

Cardio and blood review honors 2014-2015

- Look at the picture of the conduction system of the heart and be able to label it. Know where the transmission starts and where it goes.
- Know the layers of the heart wall. Which one is made of muscle?
- Be able to label the chambers of the heart. Which ones receive blood? Which ones discharge?

The atria receive and the ventricles pump and discharge.

- Know the names of the valves of the heart and their locations.
- **It would be very wise for you to draw a basic heart with the four chambers valves and main vessels bringing blood into and out of the heart. Then pretend you are a drop of blood and map your route through the heart. Make sure to list the structures you enter and pass along the way. Where are you oxygenated? Deoxygenated?**
- The sinoatrial node is known as the pacemaker of the heart.
- Define tachycardia, bradycardia, fibrillation, angina pectoris, and myocardial infarction.

Tachycardia- A persistent, resting heart rate greater than 100 beats per minute

Bradycardia- Slower than 60 beats per minute

Fibrillation- **fibrillation** is an irregular and often rapid heart rate that commonly **causes** poor blood flow to the body. During atrial **fibrillation**, the heart's two upper chambers (the atria) beat chaotically and irregularly – out of coordination with the two lower chambers (the ventricles) of the heart.

Angina pectoris- A partially blocked vessel spasms-or the heart demand more oxygen than the narrowed vessel can supply. When the demand for oxygen exceeds the supply, ischemia and chest pain occur. With rest, the heart rate skies and adequate circulation resumes, chest pain stops and permanent myocardial damage os avoided.

Myocardial infarction-Blood flow is completely blocked by a blood clot or fatty deposit, resulting in the death of myocardial cells in the area fed by the artery, once the cells diem they produce a area of necrosis.

- Look at the lub dup heart sound. What creates the sounds and how are they different?
- The lub dub sounds result from the closing of the heart valves. The LUB is faster and louder than the dub; reflecting the AV valve closure. The dub reflects the semilunar valves closing.
- Define HR, CO, and SV

CO(cardiac output)- the amount of blood pumped by the heart in one minute

HR(heart rate)- the number of times the heart beats in one minute

SV(stroke volume)- The amount of blood ejected by the heart with each beat