Control of Heart Contractions

What makes the heart muscle contract?

Control of heart muscle contractions is found within a group of conducting cells located at the opening of the superior vena cava into the right atrium.

These cells are known as the ___________________(SA) node or “________________.”

The SA node sends out an ____________ impulse that begins and regulates the ____________. The impulse spreads out over the-__________, making them contract.

This causes blood to flow downward from the upper _______ chamber to the ______________ openings. The electrical impulse eventually reaches the ______________ (AV) node, which is another conducting cell group located between the ____________ and ______________.

From the AV node, the electrical impulse is carried to conducting fibers in the ___________. These conducting fibers are known as the __________________ bundle or the bundle of His. It divides into a right and left branch: Each branch then subdivides into a fine network of branches spreading throughout the ventricles called the ______________ ______________. The electrical impulse shoots along the ______________ fibers to the ventricles causing them to contract.

Electrocardiogram (EKG of ECG)

Device used to record the electrical activity of the heart.

Systole= ____________ phase

Diastole= ____________ phase

A baseline of EKG is a flat line when there is no current flowing in the _________.

By observing the size, shape and location of each wave, the doctor can tell the hearts rate, rhythm and overall health.

Major Blood Circuits:

Cardiopulmonary Circulation-

Systemic Circulation-