CARDIOVASCULAR REVIEW GUIDE Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Blood**

1. The liquid part of blood is called the \_\_\_\_\_\_\_\_\_\_ and the solid part is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The liquid part of blood is mostly made up of \_\_\_\_\_\_\_\_\_\_\_\_.
3. What is found in the liquid part of the blood? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. What makes up the solid part of blood? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Red blood cells are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ White blood cells are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. \_\_\_\_\_\_\_\_\_ is the percentage of RBCs in a volume of blood.
7. Shortly after being formed, RBCs loose their \_\_\_\_\_\_\_\_\_\_\_\_ and have a biconcave shape.
8. This protein is found in RBCs and binds with oxygen.
9. The making of blood cells is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. The ability of WBCs to leave blood vessels to go to infected tissue is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
11. The pH of blood is \_\_\_\_\_\_\_\_\_.
12. What is the main function of the RBCs. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. What is the main function of the WBCs. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. Thrombocytes are also called \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and help in the \_\_\_\_\_\_\_\_\_ of blood when injured.
15. This is the stem cell for all blood cells. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Blood Type**

1. What are the four blood types in humans? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. These are markers found on the RBC that indicate blood type. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Where do you get your blood type from? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. This marker indicates if you are positive or negative in your blood type. \_\_\_\_\_\_\_\_\_
5. Which blood type is the universal donor? (Include +-) \_\_\_\_\_\_\_\_\_
6. Which blood type is the universal recipient? (Include +-) \_\_\_\_\_\_\_
7. These proteins are made by leukocytes (WBCs) to protect the body against pathogens and the wrong blood type. \_\_\_\_\_\_\_\_\_\_\_\_\_
8. If you have type A+ blood which antigens do you have? \_\_\_\_\_\_\_\_ Which antibodies? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. If the wrong blood is given to someone, it will clump which is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. What antigens does 0- blood have? \_\_\_\_\_\_\_\_\_\_\_ What antibodies? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. What antigens does AB+ blood have?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ What antibodies? \_\_\_\_\_\_\_\_\_\_\_\_
12. A blood clot in a blood vessel is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. If the blood clot begins to move it is now called an \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
13. This genetic blood disorder produces crescent shaped RBCs. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. This genetic blood disorder is more prevalent in men and causes uncontrolled bleeding. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Heart**

1. How many chambers are in a human heart? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. The receiving or upper chambers are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_, the pumping or lower chambers are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Deoxygenated blood is found on the \_\_\_\_\_\_\_ side of the heart. Oxygenated blood is found on the \_\_\_\_\_\_\_\_\_\_\_\_ side of the heart.
4. These large blood vessels bring blood from the body to the heart. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. This is the largest artery in your body. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lines the inside of the four chambers of the heart and reduces \_\_\_\_\_\_\_\_\_\_\_. The muscular part of the heart (contract/pumps) is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is like a shrink wrap around the heart for protection.
7. This large sac filled with fluid surrounds the heart. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. These structures control the flow of blood through the heart. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. The valves between the right atrium and right ventricle is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_, between the right ventricle and the pulmonary trunk is the \_\_\_\_\_\_\_\_\_\_\_\_\_. The valve between the left atrium and left ventricle is the \_\_\_\_\_\_\_\_\_\_\_ and the valve between the left ventricle and aorta is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. When taking blood pressure, the top number is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which is the amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ exerted when the ventricles \_\_\_\_\_\_\_\_\_\_\_\_\_. The bottom number is the \_\_\_\_\_\_\_\_\_\_\_, which is when the ventricle \_\_\_\_\_\_\_\_\_\_\_\_\_.
11. In the right atrium a group of cell make up the pacemaker of the heart. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. When the ventricles contract, the \_\_\_\_\_\_\_ valves open and the \_\_\_\_\_\_\_\_ valve close. When the ventricles relaxes, the \_\_\_\_\_\_\_\_\_\_ open and the \_\_\_\_\_\_\_\_\_\_\_ valves close.
13. What holds the tricuspid and bicuspid in place when the ventricles contract? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Blood Vessels**

1. These blood vessels have only one layer of epithelial cells which allows for easy exchange between the blood and cells of the body. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. The three layers of tissue found in veins and arteries are the: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. These blood vessels have a thick tunica media, small lumen, elastic and under great pressure. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. These blood vessels have a larger lumen, thinner tunica media and more stretchable. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. These are the only veins that contain oxygenated blood. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. A rapid heartbeat is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. These blood vessels provide nutrients and take away wastes to the heart muscle. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Blood Flow**

The superior and inferior \_\_\_\_\_\_\_\_\_\_\_\_ into the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Blood passes through the \_\_\_\_\_\_\_\_\_\_\_\_\_ valve into the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The ventricle contracts, and blood flows past the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ valve in to the pulmonary trunk and then into the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. There it will pick up \_\_\_\_\_\_\_\_ and drop off \_\_\_\_\_\_\_\_\_\_\_\_. The oxygenated blood returns to the heart via the \_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_ into the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Then it passes through the \_\_\_\_\_\_\_\_\_\_ valve in to the \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_. The strongest contraction of the heart in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sends the blood out of the heart through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_valve, into the \_\_\_\_\_\_\_\_\_\_\_ to the body.