

Name: \_\_\_\_\_ KEY \_\_\_\_\_  
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**Heart and Circulatory System Review Worksheet**

**Part A:** Define the following terms in your own word. Be clear and concise!

arterioles	<i>small branches of arteries</i>
arterial duct	<i>connects pulmonary artery to aorta in fetal system to shuttle blood from pulmonary circuit</i>
atria	<i>top chambers of heart, collect blood from body or lungs, pump to ventricles</i>
atrioventricular node	<i>AV node: causes ventricles to contract after receiving signal from S.A node</i>
capillaries	<i>microscopic blood vessels with walls one cell wall thick, across which gas exchange occurs</i>
cholesterol	<i>lipid necessary for normal cell function but can build up in arteries causing atherosclerosis</i>
diastole	<i>relaxation of heart muscle</i>
diastolic blood pressure	<i>pressure of blood in an artery when ventricles of heart in diastole</i>
heart attack	<i>myocardial infarction: blood supply to part of heart muscle cut off (usually due to clogged coronary artery)</i>
hypertension	<i>high blood pressure. Prevalent disease in industrialized nations, associated with atherosclerosis</i>
hypotension	<i>low blood pressure</i>
lacteal	<i>inside villi, this is where fats enter the lymphatic system</i>
lymph	<i>tissue fluid that has entered the lymphatic system</i>
lymph nodes	<i>specialized regions along lymph veins where lymph filtered, white blood cells made</i>
lymphocytes	<i>type of white blood cell produced in lymphatic system that makes antibodies</i>
oval opening	<i>in fetus, this opening connects the atria and diverts blood from pulmonary circuit.</i>
pacemaker node	<i>S.A node</i>
placenta	<i>membranes and blood vessels across which mother and fetus exchange nutrients</i>
pulmonary circulation	<i>circulation of blood through lungs</i>
septum	<i>divides the two halves of the heart</i>
sinoatrial node	<i>pacemaker node, special nodal tissue that initiates contraction of atria every 0.85 seconds</i>
stroke	<i>part of brain dies due to oxygen starvation because of clogged artery</i>
systemic circulation	<i>circulation of blood from left ventricle through tissues of body and back to right atrium</i>
systole	<i>contraction of heart muscle</i>
systolic blood pressure	<i>pressure of blood in an artery when ventricles contract</i>
thoracic duct	<i>major trunk of lymphatic system, drains lower portions of body</i>
umbilical arteries	<i>carry blood from fetal heart to tissues and placenta</i>
venous duct	<i>connects umbilical vein to vena cava</i>
ventricles	<i>larger lower 2 chambers of heart that pump blood to lungs and rest of body</i>
venules	<i>small branches of veins that connect to capillary beds</i>
formed elements	<i>solid part of blood consisting of erythrocytes, thrombocytes, leukocytes</i>
clotting	<i>the process of sealing up injuries to CV system, requires plasma proteins and platelets</i>
platelets	<i>thrombocytes, formed elements that function in blood clotting</i>
fibrinogen	<i>inactive form of fibrin, a plasma protein needed for clotting</i>
thrombin	<i>enzyme that activates fibrinogen to fibrin in blood clotting</i>
fibrin	<i>protein fragments that join end to end to form framework of blood clots</i>
antigens	<i>anything (esp. proteins) that can be recognized by antibodies</i>
antibodies	<i>immunoglobulins derived from lymphocytes that specifically bind to invading pathogens</i>
phagocytosis	<i>cell eating: endocytosis of large particles. Many leukocytes (e.g. neutrophils, monocytes) are phagocytes</i>
macrophages	<i>leukocytes formed from monocytes that act as scavengers for bacteria and debris</i>
agglutination	<i>clumping of red blood cells due to antibodies binding antigens on the red blood cells</i>
Rh factor	<i>red blood cell antigen responsible for fetal erythroblastosis</i>
fetal erythroblastosis	<i>condition in which antibodies from a Rh- mother attack the RBC of a Rh+ fetus</i>