

Topic/Objectives: 12-1 Heart Structure; Describe the structure and function of the heart	Name:
	Date:
	Period:

Essential Question: How does the heart's structure aid in efficient delivery of blood to the body?

Questions:	Notes: <p>The cardiovascular system consists of the heart, and vessels, arteries, _____ and veins.</p> <p>A functional cardiovascular system is vital for supplying oxygen and nutrients to tissues and removing _____ from them.</p> <p>The heart is a hollow, cone-shaped muscular pump within the _____ cavity.</p> <p>Size and location of the heart</p> <ul style="list-style-type: none"> ◦ The average adult heart is 14 cm long and 9 cm wide. ◦ The heart lies in the _____ under the sternum; its apex extends to the fifth intercostal space.
	<p>Coverings of the Heart</p> <ul style="list-style-type: none"> ◦ The _____ encloses the heart ◦ It is made of two layers: the outer, tough connective tissue fibrous pericardium surrounding a more delicate visceral pericardium (_____) that surrounds the heart. ◦ At the base of the heart, the _____ folds back to become the parietal pericardium that lines the fibrous pericardium. ◦ Between the parietal and visceral pericardia is a potential space (<u>pericardial</u> _____) filled with serous fluid. <p>Skeleton of the Heart</p> <ul style="list-style-type: none"> ◦ Rings of dense _____ tissue surround the pulmonary trunk and aorta to provide attachments for the heart valves and fibers and prevent dilating of tissue in this area.
	<p>The wall of the heart is composed of three distinct layers:</p> <ul style="list-style-type: none"> ◦ The outermost layer (_____) is made up of connective tissue and epithelium, and houses blood and lymph capillaries along the coronary arteries. It is the same as the visceral pericardium. ◦ The middle layer (_____) is the thickest and consists of cardiac muscle. ◦ The inner (_____) is smooth and is made up of connective tissue and epithelium, is continuous with the endothelium of major vessels joining the heart, and contains the _____.
	<p>The heart has four chambers: two _____ receive blood returning to the heart and two thick-musclcd _____ pump blood to the body.</p> <ul style="list-style-type: none"> ◦ The right atrium receives _____ - _____ blood from the superior and inferior vena cava. ◦ The left atrium receives _____ blood from the four pulmonary veins. ◦ The right ventricle has a _____ wall than does the left ventricle because it must pump blood only as far as the lungs, compared to the left ventricle pumping to the entire body. <p>The _____ divides the atrium and ventricles on each side.</p>

