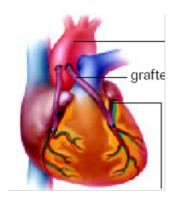
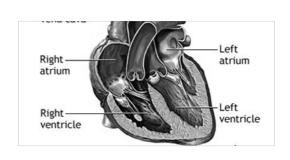
## **Structure of the Heart**

- The heart is a small, muscular organ about the size of a fist
- Located between the lungs, directly behind the sternum (breast bone)
- Surrounded by a tough, liquid filled sac called the <u>pericardium</u>. (peri around; cardium heart)
- The major portion of the heart consists of muscle called <u>myocardium</u> (<u>myo</u> muscle; <u>cardium</u> heart)
- Inner lining of the heart called the <u>endocardium</u> (endo inside).
- The heart is separated into two separate pumps by a muscular wall called the septum





Location of Heart in Body <a href="http://www.bostonscientific.com/templatedata/imports/HTML/CRM/heart/interact\_1.html">http://www.bostonscientific.com/templatedata/imports/HTML/CRM/heart/interact\_1.html</a>

The heart has 4 separate chambers

- <u>Right Atrium</u> receives <u>deoxygenated</u> blood from the body and head and pumps it into the right ventricle
- Right Ventricle pumps deoxygenated blood to the lungs
- <u>Left Atrium</u> receives <u>oxygenated</u> blood from the lungs and pumps it to the left ventricle
- <u>Left Ventricle</u> pumps <u>oxygenated</u> blood to the body

## Parts of the Heart:

Superior vena cava: carries deoxygenated blood from the head to the right atrium

Inferior vena cava: carries deoxygenated blood from the body to the right atrium

Right Atrium:pumps blood to the right ventricle (thin wall - WHY?)

Right Atrioventricular (AV) Valveseparates the right atrium and ventricle

- i. Prevents blood from flowing back into the atrium
- ii. Also referred to as thetricuspid valve.

Right Ventricle:pumps blood to the lungs (thick muscle wall - WHY?)

Pulmonary artery: carries blood from the right ventricle to the lungs

Semilunar valves: prevent blood from flowing back into the ventricles from the arteries

Septum: thick muscle that separates the left and right sides of the heart

Pulmonary veins: carry oxygenated blood from the lungs to the left atrium

<u>Left atrium</u>: receive blood from the lungs and pumps it to the left ventricle (thin muscle wall - WHY?)

<u>Left Atrioventricular (AV) valve</u>Prevents blood from flowing back into the atrium

i. Also referred to as thebicuspid valve

<u>Left ventricle</u>: receives blood from the left atrium and pumps it to the body through the aorta (thick muscle wall)

Aorta: carries oxygenated blood from the left ventricle to the body

i. branches off into smaller arteries that carry blood to different places in the body

Chordae Tendinae: connective tissue that supports the AV valves

Coronary arteries: supply the cardiac (heart) muscle with oxygen and nutrients

 $\underline{<} http://www.sumanasinc.com/webcontent/animations/content/human\_heart.html>$ 

