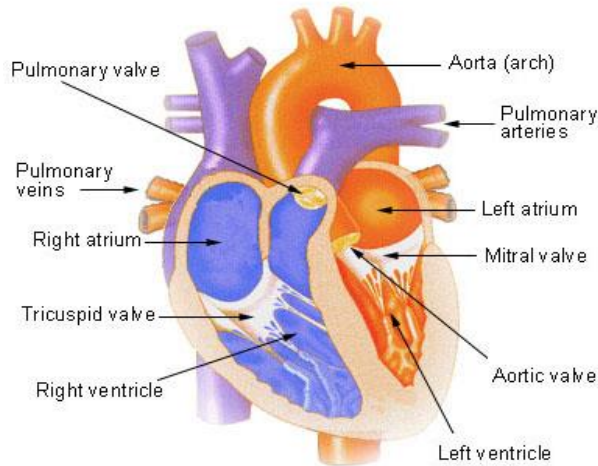
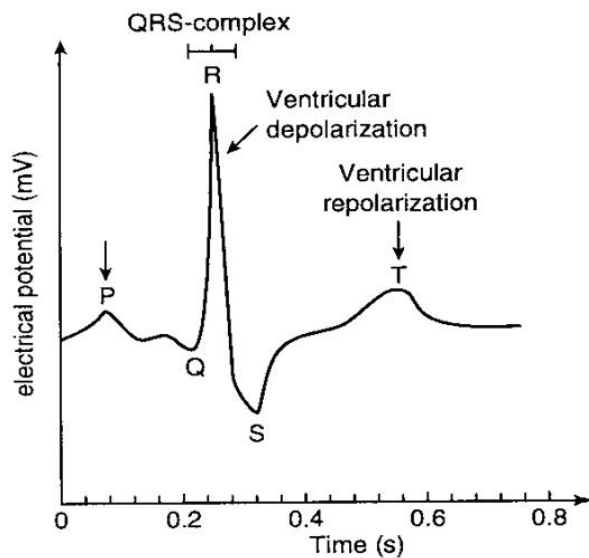
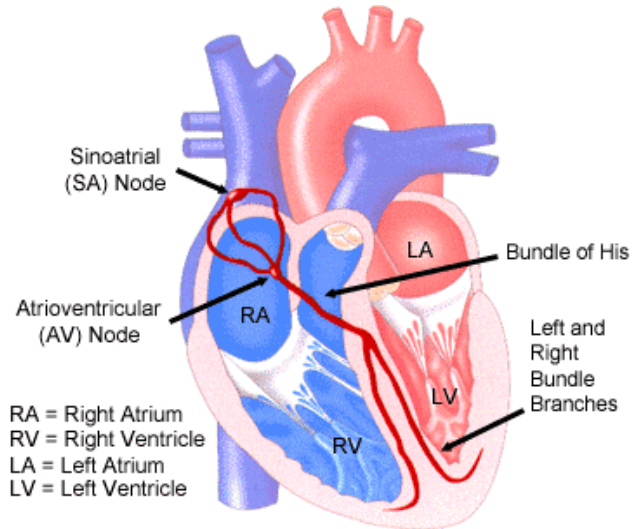


Cardiovascular System

Internal View of the Heart



Conduction system of the heart



P wave- the electrical activity associated with contraction of the cardiac atria
PR interval – delay between atrial depolarization and ventricular depolarization
QRS complex - indicates the onset of contraction of the ventricles
ST segment – period between ventricular depolarization and the beginning of ventricular repolarization
T wave – ventricular repolarization. Ventricles return to a resting state



Diastole – the AV valves (mitral valve & tricuspid valve) are open & the ventricles are relaxed. Blood rushes through the atria into the ventricles. Flow completes when atria contract raising the left ventricular pressure.

Systole – Ventricles contract, increasing ventricular pressure. This causes the AV valves to shut producing the first heart sound (**S1**). The aortic valve and the pulmonic valve open and blood is ejected through these valves. When the ventricles relax, the ventricular pressure falls and the two semilunar valves shut producing the 2nd heart sound (**S2**).

Special terms:

Arrhythmias – abnormal heart rhythms (dysrhythmias)

Fibrillation – rapid, random, ineffectual and irregular contractions of the heart

Endocarditis – inflammation of the lining of the heart caused by bacteria

Mitral valve prolapse – improper closure of the mitral valve when the heart is pumping blood

Angina pectoris – chest pain

Auscultation – listening with a stethoscope

Infarction – area of dead tissue

Palpitations – uncomfortable sensations in the chest related to cardiac arrhythmias

Aneurysm – local widening of artery

