IM5 (Pediatrics) Critical Thinking Worksheet **Patient Age:** 3yrs 2mo. **Patient Weight:** 13.1kg

Student Name: Wendy Jacquez	**Unit:** Pedi Floor **Pt. Initials:** IB	**Date:** 8/11/2021
1. Disease Process & Brief Pathophysiology (Identify Key Concepts to Your Patient and Include Reference): Bronchiolitis: is a common, acute viral infection w/ upper respiratory symptoms and lower respiratory infection of the bronchioles due to inflammation. The infection occures primarily in winter & early spring. By 3yrs old, most children have been infected at least once. RSV infection is the most frequent cause of hopitalization in children younger than 1yr old. Although most cases of bronchiolitis are caused by RSV, adenoviruses & parainfluenza viruses are also implicated; human metapneumovirus has also been associated with bronchiolitis in children. Usually affects the epithelial cells of the respiratory tract. The ciliated cells swell, protrude into the lumen, and lose their cilia. The walls of the bronchi and bronchioles are infiltrated with inflammatory cells, and varying degrees of intraluminal obstruction lead to hyperinflation, obstructive emphysema resulting from partial obstruciton, and patchy areas fo atelectasis. Dilation of bronchial passages on inspiration allows sufficient space for intake of air, but narrowing of the passages on expiration prevents air from leaving the lungs. Thus, air is trapped distal to the obstruction and causes progressive overinflation (emphysema) Hockenberry, M., Wilson, D., & Rodgers, C. Wong's essentials of pediatric nursing.	**2. Factors for the Development of the Disease/Acute Illness:** -daycares -school P-first 4 years of life -siblings	**3. Signs and Symptoms:** -rhinorrhea -pharyngitis P-coughing -sneezing -wheezing -possible ear or eye drainage -intermittent fever -tachypnea and retractions -cyanosis -listlessness -apneic spells P-poor air exchange; poor breath sounds

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4. Diagnostic Tests Pertinent or Confirming of Diagnosis: P-CXR P-rapid immunofluorescent antibody/direct fluorescent antibody (DFA) staining P-enxymelinked immunosorbent assay (ELISA) for RSV antigen detection	**5. Lab Values That May Be Affected:** P-Hg: 12.3L -pH resp. panel: P-flu negative P- RSV negative P-COVID negative	**6. Current Treatment (Include Procedures):** P-daily CXR P-humidified oxygen administration P-incentive spirometer P-continuous o2 sat. monitoring P-hourly RR, o2 sat., & HR monitoring P-adequate fluid intake
7. Pain & Discomfort Management: List 2 Developmentally Appropriate Non-Pharmacologic Interventions Related to Pain & Discomfort for This Patient. 1. breathing techniques **2.** distraction ***List All Pain/Discomfort Medication on the Medication Worksheet** N/A	**8. Calculate the Maintenance Fluid Requirement (Show Your Work):** 13.1Kg 10X100=1000 3.1X50=155 1000+155=1155 1155/24=48.1mL/hr **Actual Pt MIVF Rate:** N/A **Is There a Significant Discrepancy?** No **Why?** B/C she has no fluid running at all.	**9. Calculate the Minimum Acceptable Urine Output Requirement (Show Your Work):** 0.5X13.1=6.6mL/hr **Actual Pt Urine Output:** 4 unmeasurable voids due to parents helping child to restroom and not measuring actual output

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	10. Growth & Development: List the Developmental Stage of Your Patient For Each Theorist Below and Document 2 OBSERVED Developmental Behaviors for Each Theorist. If Developmentally Delayed, Identify the Stage You Would Classify the Patient: **Erickson Stage:** Initiative VS. Guilt **1.** She would state that she was a big girl after I would successfully obtain her vital signs. 2. Would feel sad everytime her mom wouldn't wander far due to her oxyegen tubing. **Piaget Stage:** Preoperational **1.** She would pretend that she was making food out of playdoh. **2.** She would invade her mom's space whenever she needed something.	
11. Focused Nursing Diagnosis: Decreased Gas Exchange	**15. Nursing Interventions related to the Nursing Diagnosis in #11:** **1.** teach/demonstrate deep breathing techniques **Evidenced Based Practice:** child able to repeat/demonstrate the same breathing techniques	**16. Patient/Caregiver Teaching:** **1.** Teach parent how to properly use the inscentive spirometer and have pt demonstrate proper use. This will help patient increase lung expansion and increase gas exchange. **2.** Teach parents the importance of preventing

<table>
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<tr><td>12. Related to (r/t):
bronchiolitis</td><td rowspan="3">2. administer o2 as prescribed and monitor oximetry reading; report o2 saturation of 92% or lower

Evidenced Based Practice:
oxygen saturation of less than 92% is a sign of significant oxygenation problem and can indicate for an increase in o2 therapy due to impaired gas exchange.

3. maintain prescribed activity levels to maintain/increase lung expansion thus improving gas exchange

Evidenced Based Practice:
prescribed activity levels will increase the patient's stamina while minimizing dyspnea and increasing lung expansion and gas exchange.</td><td>fatigue by pacing activities and allowing frequent rest periods. This will help patient by not exacerbating herself and further impairing her respiratory status.

3. Teach how to use/read a pulse ox in order to monitor patient properly during and after hospital visit.</td></tr>
<tr><td>13. As evidenced by (aeb):
decreased oxygen saturation with exerction.</td><td rowspan="2">17. Discharge Planning/Community Resources:
1. Have RT come and demonstrate/teach parents how to use a pulse ox.

2. Have case management help obtain o2 if needed or in case of emergencies.

3. Have diatician visit with family about adequate fluid intake due to tachypnea in order to prevent dehydration.</td></tr>
<tr><td>14. Desired patient outcome:
Wean pt off o2 gradually as tolerated during shift. Goal is room air with saturation of at least 95% and stable.</td></tr>
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