

**Lesson Outline****LESSON 2*****The Circulatory System*****A. Functions of the Circulatory System**

1. The \_\_\_\_\_ system transports materials from one part of the body to another.
2. \_\_\_\_\_ carries food, water, oxygen, and other materials through the circulatory system to the body's cells and tissues.
3. Blood carries away \_\_\_\_\_ materials, including carbon dioxide produced during cellular respiration.

**B. Circulatory System Organs**

1. The \_\_\_\_\_ is a muscle that pushes blood through the circulatory system.
2. The upper two chambers through which blood enters the heart are the \_\_\_\_\_.
3. The lower two chambers through which blood leaves the heart are the \_\_\_\_\_.
4. Oxygen-poor blood flows into the \_\_\_\_\_ atrium from the body. It goes into the \_\_\_\_\_ ventricle, which pumps it to the lungs.
5. Oxygen-rich blood flows into the \_\_\_\_\_ atrium from the lungs. It goes into the \_\_\_\_\_ ventricle, which pumps it to the body.
6. Large blood vessels that take blood away from the heart are called \_\_\_\_\_.
7. Arteries branch into smaller vessels called \_\_\_\_\_.
8. Arterioles branch into tiny \_\_\_\_\_, blood vessels that deliver supplies to individual cells and take away waste materials.
9. Vessels that bring blood toward the heart are called \_\_\_\_\_.

**C. Types of Circulation**

1. \_\_\_\_\_ is the network of vessels that carry blood from the heart to the body and from the body back to the heart.
2. A network of arteries and veins called the \_\_\_\_\_ supplies blood to all the cells of the heart.

## Lesson Outline continued

3. The network of vessels that carries blood to and from the lungs is called \_\_\_\_\_.

### D. Circulatory System Health

1. \_\_\_\_\_ diseases occur when blood vessels lose flexibility and heart muscle weakens.
2. Blood pressure higher than 140/90 mm Hg is known as \_\_\_\_\_, or high blood pressure.
3. The buildup of fatty materials within the walls of arteries is called \_\_\_\_\_.
4. A(n) \_\_\_\_\_ occurs when part of the heart muscle dies or is damaged.
5. A stroke happens when part of the \_\_\_\_\_ dies or is damaged.
6. Most \_\_\_\_\_ for circulatory disease can be controlled by making good life choices, like eating a healthy diet, controlling weight, exercising, and not smoking.

### E. The Circulatory System and Homeostasis

1. The circulatory system works with the respiratory, digestive, endocrine, and \_\_\_\_\_ systems.
2. The circulatory system transports \_\_\_\_\_ from the digestive system.