

## **Unit 8 / Chapter 13: The Respiratory System - STUDY GUIDE**

*Your study guide is not only an excellent guide to preparation for your exams, it is also a homework assignment. Your completed study guide work will be handed in on the day of the Unit Exam.*

### **Words to know:**

<b><u>Chapter 13</u></b>		
Nostrils	Parietal pleura	Tidal Volume
Nasopharynx	Visceral pleura	Residual Volume
Oropharynx	Pleural cavity	Vital Capacity
Laryngopharynx	Diaphragm	Lung Capacity
Larynx	Hemoglobin	Nonrespiratory movements
Epiglottis	Inspiration	Conducting Zone
Trachea	Expiration	Respiratory Zone
Vocal Cords	Atmospheric Pressure	Expiratory reserve volume
Bronchus	Elastic recoil	Inspiratory reserve volume
Bronchiole	Intercostal muscles	Phrenic nerves
Alveoli	Respiratory Cycle	

### **Questions to answer:**

1. Place the following respiratory structures in the correct sequence (#1-10) air passes through as you **EXHALE**.

	trachea		larynx
	alveolar duct		secondary bronchus
	pharynx		nostril
	nasal cavity		bronchiole
	alveolus		primary bronchus

2. Describe 5 functions of the respiratory system.

3. a. List the organs that are in the upper respiratory tract:

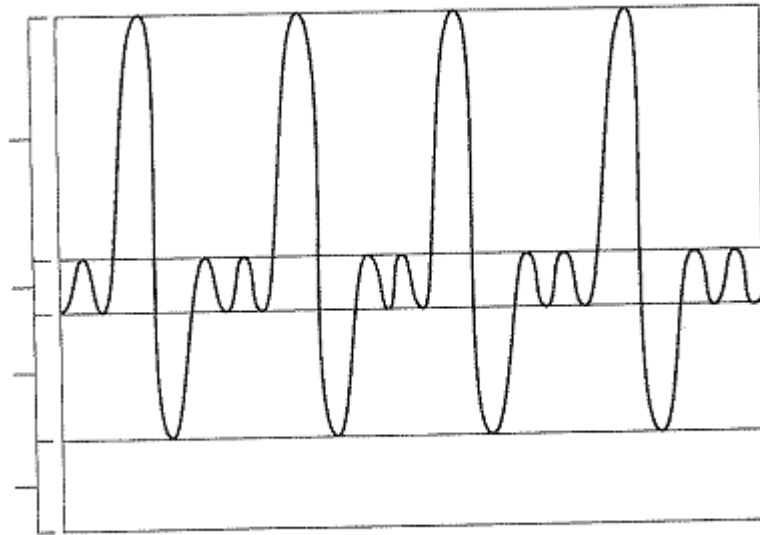
b. List the organs that are in the lower respiratory tract:

4. What are 4 factors that affect breathing?

5. Describe the flow of oxygen and carbon dioxide into the lungs and into the body.

6. Figure 13-6 is displaying respiratory volume. Complete the figure by making the following additions.

- Using the brackets on the y-axis, label the area representing vital capacity (VC). Color it yellow.
- Add green stripes to the area representing the inspiratory reserve volume and label it IRV
- Add red stripes to the area representing the expiratory reserve volume and label it ERV
- Identify and label the respiratory volume, which is now just yellow. Color the residual volume (RV) blue and label it on the figure
- Bracket and label the inspiratory capacity (IC).



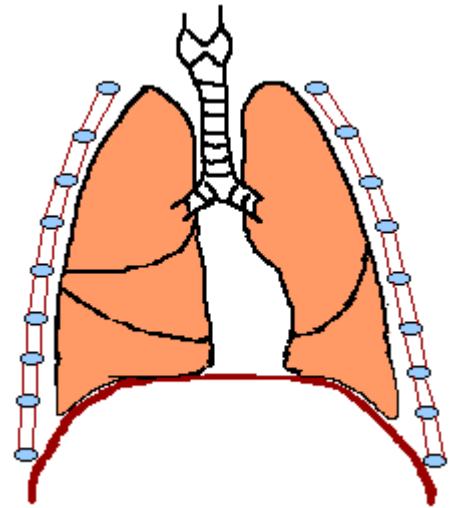
**Figure 13-6**

7. Describe 4 types of nonrespiratory movements.

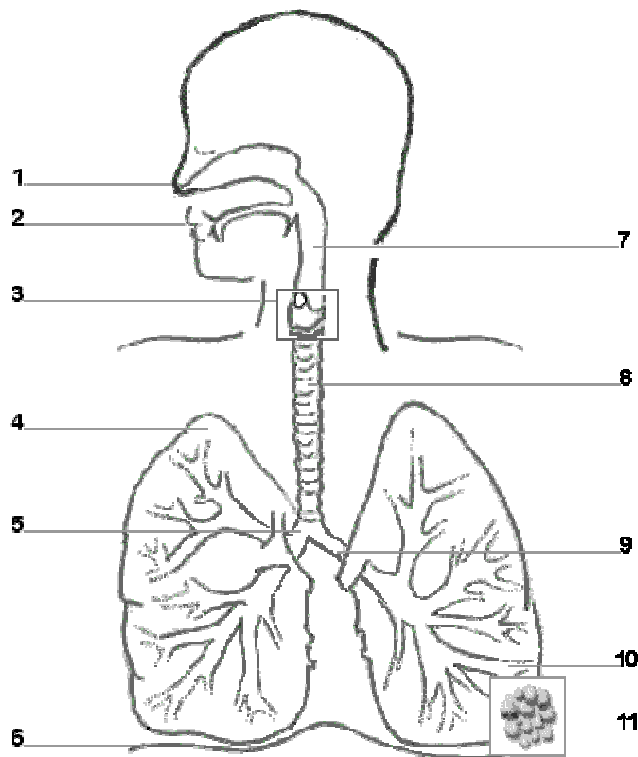
8. Using the diagram below, explain the sequence of events of a complete respiratory cycle (inhalation and exhalation) as described by "negative pressure breathing." Include in your answer how differences in pressure influence the movement of air/gases.

INHALATION:

EXHALATION:



9. Label the structures identified in the respiratory system diagram below.



1.	6.
2.	7.
3.	8.
4.	9.
5.	10.