

# RESPIRATORY SYSTEM



# Objectives:

- A. To identify the parts of man's respiratory system.**
- B. To infer how one's lifestyle can affect the functioning of respiratory system**
- C. To conduct an information dissemination activity on effective ways of taking care of the respiratory.**



# What is respiratory system?

- ❖ Is a group of tissues and organs in our body that enable us to breathe.
- ❖ The process of bringing oxygen to the body cells to burn the food and harvest its energy.



# **THE PROCESS OF BREATHING**



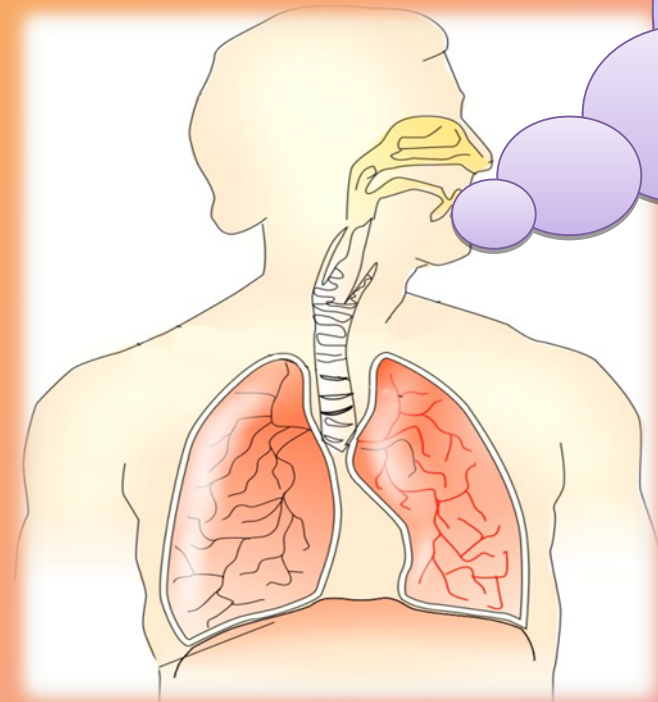
# Percentage Composition of the Air



Gas	Air Inhaled	Air Exhaled	Difference
Oxygen	20.95	16.10	4.85
Carbon Dioxide	0.04	4.50	4.46
Nitrogen	79.00	79.00	0.00



**What are  
the parts of  
man's  
respiratory  
system?**

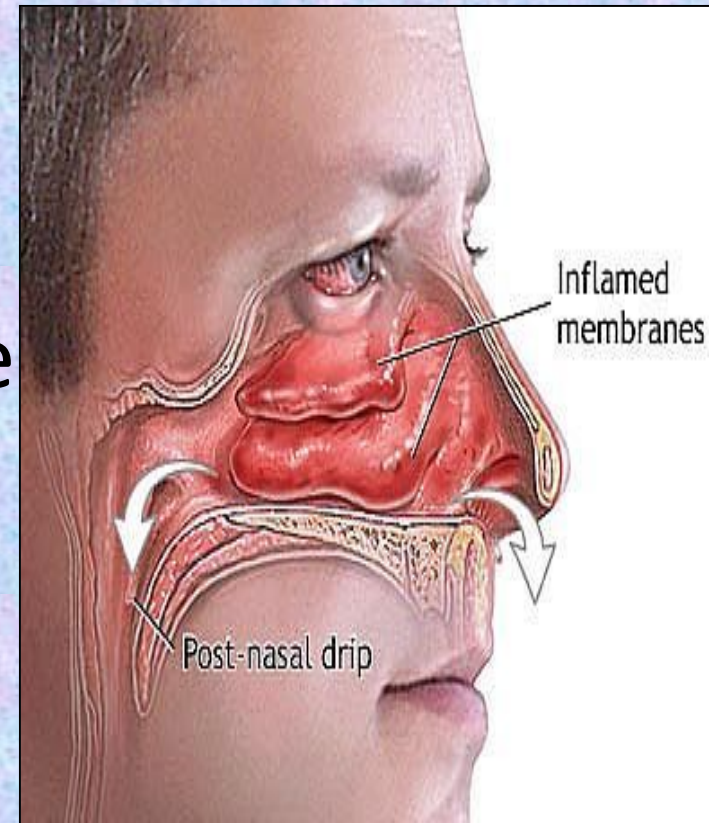


# NASAL CAVITY

The Interior area of the nose line with a sticky mucous membrane and contains a tiny surface hairs called cilia.

1. Cilia

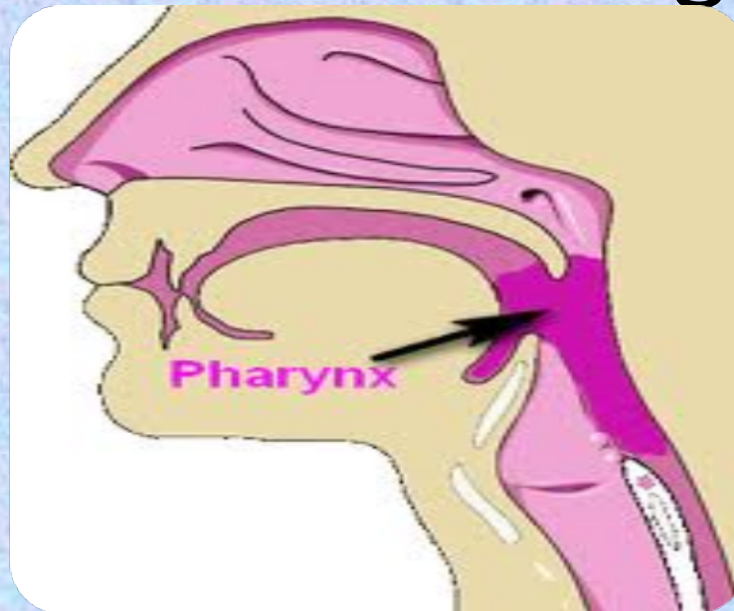
2. Hairs mucous membrane





# PHARYNX

This is where food tube and the air tube meet. A hole between these two tubes called glottis.



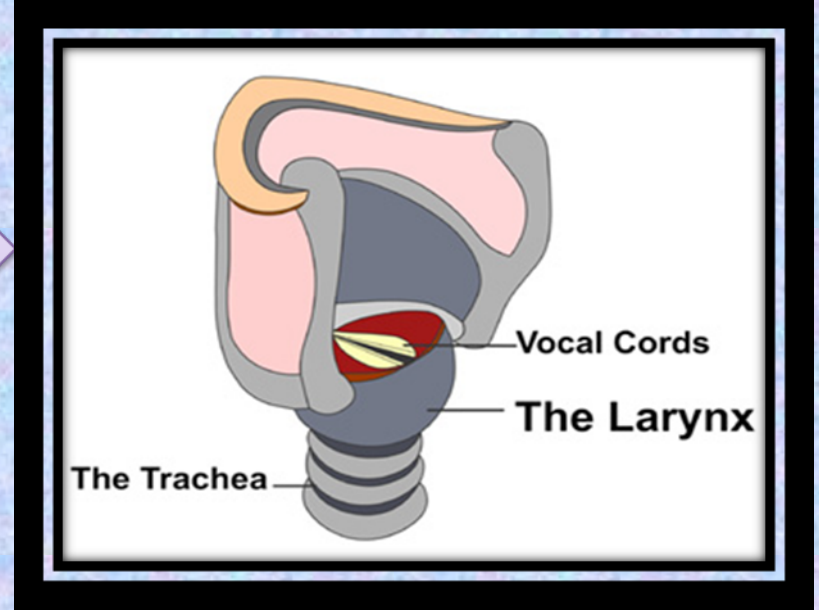


# Function



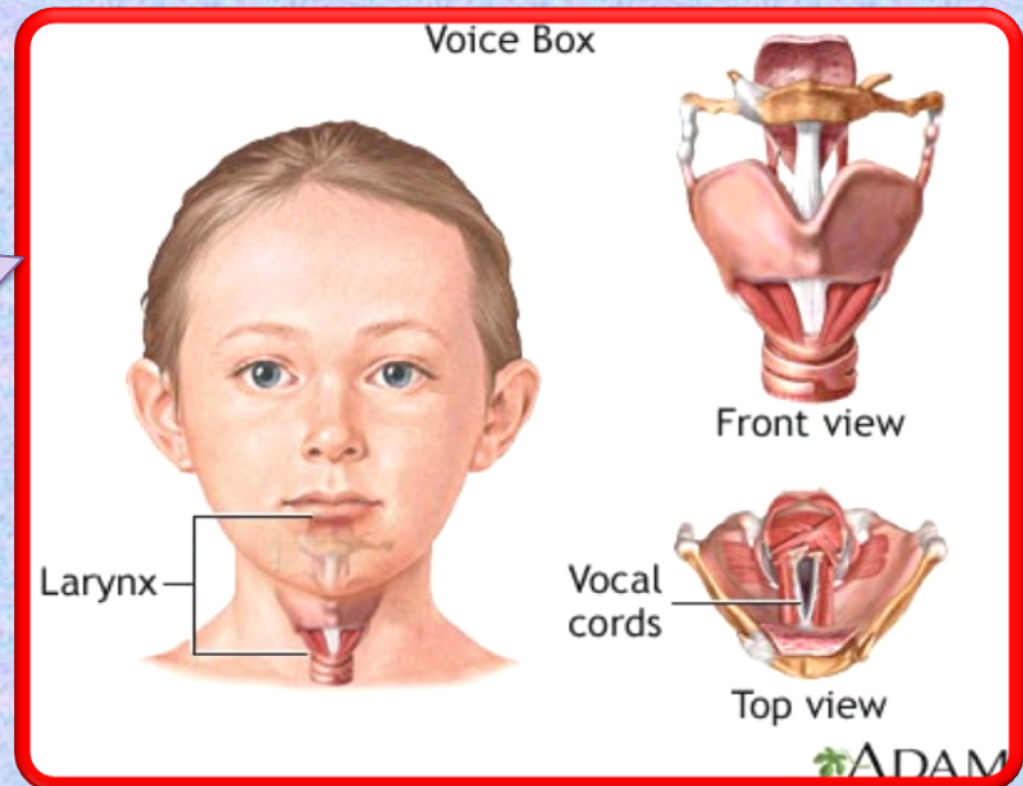
The pharynx acts as a passageway for food from the mouth to the esophagus, and as an air passage from the nasal cavity and mouth to the larynx. It also acts as a resonating chamber for the sounds produced in the larynx.

# LARYNX



Known colloquially as the “Voice Box” the larynx contains vocal cords that vibrate when sound is made. The vocal cords are also known as the “vocal folds”

# FUNCTION



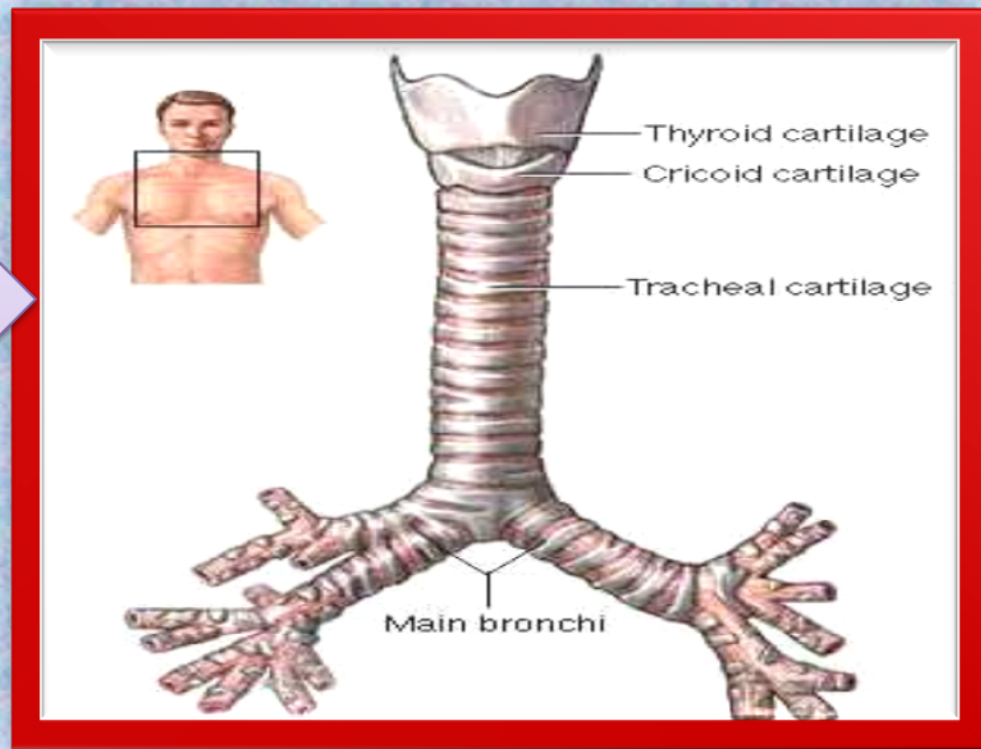
- Forming the sounds that comprise speech.



# TRACHEA

Trachea is also known as the windpipe that is supported by incomplete rings of cartilage which keep it open and at the same time allow to widen when more air needs to be inhaled.

# FUNCTION



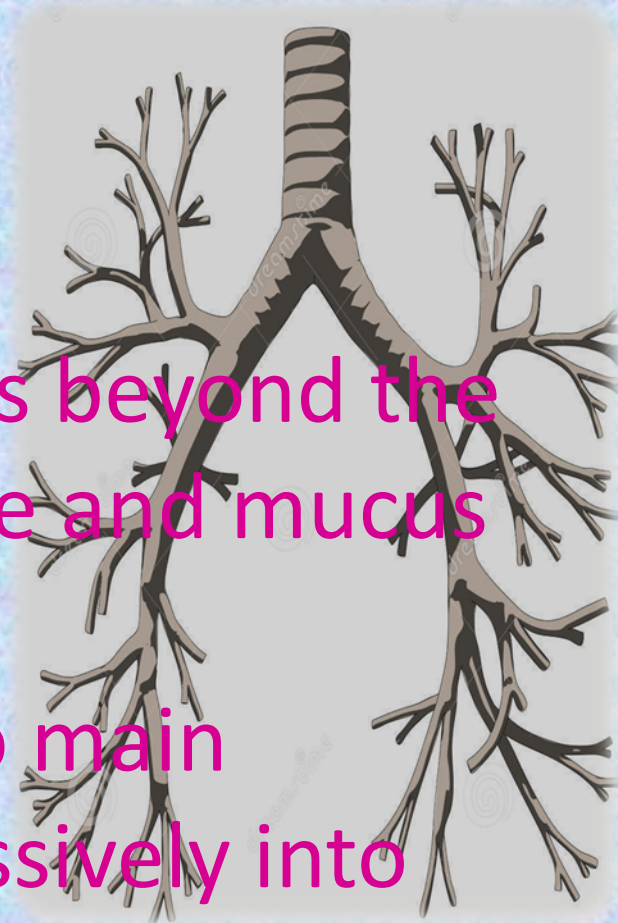
- Connects the external respiratory organs with the lungs.



# BRONCHI

The bronchi are air passages beyond the trachea, which have cartilage and mucus glands in their walls.

The trachea divides into two main bronchi, which divide successively into five lobar bronchi, 20 segmental bronchi, and two or three further divisions



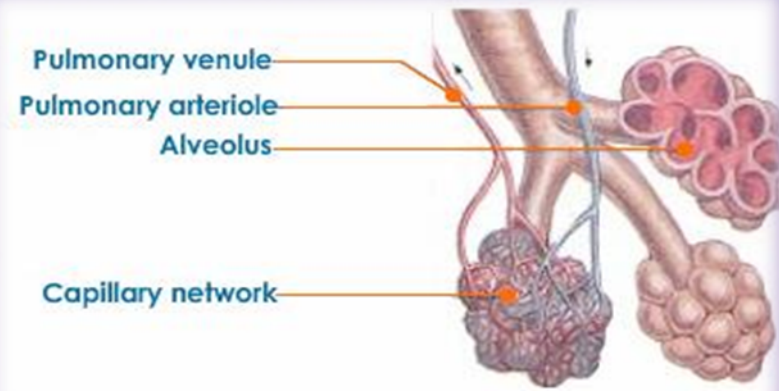


# FUNCTION



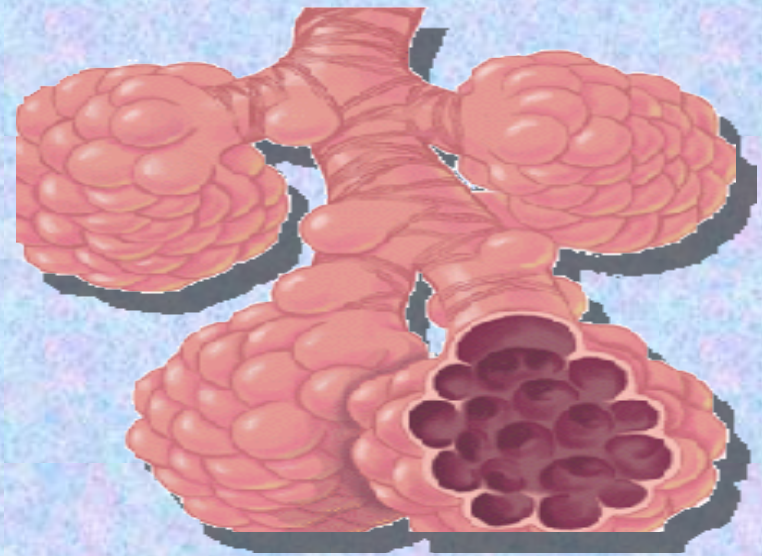
- Components essential for external respiration.

# ALVEOLI



- An alveolus in the lung is a blind-ended air sac of microscopic size. Are tiny sacs within our lungs that allow oxygen and carbon dioxide to move between the lungs and bloodstream.

# FUNCTION



- Components essential for external respiration.



# LUNGS



- Located inside the rib cage that ordinarily protects them from getting crushed.



- The main organ of the respiratory system is lungs. Lungs are the site in body where oxygen is taken into and carbon dioxide is expelled out.

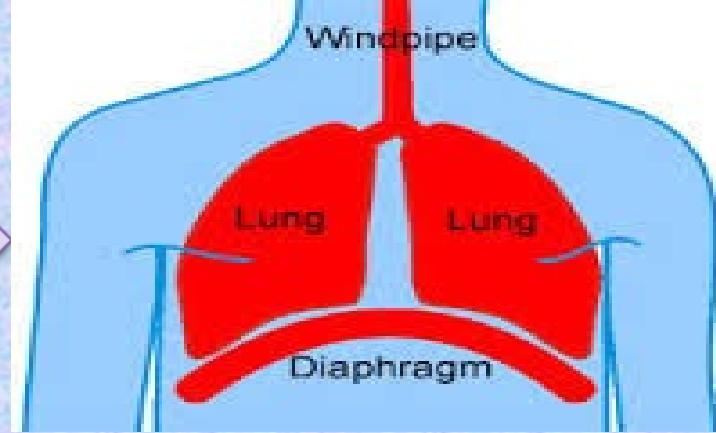
# DIAPHRAGM

- The diaphragm is a thin muscular membranous dome-shaped muscle that separates the thoracic and abdominal cavities.

It is attached to the lower ribs at each side, and to the breast bone and the backbone at the front and back.



# FUNCTION



The diaphragm plays an important part in breathing. It contracts with each inspiration, becoming flattened downwards and increasing the volume of the thoracic cavity. With each expiration the diaphragm relaxes and is restored to its dome shape.

# COMMON DISEASES OF RESPIRATORY SYSTEM



# APPLICATION

Taking care of our respiratory system in a simple way and improving good lifestyle is the best way to be away from all diseases that can give fatality in our lives.





## EVALUATION

Direction: Answer the following question and write you answer before the number.

- \_\_\_\_\_ 1. Is also known as the windpipe.
- \_\_\_\_\_ 2. Are air passage beyond the trachea.
- \_\_\_\_\_ 3. It is the main organ of the repiratory system
- \_\_\_\_\_ 4. Is also known as the voice box.

\_\_\_\_\_ 5. Are the site in body where oxygen is taken into and carbon dioxide is expelled out.

\_\_\_\_\_ 6. The process of bringing oxygen to the body cells to burn the food and harvest its energy.

\_\_\_\_\_ 7. Plays an important role in breathing.

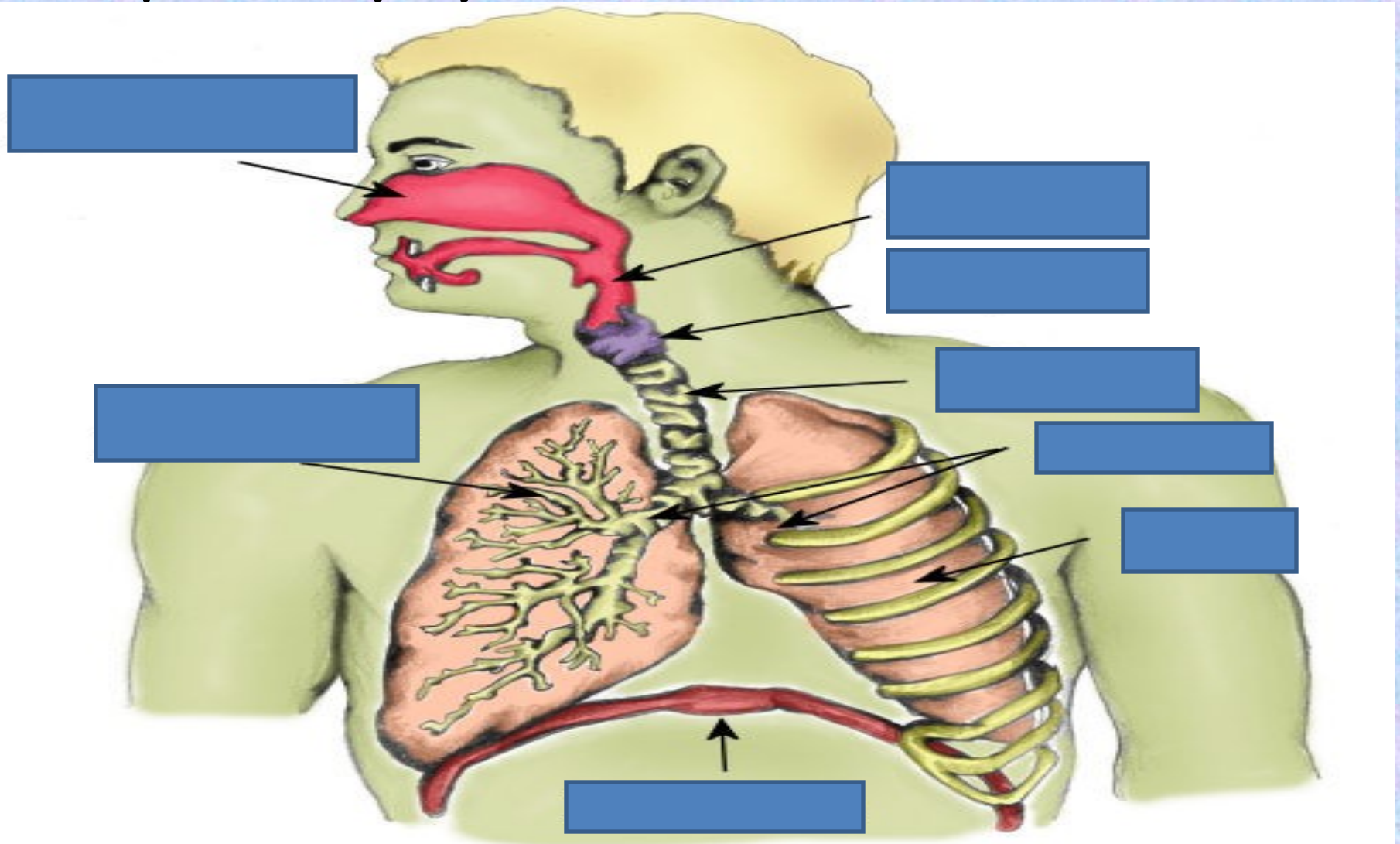
\_\_\_\_\_ 8. This contains the cilia and hairs mucous membrane.

\_\_\_\_\_9. Contain pain receptors.

\_\_\_\_\_10. The coverings of the lungs.



Direction: Label each part of respiratory system



# Essay: Explain briefly each question asked.

1. What happen to oxygen when it enters the lungs?
2. Explain the process of breathing.
3. Why is oxygen important to our body?
4. How human lifestyle affect the functioning of respiratory system.

# ASSIGNMENT

Go to some school and research some information on how to take care the respiratory system and disseminate it to fellow students.



# Non-Print Reference Material

Instructional Materials: Anatomy of Human

Subject: Second Year Biology

Grade/Year Level Being Considered:  
Grade 9

Teacher: Deane Mendoza

