

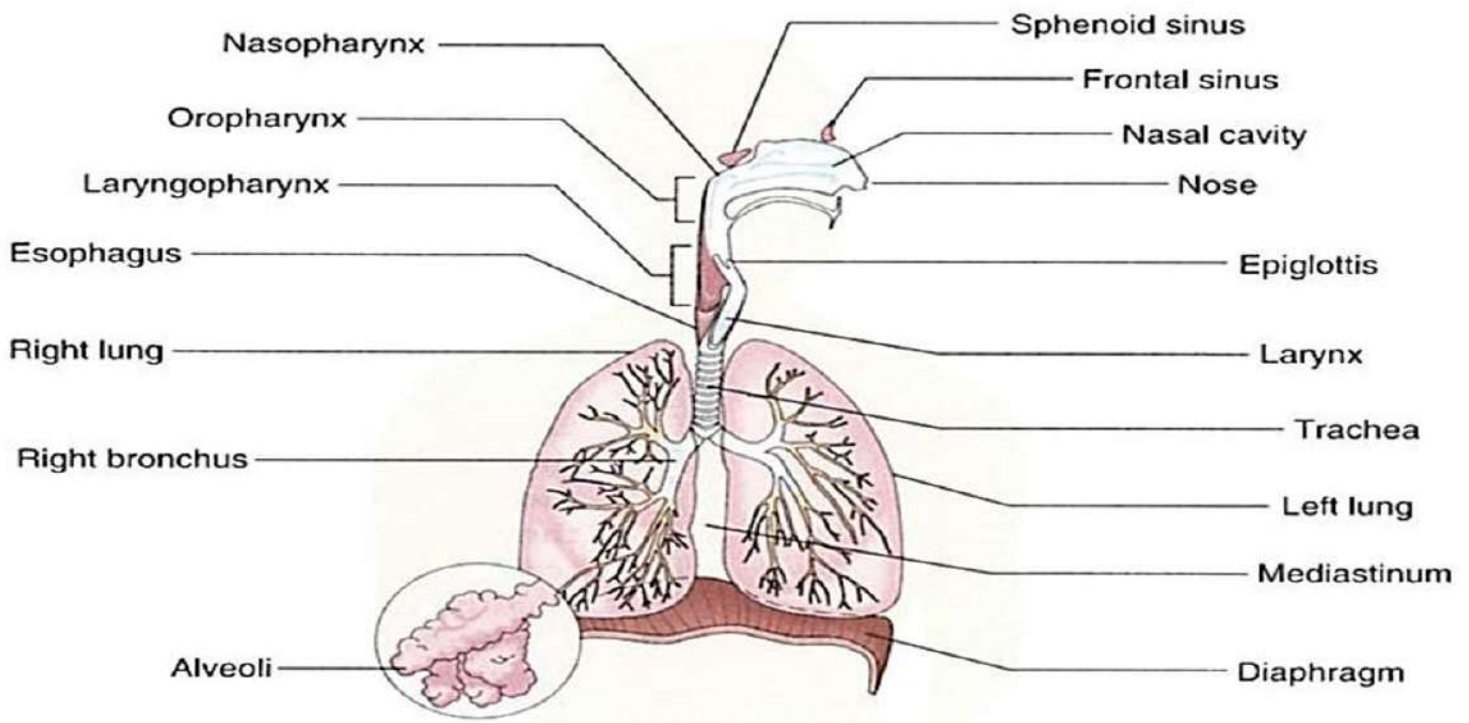
## The Respiratory System

### FUNCTIONS:

- 1.
- 2.
- 3.

### STRUCTURES

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

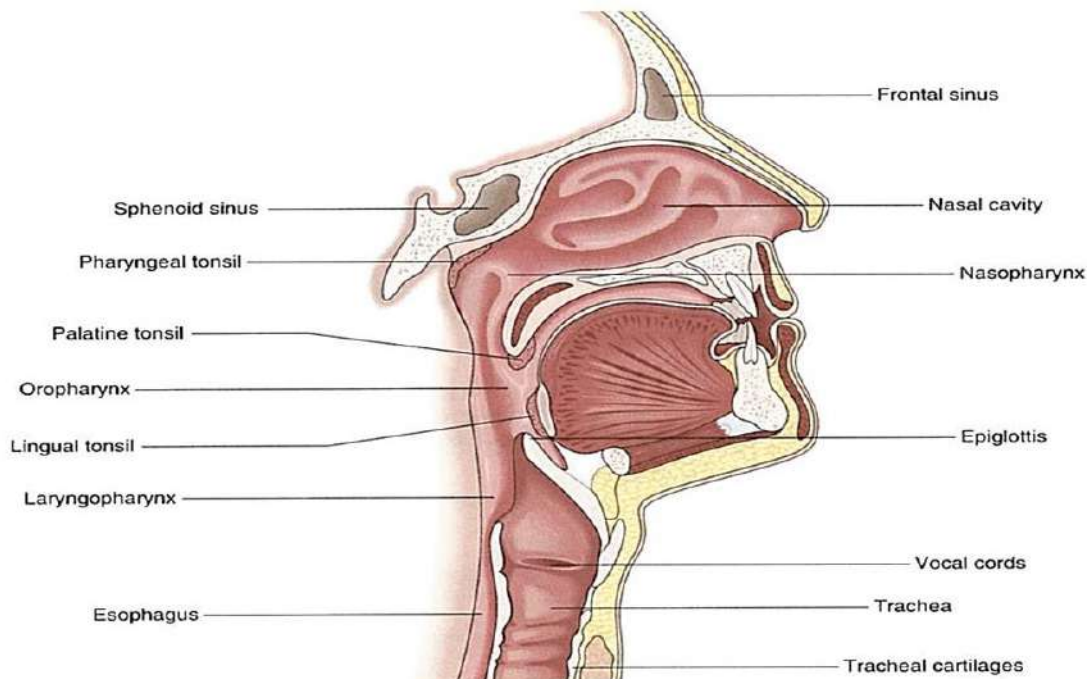


#### **A. Upper Tract**

##### **a. Nose**

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

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### 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:

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### a. Protective Swallowing Mechanisms:

**Epiglottis**- A flap that closes off the larynx when swallowing to prevent \_\_\_\_\_.

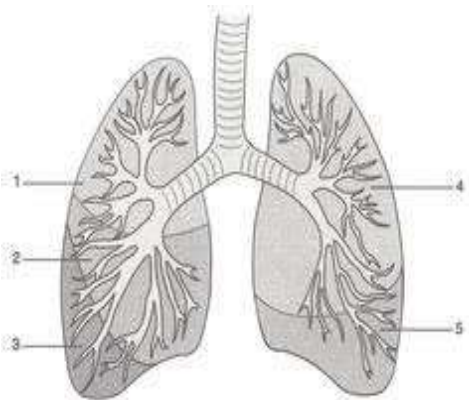
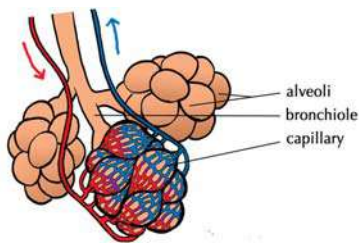
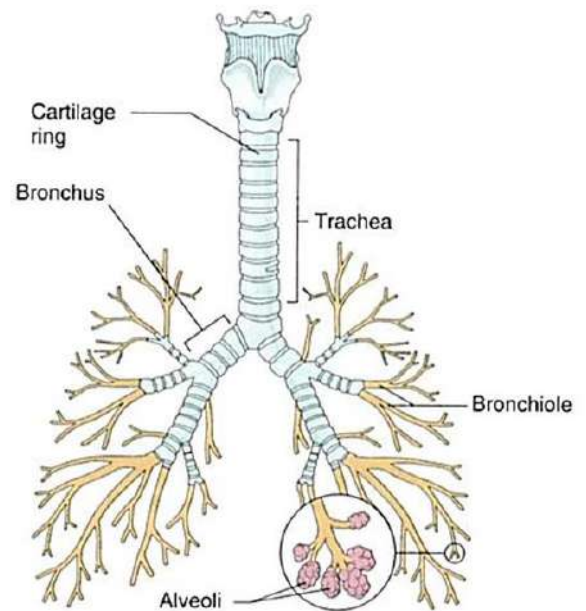
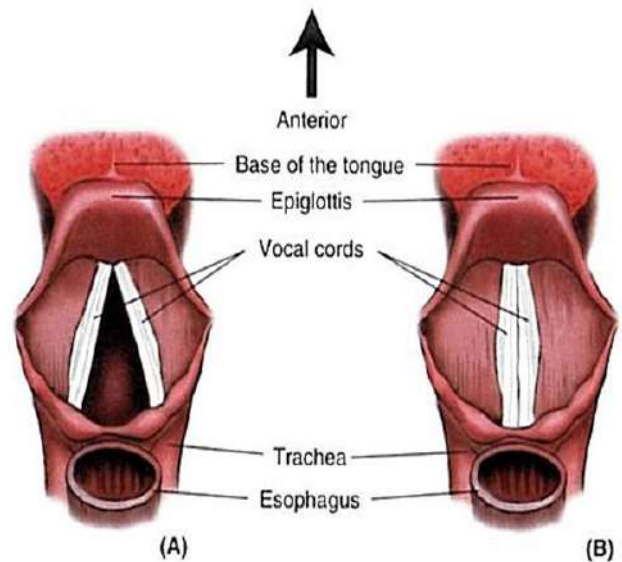
- ii. **Soft Palate** - closes off the \_\_\_\_\_ to prevent food from going up into the nose.

### 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:

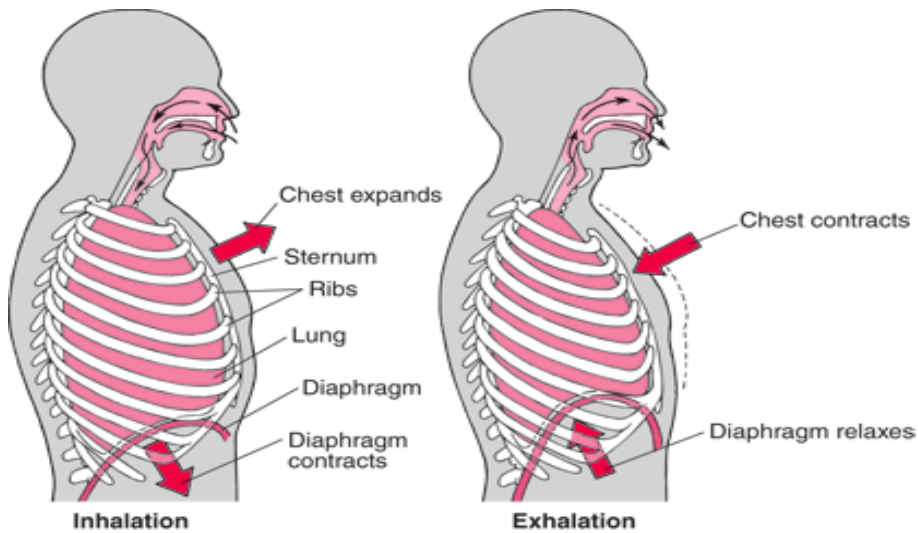
- c. Lungs: Consists of **2 divided lobes (R/L)**. Label sections:

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### **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: