

Be still my beating heart....

You couldn't survive without it....

Notes on the circulatory system.

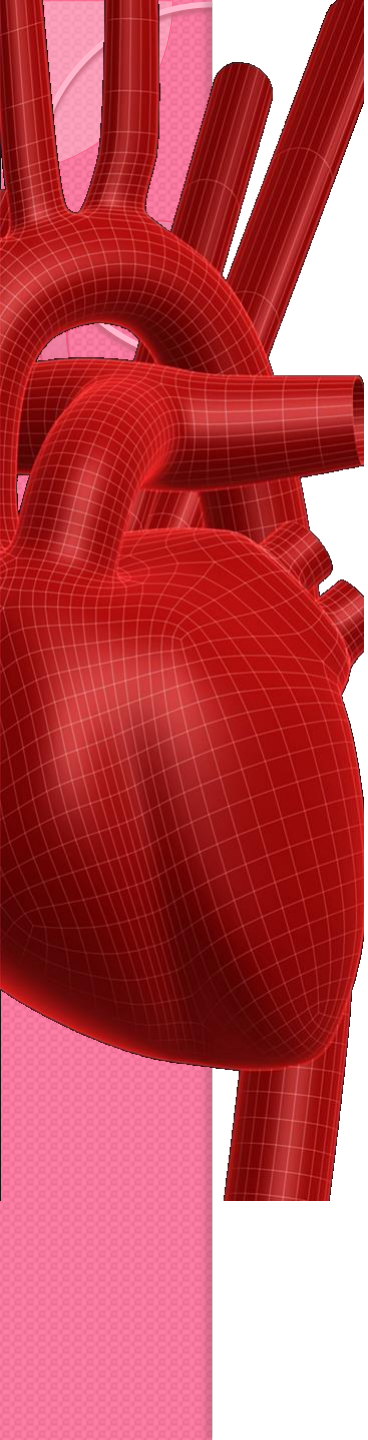


Transportation System

- The primary function of the circulatory system is transportation of materials throughout the body.
 - It transports:
 - Oxygen (O_2)
 - Waste – CO_2
 - Nutrients – Glucose
 - Disease fighting cells – White Blood Cells



MAIN ORGANS



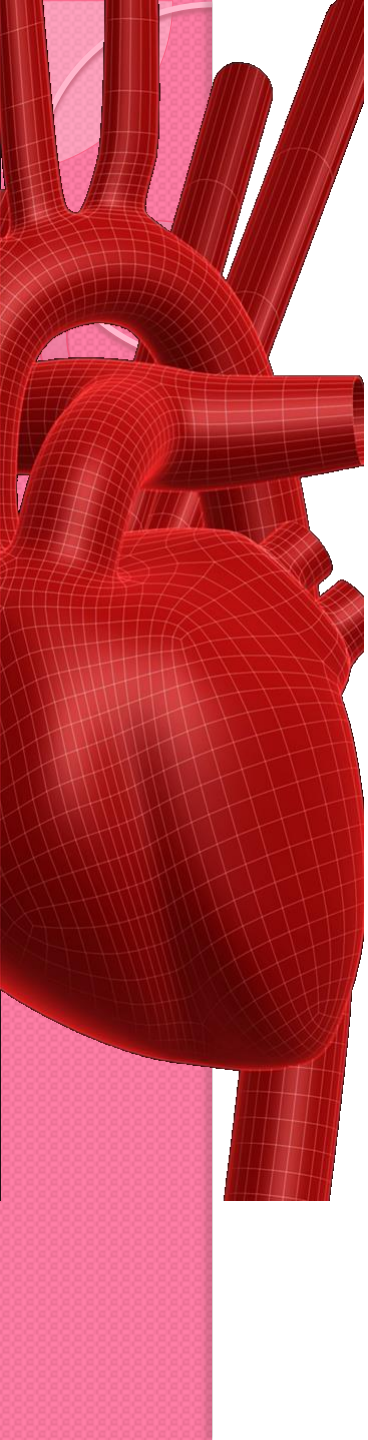
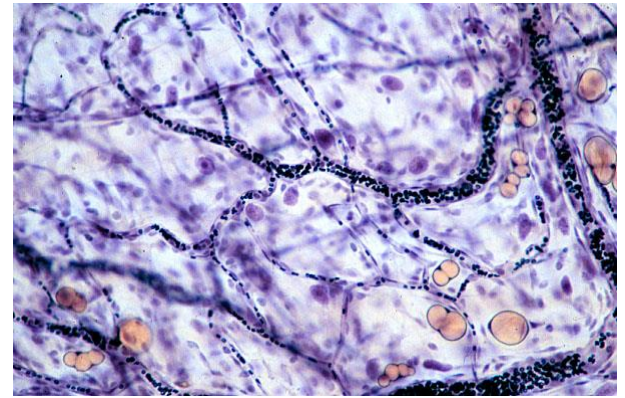
Blood Vessels

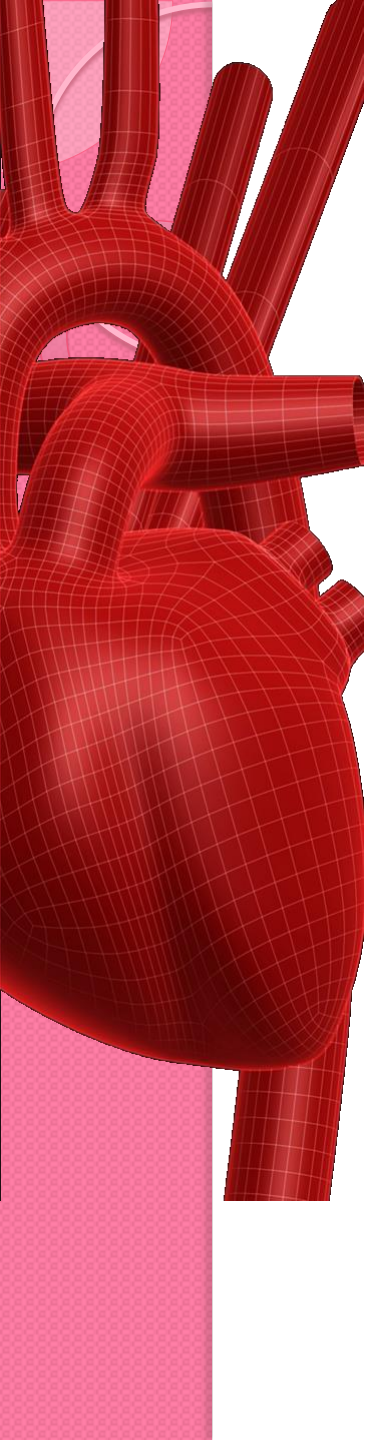
- **Veins**
 - Carry blood to heart from lungs to rest of body
 - Oxygenated Blood
- **Arteries**
 - Carry blood to heart from rest of body to lungs.
 - Deoxygenated Blood
- **Capillaries**

Blood Vessels

- Capillaries

- Gas exchange happens here
- The red blood cells inside the capillary release their oxygen which passes through the wall and into the surrounding tissue.
- The tissue releases its waste products, like carbon dioxide, which passes through the wall and into the red blood cells.



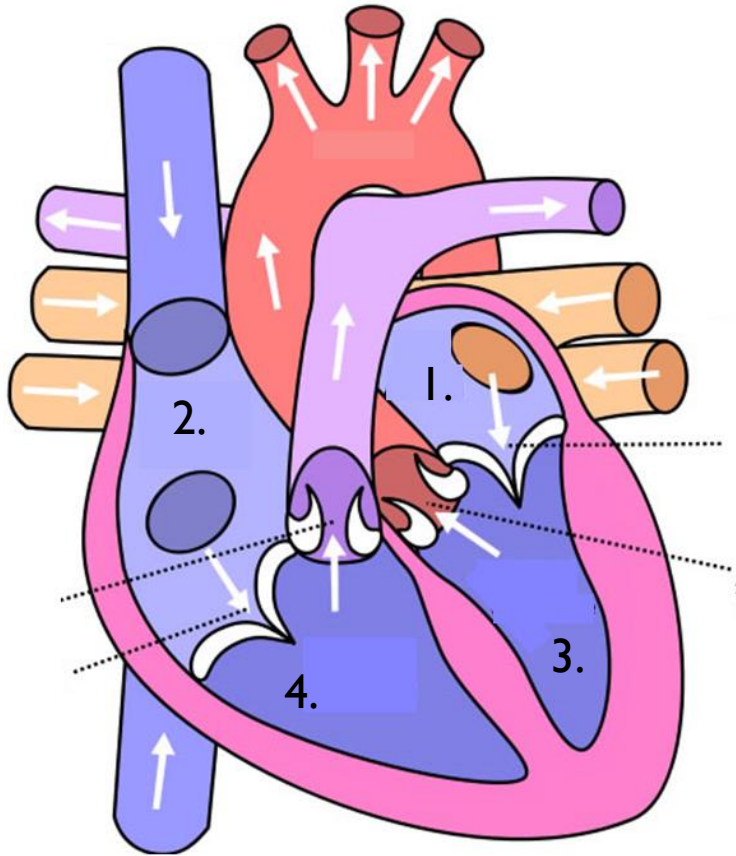
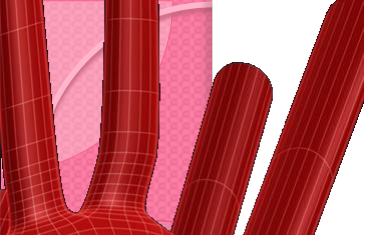


Heart

- The heart is the main organ in the circulatory system.
- The heart is a two pump organ
- The blood enters the heart twice: once from the body, needing oxygen, and once from the lungs where it becomes oxygenated.



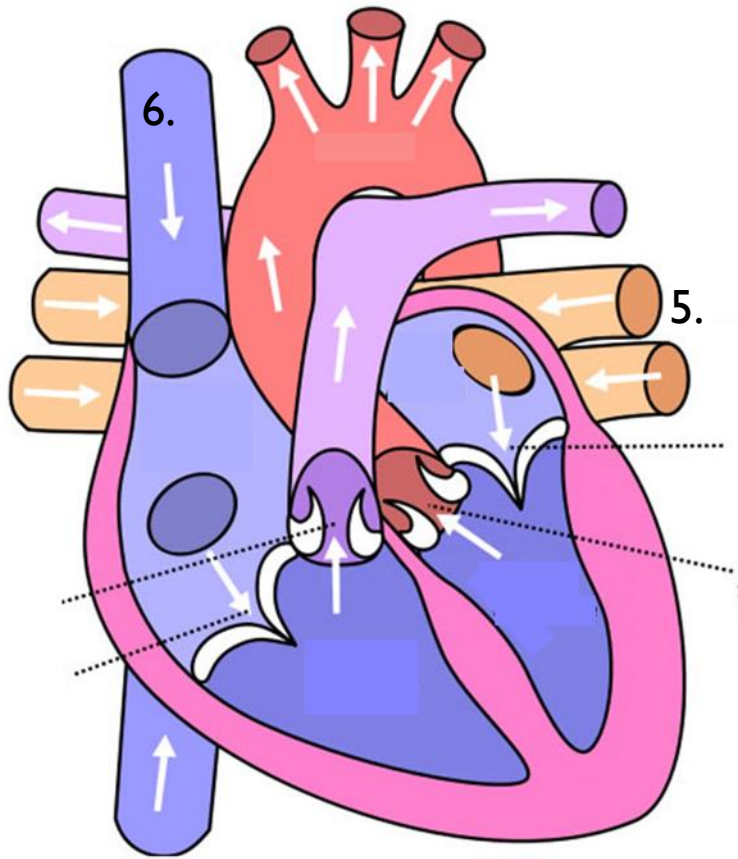
HEART PARTS



- There are four chambers in the heart:

1. left atrium
2. right atrium,
3. left ventricle
4. right ventricle.

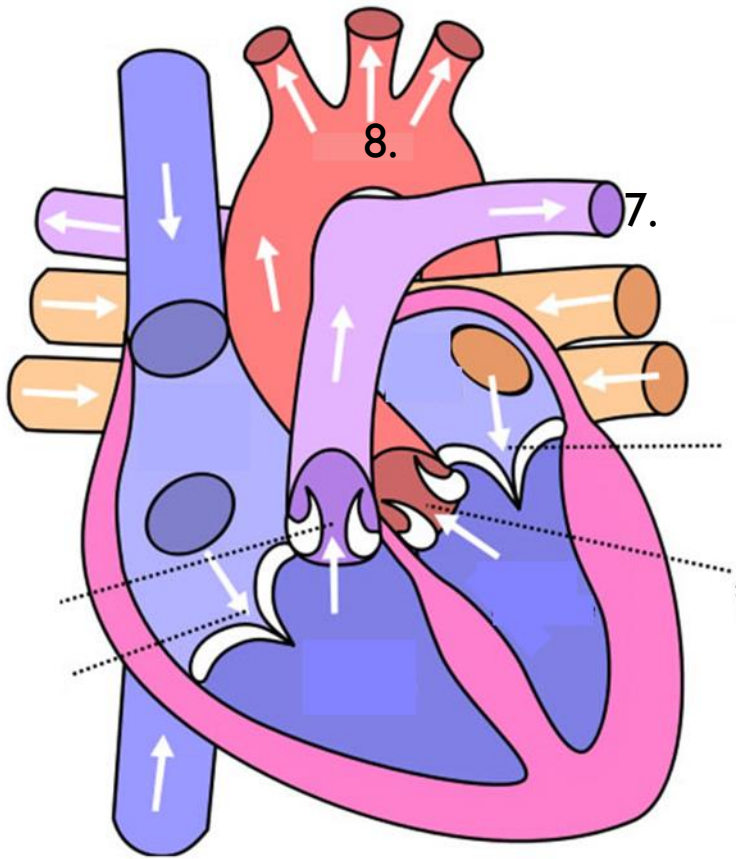
2 Ways in



5. Pulmonary Vein –
brings in oxygenated
blood from lungs

6. Superior Vena Cava –
brings in deoxygenated
blood from the body.

2 ways out



7. Pulmonary Artery— sends deoxygenated blood from the body to the lungs

8. Aorta— sends oxygenated blood from lungs to the body