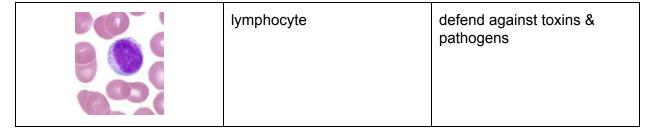
## KEY

- Pulmonary Circuit blood to and from lungs.
   Systemic Circuit blood to and from entire body, except lungs
- 2. Cardiac Muscle Intercalated Discs
- 3. Visceral & Parietal. Visceral is closest to the heart, parietal is the outer.
- 4. Endocardium (inner), mycardium (middle), epicardium (outer).
- 5. Foramen Ovale is a hole in the wall that separates the right and left atria. This is a hole when you ar a fetus in the womb. It should close within 3 days of being born. When it is closed there will be a depression in the wall, which is now the foramen ovalis.
- 6. Look at your foldable.
- 7. Heart contraction starts in the atria, specifically the right atrium.
- 8. Atria contract first due to the SA node sending signals to the atria while it transmits the action potential to the ventricles.
- 9. SA node
- 10. SA node receives an action potential and transmits it to the AV node. Along the way it sends out contraction signals to the contractile cells in the atria. When the action potential reaches the AV node it then travels down the AV bundle to the Purkinje fibers.
- 11. After repolarization, cardiac cells are drifting back towards depolarization. This is constant. If cardiac cells had a resting potential the heart would stop beating a.k.a. you'll die.
- 12. Look at the graph given.
- 13. ECG is the recording of the electrical activity of a heart.
- 14. Ventricular Contraction.
- 15. Ventricular Relaxation (filling with blood)
- 16. The amount of blood that is actually being pumped out of your heart (left ventricle).
- 17. Cardiac Output = Heart Rate x Stroke Volume
- 18. Ventricular Contraction
- 19. Ventricular Relaxation (fillling with blood).
- 20. Artery (oxygenated), capillary (diffuses with tissue; both oxy & deoxygenated blood), vein (deoxygenated).
- 21. Tunica Intima, Tunica Media, Tunica Externa
- 22. Smooth muscle
- 23. Veins have valves, the blood they carry, The tunica media is larger in arteries.
- 24. Don't worry about this one. (Elastic, muscular, arterioles)
- 25. Don't worry about this one. (Large, small, venules)
- 26. Continuous, fenestrated, discontinuous. Fenestrated capillaries have pores that allow them to diffuse larger substances.
- 27. Connective tissue
- 28. Transport (gases, nutrients, wastes, hormones), immunity, defense
- 29. RBC transport oxygen, WBC immunity, Platelets coagulation (hemostasis)
- 30. Liver and spleen in fetus, Red bone marrow in children/adults.
- 31. Protein pigment. Gives RBCs their red color. Responsible for transporting oxygen.
- 32. Iron (attached to hemoglobin)
- 33. Antibodies attack the antigens on RBCs and cause clumping.

Blood Type	Antigen	Antibody	Can donate blood to	Can receive blood from
А	А	b	A, AB	A, O
В	В	а	B, AB	B, O
AB	AB	х	AB	A, B, AB, O
0	х	AB	A, B, AB, O	0

35.

Cell	Name	Function
	neutrophils	most abundant engulf pathogens & debris
	eosinophils	engulf antibody labeled materials
	basophil	release histamine
	monocyte	live in tissues engulf pathogens & debris



36. A cell fragment.

37. RBC: no nuceli

transport

hemoglobin

WBC: nuclei

immunity

no hemoglobin

live for 120 days different lifespan w/ each type

38. Hemostasis - process of forming a clot in a damaged vessel to prevent blood loss. 1) Vascular Phase 2) Platelet Phase 3) Coagulation Phase

39. Factor X (Factor ten)

40. Fibrin holds the clot together (the "net")

41. The dissolving of fibrin to break down the clot. Plasmin is responsible for breaking down fibrin

42. Look over BV notes & quiz.