

CIRCULATORY SYSTEM

The **Circulatory System** is responsible for transporting materials throughout the entire body. It transports nutrients, water, and oxygen to your billions of body cells and carries away wastes such as carbon dioxide that body cells produce. It is an amazing highway that travels through your entire body connecting all your body cells.

PARTS OF THE CIRCULATORY SYSTEM

The **Heart** is an amazing organ. The heart beats about 3 BILLION times during an average lifetime. It is a muscle about the size of your fist. The heart is located in the center of your chest slightly to the left. Its job is to pump your blood and keep the blood moving throughout your body.

The **Blood** is an amazing substance that is constantly flowing through our bodies. Your blood is pumped by your heart. Your blood travels through thousands of miles of blood vessels right within your own body. Your blood carries nutrients, water, oxygen and waste products to and from your body cells. A young person has about a gallon of blood. An adult has about 5 quarts. Your blood is not just a red liquid but rather is made up of liquids, solids and small amounts of oxygen and carbon dioxide.

Blood Components:

- Red Blood Cells- responsible for carrying oxygen and carbon dioxide.
- White Blood Cells- help the body fight off germs.
- Platelets- blood cells that help stop bleeding.
- Plasma- the liquid part of the blood.

The Blood Vessels

In class we talked about three types of blood vessels: Arteries, Capillaries, and Veins

- **Arteries**- carry oxygen rich blood AWAY from the heart.
- **Capillaries**- as thin as or thinner than hair strands. Capillaries connect arteries to veins.
- **Veins**- carry blood back toward your heart.

COMMON DISORDER

- Coronary Artery Disease
- Hypertension
- Cardiomyopathy

COMMON CONDITIONS CAUSING CIRCULATORY PROBLEMS

- Trauma
- Aneurysms
- Vascular malformations
- Raynaud's