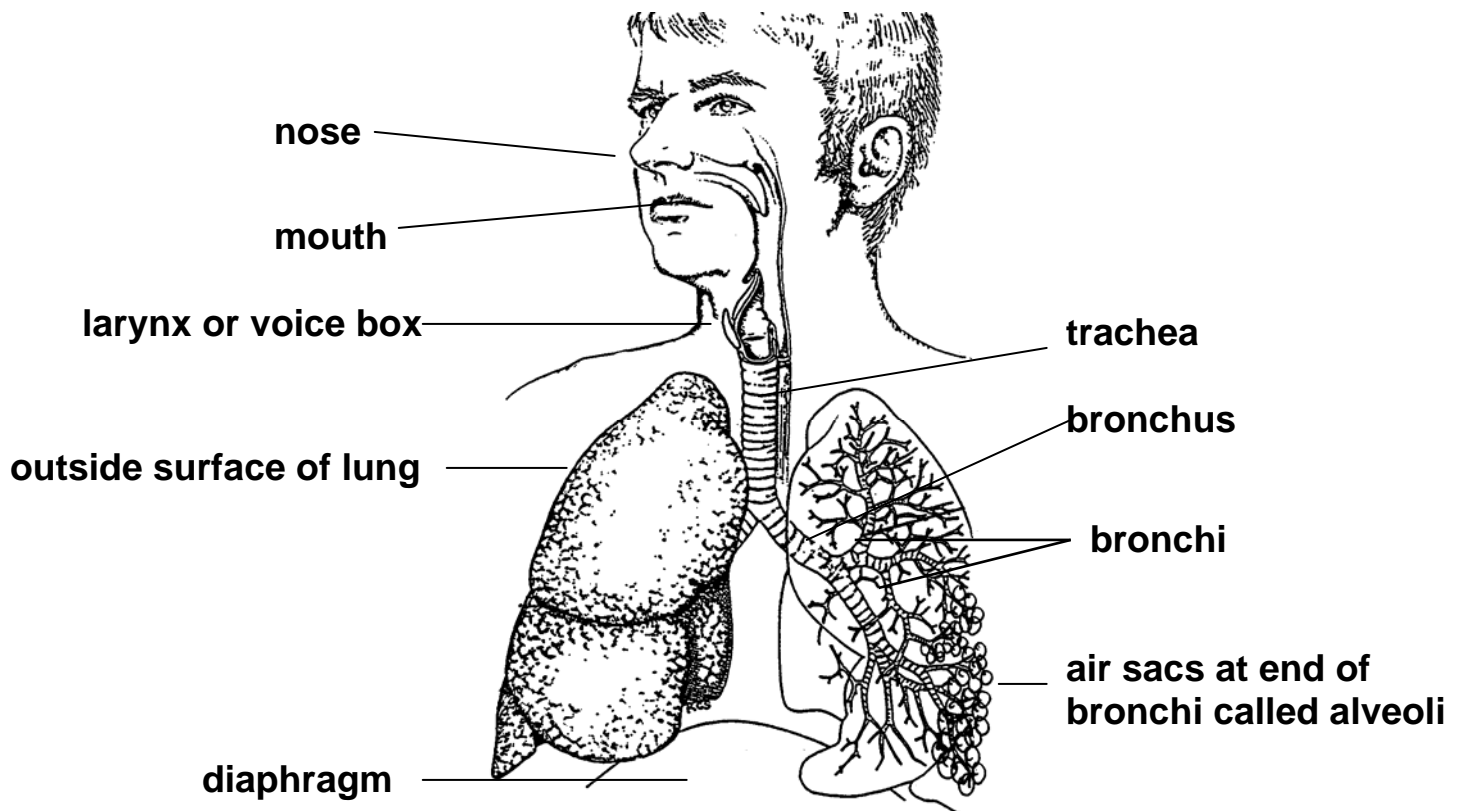

Healthy Lungs



The chest is formed by ribs and chest wall muscles. The chest is separated from the stomach by a large muscle called the diaphragm. The diaphragm is the main muscle used for breathing. When it contracts, air flows into the lungs. When it expands, air flows out.

There are 2 lungs in the chest. When you breathe in, air travels through the nose and mouth. It passes the voice box called the larynx and goes into the windpipe or trachea. The trachea divides into 2 large airways. Each airway tube is called a bronchus. One bronchus goes to each lung and divides into many smaller bronchi so it looks like branches of a tree.

Alveoli are elastic air sacs at the very end of the smallest bronchi. There are about 300 million alveoli in the lungs. When lungs are healthy, this would cover the surface area of a tennis court if you flattened them out.

Oxygen from the air you breathe moves from the alveoli into the blood flowing by. The blood takes the oxygen to all of the cells in the body to produce energy. During this process, carbon dioxide is formed. The blood then takes the carbon dioxide back to the lungs where you can breathe it out. You breathe oxygen in and carbon dioxide out each time you breathe.

The amount of oxygen you breathe in depends on the health of your lungs. For example, if you smoke or are around second hand smoke, your oxygen/carbon dioxide exchange may be affected.