## Cardiovascular and Respiratory Systems Test Review

- 1. The electrocardiogram (ECG) wave that results from depolarization of the atria is the
- 2. The iron-containing protein found in RBCs that transports the majority of oxygen carried in the blood is \_\_\_\_\_\_.
- 3. The red blood cell disorder caused by life at a high altitude is called \_\_\_\_\_\_.
- 4. The process by which white blood cells travel through the wall of blood vessels is termed
- 5. Abnormally low levels of white blood cells causes a condition known as \_\_\_\_\_\_.
- 6. White blood cells containing granules and lobed nuclei are classified as \_\_\_\_\_\_.
- 7. The stem cell that gives rise to all formed elements is the \_\_\_\_\_.
- 8. When antibodies bind to antigens on foreign blood types, clumping or \_\_\_\_\_\_ occurs.
- 9. The universal donor blood type that can donate to any blood group is type \_\_\_\_\_.
- 10. A person with type A blood can receive blood from blood type(s) \_\_\_\_\_\_
- 11. The circulation from the heart to the body and back is known as \_\_\_\_\_\_ circulation.
- 12. The term that means heart contraction is \_\_\_\_\_.
- 13. The bicuspid valve is also referred to as the \_\_\_\_\_\_ valve.
- 14. When ventricles \_\_\_\_\_\_, the AV valves are closed.
- 15. A recording of the heart's electrical activity is referred to as a(n) \_\_\_\_\_\_.
- 16. The type of tissue composing the tunica interna is \_\_\_\_\_.
- 17. Arteries are normally depicted as red while veins are colored blue. The exceptions to this rule are the \_\_\_\_\_\_ arteries and veins.
- 18. The two superior receiving chambers of the heart are known as the \_\_\_\_\_, while the two inferior discharging chambers of the heart are known as the \_\_\_\_\_.
- 19. The tiny white cords that anchor the cusps or flaps of endocardium to the walls of the ventricles are called the \_\_\_\_\_.
- 20. Blood leaves the right ventricle through a large artery called the \_\_\_\_\_\_.
- 21. The C-shaped rings that reinforce the trachea are constructed of \_\_\_\_\_\_ cartilage.
- 22. The flap of elastic cartilage that protects the opening of the larynx is called the \_\_\_\_\_.
- 23. The air sacs of the lungs are called \_\_\_\_\_\_.
- 24. The opening between the vocal folds is called the \_\_\_\_\_.
- 25. The inspiratory muscles that contract so we can inspire air are the \_\_\_\_\_ and
- 26. The formation of an insoluble clot during hemostasis is called \_\_\_\_\_\_.
- 27. The process where the binding of antibodies to antigens causes RBCs to clump is called
- 28. Which fiber forms a mesh network and the basis for the formation of a clot during coagulation?
- 29. Erythropoeitin is a hormone produced by the \_\_\_\_\_ in response to low levels of
- 30. The series of reactions that stop blood flow following a cut is called \_\_\_\_\_\_.
- 31. Which leukocytes are classified as granulocytes?
- 32. Which leukocytes are classified as agranulocytes?

- 33. How are lymphocytes different from other leukocytes?
- 34. Where does hematopoiesis produce new red blood cells?
- 35. Platelets are fragments of multinucleate cells called \_\_\_\_\_
- 36. Which type of leukocytes become macrophages in the tissues?
- 37. Which type of granulocyte produces histamine during the inflammatory response?
- 38. The matrix of blood is called \_\_\_\_\_
- 39. Which formed element is the most abundant?
- 40. What does leukocytosis most likely indicate in an individual?
- 41. When is the mitral valve usually closed?
- 42. What is occurring during ventricular systole?
- 43. Deoxygenated blood is returned to the right side of the heart by the \_\_\_\_\_.
- 44. Describe the functions of the respiratory conducting passageways.
- 45. What is the role of mucus in the nasal cavity?
- 46. Air moving in and out of the lungs is called \_\_\_\_\_\_
- 47. Exchange of both oxygen and carbon dioxide through the respiratory membrane occurs by
- 48. Describe the three phases of the normal blood-clotting process.
- 49. Which situation do you predict to prompt the release of more erythropoietin into the blood: anemia or polycythemia? Explain.
- 50. Explain the antigen-antibody response as it relates to blood groups.
- 51. Discuss the events that are taking place in the cardiac cycle during the left ventricular systole. Indicate whether the other heart chambers are in systole or diastole and whether they are filling or emptying of blood. If they are emptying, state where the blood is going. If they are filling with blood, state where the blood is coming from. Include an explanation of which valves are open and which valves are closed, in addition to whether the coronary system is filling or emptying of blood.
- 52. Trace the path of a drop of blood, starting at the right atrium and returning to the right atrium, through the pulmonary and systemic circuits of the cardiovascular system. Identify the chambers, valves, and vessels (except specific systemic blood vessels that are not directly associated with the heart), and indicate whether the blood is oxygenated or deoxygenated in each area.
- 53. Explain the roles of mucus and cilia in the respiratory system.
- 54. What structures does a molecule of oxygen encounter on its way to the alveoli of the lungs from the nose? Trace the pathway.
- 55. Explain how hyperventilation and hypoventilation alter levels of carbon dioxide in the blood.
- 56. Describe how oxygen and carbon dioxide are transported in the blood.
- 57. Label the following diagrams.



