CSM Anatomy
Respiratory System Study Guide

1. List the parts of the respiratory system. Describe the functions of the system. Explain the difference between the conducting zone and the respiratory zone. Explain the difference between the upper and lower respiratory tracts. Define external and internal and cellular respiration, ventilation, inspiration and expiration.

2. List and describe the parts of the nose. For each structure describe its function. What tissue lines the nasal vestibule? The nasal cavity? The paranasal sinuses? What is the overall function of the nose? What part of the nose is cartilage?

3. What are the paranasal sinuses and what are their functions?

4. Label a drawing of the pharynx with the following: nasopharynx, oropharynx, laryngopharynx. Describe their positions. Also label the tonsils. What is the structure and function of the tonsils?

5. Locate the larynx with in the respiratory system. Identify each cartilage piece and describe its function. How do the vocal cords attach and function. What is the role of the epiglottis? How does a person use their vocal cords and arytenoid cartilages to adjust voice pitch? What is the glottis?

6. Describe a cricothyrotomy (see http://en.wikipedia.org/wiki/Cricothyrotomy). When is it used?

7. Describe the structure and function of the trachea and the bronchial tree. What is the lining of these structures? Are these mucous or serous membranes?

8. Describe the structure and function of the bronchioles, alveolar sacs and alveoli. What are the components of the respiratory interface? What is surfactant? What is the role of alveolar macrophages. How do the gases move across the respiratory interface?

9. How is surfactant made? What are the clinical implications for a premature infant with poor surfactant production?

10. Describe the lung anatomy. Identify the pleural membranes. How does the vacuum seal between the two pleural membranes allow for inspiration and expiration?

11. Explain the process of inspiration and expiration using the anatomical structures involved.

12. Describe how ventilation is controlled.