

RESPIRATORY PART 1 (SMITH) STUDY GUIDE

Pre-Class Preparation – 15-minute prep time:

1. Summarize briefly what gasses are exchanged in the lungs?
2. Explain ventilation (aka the airways) versus perfusion (aka veins/arteries) and how this can affect oxygenation?
3. If a patient is on 40% FiO₂, what does that mean? If their PaO₂ is 80 mmHg, is this patient doing good? Why not?
4. What does MAP tell you? What is the minimum MAP to perfuse organs?
5. PaO₂ less than 79 mmHg is called _____.
PaCO₂ higher than 46 mmHg is called _____.
6. What is happening in ARDS? Is it always related to the heart?
7. What is the difference between a pneumothorax and a hemothorax? What is the treatment?
8. What do you want to assess and monitor with a chest tube?
9. Is a pulmonary embolism a ventilation (aka airway) or a perfusion (aka veins/arteries) issue? How does this affect oxygenation?
10. Describe how these meds affect oxygenation:
 - a. albuterol
 - b. ipratropium
 - c. budesonide
 - d. furosemide
 - e. heparin
 - f. methylprednisolone

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Lung Functions	
Explain FiO ₂ . What does it mean when the patient's FiO ₂ keeps going up?	
MAP - What is it? Why is this important?	
List the parts of an ABG and what each mean	
PaO ₂ /FiO ₂ ratio. 1. Figure the ratio and explain what lung classification this patient has. a. PaO ₂ 80 mmHg and 21% FiO ₂ b. PaO ₂ 80 mmHg and 80% FiO ₂ c. PaO ₂ 90 mmHg and 35% FiO ₂ 2. What would you do for each patient?	

Identify the clinical manifestations of respiratory failure	
What assessments or interventions would you do for each?	
Early	Late

Describe what happens with each process		
Pulmonary Edema (ARDS)	Pulmonary Embolus	Pneumothorax Hemothorax

Identify the clinical manifestations of each process		
What is the treatment for each?		
How would you know if your patient is getting better or worse?		
Pulmonary Edema (ARDS)	Pulmonary Embolus	Pneumothorax Hemothorax

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Identify 3 education topics you would provide about each.		
Pulmonary Edema (ARDS)	Pulmonary Embolus	Pneumothorax Hemothorax

Chest Tubes (CT)		
1. Describe the parts and what they do for wet and dry chest tubes.		
Suction chamber	Drainage chamber	Water Seal chamber
2. What action(s) should the nurse take if the CT becomes dislodged?		

PHARMACOLOGY				
1. Expected action of the medication.				
2. Potential side effects. Are these expected?				
3. Describe the appropriate medication administration.				
4. Education needed for patient/family regarding the medications.				
Anticholinergics <i>ipratropium</i>	Anticoagulants <i>heparin</i> <i>warfarin</i> <i>apixaban</i>	Anti-Inflammatory (Steroid) <i>methylprednisolone</i> <i>e</i> <i>fluticasone</i> <i>beclamethasone</i> <i>budesonide</i>	Beta 2 Agonists <i>albuterol</i>	Diuretics <i>furosemide</i> <i>spironolactone</i>