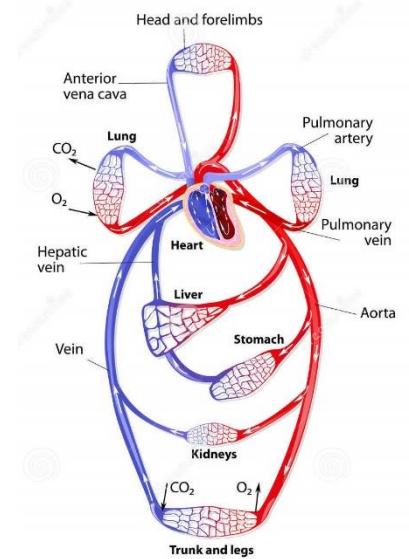


- The largest artery is the aorta. It carries oxygenated blood out of the heart.
- Capillaries
 - Capillaries are tiny vessels where the arteries & veins begin/end.
 - They are only large enough for 1 blood cell at a time.
 - The actual exchange of oxygen for waste occurs in the capillaries.
 - Most cells in the body are in contact with a capillary.
- Veins
 - Veins carry blood back to the heart.
 - The largest veins are the cranial & caudal vena cava



E. The Process

- The vena cava veins carry oxygen-poor blood back to the heart.
- The heart pumps that blood to the lungs through the pulmonary artery.
- The oxygenated blood is carried back to the heart through the pulmonary vein.
- The blood is pumped to the body through the aorta.

F. The Blood

- Blood is made of cells suspended in a special fluid called plasma.
- Most cells in the blood are red blood cells.
- Red blood cells contain hemoglobin.
 - Hemoglobin gives blood its red color.
 - It carries the oxygen & carbon dioxide in the blood.
- The blood also contains white blood cells.
 - The job of white blood cells is to fight infection & foreign objects in the body.
- Blood also contains platelets.
 - Platelets are small cells that help with blood clotting.
- Blood transports nutrients & oxygen to the body cells, collects wastes from the cells, & carries the wastes to the organs of excretion.

G. The Lymphatic System

- The lymphatic system helps return fluid to the heart that has leaked out of blood vessels.
- Lymph vessels are tubes that carry lymph fluid.
- Lymph nodes are filters for lymph fluid.
- Lymph fluid is not pumped by the heart. It is moved by muscular & intestinal activity.

H. The Spleen

- The spleen is a long, narrow organ, purplish in color, situated behind the stomach.
- The spleen:
 - Filters blood
 - Destroys old red blood cells
 - Stores red blood cells
 - Produces some kinds of white blood cells