



GRADE V THE HUMAN RESPIRATORY SYSTEM

At the end of the module, you should be able to:

- *Describe the main parts of the human respiratory system*



Try to Recall

Copy the table below in your notebook. Then classify the following body parts. Write them in the correct column of the table

1. pancreas
2. ovary
3. stomach
4. esophagus
5. large intestine
6. fallopian tube
7. skull
8. uterus
9. vertebral column
10. ribs

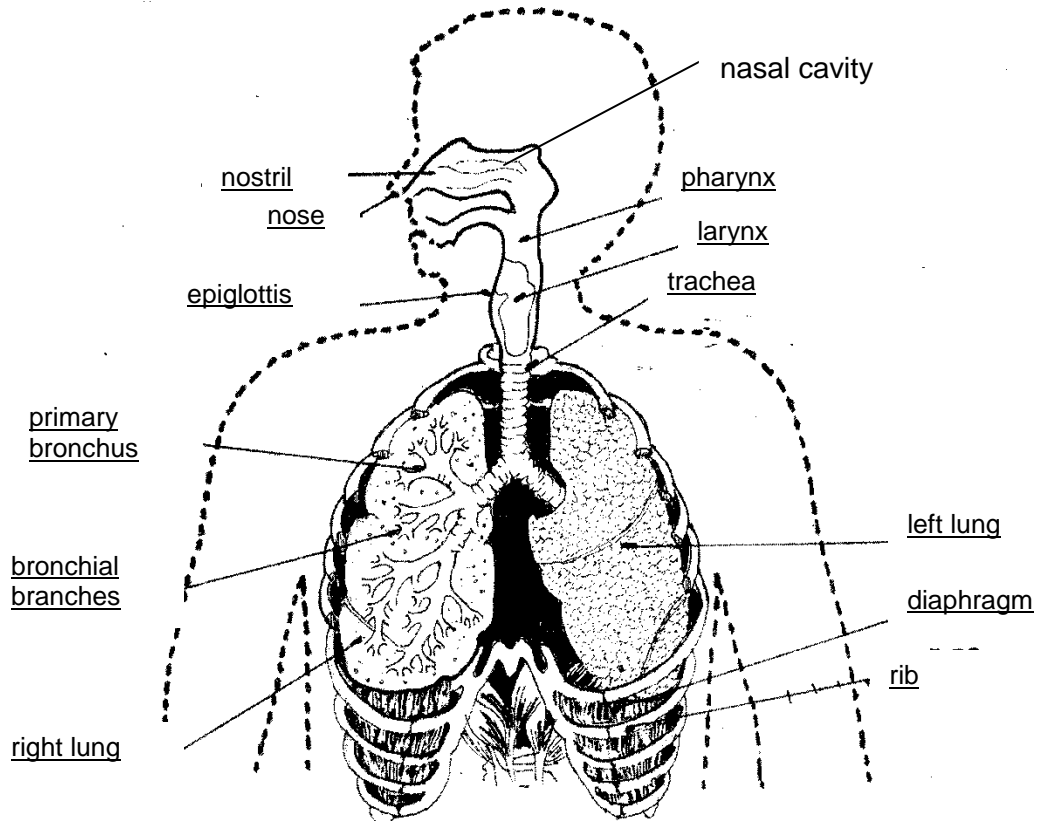
Skeletal System	Digestive System	Reproductive System



Explore

Study the parts of the respiratory system.

Point to each part as you go through each activity.



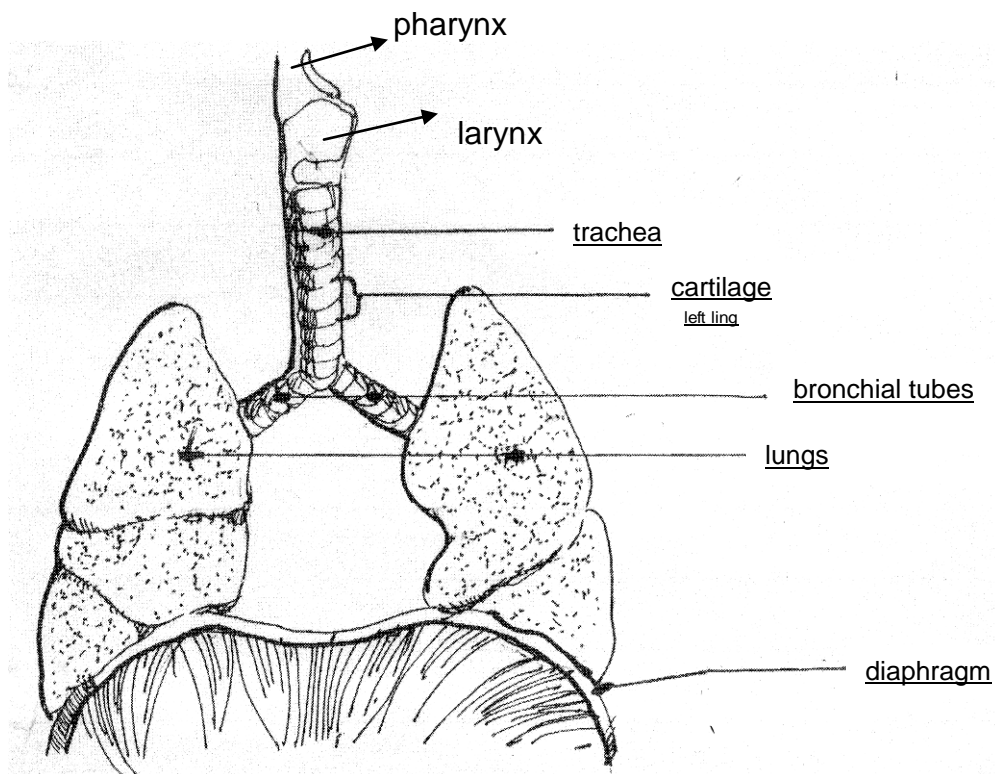
Activity 1

1. Using a hand mirror, try to look at the inner part of your nose.
Do you see two small openings? These are the nostrils, where the air gets in and out of your body.
2. Look at the inside parts of your nose again. Can you see short strands of hair? These are called cilia. Also inside your nose is a sticky substance called mucus. The cilia filter the dust and the germs from the air. The mucus moistens and filters more of the dirt and dust from the air you breathe. The air is cleaned, warmed, and moistened before it enters the lungs.



Activity 2

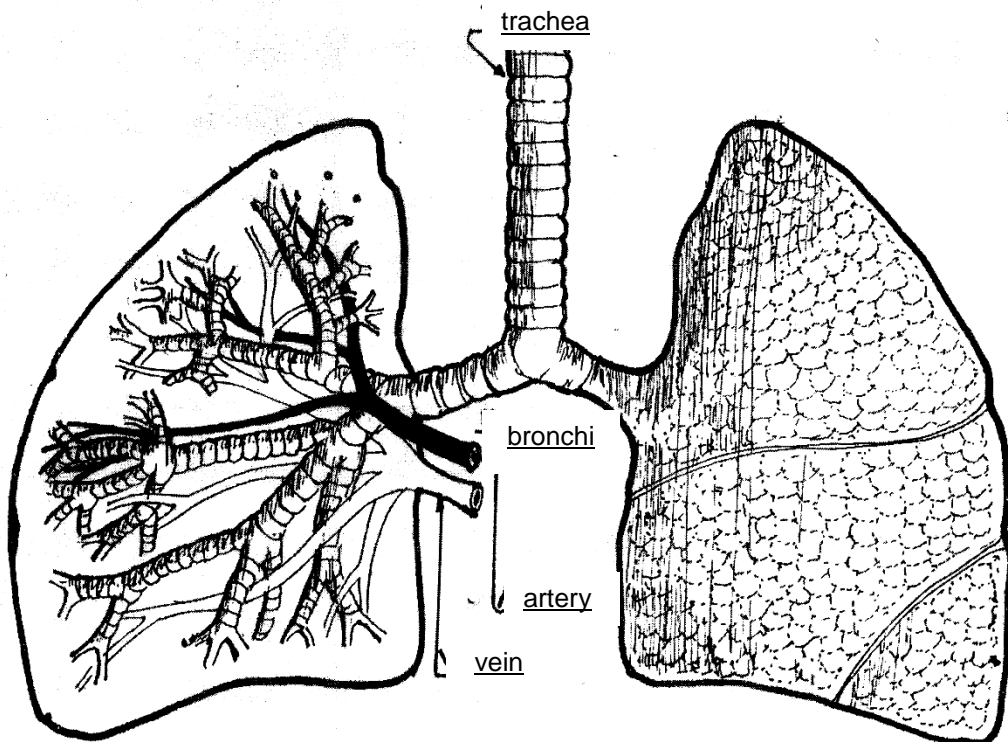
1. Look at the picture below. Find the pharynx. The pharynx is like a meeting center where tubes meet. Two of the tubes come from the nose and the mouth. These tubes enable you to breathe not only through your nose but also through your mouth.
2. From the pharynx, trace the path of the clean warm air as it passes down to the trachea.
3. Between the pharynx and trachea is the larynx. Point to it.





Activity 3

1. Look at the picture below. Find the trachea. Notice the rings of cartilage that support it. These keep the trachea from collapsing when you breathe in (inhale) and breathe out (exhale).
2. Press lightly the area just below your voicebox. You will feel your trachea.
3. Look at the lower part of the trachea in the picture below. It branches into two big tubes called bronchial tube, which lead to the left and right lungs. Find the lungs in the picture.



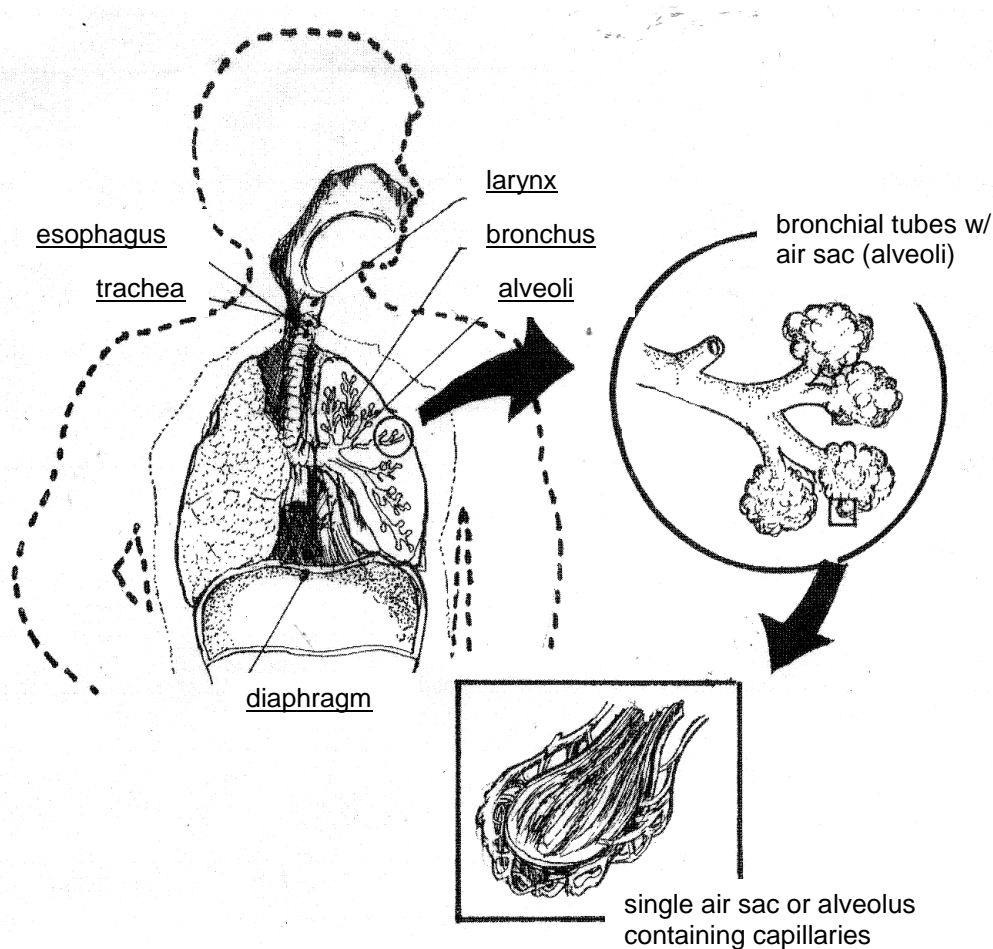
Interior of the right lung showing the branching of the bronchial tubes

left lung



Read and Learn more.

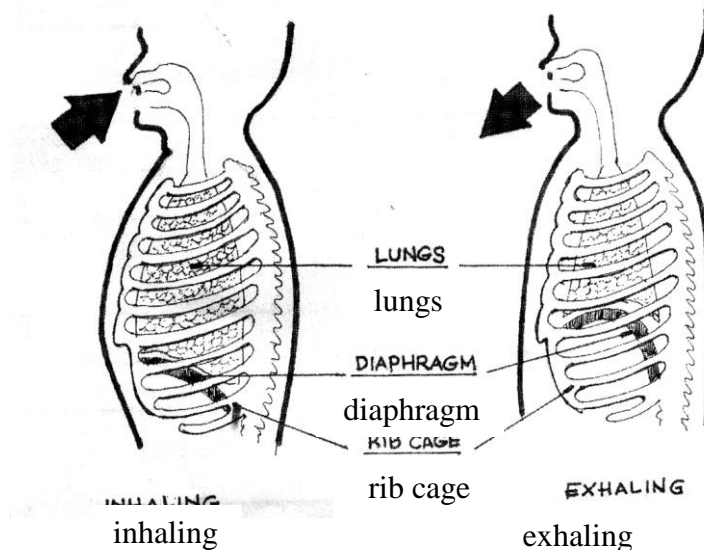
- The lungs are the lightest organs of the human body. They are large and pinkish in color. They have spongy tissues. They have a remarkable self-cleaning system, wherein the inner lining of the air tubes produces a sticky fluid called mucus, which traps dirt. Do you know how your body removes the mucus?
- Air enters the nostrils then goes into a tube called trachea or windpipe. The trachea branches into the bronchial tubes, which lead to the lungs. Find the tubes in the picture below.
- The bronchial tubes are further subdivided into smaller pipes. Look at the pipes in the picture. What do they resemble?





How We Breathe

- When you inhale, your ribs move up and down. Your diaphragm flattens and the chest cavity expands. The space inside the rib cage becomes bigger, and the pressure inside the lungs becomes less. Air moves from outside into the lungs.



- When you exhale, your ribs move down and the diaphragm curves upward. Your chest cavity becomes smaller. Air pressure inside the lungs increases, forcing air out of the lungs.
- When the chest expands, the lungs inflate when the chest contracts, the lungs deflate.

I LEARNED THAT:

- The main task of the human respiratory system is for breathing.
- The main organs of my respiratory system are the nose, pharynx, larynx, trachea, bronchial tubes, and lungs.
- The pharynx is the part where the clean warm air passes down to a long tube called trachea or wind pipe.
- Bronchial tubes are two pipes that lead to the left and right lungs.
- Lungs are the lightest organs of the body.



Apply It

1. Using a simple diagram, trace the path of air that goes in and out of the body. Write the diagram in your notebook.
2. Refer to the diagram, identify the part that performs each function below.
Do this in your notebook.
 - a. allows air to get in and out of the body
 - b. filters the air of dust and other foreign particles entering the nose
 - c. moistens the air before it flows into the lungs
 - d. serves as way of air from the pharynx to the lungs
 - e. serves as way of air leading to the left and right lungs



Test Yourself

Answer each question below. Write only the letter of the answer in your notebook.

1. Which of the following best describe your lungs?
 - a. They are porous and spongy.
 - b. They are flat and thick tissues.
 - c. They look like inflated balloons.
 - d. They are the highest organ of the human body.
2. What is the function of the respiratory system?
 - a. To help in breathing
 - b. To make the lungs healthy
 - c. To supply the blood with carbon dioxide
 - d. To protect the body from diseases
3. What do you call the tiny hair that filter the air through the nose.
 - a. cilia
 - b. throat
 - c. air sacs
 - d. mucus membrane



4. Where does the exchange of gases take place?

- a. pharynx
- b. trachea
- c. air sacs
- d. bronchial tubes

5. What happens to the diaphragm when you exhale?

- a. It swings.
- b. It expands.
- c. It contracts.
- d. It moves up and down.

