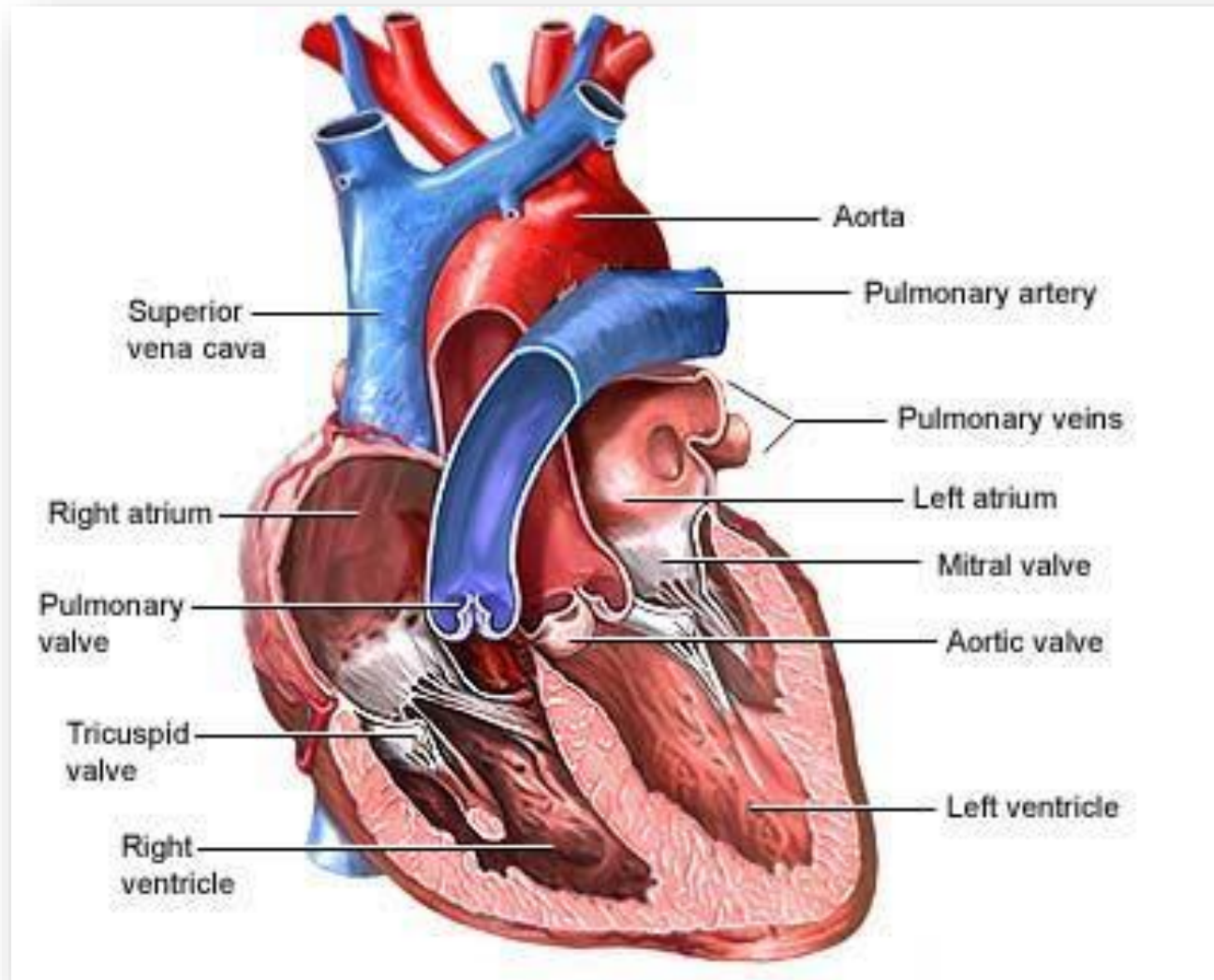


THE HEART



THE VALVES

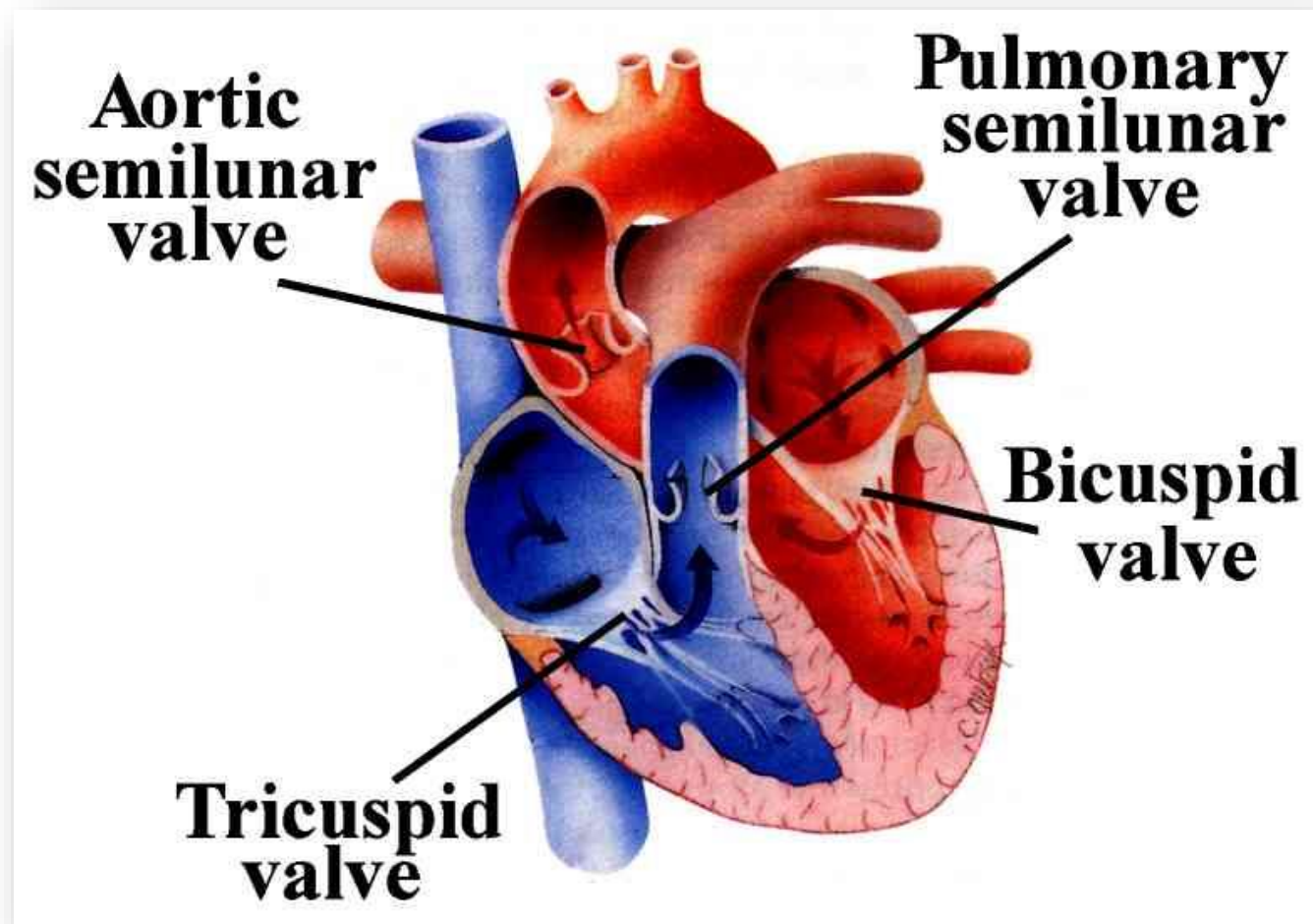
The **tricuspid valve** separates the right atrium from the right ventricle.

The **mitral (bicuspid) valve** separates the left atrium from the left ventricle.

The **pulmonary (semi-lunar) valve** separates the right ventricle from the pulmonary artery.

The **aortic (semi-lunar) valve** separates the left ventricle from the aorta.

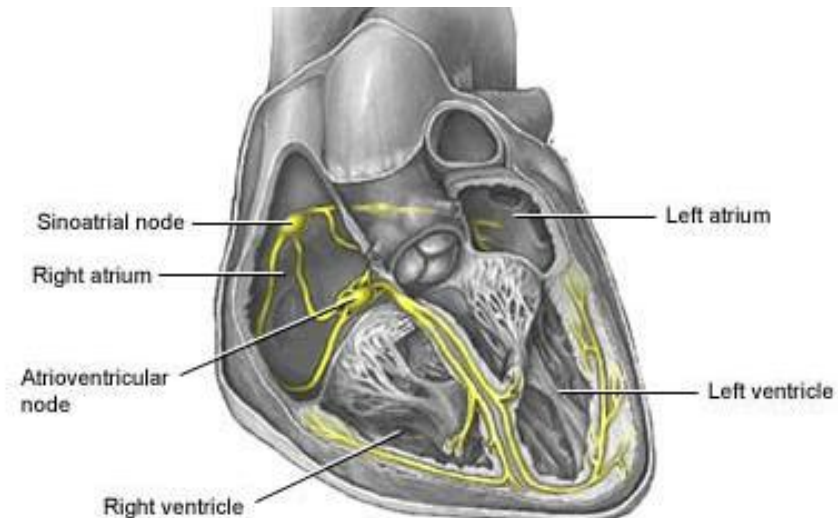
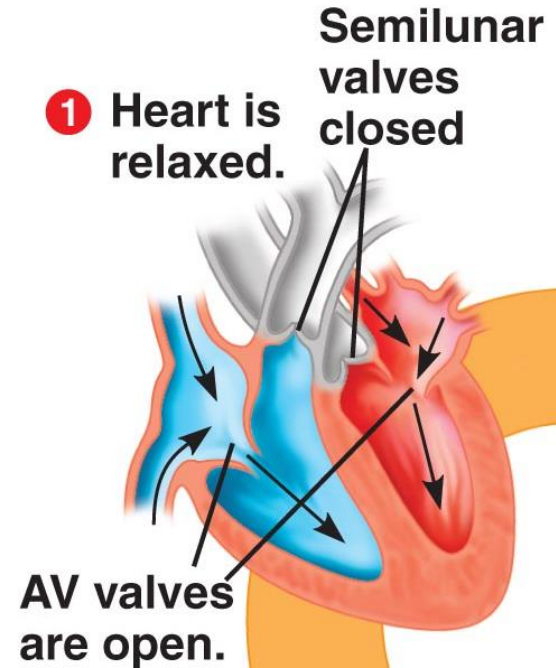
THE VALVES



Cardiac Cycle Control

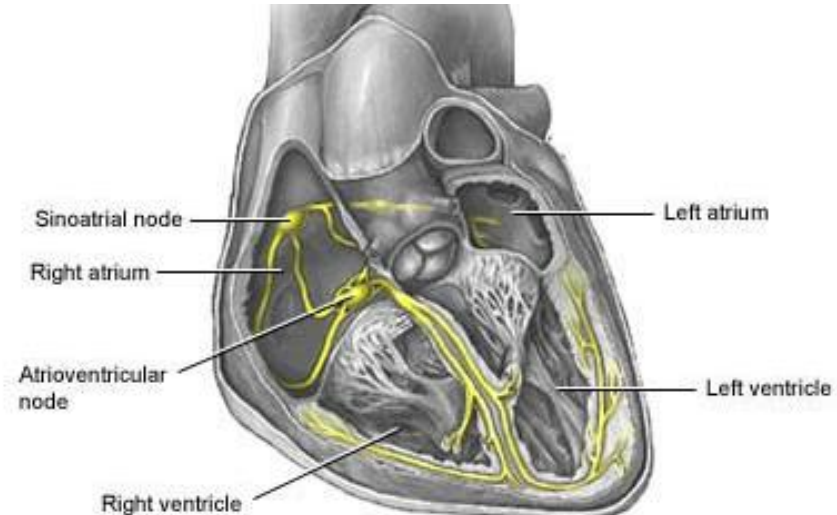
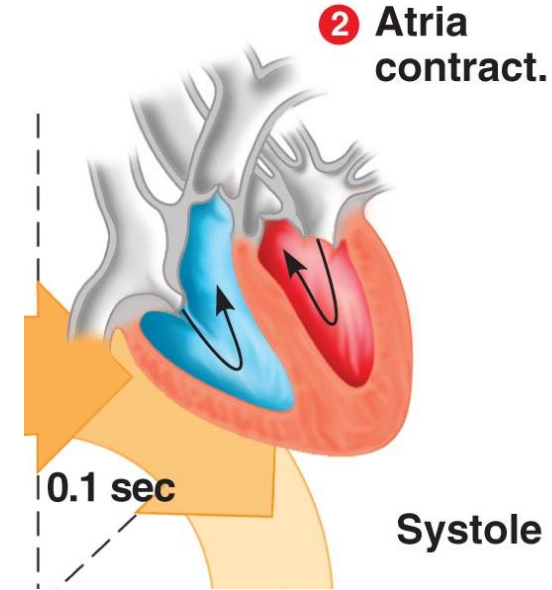
The Cardiac Cycle

- A bundle of specialized muscle tissue, called the **sinoatrial (SA) node**, stimulates the muscle cells to contract and relax **rhythmically**.
- Also referred to as the **pacemaker**, because it sets the pace for cardiac activity
- Located in the wall of the **right atrium**.



The Cardiac Cycle

- The **SA node** generates an **electrical signal** that spreads over the two atria and makes them contract simultaneously.
- As the atria contract, the signal reaches another node, called the **atrioventricular (AV) node**.



The Cardiac Cycle

- The **AV node** transmits the electrical signal through a bundle of specialized fibers, called **purkinje fibres**, that run down the septum and up around the ventricles
- This initiates the almost simultaneous contraction of all cells of the **right and left ventricles**.

