

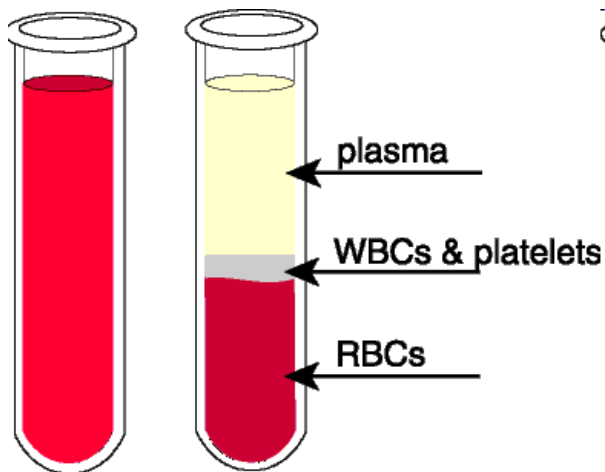
**Human Systems: The Circulatory System and Blood**  
(pp. 83-87)

**The Circulatory System**

The circulatory system in humans is made up of the \_\_\_\_\_,  
\_\_\_\_\_, \_\_\_\_\_. The main function of the circulatory system is to  
\_\_\_\_\_ through the body.

Blood is made up of red blood cells, white blood cells, \_\_\_\_\_, and \_\_\_\_\_.

- Red Blood Cells carry \_\_\_\_\_ in the blood as well as nutrients and other materials to and from tissues. Red blood cells contain protein called \_\_\_\_\_.
- \_\_\_\_\_
- White Blood cells \_\_\_\_\_ the body against \_\_\_\_\_ and other invaders.
- Platelets play an important role in the formation of \_\_\_\_\_.
- Plasma is the \_\_\_\_\_ of the blood



## Blood Vessels

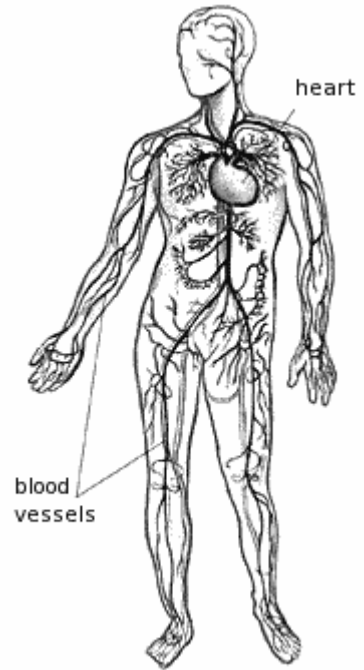
\_\_\_\_\_ are thick walled tubes that usually transport oxygenated blood to the body tissues \_\_\_\_\_ the heart. (\_\_\_\_\_)

\_\_\_\_\_ are thinner walled tubes that usually transport deoxygenated blood from the body tissues \_\_\_\_\_ the heart. (\_\_\_\_\_)

\_\_\_\_\_ are the site of exchange between the blood and body cells. They \_\_\_\_\_ oxygen, carbon dioxide, nutrients, wastes, and other materials. **(SMALL THIN WALLED BLOOD VESSELS THAT ALLOW SUBSTANCES TO \_\_\_\_\_ OF THE CIRCULATORY SYSTEM)**

## Heart

The heart contains \_\_\_\_\_ that pump blood to the lungs and to all body parts. The heart acts as a \_\_\_\_\_ with the \_\_\_\_\_ deoxygenated blood from the different parts of the body. The blood is then pumped to the lungs where oxygen diffuses into the blood and it becomes oxygenated. The oxygenated blood then \_\_\_\_\_ to the \_\_\_\_\_ of the heart where it is \_\_\_\_\_ to all body parts. Your heart beats approximately \_\_\_\_\_ times per minute when you are at rest.



The parts of the human circulatory system.

## Diseases and Disorders

- **Coronary Artery Disease-** when coronary arteries become \_\_\_\_\_ blocked with plaque (a build up of fat, cholesterol, and calcium)

**Symptoms include:** tiredness, \_\_\_\_\_, pain or burning sensation in chest or arms.

**Diagnosed with:** \_\_\_\_\_

- **Heart Attack-** coronary arteries become \_\_\_\_\_ blocked (from plaque or a blood clot)

**Symptoms include:** chest pain, shortness of breath, \_\_\_\_\_, anxiety, upper body pain, stomach pain, \_\_\_\_\_, dizziness, unusual fatigue

**Diagnosed with:** blood test or electrocardiogram (\_\_\_\_\_)

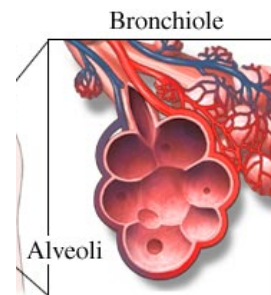
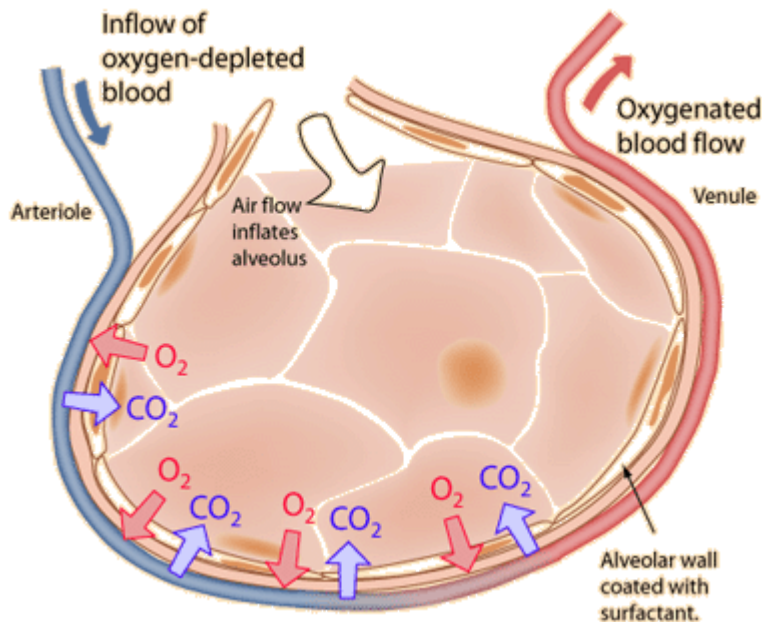
## Respiratory System (pp. 91-95)

The respiratory system is responsible for providing the \_\_\_\_\_ needed by the body and for removing the \_\_\_\_\_ produced as your body uses energy for growth, \_\_\_\_\_, and movement.

The respiratory system consists of the \_\_\_\_\_ and organs that connect the lungs to fresh air such as:

- The mouth
- \_\_\_\_\_
- Pharynx ( Throat)
- \_\_\_\_\_ (Windpipe)
- Bronchi

The \_\_\_\_\_ purpose of the respiratory system is \_\_\_\_\_.



**Inside Alveoli Sac:**

**Inside the Capillary:**

\_\_\_\_\_ enters the bloodstream in the lungs by diffusion. \_\_\_\_\_ leaves the blood in the same way. The respiratory system is adapted in several ways to make these processes as efficient as possible.

The respiratory system \_\_\_\_\_ a method of moving air into and out of the lungs called \_\_\_\_\_.

**Diseases of the Respiratory System**

\_\_\_\_\_ - infectious disease, easily passed between people. Caused by \_\_\_\_\_ entering your body when you breathe. The bacteria grows in your lungs. If untreated, TB can be fatal.

**Symptoms include:** \_\_\_\_\_, \_\_\_\_\_, weight loss, tiredness, chest pain.

**Diagnosed with:** X-Rays.

\_\_\_\_\_ - caused by carcinogens from tobacco smoke in parts of the respiratory system including lungs, mouth, pharynx, and larynx.

**SARS-** \_\_\_\_\_.

**Symptoms include:** flulike symptoms including high fever, shortness of breath, dry cough, sore throat, headache, muscle pain, exhaustion.

**Diagnosed with:** X-rays.