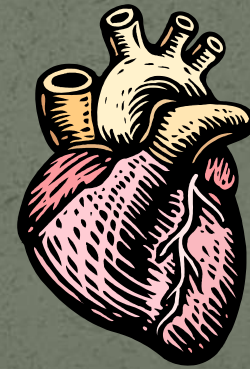
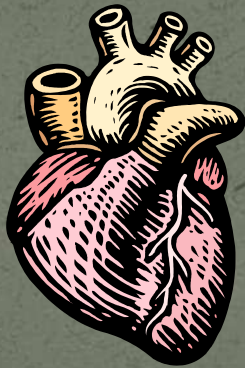


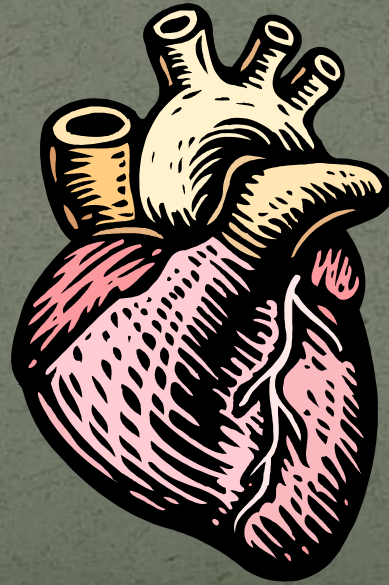
# Chapter 3 – Human Body Systems

## Lesson 4 – The Circulatory System



# How are materials transported through your body?

- The circulatory system is the “delivery system” of the body.
- The main organ of the system is the **heart**.



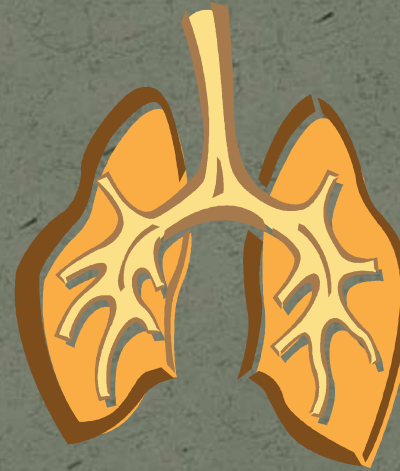
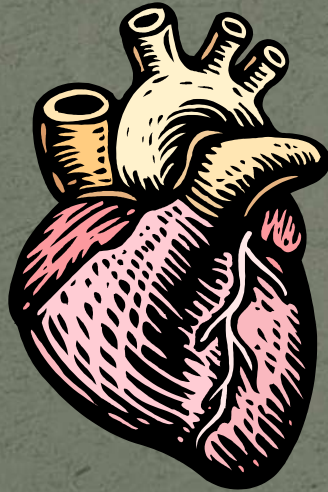
**4 chambers  
in the heart**

# How are materials transported through your body?

- **Arteries** carry oxygenated blood away from the heart.
- **Veins** carry blood back to the heart.

# How can systems work together?

- The circulatory and respiratory systems work together.



Circulation and Respiration  
Video

# Heart to Lungs

- 1.** Veins bring blood with carbon dioxide to the right side of the heart.
- 2.** The blood is pumped through an artery to the lungs.
- 3.** In the lungs, blood drops off carbon dioxide and takes in oxygen.

# Heart to Lungs

4. Veins bring oxygen-rich blood to the left side of the heart. It is pumped out to the body through a main artery called the **aorta**.

# What is blood?

- **Blood** is made of liquid and cells.
- **Plasma** – carries nutrients
- **Red blood cells** – carry oxygen and carbon dioxide
- **White blood cells** – fight germs
- **Platelets** – help blood clot

# How do vessels and valves work?

- **Valves** in veins and the heart keep blood from backing up in the wrong direction.





**All images courtesy of  
Microsoft Office Online.**