

Lab 5 Heart and blood vessels

Name _____

Seat number ____

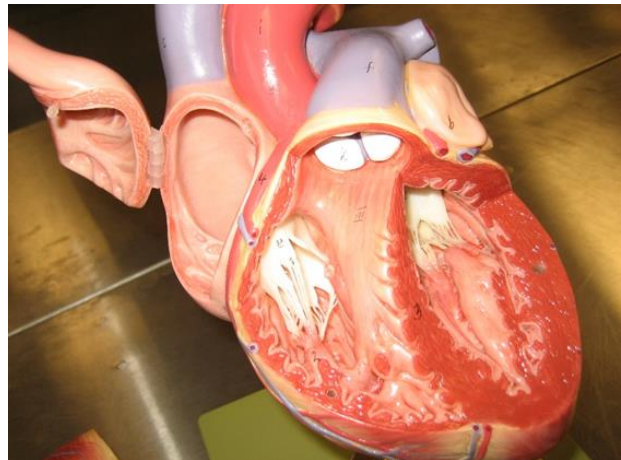
Objectives:

- A. The heart
- B. Blood flow through the heart
- C. Questions

A. The heart

Identify the following on the heart models

1. The four chambers of the heart and the auricles
 - a. Right and left atria
 - b. Right and left ventricles
 - c. Right and left auricles (atrial appendages)
2. The valves
 - a. Right atrioventricular valve (tricuspid valve)
 - b. Left atrioventricular valve (bicuspid valve, mitral valve)
 - c. Pulmonary semilunar valve
 - d. Aortic semilunar valve
3. Coronary blood vessels
 - a. Right coronary artery
 - b. Left anterior descending (LAD) coronary artery
4. Other vessels
 - a. Pulmonary trunk
 - b. Arteries and veins
 - c. Superior and inferior venae cavae
 - d. Aorta and aortic arch



B. Blood flow through the heart

- 1) Determine which of the following heart circulation parts deal with oxygenated blood and which deal with deoxygenated blood
- 2) Using the red/blue colored pencils. Color the letters BLUE if the blood is low in O₂. Color the letters RED if the blood is high in O₂. Color the letters PURPLE if there is a mixture of oxygen concentrations.
- 3) Once you have finished coloring the letters, cut out each rectangle.
- 4) Using a blank sheet of white paper place, *glue* the rectangles in the correct order of blood flow beginning with entrance of deoxygenated blood into the heart.

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pulmonary semilunar valve
pulmonary veins
left ventricle
pulmonary/trunk arteries
left AV valve (bicuspid)
lungs
right atrium
descending aorta
right AV valve (tricuspid)
aortic semilunar valve
superior and inferior vena cava
left atrium
right ventricle
aortic arch

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C. Questions:

- 1) The AV valves separate the _____ from the _____.
- 2) The pulmonary semilunar valve allows blood to flow from the _____ to the _____.
- 3) _____ valves use chordae tendineae to help them close and _____ valves do not.
- 4) Blood coming from the lower extremities must go through the _____ (name a vessel) to enter the inferior vena cava and blood comes from _____ (name a part of the body) to enter the superior vena cava.
- 5) List the blood pathway from the left ventricle back to the right atrium as it flows to the legs.

- 6) What medical emergency might happen if there is plaque in a coronary artery? (Scientific term)

- 7) What medical emergency might happen if there is plaque in a carotid artery or any cerebral artery? (Scientific term)
