Respiratory Class Preparation Day 2

Medication Review

1. Your client has recently started on montelukast (Singular) for allergic rhinitis. You know that it is important to monitor what for this client?
    a. Renal function
    b. Blood pressure
    c. Liver function
    d. Heart rate
2. You should instruct a client using phenylephrine spray for nasal congestion to do which of the following to avoid rebound congestion?
    a. Limit the drug's use to 3 to 5 days.
    b. Add an intranasal glucocorticoid.
    c. Taper the dose before discontinuation.
    d. Restrict the drug's use to one nostril at a time.
3. You anticipate that your client with a dry, hacking cough would be prescribed which of the following medications?
    a. Fluticasone
    b. Dextromethorphan
    c. Amoxicillin
    d. Diphenhydramine
4. You educate your patient these are common side effects of diphenhydramine, a first-generation antihistamine:
    a. Diarrhea
    b. Insomnia
    c. Dry mouth, constipation
    d. Rash
5. During assessment, the nurse notes that the patient with acute pharyngitis has a thick, white coating on their tongue. Which medication do they anticipate giving to treat?
    a. Amphotericin B
    b. Azithromycin
    c. Prednisone
    d. Nystatin
6. List the four drugs that are considered the initial treatment regimen of choice for patients newly diagnosed with tuberculosis: Isoniazid, Rifampin, Pyrazinamide, Ethambutol
7. Prompt treatment with what medication is essential to resolving bacterial pneumonia?
    a. Bronchodilator
    b. Antipyretic
    c. Corticosteroid
    d. Antibiotic
8. A client diagnosed with sinusitis is newly prescribed a steroid nasal spray. The nurse includes which of the following in their teaching?
    a. Systemic side effects are common
    b. Should be used on a regular basis, not PRN
    c. Use care operating machinery and driving
    d. Take on empty stomach

🩺💨 Homework Activity: “Mission: Lung Possible”

🔍 Objective:

By the end of this activity, students will be able to:

- Identify key lower respiratory disorders
- Understand basic ventilation mechanics
- Explain respiratory defense mechanisms
- Apply correct isolation precautions for common infections

📄 PART 1: Lung Locker – Diagnosis Decoder (5 minutes)

Match the correct **lower respiratory disorder** to the patient scenario below:

Scenario	Diagnosis Choices
A 68-year-old with productive cough, fever, crackles in lower lobes, lives in a care home.	A. Emphysema
A college student with fever, night sweats, hemoptysis, lives in shared housing.	B. Pertussis
A smoker with chronic cough, barrel chest, and pursed-lip breathing.	C. Pneumonia
A Child with coughing fits and “whoop” sound	D. Tuberculosis (TB)

✅ **Your Mission:** Identify each disorder (A–D) and list one typical **sign/symptom** for each.

🦠 PART 2: Infection Intel – Isolation Match-Up (5 minutes)

Match each respiratory disorder to its correct **isolation precaution**:

Condition	Precaution Options
Asthma	A. Airborne
Tuberculosis (TB)	B. Droplet
Influenza	C. Droplet + Airborne (per local policy)
COVID-19	D. Standard (no isolation)

🫁 PART 3: Ventilation Vault – Mechanics Riddle (5 minutes)

Agent Alveolus needs help remembering how air moves in and out of the lungs! Fill in the blanks:

1. When the **diaphragm contracts**, it moves ____downward_____, creating _____negative_____ pressure in the thoracic cavity and drawing air in.
2. When the diaphragm relaxes, air is pushed out because the pressure becomes ___positive_____.
3. The primary muscles of ventilation include the __diaphragm_____ and _external_____ intercostals.

✅ **Bonus:**
What happens to ventilation if the diaphragm is paralyzed?

Hypoventilation and respiratory failure due to an inability to draw air in effectively.

🛡️ PART 4: Defense System ID (5 minutes)

Match each **respiratory defense mechanism** with its function:

Defense Mechanism	Function
Cough Reflex	A. Sweeps particles up toward throat to be swallowed or coughed out
Alveolar macrophages	B. Engulf and digest microbes deep in the lungs
Nasal hairs & mucus	C. Clears irritants and secretions from upper airways
Mucociliary escalator	D. Trap large particles before they reach the lungs

✅ **Final Mission:** Choose one defense mechanism and explain how it could be impaired in a smoker.

Cilia may be destroyed in the airway of a smoker due to chronic exposure to toxins that results in constant irritation, damage and eventual paralysis.
