

Chapter 03: Techniques and Equipment for Physical Assessment

Wilson: Health Assessment for Nursing Practice, 6th Edition

MULTIPLE CHOICE

1. What is the most important nursing action to reduce transmission of microorganisms prior to initiation of the physical assessment?
 - a. Clean the bell and diaphragm of the stethoscope between patients.
 - b. Perform hand hygiene.
 - c. Wear gloves when anticipating exposure to body fluids.
 - d. Wear eye protection when anticipating spatter of body fluids.

ANS: B

Consensus recommendations of the World Health Organization include use of hand hygiene techniques to prevent spread of microorganisms before palpating, percussing, or auscultating patients, and during patient care. Cleaning the bell and diaphragm of the stethoscope between patients is important to prevent the spread of microorganisms when auscultating only. Wearing gloves when anticipating exposure to body fluids is important to prevent the spread of microorganisms from the patient while giving care. Wearing eye protection when anticipating spatter of body fluids is important to prevent the spread of microorganisms from the patient while giving care.

DIF: Cognitive Level: Remember

REF: p. 21

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Safe and Effective Care Environment: Safety and Infection Control: Standard Precautions/Transmission-Based Precautions/Surgical Asepsis

2. When examining a patient, the nurse remembers to follow which principle of Standard Precautions?
 - a. Wear gloves throughout the entire examination of the patient.
 - b. Wear gloves when in contact with the patient's mucous membranes.
 - c. Wear gloves to reduce the need for handwashing.
 - d. Wear eye protection and a gown during the examination of the patient.

ANS: B

Specifically, this applies to contact with blood, body fluids (e.g., urine, feces, sputum, wound drainage), nonintact skin, and mucous membranes. Wearing gloves throughout the examination of the patient is unnecessary. Referring to the Standard Precautions for the correct answer, nurses use judgment to determine when contact with body fluids is possible. Hands must be washed after removal of gloves. The nurse should wear a mask with eye protection or a face shield during procedures that may result in splashes or sprays of the patient's blood, body fluids, secretions, or excretions.

DIF: Cognitive Level: Understand

REF: p. 21 | Box 3-1

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Safe and Effective Care Environment: Safety and Infection Control: Standard/Transmission-Based/Other Precautions

3. How do nurses prevent a latex allergy?
 - a. They use nonlatex gloves for all procedures.

- b. They protect their hands using oil-based hand lotion applying latex gloves.
- c. They use a powder-free, low-allergen latex gloves.
- d. They wash their hands with mild soap and dry thoroughly before applying latex gloves.

ANS: C

Use of these types of gloves is recommended by The National Institute for Occupational Safety and Health (NIOSH). Nonlatex gloves may be used only for activities that are not likely to involve contact with infectious materials. NIOSH recommends not using oil-based hand lotions when wearing latex gloves. NIOSH recommends washing hands after removing latex gloves, not before applying them.

DIF: Cognitive Level: Remember

REF: p. 23 | Box 3-2

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Safe and Effective Care Environment: Safety and Infection Control: Standard Precautions/Transmission-Based Precautions/Surgical Asepsis

4. Which explanation is most appropriate for a nurse preparing to palpate a patient's neck?
- a. "I need to feel for tumors in your neck."
 - b. "I'm going to feel your neck for any abnormalities."
 - c. "I need to press deeply on your neck so please hold still."
 - d. "Is there any tenderness in your neck?"

ANS: B

Palpating the neck enters the patient's personal space and may have cultural significance. Thus it is important to inform patients of the impending action and its purpose. "I need to feel for tumors in your neck" uses the term "tumors" and may alarm the patient unnecessarily. "I need to press deeply on your neck so please hold still" may alarm the patient and is not accurate. To palpate the neck, light palpation is used to detect abnormalities such as enlarged nodes. Deep palpation is used on the abdomen. "Is there any tenderness in your neck?" obtains subjective data, but does not tell the patient what the nurse is planning to do.

DIF: Cognitive Level: Apply

REF: p. 24

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

5. Which nurse is performing the technique of light palpation appropriately?
- a. Nurse A applies the bimanual technique to determine size and location of the patient's heart.
 - b. Nurse B uses the fingertips to feel for temperature differences on the patient's legs.
 - c. Nurse C places the ulnar surface of the hands on the patient's thorax to detect vibrations.
 - d. Nurse D depresses the patient's abdomen approximately 4 cm to assess pulsations.

ANS: C

Nurse C places the ulnar surface of the hands on the patient's thorax to detect vibrations. This is considered a light palpation. The bimanual technique is used to entrap an organ or mass (such as the uterus or a growth) between the fingertips to determine size and location and is not palpation. Temperature differences are best detected using the dorsal surface of the hand; this technique is not palpation. Light pulsation is performed by pressing in to a depth of approximately 1 cm, rather than 4 cm.

DIF: Cognitive Level: Understand

REF: p. 24

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

6. How does the nurse perform the bimanual technique of palpation to assess organs?
- Using the palmar surface of the dominant hand to press inward to a depth of about 1 cm
 - Holding a light source in one hand while stroking the skin lightly with the dominant hand
 - Using the ulnar surfaces of both hands to press inward 4 to 5 cm
 - Using both hands, one anterior and one posterior, to entrap an organ between the fingertips

ANS: D

Using both hands, one anterior and one posterior, to entrap an organ between the fingertips is the correct technique for bimanual palpation. Using the palmar surface of the dominant hand to press inward to a depth of about 1 cm describes light palpation, which is different from the bimanual technique. Holding a light source in one hand while stroking the skin lightly with the dominant hand is used when inspecting rather than palpating. Using the ulnar surfaces of both hands to press inward 4 to 5 cm describes an incorrect technique.

DIF: Cognitive Level: Remember

REF: p. 24

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

7. While assessing a patient's lower extremities, the nurse suspects the lower extremities feel cooler than the upper extremities. To confirm this suspicion, how does the nurse compare the temperatures of the lower extremities with the upper extremities?
- Using the backs (dorsum) of the hands to detect differences
 - Using the ulnar surface of the hands to detect differences
 - Using the pads of the fingers to detect differences
 - Using the palmar surface (underside) of the hands to detect differences

ANS: A

The dorsal surfaces of the hands detect temperature best. The ulnar surfaces of the hands are the most sensitive to vibration. The pads of the fingers are used in palpation. The palmar surfaces (underside) of the fingers and finger pads are better for determining position, texture, size, consistency, masses, fluid, and crepitus.

DIF: Cognitive Level: Apply

REF: p. 24

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

8. How does a nurse assess for fluid in a patient's abdomen?
- Placing the nondominant hand (pleximeter) over the area to be percussed, and striking the index finger of the pleximeter with the pad of the middle finger of the dominant hand
 - Applying indirect percussion by tapping one finger lightly on the abdominal wall

- with the plexor
- c. Placing the middle finger of the nondominant hand (pleximeter) over the area to be percussed, and striking that finger with the tip of the middle finger of the dominant hand
 - d. Using direct percussion by placing one hand over the abdomen and striking lightly with the other hand

ANS: C

Placing the middle finger of the nondominant hand (pleximeter) over the area to be percussed, and striking that finger with the tip of the middle finger of the dominant hand describes the correct technique. Only the finger being struck touches the area to be percussed; the other fingers are raised off the skin and the middle finger is struck with the tip of the finger of the other hand. Percussing the abdomen requires both hands, one as the plexor and the other as the pleximeter. Using direct percussion by placing one hand over the abdomen and striking lightly with the other hand does not describe the correct technique.

DIF: Cognitive Level: Apply

REF: p. 24

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

9. What assessment data do nurses obtain through striking a hand directly against the flank or costovertebral angle of a patient's body?
 - a. Fluid in the lungs
 - b. Tenderness over the kidneys
 - c. Air in the abdomen
 - d. Tenderness over the liver

ANS: B

Tenderness over the kidneys is detected by direct percussion over the costovertebral angle. Fluid in the lungs is detected by indirect percussion. Air in the abdomen is detected by indirect percussion. Tenderness over the liver is detected by palpation.

DIF: Cognitive Level: Remember

REF: p. 24

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

10. A patient has been complaining of abdominal cramping and gas; the nurse notes that his abdomen is slightly distended. Which sound does the nurse expect to hear during percussion of this patient's abdomen?
 - a. Flatness
 - b. Dullness
 - c. Resonance
 - d. Tympany

ANS: D

Tympany is a loud, high-pitched sound heard over the abdomen. Flatness is heard over bones and muscle. Dullness is heard over the liver. Resonance is heard over normal lung tissue.

DIF: Cognitive Level: Apply

REF: pp. 24-25 | Table 3-1

TOP: Nursing Process: Assessment

11. The nurse is unable to hear the patient's breath sounds. What checks does the nurse make of the stethoscope to determine the cause of this problem?
- Ensure the stethoscope tubing is at least 20 inches long.
 - Ensure the valve is open to the diaphragm on the head of the stethoscope.
 - Ensure the earpieces are pointed toward the back of the ears.
 - Ensure the bell is placed firmly against the patient's skin.

ANS: B

The diaphragm is used to hear high-pitched sounds, such as breath sounds, bowel sounds, and normal heart sounds. Its structure screens out low-pitched sounds. Tubing should be no longer than 12 to 18 inches. If the tubing is longer than 18 inches, the sounds may become distorted. Earpieces are angled toward the nose so that sound is projected toward the tympanic membrane. The bell of the stethoscope is used to hear soft, low-pitched sounds such as extra heart sounds or vascular sounds (bruit).

DIF: Cognitive Level: Apply

REF: p. 28

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

12. What part of the stethoscope do nurses use to auscultate the chest?
- Press the bell firmly against the skin to hear sounds and vibrations.
 - The bell of the stethoscope is used to hear breath sounds.
 - The diaphragm of the stethoscope is used to hear heart sounds.
 - Either the bell or the diaphragm is used to auscultate the chest.

ANS: C

The diaphragm is used to hear breath sounds, bowel sounds, and normal heart sounds (high-pitched sounds). The bell should be pressed lightly on the skin with just enough pressure to ensure that a complete seal exists around the bell. If the bell is pressed too firmly on the skin, the concave surface is filled with skin, and the bell functions like a diaphragm and inhibits vibrations. The bell is used to hear soft, low-pitched sounds such as extra heart sounds or vascular sounds (bruit). Either the bell or the diaphragm is used to auscultate the chest. The diaphragm is used to hear breath sounds, bowel sounds, and normal heart sounds (high-pitched sounds).

DIF: Cognitive Level: Understand

REF: p. 28

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

13. How does the nurse detect an extra heart sound in an adult?
- Using the bell of a stethoscope
 - With a pulse oximeter
 - Using the diaphragm of a stethoscope
 - With a Doppler ultrasound probe

ANS: A

The bell of the stethoscope is used to hear soft, low-pitched sounds such as extra heart sounds or vascular sounds (bruit). Pulse oximetry is a noninvasive measurement of arterial oxygen saturation in the blood. The diaphragm is used to hear high-pitched sounds such as breath sounds, bowel sounds, and normal heart sounds. A Doppler ultrasound probe is used to detect difficult-to-hear vascular sounds such as fetal heart tones or peripheral pulses.

DIF: Cognitive Level: Remember

REF: p. 28

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

14. A nurse is preparing to take a patient's blood pressure. The blood pressure cuff is 5 inches wide and the patient's upper arm circumference is 20 inches. How accurate will this patient's blood pressure be using this blood pressure cuff?
- Accurate, the actual value
 - Higher than the actual value
 - Lower than the actual value
 - Unable to determine accuracy with available data

ANS: B

For an arm circumference that is 20 inches, the proper size cuff is at least 8 inches ($20 \times 0.40 = 8$). The cuff is 5 inches, which is too narrow. A cuff that is too narrow will overestimate the blood pressure and report a falsely high value. For an arm circumference that is 20 inches, the proper size cuff is at least 8 inches ($20 \times 0.40 = 8$). Therefore the blood pressure measurement will not be accurate. For an arm circumference that is 20 inches, the proper size cuff is at least 8 inches ($20 \times 0.40 = 8$). Therefore the blood pressure measurement will be higher than the actual value. Sufficient data provided to determine accuracy. For an arm circumference that is 20 inches, the proper size cuff is at least 8 inches ($20 \times 0.40 = 8$).

DIF: Cognitive Level: Analyze

REF: p. 30 | Table 3-3

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

15. Where does the nurse attach the sensor probe of the pulse oximeter to measure an adult patient's oxygen saturation?
- The chest over the patient's heart
 - Over the patient's abdominal aorta
 - Over the patient's radial pulse
 - Around the patient's index finger nail

ANS: D

The sensor is taped to a highly vascular area, such as around the index finger nail that allows the light-emitting diode (LED) to reflect off oxygenated and deoxygenated hemoglobin molecules circulating in blood. The chest over the patient's heart is an incorrect option because the LED would not be able to reflect off oxygenated and deoxygenated hemoglobin molecules circulating in blood. Over the patient's abdominal aorta is an incorrect option because the LED would not be able to reflect off oxygenated and deoxygenated hemoglobin molecules circulating in blood. Over a patient's radial pulse is an incorrect option because the LED would not be able to reflect off oxygenated and deoxygenated hemoglobin molecules circulating in blood.

DIF: Cognitive Level: Remember REF: p. 30
TOP: Nursing Process: Assessment
MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

16. The patient asks about the meaning of his visual assessment of 20/40 using a Snellen visual acuity chart. What is the nurse's appropriate response?
- "20/40 means your vision is about two times normal."
 - "A person with corrected vision can see at 20 feet what you can see at 40 feet."
 - "A person with normal vision can see at 20 feet what you can see at 40 feet."
 - "A person with normal vision can see at 40 feet what you can see at 20 feet."

ANS: D

The top number of the recording indicates the distance between the patient and the chart, and the bottom number indicates the distance at which a person with normal vision should be able to read certain letters of the chart. Options A to C are incorrect interpretations of the data.

DIF: Cognitive Level: Apply REF: pp. 30-31
TOP: Nursing Process: Assessment
MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

17. The nurse is using the Snellen chart to assess a patient's vision. The patient states that the green line on the chart is shorter than the red line. What is the interpretation of this finding?
- This patient has normal color perception and abnormal field perception.
 - This patient is color blind but has normal field perception.
 - This patient's color perception and field perception are normal.
 - This patient is color blind and has abnormal field perception.

ANS: A

Naming the colors of the horizontal lines is a screening for color perception. The top line is green, and the bottom line is red. Asking which line is longer is a screening for field perception measurement. The green line is longer. Options B to D are incorrect interpretations of the data.

DIF: Cognitive Level: Apply REF: p. 31
TOP: Nursing Process: Assessment
MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

18. What tool does the nurse use to assess the patient's near vision?
- A Snellen eye chart placed about 12 inches from the patient's face
 - An ophthalmoscope with the diopter set at 0 (zero)
 - A Jaeger or Rosenbaum chart placed about 2 feet from the patient's face
 - A newspaper held about 14 inches from the patient's face

ANS: D

This can be an alternative to using a Jaeger or Rosenbaum chart held at 14 inches from the face. A Snellen chart is used to assess distant vision. An ophthalmoscope is used to assess the internal eye. Option C is incorrect because of the distance specified. These charts can be used to assess near vision when placed at 14 inches from the patient's face.

DIF: Cognitive Level: Remember

REF: p. 32

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

19. Using an ophthalmoscope, how does the nurse bring a patient's interior eye structures into focus?
- Using the red filter
 - Adjusting the diopters
 - Dilating the patient's pupils
 - Using the wide-beam light

ANS: B

The lens selector dial (diopter) allows the nurse to adjust a set of lenses that controls focus. The red filter facilitates the identification of pallor of the disc and permits the recognition of retinal hemorrhages by making the blood appear black. When the patient's pupils are dilated, a larger light may be used for the internal eye examination. The wide-beam light can be used when the patient's pupils are dilated for better visualization of internal structures.

DIF: Cognitive Level: Understand

REF: p. 32

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

20. Which action by the nurse describes the correct technique for using an otoscope on an adult?
- Using the pneumatic attachment to observe for tympanic fluctuation
 - Striking the otoscope against the hand to engage
 - Instructing the adult to raise one finger when a sound is heard
 - Selecting the largest size speculum that fits into the adult's ear canal

ANS: D

Using the largest speculum allows visualization, while using a smaller speculum limits inspection and using a speculum that is too large is uncomfortable to the adult. The pneumatic attachment is used to evaluate the fluctuation of the tympanic membrane in children. The otoscope is not struck. The instrument that is struck before hearing assessment is a tuning fork. Instructing the patient to raise one finger when a sound is heard is done when using an audiometer to assess hearing.

DIF: Cognitive Level: Understand

REF: pp. 32-33

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

21. A nurse is preparing to assess a patient's ability to detect vibrations. Which piece of equipment is appropriate for this assessment?
- Reflex hammer
 - Tuning fork
 - Goniometer
 - Monofilament

ANS: B

The tuning fork is used to assess the patient's ability to detect vibration. A reflex hammer is used to test for deep tendon reflexes. A goniometer is used to measure the degrees of flexion and extension of a joint. A monofilament is used to test for sensation on the lower extremities.

DIF: Cognitive Level: Remember

REF: pp. 33-34

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

22. To test deep tendon reflexes, the nurse uses which instrument?
- Goniometer
 - Calipers
 - Reflex hammer
 - Monofilament

ANS: C

A reflex hammer is used to test deep tendon reflexes. A monofilament is used to test for sensation on the lower extremities. Calipers are used to measure thickness of subcutaneous tissue to estimate the amount of body fat. A monofilament is used to test for sensation on the lower extremities.

DIF: Cognitive Level: Remember

REF: p. 34

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

23. A nurse is using the finger pads to palpate a patient's dorsalis pedis pulses and is unable to feel any pulses. Which action is appropriate for the nurse to perform next?
- Document that the dorsalis pedis pulses are not palpable.
 - Have the patient stand and try again to palpate the pulses.
 - Use a Doppler to detect the presence of the pulses.
 - Palpate the dorsalis pedis pulses using the ulnar surface of the hand.

ANS: C

Use a Doppler to detect the presence of the pulses. The Doppler uses ultrasonic waves to detect difficult-to-hear vascular sounds, such as peripheral pulses. Document that the dorsalis pedis pulses are not palpable. Although the pulse may not be palpable, the nurse always tries a Doppler to determine if the pulse can be heard, even when it cannot be felt. Have the patient stand and try again to palpate the pulses. Changing positions will not facilitate palpation of a pulse. Palpate the dorsalis pedis pulses using the ulnar surface of the hand. The ulnar surface of the hand is used to palpate for vibrations rather than pulsations.

DIF: Cognitive Level: Analyze

REF: p. 34

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

24. How does the nurse detect a pulse when using a Doppler?
- The pulsation is felt.
 - The pulsation is heard.
 - The pulse wave is seen on a screen.
 - The pulse wave is printed out on special paper.

ANS: B

A Doppler amplifies sounds difficult to hear with an acoustic stethoscope. A Doppler is used when the pulses cannot be palpated. A Doppler amplifies the sound of the pulsation.

DIF: Cognitive Level: Remember

REF: p. 34

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

25. A nurse is assessing joint function of a patient with severe rheumatoid arthritis. Which instrument/tool does the nurse use to measure the degree of flexion and extension of the patient's knee joints?
- Calipers
 - Ruler or tape measure
 - Goniometer
 - Doppler

ANS: C

A goniometer is used to measure the degree of flexion and extension of a joint. Calipers are used to estimate the amount of body fat. A ruler or tape measure cannot accurately measure the degree of flexion and extension of joints. Doppler is used to detect the presence of pulses.

DIF: Cognitive Level: Understand

REF: p. 34

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

26. When does a nurse choose to use skinfold calipers when collecting assessment data?
- Calculating the patient's body mass index
 - Inspecting the patient's skin
 - Determining the amount of the patient's lean body tissue
 - Estimating the amount of the patient's body fat

ANS: D

Estimating the amount of the patient's body fat is the purpose of using skin calipers. Body mass index is a formula for determining obesity that is calculated by dividing a person's weight in kilograms by the height in meters. Calipers estimate body fat. They are not needed to inspect skin. There is no specific method to determine the amount of lean body tissue.

DIF: Cognitive Level: Remember

REF: p. 35

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

27. When does a nurse use a Pederson or Graves speculum for examination of a patient?
- To inspect the external ear
 - To assess the vaginal canal
 - To inspect nasal passages
 - To assess the oropharynx

ANS: B

The vaginal canal and cervix are inspected using a Pederson or Graves speculum or a pediatric or virginal speculum. The external ear is inspected using an otoscope. The nasal passages are inspected using a nasal speculum. The oropharynx is inspected using a tongue blade and penlight.

DIF: Cognitive Level: Remember REF: p. 35

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

28. What are characteristics of an audioscope?
- Screens for hearing ability
 - Allows visualization into the ear canal
 - Must be calibrated before use
 - Uses vibration to estimate hearing loss

ANS: A

An audioscope screens for hearing ability. The otoscope allows inspection of the ear canal. Calibration is unnecessary. An audioscope needs batteries that are charged. The tuning fork is the tool that uses vibration to detect hearing loss.

DIF: Cognitive Level: Remember REF: p. 35

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

29. A patient with type 2 diabetes mellitus has an infected lesion on his foot. During the history of his present illness, he reports, "I had a cut on my foot, but I did not even feel it." What equipment does the nurse use to gather more data about his foot?
- A Wood lamp
 - Transilluminator
 - Monofilament
 - Reflex hammer

ANS: C

A monofilament is used to test for sensation on the lower extremities. Because this patient could not feel the cut on his foot, perhaps he has lost sensation. A Wood lamp is used to detect fungal infection on the skin. A transilluminator differentiates the characteristics of tissue, fluid, and air within a specific body cavity. A reflex hammer is used to test for deep tendon reflexes.

DIF: Cognitive Level: Apply REF: pp. 35-36

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

30. A patient is complaining of pain over the maxillary sinuses. Which device does the nurse use to determine if there is air or fluid in the patient's sinuses?
- Magnification device
 - Transilluminator
 - Monofilament
 - Wood lamp

ANS: B

A transilluminator disseminates its light source under the surface of the skin to determine if the areas under the surface, such as the sinuses, are filled with air, fluid, or tissue. A magnification device helps visualize the tissue, but will not determine if sinuses are filled with air or fluid. A monofilament is used to test for sensation on the lower extremities. A Wood lamp is used to detect fungal infections.

DIF: Cognitive Level: Understand

REF: p. 36

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

31. A nurse suspects that a large skin lesion on the patient's forearm is a fungal infection. Which device does the nurse use to confirm his suspicion?
- a. Pen light
 - b. Magnification device
 - c. Transilluminator
 - d. Wood lamp

ANS: D

Skin lesions caused by a fungal infection exhibit a fluorescent yellow-green or blue-green color when examined with a Wood lamp. A pen light is used to highlight a lesion for inspection, but will not determine if it is caused by a fungus. A magnification device helps visualize the lesion, but will not determine if it is caused by a fungus. A transilluminator disseminates its light source under the surface of the skin to determine if the area under the surface is filled with air, fluid, or tissue.

DIF: Cognitive Level: Understand

REF: p. 36

TOP: Nursing Process: Assessment

MSC: NCLEX Patient Needs: Health Promotion and Maintenance: Techniques of Physical Assessment