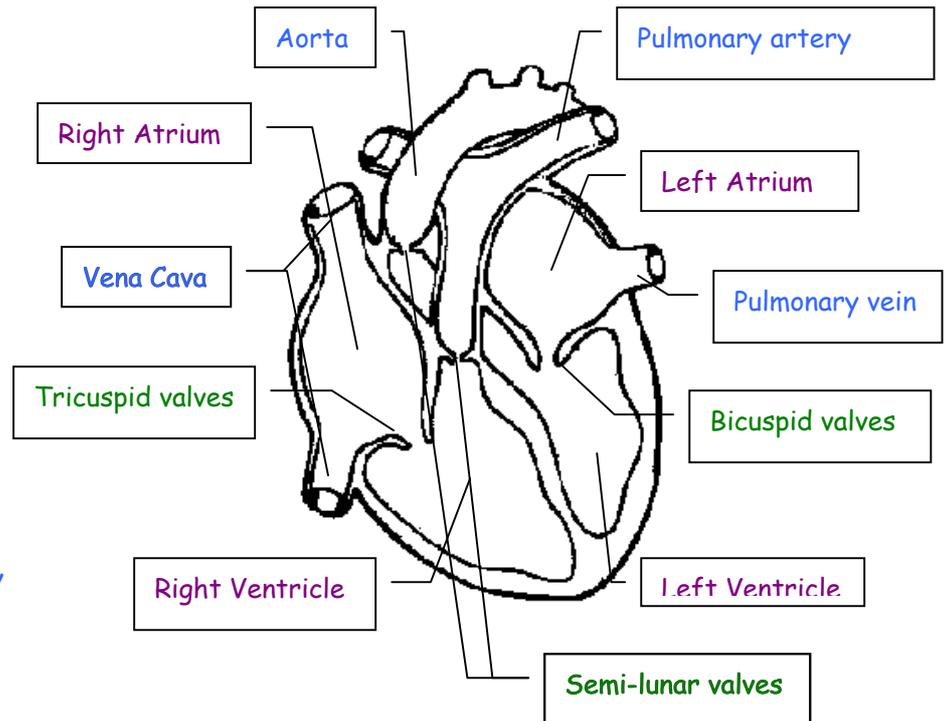


HEART - STRUCTURE

- 4 sections
 - ↳ Left atrium
 - ↳ Right atrium
 - ↳ Left ventricle
 - ↳ Right ventricle

- 4 main blood routes into and out of the heart

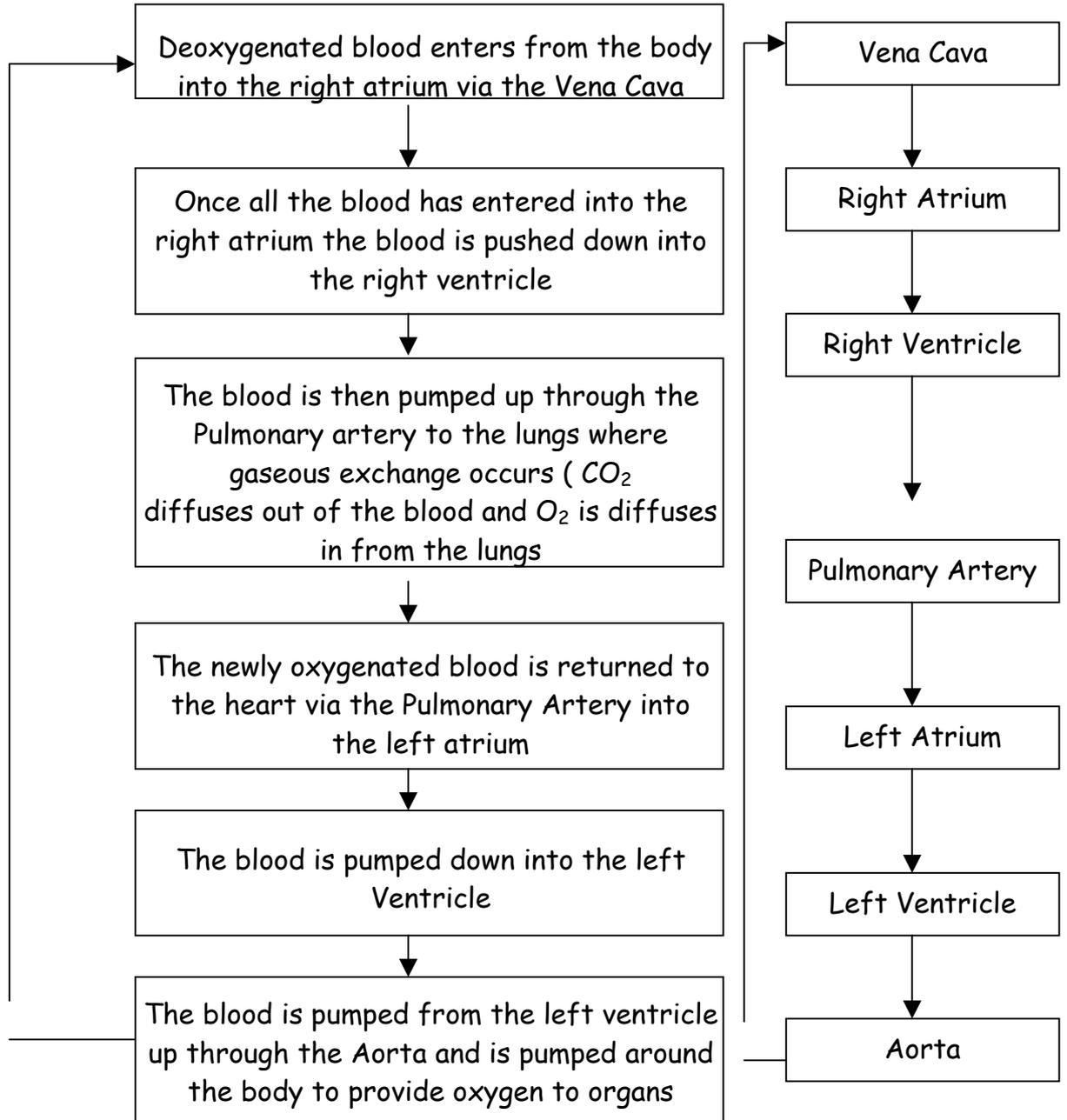
- ↳ Vena Cava
- ↳ Pulmonary artery
- ↳ Aorta
- ↳ Pulmonary vein



Left side of the heart has more muscle than the right side because the blood from the **right hand side** just has to go to the **lungs** WHEREAS the blood from the **left hand side** has to be pumped **all around the body**.

- 2 lot's of valves - there are each set on valves on both sides of the heart
 - ↳ Atrioventricular valves - between the atrium and the ventricles
 - ™ Tricuspid valve on the right
 - ™ Bicuspid (mitral) valve on the left
 - ↳ Semi-lunar valves - in the pulmonary artery and the aorta

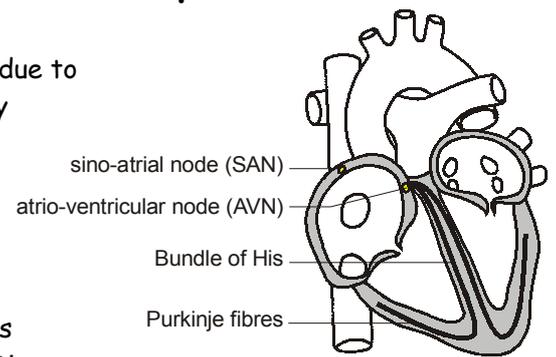
CARDIAC CYCLE



Miss G's input (I hope you don't mind Claire and Matilda)

Pressure changes in the heart and how the valves open and close

The only way blood moves from the atrium and into the ventricles, is due to pressure changes. When the atriums are relaxed and at diastole, they fill with blood causing the pressure to increase. The atrium will then receive impulses (from the SA node) to contract (systole) and the pressure increases even more, and is higher than the pressure in the ventricles, causing the atrioventricular valves (AV valves) to open, forcing blood to enter the ventricles. As blood fills the ventricles, the pressure increases, and become higher in the ventricles than in the atrium. This causes the AV valves to close. At this same time, the AV node (stimulated by the impulses across the top two atria) will send impulses over the ventricles (bundle of His and purkinji fibres), causing the ventricles to contract. Whilst the ventricles have contracted, the atriums have been relaxed and have filled with blood. Once the ventricles have contracted, both the atrium and ventricles will relax and be at diastole, and will wait for another impulse to reach the SA node.



The noise of the heart beat ('lub dub'), is only due the AV valves opening and closing. The 'lub' noise is due the AV valves opening and the 'dub' occurs when the valves close

