Respiratory Study Guide

Anatomy

- 1. What is the main function of the respiratory system?
- 2. What are the main functions of the organs in the respiratory system?
- 3. Where is the main site for gas exchange in the lungs?
- 4. What is the location and purpose of simple squamous epithelium and psuedostratified columnar epithelium?
- 5. Explain the differences in your lungs from the fetus to the infant stages of life.
- 6. What is the purpose of the nasal chonchae and the cilia?
- 7. What is the purpose of the sinuses?
- 8. What are the 3 parts of the pharynx?
- 9. What is the purpose of the epiglottis?
- 10. Explain the difference between true and false vocal cords.
- 11. What is the term for the opening between the vocal cords?
- 12. Explain the significance of the C-shaped trachea.
- 13. How does the cartilage and smooth muscle change as air flows from the trachea to the bronchioles to the alveoli?
- 14. What is the smallest organizational unit of the lungs?
- 15. List the 2 membranes around the lungs and describe the purpose of the fluid filled cavity between those membranes.
- 16. What is the purpose of surfactant?
- 17. Describe the structure of the respiratory membrane.

Physiology

- 1. What are the 4 parts of respiration?
- 2. Describe the steps of inspiration and expiration: diaphragm movement, volume change, pressure change, and then air movement
- 3. Describe how partial pressures of the different gases create the gas exchange process.
- 4. Explain the 3 factors that affect external respiration.
- 5. How is oxygen and carbon dioxide mainly carried in the blood?
- 6. What are you hearing when listening for the respiratory sounds?
- 7. Explain the differences between the 6 non-respiratory air movements.
- 8. List the differences between the volumes and capacities of the lungs.
- 9. What are the 3 parts of the nervous system that controls breathing?
- 10. What are the 4 of the 8 ways that your respiratory rate can be altered?
- 11. Explain 5 of the short definition respiratory disorders (first 11 that are listed in your notes).
- 12. Explain 1 of the following in detail: Lung cancer, Chronic obstructive pulmonary disease, Cystic Fibrosis, or SIDS