

Name: \_\_\_\_\_

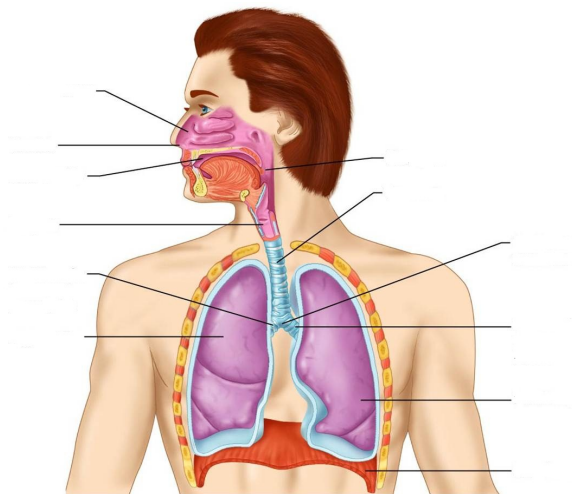
## Unit 3 – Respiratory System

### Lesson 3.1 – the Respiratory System

	Inhalation	Exhalation
<b>Chest Wall:</b>	<i>Rises</i>	
<b>Diaphragm:</b>		<i>Relaxes</i>
<b>Result:</b>		<i>Air pushed out</i>
<b>Oxygen Percentage:</b>	<i>21%</i>	

Label the following parts of the respiratory system

- Trachea
- Larynx
- Epiglottis
- Bronchi
- Bronchioles



The grape-like structures on the end of the bronchioles where gas exchange takes place: \_\_\_\_\_

**Lesson 3.2 – Respiratory Fitness**

ATP Energy is required by your \_\_\_\_\_

ATP Energy is created three ways

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

Which one of these three energy-producing systems requires oxygen? \_\_\_\_\_

To travel around your body, oxygen binds to \_\_\_\_\_

Matching:

VO2 Max	How fast you breathe
Tidal Volume	How much you breathe normally
Ventilation Rate	How much you can possibly breathe in
Total Lung Capacity	How much oxygen is going to your body

The following results were measured while someone was training. Match the result with what was being measured:

28 breaths per minute	VO2 Max
7.2 L per breath	Ventilation Rate
70 mL/kg/min	Total Lung Capacity

What is a “Second Wind” and one possible explanation?

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Why should you never hyperventilate on purpose?

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Why can the Valsalva Technique be dangerous? How do you avoid it?

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**Lesson 3.3 Shock**

Physical shock is caused by a lack of oxygen to the body cells. Another word for this is: \_\_\_\_\_

Matching:

Septic Shock	Infection
Neurogenic Shock	Heart Failure
Cardiogenic Shock	Loss of Blood
Anaphylactic Shock	Allergic Reaction
Hypovolemic Shock	Brain Malfunction

Shock can be life-threatening because \_\_\_\_\_  
\_\_\_\_\_

How bad does shock need to be before calling 9-1-1? \_\_\_\_\_  
\_\_\_\_\_

What is cyanosis? \_\_\_\_\_

Why might the symptoms be delayed for someone that is pregnant? \_\_\_\_\_  
\_\_\_\_\_

What is the treatment for shock?

- W = \_\_\_\_\_
- A = \_\_\_\_\_
- R = \_\_\_\_\_
- T = \_\_\_\_\_
- S = \_\_\_\_\_

**Lesson 3.4 – Oxygen and Airways**

**A. Oxygen Therapy**

1) Four safety considerations for oxygen therapy:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3) Two gauges on the oxygen regulator

4) Flow setting for an unconscious non-breathing patient: \_\_\_\_\_

5) Two most common delivery devices in a First Aid setting

6) Delivery device used by paramedics = \_\_\_\_\_

**B. Oropharyngeal Airways**

1) What is the purpose of using one?

\_\_\_\_\_  
\_\_\_\_\_

2) Describe how to choose the right size:

\_\_\_\_\_  
\_\_\_\_\_

**Lesson 3.5 – Unconscious Breathing Patient**

What are the first four steps of the Priority Action Approach?

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_

What does SAFE stand for?

- S = \_\_\_\_\_
- A = \_\_\_\_\_
- F = \_\_\_\_\_
- E = \_\_\_\_\_

What are the four steps of the primary survey?

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_

What are the five primary survey questions that you should ask every First Aid patient?

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

What are you looking for in a Rapid Body Survey?

- D = \_\_\_\_\_
- E = \_\_\_\_\_
- F = \_\_\_\_\_
- M = \_\_\_\_\_

For an unconscious breathing patient, how often should you re-check their breathing? \_\_\_\_\_

### Lesson 3.6 – Respiratory Emergencies

#### A. Hyperventilation

What happens to the carbon dioxide and oxygen levels in your body?

\_\_\_\_\_

What is the treatment for hyperventilation?

\_\_\_\_\_

**B. Asthma**

What is a *bronchospasm*?

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What is the medication for asthma and how does it work?

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**C. Aspiration**

What does it mean to *aspirate* something?

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How long might it take for the symptoms do develop?

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**D. Smoke Inhalation**

Why does smoke inhalation cause the same symptoms as drowning?

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What other problems can smoke inhalation cause besides difficulty breathing?

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**E. Complication**

What is the difference between *pulmonary edema* and *pneumonia*?

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**F. COPD**

What is COPD normally caused by? \_\_\_\_\_

What does it have to do with oxygen therapy?

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**Lesson 3.7 – Anaphylaxis**

What is the key symptom that we are worried about? \_\_\_\_\_

What are the three different types of epinephrine auto-injectors that we learned about?

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

How can you tell if an auto-injector is too old and no longer safe to use?

\_\_\_\_\_

When might you need to actually administer epinephrine for someone?

I \_\_\_\_\_

H \_\_\_\_\_

E \_\_\_\_\_

L \_\_\_\_\_

P \_\_\_\_\_

**Lesson 3.8 – Choking**

What are the signs of **severe** choking? (as opposed to mild choking)

\_\_\_\_\_  
\_\_\_\_\_

What are the first three things that you do if a person goes unconscious while you are performing abdominal thrusts:

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

**Lesson 3.9 – Blood Doping**

How does erythropoietin (EPO) work as a performance enhancing drug?

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How do blood transfusions enhance performance?

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Why is blood doping banned by WADA?

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**Lesson 3.8 – Choking**

What is the difference between **mild** choking and **severe** choking?

\_\_\_\_\_

For an adult who is severely choking, what two techniques do you do?

1) \_\_\_\_\_

2) \_\_\_\_\_

What if the adult is pregnant? \_\_\_\_\_

What are the first three things you do if your choking patient goes unconscious?

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

If you are doing chest compression for an unconscious choking patient and an AED arrives, what should you do? \_\_\_\_\_

For a baby who is severely choking, what two techniques do you do?

1) \_\_\_\_\_

2) \_\_\_\_\_