

**Chp. 16 - Respiratory System
Study Guide/Test Review**

**Review your coloring plate(s)
& first 2 fig. in the Chp.**

1. Define *respiration*. Know the Respiratory system functions.
2. Describe the lungs in terms of location & anatomical difference – why are they different? Describe the pleura that surround them. What happens if the lung is punctured?
3. Know the anatomy, location & function of each part of the *Respiratory Pathway* (***nose, nasal septum, conchae & mucous membrane, nasal cavity, paranasal sinuses, pharynx, larynx, trachea & bronchial tree*** (*bronchi, bronchioles & alveolar ducts, alveoli*), ***lungs***. What/where is the Adam's Apple?
4. Know the breathing mechanism (inspiration/expiration). What else is breathing called?
5. Describe the location & function of the vocal cords. How can we change the pitch & loudness of our voice?
6. Know the definitions of terms from Lab 43 (also in text p. 446) regarding respiratory air volumes.
7. Describe the *respiratory center* & how it maintains a normal breathing pattern. Describe the role the diaphragm & intercostal muscles play.
8. What can change the breathing pattern? What factors can affect breathing? What's the *inflation reflex*?
9. How does *hyperventilation* decrease your respiratory rate?
10. Describe what an alveolus looks like. Why is the respiratory membrane so important?
11. The section of the text called "Diffusion through the Respiratory Membrane" describes how gases move into & out of the lungs. Can you see why you are given a Breathalyzer if suspected of drinking & driving? What is meant by *partial pressure*? How do oxygen & carbon dioxide move across a membrane?
12. Review hemo- & oxyhemoglobin. What stimulates blood to release oxygen in various tissues? How does this tie into exercise? What is *hypoxia*? How does diffusion play a role?
13. What are the 3 ways that carbon dioxide can be transported from cells to the lungs? The most important CO₂ transport mechanism involves the formation of bicarbonate ions. Describe this process.
14. How is carbon dioxide released from the blood into the lungs?
15. Review the various respiratory conditions covered in class.