

## Unit Test Advanced Biology Ch 13, 14 and 15

1. Distinguish between inspiration and expiration. What causes each?
2. What are the following respiratory air volumes: tidal volume, inspiratory reserve and expiratory reserve volume?
3. What are the following respiratory air volumes: vital capacity, residual volume and total lung capacity?
4. Describe location and function of chemosensitive areas versus chemoreceptor areas.
5. Describe the difference between pulmonary ventilation, internal respiration, external respiration and cellular respiration. Where and why do they occur?
6. Describe the transport of oxygen and carbon dioxide in the blood.
7. State the general functions of the blood.
8. Distinguish between erythrocytes, leukocytes and thrombocytes.
9. What are the general characteristics and average numbers of erythrocytes, leukocytes and thrombocytes?
10. Describe, in general, the major events of hemostasis.
11. Describe what makes the difference blood types, A, B, AB and O using the terms agglutinins and agglutinogens.
12. Discuss blood transfusions- what is compatible and why.
13. What is erythroblastosis fetalis? How does this occur?
14. How is Rh factor and blood type inherited?
15. What are the coverings of the heart, starting with the visceral pericardium and moving out to the "bag" ?
16. Describe the wall of the heart using three terms (myocardium, etc)
17. Trace a drop of blood through the heart, to lungs and to body also. *(Consider what gases are present in the blood at each point.)*
18. Describe the differences between arteries, veins and capillaries. (structurally and functionally)
19. Describe the cardiac cycle.
20. What factors affect blood pressure and how (raise? lower?)?
21. Describe the cardiac conduction system and the sequence that is followed from the SA node.
22. What is an EKG and what is it used for?