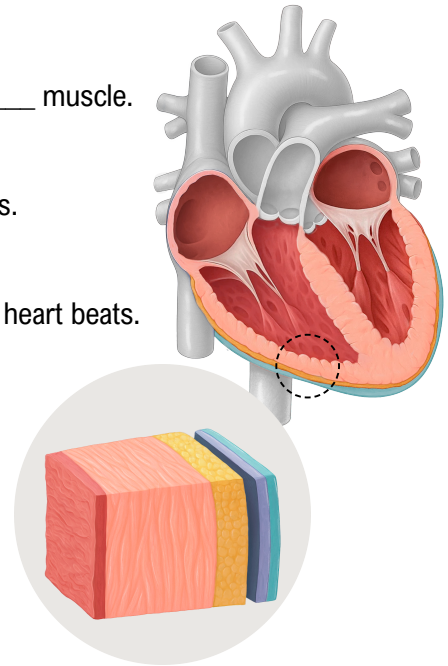


CONCEPT: CARDIOVASCULAR SYSTEM: HEART

Introduction to Heart Structure

- ◆ **Heart:** Central organ of the cardiovascular system primarily made up of _____ muscle.
- ◆ The walls of the heart are made up of ____ layers.
 - **_____cardium:** Lines heart chambers, reduces inner friction as blood flows.
 - **_____cardium:** Thick muscular layer, contraction produces pumping.
 - **_____cardium:** Double-walled fluid-filled sac, reduces outer friction as the heart beats.
- ◆ The heart has ____ chambers/cavities:
 - **Atria:** 2 Upper chambers _____ blood.
 - **Ventricles:** 2 Lower chambers _____ blood.



EXAMPLE

Use the words in the word-bank to fill in the blanks and complete the sentences.

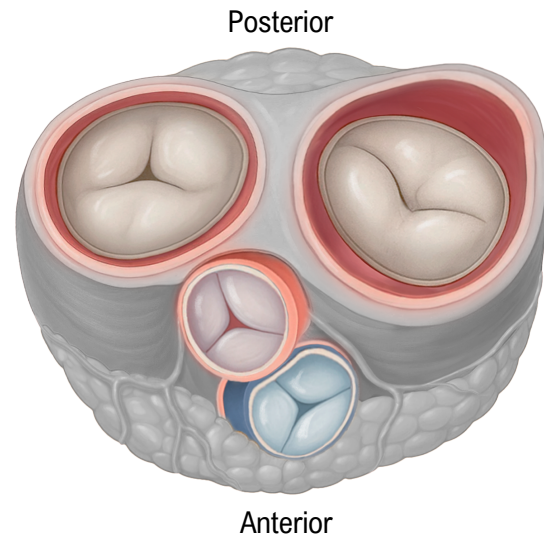
Word-Bank: Pump Receive Myo Exo Endo Peri

The heart is a muscular pump and its walls are made up of 3 layers. The _____cardium provides protection to the _____cardium, the insides of which are lined by _____cardium. The upper chambers of the heart are for _____ing blood while the lower chambers of the heart are for _____ing blood.

CONCEPT: CARDIOVASCULAR SYSTEM: HEART

Heart Valves

- ◆ Situated at the entrances & exits to the _____ and control the _____ of blood flow.
- ◆ **Atrioventricular Valves:** Allow blood received in the atria to _____ the ventricles.
 - **Tricuspid Valve:** From body.
 - **Bicuspid (Mitral) Valve:** From lungs.
- ◆ **Semilunar Valves:** Allow blood to flow _____ of the ventricles.
 - **Aortic Valve:** To body.
 - **Pulmonary Valve:** To lungs.



EXAMPLE

Identify each of the following statements as true (T) or false (F).

a) ____	The tricuspid valve gets its name from its three “leaves” (cusps).
b) ____	Semilunar valves allow blood in the atria to enter the ventricles.
c) ____	Aortic valve is a semilunar valve that allows blood to flow out of the atria.
d) ____	Atrioventricular valves connect atria to ventricles and are posterior to the semilunar valves.

PRACTICE

Which of the following is not true about a heart chamber or valve?

- a) Endocardium lines the inner walls of heart chambers and reduces friction as blood flows through the chambers.
- b) Heart valves are situated at the entrances & exits of the ventricle and ensure that blood flows in one direction only.
- c) Atria are the upper chambers that receive blood while the ventricles pump out blood when they contract.
- d) Tricuspid valve is an atrioventricular valve and allows blood from the ventricles to enter the atria.