**The Blood System Vocabulary**

1. \_\_\_\_\_\_\_ Arteries
2. \_\_\_\_\_\_\_ Veins
3. \_\_\_\_\_\_\_ Double circulation
4. \_\_\_\_\_\_\_ Tunica externa
5. \_\_\_\_\_\_\_ Arterioles
6. \_\_\_\_\_\_\_ Venules
7. \_\_\_\_\_\_\_ Atrium
8. \_\_\_\_\_\_\_ Semilunar valve
9. \_\_\_\_\_\_\_ Pulmonary circulation
10. \_\_\_\_\_\_\_ Tunica media
11. \_\_\_\_\_\_\_ Capillaries
12. \_\_\_\_\_\_\_Ventricle
13. \_\_\_\_\_\_\_Tunuica intima
14. \_\_\_\_\_\_\_ Systolic pressure
15. \_\_\_\_\_\_\_ Diastolic pressure
16. \_\_\_\_\_\_\_ Systemic circulation
17. \_\_\_\_\_\_\_ Single circulation
18. \_\_\_\_\_\_\_ Sinoatrial node
19. \_\_\_\_\_\_\_ Epinephrine
20. \_\_\_\_\_\_ Atrioventricular valve
21. A thick layer of smooth muscle and elastic fiber found in the walls of the arteries
22. Circulation systems that only go through the heart once per circulation
23. The minimum pressure in the arteries
24. Carry blood back to the heart from the capillaries
25. A group of special muscle cells in the right atrium that act as the pacemakers of the heart
26. Carry blood away from the heart at high pressure
27. The part of the heart responsible for pumping
28. The valve between the atrium and the ventricle
29. A hormone produced to increase heart rate during physical activity
30. Smaller branches of veins
31. The outer layer of connective tissue in the arties
32. The part of the human circulatory system that takes blood to the lungs and back to the heart
33. The peak pressure reached in the artery
34. The part of the heart that collects blood from the veins
35. Circulation systems that go through the heart twice per circulation
36. Smaller branches of arteries
37. The layer of endothelium that forms that lining of the artery
38. Blood vessels that are very thin and permeable to allow the exchange of oxygen and carbon dioxide between the vessels and the tissues
39. The valve between the ventricle and the artery
40. The part of the human circulatory system that carries oxygenated blood to the tissues of the body

**Heart Diagram**



1. Aorta

2. Pulmonary artery

3. Pulmonary veins

4.

5.

6.

7.

8. Septum

9. Vena Cava

10.

11.

12.

13.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Artery | Capillary  | Vein |
| Diameter |  |  | Larger than 10um |
| Thickness of wall and diameter of lumen |  |  | Relatively thin wall with wide lumen |
| Number of layers in wall |  |  | Three layers (externa, media, interna) |
| Muscle and elastic fibers in wall |  |  | Small amounts |
| Valves | None |  |  |

Around 10um Larger than 10 um None abundant (to manage pressure) None Three layers Present in many veins one layer Thick wall, narrow lumen Extremely thin wall

1. Be able to explain how the heart maintains pace and the factors that impact it
2. Be able to explain how epinephrine changes heart rate and why
3. Be able to explain the pathway of a red blood cell starting in the right atrium
4. Be able to explain why veins have valves
5. Be able to explain how the structure of the artery helps maintain pressure
6. Be able to explain how oxygen and carbon dioxide are exchanged between blood vessels and tissues

