Name _____

Date _____ Score _____

ASSIGNMENT SHEET

CHAPTER 11: ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY

Unit 7: The Respiratory System

WORDS TO KNOW CHALLENGE

A. Word Scramble: Unscramble the following terms.

1.	_____	E L I V A L O
2.	_____	I H I S T R I N
3.	_____	A L X N Y R
4.	_____	I T E G P L O T S I
5.	_____	O H R I E L B O N C
6.	_____	M S H E P E Y A M
7.	_____	S Y N C O A S I
8.	_____	R A T A H E C
9.	_____	U N O L Y P R A M
10.	_____	E Y P I L S U R
11.	_____	H A M T A S
12.	_____	E Y P S A D N
13.	_____	P R O H N A E O T
14.	_____	E N P I M U A N O
15.	_____	R I Y P S O R T A R E
16.	_____	S U C C H G I H O
17.	_____	A I P Y O H X
18.	_____	E N X G O Y

B. Spelling: Underline the correct spelling of each word.

1.	alveolah	alveala	alveola	alveoli
2.	cyanosis	cianosis	cyaniosis	cyinosis
3.	emphasema	empfazema	emfasema	emphysema
4.	hickoffs	hickcoughs	hiccoughs	hiccoufs
5.	influenza	enfluenza	influensa	enlfuensa
6.	larengitis	larenjitis	laryngitis	laringitis
7.	pnewmonia	newmonia	pneumonia	pneumonea
8.	spontaneus	spontaneous	spauntaneous	spauntaneus
9.	ventalation	ventelation	ventilation	ventolation

UNIT REVIEW

A. Matching:

1. Match the disorders or diseases in column I with their major symptoms in column II.

COLUMN I	COLUMN II
_____ 1. Allergic rhinitis	a. A progressive, complex disease with marked dyspnea, productive cough, frequent respiratory infections, barrel chest, respiratory failure
_____ 2. Asthma	b. A nosebleed
_____ 3. Atelectasis	c. Coldlike symptoms intitially, progressing to involve liver, spleen, and lymph glands; productive cough, dyspnea, weakness
_____ 4. Bronchitis	d. Acute, contagious disease with chills, fever, headache, muscular aches, non-productive cough
_____ 5. COPD	e. Sharp, stabbing pain with lung respirations, some dyspnea, usually one-sided
_____ 6. Emphysema	f. Surgical removal of the larynx
_____ 7. Epistaxis	g. Fluid collection within lung tissue associated with heart disease; causes dyspnea, orthopnea, frothy bloody sputum
_____ 8. Histoplasmosis	h. Dyspnea, chest pain, rapid heart, productive cough, low-grade fever; caused by blood vessel obstruction
_____ 9. Respiratory distress syndrome	i. Reaction to airborne allergens causing sneezing, profuse watery nasal discharge, and nasal congestion
_____ 10. Influenza	j. Prolonged apnea in infants, irregular heart rate, severe lack of oxygen
_____ 11. Laryngectomy	k. Nodular lesions and patchy infiltration of lung tissue causing fatigue, weakness, lack of appetite, weight loss, night sweats
_____ 12. Legionnaires' disease	l. An infectious, acute, or chronically developed disease causing wheezing, dyspnea, productive cough
_____ 13. Paroxysmal nocturnal dyspnea	m. Sore throat, nasal congestion, headache, burning, watery eyes, fever, non-productive cough
_____ 14. Pleural effusion	n. Diarrhea, lack of appetite, headache, chills, fever that persists, weakness, grayish sputum
_____ 15. Pleurisy	o. Bronchospasms; an allergic disorder causing wheezing, dyspnea, sputum production
_____ 16. Pneumonoconiosis	p. Affects infants, causing respiratory distress, rapid and shallow breathing, retracted sternum, flared nostrils, grunting
_____ 17. Pneumonia	q. Acute infection causing coughing, sputum, chills, fever, pleural chest pain; impairs exchange of oxygen and carbon dioxide
_____ 18. Pneumothorax	r. Inability to exchange oxygen and carbon dioxide, causing chronic cough, pursed-lips breathing, cyanosis, weight loss
_____ 19. Pulmonary edema	s. Sudden sharp pain, unequal chest wall expansion, may be chest wound; weak rapid pulse, dyspnea, lung collapse
_____ 20. Pulmonary embolism	
_____ 21. SIDS	
_____ 22. Tuberculosis	
_____ 23. URI	

Name _____

t. Environmental disease causing dyspnea, lack of oxygen, bronchial congestion
u. Dyspnea due to collapse of the alveoli
v. Awaken from sleep with feeling of suffocation
w. Hypoxia due to the presence of excess fluid in the pleural space

2. Match the diagnostic examination from column I with its purpose in column II.

COLUMN I	COLUMN II
_____ 1. Bronchoscopy	a. To evaluate pulmonary emboli
_____ 2. Chest X-ray	b. To withdraw fluid from the pleural space
_____ 3. Lung scan	c. To determine basic condition of the lungs or identify a disease process
_____ 4. Sputum analysis	d. To observe the trachea and bronchial tree, obtain a sample, or remove a foreign body
_____ 5. Thoracentesis	e. To diagnose infectious organisms or cancer cells
_____ 6. Arterial blood gases	f. Aid in diagnosing pulmonary emboli and evaluating pulmonary circulation in certain heart conditions before surgery
_____ 7. Lung perfusion scan	g. To measure the partial pressures of O_2 and CO_2 in the lungs by determining the pH of the blood
_____ 8. Lung ventilation scan	h. To provide a visual image of pulmonary blood flow to diagnose blood vessel obstruction
_____ 9. Pulmonary angiography	i. To determine the distribution pattern of an inhaled gas to identify obstructed airways

B. Short Answer

1. Where is oxygen produced, and how important is it to the human body? _____

2. What causes a breath to be taken? _____

3. Trace the pathway of oxygen to an internal cell. _____

4. How is voice sound produced? _____

5. Explain the difference between external and internal respiration. _____

6. What is surfactant and how does it affect inflation of the lungs? _____

7. List five instances when a breathing pattern is altered normally.
   a. _____
   b. _____
   c. _____
   d. _____
   e. _____

8. Describe the pleural coverings of the lungs and explain their purpose. _____

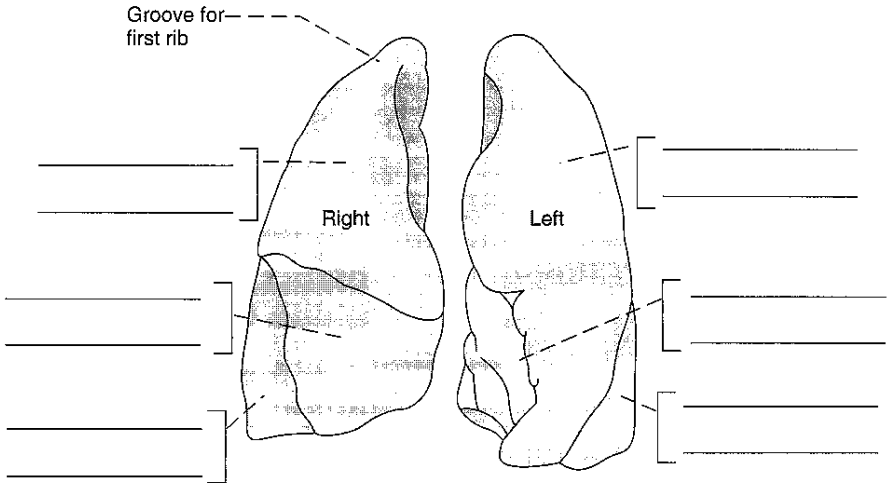
C. Design a chart. Enter the structure and function of each of the following parts of the respiratory system.

PART	STRUCTURE	FUNCTION
a.		
b.		
c.		
d.		
e.		
f.		
g.		
h.		

Name _____

D. Label the Illustration

Label the illustration of the lungs. Refer to Figure 11-109 in the textbook.



CASE STUDIES

Scenario 1

You are employed in a pediatrician's office. A young, first-time mother calls the office crying because her toddler is having a temper tantrum and is holding his breath until he gets red and then gasps for air. She is afraid he is going to quit breathing and die. She wants to know what to do.

Critical Thinking Questions

1. What should you ask the mother before responding? _____
2. How can you assure her that this is common for toddlers? _____
3. Should you check with the doctor about referring her to a behavior specialist or child psychiatrist? _____

Scenario 2

An elderly patient calls to complain of a high fever, muscle aches, a headache, and chills. He thinks he is getting the flu. He stated he had a flu shot about nine months ago, even though he didn't want it, and he is not supposed to get sick.

Critical Thinking Questions

1. Should you take his self-appraisal of his condition without further question? _____

2. How would you explain to him the nature of the flu vaccine and its effectiveness? _____

3. What can you advise him to do? _____

UNIT APPLICATION

Research Activity

There are four lung diseases or disorders that are very interesting and quite serious that should be further researched. The four conditions are pulmonary fibrosis, respiratory distress syndrome (RDS), sudden infant death syndrome (SIDS), and tuberculosis (TB). Select one and prepare a report to share with the class. Perhaps the instructor could divide the class and each group could work on the assigned report. In your research, determine the cause, the rate of incidence within the population, the age group affected, symptoms, treatment, prognosis, and any other aspect of the disease. RDS and SIDS, for example, each has a profound impact on parents. Discuss this situation. Can you identify any support groups? Tuberculosis was thought to be a thing of the past but it has returned. Why? Pulmonary fibrosis is probably unknown to most people, yet it is not that uncommon.

CERTIFICATION AND REGISTRATION PREPARATION

_____ 1. Mucus streaming is:
   a. what makes your nose run
   b. the cause of post-nasal drip
   c. watery discharge after breathing in an allergen
   d. propelling particles upward past the epiglottis

_____ 2. The epiglottis:
   a. vibrates to make speech
   b. is attached to the upper pharynx
   c. covers the opening to the larynx when swallowing
   d. is above the tongue

_____ 3. The bronchoscope can be used for all the following except:
   a. removing a foreign body
   b. delivering oxygen into the lungs
   c. obtaining a sample tissue of secretion
   d. viewing the airways

_____ 4. The pulse oximeter:
   a. measures the amount of oxygen in the blood
   b. measures pulse
   c. determines the rhythm of the pulse
   d. can detect pulse irregularities

Name _____

_____ 5. Emphysema causes:
   a. enlarged alveolar spaces in the lungs
   b. large amounts of mucus
   c. slower respirations due to enlarged alveoli
   d. more efficient exchanges of oxygen and carbon dioxide

_____ 6. Which of the following is not a symptom of influenza?
   a. Vomiting and diarrhea
   b. Chills and fever
   c. Coughing
   d. Fever

_____ 7. A pneumothorax is:
   a. the collection of air in the lungs
   b. air in the thorax
   c. air in the pleural space
   d. air between the lung and the diaphragm

_____ 8. Pulmonary edema occurs when:
   a. fluid accumulates within the tissues of the lung
   b. the pulmonary artery becomes enlarged
   c. blood pressure decreases within the blood vessels
   d. tissue fluids leak out of the alveoli

_____ 9. A pulmonary embolus is:
   a. a mysterious condition that kills healthy infants
   b. a blood clot obstructing an arteriole in the lungs
   c. the result of years of smoking
   d. something that can occur after an extended period of running

_____ 10. The incidence of tuberculosis is increasing because of all of the following except:
   a. its relationship with AIDS
   b. an influx of immigrants
   c. the organism mutating to a stronger strain
   d. the use of drugs