

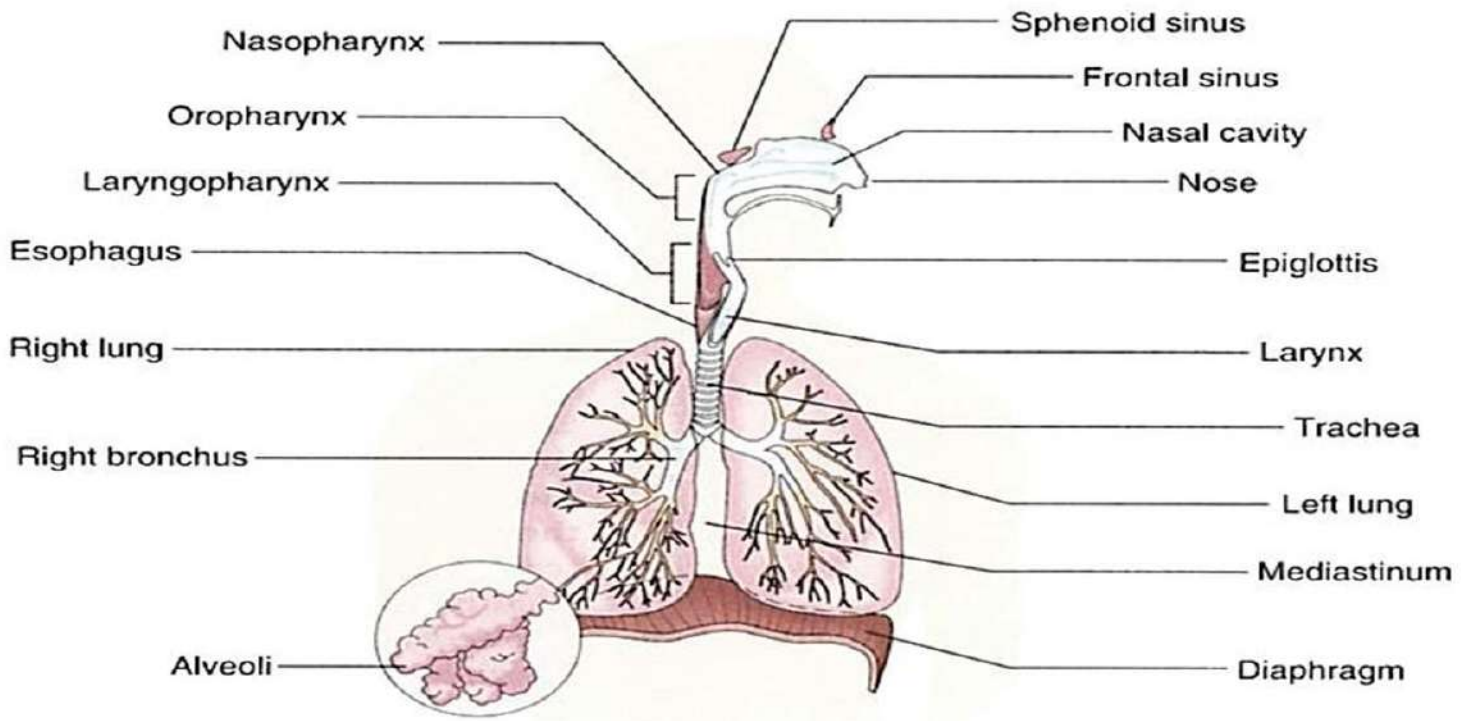
The Respiratory System

FUNCTIONS:

- 1.
- 2.
- 3.

STRUCTURES

The respiratory system is categorized into 2 regions: the _____ and _____ tracts.

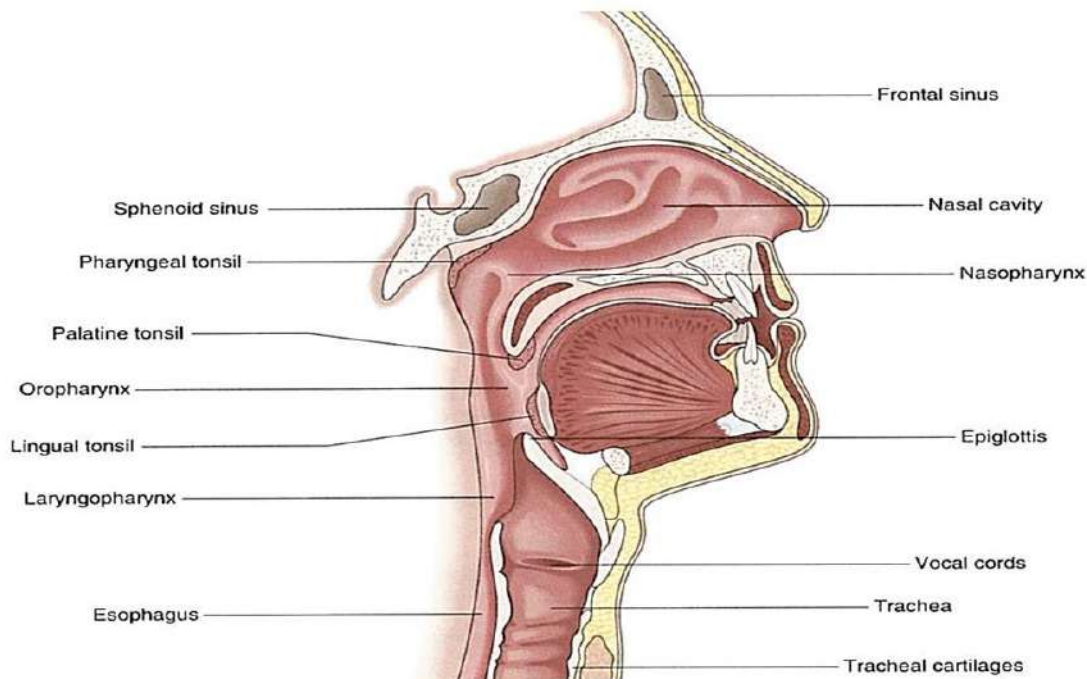


A. Upper Tract

a. Nose

- Nasal cavity-
- Septum-
- Mucous membrane- layer of thin tissue that lines the nose and entire respiratory system
- Mucus-
- Cilia-
- Olfactory receptors-

The Respiratory System



b. Tonsils-

- c. **Sinuses**- An air-filled cavity within a bone that is lined with mucous. They affect:
- Paranasal sinuses:**

Table 7.1

PARANASAL SINUSES

Maxillary sinuses (**MACK-sih-ler-ee**), located in the maxillary bones, are the largest of the paranasal sinuses.

The **ethmoid sinuses** (**ETH-moid**), located in the ethmoid bones, are irregularly shaped air cells that are separated from the orbital (eye) cavity only by a thin layer of bone.

Frontal sinuses are located in the frontal bone just above the eyebrows.

The **sphenoid sinuses** (**SFEE-noid**), located in the sphenoid bone, are close to the optic nerves. An infection here can damage vision.

d. **Pharynx**= THROAT.

e. Divided into three divisions known as:

- Nasopharynx:
- Oropharynx:
- Laryngopharynx:

The Respiratory System

a. Protective Swallowing Mechanisms:

Epiglottis- A flap that closes off the larynx when swallowing to prevent _____.

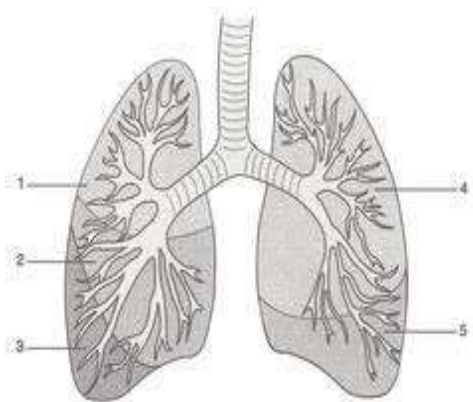
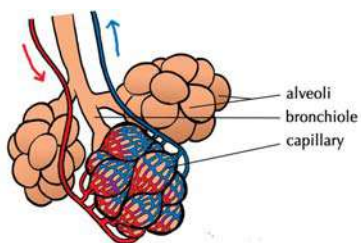
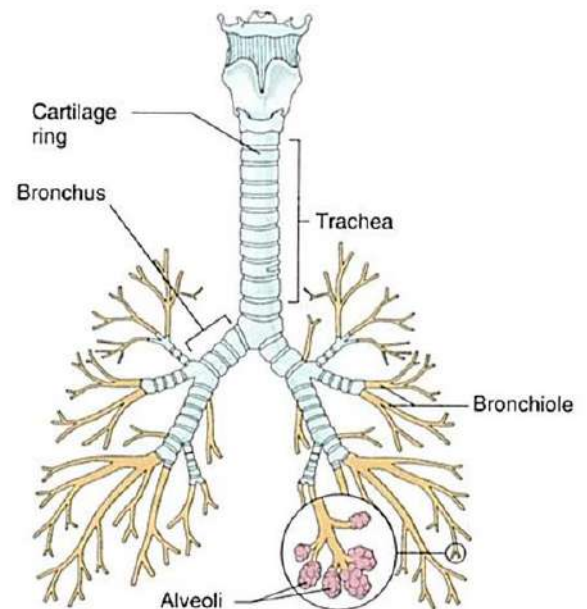
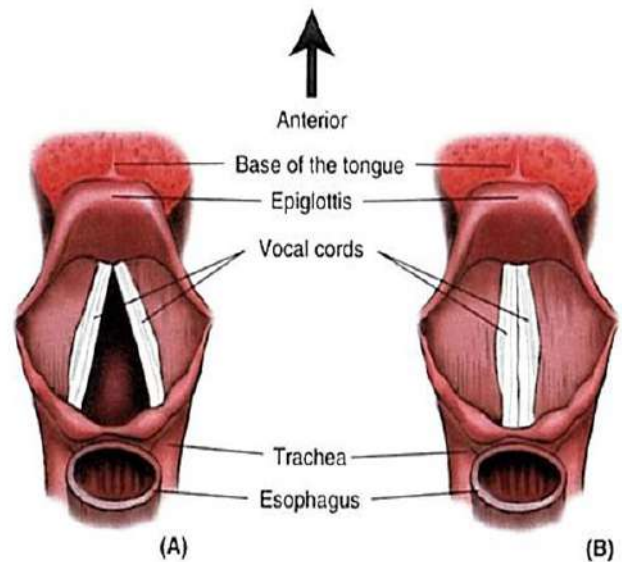
- ii. **Soft Palate** - closes off the _____ to prevent food from going up into the nose.

b. **Larynx**= voice box; "LA LA LA!"

- i. It is held open by a series of _____ (the most prominent protrusion is known as the Adam's apple)
- ii. Contains _____, which vibrate against one another to produce speech as air is _____ from the lungs.

c. **Trachea**= WINDPIPE; Extends from _____ to _____.

- i. Where air passes from the URI to the LRI (lungs).
- ii. Passes directly in front of the _____.
- iii. Held open by rings of cartilage.



B. Lower Tract

a. Bronchial Trees - the lower, two divisions of the _____.

- i. Insert into the:
- ii. Bronchioles-

b. Alveoli:

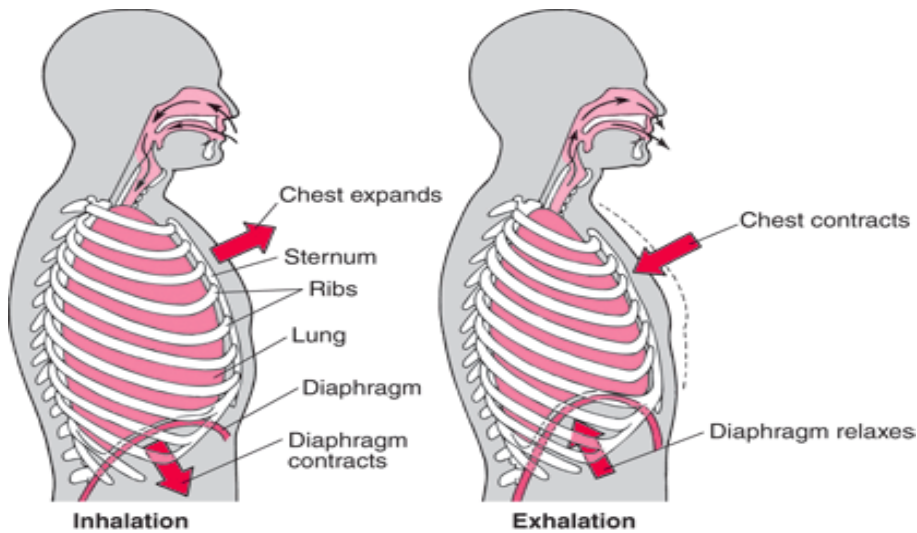
c. Lungs: Consists of **2 divided lobes** (R/L). Label sections:

The Respiratory System

B. Additional Structures

- a. Mediastinum/Interpleural space-
- b. Pleura- A _____ that surrounds each lung with blood vessels. 3 layers:
 - i. Parietal pleura-
 - ii. visceral pleura-
 - iii. pleural space/pleural cavity-
- c. Diaphragm- A MUSCLE that makes _____ possible!

The **phrenic nerve controls diaphragm contraction*



RESPIRATION

Respiration:

External respiration-

VS.

Internal respiration-

The Respiratory System

Other Key Terms to Respiration:

- Breathing:
- Inhalation:
- Exhalation: