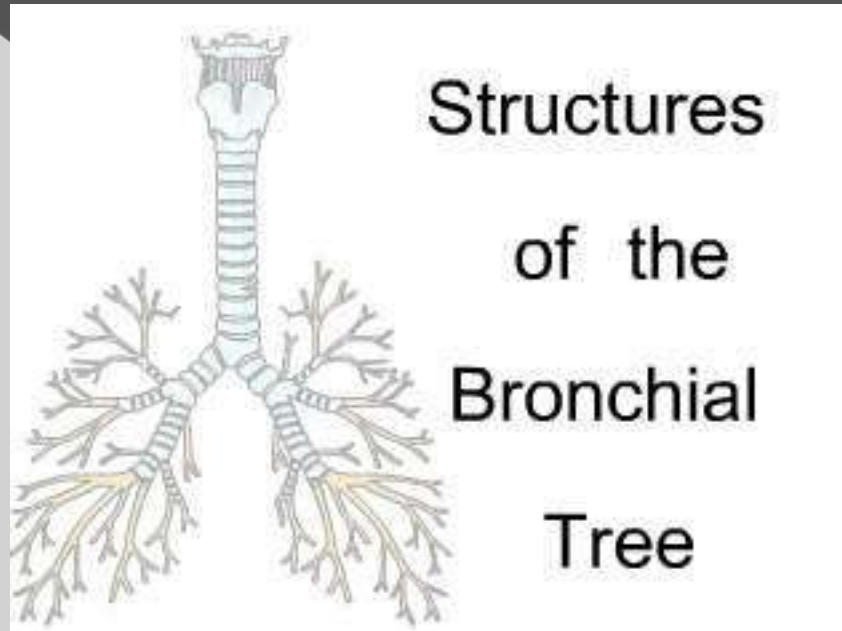


# Respiratory Safeguards



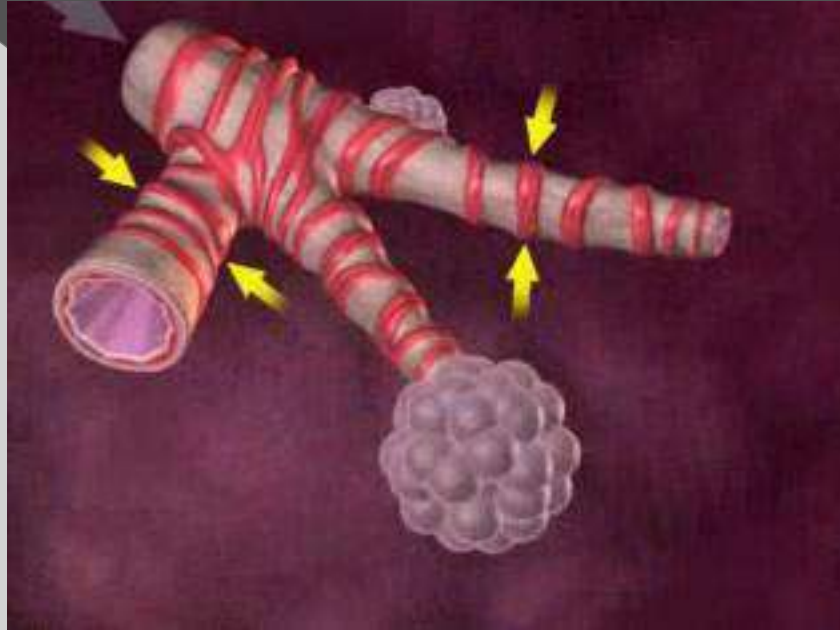
[Click Here to play Respiratory Safeguards animation](#)

# Structures of the Bronchial Tree



[Click Here to play Structures of the Bronchial Tree animation](#)

# Asthma



[Click Here to play  
Asthma animation](#)

# Smoking

⦿ <https://www.youtube.com/watch?v=yskYG-EVIBY>

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