

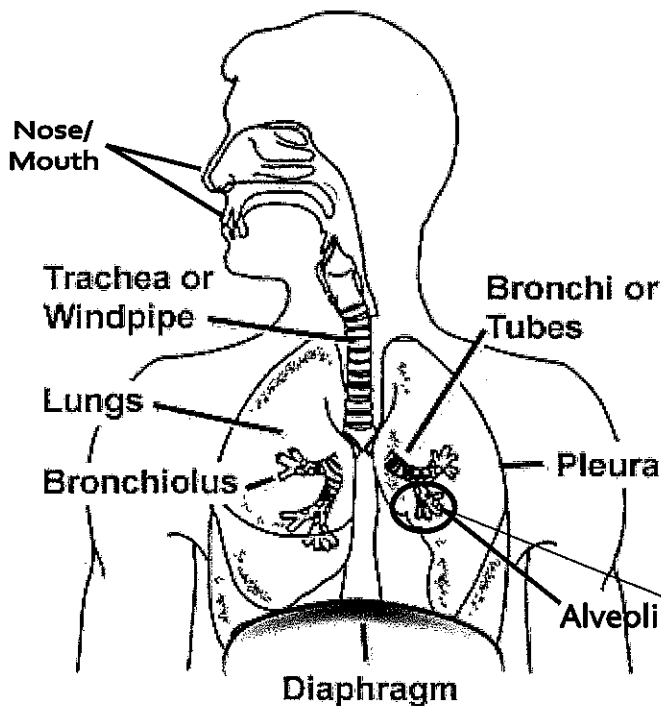
The Respiratory System

The respiratory system is the system of the body that deals with breathing. When we breathe, the body takes in the oxygen that it needs and removes the carbon dioxide that it doesn't need.

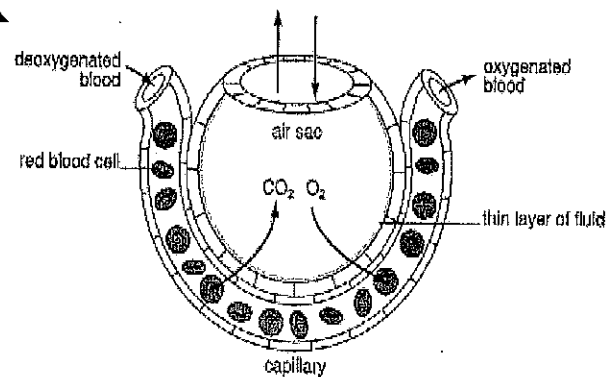
First, the body breathes in the air which is sucked in through the nose and mouth and down the trachea (windpipe). The trachea is a pipe shaped by rings of cartilage. It divides into two tubes called bronchi.

These carry air into each lung. Inside the lungs the tubes divide into smaller and smaller tubes called bronchioles. At the end of each of these tubes are small air balloons called alveoli.

Capillaries, which are small blood vessels with thin walls, are wrapped around these alveolies. The walls are so thin and close to each other that the air easily seeps through. In this way, oxygen seeps through into the



bloodstream and carbon dioxide, in the bloodstream, seeps through into the alveoli. The carbon dioxide is then removed from the body when we breathe out.



The diaphragm is the muscle that controls the breathing process. As the diaphragm flattens it causes the chest to expand and air is sucked in to the lungs. When the diaphragm relaxes, the chest collapses and the air in the lungs is forced out.

Name _____ Day _____ Date _____

Respiratory Questions

Answer the following questions on the movie you just saw.
Use the word bank to answer the questions.

exhale muscles diaphragm air sacs
mouth cilia inhale brain

1. When we _____ air enters the body through the nose and mouth.
2. _____ and mucous work to trap dirt and germs before we inhale.
3. The _____ helps draw air into the lungs.
4. The structure where the respiratory system and the circulatory system meet is the _____.
5. The _____ controls the rate of breathing.

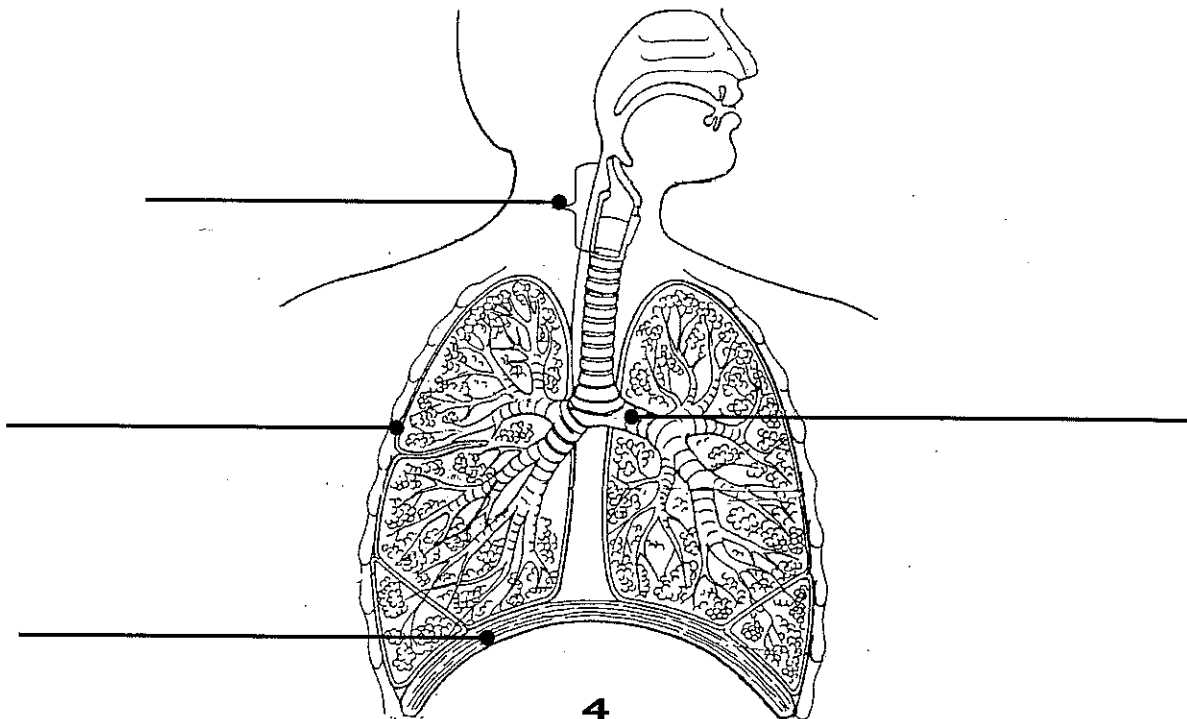
Name _____ Day _____ Date _____

Respiratory System Worksheet

Use the correct word from the word bank to fill in the answers to the questions and the labeling.

larynx	bronchioles	alveoli
diaphragm	pleura	bronchi
trachea	pharynx	lungs
oxygen	diaphragm	cilia

- _____ 1. The tube that connects the throat and bronchi.
- _____ 2. The tiny hairs that clean the air.
- _____ 3. The large band of muscle that controls the size of the chest cavity.
- _____ 4. The two large lightweight organs of the respiratory system.
- _____ 5. The many little branches of the respiratory system.
- _____ 6. The part of the respiratory system that is the voicebox.
- _____ 7. The grape like clusters of air sacs in the lungs.
- _____ 8. What we breathe in.



Name _____ Day _____ Date _____

Inhaling/Exhaling Questions

Write the letter of the word or phrase from the bank to answer questions 1-8

phrase/word bank:

- A. relaxes and moves up
- B. capillaries
- C. pleura
- D. breathing in
- E. cilia
- F. exhale
- G. contracts and flattens out
- H. carbon dioxide

- _____ 1. What does inhaling mean?
 - _____ 2. What happens to your diaphragm when you inhale?
 - _____ 3. What keeps mucus and dirt out of the lungs?
 - _____ 4. What allows oxygen to pass into your blood?
 - _____ 5. What word means to breathe out?
 - _____ 6. What happens to your diaphragm when you exhale?
 - _____ 7. What is the waste product you breathe out?
 - _____ 8. What is the name of the protective layer around the lungs?
9. Name 3 parts of the respiratory system *air passes through* when entering the body.
- _____
- _____
- _____

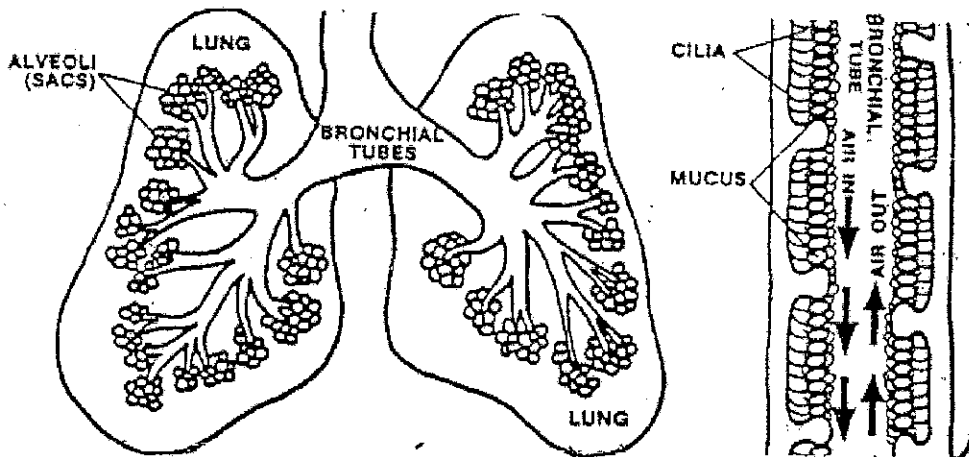
IN THE PINK

Is there anything inside your lungs? Or are they hollow inside like a balloon? The answer is that your lungs are not just hollow spaces. They are more like a sponge inside. Your lungs are filled with tubes called bronchial tubes. They start out at the bottom of your windpipe like two large tree trunks. One tube leads into each lung. Each large bronchial tube branches out into lots of smaller bronchial tubes. It's just like having an upside down tree in each lung.

The bronchial tubes lead to small groups of bubbles called air sacs. The scientific name for the air sacs is alveoli. Oxygen goes from the air sacs into your blood. It is then carried to all parts of your body.

Below the picture on the left shows you what we mean. It's called a respiratory tree.

The picture on the right shows you what it's like inside the bronchial tubes. The little hairs are called cilia. The cilia help keep dirt out of the lungs by pushing a liquid which is also inside the bronchial tubes. This liquid is called mucus. Dirt gets trapped in the mucus. The cilia and mucus work together to keep your lungs clean, pink and healthy.



Complete the sentences.

1. Oxygen is carried to all parts of your body in your _____ D
2. Another name for alveoli is A _____ S _____ (2 words)
3. The bronchial tubes start at the bottom of your T _____
4. Dirt is kept out of your lungs by tiny hairs called C _____
5. Air comes into your lungs through bronchial ___ U _____ S
6. The cilia and mucus keep your lungs clean, pink and ___ E _____
7. All of the parts of our body that help us breathe are called the
R _____ system.