NCLEX-RN®
DETAILED
TEST PLAN

Effective | April 2013

NCLEX-RN® Examination

Detailed Test Plan for the National Council Licensure Examination for Registered Nurses

Item Writer/Item Reviewer/Nurse Educator Version

NCSBN
National Council of State Boards of Nursing

Mission Statement

The National Council of State Boards of Nursing (NCSBN®) provides education, service and research through collaborative leadership to promote evidence-based regulatory excellence for patient safety and public protection.

National Council of State Boards of Nursing

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I. Background

The Item Writer/Item Reviewer/Nurse Educator Detailed Test Plan for the National Council Licensure Examination for Registered Nurses (NCLEX-RN®) was developed by the National Council of State Boards of Nursing, Inc (NCSBN®). The purpose of this document is to provide more detailed information about the content areas tested in the NCLEX-RN® Examination than is provided in the basic NCLEX-RN Test Plan.

This booklet contains the:

- *2013 NCLEX-RN® Test Plan*;
- Information on testing requirements and sample examination questions (items);
- Item writing exercises;
- References; and
- Appendix.

About the NCLEX-RN® Test Plan (Section II)

The test plan is reviewed and approved by the NCLEX® Examination Committee (NEC) every three years. Multiple resources are used, including the recent practice analysis of registered nurses (RNs), and expert opinions of the NEC, NCSBN content staff and boards of nursing (NCSBN's Member Boards) to ensure that the test plan is consistent with state nurse practice acts. Following the endorsement of proposed revisions by the NEC, the test plan document is presented for approval to the Delegate Assembly, which is the decision-making body of NCSBN.

About the NCLEX-RN® Detailed Test Plan (Section III)

The detailed test plan serves a variety of purposes. It is used to guide candidates preparing for the examination, to direct item writers in the development of items and to facilitate the classification of examination items. Two versions of the detailed test plan have been created: Item Writer/Item Reviewer/Nurse Educator version and Candidate version. The Item Writer/Item Reviewer/Nurse Educator version that is provided in this document offers a more thorough and comprehensive listing of content for each Client Needs category and subcategory outlined in the test plan. Sample items are provided at the end of each category, which are specific to the Client Needs category being reviewed in that section. There is an item writing guide along with sample case scenarios, which provide nurse educators with hands-on experience in writing NCLEX® style test questions. The Candidate version of the detailed test plan provides the same comprehensive listing of content and sample items for each Client Needs category and subcategory outlined in the test plan, however, it does not offer an item writing guide or section with case scenarios.

For up-to-date information about the NCLEX-RN® examination, visit the NCSBN website at www.ncsbn.org.

II. *2013 NCLEX-RN® Test Plan*

Introduction

Entry into the practice of nursing is regulated by the licensing authorities within each of the National Council of State Boards of Nursing (NCSBN®) member board jurisdictions (state, commonwealth and territorial boards of nursing). To ensure public protection, each jurisdiction requires candidates for licensure to meet set requirements that include passing an examination that measures the competencies needed to perform safely and effectively as a newly licensed, entry-level registered nurse (RN). NCSBN develops a licensure examination, the National Council Licensure Examination for Registered Nurses (NCLEX-RN®), which is used by member board jurisdictions to assist in making licensure decisions.

Several steps occur in the development of the NCLEX-RN Test Plan. The first step is conducting a practice analysis that is used to collect data on the current practice of the entry-level nurse (see *Report of Findings from the 2011 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*, NCSBN, 2012a). Twelve thousand newly licensed RNs are asked about the frequency and importance of performing 141 nursing care activities. Nursing care activities are then analyzed in relation to the frequency of performance, impact on maintaining client safety and client care settings where the activities are performed. This analysis guides the development of a framework for entry-level nursing practice that incorporates specific client needs, as well as processes fundamental to the practice of nursing.

The second step is the development of the NCLEX-RN Test Plan, which guides the selection of content and behaviors to be tested. The NCLEX-RN Test Plan provides a concise summary of the content and scope of the licensing examination. It serves as a guide for examination development, as well as candidate preparation. The NCLEX® examination assesses the knowledge, skills and abilities that are essential for the entry-level nurse to use in order to meet the needs of clients requiring the promotion, maintenance or restoration of health. The following sections describe beliefs about people and nursing that are integral to the examination, cognitive abilities that will be tested in the examination and specific components of the NCLEX-RN Test Plan.

Beliefs

Beliefs about people and nursing underlie the NCLEX-RN Test Plan. People are finite beings with varying capacities to function in society. They are unique individuals who have defined systems of daily living reflecting their values, motives and lifestyles. People have the right to make decisions regarding their health care needs and to participate in meeting those needs. The profession of nursing makes a unique contribution in helping clients (individual, family or group) achieve an optimal level of health in a variety of settings. For the purposes of the NCLEX examination, a client is defined as the individual, family or group which includes significant others and population.

Nursing is both an art and a science, founded on a professional body of knowledge that integrates concepts from the liberal arts and the biological, physical, psychological and social sciences. It is a learned profession based on knowledge of the human condition across the life span and the relationships of an individual with others and within the environment. Nursing is a dynamic, continually evolving discipline that employs critical thinking to integrate increasingly complex knowledge, skills, technologies and client care activities into evidence-based nursing practice. The goal of nursing for client care is preventing illness and potential complications; protecting, promoting, restoring, and facilitating comfort; health; and dignity in dying.

The RN provides a unique, comprehensive assessment of the health status of the client, applying principles of ethics, client safety, health promotion and the nursing process. The nurse then develops and implements an explicit plan of care. The nurse assists clients to promote health, cope with health problems, adapt to and/or recover from the effects of disease or injury, and support the right to a dignified death. The RN is accountable for abiding by all applicable member board jurisdiction statutes related to nursing practice.

Classification of Cognitive Levels

Bloom's taxonomy for the cognitive domain is used as a basis for writing and coding items for the examination (Bloom, et al., 1956; Anderson & Krathwohl, 2001). Since the practice of nursing requires application of knowledge, skills and abilities, the majority of items are written at the application or higher levels of cognitive ability, which requires more complex thought processing.

Test Plan Structure

The framework of Client Needs was selected for the examination because it provides a universal structure for defining nursing actions and competencies, and focuses on clients in all settings.

Client Needs

The content of the NCLEX-RN Test Plan is organized into four major Client Needs categories. Two of the four categories are divided into subcategories:

Safe and Effective Care Environment

- Management of Care
- Safety and Infection Control

Health Promotion and Maintenance

Psychosocial Integrity

Physiological Integrity

- Basic Care and Comfort
- Pharmacological and Parenteral Therapies
- Reduction of Risk Potential
- Physiological Adaptation

Integrated Processes

The following processes are fundamental to the practice of nursing and are integrated throughout the Client Needs categories and subcategories:

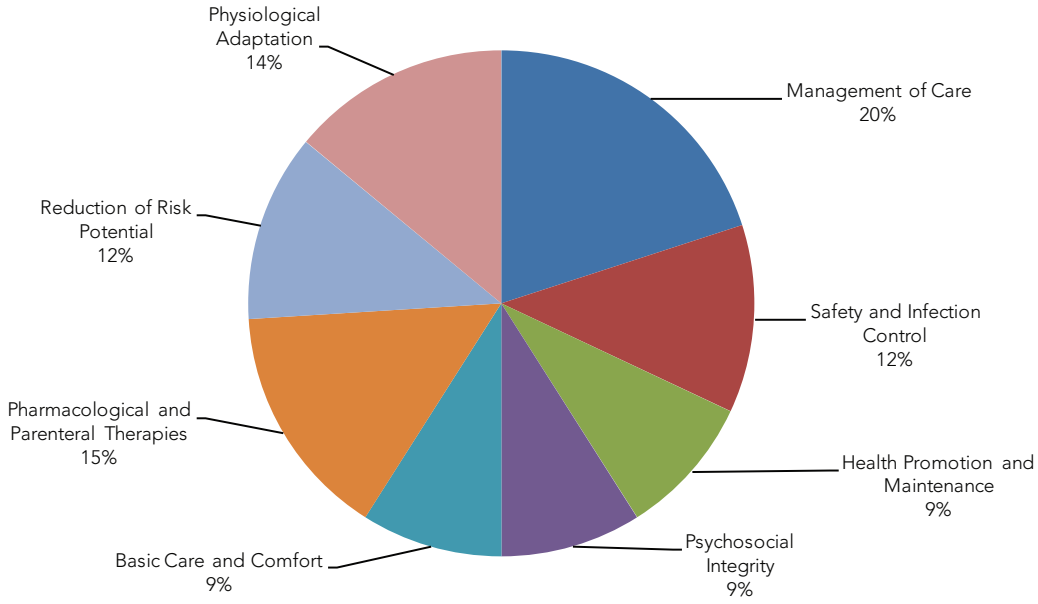
- *Nursing Process* – a scientific, clinical reasoning approach to client care that includes assessment, analysis, planning, implementation and evaluation.
- *Caring* – interaction of the nurse and client in an atmosphere of mutual respect and trust. In this collaborative environment, the nurse provides encouragement, hope, support and compassion to help achieve desired outcomes.
- *Communication and Documentation* – verbal and nonverbal interactions between the nurse and the client, the client's significant others and other members of the health care team. Events and activities associated with client care are recorded in written and/or electronic records that demonstrate adherence to the standards of practice and accountability in the provision of care.
- *Teaching/Learning* – facilitation of the acquisition of knowledge, skills and attitudes promoting a change in behavior.

Distribution of Content

The percentage of test questions assigned to each Client Needs category and subcategory of the NCLEX-RN Test Plan is based on the results of the *Report of Findings from the 2011 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice (*NCSBN, 2012a) and expert judgment provided by members of the NCLEX® Examination Committee.

Client Needs	Percentage of Items from Each Category/Subcategory
Safe and Effective Care Environment	
■ Management of Care	17-23%
■ Safety and Infection Control	9-15%
Health Promotion and Maintenance	6-12%
Psychosocial Integrity	6-12%
Physiological Integrity	
■ Basic Care and Comfort	6-12%
■ Pharmacological and Parenteral Therapies	12-18%
■ Reduction of Risk Potential	9-15%
■ Physiological Adaptation	11-17%

Distribution of Content for the NCLEX-RN® Test Plan



NCLEX-RN examinations are administrated adaptively in variable length format to target candidate-specific ability. To accommodate possible variations in test length, content area distributions of the individual examinations may differ up to ±3% in each category.

Overview of Content

All content categories and subcategories reflect client needs across the life span in a variety of settings.

Safe and Effective Care Environment

The nurse promotes achievement of client outcomes by providing and directing nursing care that enhances the care delivery setting in order to protect clients and health care personnel.

- *Management of Care* – providing and directing nursing care that enhances the care delivery setting to protect clients and health care personnel.

  Related content includes, but is **not limited** to:

  - Advance Directives
  - Advocacy
  - Assignment, Delegation and Supervision
  - Case Management
  - Client Rights
  - Collaboration with Interdisciplinary Team
  - Concepts of Management
  - Confidentiality/Information Security
  - Continuity of Care
  - Establishing Priorities
  - Ethical Practice
  - Informed Consent
  - Information Technology
  - Legal Rights and Responsibilities
  - Performance Improvement (Quality Improvement)
  - Referrals

- *Safety and Infection Control* – protecting clients and health care personnel from health and environmental hazards.

  Related content includes, but is **not limited** to:

  - Accident/Error/Injury Prevention
  - Emergency Response Plan
  - Ergonomic Principles
  - Handling Hazardous and Infectious Materials
  - Home Safety
  - Reporting of Incident/Event/Irregular Occurrence/Variance
  - Safe Use of Equipment
  - Security Plan
  - Standard Precautions/Transmission-Based Precautions/Surgical Asepsis
  - Use of Restraints/Safety Devices

Health Promotion and Maintenance

The nurse provides and directs nursing care of the client that incorporates the knowledge of expected growth and development principles, prevention and/or early detection of health problems, and strategies to achieve optimal health.

Related content includes, but is **not limited** to:

- Aging Process
- Ante/Intra/Postpartum and Newborn Care
- Developmental Stages and Transitions
- Health Promotion/Disease Prevention
- Health Screening
- High Risk Behaviors
- Lifestyle Choices
- Self Care
- Techniques of Physical Assessment

Psychosocial Integrity

The nurse provides and directs nursing care that promotes and supports the emotional, mental and social well-being of the client experiencing stressful events, as well as clients with acute or chronic mental illness.

Related content includes, but is **not limited** to:

- Abuse/Neglect
- Behavioral Interventions
- Chemical and Other Dependencies/ Substance Use Disorder
- Coping Mechanisms
- Crisis Intervention
- Cultural Awareness/Cultural Influences on Health
- End of Life Care
- Family Dynamics
- Grief and Loss
- Mental Health Concepts
- Religious and Spiritual Influences on Health
- Sensory/Perceptual Alterations
- Stress Management
- Support Systems
- Therapeutic Communication
- Therapeutic Environment

Physiological Integrity

The nurse promotes physical health and wellness by providing care and comfort, reducing client risk potential and managing health alterations.

- *Basic Care and Comfort* - providing comfort and assistance in the performance of activities of daily living.

  Related content includes but is **not limited** to:

  - Assistive Devices
  - Elimination
  - Mobility/Immobility
  - Non-Pharmacological Comfort Interventions
  - Nutrition and Oral Hydration
  - Personal Hygiene
  - Rest and Sleep

- *Pharmacological and Parenteral Therapies* - providing care related to the administration of medications and parenteral therapies.

  Related content includes but is **not limited** to:

  - Adverse Effects/Contraindications/Side Effects/Interactions
  - Blood and Blood Products
  - Central Venous Access Devices
  - Dosage Calculation
  - Expected Actions/Outcomes
  - Medication Administration
  - Parenteral/Intravenous Therapies
  - Pharmacological Pain Management
  - Total Parenteral Nutrition

- *Reduction of Risk Potential* - reducing the likelihood that clients will develop complications or health problems related to existing conditions, treatments or procedures.

  Related content includes but is **not limited** to:

  - Changes/Abnormalities in Vital Signs
  - Diagnostic Tests
  - Laboratory Values
  - Potential for Alterations in Body Systems
  - Potential for Complications of Diagnostic Tests/Treatments/Procedures
  - Potential for Complications from Surgical Procedures and Health Alterations
  - System Specific Assessments
  - Therapeutic Procedures

- *Physiological Adaptation* - managing and providing care for clients with acute, chronic or life threatening physical health conditions.

  Related content includes but is **not limited** to:

  - Alterations in Body Systems
  - Fluid and Electrolyte Imbalances
  - Hemodynamics
  - Illness Management
  - Medical Emergencies
  - Pathophysiology
  - Unexpected Response to Therapies

III. *2013 NCLEX-RN® Detailed Test Plan*

The NCLEX-RN Test Plan in the previous section provides a general outline of the categories and subcategories of the examination. The *2013 NCLEX-RN® Detailed Test Plan - Item Writer/Item Reviewer/Nurse Educator Version* is used to guide the direction of examination content to be followed by NCLEX® item writers, item reviewers and nurse educators.

The activity statements used in the *2011 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice* (NCSBN, 2012a) preface each of the eight content categories and are identified throughout the detailed test plan by an asterisk (*). NCSBN performs an analysis of those activities used frequently and identified as important by entry-level nurses to ensure client safety. This is called a practice analysis; it provides data to support the NCLEX examination as a reliable, valid measure of competent, entry-level nursing practice. The practice analysis is conducted at least every three years.

In addition to the practice analysis, NCSBN conducts a knowledge, skills and abilities (KSA) survey. The primary purpose of this study is to identify the knowledge needed by newly licensed registered nurses (RNs) in order to practice safe and effective care.

Findings from both the *2011 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice* (NCSBN, 2012a) and the *Report of Findings from the 2011 RN Nursing Knowledge Survey.* (NCSBN, 2012c) can be found at www.ncsbn.org/1235.htm. Both documents are used in the development of the NCLEX-RN Test Plan, as well as to inform item development.

All task statements in the *2013 NCLEX-RN® Detailed Test Plan* require the nurse to apply the fundamental principles of clinical decision making and critical thinking to nursing practice. The detailed test plan also makes the assumption that the nurse integrates concepts from the following bodies of knowledge:

- Social sciences (psychology and sociology);
- Biological sciences (anatomy, physiology, biology and microbiology); and
- Physical sciences (chemistry and physics).

In addition, the following concepts are utilized throughout the four major Client Needs categories and subcategories of the test plan:

- Nursing process;
- Caring;
- Communication and documentation; and
- Teaching and learning.

Note: There are certain inconsistencies throughout this document related to word usage and punctuation. Sentences or phrases marked by an asterisk (*) are activity statements taken directly from the *2011 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice* (NCSBN, 2012a). In order to provide proper attribution to the original survey these statements have not been altered to fit the overall grammatical style of this document. In addition, the term "client" refers to the individual, family or group, which includes significant others and population. "Clients" are the same as "residents" or "patients." NCLEX examination items are developed based on a variety of practice settings such as: acute/critical care, long-term care/rehabilitation care, outpatient care and community-based/home care settings.

Safe and Effective Care Environment

Management of Care

- Management of Care – the nurse provides and directs nursing care that enhances the care delivery setting to protect the client and health care personnel.

MANAGEMENT OF CARE **Related Activity Statements from the *2011 RN Practice Analysis of Newly Licensed Registered Nurses in the U.S. and Member Board Jurisdictions***
■ Integrate advance directives into client plan of care ■ Assign and supervise care provided by others (e.g., LPN/VN, assistive personnel, other RNs) ■ Organize workload to manage time effectively ■ Participate in providing cost effective care ■ Initiate, evaluate, and update plan of care (e.g., care map, clinical pathway) ■ Provide education to clients and staff about client rights and responsibilities ■ Advocate for client rights and needs ■ Collaborate with health care members in other disciplines when providing client care ■ Manage conflict among clients and health care staff ■ Maintain client confidentiality and privacy ■ Provide and receive report on assigned clients (e.g., standardized hand off communication) ■ Use approved abbreviations and standard terminology when documenting care ■ Perform procedures necessary to safely admit, transfer or discharge a client ■ Prioritize the delivery of client care ■ Recognize ethical dilemmas and take appropriate action ■ Practice in a manner consistent with a code of ethics for registered nurses ■ Verify that the client comprehends and consents to care and procedures ■ Receive and/or transcribe health care provider orders ■ Utilize information resources to enhance the care provided to a client (e.g., evidenced-based research, information technology, policies and procedures) ■ Recognize limitations of self/others and seek assistance ■ Report client conditions as required by law (e.g., abuse/neglect, communicable disease, gunshot wound) ■ Report unsafe practice of health care personnel and intervene as appropriate (e.g., substance abuse, improper care, staffing practices) ■ Provide care within the legal scope of practice ■ Participate in performance improvement/quality improvement process ■ Recognize the need for referrals and obtain necessary orders

*Activity Statements used in the 2011 RN Practice Analysis

Related content includes, but is **not limited** to:

Advance Directives

- Assess client and/or staff member knowledge of advance directives (e.g., living will, health care proxy, Durable Power of Attorney for Health Care [DPAHC])
- Integrate advance directives into client plan of care*
- Provide client with information about advance directives

Advocacy

- Discuss identified treatment options with client and respect their decisions
- Provide information on advocacy to staff members
- Act in the role of client advocate
- Utilize advocacy resources appropriately (e.g., social worker, chain of command, interpreter)

Assignment, Delegation and Supervision

- Identify tasks for delegation based on client needs
- Ensure appropriate education, skills, and experience of personnel performing delegated tasks
- Assign and supervise care provided by others (e.g., LPN/VN, assistive personnel, other RNs)*
- Communicate tasks to be completed and report client concerns immediately
- Organize workload to manage time effectively*
- Utilize the five rights of delegation (e.g., right task, right circumstances, right person, right direction or communication, right supervision or feedback)
- Evaluate delegated tasks to ensure correct completion of activity
- Evaluate ability of staff members to perform assigned tasks for the position (e.g., job description, scope of practice, training, experience)
- Evaluate effectiveness of staff members' time management skills

Case Management

- Explore resources available to assist the client with achieving or maintaining independence
- Assess the client's need for materials and equipment (e.g., oxygen, suction machine, wound care supplies)
- Participate in providing cost effective care*
- Plan individualized care for client based on need (e.g., client diagnosis, self-care ability, prescribed treatments)
- Provide client with information on discharge procedures to home, hospice, or community setting
- Initiate, evaluate, and update plan of care (e.g., care map, clinical pathway)*

*Activity Statements used in the 2011 RN Practice Analysis

Client Rights
- Recognize the client's right to refuse treatment/procedures
- Discuss treatment options/decisions with client
- Provide education to clients and staff about client rights and responsibilities*
- Evaluate client/staff understanding of client rights
- Advocate for client rights and needs*

Collaboration with Interdisciplinary Team
- Identify the need for interdisciplinary conferences
- Identify significant information to report to other disciplines (e.g., health care provider, pharmacist, social worker, respiratory therapist)
- Review plan of care to ensure continuity across disciplines
- Collaborate with healthcare members in other disciplines when providing client care*
- Serve as resource person to other staff

Concepts of Management
- Identify roles/responsibilities of health care team members
- Plan overall strategies to address client problems
- Act as liaison between client and others (e.g., coordinate care, manage care)
- Manage conflict among clients and health care staff*
- Evaluate management outcomes

Confidentiality/Information Security
- Assess staff member and client understanding of confidentiality requirements (e.g., HIPAA)
- Maintain client confidentiality and privacy*
- Intervene appropriately when confidentiality has been breached by staff members

Continuity of Care
- Provide and receive report on assigned clients (e.g., standardized hand off communication)*
- Use documents to record and communicate client information (e.g., medical record, referral/ transfer form)
- Use approved abbreviations and standard terminology when documenting care*
- Perform procedures necessary to safely admit, transfer or discharge a client*
- Follow up on unresolved issues regarding client care (e.g., laboratory results, client requests)

Establishing Priorities
- Apply knowledge of pathophysiology when establishing priorities for interventions with multiple clients
- Prioritize the delivery of client care*
- Evaluation plan of care for multiple clients and revise plan of care as needed

*Activity Statements used in the 2011 RN Practice Analysis

Ethical Practice

- Recognize ethical dilemmas and take appropriate action*
- Inform client/staff members of ethical issues affecting client care
- Practice in a manner consistent with a code of ethics for registered nurses*
- Evaluate outcomes of interventions to promote ethical practice

Informed Consent

- Identify appropriate person to provide informed consent for client (e.g., client, parent, legal guardian)
- Provide written materials in client's spoken language, when possible
- Describe components of informed consent
- Participate in obtaining informed consent
- Verify that the client comprehends and consents to care and procedures*

Information Technology

- Receive and/or transcribe health care provider orders*
- Apply knowledge of facility regulations when accessing client records
- Access data for client through online databases and journals
- Enter computer documentation accurately, completely and in a timely manner
- Utilize information resources to enhance the care provided to a client (e.g., evidenced-based research, information technology, policies and procedures)*

Legal Rights and Responsibilities

- Identify legal issues affecting the client (e.g., refusing treatment)
- Identify and manage the client's valuables according to facility/agency policy
- Recognize limitations of self/others and seek assistance*
- Review facility policy and state mandates prior to agreeing to serve as an interpreter for staff or primary health care provider
- Educate client/staff on legal issues
- Report client conditions as required by law (e.g., abuse/neglect, communicable disease, gunshot wound)*
- Report unsafe practice of health care personnel and intervene as appropriate (e.g. substance abuse, improper care, staffing practices)*
- Provide care within the legal scope of practice*

*Activity Statements used in the 2011 RN Practice Analysis

Performance Improvement (Quality Improvement)

- Define performance improvement/quality assurance activities
- Participate in performance improvement/quality improvement process*
- Report identified client care issues/problems to appropriate personnel (e.g., nurse manager, risk manager)
- Utilize research and other references for performance improvement actions
- Evaluate the impact of performance improvement measures on client care and resource utilization

Referrals

- Assess the need to refer clients for assistance with actual or potential problems (e.g., physical therapy, speech therapy)
- Recognize the need for referrals and obtain necessary orders*
- Identify community resources for the client (e.g., respite care, social services, shelters)
- Identify which documents to include when referring a client (e.g., medical record, referral form)

Sample Item
The nurse is caring for a client in a long term care facility. The client's spouse asks the nurse for information regarding the client's treatment plan. Which of the following responses would be **most** appropriate for the nurse to make? a. "I cannot give you information on any client." **(key)** b. "Can you verify the client's date of birth?" c. "Let me ask the primary health care provider to speak with you." d. "You should speak directly with the client about the treatment plan."

(Key) is used throughout this document to denote the correct answer(s) for the exam item.

*Activity Statements used in the 2011 RN Practice Analysis

Safety and Infection Control

- Safety and Infection Control – the nurse protects clients and health care personnel from health and environmental hazards.

SAFETY AND INFECTION CONTROL **Related Activity Statements from the *2011 RN Practice Analysis of Newly Licensed Registered Nurses in the U.S. and Member Board Jurisdictions***
■ Assess client for allergies and intervene as needed (e.g., food, latex, environmental allergies) ■ Protect client from injury (e.g., falls, electrical hazards) ■ Ensure proper identification of client when providing care ■ Verify appropriateness and/or accuracy of a treatment order ■ Implement emergency response plans (e.g., internal/external disaster) ■ Use ergonomic principles when providing care (e.g., assistive devices, proper lifting) ■ Follow procedures for handling biohazardous materials ■ Educate client on home safety issues ■ Acknowledge and document practice error (e.g. incident report for medication error) ■ Facilitate appropriate and safe use of equipment ■ Participate in institution security plan (e.g., newborn nursery security, bomb threats) ■ Apply principles of infection control (e.g., hand hygiene, surgical asepsis, isolation, sterile technique, universal/standard precautions) ■ Educate client and staff regarding infection control measures ■ Follow requirements for use of restraints and/or safety device (e.g., least restrictive restraints, timed client monitoring)

Related content includes, but is **not limited** to:

Accident/Error/Injury Prevention

- Assess client for allergies and intervene as needed (e.g., food, latex, environmental allergies)*
- Determine client/staff member knowledge of safety procedures
- Identify factors that influence accident/injury prevention (e.g., age, developmental stage, lifestyle, mental status)
- Identify deficits that may impede client safety (e.g., visual, hearing, sensory/perceptual)
- Identify and verify prescriptions for treatments that may contribute to an accident or injury (does not include medication)
- Identify and facilitate correct use of infant and child car seats
- Provide client with appropriate method to signal staff members
- Protect client from injury (e.g., falls, electrical hazards)*
- Review necessary modifications with client to reduce stress on specific muscle or skeletal groups (e.g., frequent changing of position, routine stretching of the shoulders, neck, arms, hands, fingers)

*Activity Statements used in the 2011 RN Practice Analysis

- Implement seizure precautions for at-risk clients
- Make appropriate room assignments for cognitively impaired clients
- Ensure proper identification of client when providing care*
- Verify appropriateness and/or accuracy of a treatment order*

Emergency Response Plan
- Determine which client(s) to recommend for discharge in a disaster situation
- Identify nursing roles in disaster planning
- Use clinical decision-making/critical thinking for emergency response plan
- Implement emergency response plans (e.g., internal/external disaster)*
- Participate in disaster planning activities/drills

Ergonomic Principles
- Assess client ability to balance, transfer and use assistive devices prior to planning care (e.g., crutches, walker)
- Provide instruction and information to client about body positions that eliminate potential for repetitive stress injuries
- Use ergonomic principles when providing care (e.g., assistive devices, proper lifting)*

Handling Hazardous and Infectious Materials
- Identify biohazardous, flammable and infectious materials
- Follow procedures for handling biohazardous materials*
- Demonstrate safe handling techniques to staff and client
- Ensure safe implementation of internal radiation therapy

Home Safety
- Assess need for client home modifications (e.g., lighting, handrails, kitchen safety)
- Apply knowledge of client pathophysiology to home safety interventions
- Educate client on home safety issues*
- Encourage the client to use protective equipment when using devices that can cause injury (e.g., home disposal of syringes)
- Evaluate client care environment for fire/environmental hazard

Reporting of Incident/Event/Irregular Occurrence/Variance
- Identify need/situation where reporting of incident/event/irregular occurrence/variance is appropriate
- Acknowledge and document practice error (e.g. incident report for medication error)*
- Evaluate response to error/event/occurrence

*Activity Statements used in the 2011 RN Practice Analysis

Safe Use of Equipment

- Inspect equipment for safety hazards (e.g., frayed electrical cords, loose/missing parts)
- Teach client about the safe use of equipment needed for health care
- Facilitate appropriate and safe use of equipment*
- Remove malfunctioning equipment from client care area and report the problem to appropriate personnel

Security Plan

- Use clinical decision making/critical thinking in situations related to security planning
- Apply principles of triage and evacuation procedures/protocols
- Participate in institution security plan (e.g., newborn nursery security, bomb threats)*

Standard Precautions/Transmission-Based Precautions/Surgical Asepsis

- Assess client care area for sources of infection
- Understand communicable diseases and the modes of organism transmission (e.g., airborne, droplet, contact)
- Apply principles of infection control (e.g., hand hygiene, surgical asepsis, isolation, sterile technique, universal/standard precautions)*
- Follow correct policy and procedures when reporting a client with a communicable disease
- Educate client and staff regarding infection control measures*
- Utilize appropriate precautions for immunocompromised clients
- Use appropriate technique to set up a sterile field/maintain asepsis (e.g., gloves, mask, sterile supplies)
- Evaluate infection control precautions implemented by staff members
- Evaluate whether aseptic technique is performed correctly

Use of Restraints/Safety Devices

- Assess appropriateness of the type of restraint/safety device used
- Follow requirements for use of restraints and/or safety device (e.g., least restrictive restraints, timed client monitoring)*
- Monitor/evaluate client response to restraints/safety device

Sample Item
The nurse is caring for a client who has streptococcal pneumonia. Which of the following infection control precautions should the nurse implement? a. Request the dietary department provide disposable utensils on the client's meal tray. b. Wear a surgical mask when obtaining the client's vital signs. **(key)** c. Remove fresh flowers from the client's room. d. Place the client in a private room with monitored negative air pressure.

*Activity Statements used in the 2011 RN Practice Analysis

Health Promotion and Maintenance

- Health Promotion and Maintenance – the nurse provides and directs nursing care of the client that incorporates knowledge of expected growth and development principles; prevention and/or early detection of health problems; and strategies to achieve optimal health.

HEALTH PROMOTION AND MAINTENANCE **Related Activity Statements from the *2011 RN Practice Analysis of Newly Licensed Registered Nurses in the U.S. and Member Board Jurisdictions***
■ Provide care and education for the newborn less than 1 month old through the infant or toddler client through 2 years ■ Provide care and education for the preschool, school age and adolescent client ages 3 through 17 years ■ Provide care and education for the adult client ages 18 through 64 years ■ Provide care and education for the adult client ages 65 through 85 years and over ■ Provide prenatal care and education ■ Provide care to client in labor ■ Provide post-partum care and education ■ Assess and teach clients about health risks based on family, population, and/or community characteristics ■ Assess client's readiness to learn, learning preferences and barriers to learning ■ Plan and/or participate in community health education ■ Provide information about health promotion and maintenance recommendations (e.g., physician visits, immunizations) ■ Perform targeted screening assessments (e.g., vision, hearing, nutrition) ■ Provide information for prevention and treatment of high risk health behaviors (e.g., smoking cessation, safe sexual practices, drug education) ■ Assess client ability to manage care in home environment and plan care accordingly (e.g. equipment, community resources) ■ Perform comprehensive health assessment

Related content includes, but is **not limited** to:

Aging Process

- Assess client's reactions to expected age-related changes
- Provide care and education for the newborn less than 1 month old through the infant or toddler client through 2 years*
- Provide care and education for the preschool, school age and adolescent client ages 3 through 17 years*
- Provide care and education for the adult client ages 18 through 64 years*
- Provide care and education for the adult client ages 65 through 85 years and over*

*Activity Statements used in the 2011 RN Practice Analysis

Ante/Intra/Postpartum and Newborn Care

- Assess client's psychosocial response to pregnancy (e.g., support systems, perception of pregnancy, coping mechanisms)
- Assess client for symptoms of postpartum complications (e.g., hemorrhage, infection)
- Recognize cultural differences in childbearing practices
- Calculate expected delivery date
- Check fetal heart rate during routine prenatal exams
- Assist client with performing/learning newborn care (e.g., feeding)
- Provide prenatal care and education*
- Provide care to client in labor*
- Provide post-partum care and education*
- Provide discharge instructions (e.g., post-partum and newborn care)
- Evaluate client's ability to care for the newborn

Developmental Stages and Transitions

- Identify expected physical, cognitive and psychosocial stages of development
- Identify expected body image changes associated with client developmental age (e.g., aging, pregnancy)
- Identify family structures and roles of family members (e.g., nuclear, blended, adoptive)
- Compare client development to expected age/developmental stage and report any deviations
- Assess impact of change on family system (e.g., one-parent family, divorce, ill family member)
- Recognize cultural and religious influences that may impact family functioning
- Assist client to cope with life transitions (e.g., attachment to newborn, parenting, puberty, retirement)
- Modify approaches to care in accordance with client developmental stage (use age appropriate explanations of procedures and treatments)
- Provide education to client/staff members about expected age-related changes and age-specific growth and development (e.g., developmental stages)
- Evaluate client's achievement of expected developmental level (e.g., developmental milestones)
- Evaluate impact of expected body image changes on client and family

Health Promotion/Disease Prevention

- Identify risk factors for disease/illness (e.g., age, gender, ethnicity, lifestyle)
- Assess and teach clients about health risks based on family, population, and/or community characteristics*
- Assess client's readiness to learn, learning preferences and barriers to learning*
- Plan and/or participate in community health education*
- Educate the client on actions to promote/maintain health and prevent disease (e.g., smoking cessation, diet, weight loss)
- Inform the client of appropriate immunization schedules
- Integrate complementary therapies into health promotion activities for the well client

*Activity Statements used in the 2011 RN Practice Analysis

- Provide information about health promotion and maintenance recommendations (e.g., physician visits, immunizations)*
- Provide follow-up to the client following participation in health promotion program (e.g., diet counseling)
- Assist the client in maintaining an optimum level of health
- Evaluate client understanding of health promotion behaviors/activities (e.g., weight control, exercise actions)
- Implement and evaluate community-based client care

Health Screening

- Apply knowledge of pathophysiology to health screening
- Identify risk factors linked to ethnicity (e.g., hypertension, diabetes)
- Perform health history/health and risk assessments (e.g., lifestyle, family and genetic history)
- Perform targeted screening assessments (e.g., vision, hearing, nutrition)*
- Utilize appropriate procedure and interviewing techniques when taking the client health history

High Risk Behaviors

- Assess client lifestyle practice risks that may impact health (e.g., excessive sun exposure, lack of regular exercise)
- Assist the client to identify behaviors/risks that may impact health (e.g., fatigue, calcium deficiency)
- Provide information for prevention and treatment of high risk health behaviors (e.g., smoking cessation, safe sexual practices, drug education)*

Lifestyle Choices

- Assess the client's lifestyle choices (e.g., home schooling, rural or urban living)
- Assess client's attitudes/perceptions on sexuality
- Assess client's need/desire for contraception
- Identify contraindications to chosen contraceptive method (e.g., smoking, compliance, medical conditions)
- Identify expected outcomes for family planning methods
- Recognize client who is socially or environmentally isolated
- Educate the client on sexuality issues (e.g., family planning, safe sexual practices, menopause, impotence)
- Evaluate client alternative or homeopathic health care practices (e.g., massage therapy, acupuncture, herbal medicine and minerals)

*Activity Statements used in the 2011 RN Practice Analysis

Self Care

- Assess client ability to manage care in home environment and plan care accordingly (e.g., equipment, community resources)*
- Consider client self care needs before developing or revising care plan
- Assist primary caregivers working with the client to meet self-care goals

Techniques of Physical Assessment

- Apply knowledge of nursing procedures and psychomotor skills to techniques of physical assessment
- Choose physical assessment equipment and technique appropriate for the client (e.g., age of client, measurement of vital signs)
- Perform comprehensive health assessment*

Sample Item

The nurse is teaching a client about contraception. Which of the following information should the nurse include?

a. "Emergency contraception is most effective if used within 72 hours of unprotected intercourse." **(key)**

b. "If used correctly, a birth control patch will protect you from contracting a sexually transmitted disease (STD)."

c. "If you use an intrauterine device for contraception, it will need to be replaced every year."

d. "You cannot use medroxyprogesterone if you smoke cigarettes."

*Activity Statements used in the 2011 RN Practice Analysis

Psychosocial Integrity

- Psychosocial Integrity – the nurse provides and directs nursing care that promotes and supports the emotional, mental and social well being of the client experiencing stressful events, as well as clients with acute or chronic mental illness.

PSYCHOSOCIAL INTEGRITY **Related Activity Statements from the *2011 RN Practice Analysis of Newly Licensed Registered Nurses in the U.S. and Member Board Jurisdictions***
■ Assess client for abuse or neglect and intervene as appropriate
■ Incorporate behavioral management techniques when caring for a client (e.g., positive reinforcement, setting limits)
■ Assess client for drug/alcohol dependencies, withdrawal, or toxicities and intervene as appropriate
■ Assess client in coping with life changes and provide support
■ Assess the potential for violence and use safety precautions (e.g., suicide, homicide, self-destructive behavior)
■ Incorporate client cultural practice and beliefs when planning and providing care
■ Provide end of life care and education to clients
■ Assess family dynamics to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)
■ Provide care and education for acute and chronic behavioral health issues (e.g., anxiety, depression, dementia, eating disorders)
■ Assess psychosocial, spiritual and occupational factors affecting care, and plan interventions
■ Provide care for a client experiencing visual, auditory or cognitive distortions (e.g., hallucinations)
■ Recognize non-verbal cues to physical and/or psychological stressors
■ Use therapeutic communication techniques to provide client support
■ Provide a therapeutic environment for clients with emotional/behavioral issues

Related content includes, but is **not limited** to:

Abuse/Neglect

- Assess client for abuse or neglect and intervene as appropriate*
- Identify risk factors for domestic, child, elder abuse/neglect and sexual abuse
- Plan interventions for victims/suspected victims of abuse
- Counsel victims/suspected victims of abuse and their families on coping strategies
- Provide a safe environment for the abused/neglected client
- Evaluate client response to interventions

*Activity Statements used in the 2011 RN Practice Analysis

Behavioral Interventions

- Assess the client's appearance, mood and psychomotor behavior and identify/respond to inappropriate/abnormal behavior
- Assist the client with achieving and maintaining self-control of behavior (e.g., contract, behavior modification)
- Assist the client to develop and use strategies to decrease anxiety
- Orient the client to reality
- Participate in group sessions (e.g., support groups)
- Incorporate behavioral management techniques when caring for a client (e.g., positive reinforcement, setting limits)*
- Evaluate the client's response to treatment plan

Chemical and Other Dependencies/Substance Use Disorder

- Assess the client's reactions to the diagnosis/treatment of substance-related disorder
- Assess client for drug/alcohol dependencies, withdrawal, or toxicities and intervene as appropriate*
- Plan and provide care to clients experiencing substance-related withdrawal or toxicity (e.g., nicotine, opioid, sedative)
- Provide information on substance abuse diagnosis and treatment plan to the client
- Provide care and/or support for a client with non-substance-related dependencies (e.g., gambling, sexual addiction)
- Provide symptom management for clients experiencing withdrawal or toxicity
- Encourage client to participate in support groups (e.g., Alcoholics Anonymous, Narcotics Anonymous)
- Evaluate the client's response to a treatment plan and revise as needed

Coping Mechanisms

- Assess the client's support systems and available resources
- Assess the client's ability to adapt to temporary/permanent role changes
- Assess the client's reaction to a diagnosis of acute or chronic mental illness (e.g., rationalization, hopefulness, anger)
- Assess client in coping with life changes and provide support*
- Identify situations which may necessitate role changes for a client (e.g., spouse with chronic illness, death of parent)
- Provide support to the client with unexpected altered body image (e.g., alopecia)
- Evaluate the constructive use of defense mechanisms by a client
- Evaluate whether the client has successfully adapted to situational role changes (e.g., accept dependency on others)

*Activity Statements used in the 2011 RN Practice Analysis

Crisis Intervention

- Assess the potential for violence and use safety precautions (e.g., suicide, homicide, self-destructive behavior)*
- Identify the client in crisis
- Use crisis intervention techniques to assist the client in coping
- Apply knowledge of client psychopathology to crisis intervention
- Guide the client to resources for recovery from crisis (e.g., social supports)

Cultural Awareness/Cultural Influences on Health

- Assess the importance of client culture/ethnicity when planning/providing/evaluating care
- Recognize cultural issues that may impact the client's understanding/acceptance of psychiatric diagnosis
- Incorporate client cultural practice and beliefs when planning and providing care*
- Respect cultural background/practices of the client (does not include dietary preferences)
- Use appropriate interpreters to assist in achieving client understanding
- Evaluate and document how client language needs were met

End of Life Care

- Assess the client's ability to cope with end-of-life interventions
- Identify end of life needs of the client (e.g., financial concerns, fear, loss of control, role changes)
- Recognize the need for and provide psychosocial support to the family/caregiver
- Assist the client in resolution of end-of-life issues
- Provide end of life care and education to clients*

Family Dynamics

- Assess barriers/stressors that impact family functioning (e.g., meeting client care needs, divorce)
- Assess family dynamics to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)*
- Assess parental techniques related to discipline
- Encourage the client's participation in group/family therapy
- Assist the client to integrate new members into family structure (e.g., new infant, blended family)
- Evaluate resources available to assist family functioning

Grief and Loss

- Assist the client in coping with suffering, grief, loss, dying, and bereavement
- Support the client in anticipatory grieving
- Inform the client of expected reactions to grief and loss (e.g., denial, fear)
- Provide the client with resources to adjust to loss/bereavement (e.g., individual counseling, support groups)
- Evaluate the client's coping and fears related to grief and loss

*Activity Statements used in the 2011 RN Practice Analysis

Mental Health Concepts

- Identify signs and symptoms of impaired cognition (e.g., memory loss, poor hygiene)
- Recognize signs and symptoms of acute and chronic mental illness (e.g., schizophrenia, depression, bipolar disorder)
- Recognize the client use of defense mechanisms
- Explore why client is refusing/not following treatment plan (e.g., non-adherence)
- Assess client for alterations in mood, judgment, cognition and reasoning
- Apply knowledge of client psychopathology to mental health concepts applied in individual/group/family therapy
- Provide care and education for acute and chronic behavioral health issues (e.g., anxiety, depression, dementia, eating disorders)*
- Evaluate the client ability to adhere to treatment plan
- Evaluate a client's abnormal response to the aging process (e.g., depression)

Religious and Spiritual Influences on Health

- Identify the emotional problems of client or client needs that are related to religious/spiritual beliefs (e.g., spiritual distress, conflict between recommended treatment and beliefs)
- Assess psychosocial, spiritual and occupational factors affecting care, and plan interventions*
- Assess and plan interventions that meet the client's emotional and spiritual needs
- Evaluate whether the client's religious/spiritual needs are met

Sensory/Perceptual Alterations

- Identify time, place, and stimuli surrounding the appearance of symptoms
- Assist client to develop strategies for dealing with sensory and thought disturbances
- Provide care for a client experiencing visual, auditory or cognitive distortions (e.g., hallucinations)*
- Provide care in a nonthreatening and nonjudgmental manner
- Provide reality-based diversions

Stress Management

- Recognize nonverbal cues to physical and/or psychological stressors*
- Assess stressors, including environmental, that affect client care (e.g., noise, fear, uncertainty, change, lack of knowledge)
- Implement measures to reduce environmental stressors (e.g., noise, temperature, pollution)
- Provide information to client on stress management techniques (e.g., relaxation techniques, exercise, meditation)
- Evaluate the client's use of stress management techniques

Support Systems

- Assist family to plan care for client with impaired cognition (e.g., Alzheimer's disease)
- Encourage the client's involvement in the health care decision-making process
- Evaluate the client's feelings about the diagnosis/treatment plan

*Activity Statements used in the 2011 RN Practice Analysis

Therapeutic Communication

- Assess verbal and nonverbal client communication needs
- Respect the client's personal values and beliefs
- Allow time to communicate with the client
- Use therapeutic communication techniques to provide client support*
- Encourage the client to verbalize feelings (e.g., fear, discomfort)
- Evaluate the effectiveness of communications with the client

Therapeutic Environment

- Identify external factors that may interfere with client recovery (e.g., stressors, family dynamics)
- Make client room assignments that support the therapeutic milieu
- Provide a therapeutic environment for clients with emotional/behavioral issues*

Sample Item

The nurse is caring for a female client who was brought to the emergency department (ED) by the spouse. Based on the client's injuries, the nurse suspects the client may have been physically abused. Which of the following actions would be **most** appropriate for the nurse to take?

a. Question the client about the possibility of abuse when the spouse is not in the room. **(key)**

b. Explain to the client that the client will have to speak with a police officer to rule out the possibility of abuse.

c. Explain to the spouse that the client's injuries appear to be the result of physical abuse.

d. Ask the client and the spouse how long they have been married.

*Activity Statements used in the 2011 RN Practice Analysis

Physiological Integrity

Basic Care and Comfort

- Basic Care and Comfort – the nurse provides comfort and assistance in the performance of activities of daily living.

BASIC CARE AND COMFORT **Related Activity Statements from the *2011 RN Practice Analysis of Newly Licensed Registered Nurses in the U.S. and Member Board Jurisdictions***
■ Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques) ■ Assess and manage client with an alteration in elimination (e.g., bowel, urinary) ■ Perform irrigations (e.g., of bladder, ear, eye) ■ Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces) ■ Apply, maintain or remove orthopedic devices (e.g., traction, splints, braces, casts) ■ Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices) ■ Implement measures to promote circulation (e.g., active or passive range of motion, positioning and mobilization) ■ Assess client need for pain management ■ Provide non-pharmacological comfort measures ■ Manage the client's nutritional intake (e.g., adjust diet, monitor height and weight) ■ Provide client nutrition through continuous or intermittent tube feedings ■ Evaluate client intake and output and intervene as needed ■ Assess and intervene in client performance of activities of daily living ■ Perform post-mortem care ■ Assess client need for sleep/rest and intervene as needed

Related content includes, but is **not limited** to:

Assistive Devices

- Assess the client for actual/potential difficulty with communication and speech/vision/hearing problems
- Assess the client's use of assistive devices (e.g., prosthetic limbs, hearing aid)
- Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)*
- Manage the client who uses assistive devices or prostheses (e.g., eating utensils, telecommunication devices, dentures)
- Evaluate the correct use of assistive devices by the client

*Activity Statements used in the 2011 RN Practice Analysis

Elimination

- Assess and manage client with an alteration in elimination (e.g., bowel, urinary)*
- Perform irrigations (e.g., of bladder, ear, eye)*
- Provide skin care to clients who are incontinent (e.g., wash frequently, barrier creams/ointments)
- Use alternative methods to promote voiding
- Evaluate whether the client's ability to eliminate is restored/maintained

Mobility/Immobility

- Identify complications of immobility (e.g., skin breakdown, contractures)
- Assess the client for mobility, gait, strength and motor skills
- Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces)*
- Apply knowledge of nursing procedures and psychomotor skills when providing care to clients with immobility
- Apply, maintain or remove orthopedic devices (e.g., traction, splints, braces, casts)*
- Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)*
- Educate the client regarding proper methods used when repositioning an immobilized client
- Maintain the client's correct body alignment
- Maintain/correct the adjustment of client's traction device (e.g., external fixation device, halo traction, skeletal traction)
- Implement measures to promote circulation (e.g., active or passive range of motion, positioning and mobilization)*
- Evaluate the client's response to interventions to prevent complications from immobility

Non-Pharmacological Comfort Interventions

- Assess the client's need for alternative and/or complementary therapy
- Assess the client's need for palliative care
- Assess client need for pain management*
- Recognize differences in client perception and response to pain
- Apply knowledge of pathophysiology to non-pharmacological comfort/palliative care interventions
- Incorporate alternative/complementary therapies into client plan of care (e.g., music therapy, relaxation therapy)
- Counsel client regarding palliative care
- Respect client palliative care choices
- Assist client in receiving appropriate end of life physical symptom management
- Plan measures to provide comfort interventions to clients with anticipated or actual impaired comfort

*Activity Statements used in the 2011 RN Practice Analysis

- Provide non-pharmacological comfort measures*
- Evaluate the client's response to non-pharmacological interventions (e.g., pain rating scale, verbal reports)
- Evaluate the outcomes of alternative and/or complementary therapy practices
- Evaluate outcome of palliative care interventions

Nutrition and Oral Hydration

- Assess client ability to eat (e.g., chew, swallow)
- Assess client for actual/potential specific food and medication interactions
- Consider client choices regarding meeting nutritional requirements and/or maintaining dietary restrictions, including mention of specific food items
- Monitor client hydration status (e.g., edema, signs and symptoms of dehydration)
- Initiate calorie counts for clients
- Apply knowledge of mathematics to client nutrition (e.g., body mass index [BMI])
- Manage the client's nutritional intake (e.g., adjust diet, monitor height and weight)*
- Promote the client's independence in eating
- Provide/maintain special diets based on the client diagnosis/nutritional needs and cultural considerations (e.g., low sodium, high protein, calorie restrictions)
- Provide nutritional supplements as needed (e.g., high protein drinks)
- Provide client nutrition through continuous or intermittent tube feedings*
- Evaluate side effects of client tube feedings and intervene, as needed (e.g., diarrhea, dehydration)
- Evaluate client intake and output and intervene as needed*
- Evaluate the impact of disease/illness on nutritional status of a client

Personal Hygiene

- Assess the client for personal hygiene habits/routine
- Assess and intervene in client performance of activities of daily living*
- Provide information to the client on required adaptations for performing activities of daily living (e.g., shower chair, hand rails)
- Perform post-mortem care*

Rest and Sleep

- Assess client need for sleep/rest and intervene as needed*
- Apply knowledge of client pathophysiology to rest and sleep interventions
- Schedule client care activities to promote adequate rest

*Activity Statements used in the 2011 RN Practice Analysis

Sample Item

The nurse is teaching a client with gastroesophageal reflux disease (GERD) about dietary and lifestyle modifications. Which of the following information should the nurse include in the teaching? **Select all that apply.**

a. Maintain a high-protein, low-fat diet. **(key)**

b. Avoid snacks between meals.

c. Sleep with the head of the bed elevated. **(key)**

d. Stay upright for 2 to 3 hours after eating. **(key)**

e. Decrease daily intake of sodium.

*Activity Statements used in the 2011 RN Practice Analysis

Pharmacological and Parenteral Therapies

- Pharmacological and Parenteral Therapies – the nurse provides care related to the administration of medications and parenteral therapies.

PHARMACOLOGICAL AND PARENTERAL THERAPIES **Related Activity Statements from the *2011 RN Practice Analysis of Newly Licensed Registered Nurses in the U.S. and Member Board Jurisdictions***
■ Administer blood products and evaluate client response ■ Access venous access devices, including tunneled, implanted and central lines ■ Perform calculations needed for medication administration ■ Evaluate client response to medication (e.g., therapeutic effects, side effects, adverse reactions) ■ Educate client about medications ■ Prepare and administer medications, using rights of medication administration ■ Review pertinent data prior to medication administration (e.g., contraindications, lab results, allergies, potential interactions) ■ Participate in medication reconciliation process ■ Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure) ■ Evaluate appropriateness and accuracy of medication order for client ■ Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access devices) ■ Administer pharmacological measures for pain management ■ Administer controlled substances within regulatory guidelines (e.g., witness, waste) ■ Administer parenteral nutrition and evaluate client response (e.g., TPN)

Related content includes, but is **not limited** to:

Adverse Effects/Contraindications/Side Effects/Interactions

- Identify a contraindication to the administration of a medication to the client
- Identify actual and potential incompatibilities of prescribed client medications
- Identify symptoms/evidence of an allergic reaction (e.g., to medications)
- Assess the client for actual or potential side effects and adverse effects of medications (e.g., prescribed, over-the-counter, herbal supplements, preexisting condition)
- Provide information to the client on common side effects/adverse effects/potential interactions of medications and inform the client when to notify the primary health care provider
- Notify the primary health care provider of side effects, adverse effects and contraindications of medications and parenteral therapy

*Activity Statements used in the 2011 RN Practice Analysis

- Document side effects and adverse effects of medications and parenteral therapy
- Monitor for anticipated interactions among the client prescribed medications and fluids (e.g., oral, IV, subcutaneous, IM, topical prescriptions)
- Evaluate and document the client's response to actions taken to counteract side effects and adverse effects of medications and parenteral therapy

Blood and Blood Products

- Identify the client according to facility/agency policy prior to administration of red blood cells/ blood products (e.g., prescription for administration, correct type, correct client, cross matching complete, consent obtained)
- Check the client for appropriate venous access for red blood cell/blood product administration (e.g., correct gauge needle, integrity of access site)
- Document necessary information on the administration of red blood cells/blood products
- Administer blood products and evaluate client response*

Central Venous Access Devices

- Educate the client on the reason for and care of a venous access device
- Access venous access devices, including tunneled, implanted and central lines*
- Provide care for client with a central venous access device (e.g., port-a-cath, Hickman)

Dosage Calculation

- Perform calculations needed for medication administration*
- Use clinical decision making/critical thinking when calculating dosages

Expected Actions/Outcomes

- Obtain information on a client's prescribed medications (e.g., review formulary, consult pharmacist)
- Use clinical decision making/critical thinking when addressing expected effects/outcomes of medications (e.g., oral, intradermal, subcutaneous, IM, topical)
- Evaluate the client's use of medications over time (e.g., prescription, over-the-counter, home remedies)
- Evaluate client response to medication (e.g., therapeutic effects, side effects, adverse reactions)*

Medication Administration

- Educate client about medications*
- Educate client on medication self-administration procedures
- Prepare and administer medications, using rights of medication administration*
- Review pertinent data prior to medication administration (e.g., contraindications, lab results, allergies, potential interactions)*
- Mix medications from two vials when necessary (e.g., insulin)

*Activity Statements used in the 2011 RN Practice Analysis

- Administer and document medications given by common routes (e.g., oral, topical)
- Administer and document medications given by parenteral routes (e.g., intravenous, intramuscular, subcutaneous)
- Participate in medication reconciliation process*
- Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)*
- Dispose of unused medications according to facility/agency policy
- Evaluate appropriateness and accuracy of medication order for client*

Parenteral/Intravenous Therapies

- Identify appropriate veins that should be accessed for various therapies
- Educate client on the need for intermittent parenteral fluid therapy
- Apply knowledge and concepts of mathematics/nursing procedures/psychomotor skills when caring for a client receiving intravenous and parenteral therapy
- Prepare the client for intravenous catheter insertion
- Monitor the use of an infusion pump (e.g., IV, patient-controlled analgesia (PCA) device)
- Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access devices)*
- Evaluate the client's response to intermittent parenteral fluid therapy

Pharmacological Pain Management

- Assess client need for administration of a PRN pain medication (e.g., oral, topical, subcutaneous, IM, IV)
- Administer and document pharmacological pain management appropriate for client age and diagnoses (e.g., pregnancy, children, older adults)
- Administer pharmacological measures for pain management*
- Administer controlled substances within regulatory guidelines (e.g., witness, waste)*
- Evaluate and document the client's use and response to pain medications

Total Parenteral Nutrition (TPN)

- Identify side effects/adverse events related to TPN and intervene as appropriate (e.g., hyperglycemia, fluid imbalance, infection)
- Educate client on the need for and use of TPN
- Apply knowledge of nursing procedures and psychomotor skills when caring for a client receiving TPN
- Apply knowledge of client pathophysiology and mathematics to TPN interventions
- Administer parenteral nutrition and evaluate client response (e.g., TPN)*

*Activity Statements used in the 2011 RN Practice Analysis

Sample Item
The nurse is caring for a client who has a prescription for gentamicin 2 mg/kg, IV, every 8 hours. The client weighs 143 lb. The nurse has gentamicin 100 mg in 50 ml of solution available. How many ml should the nurse administer to the client with each dose? Record your answer using a whole number. 65 ml **(key)**

*Activity Statements used in the 2011 RN Practice Analysis

Reduction of Risk Potential

- Reduction of Risk Potential – the nurse reduces the likelihood that clients will develop complications or health problems related to existing conditions, treatments or procedures.

REDUCTION OF RISK POTENTIAL **Related Activity Statements from the *2011 RN Practice Analysis of Newly Licensed Registered Nurses in the U.S. and Member Board Jurisdictions***
■ Assess and respond to changes in client vital signs ■ Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring) ■ Monitor the results of diagnostic testing and intervene as needed ■ Obtain blood specimens peripherally or through central line ■ Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine) ■ Insert, maintain and remove a gastric tube ■ Insert, maintain and remove a urinary catheter ■ Insert, maintain and remove a peripheral intravenous line ■ Use precautions to prevent injury and/or complications associated with a procedure or diagnosis ■ Evaluate responses to procedures and treatments ■ Recognize trends and changes in client condition and intervene as needed ■ Perform focused assessment ■ Educate client about treatments and procedures ■ Provide preoperative and postoperative education ■ Provide preoperative care ■ Provide intraoperative care ■ Manage client during and following a procedure with moderate sedation

Related content includes, but is **not limited** to:

Changes/Abnormalities in Vital Signs

- Assess and respond to changes in client vital signs*
- Apply knowledge needed to perform related nursing procedures and psychomotor skills when assessing vital signs
- Apply knowledge of client pathophysiology when measuring vital signs
- Evaluate invasive monitoring data (e.g., pulmonary artery pressure, intracranial pressure)

*Activity Statements used in the 2011 RN Practice Analysis

Diagnostic Tests

- Apply knowledge of related nursing procedures and psychomotor skills when caring for clients undergoing diagnostic testing
- Compare client diagnostic findings with pre-test results
- Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)*
- Perform fetal heart monitoring
- Monitor results of maternal and fetal diagnostic tests (e.g., non-stress test, amniocentesis, ultrasound)
- Monitor the results of diagnostic testing and intervene as needed*

Laboratory Values

- Identify laboratory values for ABGs (pH, PO_2, PCO_2, SaO_2, HCO_3), BUN, cholesterol (total) glucose, hematocrit, hemoglobin, glycosylated hemoglobin ($HgbA_1C$), platelets, potassium, sodium, WBC, creatinine, PT, PTT & APTT, INR
- Compare client laboratory values to normal laboratory values
- Educate client about the purpose and procedure of prescribed laboratory tests
- Obtain blood specimens peripherally or through central line*
- Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine)*
- Monitor client laboratory values (e.g., glucose testing results for the client with diabetes)
- Notify primary health care provider about laboratory test results

Potential for Alterations in Body Systems

- Identify client potential for aspiration (e.g., feeding tube, sedation, swallowing difficulties)
- Identify client potential for skin breakdown (e.g., immobility, nutritional status, incontinence)
- Identify client with increased risk for insufficient vascular perfusion (e.g., immobilized limb, post surgery, diabetes)
- Educate client on methods to prevent complications associated with activity level/diagnosed illness/disease (e.g., contractures, foot care for client with diabetes mellitus)
- Compare current client data to baseline client data (e.g., symptoms of illness/disease)
- Monitor client output for changes from baseline (e.g., nasogastric [NG] tube, emesis, stools, urine)

Potential for Complications of Diagnostic Tests/Treatments/Procedures

- Assess client for an abnormal response following a diagnostic test/procedure (e.g., dysrhythmia following cardiac catheterization)
- Apply knowledge of nursing procedures and psychomotor skills when caring for a client with potential for complications
- Monitor the client for signs of bleeding
- Position the client to prevent complications following tests/treatments/procedures (e.g., elevate head of bed, immobilize extremity)

*Activity Statements used in the 2011 RN Practice Analysis

- Insert, maintain and remove a gastric tube*
- Insert, maintain and remove a urinary catheter*
- Insert, maintain and remove a peripheral intravenous line*
- Maintain tube patency (e.g., NG tube for decompression, chest tubes)
- Use precautions to prevent injury and/or complications associated with a procedure or diagnosis*
- Provide care for client undergoing electroconvulsive therapy (e.g., monitor airway, assess for side effects, teach client about procedure)
- Intervene to manage potential circulatory complications (e.g., hemorrhage, embolus, shock)
- Intervene to prevent aspiration (e.g., check NG tube placement)
- Intervene to prevent potential neurological complications (e.g., foot drop, numbness, tingling)
- Evaluate responses to procedures and treatments*

Potential for Complications from Surgical Procedures and Health Alterations

- Apply knowledge of pathophysiology to monitoring for complications (e.g., recognize signs of thrombocytopenia)
- Evaluate the client's response to post-operative interventions to prevent complications (e.g., prevent aspiration, promote venous return, promote mobility)

System Specific Assessments

- Assess the client for abnormal peripheral pulses after a procedure or treatment
- Assess the client for abnormal neurological status (e.g., level of consciousness, muscle strength, mobility)
- Assess the client for peripheral edema
- Assess the client for signs of hypoglycemia or hyperglycemia
- Identify factors that result in delayed wound healing
- Recognize trends and changes in client condition and intervene as needed*
- Perform a risk assessment (e.g., sensory impairment, potential for falls, level of mobility, skin integrity)
- Perform focused assessment*

Therapeutic Procedures

- Assess client response to recovery from local, regional or general anesthesia
- Apply knowledge of related nursing procedures and psychomotor skills when caring for clients undergoing therapeutic procedures
- Educate client about treatments and procedures*
- Educate client about home management of care (tracheostomy and ostomy)
- Use precautions to prevent further injury when moving a client with a musculoskeletal condition (e.g., log-rolling, abduction pillow)
- Monitor the client before, during, and after a procedure/surgery (e.g., casted extremity)

*Activity Statements used in the 2011 RN Practice Analysis

- Monitor effective functioning of therapeutic devices (e.g., chest tube, drainage tubes, wound drainage devices, continuous bladder irrigation)
- Provide preoperative and postoperative education*
- Provide preoperative care*
- Provide intraoperative care*
- Manage client during and following a procedure with moderate sedation*

Sample Item
The nurse has taught a client who is scheduled for a colonoscopy. Which of the following statements by the client would require follow up? a. "I will not be able to eat or drink anything for 24 hours before the procedure." **(key)** b. "I may experience abdominal cramping after the procedure." c. "I will be sedated during the procedure." d. "I will be placed in the knee-chest position for the procedure."

*Activity Statements used in the 2011 RN Practice Analysis

Physiological Adaptation

- Physiological Adaptation – the nurse manages and provides care for clients with acute, chronic or life threatening physical health conditions.

PHYSIOLOGICAL ADAPTATION **Related Activity Statements from the *2011 RN Practice Analysis of Newly Licensed Registered Nurses in the U.S. and Member Board Jurisdictions***
■ Assist with invasive procedures (e.g., central line, thoracentesis, bronchoscopy)
■ Implement and monitor phototherapy
■ Maintain optimal temperature of client (e.g., cooling and/or warming blanket)
■ Monitor and care for clients on a ventilator
■ Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)
■ Perform and manage care of client receiving peritoneal dialysis
■ Perform suctioning (e.g. oral, nasopharyngeal, endotracheal, tracheal)
■ Provide wound care or dressing change
■ Provide ostomy care and education (e.g. tracheal, enteral)
■ Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)
■ Provide postoperative care
■ Manage the care of the client with a fluid and electrolyte imbalance
■ Monitor and maintain arterial lines
■ Manage the care of a client with a pacing device (e.g., pacemaker)
■ Manage the care of a client on telemetry
■ Manage the care of a client receiving hemodialysis
■ Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)
■ Educate client regarding an acute or chronic condition
■ Manage the care of a client with impaired ventilation/oxygenation
■ Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis
■ Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, respiratory support, automated external defibrillator)
■ Identify pathophysiology related to an acute or chronic condition (e.g., signs and symptoms)
■ Recognize signs and symptoms of complications and intervene appropriately when providing client care

*Activity Statements used in the 2011 RN Practice Analysis

Related content includes, but is **not limited** to:

Alterations in Body Systems

- Assess adaptation of a client to health alteration, illness and/or disease
- Assess tube drainage during the time the client has an alteration in body systems (e.g., amount, color)
- Assess client for signs and symptoms of adverse effects of radiation therapy
- Identify signs of potential prenatal complications
- Identify signs, symptoms and incubation periods of infectious diseases
- Apply knowledge of nursing procedures, pathophysiology and psychomotor skills when caring for a client with an alteration in body systems
- Educate client about managing health problems (e.g., chronic illness)
- Assist with invasive procedures (e.g., central line, thoracentesis, bronchoscopy)*
- Implement and monitor phototherapy*
- Implement interventions to address side/adverse effects of radiation therapy (e.g., dietary modifications, avoid sunlight)
- Maintain optimal temperature of client (e.g., cooling and/or warming blanket)*
- Monitor and care for clients on a ventilator*
- Monitor wounds for signs and symptoms of infection
- Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)*
- Perform and manage care of client receiving peritoneal dialysis*
- Perform suctioning (e.g. oral, nasopharyngeal, endotracheal, tracheal)*
- Perform wound care or dressing change*
- Promote client progress toward recovery from an alteration in body systems
- Provide ostomy care and education (e.g. tracheal, enteral)*
- Provide care to client who has experienced a seizure
- Provide care to a client with an infectious disease
- Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)*
- Provide care for client experiencing complications of pregnancy/labor and/or delivery (e.g., eclampsia, precipitous labor, hemorrhage)
- Provide care for client experiencing increased intracranial pressure
- Provide postoperative care*
- Remove sutures or staples
- Evaluate client response to surgery
- Evaluate achievement of client treatment goals
- Evaluate client response to treatment for an infectious disease (e.g., acquired immune deficiency syndrome [AIDS], tuberculosis [TB])
- Evaluate and monitor client response to radiation therapy

*Activity Statements used in the 2011 RN Practice Analysis

Fluid and Electrolyte Imbalances

- Identify signs and symptoms of client fluid and/or electrolyte imbalance
- Apply knowledge of pathophysiology when caring for the client with fluid and electrolyte imbalances
- Manage the care of the client with a fluid and electrolyte imbalance*
- Evaluate the client's response to interventions to correct fluid or electrolyte imbalance

Hemodynamics

- Assess client for decreased cardiac output (e.g., diminished peripheral pulses, hypotension)
- Identify cardiac rhythm strip abnormalities (e.g., sinus bradycardia, premature ventricular contractions [PVCs], ventricular tachycardia, fibrillation)
- Apply knowledge of pathophysiology to interventions in response to client abnormal hemodynamics
- Provide client with strategies to manage decreased cardiac output (e.g., frequent rest periods, limit activities)
- Intervene to improve client cardiovascular status (e.g., initiate protocol to manage cardiac arrhythmias, monitor pacemaker functions)
- Monitor and maintain arterial lines*
- Manage the care of a client with a pacing device (e.g., pacemaker)*
- Manage the care of a client on telemetry*
- Manage the care of a client receiving hemodialysis*
- Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)*

Illness Management

- Identify client data that needs to be reported immediately
- Apply knowledge of client pathophysiology to illness management
- Educate client regarding an acute or chronic condition*
- Educate client about managing illness (e.g., acquired immune deficiency syndrome [AIDS], chronic illnesses)
- Implement interventions to manage the client's recovery from an illness
- Perform gastric lavage
- Promote and provide continuity of care in illness management activities (e.g., cast placement)
- Manage the care of a client with impaired ventilation/oxygenation*
- Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis*

*Activity Statements used in the 2011 RN Practice Analysis

Medical Emergencies

- Apply knowledge of pathophysiology when caring for a client experiencing a medical emergency
- Apply knowledge of nursing procedures and psychomotor skills when caring for a client experiencing a medical emergency
- Explain emergency interventions to a client
- Notify primary health care provider about client unexpected response/emergency situation
- Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, respiratory support, automated external defibrillator)*
- Provide emergency care for wound disruption (e.g., evisceration, dehiscence)
- Evaluate and document the client's response to emergency interventions (e.g., restoration of breathing, pulse)

Pathophysiology

- Identify pathophysiology related to an acute or chronic condition (e.g., signs and symptoms)*
- Understand general principles of pathophysiology (e.g., injury and repair, immunity, cellular structure)

Unexpected Response to Therapies

- Assess the client for unexpected adverse response to therapy (e.g., increased intracranial pressure, hemorrhage)
- Recognize signs and symptoms of complications and intervene appropriately when providing client care*
- Promote recovery of the client from unexpected response to therapy (e.g., urinary tract infection)

Sample Item

The nurse is assessing a client with hyperthyroidism. Which of the following findings would the nurse expect to observe? **Select all that apply.**

a. increased appetite **(key)**

b. lethargy

c. diarrhea **(key)**

d. exopthalmos **(key)**

e. weight gain

f. cold intolerance

*Activity Statements used in the 2011 RN Practice Analysis

IV. Administration of the NCLEX-RN® Examination

Examination Length

The NCELX-RN® Examination is a variable length computerized adaptive test. It is not offered in paper-and-pencil or oral examination formats and can be anywhere from 75 to 265 items long. Of these items, 15 are pretest items that are not scored. The time limit for the exam is specified in the *NCSBN NCLEX® Examination Candidate Bulletin*. It is important to note that the time allotted for the examination **includes** the tutorial, sample items, all breaks (restroom, stretching, etc.) and the examination. All breaks are optional.

The length of the examination is determined by the candidate's responses to the items. After the minimum number of items has been answered, testing stops when the candidate's ability is determined to be either above or below the passing standard with 95 percent certainty. Depending upon the particular pattern of correct and incorrect responses, different candidates will take different numbers of items and therefore use varying amounts of time. The examination will stop when the maximum number of items has been taken or when the time limit has been reached. Remember, it is in the candidate's best interest to maintain a reasonable pace of spending only one or two minutes on each item. The candidates should select a pace that will permit them to complete the examination within the allotted time should the maximum number of items be administered.

It is important to understand that the length of the candidate's examination is not an indication of a pass or fail result. A candidate with a relatively short examination may pass or fail just as the candidate with a long examination may pass or fail. Regardless of the length of the examination, each candidate is given an examination that conforms to the NCLEX® test plan and has ample opportunity to demonstrate his or her ability.

The Passing Standard

The NCSBN Board of Directors (BOD) reevaluates the passing standard once every three years. The criterion that the BOD uses to set the standard is the minimum level of ability required for safe and effective entry-level nursing practice.

To assist the BOD in making this decision, they are provided with information on:

1. The results of a standard-setting exercise performed by a panel of experts with the assistance of professional psychometricians;
2. The historical record of the passing standard with summaries of the candidate performance associated with those standards;
3. The results of a standard setting survey sent to educators and employers; and
4. Information describing the educational readiness of high school graduates who express an interest in nursing.

Once the passing standard is set, it is imposed uniformly on every test record according to the procedures laid out in the Scoring the NCLEX® Examination section. To pass an NCLEX examination, a candidate must perform **above** the passing standard. There is no fixed percentage of candidates that pass or fail each examination.

Similar Items

Occasionally, a candidate may receive an item that seems to be very similar to an item received earlier in the examination. This could happen for a variety of reasons. For example, several items could be about similar symptoms, diseases, or disorders yet address different phases of the nursing process. Alternatively, a pretest (unscored) item could be about content similar to an operational (scored) item. It is **incorrect** to assume that a second item, which is similar in content to a previously administered item, is administered because the candidate answered the first item incorrectly. The candidate is instructed to always select the answer believed to be correct for each item administered. All examinations conform to their respective test plan.

Reviewing Answers and Guessing

The items are presented to the candidate one at a time on a computer screen. Each item can be viewed as long as the candidate likes, but it is not possible to go back to a previous item once the answer is selected and confirmed by pressing the <NEXT> button. Every item must be answered even if the candidate is not sure of the right answer. The computer will not allow the candidate to go on to the next item without answering the one on the screen. If the candidate is unsure of the correct answer, the best guess is made and the candidate moves on to the next item. After an answer to an item is selected, the candidate has a chance to think about the answer and change it if necessary. However, once the candidate confirms the answer and goes on to the next item, the candidate will not be allowed to go back to any previous item on the examination.

Please note that rapid guessing can drastically lower the score. Some test preparation companies have realized that on certain pencil and paper tests, unanswered items are marked as wrong. To improve the candidate's score when they are running out of time, these companies sometimes advocate rapid guessing (perhaps without even reading the item) in the hope that the candidate will get at least a few items correct. On any adaptive test, this can be disastrous. It has the effect of giving the candidate easier items which he or she will likely also get wrong. The best advice is to (1) maintain a reasonable pace, perhaps one item every minute or two; and (2) carefully read and consider each item before answering.

Scoring the NCLEX® Examination

Computerized Adaptive Testing (CAT)

The NCLEX examination is different than a traditional pencil and paper examination. Typically, pencil and paper examinations administer the same items to every candidate, thus ensuring that the difficulty of the examination is the same across the board. Because the difficulty of the examination is constant, the percentage correct is the indicator of the candidate's ability. One disadvantage of this approach is that it is inefficient. It requires the high ability candidates to answer all of the easy items on the examination, which provides very little information about his or her ability. Another disadvantage is that guessing can artificially inflate the scores of low ability candidates, because they can answer these items correctly 25 percent of the time for reasons that have nothing to do with his or her ability.

Instead, the NCLEX examination uses CAT to administer the items. CAT is able to produce exam results that are more stable using fewer items by targeting items to the candidate's ability. The computer's goal during the NCLEX is to determine the ability of the candidate in relation to the passing standard. Every time the candidate answers an item, the computer re-estimates the candidate's ability. With each additional answered item, the ability estimate becomes more precise.

Each item that the candidate receives is selected from a large pool of items using three criteria:

1. The item is limited to the content area that will produce the best match to the test plan percentages. It is ensured that each candidate's exam has enough questions from each content area to match the required test plan percentages.
2. An item is selected that the candidate is expected to find challenging. Based on the candidate's answers up to that point and the difficulty of those items, the computer estimates the candidate's ability and selects an item that the candidate should have a 50 percent chance of answering correctly. This way, the next item should not be too easy or too hard and the examination can get maximum information about the candidate's ability from the item.
3. Any item that a repeat candidate has seen in the last year is excluded.

Pretest Items

For CAT to work, the difficulty of each item must be known in advance. The degree of difficulty is determined by administering the items as pretest items to a large sample of NCLEX candidates. Because the difficulty of these pretest items is not known in advance, these items are not included when estimating the candidate's ability or making pass-fail decisions. When enough responses are collected, the pretest items are statistically analyzed and calibrated. If the pretest items meet the NCLEX statistical standards, they can be administered in future examinations as scored items. There are 15 pretest items on every NCLEX-RN examination. It is impossible to distinguish operational items from pretest items, so candidates are asked to do their best on every item.

Passing and Failing

The decision as to whether a candidate passes or fails the NCLEX examination is governed by three different scenarios:

Scenario 1: The 95% Confidence Interval Rule

This scenario is the most common for NCLEX candidates. The computer will stop administering items when it is 95% certain that the candidate's ability is either clearly above or clearly below the passing standard.

Scenario 2: Maximum-Length Exam

Some candidate's ability levels will be very close to the passing standard. When this is the case, the computer continues to administer questions until the maximum number of items is reached. At this point, the computer disregards the 95% confidence rule and considers only the final ability estimate:

- If the final ability estimate is above the passing standard, the candidate passes.
- If the final ability estimate is at or below the passing standard, the candidate fails.

Scenario 3: Run-Out-Of-Time Rule (R.O.O.T.)

If a candidate runs out of time before reaching the maximum number of items and the computer has not determined with 95 percent certainty whether the candidate has passed or failed, an alternate criteria is used.

- If the candidate has not answered the minimum number of required items, the candidate automatically fails.
- If at least the minimum number of required items were answered, the computer looks at the last 60 ability estimates.
    - If the last 60 ability estimates were consistently above the passing standard, the candidate passes.
    - If the candidate's ability estimate drops below the passing standard even once over the last 60 items, the candidate fails.

This does not mean that the candidate must answer the last 60 items correctly. Each ability estimate is based upon all previous items answered.

Scoring Items

Items are scored as either right or wrong. There is no partial credit. For updated information on the administration of the examination, visit www.ncsbn.org.

Types of Items on the NCLEX-RN® Examination

During the administration of the NCLEX-RN Examination candidates will be required to respond to items in a variety of formats. These formats may include, but are not limited to: multiple-choice, multiple response, fill-in-the-blank calculation, ordered response and/or hot spots. All item types may include multimedia, such as charts, tables, graphics, sound and video.

For more information, visit www.ncsbn.org/2334.htm.

NCLEX® Examination Terminology

On the NCLEX examination, a prescription is defined as orders, interventions, remedies or treatments ordered or directed by an authorized health care provider.

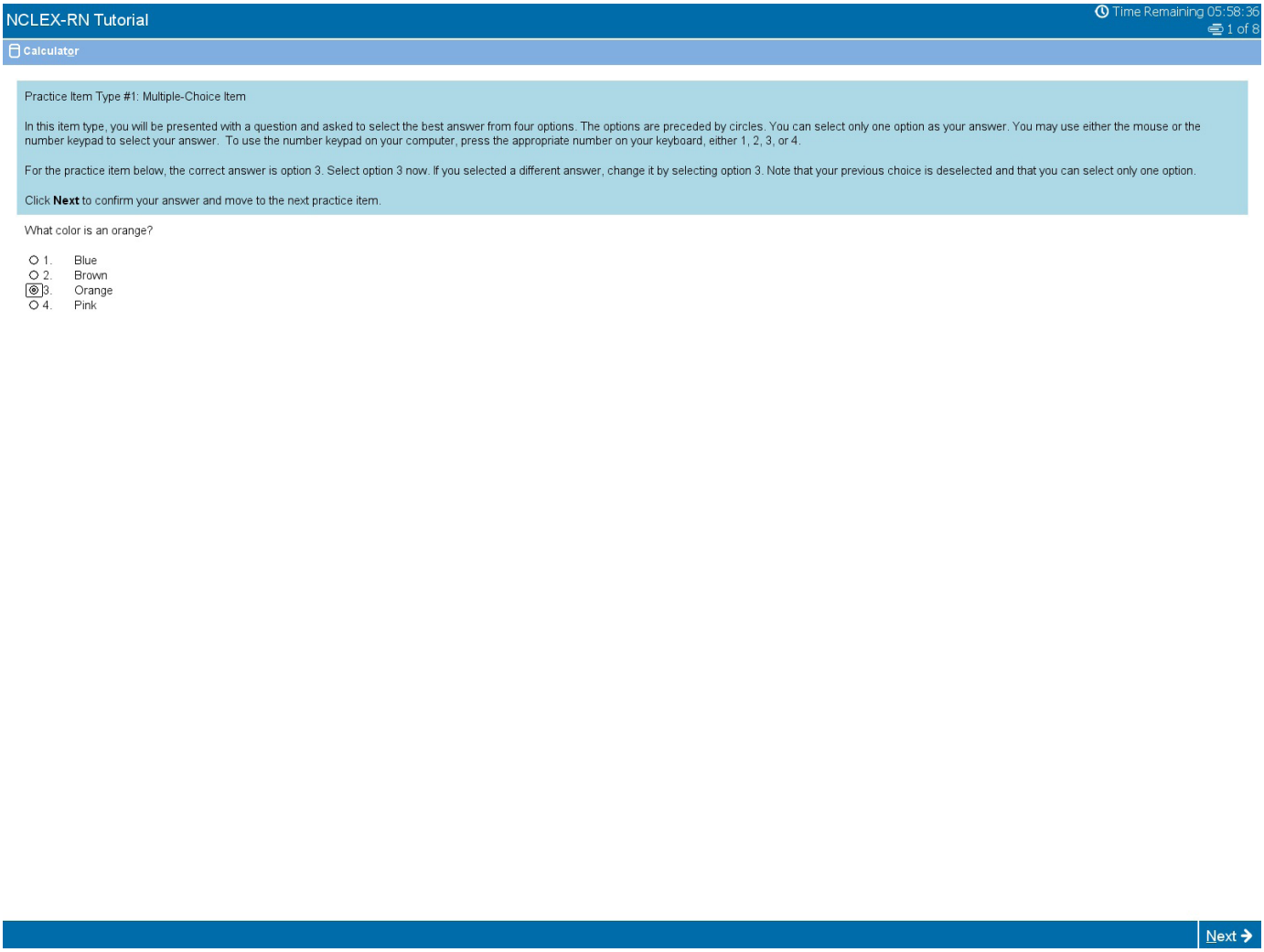
Confidentiality

Candidates should be aware and understand that the disclosure of examination materials, including the nature or content of examination items, before, during, or after the examination is a violation of law. Violations of confidentiality and/or candidates' rules can result in criminal prosecution or civil liability and/or disciplinary actions by the licensing agency, including the denial of licensure.

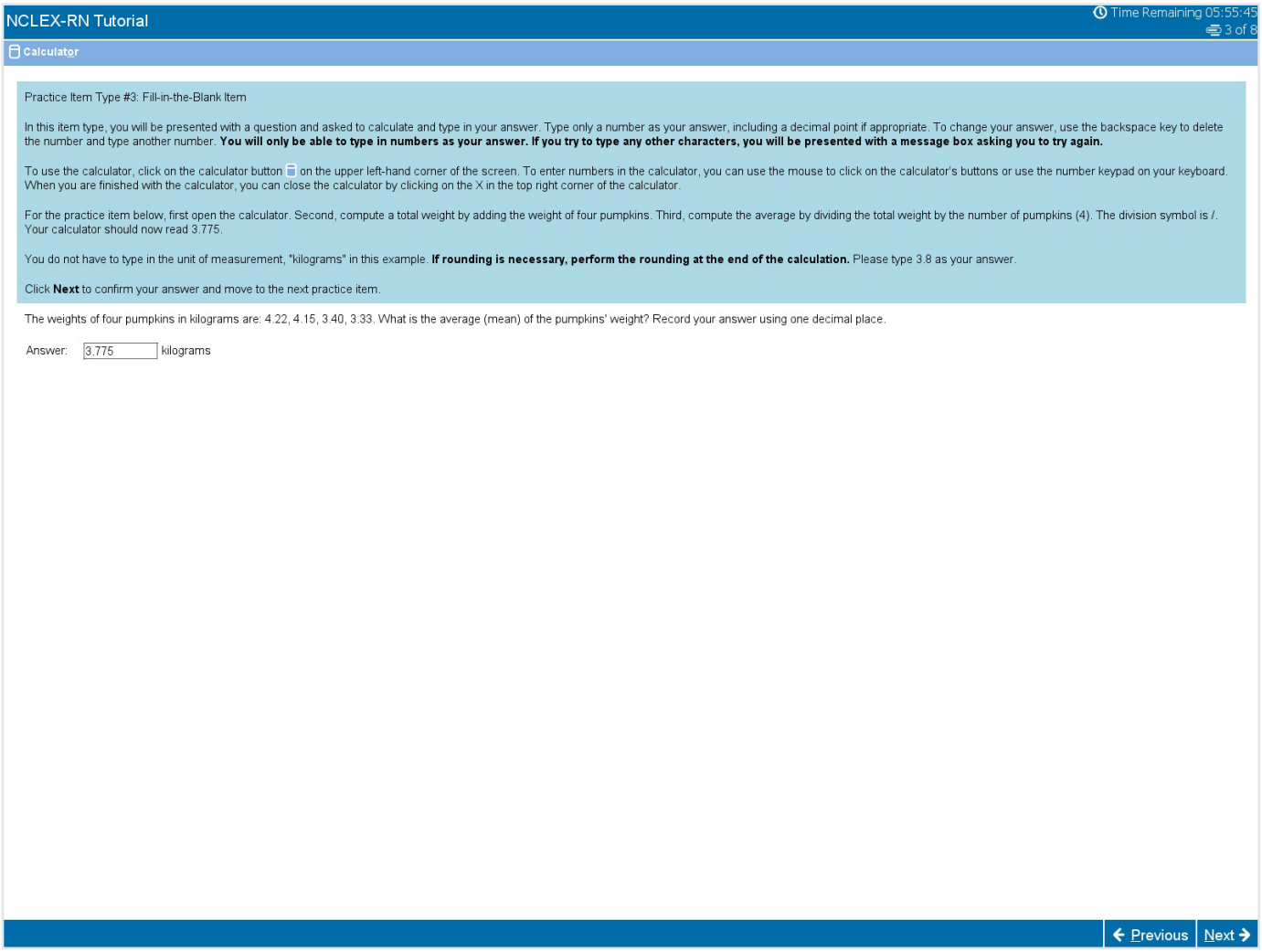
Tutorial

Each NCLEX-RN candidate is provided information on how to answer examination items. A tutorial is given at the beginning of the examination explaining the various formats that candidates may see on the examination. The following are examples of how screens in the tutorial may appear.

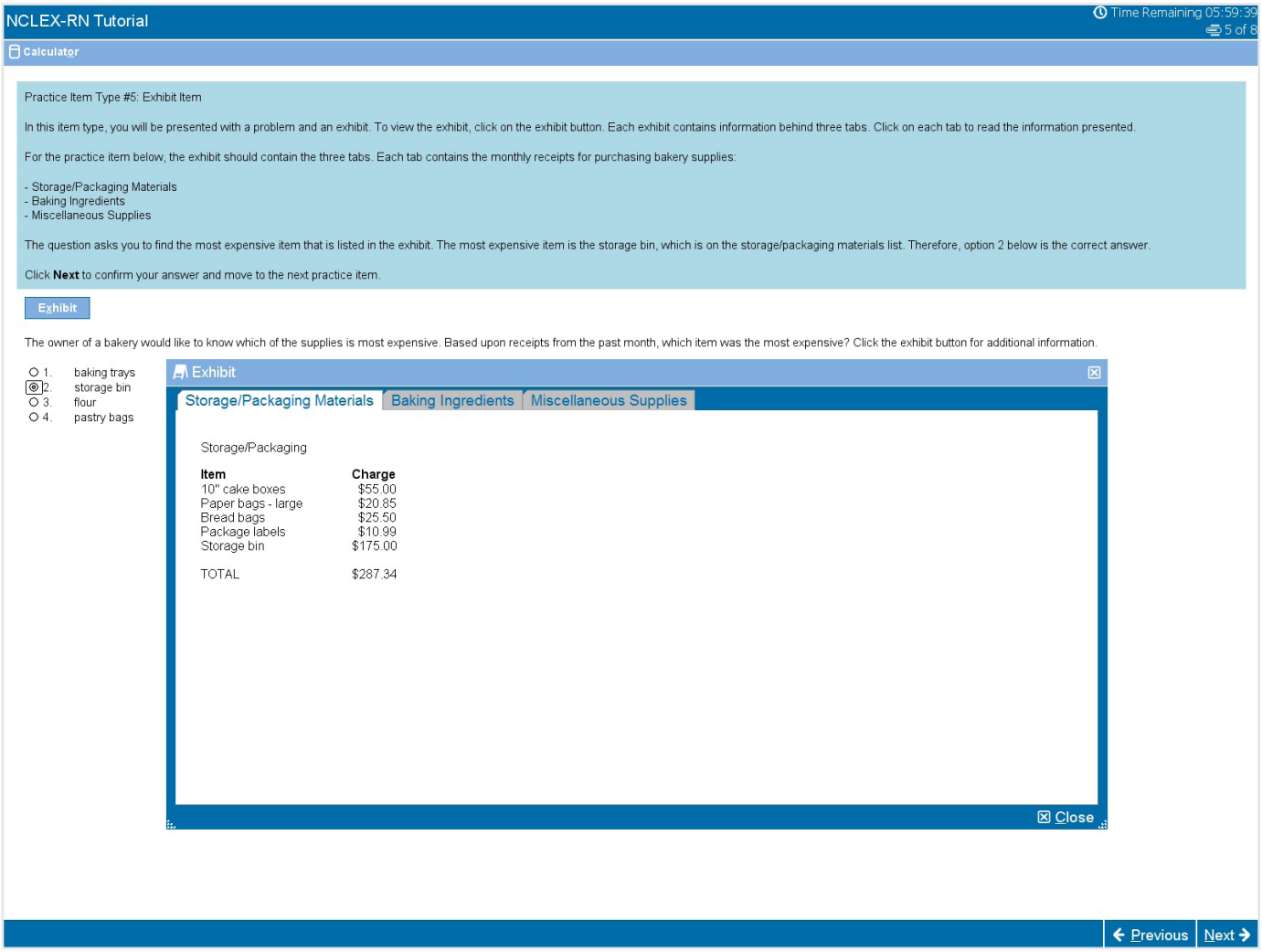
Multiple Choice (One Answer)



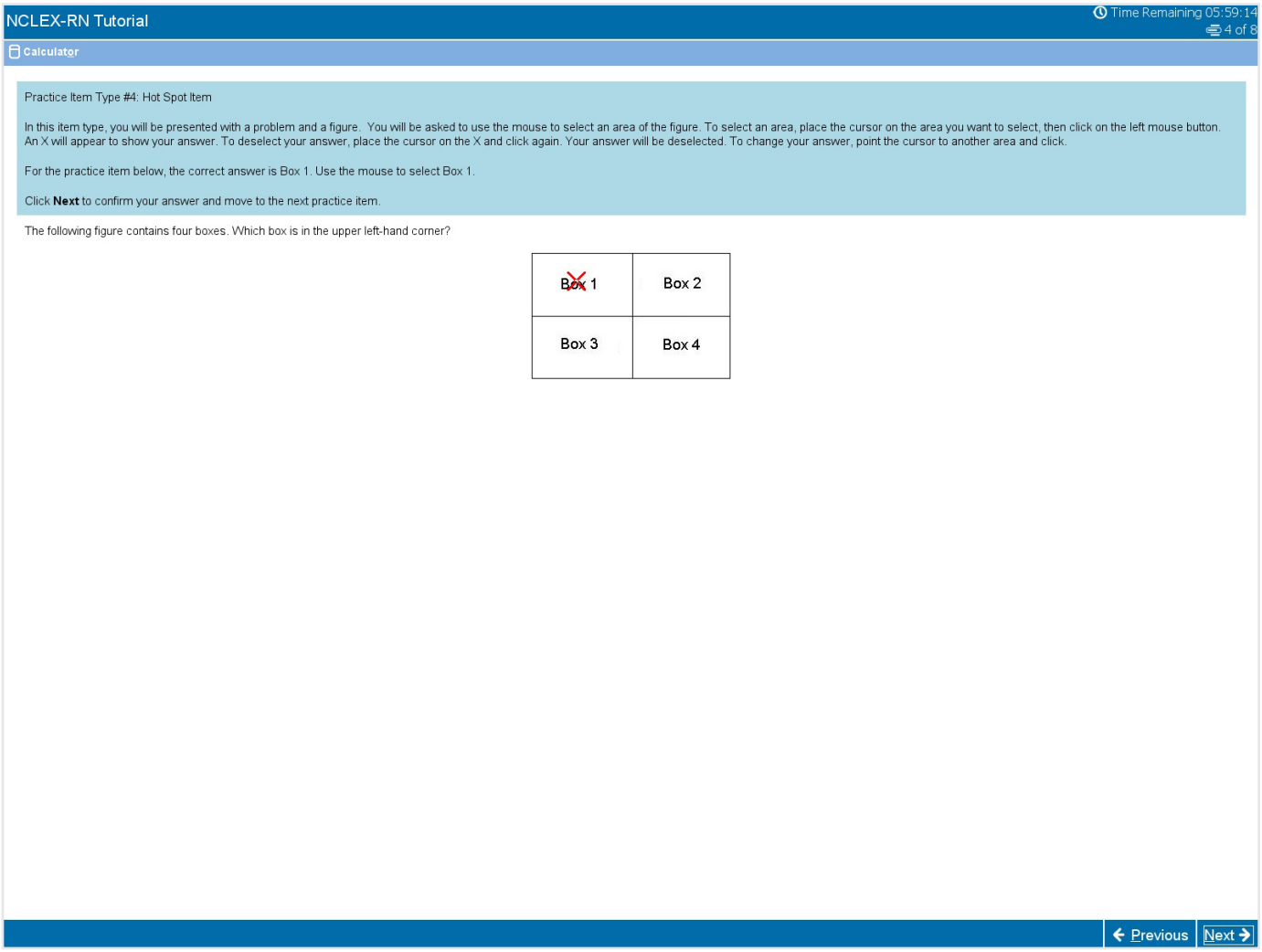
Fill-in-the-Blank Calculation



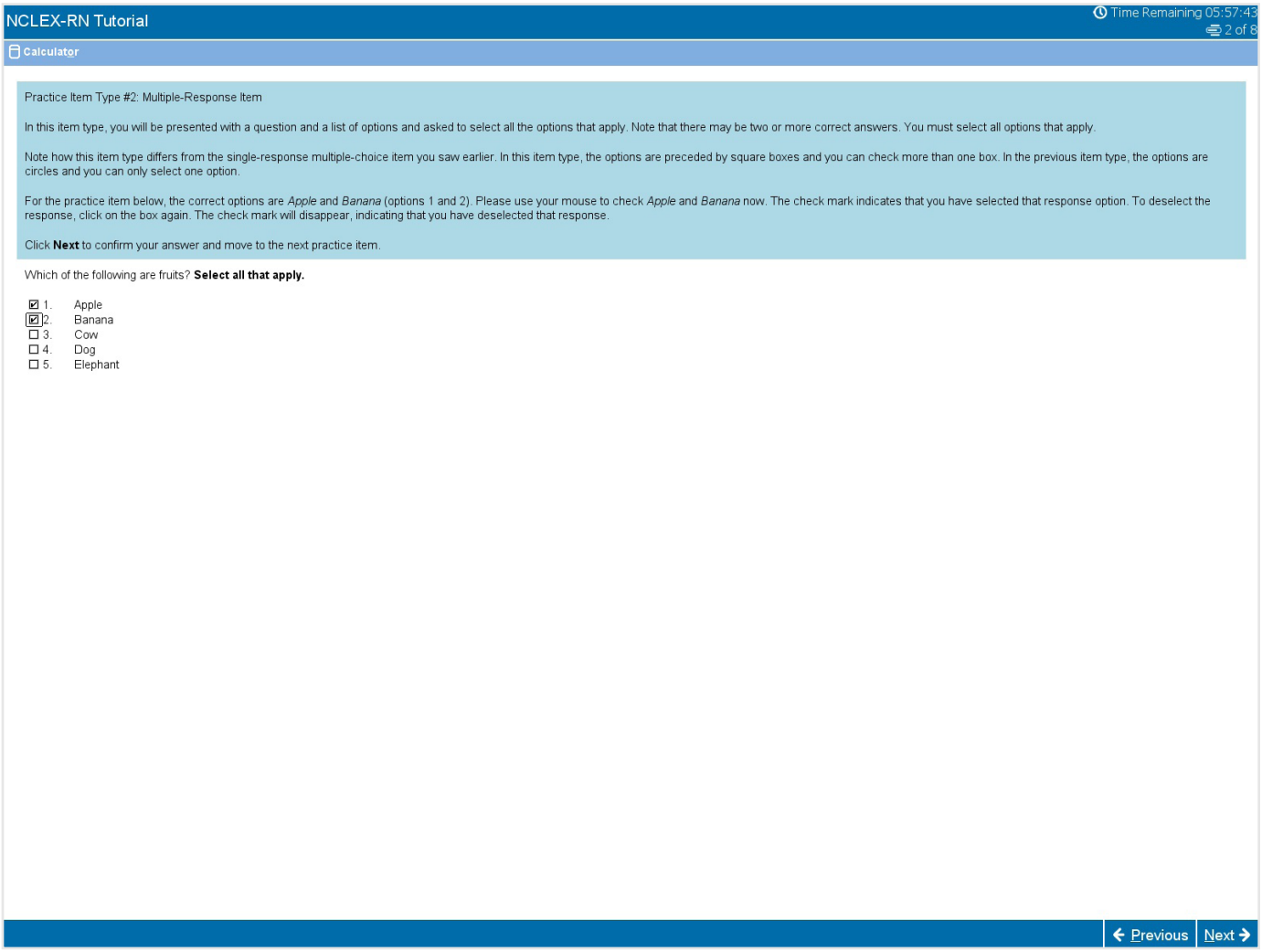
Exhibit


NCLEX-RN Tutorial
Time Remaining 05:59:39
5 of 8
Calculator
Practice Item Type #5: Exhibit Item
In this item type, you will be presented with a problem and an exhibit. To view the exhibit, click on the exhibit button. Each exhibit contains information behind three tabs. Click on each tab to read the information presented.
For the practice item below, the exhibit should contain the three tabs. Each tab contains the monthly receipts for purchasing bakery supplies:
- Storage/Packaging Materials
- Baking Ingredients
- Miscellaneous Supplies
The question asks you to find the most expensive item that is listed in the exhibit. The most expensive item is the storage bin, which is on the storage/packaging materials list. Therefore, option 2 below is the correct answer.
Click Next to confirm your answer and move to the next practice item.
Exhibit
The owner of a bakery would like to know which of the supplies is most expensive. Based upon receipts from the past month, which item was the most expensive? Click the exhibit button for additional information.
1. baking trays
2. storage bin
3. flour
4. pastry bags
Exhibit
Storage/Packaging Materials
Baking Ingredients
Miscellaneous Supplies
Storage/Packaging
Item Charge
10" cake boxes $55.00
Paper bags - large $20.85
Bread bags $25.50
Package labels $10.99
Storage bin $175.00
TOTAL $287.34
Close
Previous
Next

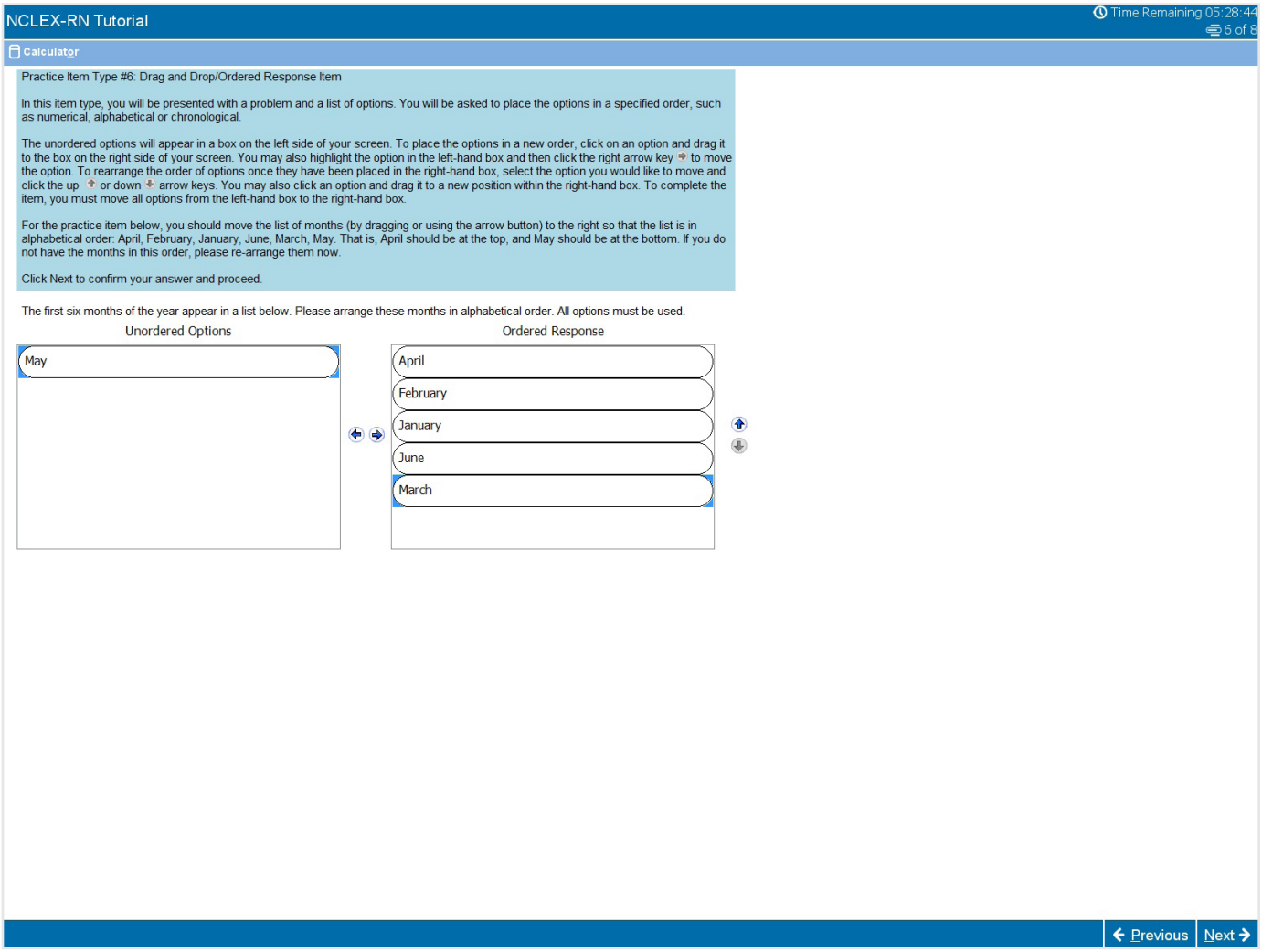
Hot Spot


NCLEX-RN Tutorial
Time Remaining 05:59:14
4 of 8
Calculator
Practice Item Type #4: Hot Spot Item
In this item type, you will be presented with a problem and a figure. You will be asked to use the mouse to select an area of the figure. To select an area, place the cursor on the area you want to select, then click on the left mouse button. An X will appear to show your answer. To deselect your answer, place the cursor on the X and click again. Your answer will be deselected. To change your answer, point the cursor to another area and click.
For the practice item below, the correct answer is Box 1. Use the mouse to select Box 1.
Click Next to confirm your answer and move to the next practice item.
The following figure contains four boxes. Which box is in the upper left-hand corner?
Box 1
Box 2
Box 3
Box 4
Previous
Next

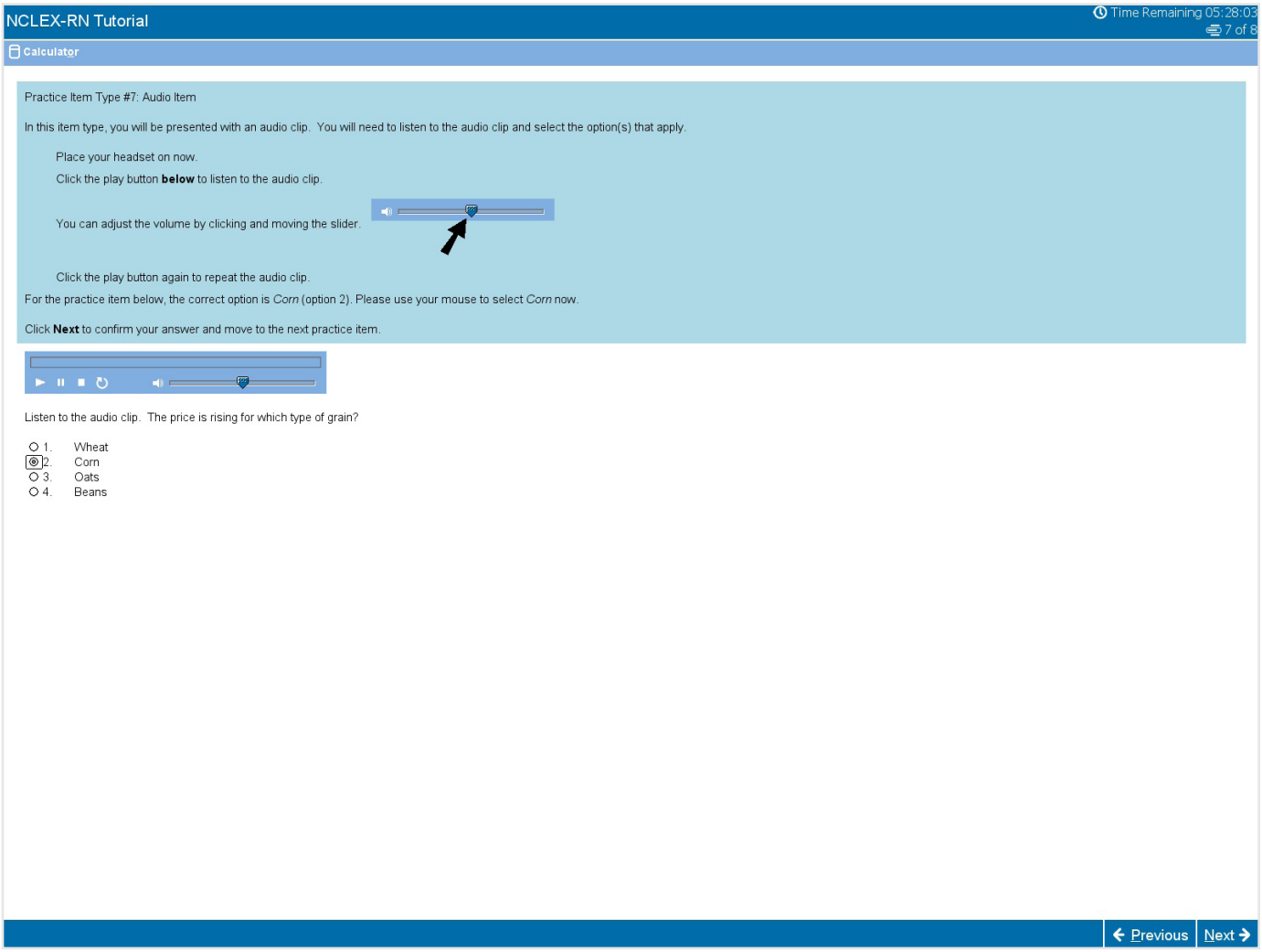
Multiple Response



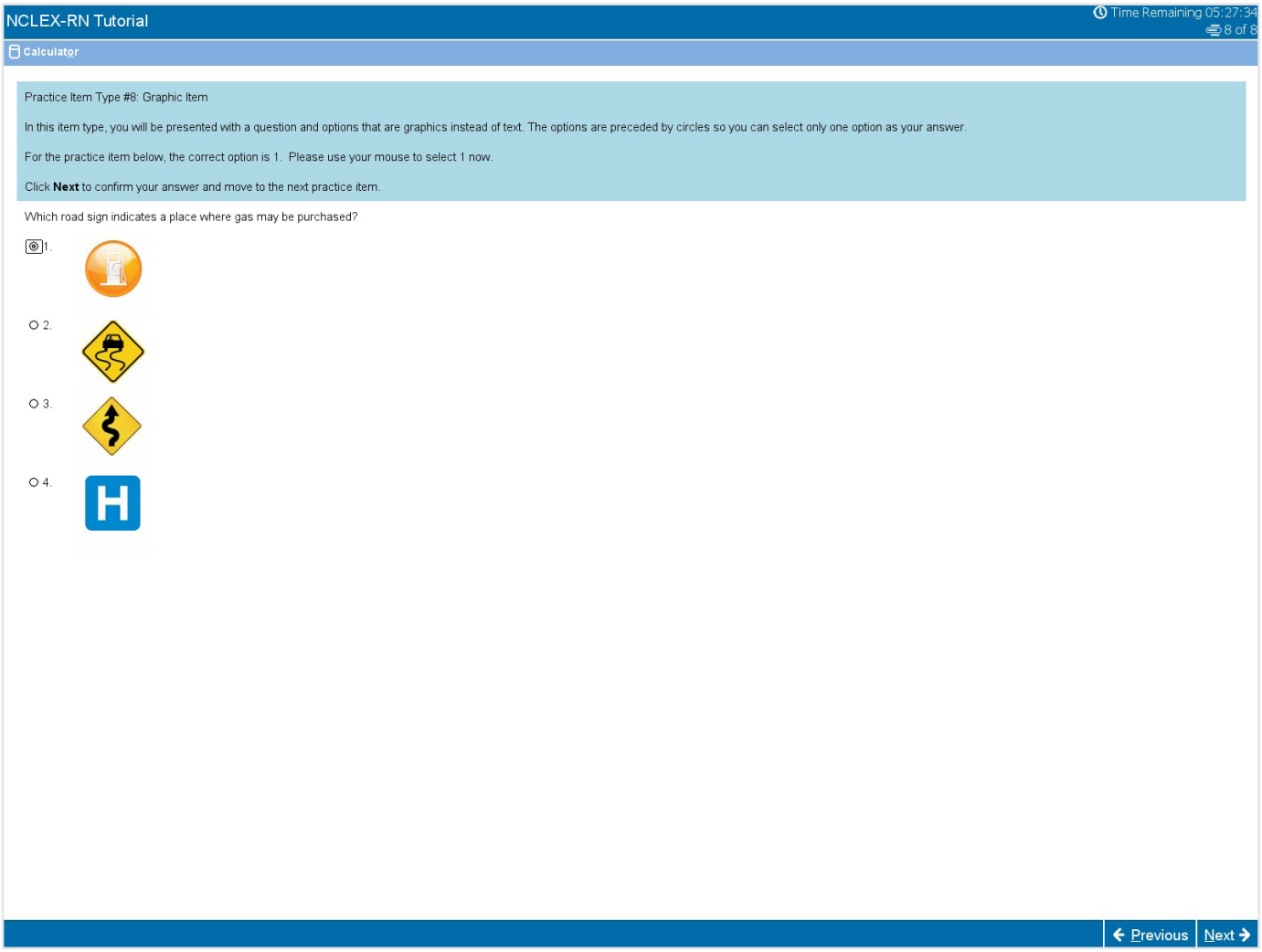
Drag and Drop/Ordered Response



Audio


NCLEX-RN Tutorial
Time Remaining 05:28:03
7 of 8
Calculator
Practice Item Type #7: Audio Item
In this item type, you will be presented with an audio clip. You will need to listen to the audio clip and select the option(s) that apply.
Place your headset on now.
Click the play button below to listen to the audio clip.
You can adjust the volume by clicking and moving the slider.
Click the play button again to repeat the audio clip.
For the practice item below, the correct option is Corn (option 2). Please use your mouse to select Corn now.
Click Next to confirm your answer and move to the next practice item.
Listen to the audio clip. The price is rising for which type of grain?
1. Wheat
2. Corn
3. Oats
4. Beans
Previous
Next

Graphic


NCLEX-RN Tutorial
Time Remaining 05:27:34
8 of 8
Calculator
Practice Item Type #8: Graphic Item
In this item type, you will be presented with a question and options that are graphics instead of text. The options are preceded by circles so you can select only one option as your answer.
For the practice item below, the correct option is 1. Please use your mouse to select 1 now.
Click Next to confirm your answer and move to the next practice item.
Which road sign indicates a place where gas may be purchased?
1.
2.
3.
4.
Previous
Next

V. Item Writing Exercises

The following written exercises are designed to provide nurse educators with hands-on experience in writing NCLEX®-style test questions. Please note, not all item types are provided in the Item Writing Exercises. Refer to www.ncsbn.org/2334.htm for additional information on alternate item formats.

NCSBN offers two online Web courses in Assessment Strategies (Test Development and Item Writing and Assessment of Critical Thinking) at www.learningext.com. Utilize these Web-based courses as a means of supplementing knowledge of test writing principles and to encourage compliance with the NCLEX style of writing.

Steps to Item Writing

A well-designed multiple-choice item consists of three main components: a stem (asks a question or poses a statement which requires completion), key (the correct answer/s) and distractor(s) (incorrect option/s). The following section is designed to enhance the writer's understanding of the NCLEX item writing process. Steps are provided below to assist in creating a well-designed item.

Step 1. Select an area of the test plan for the focus of the item.

Step 2. Select a subcategory from the chosen area of the test plan.

Step 3. Select an important concept within that subcategory.

Step 4. Use the selected concept and write the stem.

Step 5. Write a key to represent important information the entry-level nurse should know.

Step 6. Identify common errors, misconceptions or irrelevant information.

Step 7. Use the previous information and write the distractors.

Step 8. Complete the item using the stem, key and distractors.

Example

Here is an example of how to write an item using the above steps.

1. Select an area of the test plan for the focus of the item.

*Safety and Infection Control

2. Select a subcategory from the chosen area of the test plan.

*Standard Precautions/Transmission-Based Precautions/Surgical Asepsis

3. Select an important concept within that subcategory.

*Evaluate infection control precautions implemented by staff members

4. Use the selected concept and write the stem.

*The nurse and nursing assistant are caring for a client with vancomycin-resistant enterococci (VRE). Which of the following activities by the nursing assistant would require **immediate** follow-up from the nurse?

5. Write a key to represent important information the entry-level nurse should know.

*Contact Isolation:
  *Assisting the client to ambulate in the hallway

6. Identify common errors, misconceptions or irrelevant information.

*Lack of understanding of isolation precautions
*Uncertainty related to specific diagnosis

7. Use the previous information and write the distractors.

*Leaving a blood pressure cuff in the client's room to be used by the client only
*Putting on a protective gown to assist the client to sit in a chair
*Taking the gloves off before leaving the client's room

8. Complete the item using the stem, key and distractors.

The nurse and nursing assistant are caring for a client with vancomycin-resistant enterococci (VRE). Which of the following actions performed by the nursing assistant would require **immediate** follow-up from the nurse?

a. Leaving a blood pressure cuff in the client's room to be used by that client only.
b. Putting on a protective gown to assist the client to sit in a chair.
c. Taking the gloves off before leaving the client's room.
d. Assisting the client to ambulate in the hallway. **(key)**

Exercises

Case scenarios: Using the steps listed above, create an item based on the following situations:

Management of Care

The charge nurse is preparing client assignments for the oncoming shift. One of the oncoming nurses is an licensed practical/vocational nurse (LPN/VN). Write an item that has three clients that the LPN/VN could be assigned to and one client that requires an RN.

Safety and Infection Control

A 76-year-old client is being discharged from the hospital to their adult child's home after a surgery. The nurse is discussing the discharge instructions with the client and the adult child. Write an item indicating that correct understanding of the instructions took place.

Health Promotion and Maintenance

The nurse at a local health fair is conducting a cancer screening for a specific organ. Write a multiple response item (four to six options with more than one key) indicating risk factors for cancer of that organ.

Psychosocial Integrity

A nurse on an inpatient psychiatric unit observes a client pacing the hallway, mumbling and occasionally yelling aloud "Stop it!" Write an item describing the action the nurse should take in this situation.

Basic Care and Comfort

The charge nurse is observing a newly licensed nurse care for a client with continuous tube feedings. Write an item describing an action that, if observed, would require the charge nurse to intervene immediately.

Pharmacological and Parenteral Therapies

The nurse is performing discharge instructions for a client who is newly prescribed a certain medication. Write a multiple response item with foods or activities that the client should avoid while on this medication.

The nurse is caring for a client with a certain prescription. Write an item that names the medication; the amount and timeframe that the client would receive the medication; the amount available; the client's weight in pounds and kilograms; and how much of the medication the client should receive with each administration. The concept of the item should be that the candidate needs to perform a calculation in order to achieve the correct answer.

Reduction of Risk Potential

The nurse is caring for a client who had a procedure three hours ago. Write an item that includes assessment data the nurse would observe in this client and which data should the nurse respond to first.

Physiological Adaptation

The nurse is assessing a client with a suspected certain disease. Write a multiple choice item of expected findings associated with this diagnosis.

VI. References

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APPENDIX A

Case Scenario Answers/Examples

Management of Care

The charge nurse is planning client care assignments for a registered nurse (RN) and licensed practical/vocational nurse (LPN/VN). Which of the following clients would be most appropriate to assign to the RN?

a. A client who was recently diagnosed with Graves' disease and is requesting a fan to be placed in the room.

b. A client with acute pancreatitis who is reporting greenish-yellow emesis and abdominal pain.

c. A client who was recently diagnosed with diabetes mellitus (type 2) and is requesting teaching to administer insulin. **(key)**

d. A client with Crohn's disease who is reporting diarrhea, weight loss, and steatorrhea.

Safety and Infection Control

The nurse is teaching the adult child of a client who had a hip replacement and is being discharged to the adult child's home. Which of the following statements by the adult child would indicate a correct understanding of the teaching?

a. "I will assist my parent to perform full range-of-motion (ROM) exercises in both legs."

b. "I will assist my parent to get in and out of the bathtub."

c. "I will install raised toilet seats on every toilet in my home." **(key)**

d. "I will keep my parent on bed-rest for the first 5 days after discharge."

Health Maintenance and Promotion

The nurse is conducting a health screening at a local health fair. Which of the following should the nurse recognize as increasing the risk for developing testicular cancer? **Select all that apply.**

a. Vasectomy

b. Undescended testicles **(key)**

c. Exposure to the herpes simplex virus type – 2 (HSV 2)

d. Family history of testicular cancer **(key)**

e. Multiple sexual partners

Psychosocial Integrity

The nurse is caring for a client who is mumbling, pacing in the hallway and occasionally yelling "Stop it!" Which of the following actions should the nurse take?

a. Remove other clients from the area.

b. Escort the client back to the client's room.

c. Request that the client be quiet and not disrupt others.

d. Use distraction to refocus the client to reality. **(key)**

Basic Care and Comfort

The nurse is observing a co-worker who is caring for a client who has prescribed continuous enteral tube feedings. Which of the following actions by the co-worker would require the nurse to intervene?

a. Elevating the head of the client's bed to 35 degrees.

b. Measuring and then readministering the residual gastric content.

c. Changing the tube feeding container and tubing every 8 hours. **(key)**

d. Replacing the formula every 4 hours with fresh formula.

Pharmacological and Parenteral Therapies

The nurse is caring for a client who is receiving newly prescribed tranylcypromine. Which of the following foods should the client avoid while receiving tranylcypromine? **Select all that apply.**

a. Chocolate **(key)**

b. Apples

c. Avocados **(key)**

d. Milk

e. Red wine **(key)**

f. Salt-substitutes

The nurse is caring for a 4-year-old client who has a prescription for acetaminophen 15mg/kg, p.o., every 4 hours, p.r.n. The client weighs 38 lbs. The nurse has 120mg/5 ml of acetaminophen available. How many milliliters should the nurse administer with each dose? **Record your answer using one decimal place.**

a. 10.8 ml

Reduction of Risk Potential

The nurse is caring for a client who had a cardiac catherization 3 hours ago. Which of the following findings would be **essential** for the nurse to follow-up?

a. Blood pressure increase from 103/68 to 110/70 over the past one hour

b. Blood urea nitrogen (BUN), 22 mg/dL **(key)**

c. Pulse, 101

d. Decrease in respiratory rate from 18 to 16 over the past one hour

Physiological Adaptation

The nurse is assessing a client with suspected Addison's disease. Which of the following symptoms would be consistent with Addison's disease? **Select all that apply.**

a. Muscle weakness **(key)**

b. Hypertension

c. Decreased serum sodium level **(key)**

d. Fatigue **(key)**

e. Decreased serum potassium level

f. Anorexia **(key)**

National Council of State Boards of Nursing (NCSBN®)
111 E. Wacker Drive, Suite 2900
Chicago, IL 60601-4277 USA
312.525.3600 | www.ncsbn.org
+1.312.525.3600 International Calls
866.293.9600 Testing Services Toll-Free
312.279.1036 Testing Services Fax
v.2