NCLEX-RN®
DETAILED
TEST PLAN

Effective | April 2016

NCLEX-RN® Examination

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

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Mission Statement

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Purpose and Functions

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National Council of State Boards of Nursing

2016 NCLEX-RN® Detailed Test Plan

Candidate Version

Effective Date
April 2016

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II. -

Test Plan for the National Council Licensure Examination for Registered Nurses (NCLEX-RN® Examination)

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, province, 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. 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 (, NCSBN, 2015). Twelve thousand newly licensed registered nurses are asked about the frequency and importance of performing nursing care activities. Nursing care activities are then analyzed in relation to the frequency of performance, impact on

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 registered nurse 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 considering unique cultural and spiritual client preferences, the applicable standard of care and legal instructions. 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 registered nurse 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:

f Eff C E

Management of Care

Safety and Infection Control

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:

– a scientific, clinical reasoning approach to client care that includes assessment, analysis, planning, implementation and evaluation.

– 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.

– verbal and nonverbal interactions between the nurse and the client, the client's significant others, and the 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.

– facilitation of the acquisition of knowledge, skills and attitudes promoting a change in behavior.

– interaction of the nurse and the client (individual, family or group, including significant others and population) which recognizes and considers the client-reported, self-identified, unique and individual preferences to client care, the applicable standard of care and legal instructions.

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 (NCSBN, 2015) and expert judgment provided by members of the NCLEX® Examination Committee.

– 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

III. -

Detailed Test Plan for the National Council Licensure Examination for Registered Nurses (NCLEX-RN® Examination)

The NCLEX-RN Test Plan in the previous section provides a general outline of the categories and subcategories of the examination. The - D (Candidate Version) is used to guide the direction of examination content to be followed by NCLEX® candidates preparing to take the examination

The activity statements used in the - K (NCSBN, 2015) 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 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 performed every three years, 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 2014 RN Practice Analysis and the 2014 RN KSA survey 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 - D 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;

Teaching and learning; and

Culture and Spirituality.

Please 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 - K. 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." In general, if the age or age category of the client is not stated in an item, it can be understood that the client is an adult. NCLEX 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 -**
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 interprofessional health care members in other disciplines when providing client care (e.g., language interpreter, health care professionals)
Manage conflict among clients and health care staff
Maintain client confidentiality and privacy
Provide and receive hand off of care 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 received appropriate procedure education and consents to care and procedures
Receive and/or transcribe health care provider orders
Utilize valid 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)
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

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 agent/proxy, Power of Attorney for Health Care)

Integrate advance directives into client plan of care*

Provide client with information about advance directives, self-care determination, life planning.

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 assignment or delegation based on client needs

Delegate and assign appropriate task based on client's needs to personnel with competency to perform task

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 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 considering personnel's allowable tasks/duties, competency and ability to use sound judgment and decision making.

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)

Provide cost effective care*(not including payor or insurance)

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, or community setting

Initiate, evaluate, and update plan of care (e.g., care map, clinical pathway)*

*Activity Statements used in the 2014 RN Practice Analysis

Client Rights

Recognize the client's right to refuse treatment/procedures

Discuss treatment options/decisions with client

*Activity Statements used in the 2014 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

Provide written materials in client's spoken language, when possible

Describe components of informed consent

Participate in obtaining informed consent

Verify that the client received appropriate procedure education and consents to care and procedures*

Information Technology

Receive and/or transcribe health care provider orders* (orders/prescriptions)

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 valid 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 legal considerations 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)*

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 2014 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

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* (orders/prescriptions)

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 neighbor 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?

1. "I cannot give you information on the client without the client's consent." **(key)**
2.

*Activity Statements used in the 2014 RN Practice Analysis

Safety and Infection Control

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

*Activity Statements used in the 2014 RN Practice Analysis

(e.g., frequent changing of position, routine stretching of the shoulders, neck, arms, hands, fingers)

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., safe client handling, 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 (e.g., home, school, transportation)*

Encourage the client to use protective equipment when using devices that can cause injury

*Activity Statements used in the 2014 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

Follow security plan and procedures (e.g., newborn nursery security, violence, controlled access)*

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?

1. Request the dietary department provide disposable utensils on the client's meal tray.
2. Wear a surgical mask when obtaining the client's vital signs. **(key)**
3. Remove fresh flowers from the client's room.
4. Place the client in a private room with monitored negative air pressure.

*Activity Statements used in the 2014 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 -
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 or antepartum client
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, nutrition)
Provide information for prevention and treatment of high risk health behaviors (e.g., smoking cessation, safe sexual practices, needle exchange)
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 2014 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)

Health Screening

Apply knowledge of pathophysiology to health screening

*Activity Statements used in the 2014 RN Practice Analysis

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? 1. "Emergency contraception is most effective if used within 72 hours of unprotected intercourse." **(key)** 2. "If used correctly, a birth control patch will protect you from contracting a sexually transmitted disease (STD)." 3. "If you use an intrauterine device for contraception, it will need to be replaced every month." 4. "You cannot use medroxyprogesterone if you smoke cigarettes."

*Activity Statements used in the 2014 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., 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, de-escalation techniques)*

Evaluate the client's response to treatment plan

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*Activity Statements used in the 2014 RN Practice Analysis

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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)

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 2014 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)

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*Activity Statements used in the 2014 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 -**
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)

Perform irrigations (e.g., of bladder, ear, eye)

*Activity Statements used in the 2014 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

*Activity Statements used in the 2014 RN Practice Analysis

*Activity Statements used in the 2014 RN Practice Analysis

*Activity Statements used in the 2014 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 -
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)
Handle and maintain medication in a safe and controlled environment

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

Document side effects and adverse effects of medications and parenteral therapy

*Activity Statements used in the 2014 RN Practice Analysis

*Activity Statements used in the 2014 RN Practice Analysis

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

Handle and maintain medication in a safe and controlled environment*

Evaluate appropriateness and accuracy of medication order for client* (order/prescription)

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 device)

Monitor intravenous infusion and maintain site (e.g., central, peripheral, 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 2014 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 lbs. (65 kg). 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?

65 ml **(key)**

*Activity Statements used in the 2014 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 -
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
Manage client during and/or 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)

Diagnostic Tests

Apply knowledge of related nursing procedures and psychomotor skills when caring for clients undergoing diagnostic testing

*Activity Statements used in the 2014 RN Practice Analysis

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)

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)

*Activity Statements used in the 2014 RN Practice Analysis

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)

*Activity Statements used in the 2014 RN Practice Analysis

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? 1. "I will not be able to eat or drink anything for 24 hours before the procedure." **(key)** 2. "I may experience abdominal cramping after the procedure." 3. "I will be sedated during the procedure." 4. "I will be placed in the knee-chest position for the procedure."

*Activity Statements used in the 2014 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 -**
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 or continuous renal replacement therapy
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 de

*Activity Statements used in the 2014 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 or continuous renal replacement therapy*

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*

Medical Emergencies

Apply knowledge of pathophysiology when caring for a client experiencing a medical emergency

*Activity Statements used in the 2014 RN Practice Analysis

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.** 1. increased appetite **(key)** 2. lethargy 3. diarrhea **(key)** 4. exopthalmos **(key)** 5. weight gain 6.

*Activity Statements used in the 2014 RN Practice Analysis

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®

Computerized Adaptive Testing (CAT)

The NCLEX 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 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. Excludes any item that a repeat candidate has seen in the last year.

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 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% 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

The majority of items in the NCLEX are multiple-choice, but there are other formats as well. Items are scored as either right or wrong. There is no partial credit. For updated information on the administration of the examination, access the NCSBN website at 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, please visit the NCSBN website at www.ncsbn.org to review the information about Alternate Item Formats.

NCLEX® Examination Terminology

Client: Individual, family or group which includes significant others and population.

Prescription: Orders, interventions, remedies or treatments ordered or directed by an authorized primary health care provider.

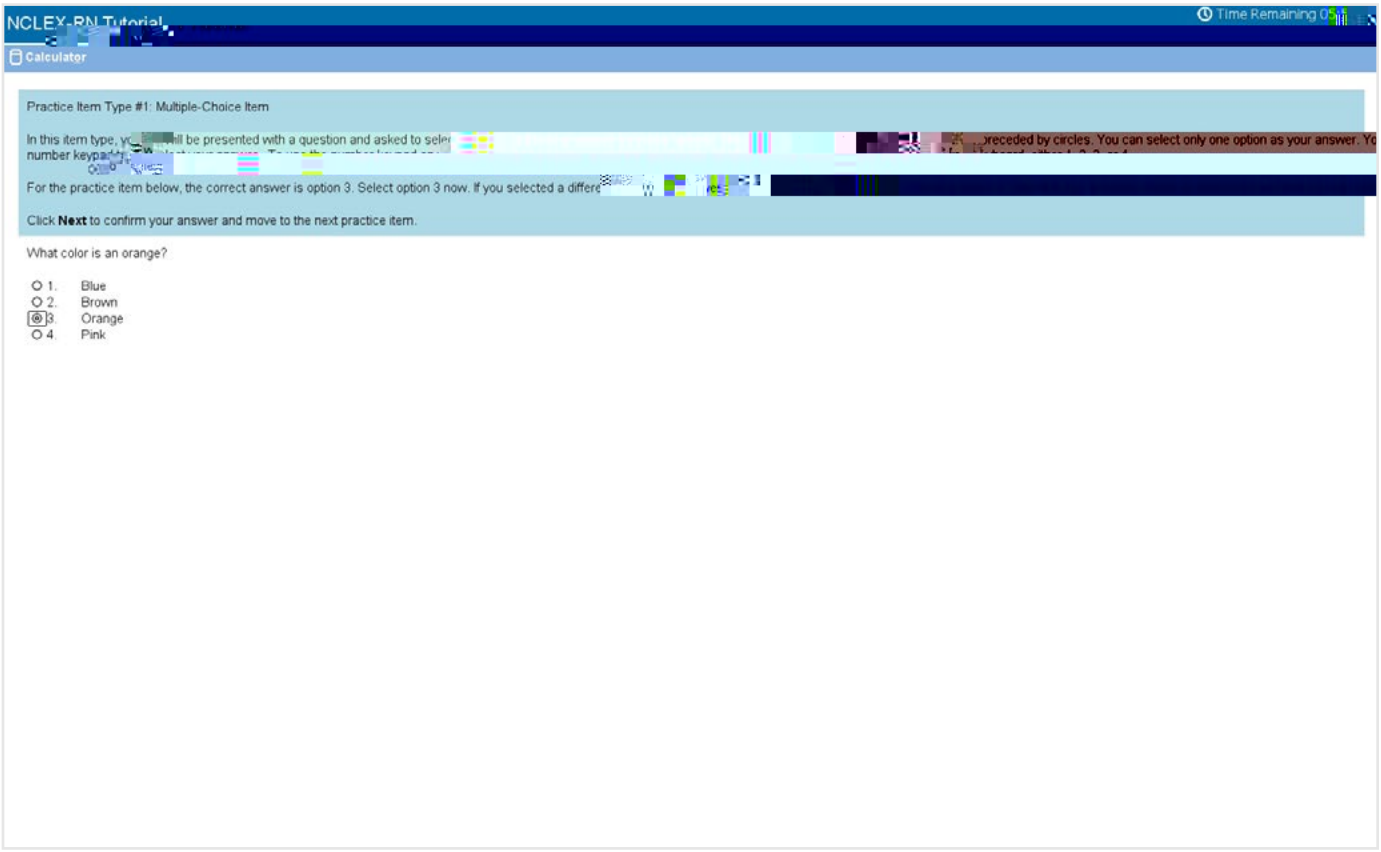
Primary Health Care Provider: Member of the healthcare team (usually a medical physician [or other specialty, e.g., surgeon, nephrologist, etc.], nurse practitioner, etc.), licensed and authorized to formulate orders/ prescriptions on behalf of the client.

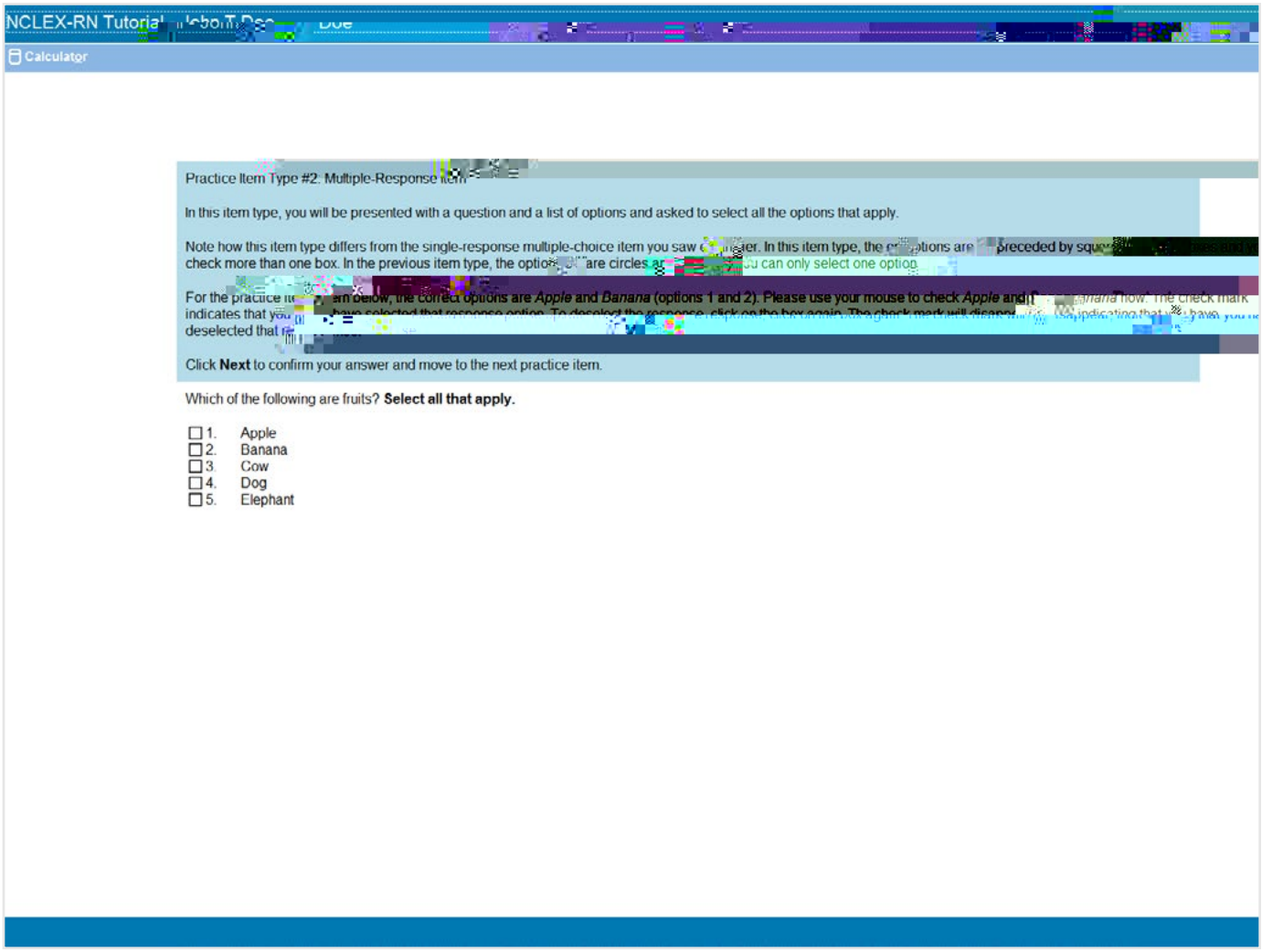
Confidentiality

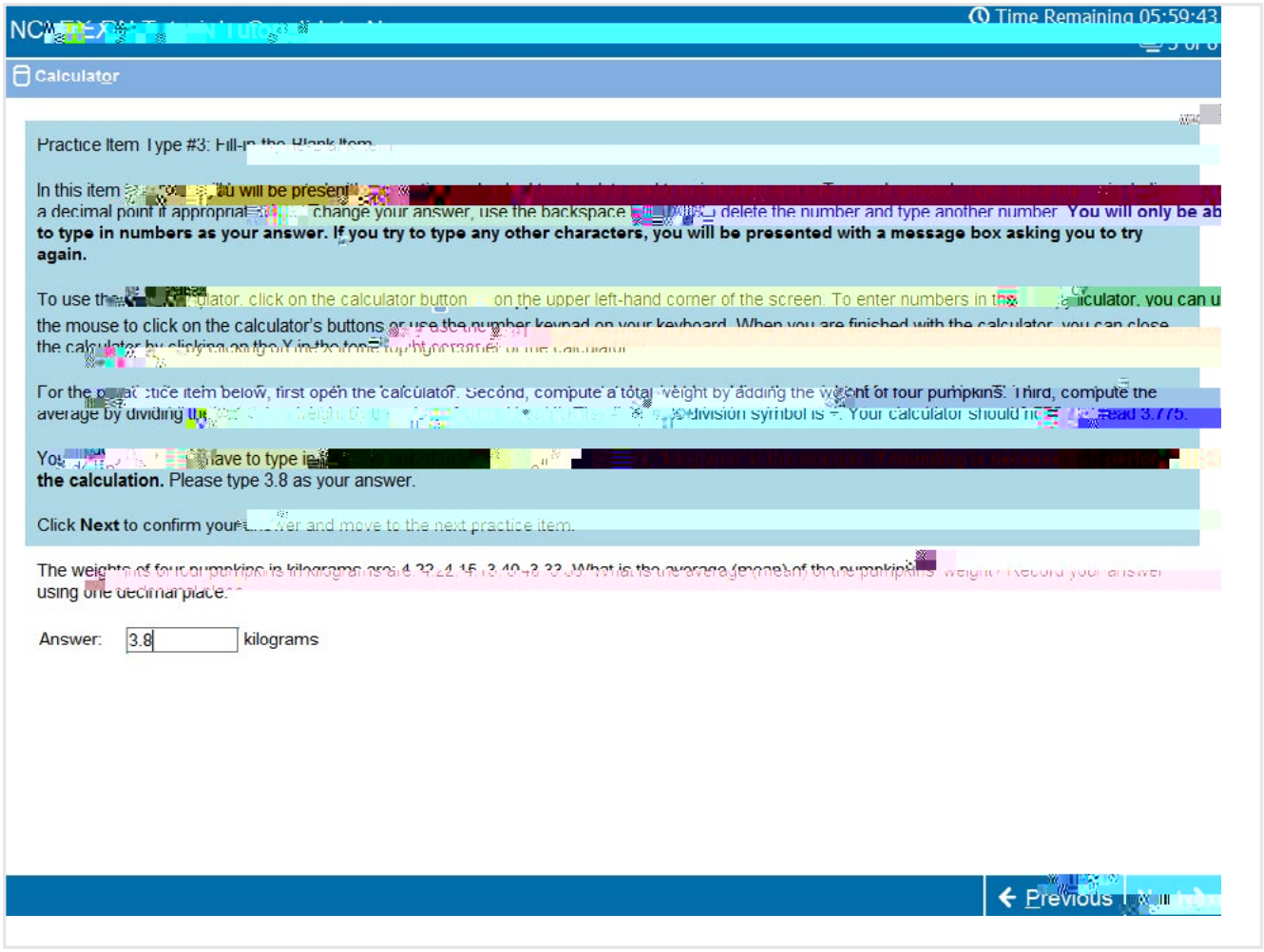
Candidates should be aware and understand that the disclosure of examination items before, during, or after the examination is a violation of law. Violations of confidentiality and/or candidates' rules can result in criminal prosecution or civil liability and/or disciplinary actions by the licensing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

Tutorial

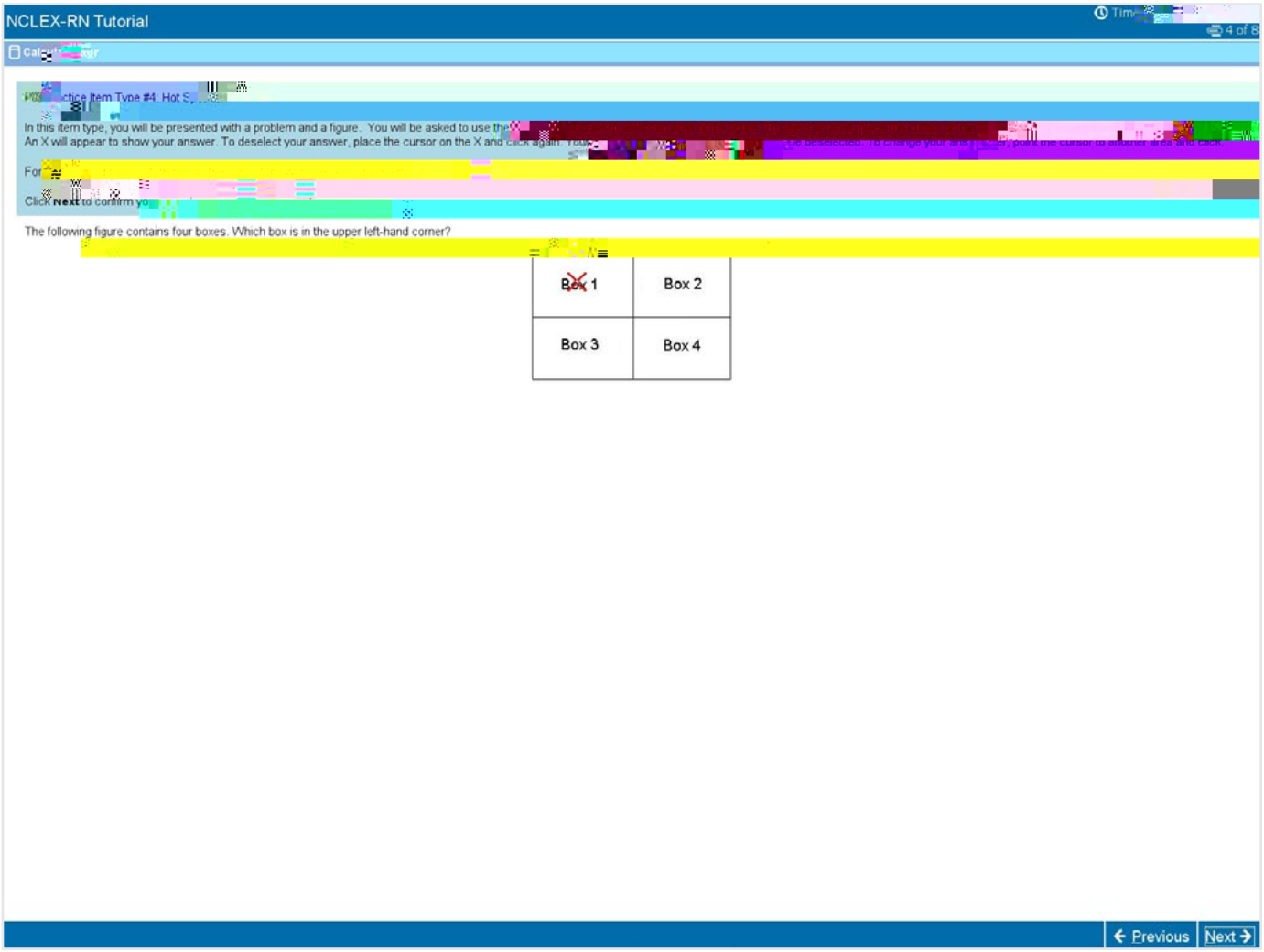
Each NCLEX-RN candidate is provided information on how to answer examination items. A tutorial is given tu/T1Ø12prvousese for


Time Remaining
Calculator
Practice Item Type #1: Multiple-Choice Item
For the practice item below, the correct answer is option 3. Select option 3 now. If you selected a differe
Click Next to confirm your answer and move to the next practice item.
What color is an orange?
1. Blue
2. Brown
3. Orange
4. Pink

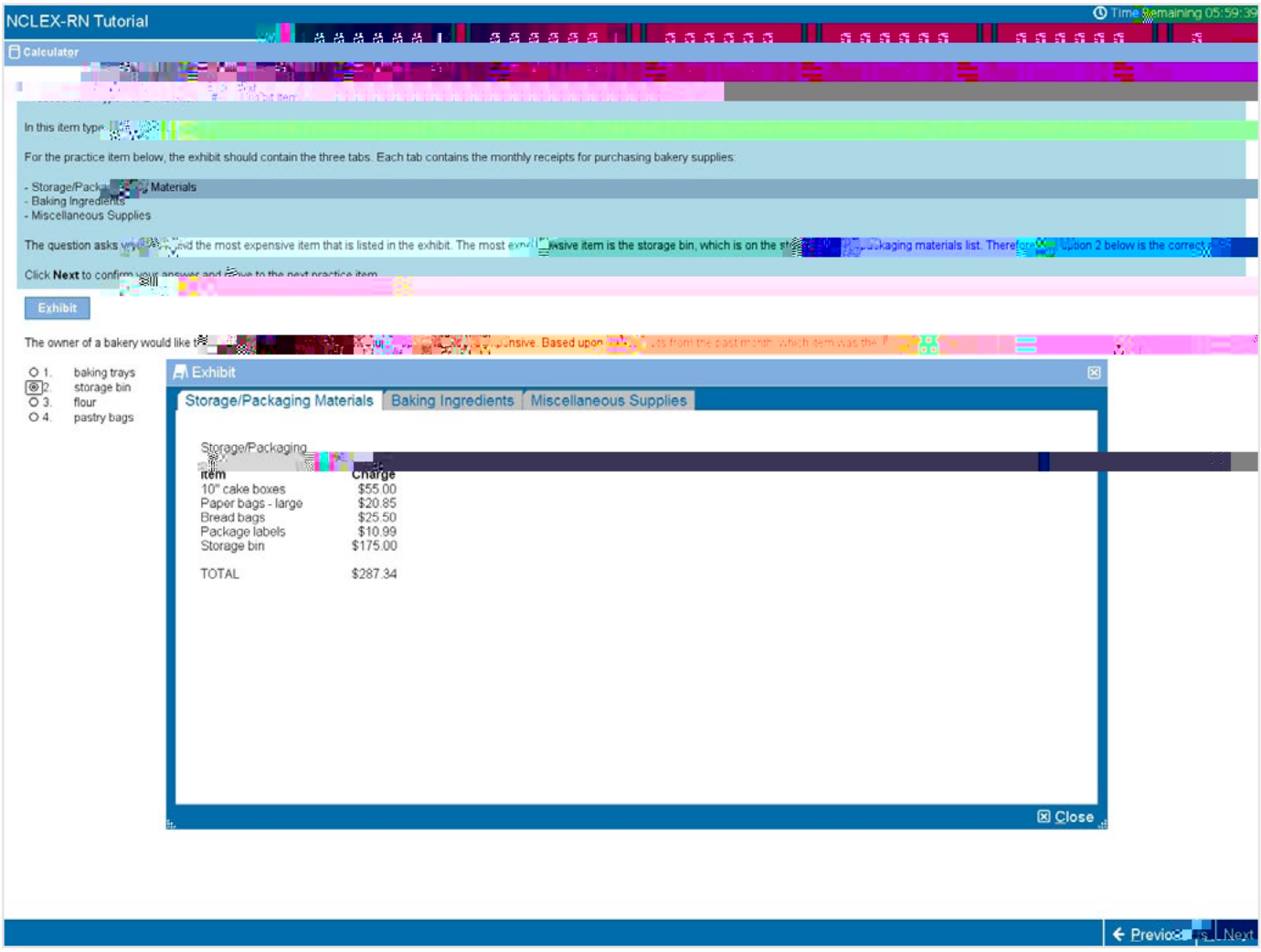

Calculator
Practice Item Type #2: Multiple-Response Item
In this item type, you will be presented with a question and a list of options and asked to select all the options that apply.
Click Next to confirm your answer and move to the next practice item.
Which of the following are fruits? Select all that apply.
1. Apple
2. Banana
3. Cow
4. Dog
5. Elephant


Time Remaining 05:59:43
Calculator
Practice Item Type #3: Fill-in-the-Blank Item
In this item type, you will be presented
a decimal point if appropriate. To change your answer, use the backspace
to type in numbers as your answer. If you try to type any other characters, you will be presented with a message box asking you to try
again.
To use the
the mouse to click on the calculator's buttons or use the number keypad on your keyboard. When you are finished with the calculator, you can close
the calculator by clicking on the X in the top right corner of the calculator.
For the
average by dividing
You
the calculation. Please type 3.8 as your answer.
Click Next to confirm your
The weights of four pumpkins in kilograms are 4.22, 4.15, 3.40, 3.33. What is the average (mean) of the pumpkins' weights? Record your answer
using one decimal place.
Answer: 3.8 kilograms
Previous

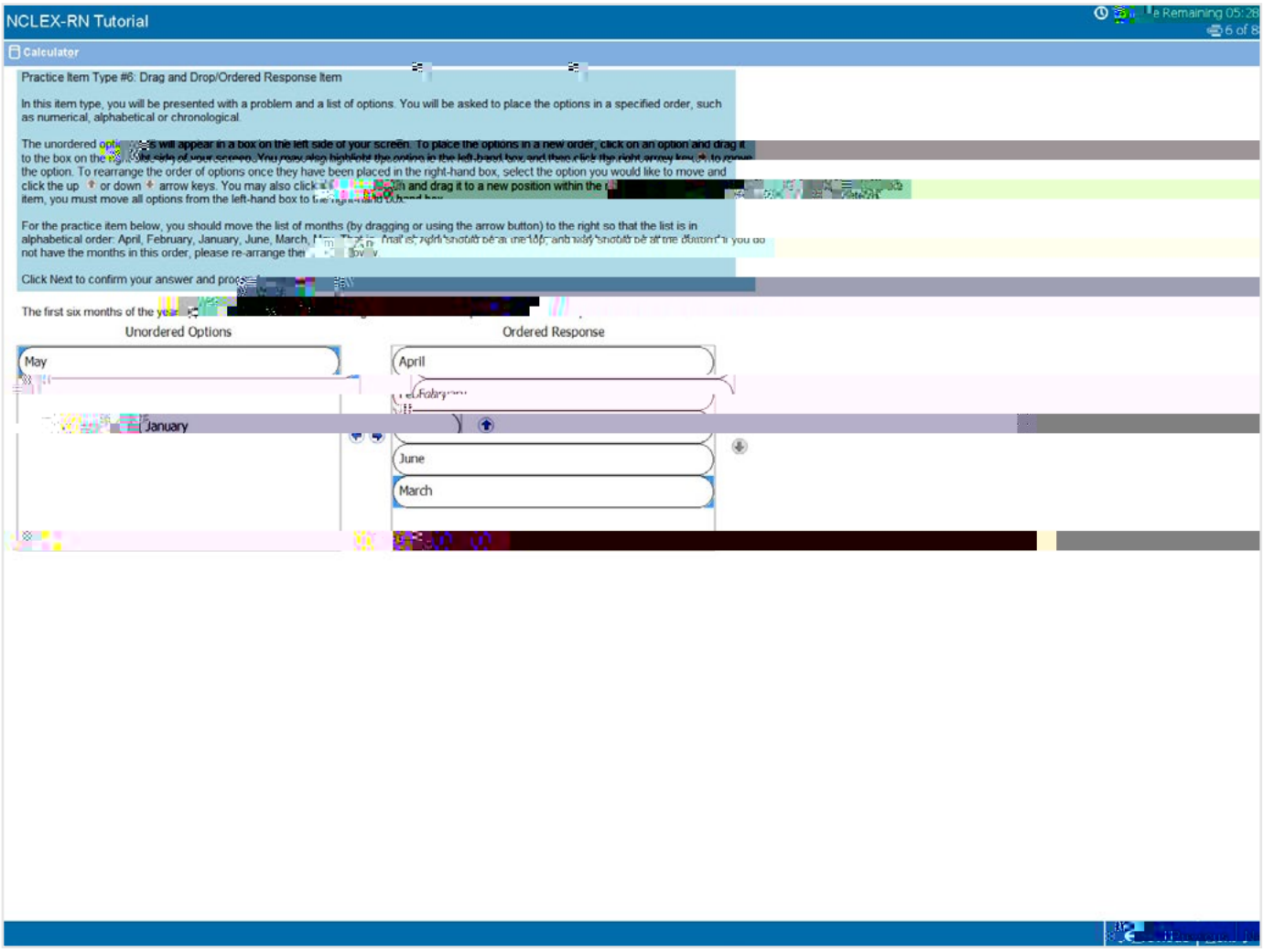
. . :


NCLEX-RN Tutorial
4 of 8
In this item type, you will be presented with a problem and a figure. You will be asked to use the
An X will appear to show your answer. To deselect your answer, place the cursor on the X and
Click Next to confirm yo
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

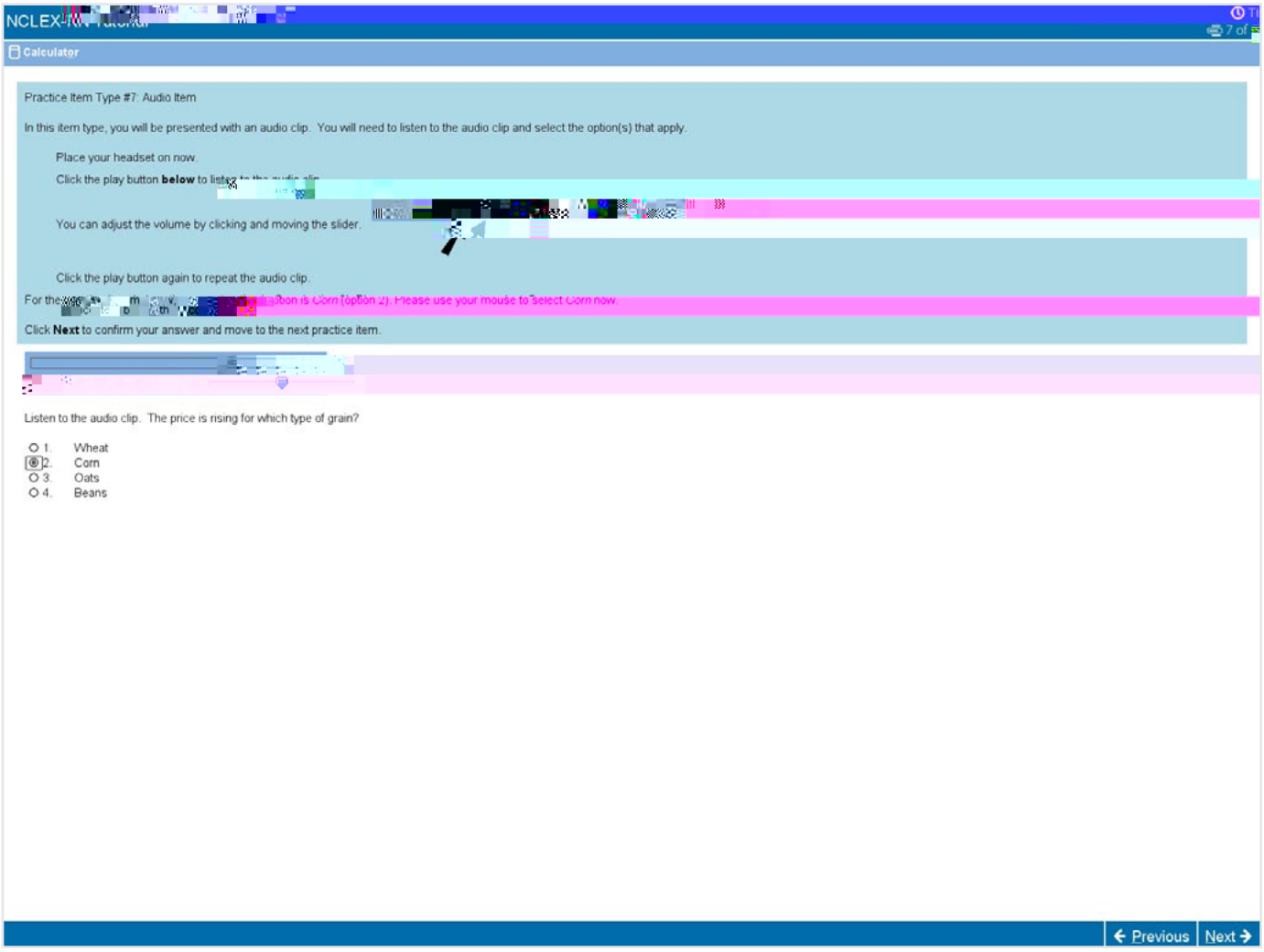
E n : :

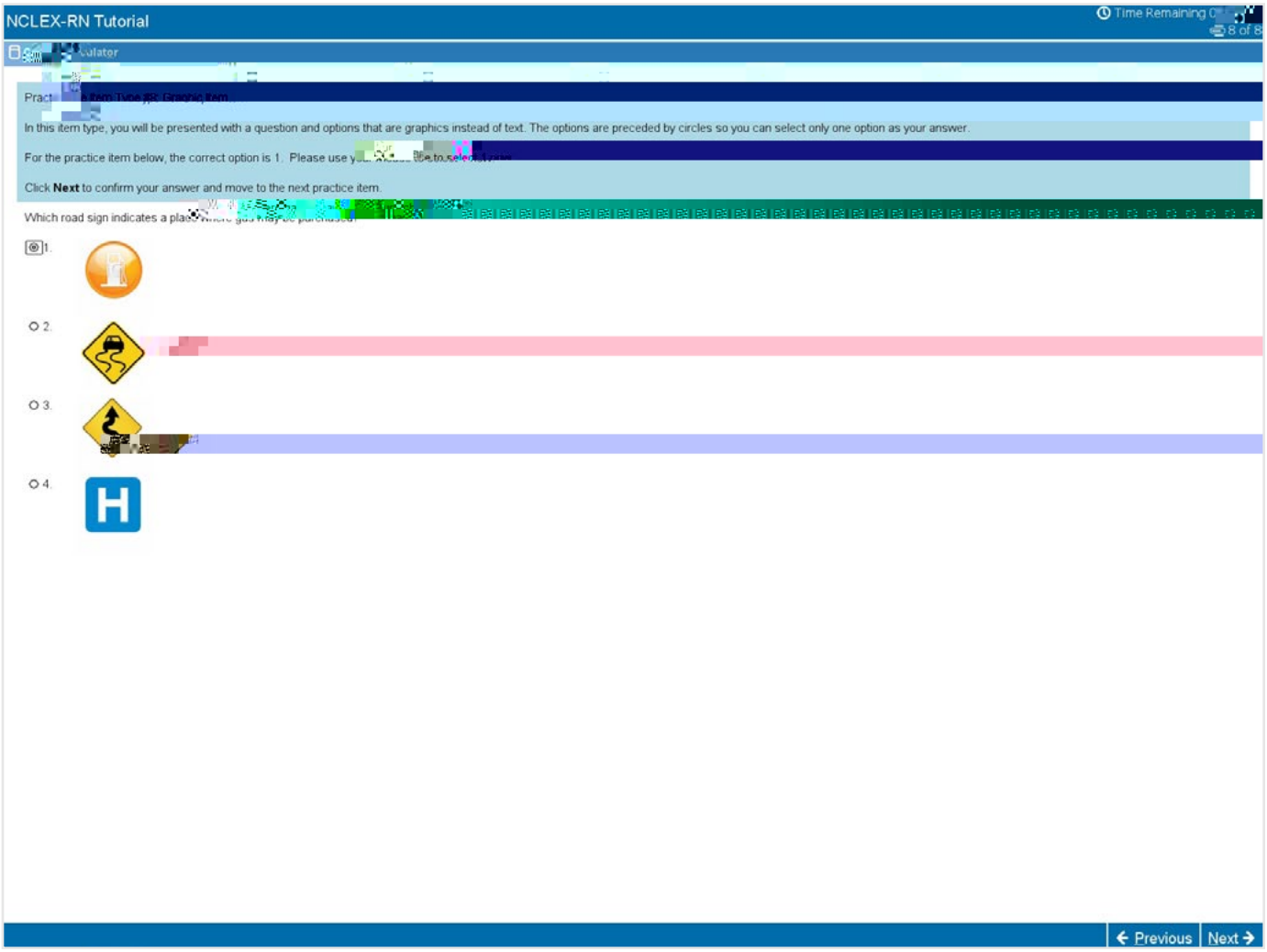

NCLEX-RN Tutorial
Time Remaining 05:59:39
Calculator
In this item type
For the practice item below, the exhibit should contain the three tabs. Each tab contains the monthly receipts for purchasing bakery supplies:
- Storage/Packa Materials
- Baking Ingredients
- Miscellaneous Supplies
The question asks 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 st kaging materials list. Therefore, option 2 below is the correct
Click Next to confirm your answer and move to the next practice item.
Exhibit
The owner of a bakery would like t nsive. Based upon ts from the past month, which item was the
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

Dr n Dr / r r : :


NCLEX-RN Tutorial
Calculator
Practice Item Type #6: Drag and Drop/Ordered Response Item
In this item type, you will be presented with a problem and a list of options. You will be asked to place the options in a specified order, such as numerical, alphabetical or chronological.
Unordered Options
Ordered Response
May
January
April
June
March

A _ _ _:


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.
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


NCLEX-RN Tutorial
Time Remaining
8 of 8
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
Click Next to confirm your answer and move to the next practice item.
Which road sign indicates a
1.
2.
3.
4.
Previous
Next

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