WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

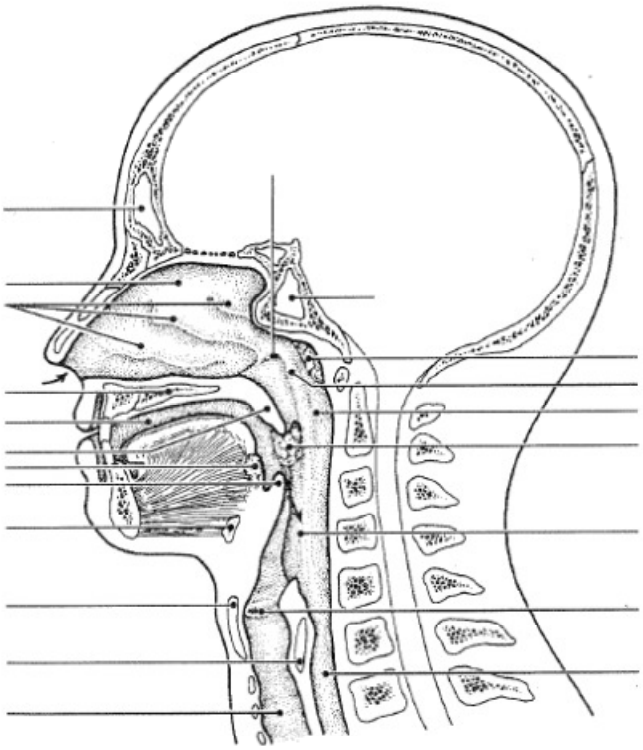

Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
E. Parietal pleura
F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
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5.	Period of breathing when air leaves the lungs
6.	Respiratory volume inhaled or exhaled during normal breathing
7.	Air in respiratory passages that does not contribute to gas exchange
8.	Total amount of exchangeable air
9.	Gas volume that allows gas exchange to go on continuously
10.	Amount of air that can still be exhaled (forcibly) after a normal exhalation

7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

b. A deep breath is taken, the glottis is closed, and air is forced out of the lungs against the glottis; clear the lower respiratory passageways. _____

c. As just described, but it clears the upper respiratory passageways. _____

d. Increases ventilation of the lungs; may be initiated by a need to increase oxygen levels in the blood. _____

8. Circle the term that **DOES NOT** belong from the following groupings.

a. Nasal cavity Trachea Alveolus Larynx Bronchus

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d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

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9. In the picture below, identify the following structures:

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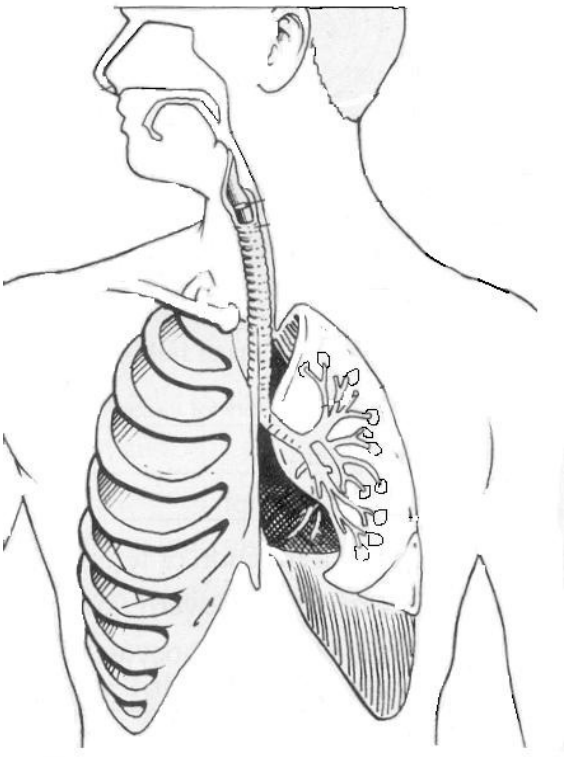

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

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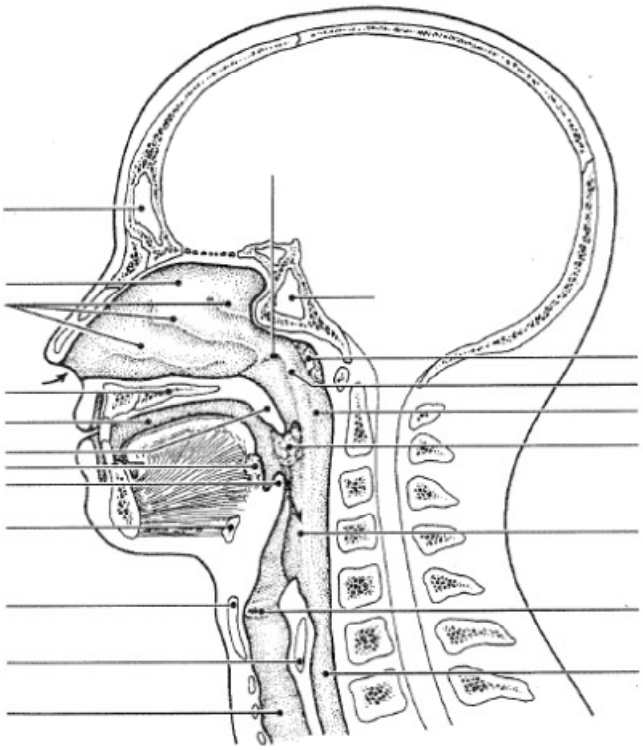

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Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
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E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
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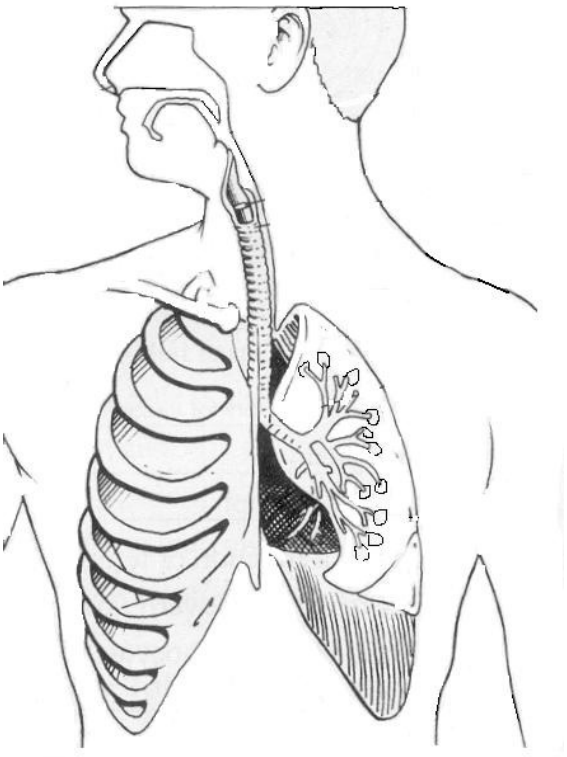

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

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2. Complete the following statements by inserting your answers in the blank.

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Oropharynx
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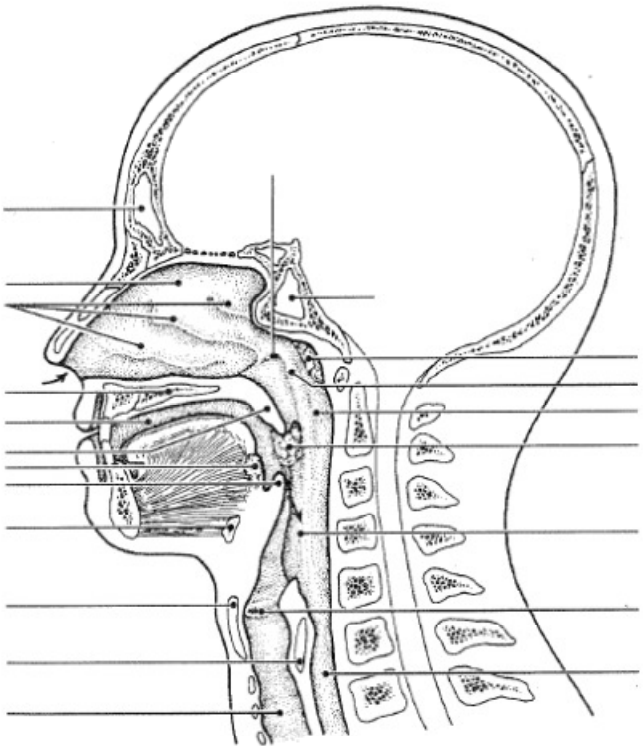

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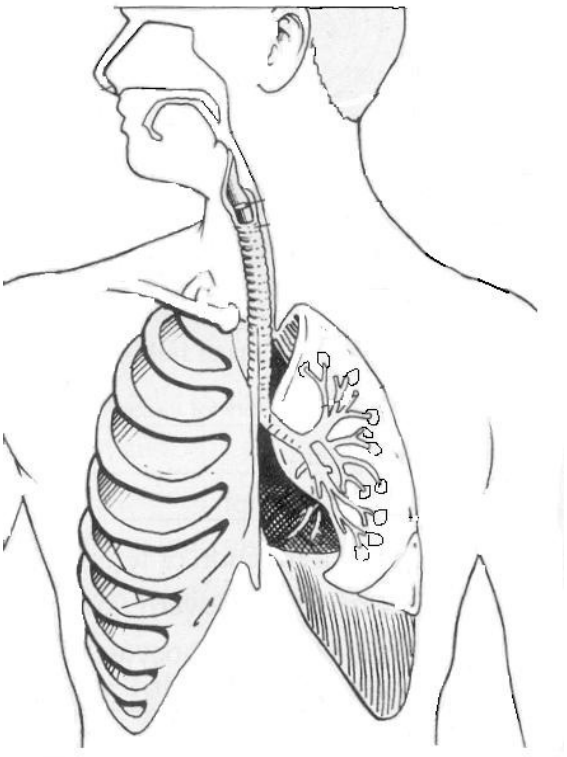

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

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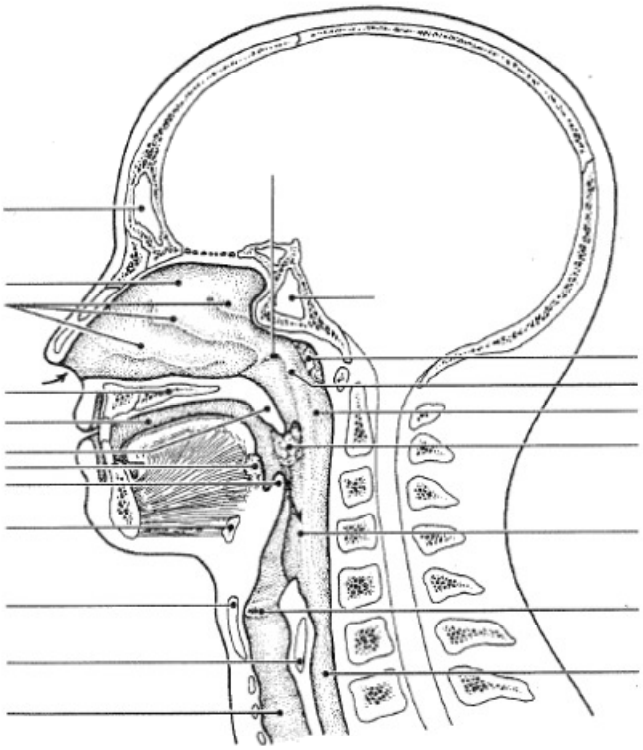

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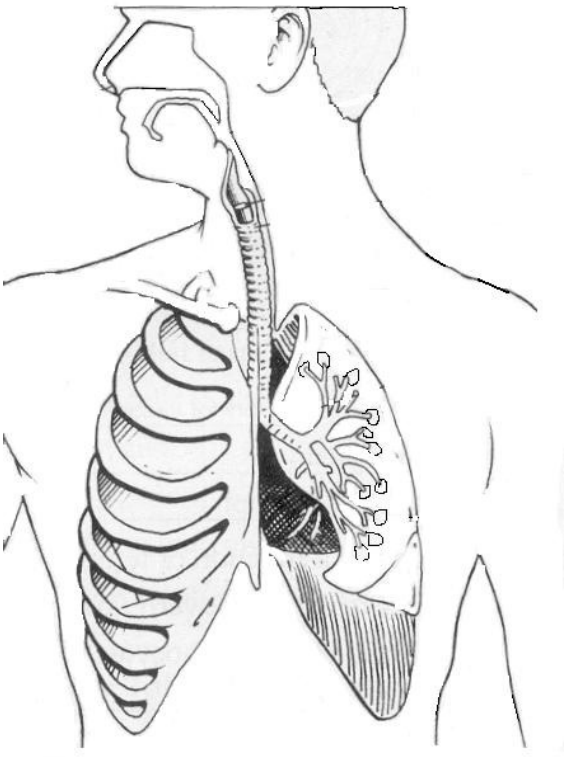

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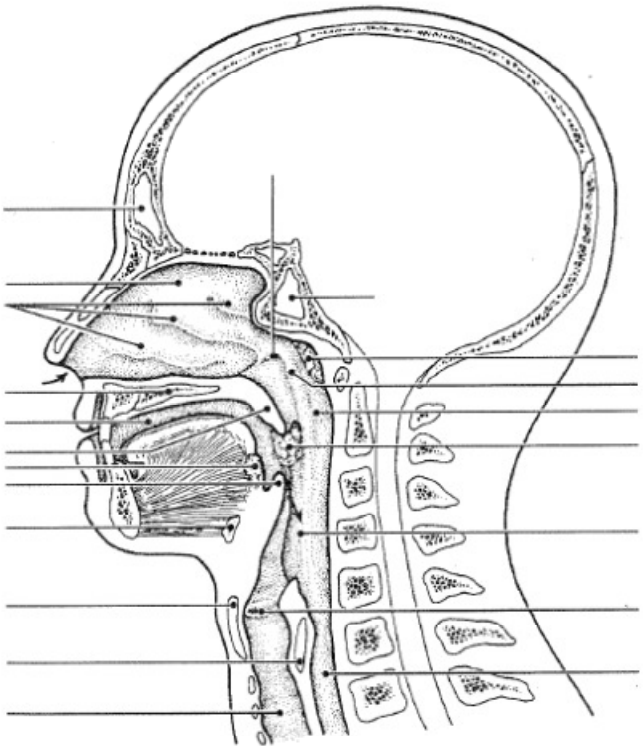

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8. Circle the term that **DOES NOT** belong from the following groupings.

a. Nasal cavity Trachea Alveolus Larynx Bronchus

b. Laryngopharynx Oropharynx Transports air and food Nasopharynx

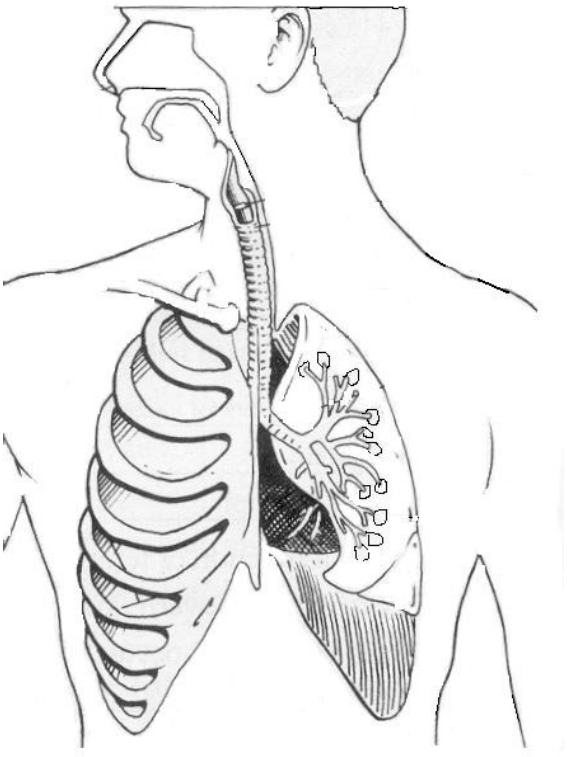
c. Alveoli Respiratory zone Alveolar sac Main bronchus

d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

e. High altitude ↓PO2 ↑PCO2 ↓Atmospheric pressure

9. In the picture below, identify the following structures:

lungs, trachea, larynx, bronchus, alveolar sac, oropharynx, nasopharynx, laryngopharynx, esophagus



WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

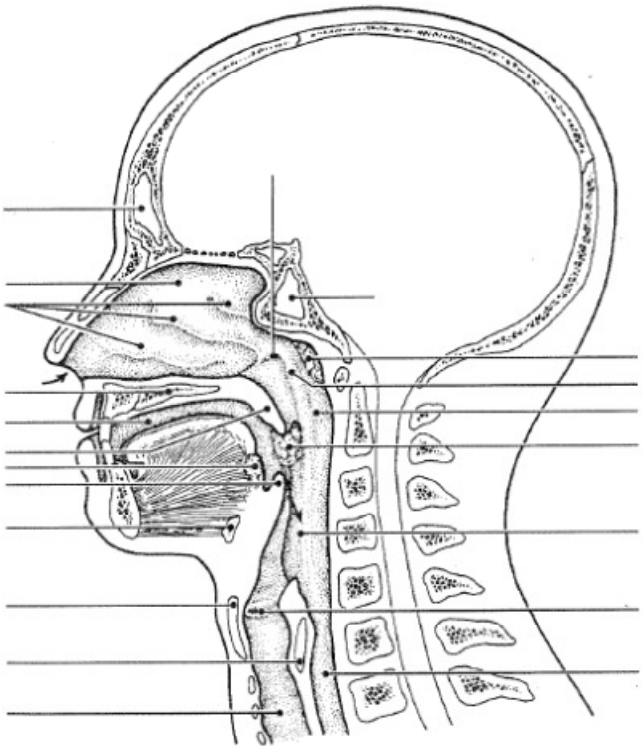


Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
E. Parietal pleura
F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
4.	Exchange of gases between alveolar air and pulmonary capillary blood
5.	Period of breathing when air leaves the lungs
6.	Respiratory volume inhaled or exhaled during normal breathing
7.	Air in respiratory passages that does not contribute to gas exchange
8.	Total amount of exchangeable air
9.	Gas volume that allows gas exchange to go on continuously
10.	Amount of air that can still be exhaled (forcibly) after a normal exhalation

7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

b. A deep breath is taken, the glottis is closed, and air is forced out of the lungs against the glottis; clear the lower respiratory passageways. _____

c. As just described, but it clears the upper respiratory passageways. _____

d. Increases ventilation of the lungs; may be initiated by a need to increase oxygen levels in the blood. _____

8. Circle the term that **DOES NOT** belong from the following groupings.

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9. In the picture below, identify the following structures:

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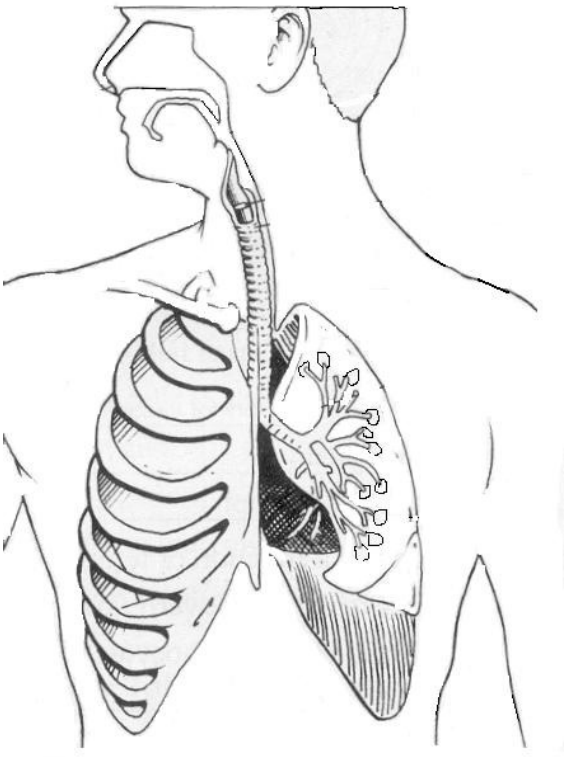

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
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Epiglottis
Sinuses (2)

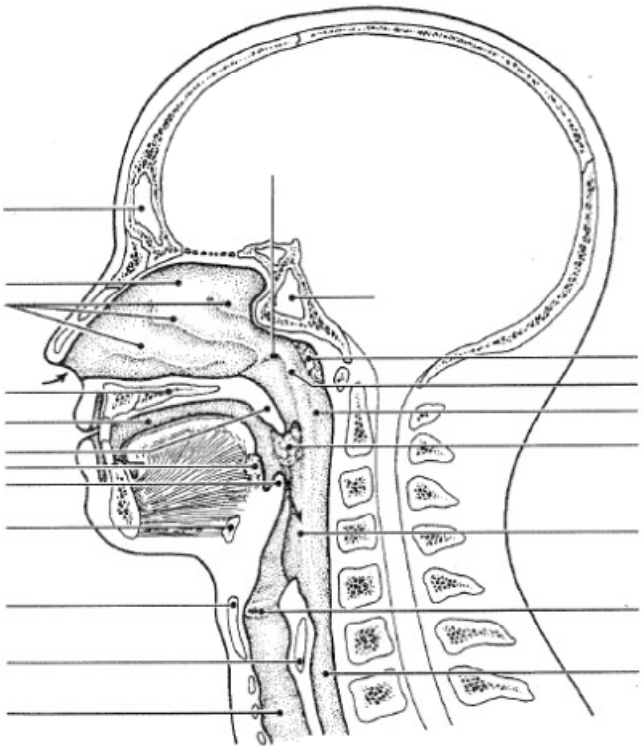

Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

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B. Bronchioles
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D. Esophagus
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F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
4.	Exchange of gases between alveolar air and pulmonary capillary blood
5.	Period of breathing when air leaves the lungs
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8. Circle the term that **DOES NOT** belong from the following groupings.

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d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

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9. In the picture below, identify the following structures:

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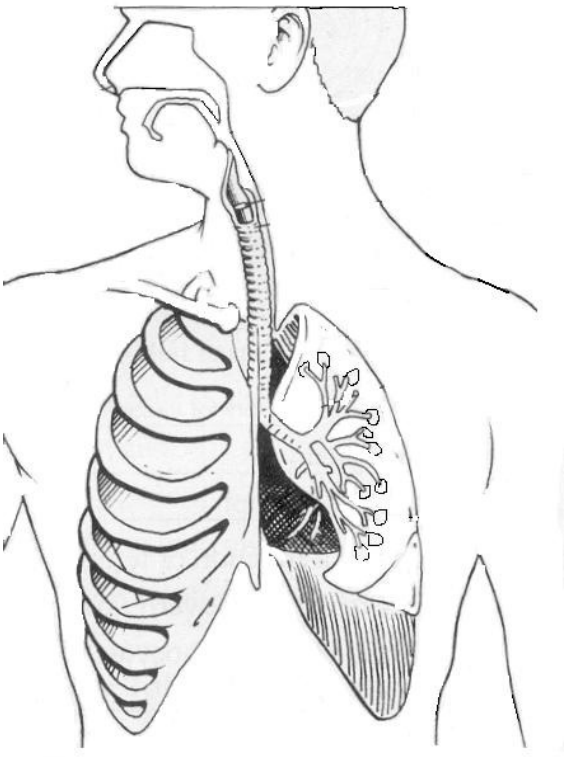

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
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3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

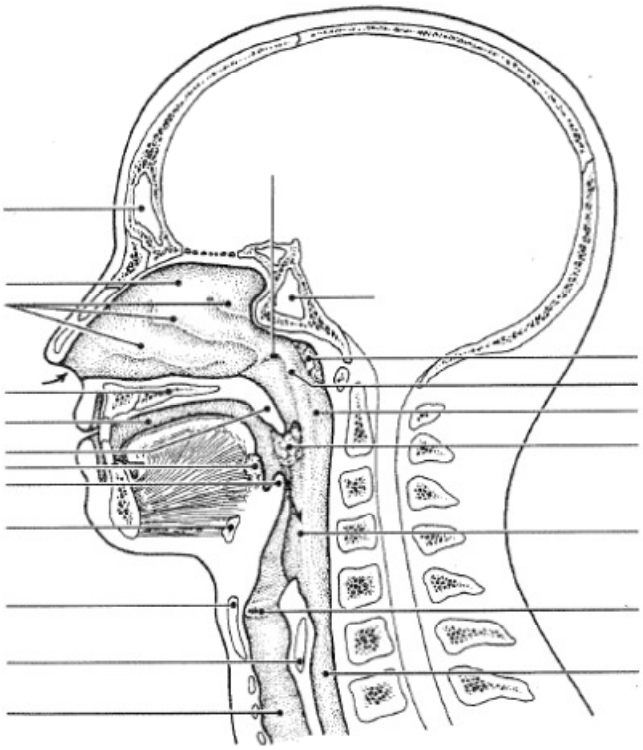

Figure 13–1

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I. Vocal cords

1.	Smallest conducting respiratory passageway
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4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
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9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

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Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
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K. Vital Capacity (VC)

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8. Circle the term that **DOES NOT** belong from the following groupings.

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d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

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9. In the picture below, identify the following structures:

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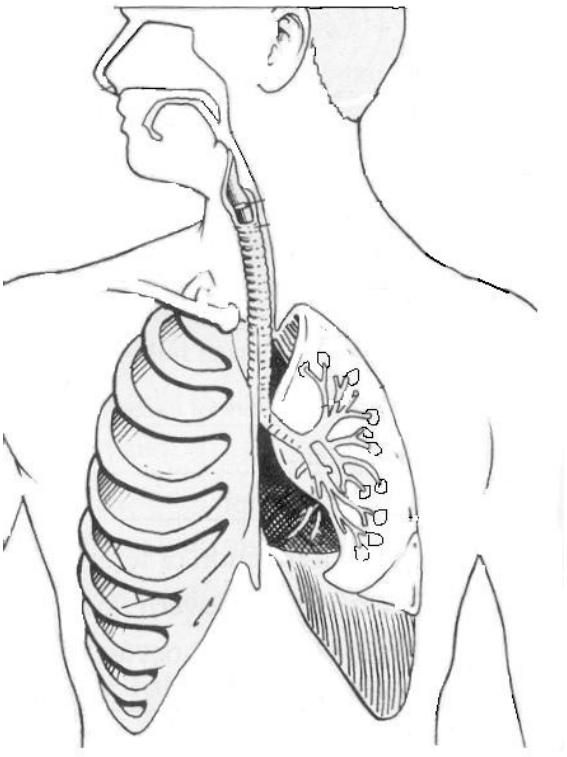

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
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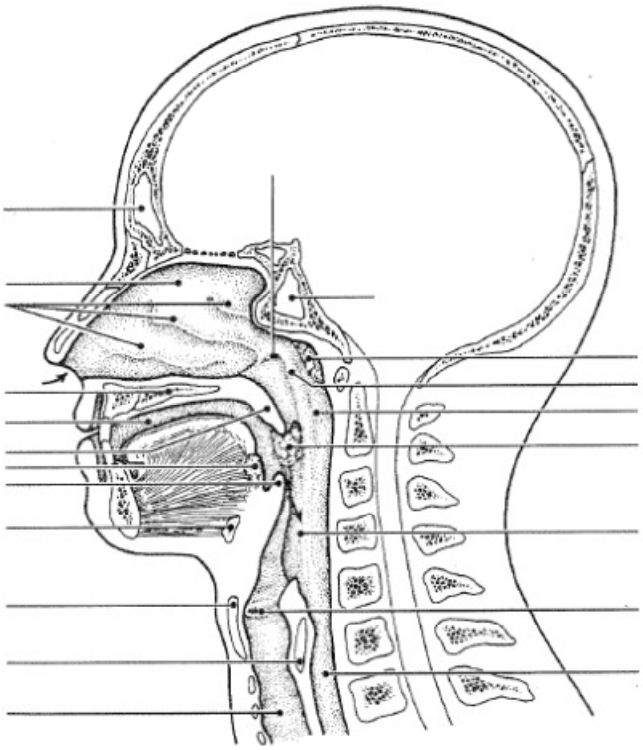

Figure 13–1

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1.	Smallest conducting respiratory passageway
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7.	Pleural layer covering the thorax walls
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9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

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Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
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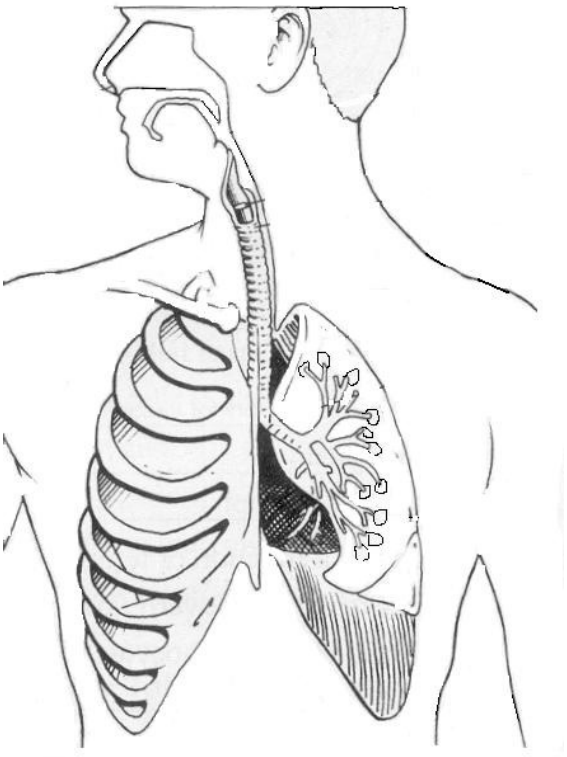

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

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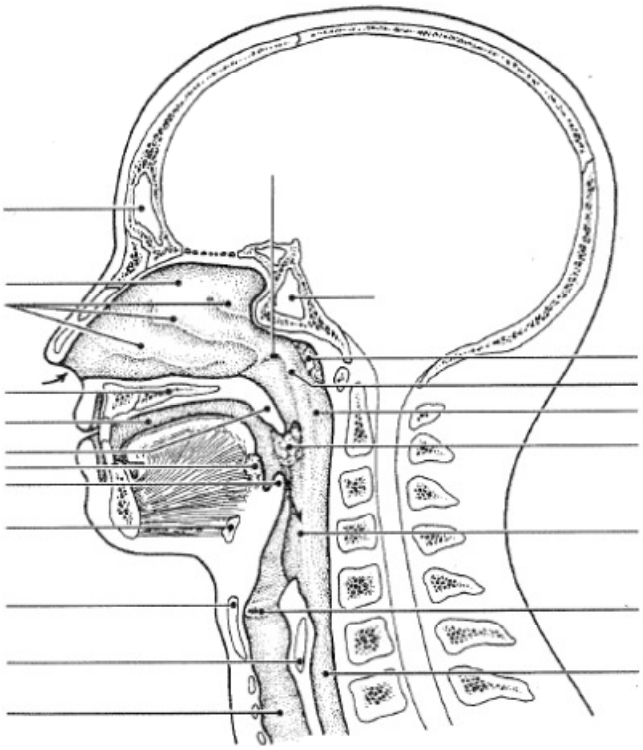

Figure 13–1

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A. External respiration
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F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
4.	Exchange of gases between alveolar air and pulmonary capillary blood
5.	Period of breathing when air leaves the lungs
6.	Respiratory volume inhaled or exhaled during normal breathing
7.	Air in respiratory passages that does not contribute to gas exchange
8.	Total amount of exchangeable air
9.	Gas volume that allows gas exchange to go on continuously
10.	Amount of air that can still be exhaled (forcibly) after a normal exhalation

7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

b. A deep breath is taken, the glottis is closed, and air is forced out of the lungs against the glottis; clear the lower respiratory passageways. _____

c. As just described, but it clears the upper respiratory passageways. _____

d. Increases ventilation of the lungs; may be initiated by a need to increase oxygen levels in the blood. _____

8. Circle the term that **DOES NOT** belong from the following groupings.

a. Nasal cavity Trachea Alveolus Larynx Bronchus

b. Laryngopharynx Oropharynx Transports air and food Nasopharynx

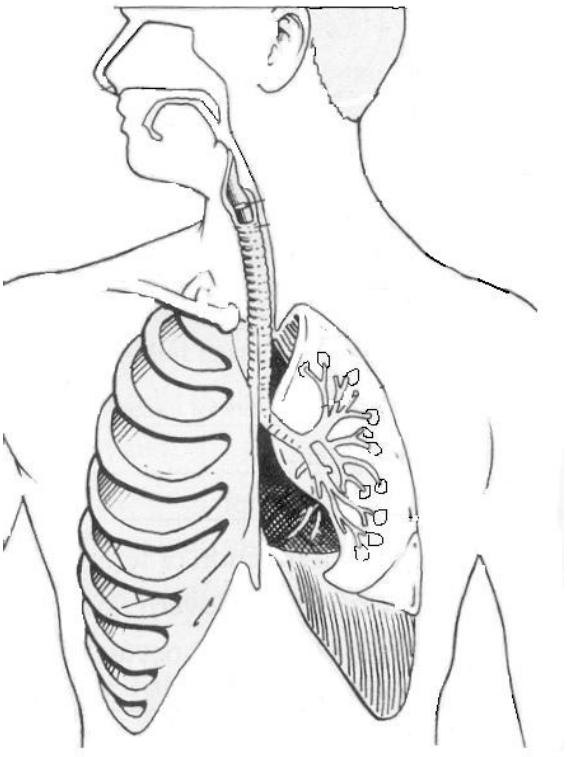
c. Alveoli Respiratory zone Alveolar sac Main bronchus

d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

e. High altitude ↓PO2 ↑PCO2 ↓Atmospheric pressure

9. In the picture below, identify the following structures:

lungs, trachea, larynx, bronchus, alveolar sac, oropharynx, nasopharynx, laryngopharynx, esophagus



WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

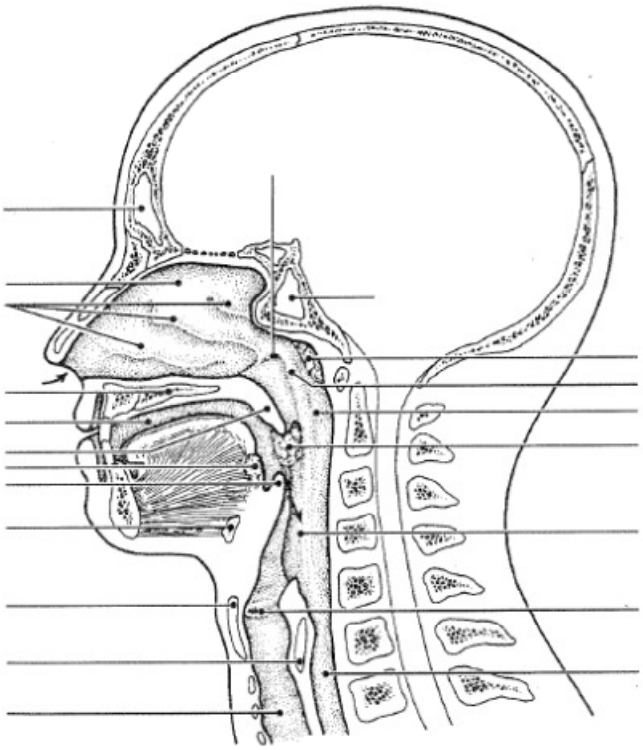


Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
E. Parietal pleura
F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
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a. Sudden inspiration, resulting from spasms of the diaphragm. _____

b. A deep breath is taken, the glottis is closed, and air is forced out of the lungs against the glottis; clear the lower respiratory passageways. _____

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8. Circle the term that **DOES NOT** belong from the following groupings.

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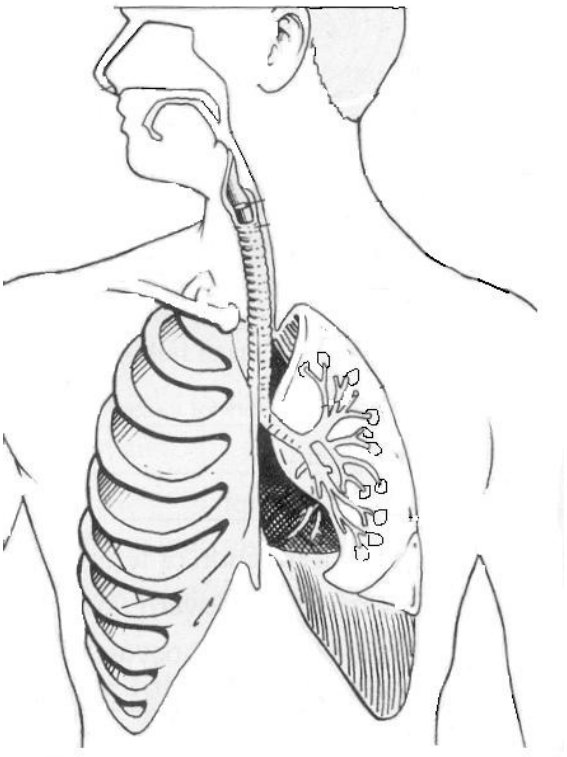

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
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Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

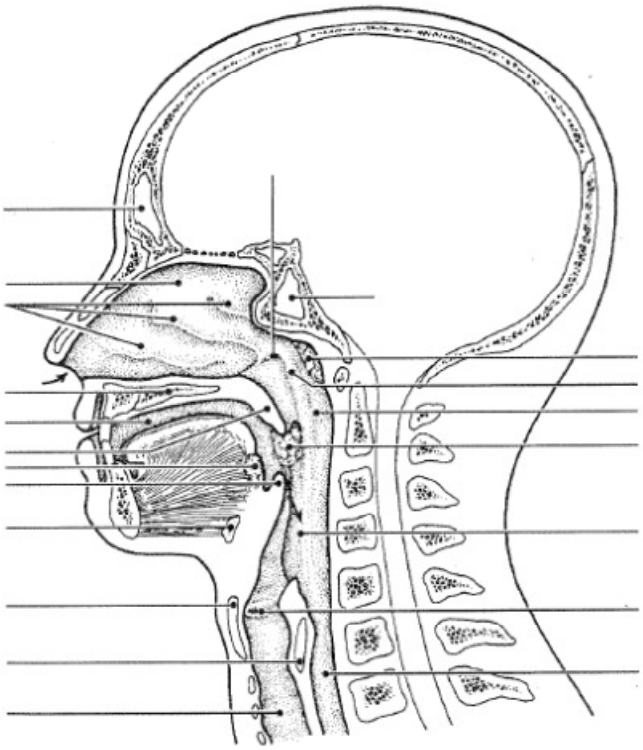

Figure 13–1

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I. Vocal cords

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4.	Closes off the larynx during swallowing
5.	Windpipe
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7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

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Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
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8. Circle the term that **DOES NOT** belong from the following groupings.

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9. In the picture below, identify the following structures:

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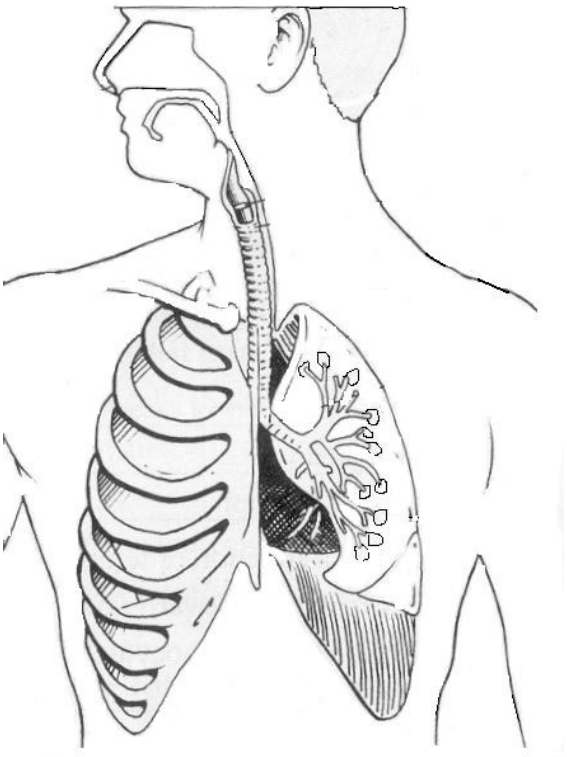

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
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3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
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Laryngopharynx
Esophagus
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Mouth
Larynx
Trachea
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Epiglottis
Sinuses (2)

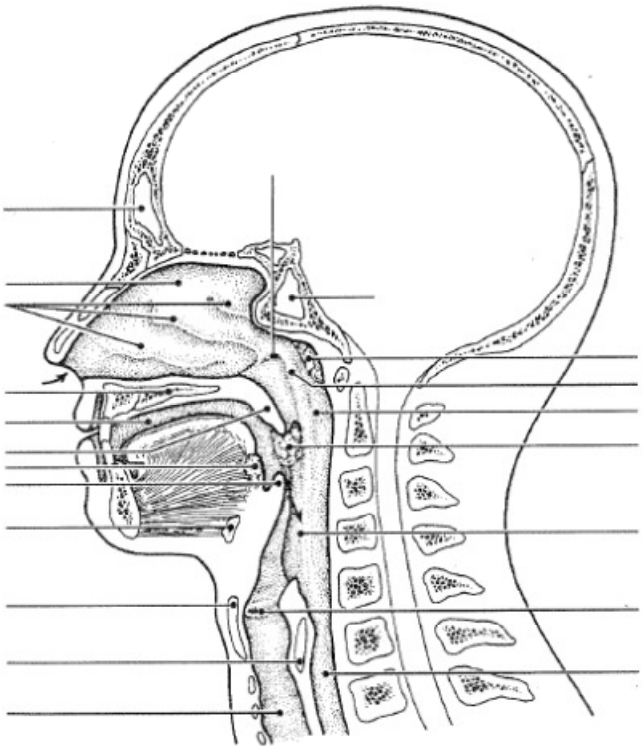

Figure 13–1

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A. Alveoli
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D. Esophagus
E. Parietal pleura
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I. Vocal cords

1.	Smallest conducting respiratory passageway
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4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

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Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
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J. Tidal Volume (TV)
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1.	Period of breathing when air enters the lungs
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8. Circle the term that **DOES NOT** belong from the following groupings.

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9. In the picture below, identify the following structures:

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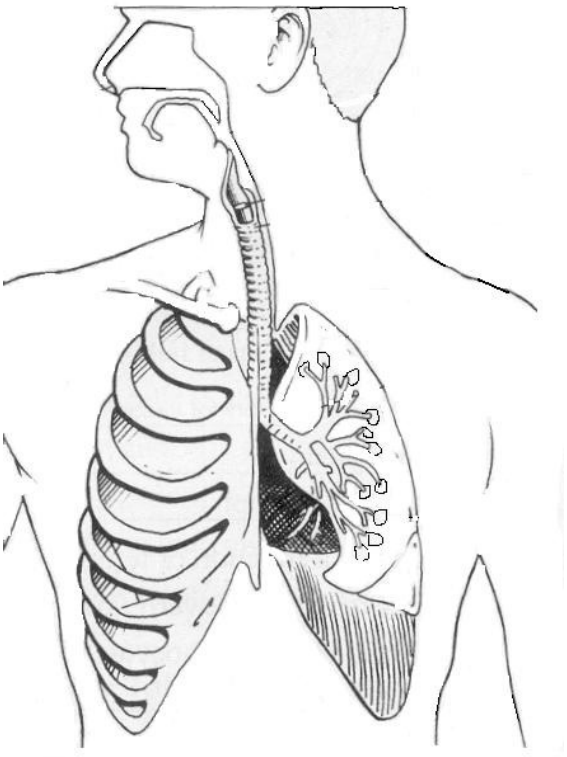

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
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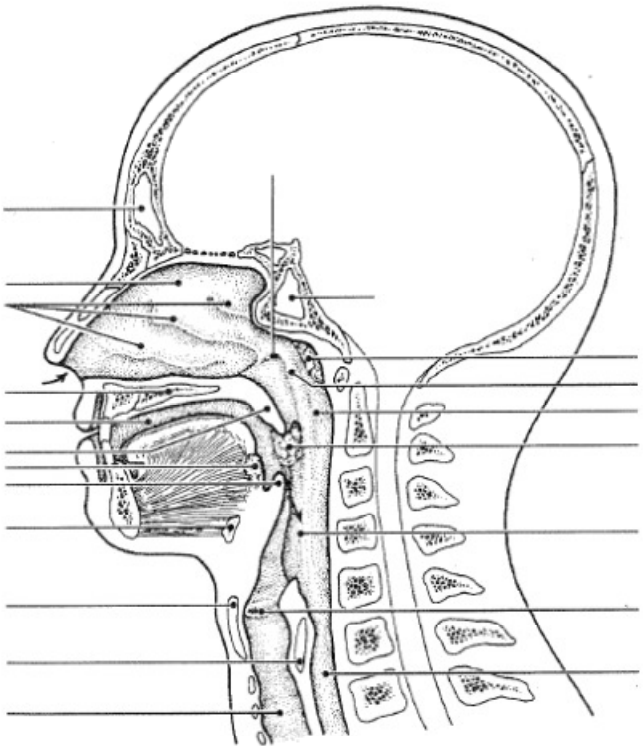

Figure 13–1

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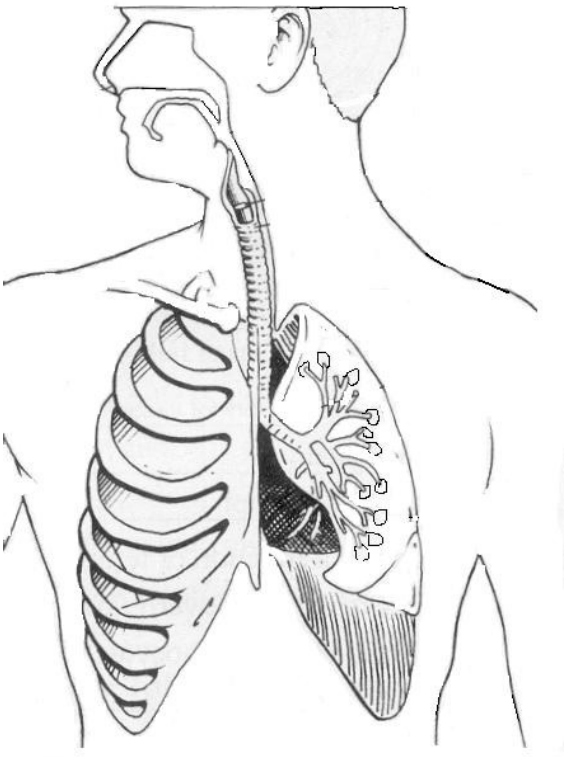

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

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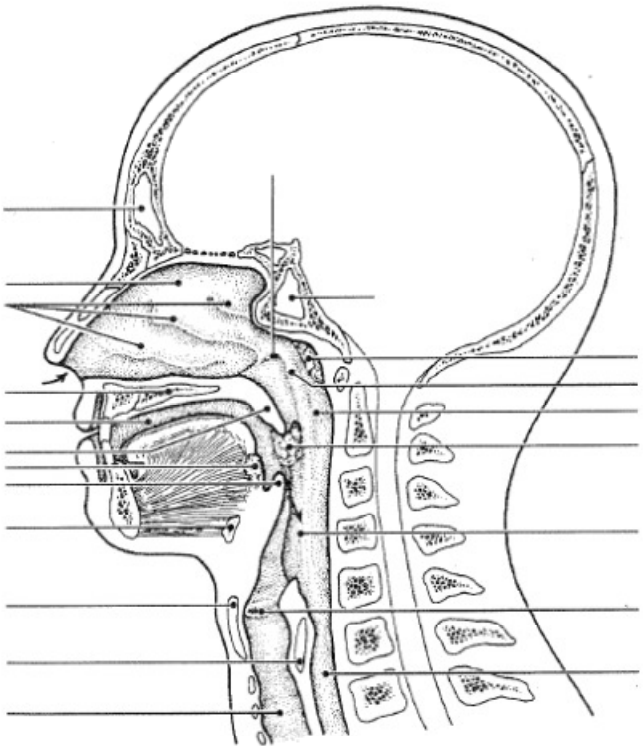

Figure 13–1

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B. Bronchioles
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6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
4.	Exchange of gases between alveolar air and pulmonary capillary blood
5.	Period of breathing when air leaves the lungs
6.	Respiratory volume inhaled or exhaled during normal breathing
7.	Air in respiratory passages that does not contribute to gas exchange
8.	Total amount of exchangeable air
9.	Gas volume that allows gas exchange to go on continuously
10.	Amount of air that can still be exhaled (forcibly) after a normal exhalation

7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

b. A deep breath is taken, the glottis is closed, and air is forced out of the lungs against the glottis; clear the lower respiratory passageways. _____

c. As just described, but it clears the upper respiratory passageways. _____

d. Increases ventilation of the lungs; may be initiated by a need to increase oxygen levels in the blood. _____

8. Circle the term that **DOES NOT** belong from the following groupings.

a. Nasal cavity Trachea Alveolus Larynx Bronchus

b. Laryngopharynx Oropharynx Transports air and food Nasopharynx

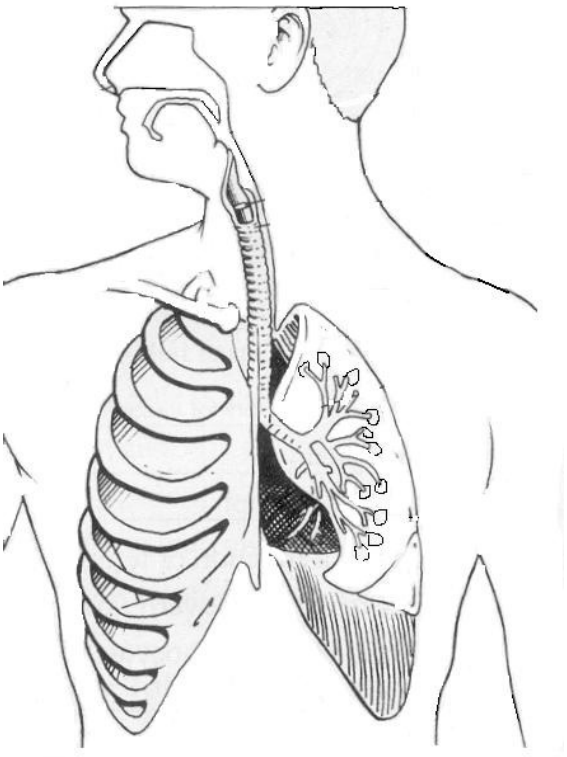
c. Alveoli Respiratory zone Alveolar sac Main bronchus

d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

e. High altitude ↓PO2 ↑PCO2 ↓Atmospheric pressure

9. In the picture below, identify the following structures:

lungs, trachea, larynx, bronchus, alveolar sac, oropharynx, nasopharynx, laryngopharynx, esophagus



WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

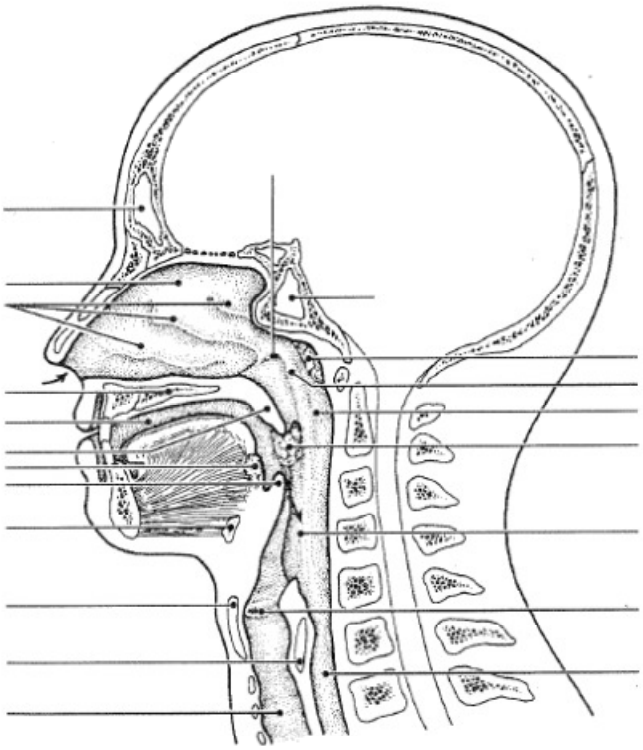


Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
E. Parietal pleura
F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
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Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
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E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
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J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
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7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

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9. In the picture below, identify the following structures:

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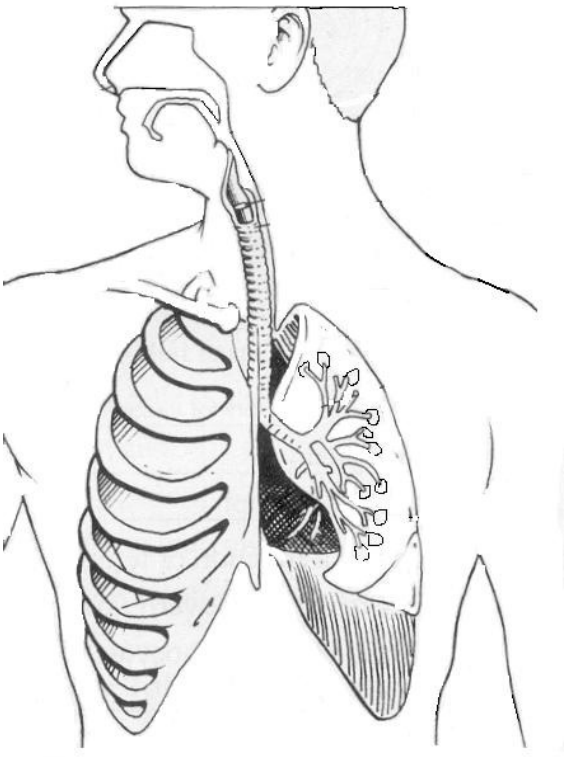

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
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Sinuses (2)

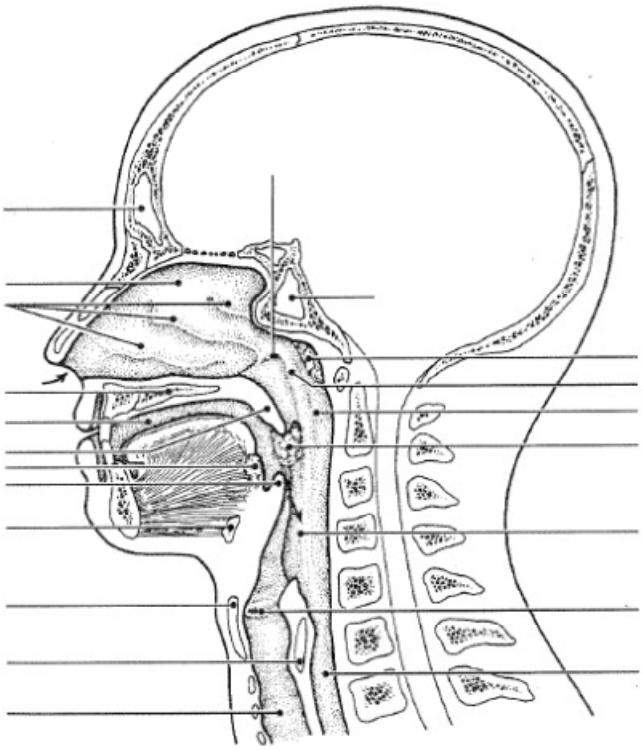

Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
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F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

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	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
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7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

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d. Increases ventilation of the lungs; may be initiated by a need to increase oxygen levels in the blood. _____

8. Circle the term that **DOES NOT** belong from the following groupings.

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c. Alveoli Respiratory zone Alveolar sac Main bronchus

d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

e. High altitude ↓PO2 ↑PCO2 ↓Atmospheric pressure

9. In the picture below, identify the following structures:

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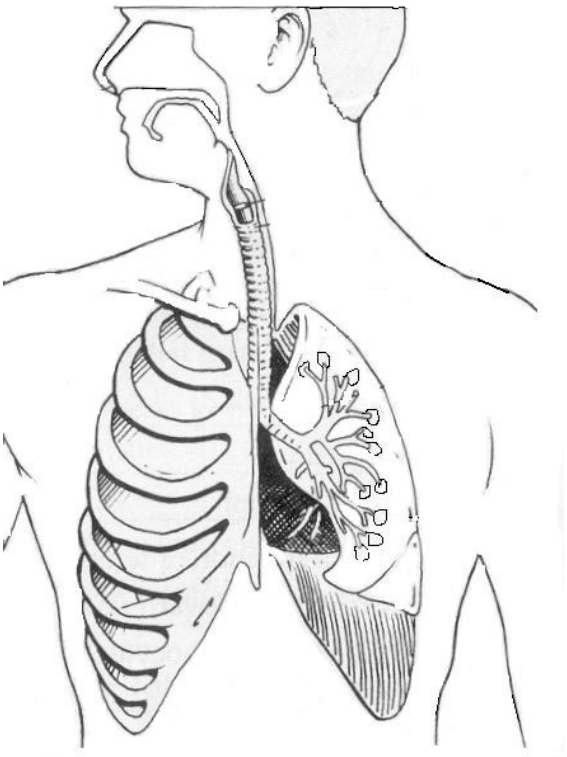

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

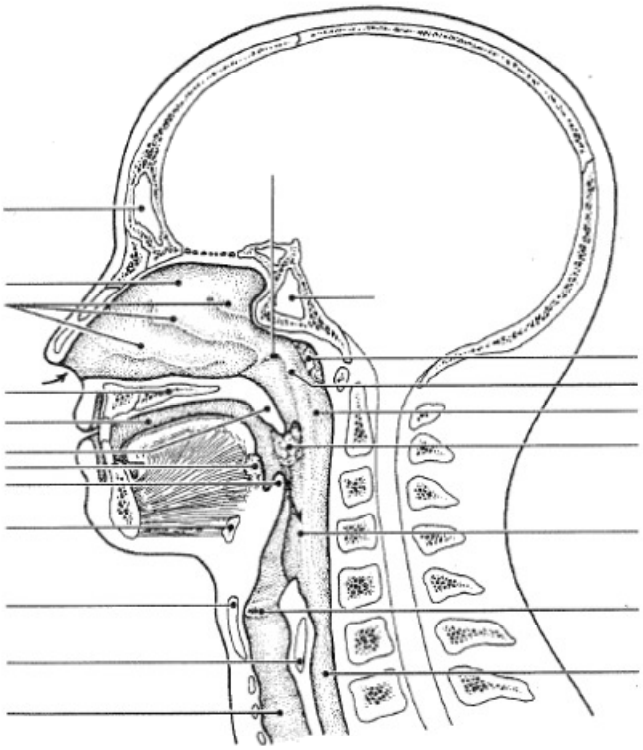

Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
E. Parietal pleura
F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

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↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
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I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
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8. Circle the term that **DOES NOT** belong from the following groupings.

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d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

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9. In the picture below, identify the following structures:

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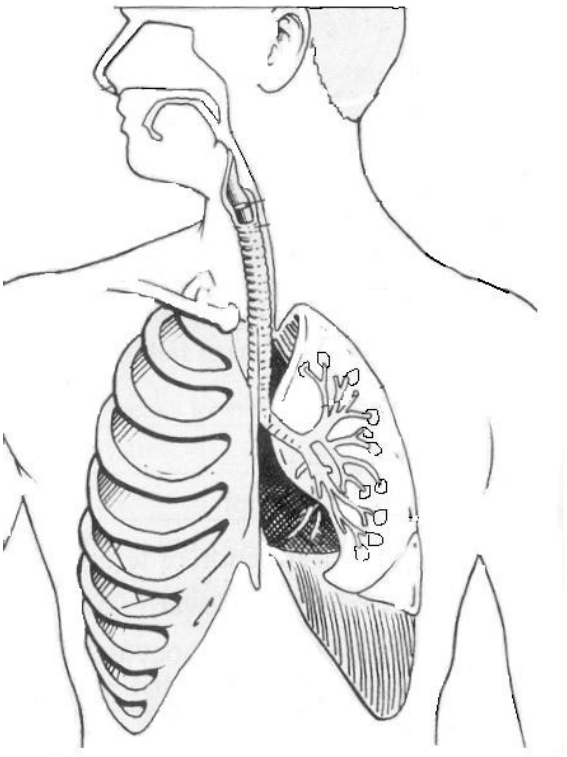

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
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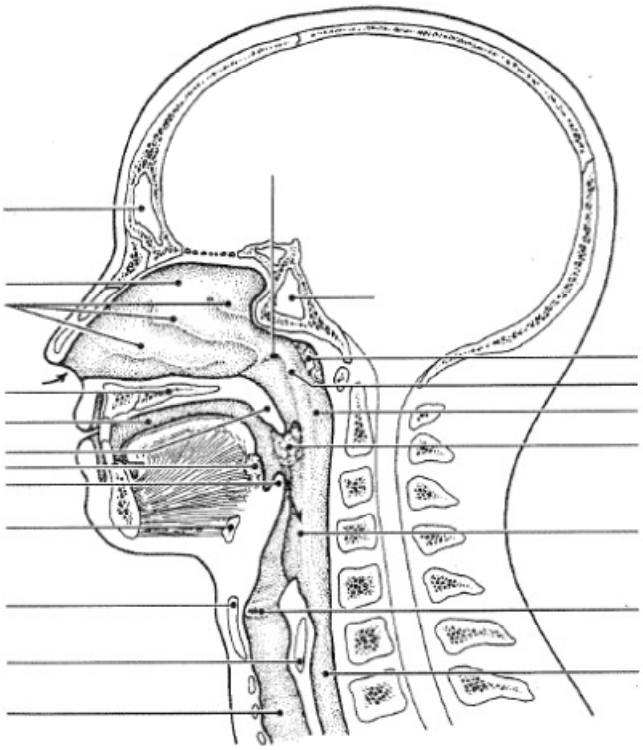

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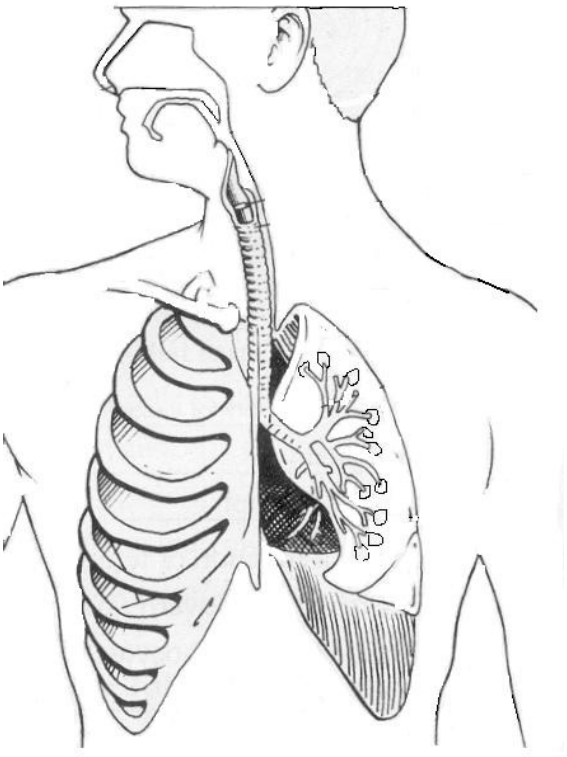

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

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Epiglottis
Sinuses (2)

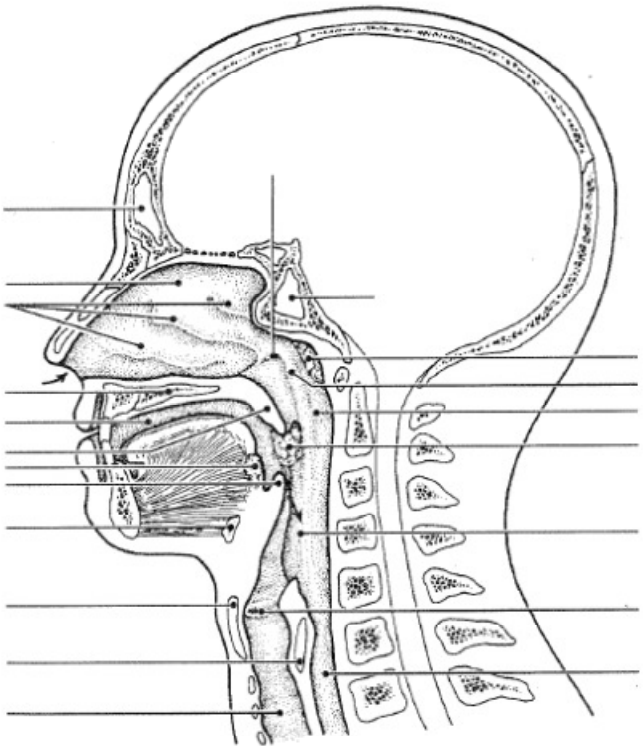

Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
E. Parietal pleura
F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
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5.	Period of breathing when air leaves the lungs
6.	Respiratory volume inhaled or exhaled during normal breathing
7.	Air in respiratory passages that does not contribute to gas exchange
8.	Total amount of exchangeable air
9.	Gas volume that allows gas exchange to go on continuously
10.	Amount of air that can still be exhaled (forcibly) after a normal exhalation

7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

b. A deep breath is taken, the glottis is closed, and air is forced out of the lungs against the glottis; clear the lower respiratory passageways. _____

c. As just described, but it clears the upper respiratory passageways. _____

d. Increases ventilation of the lungs; may be initiated by a need to increase oxygen levels in the blood. _____

8. Circle the term that **DOES NOT** belong from the following groupings.

a. Nasal cavity Trachea Alveolus Larynx Bronchus

b. Laryngopharynx Oropharynx Transports air and food Nasopharynx

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d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

e. High altitude ↓PO2 ↑PCO2 ↓Atmospheric pressure

9. In the picture below, identify the following structures:

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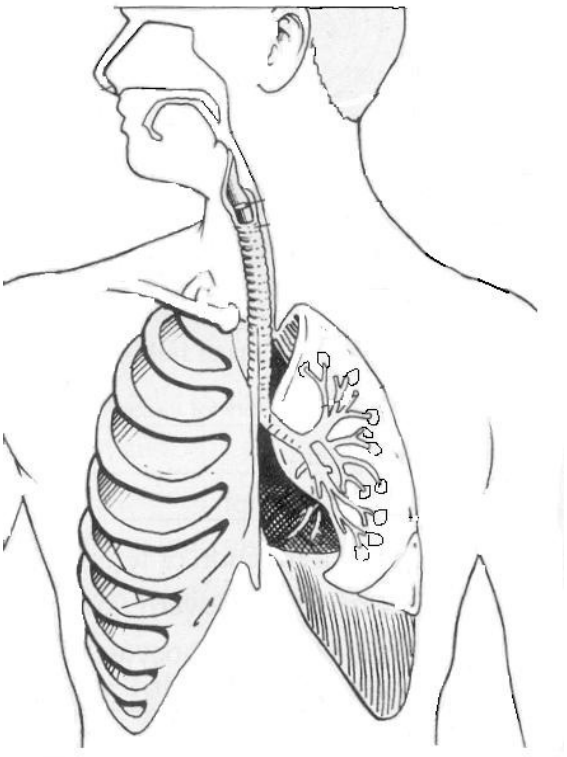


WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

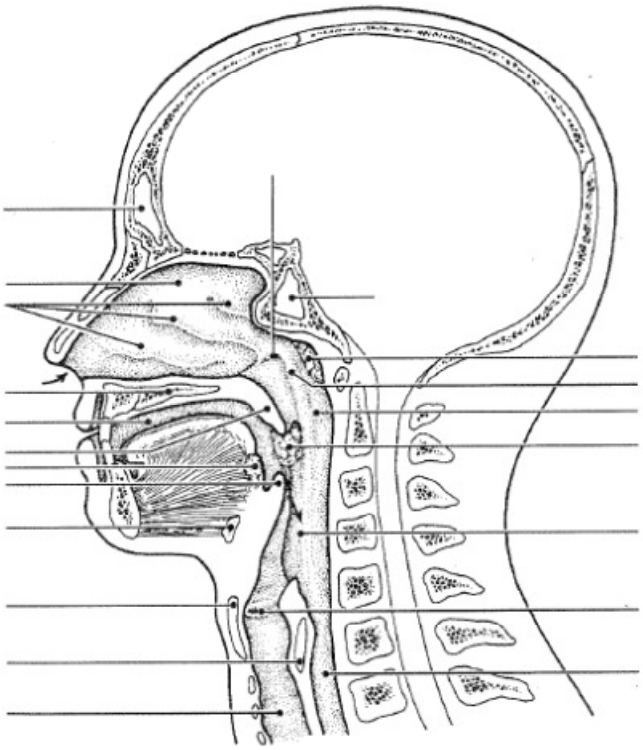
2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)



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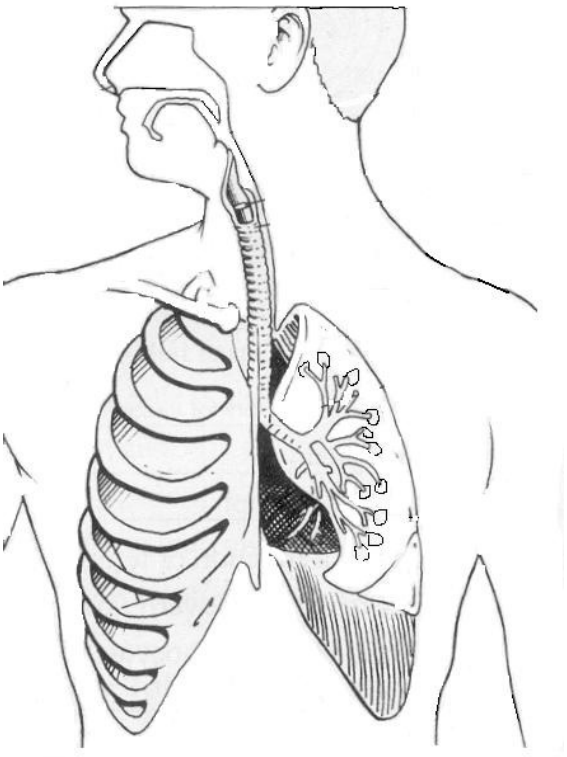

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

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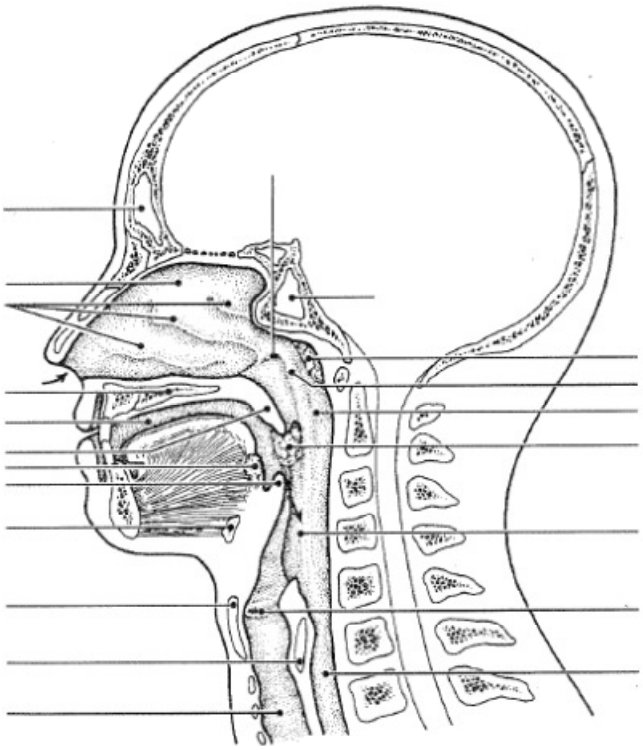

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6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

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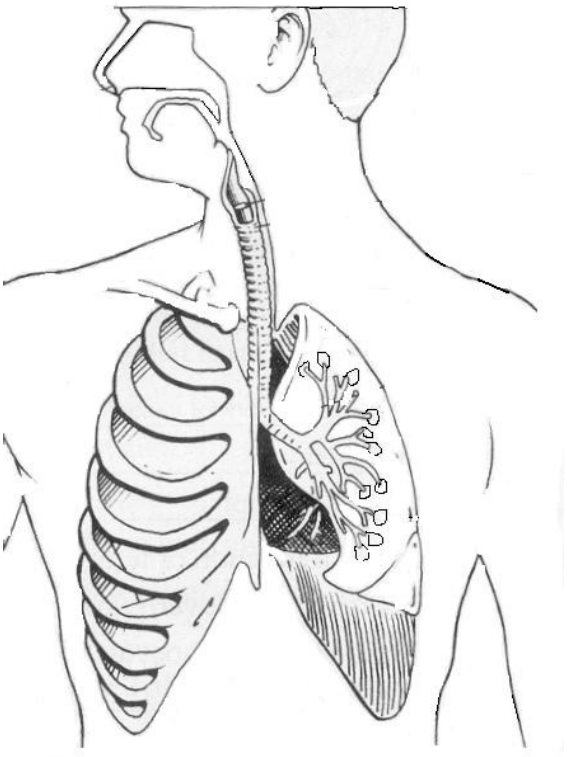

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

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2. Complete the following statements by inserting your answers in the blank.

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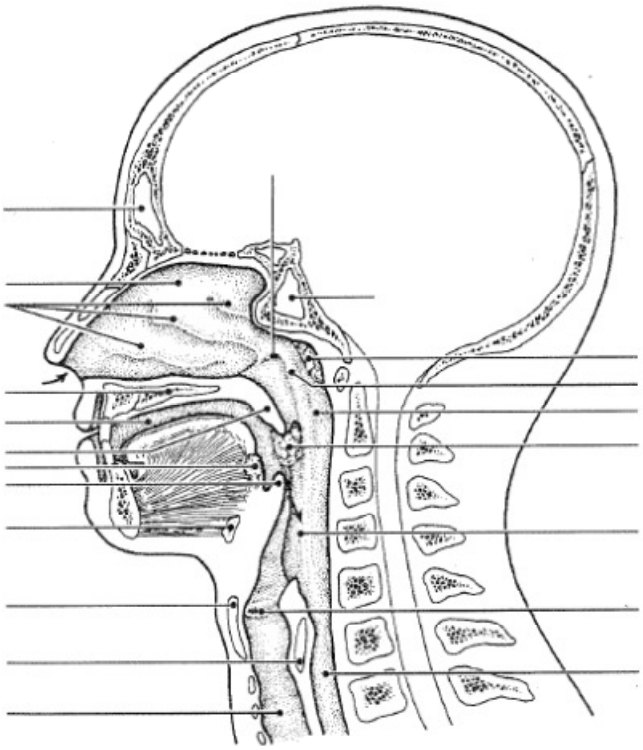

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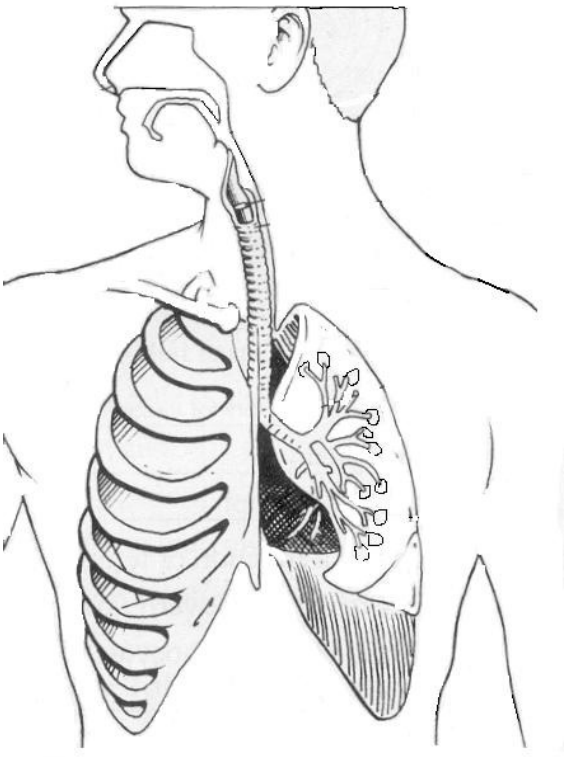

WLHS/A&P/Oppelt Name _____

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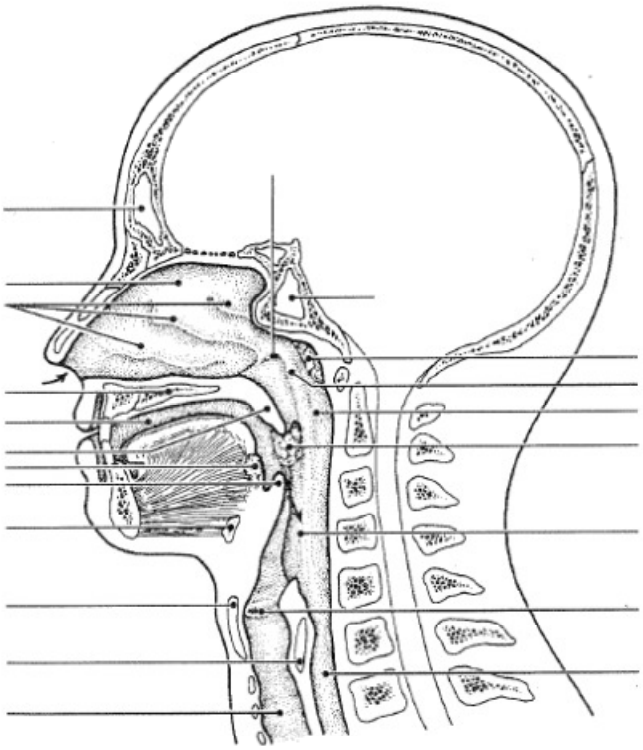

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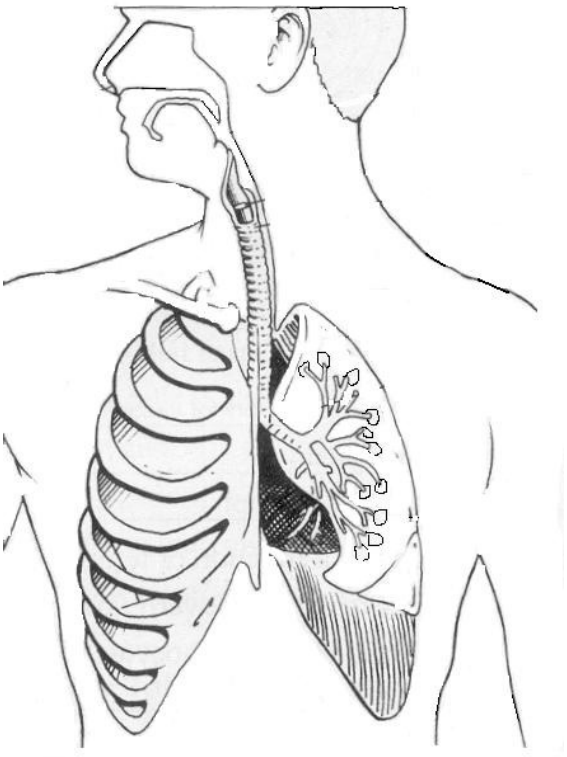

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Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

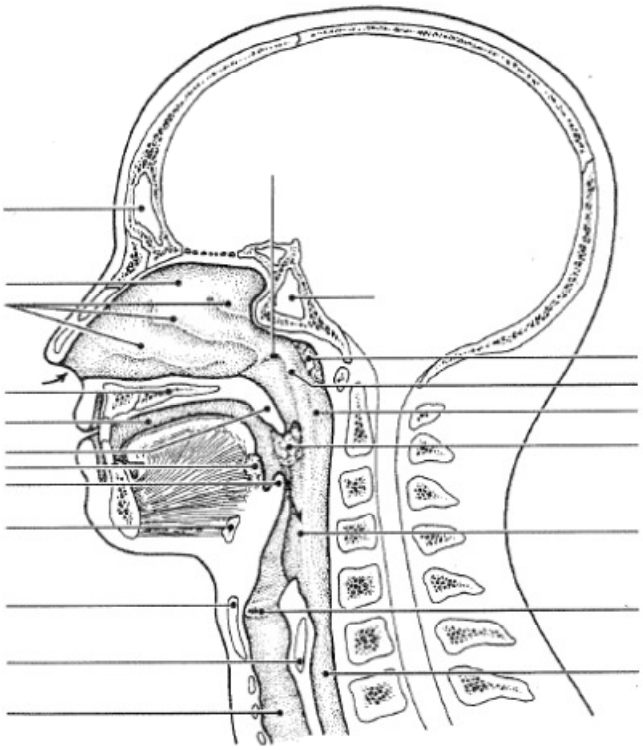

Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
E. Parietal pleura
F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
4.	Exchange of gases between alveolar air and pulmonary capillary blood
5.	Period of breathing when air leaves the lungs
6.	Respiratory volume inhaled or exhaled during normal breathing
7.	Air in respiratory passages that does not contribute to gas exchange
8.	Total amount of exchangeable air
9.	Gas volume that allows gas exchange to go on continuously
10.	Amount of air that can still be exhaled (forcibly) after a normal exhalation

7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

b. A deep breath is taken, the glottis is closed, and air is forced out of the lungs against the glottis; clear the lower respiratory passageways. _____

c. As just described, but it clears the upper respiratory passageways. _____

d. Increases ventilation of the lungs; may be initiated by a need to increase oxygen levels in the blood. _____

8. Circle the term that **DOES NOT** belong from the following groupings.

a. Nasal cavity Trachea Alveolus Larynx Bronchus

b. Laryngopharynx Oropharynx Transports air and food Nasopharynx

c. Alveoli Respiratory zone Alveolar sac Main bronchus

d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

e. High altitude ↓PO2 ↑PCO2 ↓Atmospheric pressure

9. In the picture below, identify the following structures:

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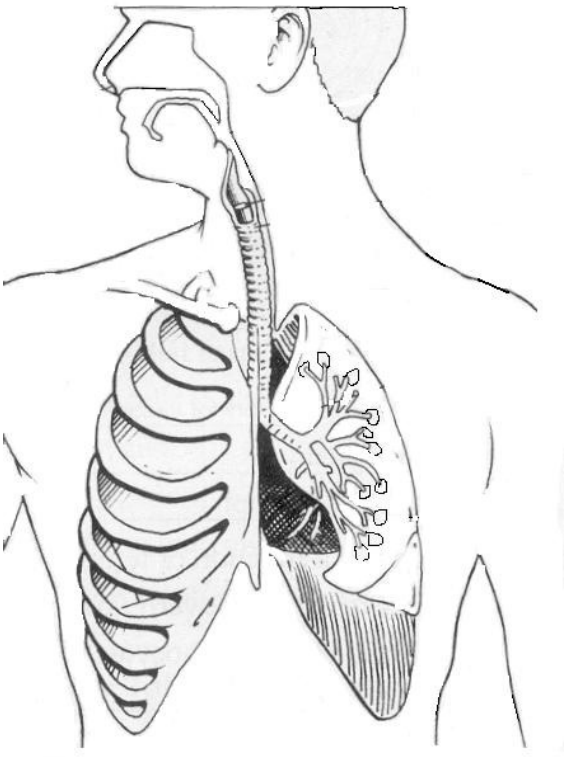

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

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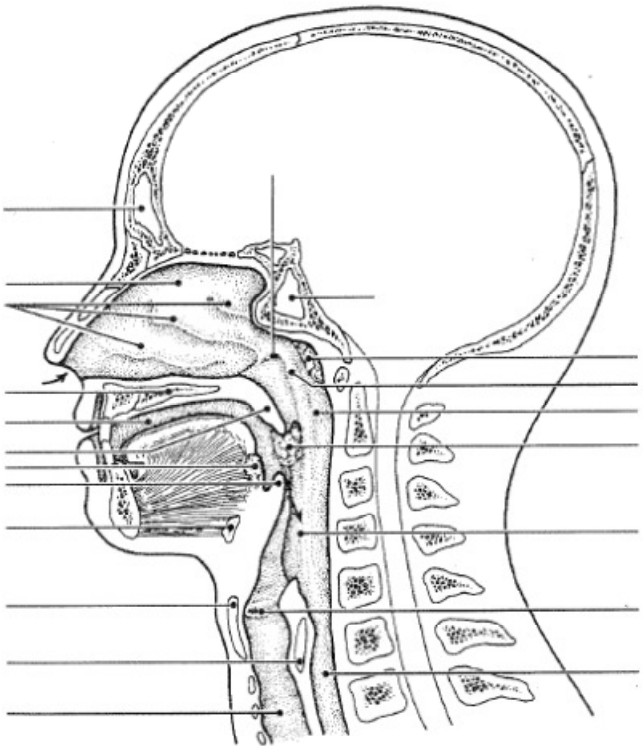

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Contracted, moves down								
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6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
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I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
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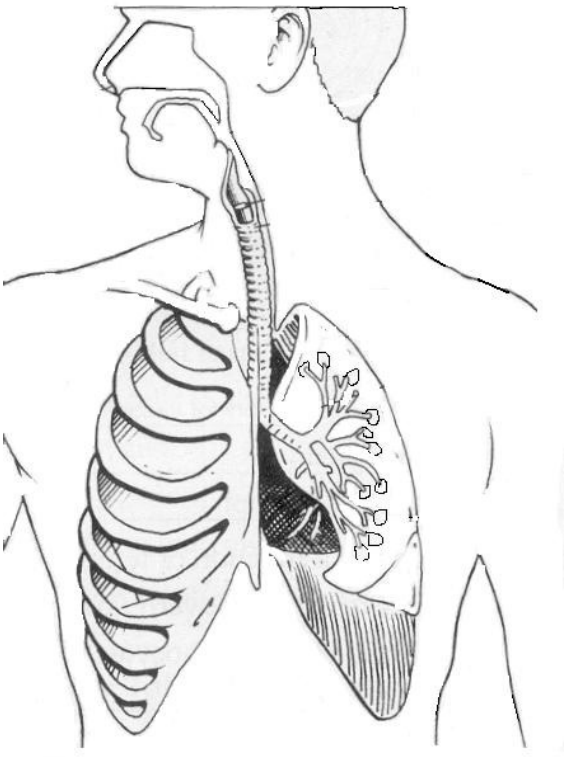

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
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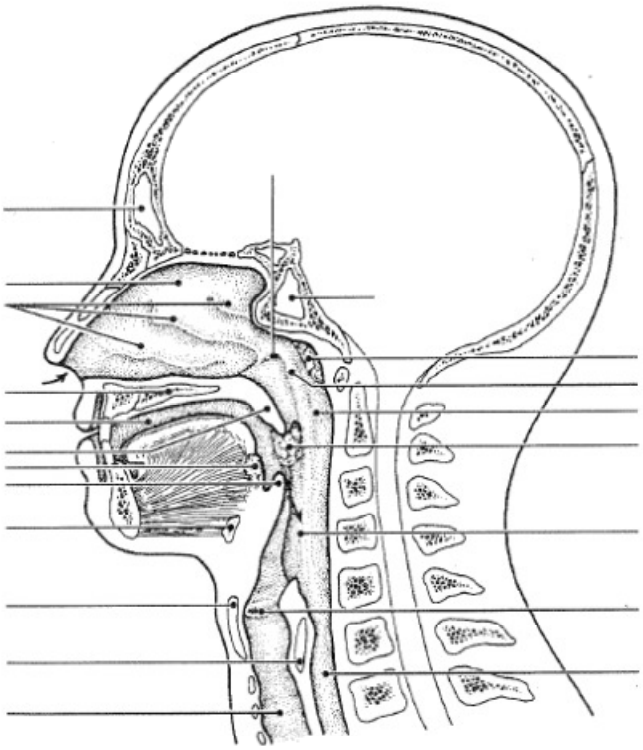

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I. Vocal cords

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6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
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E. Ventilation (breathing)
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K. Vital Capacity (VC)

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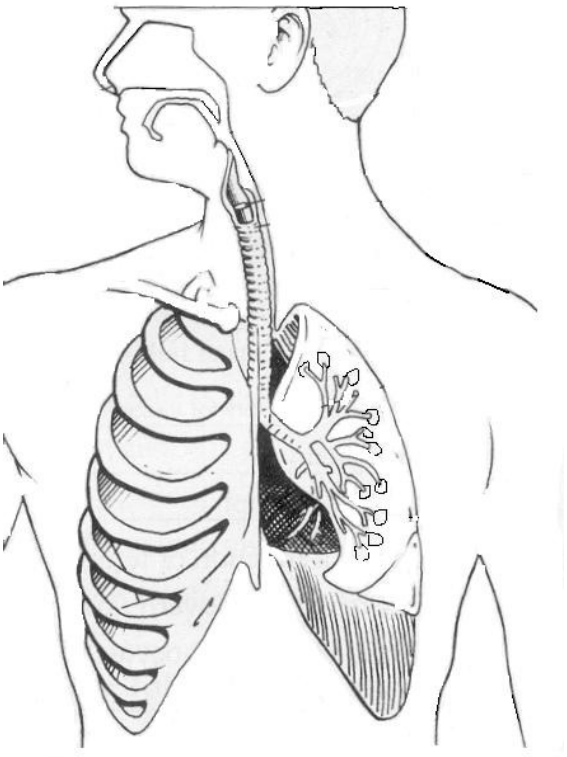

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
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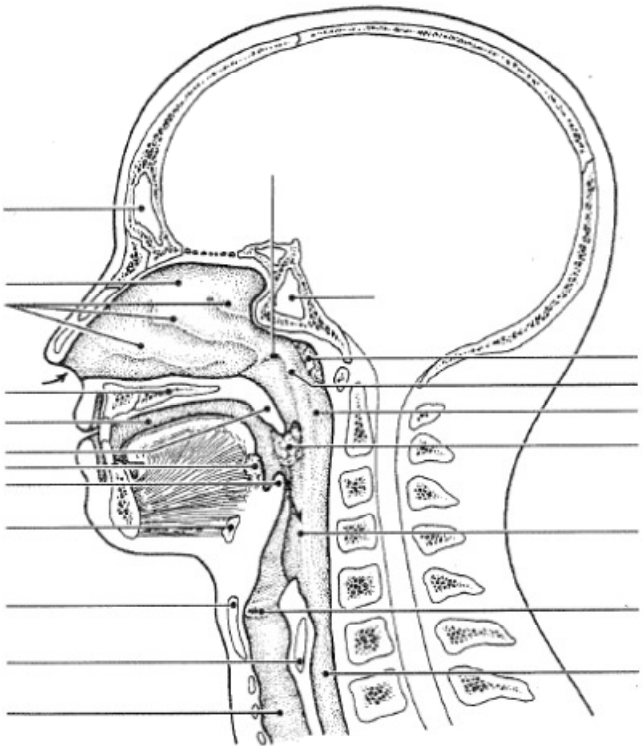

Figure 13–1

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5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

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6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

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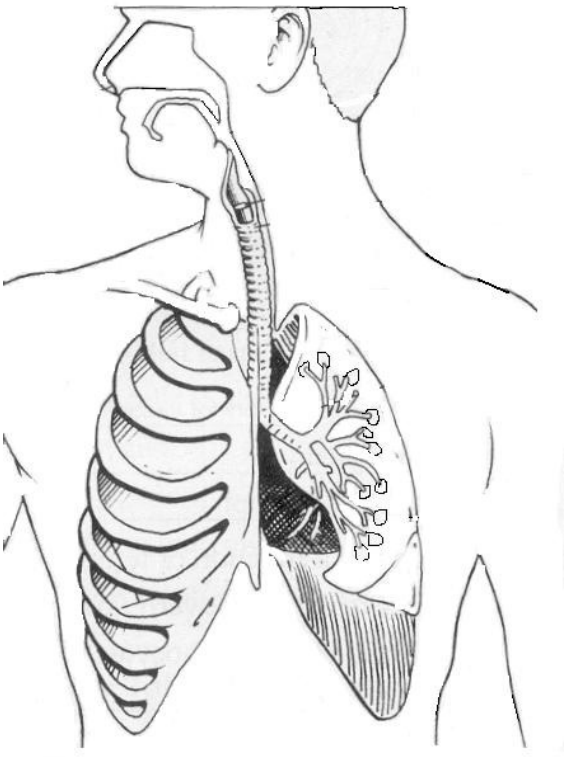

WLHS/A&P/Oppelt Name _____

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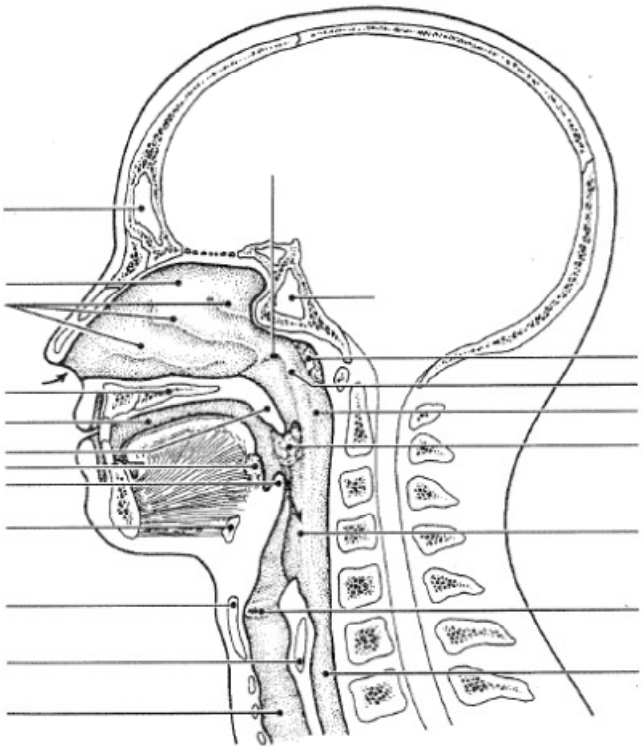

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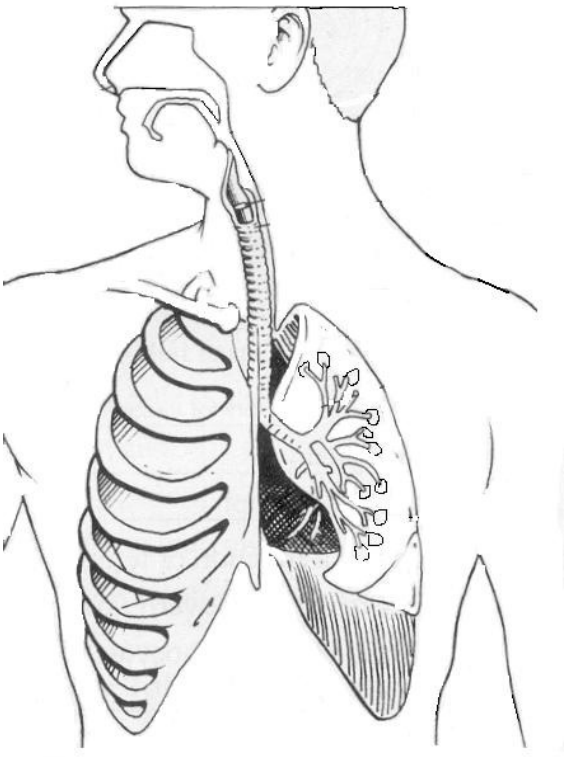
9. In the picture below, identify the following structures:

lungs, trachea, larynx, bronchus, alveolar sac, oropharynx, nasopharynx, laryngopharynx, esophagus



WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

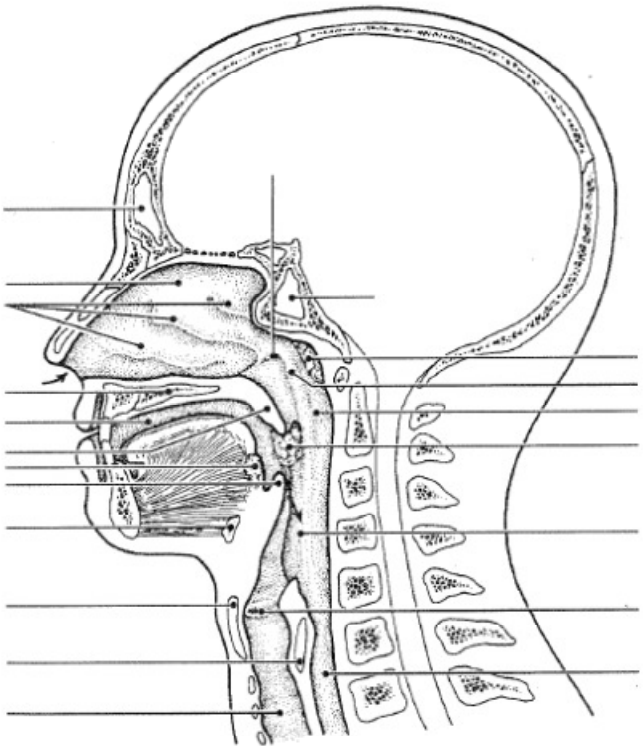


Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
E. Parietal pleura
F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
4.	Exchange of gases between alveolar air and pulmonary capillary blood
5.	Period of breathing when air leaves the lungs
6.	Respiratory volume inhaled or exhaled during normal breathing
7.	Air in respiratory passages that does not contribute to gas exchange
8.	Total amount of exchangeable air
9.	Gas volume that allows gas exchange to go on continuously
10.	Amount of air that can still be exhaled (forcibly) after a normal exhalation

7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

b. A deep breath is taken, the glottis is closed, and air is forced out of the lungs against the glottis; clear the lower respiratory passageways. _____

c. As just described, but it clears the upper respiratory passageways. _____

d. Increases ventilation of the lungs; may be initiated by a need to increase oxygen levels in the blood. _____

8. Circle the term that **DOES NOT** belong from the following groupings.

a. Nasal cavity Trachea Alveolus Larynx Bronchus

b. Laryngopharynx Oropharynx Transports air and food Nasopharynx

c. Alveoli Respiratory zone Alveolar sac Main bronchus

d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

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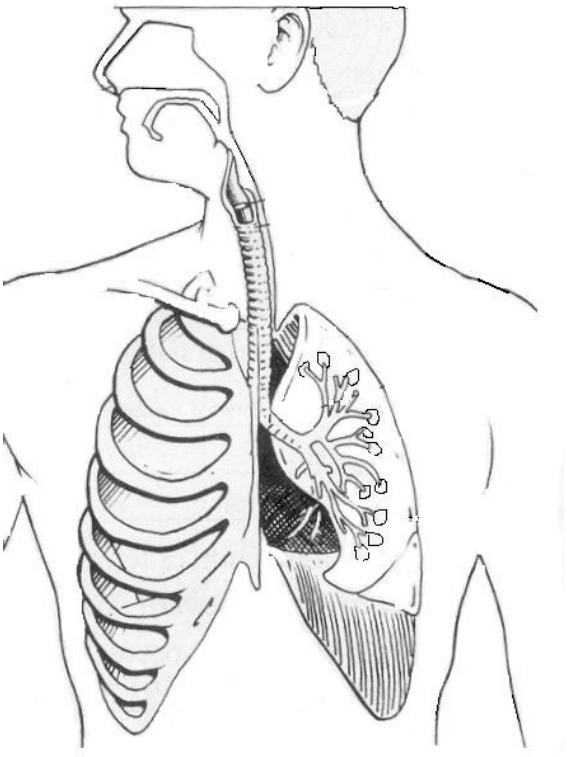

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

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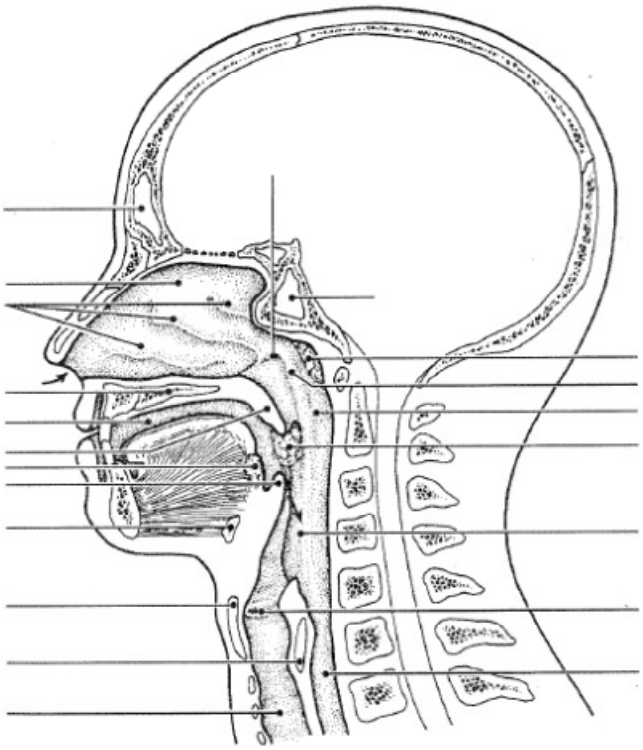
3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)



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5.	Windpipe
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7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
4.	Exchange of gases between alveolar air and pulmonary capillary blood
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a. Sudden inspiration, resulting from spasms of the diaphragm. _____

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d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

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9. In the picture below, identify the following structures:

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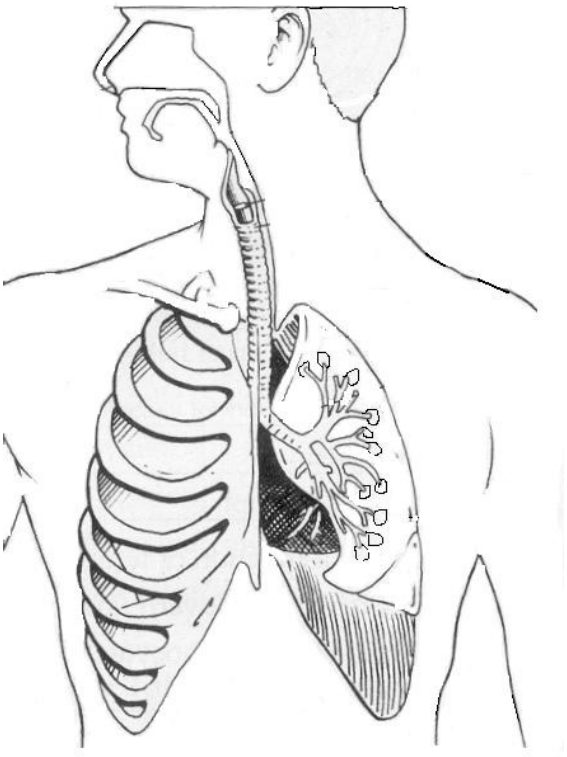

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
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3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
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Laryngopharynx
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Epiglottis
Sinuses (2)

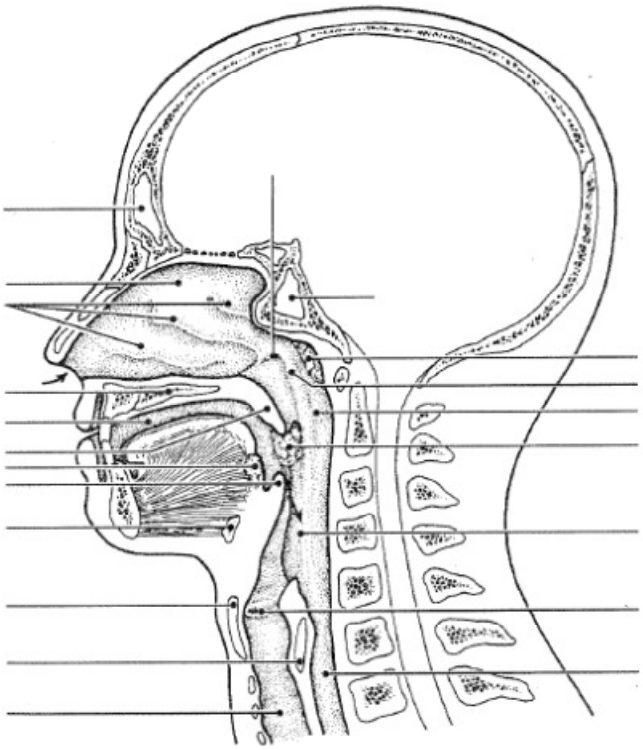

Figure 13–1

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D. Esophagus
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I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
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4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

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↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
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K. Vital Capacity (VC)

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8. Circle the term that **DOES NOT** belong from the following groupings.

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d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

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9. In the picture below, identify the following structures:

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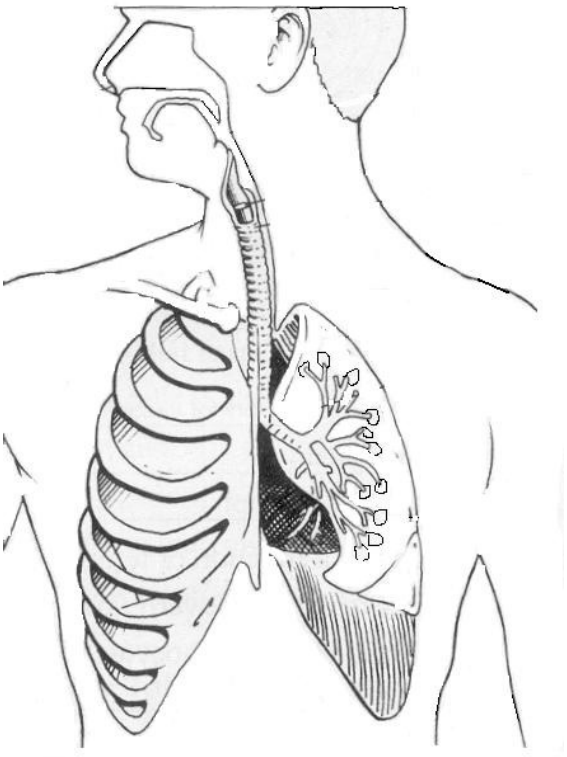

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
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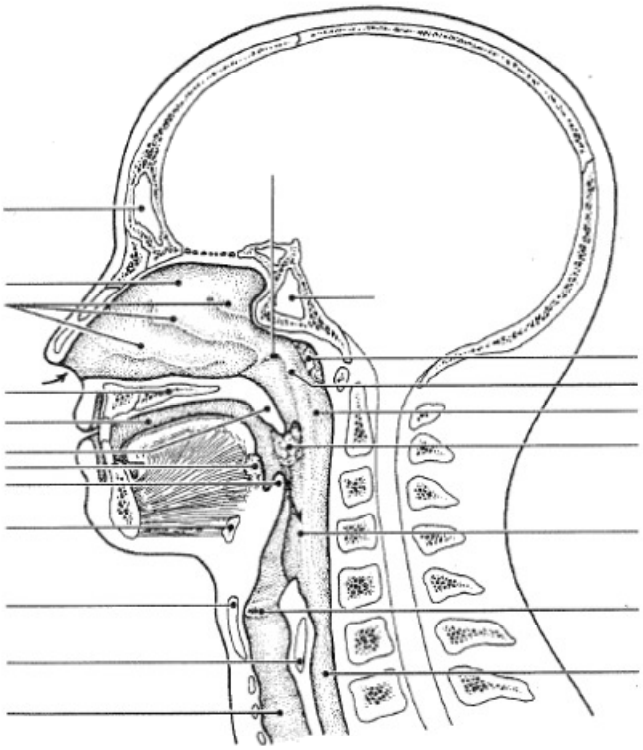

Figure 13–1

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5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

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Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
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F. Dead space volume
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J. Tidal Volume (TV)
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1.	Period of breathing when air enters the lungs
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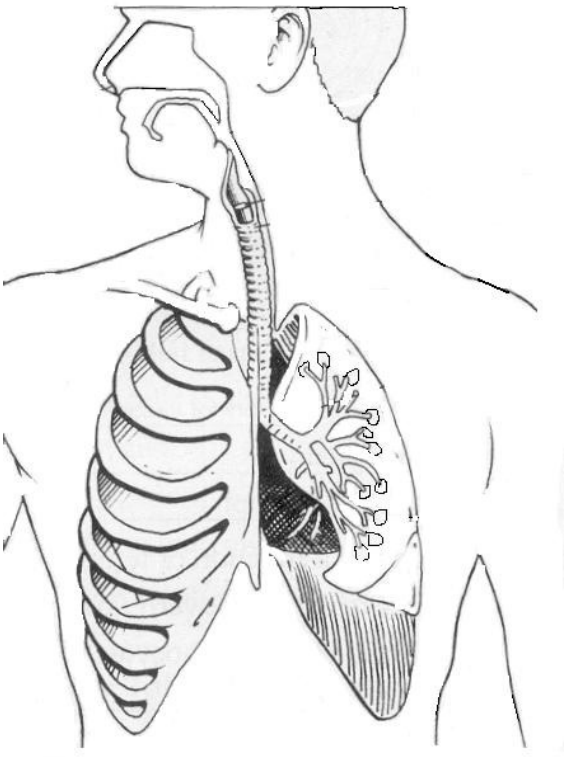

WLHS/A&P/Oppelt Name _____

Respiratory System Practice

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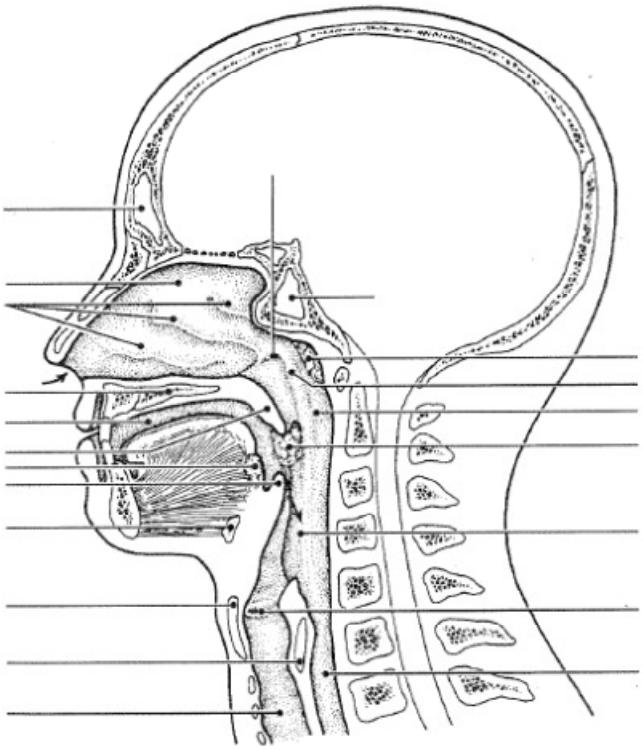

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6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
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4.	Exchange of gases between alveolar air and pulmonary capillary blood
5.	Period of breathing when air leaves the lungs
6.	Respiratory volume inhaled or exhaled during normal breathing
7.	Air in respiratory passages that does not contribute to gas exchange
8.	Total amount of exchangeable air
9.	Gas volume that allows gas exchange to go on continuously
10.	Amount of air that can still be exhaled (forcibly) after a normal exhalation

7. Four nonrespiratory movements are described below. Identify each by inserting the correct term in to the space provided.

a. Sudden inspiration, resulting from spasms of the diaphragm. _____

b. A deep breath is taken, the glottis is closed, and air is forced out of the lungs against the glottis; clear the lower respiratory passageways. _____

c. As just described, but it clears the upper respiratory passageways. _____

d. Increases ventilation of the lungs; may be initiated by a need to increase oxygen levels in the blood. _____

8. Circle the term that **DOES NOT** belong from the following groupings.

a. Nasal cavity Trachea Alveolus Larynx Bronchus

b. Laryngopharynx Oropharynx Transports air and food Nasopharynx

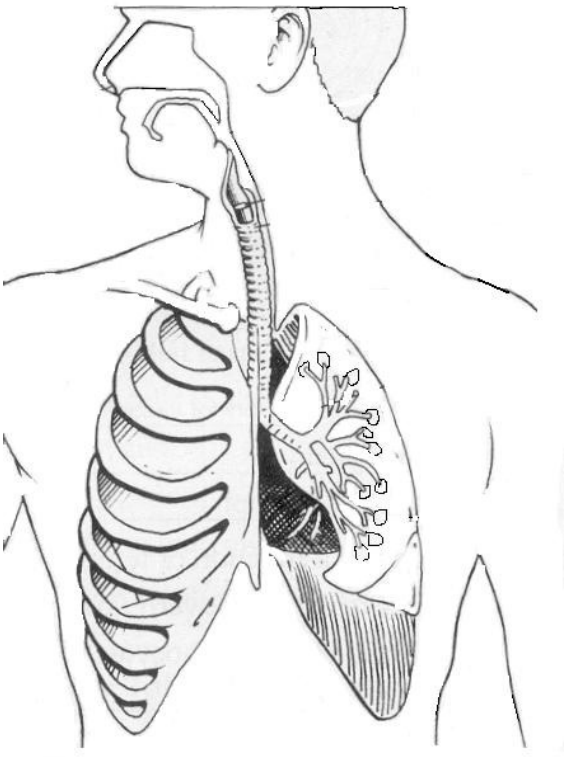
c. Alveoli Respiratory zone Alveolar sac Main bronchus

d. ↑ Respiratory rate ↑Exercise Anger CO_2 in blood

e. High altitude ↓PO2 ↑PCO2 ↓Atmospheric pressure

9. In the picture below, identify the following structures:

lungs, trachea, larynx, bronchus, alveolar sac, oropharynx, nasopharynx, laryngopharynx, esophagus



WLHS/A&P/Oppelt Name _____

Respiratory System Practice

1. a. Name the conducting zone structures: _____

   b. What is their common function? _____

   c. Name the respiratory zone structures: _____

2. Complete the following statements by inserting your answers in the blank.

Moisten	Speak	Warm
Nostrils	Anteriorly	Nasal Septum
Pharynx	Thyroid	Cartilage
Cleanse	Pressure	Tonsils
Vocal cords	Speech	Larynx

Air enters the nasal cavity of the respiratory system through the (1)_____. The nasal cavity is divided by the midline (2)_____. The nasal cavity mucosa has several functions. Its major functions are to (3)_____, (4)_____, and (5)_____ the incoming air. Mucous membrane-lined cavities called paranasal sinuses are found in several bones surrounding the nasal cavities. They make the skull less heavy and probably act as resonance chambers for (6)_____. The passageway common to the digestive and respiratory systems are the (7)_____, is often referred to as the throat; it connects the nasal cavity with the (8)_____ below. Clusters of lymphatic tissue, (9)_____, are part of the defensive system of the body. Reinforcement of the trachea with (10)_____ rings prevents its collapse during (11)_____ changes that occur during breathing. The fact that the rings are incomplete posteriorly allows a food bolus to bulge (12) _____ during its transport to the stomach. The larynx or voice box is built from many cartilages, but the largest is the (13)_____ cartilage. Within the larynx are the (14)_____, which vibrate with exhaled air and allow an individual to (15)_____.

3. In the picture below, identify the following parts of the upper respiratory system.

Nostrils
Oropharynx
Nasopharynx
Laryngopharynx
Esophagus
Nasal cavity
Mouth
Larynx
Trachea
Vocal Chords of larynx
Epiglottis
Sinuses (2)

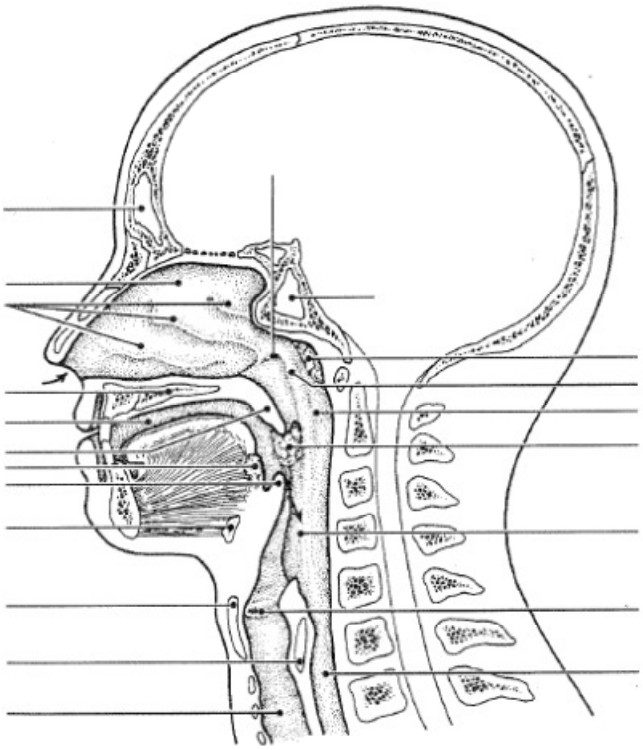


Figure 13–1

4. Using the key terms below, identify the term that goes with the correct description.

A. Alveoli
B. Bronchioles
C. Epiglottis
D. Esophagus
E. Parietal pleura
F. Phrenic
G. Trachea
H. Visceral pleura
I. Vocal cords

1.	Smallest conducting respiratory passageway
2.	Major nerve, stimulating the diaphragm
3.	Food passageway posterior to the trachea
4.	Closes off the larynx during swallowing
5.	Windpipe
6.	Actual site of gas exchange
7.	Pleural layer covering the thorax walls
8.	Pleural layer covering the lungs
9.	Vibrate with expired air

5. Many changes occur within the lungs as the diaphragm (and external intercostals muscles) contract and then relax. These changes lead to the flow of air into and out of the lungs. The activity of the diaphragm is in the left column while various changes in condition are listed in the right column. Complete the table by placing a check **(√)** in the appropriate column that would correctly identify the change that would occur.

	Changes in…							
Activity of Diaphram	**Internal volume of thorax**		**Internal pressure in thorax**		**Size of lungs**		**Direction of air flow**	
↓ = decrease ↑ = increase	↑	↓	↑	↓	↑	↓	Into lung	Out of lung
Contracted, moves down								
Relaxed, moves superiorly								

6. Use the key choices to respond to the following descriptions. Insert the correct term or letter in the answer blanks.

A. External respiration
B. Expiration
C. Inspiration
D. Internal respiration
E. Ventilation (breathing)
F. Dead space volume
G. Expiratory reserve volume (ERV)
H. Inspiratory reserve volume (IRV)
I. Residual volume (RV)
J. Tidal Volume (TV)
K. Vital Capacity (VC)

1.	Period of breathing when air enters the lungs
2.	Exchange of games between the systemic capillary blood and body cells
3.	Alternate flushing of air into and out of lungs
4.	Exchange of gases between alveolar air and pulmonary capillary blood
5.	Period of breathing when air leaves the lungs
6.	Respiratory volume inhaled or exhaled during normal breathing
7.	Air in respiratory passages that does not contribute to gas exchange
8.	Total amount of exchangeable air
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