

Student Laboratory Manual

Physical Examination and History Taking



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Student Laboratory Manual for

Bates' Nursing Guide to Physical Examination and History Taking

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Preface

This Student Laboratory Manual was written by Jo Anne Kirk, RN, MSN, to accompany *Bates' Nursing Guide to Physical Examination and History Taking* by Beth Hogan-Quigley, Mary Louise Palm, and Lynn S. Bickley. Each chapter has a corresponding textbook chapter and contains activities to help you retain and apply the knowledge you have gained from the associated textbook.

The following information outlines the purpose of each section of the Laboratory Manual:

- **Learning Objectives.** Each chapter begins with a review of the stated Learning Objectives from the corresponding textbook chapter.
- **Study Guide.** The Study Guide portion of each chapter includes combinations of Fill in the Blank, Labeling, Matching, Sequencing, Short Answer, and Multiple Choice questions. All of these exercises help students to reinforce knowledge, synthesize concepts, prepare for

tests, and ensure their understanding of Physical Examination and History Taking. An answer key to each chapter is provided at the end of the manual.

- **Case Studies.** These scenarios focus on critical thinking. They ask students to consider how responses to patients would change with different assessment data, patient background, medical diagnoses, and other key variables.
- **Documentation.** Where applicable, the chapters include the *Form for Use in Practice*, which serves as a quick checklist by which students can ensure that they are covering all key areas of the health history and physical assessment. This serves to help guide students through their clinical experiences.

The authors and publisher sincerely hope that this product achieves the goals of assisting with learning and optimizing comprehension and application to facilitate quality health assessments and competent nursing care.

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Introduction to Health Assessment

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Define health and health assessment.
2. Identify the health indicators and purpose of Healthy People 2020.
3. Explain the components of the health assessment.
4. Clarify the nurse's role in assessment.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

A. The nursing health assessment focus is to

_____.

B. The nursing health assessment is used _____

_____.

C. The physical examination performed by the nurse is done to _____

_____.

D. The nurse performs a systematic data collection called a _____

_____.

E. Having taken the lead in health promotion, nurses are able to assist their patients to _____

_____.

2. List the facets of health.

A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

Activity B MATCHING

3. Match the level of prevention with its definition.

	Level of Prevention	Definition
	Primary	A. Decreasing the effects of a disease or disability by preventing complications and additional loss that happens when a defect is permanent
	Secondary	B. Improving the overall wellness and protection from disease or disability
	Tertiary	C. Early detection and treatment of a disease when it is curable or has few complications or disabilities

4. Match the examples of prevention with their corresponding level of prevention. (Level of prevention may be used more than once.)

	Example	Level of Prevention
	Communicable disease control	A. Primary
	Health education	B. Secondary
	Periodic selective examinations	C. Tertiary
	Sheltered communities	
	Provision of adequate housing	
	Provision of hospital and community facilities	
	Reducing risk factors	
	Early treatment of diseases	
	Self-examination	
	Rehabilitation programs	

Activity C SHORT ANSWER

5. The ability to maintain health includes integrating a variety of components. Discuss these components.

6. List the leading health indicators for 2020 and discuss where they came from.

7. The authors state that the health assessment is similar to a puzzle. Explain this.

8. The nursing health assessment enables nurses to detect areas that need adjusting. Explain what nurses are able to assist their patients to do and what this enables the patient to do.

9. How do nurses influence the health of the patient?

Activity D NCLEX STYLE QUESTIONS

10. When doing an overall assessment of a patient, the nurse is able to utilize findings and do what?
- Identify what level of prevention the patient is at
 - Identify in what areas the patient can educate his or her family
 - Identify in what areas the patient needs the most care
 - Identify the patient's diagnosis
11. What is paramount in health promotion? (Mark all that apply.)
- Working with the individual patient
 - Performing accurate nursing interventions
 - Developing an accurate diagnosis
 - Developing the nursing care plan
 - Obtaining an accurate history
12. What is the function of the health care team?
- To work together to obtain maximum coverage
 - To decide the best overall care
 - To guide the patient's care throughout times of crisis
 - To develop an individual focus for each member
13. What are nurses able to detect through the health assessment?
- Areas that need continuous care
 - Areas that need in-hospital care
 - Areas that need referral to a specialist
 - Areas in need of health adjustments
14. Using both verbal and nonverbal clues given by the patient, what is the nurse constantly doing?
- Diagnosing
 - Intervening where necessary
 - Formulating a discharge plan
 - Assessing
15. When assisting a patient with health promotion, what must the nurse also nurture?
- A healthy environment
 - Realistic health goals
 - Family communication
 - School/work attendance
16. As a nurse becomes more proficient and comfortable in her role, what increases?
- Confidence and knowledge base
 - Time management and confidence
 - Knowledge base and expertise
 - Expertise and time management
17. What is the foundation of nursing practice?
- Planning
 - Assessment
 - Evaluation
 - Intervention
18. How does a nurse facilitate the nursing health assessment?
- Maintaining privacy
 - Asking the appropriate questions
 - Formulating a nursing diagnosis
 - Creating a nursing care plan
19. Why is the nurse always reassessing the patient for changes?
- To never make a mistake when providing care
 - To always have the best nursing care plan
 - To achieve the best results
 - To update the nursing diagnosis

SECTION III: CASE STUDY

Activity E

A graduate nurse is meeting her first patient on the medical-surgical unit. The patient is a 52-year-old woman of African American descent who is being admitted with an exacerbation of her multiple sclerosis.

- a. What Healthy People 2020 health indicators would apply to this patient?

- b. What abilities would the nurse use when performing the nursing health assessment?

Critical Thinking in Health Assessment

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the components of the nursing process.
2. Identify appropriate subjective questions based on the health assessment.
3. Categorize patient problems into a priority list.
4. Formulate a nursing diagnosis.
5. Develop a plan of care for a patient.
6. Evaluate and revise a care plan based on an individual patient.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Critical thinking is ongoing, as is _____ of the patient.
 - B. The _____ is the broad systematic framework that supplies a methodical base applicable to the practice of nursing.

- C. When _____ findings, be as specific as your data allow, but bear in mind that you may have to settle for a _____, such as the chest, or a body system, such as the musculoskeletal system.
 - D. Problems may relate to _____ in the patient's life.
 - E. Involvement of _____ may help you to cluster the clinical data.
 - F. Almost all clinical information is subject to _____.
2. List the steps in clinical reasoning.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 - F. _____

Activity B MATCHING

3. Match the term with its definition.

Answer	Term	Definition
	Assessment	A. The development of the steps to execute the plan
	Diagnosis	B. A continuing process that determines if the goals/outcomes have been attained
	Planning	C. Subjective and objective data gathered initially during the health history and physical examination and the additional information collected on a daily basis
	Implementation	D. Charting the best course to achieve the patient's optimal wellness and comfort
	Evaluation	E. Has a nursing focus and is based on real or potential health problems or human responses

4. Match the part of the nursing process with its action.

Answer	Part of Nursing Process	Action
	Assessment	A. Use your inferences about the structures and processes involved
	Diagnosis	B. Nursing interventions that help to achieve the goals stated
	Planning	C. Continue to monitor
	Implementation/interventions	D. Select the most specific and critical findings to support your problem list
	Evaluation	E. Develop goals

5. Match the term with its corresponding meaning.

Answer	Term	Meaning
	Onset	A. How long the sign or symptom has been going on.
	Location	B. What else is going on when the patient experiences the sign or symptom
	Duration	C. What the symptom feels like
	Characteristic symptoms	D. Anything the patient has tried to make it go away
	Associated manifestations	E. Nursing interventions that are recommended
	Relieving factors	F. Where the sign or symptom is
	Treatments	G. When the sign or symptom began

Activity C SHORT ANSWER

6. What part of the nursing process is nursing focused? Explain this.

7. Discuss the validity of clinical problem solving used by nurses and its components.

8. Describe methods nurses use to ensure the quality of patient data.

9. Discuss the principles that nurses apply to clinical findings because of their inherent imperfection.

10. Explain what is involved in writing a progress note.

Activity D NCLEX STYLE QUESTIONS

11. In what area do nurses use assessment tools?
- Mobility
 - Skin breakdown
 - Mentation
 - Strength
12. How does an experienced nurse improve his or her efficiency and enhance the relevance and value of the data he or she collects?
- Initiating a problem list
 - Obtaining an accurate history
 - Developing accurate nursing diagnoses
 - Generating plans early

13. When constructing a nursing care plan, what should you reference? (Mark all that apply.)
- Therapy
 - Social support
 - Patient education
 - Personal history
 - Diagnosis
14. When documenting clinical data, what might you write in the physical assessment?
- Thyroid isthmus barely palpable, lobes not felt
 - Apical impulse indiscrete and tapping
 - Thorax symmetric without equal excursion
 - Extraocular movements full and equal on exam
15. You are the office nurse admitting a new patient to the clinic. You have gained your patient's trust, gathered a detailed history, and finished your portion of the physical examination. What is your next step in caring for this patient?
- Formulate nursing diagnoses
 - Order the appropriate laboratory tests
 - Identify the patient's problems
 - Notify the physician of your findings
16. What is pivotal to determining how to move from each patient problem to its goals?
- Your clinical reasoning process
 - Your positive interpretation of the patient's history
 - Your process in collecting physical data
 - Your evaluation as an accurate historian of the patient
17. As the nurse caring for a patient you have completed the collection of the subjective data. On what do you base your decision to do an entire head-to-toe physical assessment or a systems-specific assessment?
- The patient's answers
 - Observable signs and symptoms
 - Your knowledge base and expertise
 - The patient's chief complaint
18. For each patient problem you identify you develop and record a plan. What must your plan do? (Mark all that apply.)
- Begin discharge planning
 - Include referral to dietician

- c. Flow logically from identified diagnoses
 - d. Specify which steps are needed next
 - e. Identify timing of family involvement
19. Your patient tells you that his chief complaint is “fatigue.” When obtaining the patient history, what additional information might you want to elicit to try and pinpoint the patient’s “real problem”?
- a. More information regarding family history
 - b. More information regarding secondary complaints
 - c. More information regarding laboratory data
 - d. More information regarding psychosocial issues
20. Your patient has been directly admitted from the doctor’s office. The only paperwork he has brought with him is his admission orders. You are gathering your admission data when ordered lab work is collected. When documenting your history, physical examination, assessment, and plan, what would you write under the heading “Laboratory Data”?
- a. None available. Will enter later.
 - b. None currently. See Plans.
 - c. No findings currently available.
 - d. Nothing. Enter as a late entry.

SECTION III: CASE STUDY

Activity E

Kris Brown is a 28-year-old Caucasian male who presents to the emergency department with a swollen and tender left ankle. He tells the nurse that he was playing baseball and was sliding into second base when the injury occurred.

- a. Using critical thinking, what subjective data would be important for the nurse to gather?

- b. Using clinical reasoning, what objective data would be important for the nurse to gather?

Interviewing and Communication

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Utilize therapeutic communication techniques during the patient interview.
 2. Interview patients using a broad to narrow questioning technique.
 3. Describe the phases of the nurse–patient interview.
 4. Describe the appropriate environment to promote a successful interview.
 5. Become more comfortable interviewing patients on sensitive subjects.
 6. Discuss strategies for handling difficult patients.
- B. The interviewing process that actually generates the pieces of health information is much more _____ and demands effective _____ and _____ skills.
 - C. Being consistently _____ and _____ to individual differences is one of the clinician’s challenges.
 - D. Remember that _____ background and _____ influence preferences about interpersonal space.
 - E. Learning about the effects of the illness gives the nurse and the patient the opportunity to create a _____ and _____ picture of the problem.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. The primary goal of the nurse–patient interview is to improve the _____ of the patient.

2. List the phases of the interviewing process.
 - A. _____
 - B. _____
 - C. _____
 - D. _____

Activity B MATCHING

3. Match the technique of skilled interviewing with its definition.

Answer	Term	Definition
	Active listening	A. Communication that occurs continuously and provides important clues to feelings and emotions
	Guided questioning	B. Acknowledging the legitimacy of the patient's emotional experience
	Nonverbal communication	C. Telling the patient when you are changing directions during the interview
	Empathic responses	D. Closely attending to what the patient is communicating
	Validation	E. Reinforcing the patient's primary responsibility for his or her health
	Reassurance	F. Identifying what you know and what you don't know
	Partnering	G. Options for expanding and clarifying the patient's story
	Summarization	H. Interpreting for the patient what you think is happening and dealing openly with expressed concerns
	Transitions	I. Communicating understanding and acceptance
	Empowering the patient	J. Making the relationship collaborative

Activity C SHORT ANSWER

4. List and discuss the guidelines for working with an interpreter.

5. Explain how you would communicate with a hearing-impaired patient.

6. Describe how the health history format differs from the interviewing process.

7. Discuss phase I of the interview process.

8. Explain and discuss the attributes of a symptom.

9. Discuss what the nurse should include when obtaining the patient's perspective on his or her illness.

Activity D NCLEX STYLE QUESTIONS

10. Learning about the effects of the illness does what for the nurse and the patient?
 - a. Gives them the basis to establish a trusting relationship
 - b. Gives them each a better understanding of the other
 - c. Gives them the ability to communicate better
 - d. Gives them the opportunity to create a complete and congruent picture of the problem
11. What occurs during the termination phase of an interview?
 - a. Plan for follow-up care
 - b. Address topics that have not yet been addressed
 - c. Assess the patient's mental status
 - d. Let the patient know you understood all he or she has told you
12. How would the nursing instructor explain the goal of guided questioning to his or her students?
 - a. Obtaining complete data from the patient
 - b. Facilitating the patient's fullest communication
 - c. Developing a basis for accurate nursing diagnoses
 - d. Creating an opportunity for the early generation of a plan
13. "How many steps can you climb before you get short of breath?" is an example of what kind of question?
 - a. A question that offers multiple choices for answers
 - b. A question that is narrow in focus
 - c. A question that elicits a graded response
 - d. A question that demands an exact response
14. While interviewing a new patient, you notice that he is mirroring your position. What can this signify?
 - a. An increasing sense of connectedness
 - b. A desire to be on an equal power level
 - c. A desire for increased rapport
 - d. The patient does not take you seriously
15. Your new patient becomes visibly anxious during the nursing interview. You respond by telling her, "Don't worry, everything will be okay." What might this premature reassurance cause?
 - a. A feeling of closeness between the patient and the nurse
 - b. The nurse to shorten the interview process
 - c. The blockage of further disclosures by the patient
 - d. A noticeable lessening of the patient's anxiety
16. What techniques encourage patient disclosures while minimizing the risk for distorting the patient's ideas or missing significant details? (Mark all that apply.)
 - a. Asking a series of questions, one at a time
 - b. Using reflection
 - c. Asking only open-ended questions
 - d. Encouraging with repetition
 - e. Offering multiple choices for answers
17. A student nurse is conducting her first patient interview. The student suddenly draws a blank on what to ask the patient next. What is a useful interview technique for the student to use at this point?
 - a. Transition
 - b. Summarization
 - c. Reassurance
 - d. Termination
18. During one of your clinicals you encounter a patient who becomes silent during the nursing interview. What would be appropriate for you to do? (Mark all that apply.)
 - a. Appear attentive
 - b. Reassure the patient
 - c. Change the subject you are asking about
 - d. Ask your question again
 - e. Watch the patient closely for nonverbal cues
19. The principle of confidentiality is of paramount importance in the nurse-patient relationship. When should you inform the patient of with whom his or her information will be shared?
 - a. When the patient asks
 - b. At the beginning of the interview
 - c. At the end of the interview
 - d. Whenever it seems appropriate

20. When interacting with a patient, what conveys the extent of interest, attention, acceptance, and understanding of the nurse? (Mark all that apply.)
- a. Cultural reassurance
 - b. Eye contact
 - c. Gestures
 - d. Posture
 - e. Restatement

SECTION III: CASE STUDY

Activity E

Nailah Shadid, a 22-year-old immigrant from Egypt, comes to the clinic for the first time because of a gynecologic problem. Her husband accompanies her.

- a. Discuss why it would be important to know about Nailah's culture when conducting your nursing interview.

The Health History

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Explain the four types of histories and when they are used.
2. Describe the components of a comprehensive health history.
3. Obtain a comprehensive health history from a patient.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. The _____ should reveal the patient's responses to his or her symptoms and what effect the illness has had on the patient's _____.
 - B. Inquire about _____ of a symptom and ask what treatments were _____ and their results.
 - C. Risk factors and other pertinent information related to the symptom are frequently _____, such as risk factors for coronary artery disease in a patient with chest pain, or current _____ that may have side effects similar to the _____.

- D. The Health Pattern section provides a guide for gathering _____ history from the patient and _____ that may influence health and illness.
 - E. _____ of behaviors or elements in the health history will only _____ with learning about the patient.
 - F. How much history to gather varies by the purpose of the patient _____.
2. List the clues to physical abuse.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 3. List the parts of a comprehensive health history.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 - F. _____
 - G. _____

Activity B MATCHING

4. Match the type of assessment with the description (assessments will have multiple descriptions).

Answer	Description	Type of Assessment
	A systematic prioritization of need	A. Comprehensive assessment
	Having a problem or treatment plan evaluated	B. Focused assessment
	Strengthens the nurse–patient relationship	C. Follow-up history
	Assesses symptoms restricted to a specific body system	D. Emergency history
	Addresses specific concerns or symptoms	
	Gathering data to evaluate the outcomes of the plan of care	
	ABCs of airway, breathing, and circulation	
	Provides fundamental and personalized knowledge about the patient	
	Appropriate for established patients	
	Data collection is focused on the patient's emergent problem	
	Creates platform for health promotion through education and counseling	
	Carried out by a second-shift nurse	

5. Match the component of the health history with the information obtained.

Answer	Component of the Health History	Information Obtained
	Identifying Data	A. May include medications, allergies, and habits of smoking and alcohol
	Reliability	B. Risk factors
	Chief Complaint(s)	C. Documents historical presence or absence of specific illnesses
	Present Illness	D. Establishes source of referral
	Past History	E. Documents personal/social history
	Family History	F. One or more symptoms or concerns
	Review of Systems	G. Systemic documentation of presence or absence of common symptoms
	Health Patterns	H. Varies according to the patient's memory, trust, and mood

6. Match the system to its corresponding data.

Answer	System	Data
	General	A. Goiter
	Skin	B. Paroxysmal nocturnal dyspnea
	HEENT	C. Flank pain
	Neck	D. Trouble swallowing
	Breasts	E. Arthritis
	Respiratory	F. Weakness, fatigue, or fever
	Cardiovascular	G. Dentures
	Gastrointestinal	H. Changes in hair or nails
	Peripheral vascular	I. HPV
	Urinary	J. Nervousness
	Reproductive	K. Changes in mood
	Musculoskeletal	L. Hemoptysis
	Psychiatric	M. Easy bruising
	Neurologic	N. Change in glove or shoe size
	Hematologic	O. Swelling with redness or tenderness
	Endocrine	P. Self-examination practices

Activity C SHORT ANSWER

7. Explain why it is important to investigate a patient's health patterns when taking a health history.

8. Discuss what students/nurses can do to become more comfortable gathering patient data on sensitive topics.

9. Compare and contrast the four types of health histories.

10. Discuss the different components of the health history.

Activity D NCLEX STYLE QUESTIONS

11. What information aids the nurse in assessing possible biases in the data collected in the health history?

- Ethnicity of patient
- Gender of patient
- Source of information
- Reliability of the data

12. What is a key element of the history of present illness?

- Initiating a problem list
- Obtaining an accurate history
- Developing accurate nursing diagnoses
- Self-treatment

13. You are collecting data for a comprehensive health history on a patient new to your clinic. Under what component of the health history would you place data on a chronic childhood illness?
- Past history
 - Health maintenance
 - General information
 - Risk factors
14. A nurse at the local free clinic is collecting data on a 16-year-old boy who has come to the clinic with a lesion on his penis. Under what component of the health history would the nurse place data on whether the teen routinely uses seat belts when in a vehicle?
- General information
 - Health maintenance
 - Risk factors
 - Initial information
15. As a nursing student you learn that mastering all the components of the comprehensive history provides what?
- Confidence
 - Professionalism
 - Proficiency
 - Insight
16. What is an aspect of the comprehensive health history? (Mark all that apply.)
- Strengthens the nurse–patient relationship
 - Provides baselines for future assessments
 - Creates platform for health promotion through education and counseling
 - Obtains data to evaluate the outcomes of the plan of care
 - Is appropriate for established patients
17. When collecting data on the history of the present illness, it is appropriate to include what?
- Chronic childhood illnesses
 - Observable signs and symptoms
 - Reliability of information source
 - Current medications
18. A patient comes into the clinic for a routine annual physical. Where would you document this information?
- Initial information
 - History of present illness
 - Health maintenance
 - Chief complaint
19. Your patient has two affirmative answers to the CAGE Questionnaire. What other questions should you ask? (Mark all that apply.)
- What OTC medications do you take?
 - Do you experience blackouts when drinking?
 - Do you only drink beer?
 - Do you have seizures while drinking?
 - Do you have any legal problems?
20. While gathering data for the family history portion of the health history, what would you ask about?
- Suicide
 - Number of siblings
 - Family ethnicity
 - Religion

SECTION III: CASE STUDY

Activity E

Geri Christianson, a 57-year-old white woman, has been brought to the emergency room with chest pain. Vital signs are T 37°C; pulse 105; respirations 23; BP 130/83.

- Compile an appropriate health history for this patient.

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

COMPREHENSIVE ADULT HEALTH HISTORY	
Patient Name _____	Date/Time _____
Overview _____	
Identifying Data _____	
Source and Reliability _____	
Chief Complaint(s) _____	
History of Present Illness	
Onset _____	
Location _____	
Duration _____	
Characteristic symptoms _____	
Associated manifestations _____	
Relieving/exacerbating factors _____	
Treatment _____	
Past History	
Allergies _____	
Medications _____	
Childhood illnesses _____	
Adult illnesses	
Medical _____	
Surgical _____	
Psychiatric _____	
Health Maintenance	
Immunizations _____	
Screening tests _____	
Safety measures _____	
Risk Factors	
Tobacco _____	
Alcohol/drugs _____	
Family History _____	
Review of Systems	
General _____	
Skin _____	
HEENT _____	
Head _____	
Eyes _____	
Ears _____	
Nose and sinuses _____	
Throat (or mouth and pharynx) _____	
Neck _____	
Breasts _____	
Respiratory _____	
Cardiovascular _____	
Gastrointestinal _____	
Urinary _____	
Reproductive _____	
Peripheral vascular _____	
Musculoskeletal _____	
Psychiatric _____	

Neurologic	_____
Hematologic	_____
Endocrine	_____
Health Patterns	_____
Self-perception–self-concept	_____
Value-belief	_____
Activity-exercise	_____
Sleep-rest	_____
Nutrition	_____
Role-relationship	_____
Coping-stress tolerance	_____

Cultural and Spiritual Assessment

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Explain why culture is important in the health assessment process.
2. Define cultural competency and cultural humility.
3. Demonstrate behaviors that show sensitivity to a patient's culture during the assessment process.
4. Explain the difference between spirituality and religion.
5. Explain why the patient's spiritual needs should be assessed.
6. Utilize a spiritual assessment tool to assess a patient's spiritual needs.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Nursing has long recognized and practiced _____ care of the patient and attention to _____ is a part of caring for the whole patient.
 - B. You must evaluate each patient with pain as _____, being aware of your reaction to the patient's _____.

- C. Knowledge of the _____ or _____ groups in your practice region will help you better _____ and _____ the patient's needs.
 - D. It can be _____ working with a person whose culture _____ nodding the head for _____ and shaking the head for _____.
 - E. There are also _____, which are "illnesses" defined by a particular culture but that have no _____ illness in Western medicine.
 - F. _____ may be a response to _____ or _____ issues.
2. List the aspects of culture relevant to health assessment.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 - F. _____
 - G. _____
 - H. _____
 - I. _____

3. List the stages of grief.

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____

Activity B MATCHING

4. Match the dimension of cultural humility with its component.

Answer	Component	Definition
	Self-awareness	A. Communication based on trust, respect, and a willingness to re-examine assumptions
	Respectful communication	B. Intuitively knowing members of one's own group
	Collaborative partnerships	C. Maintaining an open and inquiring attitude

5. Match the concept with the statement about the concept.

Answer	Concept	Statement
	Spirituality	A. Involves a sincere connection and sharing of human experience
	Religion	B. What do you think is going to happen to you?
	Spiritual care	C. Has being sick (or what has happened to you) made any difference in your practice of praying?
	Nursing presence	D. A system of beliefs or a practice of worship
	Relation between spiritual beliefs and health	E. Being present during unpleasant experiences, listening to the patient, providing opportunities for the patient to practice religious rituals, or referring the patient to a religious leader of the patient's choice.
	Dying patients	F. Involves a two-tiered approach
	Religious practices	G. Culture specific
	Spiritual assessment	H. Don't wish to confide in everyone they meet

Activity C SHORT ANSWER

6. Define *nursing presence* and explain what it involves.

7. Discuss Stoll's guidelines for spiritual assessment.

8. Discuss what is involved in nursing care of the dying patient.

9. Explain the statement “Patients do not live in isolation . . .” and how this affects nursing care.

10. Identify and discuss Campinha-Bacote’s model of cultural competence.

Activity D NCLEX STYLE QUESTIONS

11. When culture is defined as a system, what components would be included? (Mark all that apply.)
- Ethnicity of the patient
 - How we view the world
 - How we experience the world physically
 - How we behave in relation to other people
 - Shared ideas, rules, and meanings
12. What concept is an approach to caring for patients from culturally diverse backgrounds?
- Cultural humility
 - Ethnic sensitivity
 - Spiritual awareness
 - Cultural values
13. You are caring for an 85-year-old Siberian woman who is in the United States visiting her family. What must occur before this patient is willing to teach you about her culture?
- The patient’s family must allow it
 - You need to hide your biases
 - You need to establish rapport and trust
 - You need to establish a value-based partnership
14. As a novice nurse caring for a patient from a different culture, what may you find confusing or upsetting?
- Patient’s cultural biases
 - Patient’s nonverbal communication
 - Patient’s spiritual practices
 - Patient’s ethnicity
15. You are attending a seminar on transcultural nursing at a nursing conference. What aspects of culture relevant to health assessment would you expect to be discussed? (Mark all that apply.)
- Nutrition
 - High-risk behaviors
 - Elder care
 - Educational goals
 - Health care practitioners
16. The “evil eye” is an example of what?
- A spiritually defined illness
 - A psychosocial condition
 - A cultural-bound syndrome
 - An ethnic belief
17. An elderly Chinese patient is touring the United States and has a heart attack. When admitting this patient to the coronary care unit, what would be important to note in the family history?
- Chronic childhood illnesses
 - Family members residing in the United States
 - Reliability of information source
 - The decision makers for the family
18. What is an important part of being present with a patient?
- Listening
 - Understanding
 - Spiritual awareness
 - Cultural knowledge
19. You are discussing hospice care with a dying patient who will be going home from the hospital tomorrow. What would be important to tell this patient about hospice care?
- It teaches CPR
 - It provides all medicine and treatment
 - It is palliative
 - It makes end-of-life decisions easier

20. When studying Campinha-Bacote's model of cultural competency in the delivery of health care, you learn that cultural desire is viewed as the motivation for the nurse to want to do what? (Mark all that apply.)
- a. Become culturally skillful
 - b. Seek cultural compassion
 - c. Become culturally knowledgeable
 - d. Seek cultural encounters
 - e. Become ethnically expert

SECTION III: CASE STUDY

Activity E

A 55-year-old Amish man is trampled by a horse. He is unable to move his legs when admitted to the ICU from the emergency department.

- a. Using **Stoll's Guidelines for Spiritual Assessment**, what data would be important to obtain from the patient. Why?

Physical Examination

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the components of the physical examination.
2. Recognize the best approach for each physical examination based on individual patient needs.
3. Utilize lighting and the environment to ensure an accurate physical examination.
4. Describe the equipment for performing a physical examination.
5. Demonstrate a head-to-toe physical examination.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

- A. The physical examination is a _____ to obtain _____ through patient assessment.

- B. Before beginning the physical examination, _____ the measures that promote the patient's physical comfort and make any adjustments needed in the _____ and _____ environment.

- C. The skillful nurse is thorough without _____, systematic without being _____, gentle yet not afraid to _____ should this be required.

- D. The _____ of the nurse is to _____ one area of the _____ at a time.

- E. The strength of a _____ is used to _____ central and peripheral nervous system disorders.

- F. As the nurse develops his or her own sequence of examination, an important _____ is to _____ how often you ask the patient to _____.

2. List the elements of standard precautions.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____

Activity B MATCHING

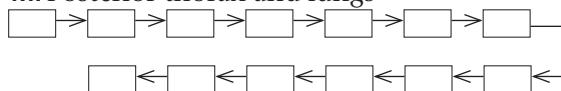
3. Match the cranial nerve with what it controls.

Answer	Cranial Nerve	Process for Testing
	Olfactory nerve	A. Somatic motor innervation to the superior oblique eye muscle
	Optic nerve	B. Somatic motor innervation to the lateral rectus muscle
	Oculomotor nerve	C. Innervates the hair cell receptors of the inner ear
	Trochlear nerve	D. Provides sensory information from the esophagus, respiratory tract, and abdominal viscera
	Trigeminal nerve	E. Somatic motor innervation to the muscles of the tongue
	Abducens nerve	F. Somatic motor innervation to the throat muscles involved in swallowing
	Facial nerve	G. Somatic motor innervation to four of the extrinsic eye muscles
	Vestibulocochlear nerve	H. Sense of smell
	Glossopharyngeal nerve	I. Provides muscle movement for the upper shoulders, head, and neck
	Vagus nerve	J. Sensory information from the face (deep pressure sensation) and taste information from the anterior two thirds of the tongue
	Accessory nerve	K. Provides sensory information from the face
	Hypoglossal nerve	L. Visual information

Activity C SEQUENCING

4. Show the suggested sequence of the physical examination.

- A. General survey
- B. Back
- C. Abdomen
- D. Peripheral vascular system
- E. Vital signs
- F. Breasts, axillae, and epitrochlear nodes
- G. Nervous system
- H. Neck
- I. Anterior thorax and lungs
- J. HEENT
- K. Skin
- L. Lower extremities
- M. Posterior thorax and lungs

**Activity D SHORT ANSWER**

5. Discuss how to assess each of the cranial nerves.

6. Discuss the decision process used to decide between performing a complete or a focused physical examination.

7. Explain what you would do when preparing to perform a physical examination on a patient and why.

8. Describe what is involved in your approach to the patient.

Activity E NCLEX STYLE QUESTIONS

9. You are performing a physical examination on a new patient. What would you be assessing if you were testing the patient's sense of smell?
- Cranial nerves
 - Nose
 - Upper neuron function
 - Strength of nerve functioning
10. When inspecting structures such as the jugular venous pulse, what would be the best lighting to use?
- Direct lighting
 - Tangential lighting
 - Diffuse lighting
 - Back lighting
11. You have finished the physical examination. What do you do next? (Mark all that apply.)
- Identify needed laboratory tests
 - Share findings with physician
 - Give your general impressions
 - Tell patient what to expect next
 - Identify health maintenance opportunities
12. When performing a physical examination, what diopter setting would you use at the beginning of the exam?
- 1
 - 0
 - 0.5
 - 1
13. Equipment used in conducting a physical examination includes a 2×2 gauze pad. What is this used for?
- Testing facial sensation
 - Invoking the blink reflex
 - Inverting the eyelid
 - Examining the tongue
14. What is used to gauge central and peripheral nervous system disorders?
- Strength of a reflex
 - Gait
 - Tuning fork
 - Heat and cold
15. What goals do you organize your comprehensive or focused examination around? (Mark all that apply.)
- Identifying chief complaint
 - Observing signs and symptoms
 - Avoiding unnecessary changes in position
 - Enhancing clinical efficiency
 - Maximizing the patient's comfort
16. Your lab instructor explains that physical examination relies on what classic nursing technique?
- Assessment
 - Percussion
 - Organization
 - Communication
17. Universal precautions are designed to protect the health care worker from what?
- STDs
 - Fatal infections
 - Blood-borne pathogens
 - MRSA
18. During the physical examination of your patient you observe the sound and effort of the patient's breathing. What area of the patient are you examining?
- Thorax
 - Neck
 - Lungs
 - Back

SECTION III: CASE STUDY

Activity F

Mr. Boudroux, 68 years old, is HIV positive. He is admitted to your unit following knee replacement surgery. He is now 24 hours postop and you are caring for him for the first time.

- a. What cardinal assessment techniques would you use when conducting a focused assessment on Mr. Boudroux? Why?

Because of Mr. Boudroux's HIV status, universal precautions are used by all health care providers.

- b. What are universal precautions and how would they be used with Mr. Boudroux?

SECTION IV: DOCUMENTATION

FORM TO BE USED IN PRACTICE

Patient's Name _____	Date/Time _____
General survey _____	
Vital signs _____	
Skin: upper torso, anterior and posterior _____	
Head and neck, including thyroid and lymph nodes _____	
Nervous system (mental status; cranial nerves; upper extremity motor strength, bulk, tone; cerebellar function) _____	
Thorax and lungs	
Anterior _____	
Posterior _____	
Breasts _____	
Musculoskeletal as indicated: upper extremities _____	
Cardiovascular	
JVP, carotid upstrokes and bruits, PMI, etc. _____	
S ₃ and murmur of mitral stenosis _____	
Murmur of aortic insufficiency _____	
Breasts and axillae _____	
Abdomen _____	
Peripheral vascular; skin—lower torso and extremities _____	
Nervous system: lower extremity motor strength, bulk, tone, sensation; reflexes _____	
Skin, anterior and posterior (may prefer in this position) _____	
Nervous system, including gait _____	
Musculoskeletal, comprehensive _____	

Beginning the Physical Examination: General Survey, Vital Signs, and Pain

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the components of the general survey.
2. Identify appropriate subjective questions based on initial observations.
3. Demonstrate how to measure blood pressure, pulse, respiration, and temperature.
4. Discuss variations in vital signs and the possible causes.
5. Describe the different types of pain.
6. Perform and document a pain assessment utilizing information from the health history and the physical examination.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

- A. _____ is a nonspecific symptom with many _____.
- B. Decreased eye contact may be _____, or may suggest _____, _____, or _____.

- C. Blood pressure _____ should be verified in the _____.
- D. Never assume that _____ on a patient's breath explains changes in _____ or _____.
- E. When you cannot hear _____ sounds at all, you may be able to estimate the _____ pressure by palpation.
- F. _____ measurements are more variable than _____ or _____ measurements, including right and left comparisons in the same person.
- G. Thermometers used to measure fevers will not detect _____ as thermometers only measure _____ temperature and the core may still be _____.

2. List the focal points when monitoring patient outcomes in pain management.

- A. _____
- B. _____
- C. _____
- D. _____

3. List the components of a general survey.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
- I. _____
- J. _____

Activity B MATCHING

4. Match the description of the blood pressure cuff error with the type of error (type of error will have multiple descriptions).

Answer	Description of Error	Type of Error
	Cuff too small (narrow)	A. False low readings
	Cuff too large (wide)	B. False high readings
	Pressing stethoscope too tightly against pulse	
	Inflating or deflating cuff too slowly	
	Cuff too loose or uneven	
	Repeating assessments too quickly	
	Deflating cuff too quickly	

5. Match the special technique with the problem obtaining an accurate blood pressure.

Answer	Special Technique	Problem
	Doppler ultrasound stethoscope	A. Apical pulse should be taken
	Radial pulse is difficult to find or there is an irregularity	B. Hypertension in people whose blood pressure measurements are higher in the office than at home or in more relaxed settings
	Weak or inaudible Korotkoff sounds	C. The obese arm
	Frequent premature contractions or atrial fibrillation	D. Atrial fibrillation
	Important to use a wide cuff of 15 cm	E. Weak pulse
	"White coat hypertension"	F. Consider technical problems
	Palpation of an irregular rhythm	G. Determine the average of several observations and note that your measurements are approximate

6. Match the definition to its corresponding description.

Answer	Definition	Description
	Night sweats	A. Can be used with unconscious patients
	Sweating	B. Measures core body temperature
	Axillary temperatures	C. Accompanies a rising temperature
	Feeling cold	D. Usually blue
	Tympanic membrane temperature	E. Usually red
	Rectal thermometer	F. Accompanies a falling temperature
	Oral thermometer	G. Occur in tuberculosis and malignancy

Activity C SHORT ANSWER

7. Discuss the measuring of the severity of pain.

8. Discuss the health disparities in pain management.

9. Compare and contrast the different types of pain.

10. Discuss health promotion as it pertains to the general survey.

Activity D NCLEX STYLE QUESTIONS

11. What factors contribute to the patient's makeup? (Mark all that apply.)

- a. Ethnicity of patient
- b. Nutrition
- c. Genetic composition
- d. Geographic location
- e. Cultural norms

12. Mr. Smith presents to the clinic stating, "My face looks funny." You note that his face is asymmetric. What might you suspect is the patient's problem?

- a. Heart attack
- b. Parafacial macrosomia
- c. Muscular dystrophy
- d. Palsy

13. Mrs. Helms is admitted to your unit with an exacerbation of COPD. When you enter her room to do your initial assessment, you note that she is sitting on the side of the bed, leaning forward, with her arms on the bedside table. What would this indicate to you?

- a. Respiratory distress
- b. A relaxed attitude
- c. Depression
- d. Pulmonary embolism

14. A patient admitted to your unit from the emergency room is noted to have "grown-out" nail polish. What might this indicate?

- a. Inability to give accurate history
- b. Depression
- c. Length of an illness
- d. Inability to perform ADLs

15. As a nursing student you learn that the normal range for an adult pulse is what?

- a. 80–120 bpm
- b. 70–110 bpm
- c. 60–100 bpm
- d. 50–90 bpm

16. Fatigue is considered a common symptom of what? (Mark all that apply.)
- Infections
 - Panhypopituitarism
 - Mild anemia
 - Depression
 - Hyperthyroidism
17. You are educating your patient on taking blood pressure at home. What would be important to include in your patient education?
- Monthly replacement of batteries
 - Routine recalibration of the device
 - Application of a thigh cuff
 - Use of a wrist cuff
18. Ideally, when taking a blood pressure, the patient should be instructed to what?
- Avoid smoking for 30 minutes prior to the assessment
 - Sit quietly for at least 10 minutes in a chair, rather than on the examining table, with feet flat on the floor and legs uncrossed
 - Abstain from drinking caffeine for 45 minutes prior to the assessment
 - Take several deep breaths to help relax prior to the assessment
19. The nurse should know that some disease processes affect facial expression. What are they? (Mark all that apply.)
- Diabetes mellitus
 - Depression
 - Multiple sclerosis
 - Parkinsonism
 - Hyperthyroidism
20. When counting the patient's pulse, what beats may not be detected peripherally?
- Split beats
 - Early beats
 - Irregular beats
 - Late beats

SECTION III: CASE STUDY

Activity E

Ms. Cox has come to the clinic with a chief complaint of "severe sore throat." She is 27 years old, is married, and has one child. She is dressed in jeans and a light sweater.

- Document a general survey for this patient.

Nutrition

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Assess the nutritional status of an individual through a nutrition history and physical examination.
2. Identify persons at risk for malnutrition or overnutrition.
3. Differentiate between normal and abnormal nutrition assessment findings.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. The MyPyramid Tracker provides information on _____ and _____ status.
 - B. _____ status is critical to a patient's health.
 - C. Changes in _____ result from changes in body _____ or body _____.
 - D. In addition to the _____, the nurse should collect a sample _____ record.
 - E. Do not use a _____ to measure height for children or unstable elderly; instead, use a _____ attached to the wall.
 - F. Body fat consists primarily of adipose in the form of _____ and is stored in _____, _____, and _____ fat deposits that are difficult to measure directly.
2. List the key messages for promoting patient health.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 - F. _____
 - G. _____
 - H. _____
 - I. _____
3. List the assessment areas of a nutrition history.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 - F. _____
 - G. _____
 - H. _____

Activity B MATCHING

4. Match the assessment with the area of the health history in which it occurs (area of occurrence will have multiple assessments).

Answer	Assessment	Area of Occurrence
	Nutrition	A. ROS
	Weight changes	B. Health patterns
	Exercise patterns	
	Allergies	
	Fatigue	

5. Match the assessment area of the nutrition history with the question used to obtain the data.

Answer	Assessment Area	Question
	Food pattern	A. Are there any foods the client feels are harmful or beneficial?
	Personal food preferences	B. How many meals are eaten outside the home?
	Food preparation	C. Does the client take nutritional supplements or vitamins? What type?
	Finances	D. Is there transportation to the market?
	Accessibility	E. Are there any eating disorders, heart disease, osteoporosis, diabetes, obesity, or gastrointestinal disorders?
	Client health	F. Is mealtime a social time?
	Family health	G. Is any supplementary financial program used?
	Family dietary patterns	H. Who does the cooking?

Activity C SEQUENCING

6. Show the suggested sequence for measuring height.
- Have the patient step off the scale or away from the wall.
 - Raise the horizontal bar above the patient's head and lower it until it just touches the crown of the head.
 - On a balance beam scale read the height at the point where the top of the measuring slide comes out of the lower portion of the measuring slide.
 - Have the patient remove shoes and hat.

- E. The patient should stand facing away from the scale with a straight back and the heels, hips, shoulders, and occiput aligned.

**Activity D SHORT ANSWER**

7. Discuss the causes of weight loss.

8. When taking a nutrition history, why assess the gastrointestinal system?

9. When obtaining a nutritional history, what symptoms would cause concern? Why?

10. Name the sources for the following nutrients: calcium, iron, folate and vitamin D.

Activity E NCLEX STYLE QUESTIONS

11. Which of the following are causes of weight loss? (Mark all that apply.)
- Hypothyroidism
 - Chronic liver failure
 - Chronic renal failure
 - Chronic infections
 - Adrenal insufficiency
12. What can cause edema in a patient with a weak heart?
- Hyponatremia
 - Dehydration
 - Hyperproteinemia
 - Overhydration
13. You note that your patient has developed mental status changes and paresthesias. What would you know to assess as a possible cause for these changes?
- Patient's hydration status
 - Patient's intake of protein
 - Patient's vitamin intake
 - Patient's BMI
14. You are caring for a patient with hypertension. What dietary change would be appropriate to recommend?
- Eat fewer plantains
 - Drink less orange juice
 - Eat more spinach
 - Drink more apple juice
15. As a nursing student you learn that obesity-related risk factors include what? (Mark all that apply.)
- Infertility
 - Hypermenorrhea
 - Polycystic ovarian syndrome
 - Type 1 diabetes
 - Androgenicity
16. You are caring for a 16-year-old female patient diagnosed with anorexia nervosa. What biologic complication would you know to assess for?
- Severe cognitive disorder
 - Increased corticotropin-releasing factor
 - Tachycardia
 - Decreased BUN
17. You are teaching a middle-school health class. What would you tell the students is necessary when they are exposed to heat stress or when they perform sustained vigorous physical activity?
- Free water consumption
 - Purposeful drinking
 - 8–10 glasses of water daily
 - 64 oz of nonsweetened fluid
18. You are counseling a 44-year-old woman about ways to maintain her weight, which is within normal range for her height. What should you suggest for her?
- 15 minutes per day of physical activity at a moderate intensity
 - 30 minutes per day of physical activity at a moderate intensity
 - 45 minutes per day of physical activity at a moderate intensity
 - 60 minutes per day of physical activity at a moderate intensity

19. A student asks the school nurse what the recommended daily allowance for sodium is. What should the school nurse reply?
- 2400 mg/day
 - 1800 mg/day
 - 1200 mg/day
 - 600 mg/day
20. When teaching a nutrition class, what would you recommend for adults older than the age of 50?
- Increase foods rich in vitamin B₆ and iron
 - Increase foods rich in vitamin B₁₂ and folic acid
 - Increase foods rich in vitamin B₁₂ and calcium
 - Increase foods rich in vitamin B₆ and vitamin D

SECTION III: CASE STUDY

Activity F

Penny Sandusky, 53 years old, comes to the clinic with a chief complaint of unintended weight loss of 10 pounds over an 8-week period. She is 5'4" tall and had a BMI of 24.88 when she started losing weight.

- a. Describe the areas of a physical examination you would look at to assess for nutritional deficiencies.

- b. Create a 1-week food record that would indicate a possible malignancy.

The Integumentary System

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the structures of the skin, nails, and hair.
2. Explain the functions of the integumentary system.
3. Identify risk factors for pressure ulcers.
4. Identify risk factors for skin cancer.
5. Obtain an accurate history of the integumentary system.
6. Appropriately prepare and position the client for the integumentary examination.
7. Describe the equipment necessary to perform an integumentary examination.
8. Correctly perform an integumentary examination.
9. Accurately describe primary, secondary, and vascular lesions.
10. Discuss risk reduction and health promotion strategies to reduce skin cancer.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

- A. The skin contains _____
 _____: the _____, the
 _____, and the _____ tissues.

- B. An increase in _____ through the _____ to the _____ causes a _____ of the skin, whereas the opposite change usually produces _____.
- C. Adults have two types of hair: _____, which is short, fine, inconspicuous, and relatively unpigmented; and _____, which is coarser, thicker, more conspicuous, and usually pigmented.
- D. The firm, rectangular, and usually curving _____ gets its pink color from the _____ to which the plate is firmly attached.
- E. The _____ are widely distributed, open directly onto the _____, and by their _____ help to control _____.
- F. Remember to _____ your findings with observations of the _____, especially when assessing _____, because _____ may appear in both areas.
- G. _____ result when _____ compression _____ arteriolar and capillary blood flow to the _____.

- H. The _____ is a ratio of the number of _____ for treated versus untreated skin to _____ with exposure to _____.
- I. Early detection of _____, when _____ or less, significantly improves _____.
- J. Inspect the scalp for _____, _____, and _____ by separating the hair at _____ intervals.
2. List the functions of the skin.
- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
3. List the characteristics of the skin assessed in a physical examination.
- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____

Activity B MATCHING

4. Match the type of skin cancer with the description (skin cancers will have multiple descriptions).

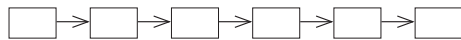
Answer	Description	Type of Skin Cancer
	Most rapidly increasing U.S. malignancy	A. Basal cell carcinoma
	Often crusted and scaly	B. Squamous cell carcinoma
	Pearly white and translucent	C. Melanoma
	Accounts for approximately 16% of skin cancers	
	Can spread rapidly to the lymph system and internal organs	
	Rarely metastasizes	

5. Match the type of skin lesion with its description.

Answer	Type of Skin Lesion	Description
	Primary skin lesions (primary presentation)	A. Comedones, papules, pustules, and alcohol
	Secondary skin lesions	B. Pitting and scars
	Secondary skin lesions—depressed	C. Ecchymosis
	Acne vulgaris—primary lesion	D. Dry skin
	Acne vulgaris—secondary lesion	E. Cherry angioma
	Vascular lesion	F. Café-au-lait spot
	Purpuric lesion	G. Excoriation

Activity C SEQUENCING

6. Put the following actions in the correct sequence for skin self-examination:
- Examine the right and left sides with arms raised.
 - Look at the backs of your legs and feet, the spaces between your toes, and the sole.
 - Examine the back of your neck and scalp with a hand mirror.
 - Check your back and buttocks with a hand mirror.
 - Examine your body front and back in the mirror
 - Bend elbows and look carefully at forearms, upper underarms, and palms.

**Activity D SHORT ANSWER**

7. Discuss the functions of the skin and how they work.

8. Discuss the purpose of the integumentary history.

9. Explain the difference between pitting and nonpitting edema and how they are measured.

10. When assessing the skin, explain the characteristics of lesions that you would assess.

Activity E NCLEX STYLE QUESTIONS

11. You are using the Braden Scale to measure risk factors for pressure sores. What risk factors will you assess?
- Disease process
 - Moisture
 - Increased mobility
 - Activity
 - Nutrition
12. When assessing your new patient, you note that he has no hair on his legs. What might this indicate about the patient?
- He has a hormonal imbalance
 - He has hyperthyroidism
 - He has peripheral artery disease
 - He has hypothyroidism
13. When educating a patient about the risks of malignant melanoma, what would you know to include? (Mark all that apply.)
- Red or light hair
 - Freckles
 - Immunosuppression
 - Female gender
 - Age older than 60
14. A 16-year-old African-American girl shows the school nurse a rash that has developed on the back of her left hand. You assess the rash as a depigmented macular area. What might the nurse suspect?
- Addison disease
 - Vitiligo
 - Tinea versicolor
 - Dermatomyositis
15. A golden yellow pigment that is heavily keratinized and is found in subcutaneous fat is called what?
- Oxyhemoglobin
 - Deoxyhemoglobin
 - Carotene
 - Melanin

16. The student nurse learns that examining the skin can do what?
- Reveal overhydration
 - Allow early identification of noncancerous lesions
 - Rule out physical abuse
 - Allow early identification of risk factors for dehydration
17. Which of the following scores on the Braden Scale signifies that the patient is not at risk for a pressure sore?
- 9 or lower
 - 10 to 12
 - 13 to 18
 - 19 to 23
18. A 67-year-old male patient tells the clinic nurse that his feet and lower legs turn a blue color. On assessment, the nurse notes that the patient's oxygenation level is within normal levels. The nurse knows that the blue color the patient described is caused by what?
- Reynaud disease
 - Central cyanosis
 - Neurofibromatosis
 - Peripheral cyanosis
19. The apocrine glands are stimulated by what?
- Emotional stress
 - Temperature
 - Physical stress
 - Overhydration
20. In what age group does the American Cancer Society recommend yearly skin examination as part of a routine cancer-related check-up?
- 30 or older
 - 40 or older
 - 50 or older
 - 60 or older

SECTION III: CASE STUDY

Activity F

Belinda Mitchell, a 53-year-old Caucasian female, has been referred to the dermatology clinic because of a suspicious lesion on the inside of her left thigh. A biopsy of the lesion is negative for cancer.

- a. Develop a teaching plan for this patient covering the risks for malignant melanoma.

- b. Explain what you would teach the patient about assessing moles for malignant melanoma.

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

INTEGUMENTARY SYSTEM ASSESSMENT	
Patient Name _____	Date/Time _____
Overview _____	
Identifying Data _____	
Source and Reliability _____	
Common or Concerning Symptoms _____	
Onset _____	
Location _____	
Duration _____	
Characteristic symptoms _____	
Associated manifestations _____	
Relieving/exacerbating factors _____	
Treatment _____	
Past History _____	
Skin diseases _____	
Diabetes or peripheral vascular disease _____	
Allergies or food sensitivities _____	
Burns (including sunburns) _____	
Medications _____	
Corticosteroids _____	
OTCs _____	
Family History _____	
Same or similar symptoms _____	
Melanoma, eczema, or psoriasis or skin biopsies _____	
Allergies _____	
Health Maintenance _____	
Immunizations _____	
Screening tests _____	
Lifestyle and Personal Habits _____	
Bathing and shampooing routines _____	
Changed brands _____	
False nails or wigs _____	
Nail salon or gym _____	
Daily sun exposure _____	
Sunscreen use _____	
SPF _____	
Skin self-examinations _____	
Chemicals or radiation exposure _____	
Hobbies _____	
Typical day's diet _____	
Physical Examination _____	
Skin _____	
Color _____	
Moisture _____	
Temperature _____	
Texture _____	
Mobility and Turgor _____	
Edema _____	
Lesions _____	
Hair _____	
Nails _____	
Health Promotion _____	
Patient Instructions for the Skin Self-Examination _____	

The Head and Neck

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the structures of the head and neck and the purpose of each.
2. Perform an accurate health history of the head and neck.
3. Perform the physical examination techniques to evaluate the head and neck.
4. Document the physical examination results.
5. Determine the measures for prevention of traumatic brain injury.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

- A. Every _____ warrants careful evaluation for life-threatening causes such as _____, _____ or _____, or _____.
- B. An _____, with _____, may _____ a headache.
- C. The function of the _____ is to detect and eliminate _____.
- D. Deep to the _____ run the _____ of the neck: the _____ and the _____.

- E. _____ is an anomaly characterized by a _____ in proportion to the _____ and an _____.
- F. The _____ nodes lie in the angle between the _____ and the _____.
- G. _____ may also signify important problems in the thorax, such as a _____, _____, or a large _____.
- H. The _____, the _____, and the _____ all rise with swallowing and then fall to their resting positions.

2. List the "red flags" that suggest secondary causes to headaches.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
- I. _____
- J. _____
- K. _____
- L. _____

3. List the steps for palpating the thyroid gland using the posterior approach.

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____

Activity B MATCHING

4. Match the description of head pain with the type of head pain.

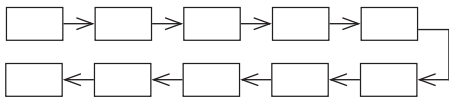
Answer	Description of Head Pain	Type of Head Pain
	Around and over the eyes	A. Sinus headache
	Most often the temporal, but also the occipital	B. Subarachnoid hemorrhage
	Cheek, jaws, lips, or gums	C. Brain tumor
	Nausea, vomiting, possibly loss of consciousness, neck pain	D. Meningitis
	Mental and physical exertion	E. Trigeminal neuralgia
	Previous headache pattern	F. Acute glaucoma
	In and around one eye	G. Posttraumatic headache
	Generalized, fever, stiff neck	H. Giant cell arteritis
	Often intermittent but progressive	I. Headaches from eye disorders
	Usually above the eye	J. Analgesic rebound

5. Match the facies with their description.

Answer	Facies	Description
	Parkinson disease	A. The head is elongated, with bony prominence of the forehead, nose, and lower jaw.
	Myxedema	B. Chronic bilateral asymptomatic swellings anterior to the ear lobes
	Cushing syndrome	C. Swelling usually appears first around the eyes and in the morning.
	Acromegaly	D. A mask-like face may result, with decreased blinking and a characteristic stare.
	Parotid gland enlargement	E. A dull, puffy facies
	Nephrotic syndrome	F. A round or "moon" face with red cheeks

Activity C SEQUENCING

6. Put the palpation of lymph nodes in the correct sequence.
- Occipital
 - Submandibular
 - Posterior auricular
 - Superficial cervical
 - Deep cervical chain
 - Preauricular
 - Submental
 - Supraclavicular
 - Posterior cervical
 - Tonsillar

**Activity D SHORT ANSWER**

7. List and explain the educational topics you would use when teaching a patient to prevent falls.
-
-
-
8. Explain the process for assessing the trachea and thyroid gland.
-
-
-
9. Discuss migraine headaches.
-
-
-
10. Name and explain the common or concerning symptoms of the head.
-
-
-

Activity E NCLEX STYLE QUESTIONS

11. What activity is known to aggravate a tension headache?
- Listening to music
 - Sex
 - Driving
 - Watching a movie
12. A 16-year-old white female is brought to the clinic by her mother with a chief complaint of a severe headache lasting more than 24 hours. The mother states, "Just before the headache started my daughter was craving food. I couldn't feed her enough." What is this called?
- Aura
 - Prodrome
 - Neurologic onset
 - Aberrant sign
13. What are associated manifestations of a headache caused by a traumatic head injury? (Mark all that apply.)
- Attention span deficit
 - Changes in taste
 - Gait changes
 - Seizures
 - Loss of speech
14. The nursing instructor is discussing assessment of the head and neck with the class. What identifying characteristic would the instructor use for the thyroid cartilage?
- It lies just below the mandible
 - The curve on its inferior edge
 - Its relation to the cricoid cartilage
 - The notch on its superior edge
15. During your physical examination of the patient you note an enlarged tender tonsillar lymph node. What would you do?
- Assess for meningitis
 - Look for involvement of other regions of the body
 - Look for a source such as infection in the area that it drains
 - Assess for dietary changes

16. What are the bordering landmarks of the anterior triangle of the neck? (Mark all that apply.)
- The sternomastoid
 - The mandible
 - The midline of the neck
 - The omohyoid muscle
 - The clavicle
17. A 43-year-old Asian female presents at the clinic for a routine check-up. The nurse notes that she is dressed in warm clothing even though the temperature outside is 73°F. The nurse also notes that the patient has gained 10 pounds since her last visit 9 months ago. What might the nurse suspect?
- Changes are age related
 - Brain tumor
 - Hyperthyroidism
 - Hypothyroidism
18. A 72-year-old male arrives in the emergency department by ambulance after falling down his front steps. You note two soft lumps, approximately 3 cm in diameter, on the side of his head. What would you identify these as?
- Wens
 - Pigmented nevi
 - Signs of abuse
 - Edema from fall
19. When assessing your patient's head and neck, what would you assess the face for? (Mark all that apply.)
- Hair distribution
 - Asymmetry
 - Bruising
 - Edema
 - Involuntary movements
20. When assessing a patient with Graves disease, how would you expect the thyroid gland to be?
- Soft
 - Firm
 - Nodular
 - Tender

SECTION III: CASE STUDY

Activity F

Brian Miller is brought to the emergency room by his parents after being knocked unconscious in a high school football game. Vital signs include BP 105/ 80; HR 80; respirations 16; T 38°C; eyes PERRLA.

- a. When completing an assessment on this patient, what would you focus on?

- b. Explain why a CT scan of the head and neck would be an important assessment tool.

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

HEAD AND NECK ASSESSMENT

Patient Name _____ Date/Time _____

Overview. _____

Identifying Data

Source and Reliability _____

Common or Concerning Symptoms of the Head _____

Common or Concerning Symptoms of the Neck _____

History of Present Illness _____

Onset _____

Location _____

Duration _____

Characteristic symptoms _____

Associated manifestations _____

Relieving/exacerbating factors _____

Treatment _____

Past History _____

Allergies _____

Medications _____

Past head trauma _____

Thyroid problems _____

Health Maintenance _____

Immunizations _____

Screening tests _____

Risk Factors _____

Tobacco _____

Alcohol/drugs _____

Family History _____

Headaches _____

Thyroid disease _____

Brain tumors _____

Review of Systems _____

General _____

Hair _____

Scalp _____

Skull _____

Face _____

Skin _____

Neck _____

Lymph nodes _____

Trachea and the thyroid gland _____

Carotid arteries and jugular veins _____

Health Promotion, Disease Prevention, and Education: Head _____

Prevention of traumatic brain injury _____

Fall prevention _____

Prevention of head injuries in motor vehicle accidents _____

Prevention of injuries from being hit by an object _____

The Eyes

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the components of the eye and the function of each.
2. Perform an accurate health history of the eye.
3. Describe the physical examination techniques performed to evaluate the eye.
4. Demonstrate how to use the ophthalmoscope.
5. Determine the measures for prevention or early detection of eye disease, infections, or vision loss.
6. Perform and document a complete eye assessment utilizing information from the health history and physical examination.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. A film of _____ protects the _____ and _____ from drying, inhibits _____, and gives a _____ to the cornea.
 - B. A _____ is the entire area seen by an eye when it looks at a _____.
 - C. A light beam shining onto one _____ causes _____ both in that eye, termed the

_____ to light, and in the opposite eye, the _____.

- D. _____ can occur and _____ the eye if contact lenses are not taken care of _____.
 - E. _____, also known as “lazy eye,” is a _____ of vision due to lack of use, and _____ is eye _____; these are found most frequently in _____ and _____ up to _____ years old.
 - F. Vision is a _____ for experiencing the world around us, and areas of importance are _____ and _____.
2. List the structures of the eye seen through an ophthalmoscope.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 - F. _____
 3. List the cardinal directions of gaze.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 - F. _____

Activity B MATCHING

4. Match the papillary abnormality with its description.

Answer	Description	Pupillary Abnormality
	Unequal pupils	A. Tonic pupil
	Does not cause anisocoria as long as the sympathetic and parasympathetic innervation to both irises is normal	B. Horner syndrome
	Reaction to light is severely reduced and slowed, or even absent	C. Oculomotor nerve (CN III) paralysis
	Pupils that accommodate but do not react to light	D. Anisocoria
	The dilated pupil is fixed to light and near effort. Ptosis of the upper eyelid and lateral deviation of the eye are almost always present	E. Equal pupils and one blind eye
	The affected pupil, though small, reacts briskly to light and near effort. Ptosis of the eyelid is present, perhaps with loss of sweating on the forehead	F. Small, irregular pupils (Argyll Robertson pupils)

5. Match the lump or swelling in and around the eye with its description.

Answer	Lump or Swelling	Description
	Pinguecula	A. A localized ocular redness from inflammation of the episcleral vessels
	Hordeolum	B. A swelling between the lower eyelid and nose
	Xanthelasma	C. A subacute, nontender, and usually painless nodule involving a meibomian gland
	Episcleritis	D. A painful, tender red infection in a gland at the margin of the eyelid
	Chalazion	E. Yellowish triangular nodule in the bulbar conjunctiva on either side of the iris
	Dacryocystitis	F. Slightly raised, yellowish, well-circumscribed plaques that appear along the nasal portions of one or both eyelids

Activity C SHORT ANSWER

6. Explain the differences between a nuclear and a peripheral cataract.

7. Compare and contrast conjunctivitis, subconjunctival hemorrhage, corneal injury or infection, acute iritis, and glaucoma.

8. Explain the visual pathway.

9. Discuss the process for testing vision.

Activity D NCLEX STYLE QUESTIONS

10. What is a characteristic symptom of Graves hyperthyroidism?
- Pterygium
 - Exophthalmos
 - Pinguecula
 - Episcleritis
11. What is the purpose of the health history in relation to the eyes?
- To identify a family history of ocular disease
 - To identify if problems are unilateral or bilateral
 - To test the acuity of central vision
 - To identify changes
12. A patient in the clinic where you work is considered legally blind. You know that this means the vision in his better eye, corrected by glasses, is what?
- 20/100 or less
 - 20/200 or less
 - 20/300 or less
 - 20/400 or less
13. The nurse is assessing visual fields on a patient newly admitted for eye surgery. The patient's left eye repeatedly does not see your fingers until they have crossed the line of gaze. The nurse would document that the patient has what?
- A left temporal hemianopsia
 - A homonymous hemianopsia
 - A bitemporal hemianopsia
 - A quadrantic defect
14. What are you testing when you ask the patient to follow your finger or pencil as you move it in toward the bridge of the nose?
- Accommodation
 - EOM
 - Convergence
 - Visual fields
15. What systemic diseases may cause nodular episcleritis? (Mark all that apply.)
- Systemic lupus erythematosus
 - Multiple sclerosis
 - Fibromyalgia
 - Muscular dystrophy
 - Rheumatoid arthritis
16. When examining the eye with an ophthalmoscope, where would you look to visualize the optic disc?
- Medially toward the nose
 - Laterally toward the ear
 - Upward toward the forehead
 - Downward toward the chin
17. You note anterior bulging of the physiologic cup when performing a fundoscopic examination of your patient's eyes. What would you document?
- Positive axoplasmic sign
 - Arteriovenous crossings
 - Papilledema
 - Hyperopia
18. What are the glands that are located on the tarsal plates and open on the lid margins?
- Levator glands
 - Chalazion glands
 - Pterygium glands
 - Meibomian glands

19. What is vital in maintaining vision and a healthy outlook for clients?

- Nursing education
- Yearly eye exams
- Emotional support
- Nursing care

a. Describe how you would examine Mr. Thygeson's upper palpebral conjunctiva for the presence of a foreign body.

b. What would you include in a teaching plan for Mr. Thygeson?

SECTION III: CASE STUDY

Activity E

Bud Thygeson, a 57-year-old cabinet maker, presents at the clinic with a chief complaint of left eye pain. He states, "I got something in my eye at work."

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

EYE EXAMINATION	
Patient Name _____	Date/Time _____
Overview. _____	
Identifying Data _____	
Source and Reliability _____	
Common or Concerning Symptoms _____	
Eye History	
Do you have any past history of eye problems or eye disease? _____	
Do you have a history of:	
Premature birth? _____	
Trauma or injury to the eye? _____	
Eye surgery? Related to injury, congenital causes, or cosmetic reasons? _____	
Eye infections? _____	
Strabismus? _____	
Cataracts? _____	
Glaucoma? _____	
Diabetes? _____	
Retinal detachment? _____	
Macular degeneration? _____	
Blindness? _____	
When was your last eye examination? Test for color blindness? _____	
Do you wear glasses or contact lenses? _____	
When did you begin to wear them? _____	
Are they corrective or cosmetic? _____	
How do you care for your contacts? _____	
Do you share contacts? _____	
How long are the contacts in your eye? Day hours? Night hours? _____	

Family History

Do you have a family history of congenital eye diseases, cataracts, glaucoma, macular degeneration, or diabetes?

Lifestyle Habits

Do you smoke? _____

Do you use contacts? _____

Do you use goggles or protective eyewear? When? _____

Are you on any medications/drugs that dry out the eye? _____

Physical Examination

Vision tests _____

Distal _____

Near _____

Peripheral _____

Inspection of the eye _____

Eyebrows _____

Lids _____

Conjunctiva _____

Sclera _____

Cornea _____

Lens _____

Iris _____

Pupils _____

Inspection and palpation of the lacrimal apparatus _____

Extraocular movements _____

Assessment of cardinal fields _____

Convergence _____

Corneal light test _____

Cover-uncover test _____

Inspection of the fundi _____

Optic disc and cup _____

Retina _____

Retinal vessels _____

Ears, Nose, Mouth, and Throat

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the structures of the ear, nose, mouth, and throat and the purpose of each.
2. Perform an accurate health history of the ear, nose, mouth, and throat.
3. Describe the physical examination techniques performed to evaluate the ear, nose, mouth, and throat.
4. Demonstrate how to use the otoscope.
5. Determine the measures for prevention or early detection of ear, sinus, and throat infections; hearing loss; change in balance; and maintenance of oral health.
6. Perform and document a complete ear, nose, mouth, and throat assessment utilizing information from the health history and the physical examination.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. The nurse's role is to detect changes and work with the health care team to _____ or _____.
 - B. In all components of the digestive system, the nurse assesses the patient for _____ and _____ to maintain these sensory organs.
 - C. The lowest portion of the temporal bone, the _____, is palpable behind the _____.
 - D. The second part of the hearing pathway, involving the _____ and the _____ phase; a disorder here causes _____ hearing loss.
 - E. Air enters the nasal cavity by way of the _____ on either side, then passes into a widened area known as the _____ and on through the narrow nasal passage to the _____.
 - F. The paranasal sinuses are air filled and make the _____ and add to _____.
 - G. Nasal sprays, if overused, can contribute to the _____, causing _____ and _____.
 - H. A midline mucosal fold, called a _____, connects each lip with the _____.
 - I. At the base of the tongue the _____ of the _____ pass _____ and _____.
 - J. Each _____ opens onto the _____ near the upper second molar.

2. List the clues to physical abuse.

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____

3. List the parts of a comprehensive health history.

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____
 F. _____
 G. _____

Activity B MATCHING

4. Match the term for dizziness with its description.

Answer	Term	Description
	Vertigo	A. Causes include anxiety, panic disorder, hyperventilation, depression, somatization disorder, and alcohol and substance abuse
	Presyncope	B. Unsteadiness or imbalance when walking
	Dysequilibrium	C. A spinning sensation accompanied by nystagmus and ataxia
	Psychiatric	D. A near faint from "feeling faint or lightheaded"

5. Match the abnormality of the eardrum with its description.

Answer	Abnormalities of the Eardrum	Description
	Perforation of the drum	A. Viral infection characterized by painful hemorrhagic vesicles that appear on the tympanic membrane, the ear canal, or both
	Tympanosclerosis	B. Caused by bacterial infection
	Serous effusion	C. Holes in the eardrum that usually result from purulent infections of the middle ear
	Bullous myringitis	D. A deposition of hyaline material within the layers of the tympanic membrane that sometimes follows a severe episode of otitis media
	Acute otitis media with purulent effusion	E. Usually caused by viral upper respiratory infections or by sudden changes in atmospheric pressure as from flying or diving

6. Match the abnormality to its corresponding description.

Answer	Abnormality	Description
	Geographic tongue	A. Painful, round or oval ulcer
	Fissured tongue	B. Small purplish or blue-black round swellings under the tongue
	Candidiasis	C. The undersurface of the tongue appears painted white
	Hairy tongue	D. Slightly raised, oval, and covered by a grayish membrane
	Smooth tongue	E. Rounded bony growths
	Hairy leukoplakia	F. Thick white coating
	Varicose veins	G. Sometimes termed scrotal tongue
	Mucous patch of syphilis	H. A map-like pattern that changes over time
	Tori mandibulares	I. Medially, note the reddened area of mucosa, called <i>erythroplakia</i> , suggesting possible malignancy
	Aphthous ulcer	J. Yellowish to brown or black elongated papillae on the tongue's dorsum
	Leukoplakia	K. Whitish raised areas with a feathery or corrugated pattern
	Carcinoma, floor of the mouth	L. Suggests a deficiency in riboflavin, niacin, folic acid, vitamin B ₁₂ , pyridoxine, or iron, or treatment with chemotherapy

Activity C SHORT ANSWER

7. Explain the pathway of hearing.

8. Discuss tinnitus.

9. Discuss the anatomy and physiology of the nose.

10. Explain the physical examination of the tongue and the floor of the mouth.

Activity D NCLEX STYLE QUESTIONS

11. When providing patient education on hearing, patients should be reminded to utilize ear plugs when they are what? (Mark all that apply.)

- a. At train stations
- b. At the movies
- c. Using lawnmowers
- d. At work
- e. At concerts

12. Functionally, the most important range for hearing is the range of human speech. What is the range of human speech?

- a. 150 Hz to 1500 Hz
- b. 200 Hz to 2000 Hz
- c. 250 Hz to 2500 Hz
- d. 300 Hz to 3000 Hz

13. When assessing a patient you note that the tonsils are touching the uvula. How would you document the tonsils?

- a. Tonsils are T4
- b. Tonsils are T3
- c. Tonsils are T2
- d. Tonsils are T1

14. What is the average age of significant hearing loss detected if the infant is not assessed prior to leaving the hospital at birth?
 - a. 12 months
 - b. 14 months
 - c. 16 months
 - d. 18 months
15. You are teaching a health class at the local high school. What would you teach the students to use during oral sex to help reduce the transmission of STDs?
 - a. Oral barriers
 - b. Dental prophylactic
 - c. Dental dams
 - d. Oral condoms
16. What structure in the inner ear senses the position and movements of the head and helps to maintain balance?
 - a. The cochlea
 - b. The labyrinth
 - c. The umbo
 - d. The ossicle
17. An alternate pathway that bypasses the external and middle ear is called what?
 - a. Bone conduction
 - b. Sensory conduction
 - c. Neuro conduction
 - d. Air conduction
18. A patient presents at the clinic with a chief complaint of right ear pain. You note a rash in the right ear canal. What should you know is a possible cause of these symptoms?
 - a. Acute ossiculo-mastitis
 - b. Chronic otosclerosis
 - c. Acute mastoiditis
 - d. Chronic otitis media
19. Your patient is complaining of nasal stuffiness. What drugs should you ask if she is taking? (Mark all that apply.)
 - a. Guaifenesin
 - b. Oral contraceptives
 - c. Nicotine
 - d. Alcohol
 - e. Guanethidine
20. What lines the cheeks?
 - a. Lingual mucosa
 - b. Alveolar mucosa
 - c. Buccal mucosa
 - d. Labial mucosa

SECTION III: CASE STUDY

Activity E

Marcus Merriweather, a 55-year-old white male, presents at the clinic complaining of decreased hearing for the past 6 weeks. He works in a bowling alley.

- a. Describe an appropriate physical examination for this patient.

- b. Develop a teaching plan for this patient.

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

EARS, NOSE, MOUTH, AND THROAT	
Name _____	Date/Time _____
Overview. _____	
Identifying Data _____	
Source and Reliability _____	
Common or Concerning Symptoms of the Ears _____	
History of Present Illness	
Onset _____	
Location _____	
Duration _____	
Characteristic symptoms _____	
Associated manifestations _____	
Relieving/exacerbating factors _____	
Treatment _____	
Past History	
Congenital hearing loss _____	
Removal of cerumen _____	
Ear surgery _____	
Trauma or injury to ear(s) _____	
Exposure to hazardous noise levels (work, home, war) _____	
History of syphilis, rubella, meningitis _____	
Family History	
Hearing loss _____	
Otitis media _____	
Allergies _____	
Smoking or exposure to cigarette smoke _____	
Lifestyle Habits	
Are you exposed to loud noises? _____	
What is your occupation? Hobbies (e.g., hunting)? _____	
Do you attend concerts? Bars? Loud places? _____	
Do you use headphones or earbuds to listen to music? _____	
Do you use an iPod? How often? On what level? _____	
Do you use a lawnmower? Power tools? Firearms? _____	
Do you live near a busy road or train tracks? _____	
Have you ever used ear plugs/protectors? Currently? _____	
Have you ever used hearing aid(s)? Which ear? Currently? At all times? Brand? _____	
Have you used medications or drugs that interfere with how you hear or cause dizziness? Any medications that cause ototoxicity (e.g., large doses of antibiotics infused rapidly)? _____	
Common or Concerning Symptoms of the Nose and Sinuses _____	
History of Present Illness	
Onset _____	
Location _____	
Duration _____	
Characteristic symptoms _____	
Associated manifestations _____	
Relieving/exacerbating factors _____	
Treatment _____	

Past History

Sinus infections _____
 Upper respiratory infections _____
 Allergies _____
 Trauma or injury _____
 Nasal or sinus surgery _____
 Polyps _____
 Dental history _____

Family History

Allergies _____
 Asthma _____
 Cancer of the nose or sinus _____

Lifestyle Habits

Air quality: at home and work, how often filters are changed, age of home and work or school site, rugs _____

Pets: What kind? How many? Are they in the house or outside? Do they sleep in bed with the patient? _____

Alcohol: What kind? How much? _____

Tobacco use: What kind? How often? How many? _____

Recreational drugs: What kind? Route? How often? _____

Common or Concerning Symptoms of the Mouth and Throat _____

History of Present Illness

Onset _____

Location _____

Duration _____

Characteristic symptoms _____

Associated manifestations _____

Relieving/exacerbating factors _____

Treatment _____

Past History

Sore throats _____

Loss of voice _____

Dental, mouth, or throat surgery _____

Trauma or injury to teeth, mouth, or throat _____

Exposure to hazardous noise levels (work, home, war) _____

History of infections _____

Oral cancer _____

STDs _____

Family History

Allergies _____

Smoking or exposure to cigarette smoke _____

Stroke _____

Tuberculosis _____

Lifestyle Habits

Do you see a dentist? When was your last exam? What were the results? _____

How many times a day do you brush your teeth? _____

Do you floss? How often? _____

Do you use tobacco? Cigarettes, cigars, a pipe, or chewing tobacco? How many per day?

Since when? _____

Do you smoke marijuana? Crack? Inhale any other product? _____

Do you drink alcohol? What? How many ounces per day? _____

What is your occupation? _____

Do you attend concerts? Bars? Loud places? _____

Do you use dental dams? _____

Physical Examination of the Ears

The auricle _____

Ear canal and drum _____

Auditory acuity _____

Air and bone conduction _____

Physical Examination of the Nose

Inspect the anterior and inferior surfaces of the nose _____

Inspect the inside of the nose _____

Physical Examination of the Mouth and Throat

The lips _____

The oral mucosa _____

The gums and teeth _____

The roof of the mouth _____

The tongue and the floor of the mouth _____

The pharynx _____

Health Promotion, Disease Prevention, and Education: Ears

Hearing screening _____

Ear protection _____

Health Promotion, Disease Prevention, and Education: Mouth and Throat

Oral and dental screening _____

Cancer prevention _____

The Respiratory System

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Describe the structure and functions of the airways, alveoli, lungs, and pleura.
2. Identify the locations of each lung lobe using landmarks on the thorax.
3. Describe the mechanics of breathing.
4. Identify the percussion and auscultation sites for assessment of the lungs.
5. Describe the normal lung sounds and their location.
6. Describe adventitious sounds and voice sounds and their origin.
7. Obtain an accurate history of the respiratory system.
8. Appropriately prepare and position the client for the respiratory examination.
9. Describe the equipment necessary to perform a respiratory examination.
10. Correctly inspect, palpate, percuss, and auscultate the anterior and posterior thorax.
11. Discuss risk factors for respiratory disease.
12. Discuss risk reduction and health promotion strategies to reduce respiratory disease.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

A. In a woman, to find the _____
_____, either _____ the

_____ or _____
_____ to the sternum.

- B. As you _____ down the chest on the left, the _____ of normal lung usually changes to the _____ of the gastric air bubble.
 - C. _____ sets the chest wall and underlying tissues in _____, producing _____ and _____.
 - D. _____ refers to the _____
_____ transmitted through the _____ to the _____ as the patient is _____.
 - E. Try to visualize the _____
_____, and compare one side with the other, so that the _____ serves as his or her own _____.
 - F. Cough is typically a _____
_____ to stimuli that _____
receptors in the _____,
_____, or _____
_____.
2. List the groups for whom the CDC recommends the pneumococcal vaccine.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 - F. _____

3. List the sources of chest pain.

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____

- F. _____
 G. _____
 H. _____
 I. _____

Activity B MATCHING

4. Match the type of breath sound with its description (breath sounds may have multiple descriptions).

Answer	Description	Type of Breath Sound
	Musical, prolonged	A. Crackles (or rales)
	Discontinuous	B. Wheezes and rhonchi
	Soft, high pitched, very brief	C. Fine crackles
	Continuous	D. Course crackles
	Like dots in time	E. Wheezes
	Relatively high pitched with hissing or shrill quality	F. Rhonchi
	Somewhat louder, lower in pitch, brief (20–30 msec)	
	Relatively low pitched with snoring	
	Like dashes in time	
	Intermittent, nonmusical, and brief	

5. Match the respiratory term with its description.

Answer	Term	Description
	Dyspnea	A. Inspiratory and expiratory sounds about equal in length
	Wheezes	B. Fade away about one third of the way through expiration
	Cough	C. Suggest partial airway obstruction from secretions, tissue inflammation, or a foreign body
	Bronchovesicular sounds	D. Have a short silence between inspiratory and expiratory sounds
	Vesicular sounds	E. May be caused by inflammation of the respiratory mucosa or tension in the air passages from a tumor or enlarged peribronchial lymph nodes
	Bronchial sounds	F. Shortness of breath

6. Match the disease process to its corresponding location of chest pain.

Answer	Disease Process	Corresponding Location of Chest
	Tracheobronchitis	A. Retrosternal or across the anterior chest
	Pericarditis	B. Precordial, below the left breast, or across the anterior chest
	Dissecting aortic aneurysm	C. Retrosternal, may radiate to the back
	Reflex esophagitis	D. Often below the left breast
	Diffuse esophageal spasm	E. Sometimes radiating to the shoulders, arms, neck, lower jaw, or upper abdomen
	Costochondritis	F. Upper sternal or on either side of the sternum
	Pleuritic pain	G. Retrosternal, may radiate to the back, arms, and jaw
	Anxiety	H. Anterior chest, radiating to the neck, back, or abdomen
	Angina pectoris	I. Precordial, may radiate to the tip of the shoulder and to the neck
	Myocardial infarction	J. Chest wall overlying the process

Activity C SHORT ANSWER

7. Explain how to locate findings on the chest.

8. Discuss adventitious breath sounds and their causes.

9. Discuss the physical findings in some chest disorders

10. Discuss the initial survey of respiration and the thorax.

Activity D NCLEX STYLE QUESTIONS

11. What is the best guide to make vertical locations on the chest?

- Midclavicular line
- Sternal angle
- Angle of Henri
- 5th intercostal space

12. When assessing the posterior chest, what is a starting point for counting ribs and inter-spaces?

- 6th rib
- 8th rib
- 10th rib
- 12th rib

13. Which ribs are considered “floating ribs”?

- 11th and 12th
- 10th and 11th
- 9th and 10th
- 8th and 9th

14. When assessing posteriorly, where would the trachea bifurcate into its mainstem bronchi?

- Sternal angle
- T4 spinous process
- Suprasternal notch
- Midaxillary line

15. Dyspnea, an uncomfortable awareness of breathing that is inappropriate to the level of exertion, is what?
- Audible breathing
 - Painful breathing
 - Air hunger
 - Prolonged inspiration
16. A 25-year-old male patient is brought to the emergency department by ambulance after being involved in a motor vehicle accident. You find that he has decreased breath sounds over the left lung fields. What might you suspect is the cause?
- Pneumothorax
 - COPD
 - Muscular weakness
 - Pulmonary embolism
17. When assessing the breath sounds of a newly admitted patient, the nurse notes increased transmission of voice sounds over the right lung. What would this indicate to the nurse?
- The lung is full of fluid
 - The lung has an embolus
 - The lung is overinflated
 - The lung has become airless
18. What replaces resonance when fluid or solid tissue replaces air-containing lung or occupies the plural space?
- Hyperresonance
 - Dullness
 - Tympany
 - Chief complaint
19. What associated symptoms might a patient with a history of chronic bronchitis have? (Mark all that apply.)
- Orthopnea
 - Chronic productive cough
 - Paroxysmal nocturnal dyspnea
 - Recurrent respiratory infections
 - Wheezing
20. You are caring for an 80-year-old Hispanic woman who is 48 hours postop from the repair of a fractured hip. She has a sudden onset of dyspnea without pain. What disease process would you suspect?
- Left ventricular failure
 - Asthma
 - Pulmonary embolism
 - Chronic lung disease

SECTION III: CASE STUDY

Activity E

Stan Conner, 62 years old, presents at the clinic with a chief complaint of malaise. He tells the nurse, "I just don't feel good." Vital signs are T 39°C; respirations 25 and shallow; HR 100 bpm; BP 125/85. Past history indicates Mr. Conner has been a pack-a-day smoker for 30 years. Family history is positive for paternal COPD and lung cancer.

- a. What would be important when considering further assessment on this patient?

Mr. Conner is being evaluated for COPD.

- b. Develop a teaching plan for Mr. Conner.

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

RESPIRATORY SYSTEM	
Patient Name _____	Date/Time _____
Overview. _____	
Identifying Data _____	
Source and Reliability _____	
Common or Concerning Symptoms _____	
History of Present Illness	
Onset _____	
Location _____	
Duration _____	
Characteristic symptoms _____	
Associated manifestations _____	
Relieving/exacerbating factors _____	
Treatment _____	
Past History	
Have you had any prior respiratory problems? _____	
Have you had thoracic surgery, biopsy, or trauma to your chest? _____	
Do you have any allergies that affect your breathing or respiratory system? _____	
Have you had tuberculosis skin testing (purified protein derivative [PPD]) or a chest x-ray? When? What were the results? _____	
Have you had any other pulmonary testing? When? What were the results? _____	
Have you had an influenza immunization? When? _____	
Have you had the Tdap version of the tetanus immunization? _____	
If the client is over 65 years of age, inquire whether he or she had pneumococcal or varicella zoster immunizations. _____	
Have you traveled outside the United States within the past 6 months? If yes, where? _____	
Have you been in contact with anyone with severe acute respiratory syndrome (SARS) or suspected of having SARS? _____	
Health Maintenance	
Immunizations _____	
Screening tests _____	
Safety measures _____	
Family History	
Does anyone in your family currently have a respiratory infection or disease? _____	
Has anyone had lung cancer, asthma, or cystic fibrosis? _____	
Did anyone smoke in your home when you were growing up? _____	
Lifestyle and Personal Habits	
Do you smoke or have you ever smoked tobacco or marijuana? _____	
How many cigarettes or packs per day do you smoke? _____	
When did you start? How long have you smoked/did you smoke? _____	
Do you use or have you ever used snuff? _____	
Do you chew or have you ever chewed tobacco? _____	
Are you exposed to second-hand smoke? _____	
How many hours per day? For how many years? _____	
Are you exposed to any environmental conditions at home or work that affect your breathing (e.g., mold, sawdust, asbestos, coal dust, insecticides, radon, paint, or pollution)? _____	

Are you taking any prescription, herbal, or over-the-counter (OTC) medications for breathing or respiratory problems? _____

Do you use oxygen or other treatments for breathing problems (e.g., nebulizer treatments)? _____

Physical Examination _____

Overview _____

Initial survey of respiration and the thorax _____

Examination of the posterior chest

Deformities or asymmetry _____

Abnormal retraction of the intercostal spaces during inspiration _____

Impaired respiratory movement on one or both sides or a unilateral lag (or delay) in movement _____

Palpation _____

Identify tender areas. _____

Assess any observed abnormalities. _____

Test chest expansion. _____

Feel for tactile fremitus. _____

Palpate and compare symmetric areas. _____

Percussion _____

Auscultation _____

Breath sounds _____

Adventitious sounds _____

Transmitted voice sounds _____

Examination of the anterior chest

Inspection _____

Deformities or asymmetry _____

Work of breathing _____

Local lag or impairment in respiratory _____

Movement _____

Palpation _____

Identify tender areas. _____

Assess any observed abnormalities. _____

Test chest expansion. _____

Feel for tactile fremitus. _____

Palpate and compare symmetric areas. _____

Percussion _____

Auscultation _____

Breath sounds _____

Adventitious sounds _____

Transmitted voice sounds _____

Health Promotion and Counseling

Tobacco cessation _____

Immunizations (adults) _____

The Cardiovascular System

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Describe the structure and functions of the heart and great vessels.
2. Identify the landmarks and key auscultation sites of the precordium.
3. Describe the electrical conduction system of the heart.
4. Explain the normal electrocardiogram waveform pattern.
5. Describe the two phases of the mechanical heart cycle.
6. Describe the normal heart sounds and their origin.
7. Describe extra heart sounds and their origin.
8. Obtain an accurate history of the cardiovascular system.
9. Appropriately prepare and position the client for the cardiovascular examination.
10. Describe the equipment necessary to perform a cardiovascular examination.
11. Inspect, palpate, and auscultate the jugular veins and carotid arteries of the neck.
12. Inspect, palpate, and auscultate the precordium to evaluate cardiovascular status.
13. Discuss risk factors for coronary heart disease.
14. Discuss risk reduction and health promotion strategies to reduce coronary heart disease.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. The area of the exterior chest that _____ the heart and great vessels is called the _____.
 - B. To reduce the risk for _____, counsel patients to pursue _____, or exercise that increases _____, for at least _____ on most days of the week.
 - C. _____ of heart sounds and murmurs is an _____ of physical examination that leads directly to several _____.
 - D. If an impulse or heave is _____, assess its _____, _____, and _____.
 - E. To assess duration, listen to the _____ as you feel the _____, or watch the movement of your stethoscope as you _____ at the _____.
 - F. Carefully _____ the anterior chest for the _____ of the apical impulse or _____ of _____ or _____ over the precordium, which indicate increased _____.

- G. Note the _____ of sounds in terms of _____ and their distance from the _____ or _____ lines.
- H. The _____ provides valuable information about the patient's _____ and _____.
2. List the lifestyle modifications to prevent cardiovascular disease and stroke.
- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
3. List the components of the cardiovascular examination.
- A. _____
- B. _____
- C. _____
- D. _____
- E. _____

Activity B MATCHING

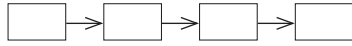
4. Match the heart rhythm with its usual resting rate.

Answer	Heart Rhythm	Usual Resting Rate
	Ventricular tachycardia	A. <60
	Second-degree AV block	B. 100–175
	Complete heart block	C. 100–180
	Atrial flutter with a regular ventricular response	D. 60–100
	Sinus tachycardia	E. <40
	Sinus bradycardia	F. 150–250
	Normal sinus rhythm	G. 110–250
	Supraventricular (atrial or nodal) tachycardia	H. 60–90

5. Match the description with the correct gradation of murmur.

Answer	Gradation of Murmur	Description
	Grade 1	A. Loud, with palpable thrill
	Grade 2	B. Very loud, with thrill; may be heard when the stethoscope is partly off the chest
	Grade 3	C. Very loud, with thrill; may be heard with stethoscope entirely off the chest
	Grade 4	D. Quiet, but heard immediately after placing the stethoscope on the chest
	Grade 5	E. Very faint; heard only after listener has "tuned in"
	Grade 6	F. Moderately loud

6. Put the steps of the cardiac examination in the correct sequence.
 - A. Listen at the 2nd right and left intercostal spaces.
 - B. Listen at the right sternal border.
 - C. Inspect and palpate the precordium.
 - D. Palpate the apical impulse.



Activity C SHORT ANSWER

7. Describe the sequence of the cardiac examination.

8. Explain the circulation of blood through the heart.

9. Explain the heart wall.

10. Discuss the conduction system of the heart.

Activity D NCLEX STYLE QUESTIONS

11. What is located at the right and left 2nd intercostal spaces next to the sternum?
 - a. "Base of the heart"
 - b. Apex of the heart
 - c. Pulmonary vein
 - d. Aortic valve
12. When a patient is obese or has a thick chest wall, what is difficult to palpate?
 - a. Thrill
 - b. Apical impulse
 - c. Grade 4 murmur
 - d. Sternal angle
13. What is the normal peak pressure of the left ventricle?
 - a. 90 mm Hg
 - b. 100 mm Hg
 - c. 110 mm Hg
 - d. 120 mm Hg
14. A 78-year-old male Hispanic patient is noted to have a pathologic change in ventricular compliance. What information from the cardiac assessment would indicate this?
 - a. A split S_2
 - b. An S_3 gallop
 - c. A delayed S_3
 - d. A weak S_4
15. What are the components of S_1 ? (Mark all that apply.)
 - a. An earlier aortic sound
 - b. An earlier mitral sound
 - c. A later pulmonic sound
 - d. A later tricuspid sound
 - e. An earlier tricuspid sound
16. Your patient asks you what the small P wave on her ECG indicates. What would you answer?
 - a. Atrial depolarization
 - b. Ventricular depolarization
 - c. Atrial repolarization
 - d. Ventricular repolarization
17. What term is used to describe the degree of vascular resistance to ventricular contraction?
 - a. Contractile overload
 - b. Volume overload
 - c. Preload
 - d. Afterload
18. When, in the cardiac cycle, does blood pressure peak?
 - a. Preload
 - b. Systole
 - c. Diastole
 - d. Afterload

19. Over a 24-hour period there is a striking variation in blood pressure levels. What can cause these variations? (Mark all that apply.)
- Time of day
 - Sugar ingestion
 - Size of meals
 - Noise
 - Environmental temperature
20. What do the oscillations in the internal jugular veins reflect?
- Changing pressures within the right atrium
 - Changing pressures within the left atrium
 - Changing pressures within the right ventricle
 - Changing pressures within the left ventricle

SECTION III: CASE STUDY

Activity E

Sam Simmons, age 57, is an African American man who works for the post office. He is 6' tall and weighs 182 pounds. Vital signs are T 37°C; HR 95; BP 138/88; pain level 0. He presents at the clinic with a chief complaint of "just not feeling well."

- a. How would you assess Mr. Simmons for hypertensive risks?

On auscultation you hear a heart murmur.

- b. How would you identify Mr. Simmons' heart murmur?

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

THE CARDIOVASCULAR SYSTEM	
Name _____	Date/Time _____
Overview. _____	
Identifying Data _____	
Common or Concerning Symptoms	
Chest pain _____	
Pain or discomfort radiating to the neck, left shoulder or arm, and back _____	
Nausea _____	
Diaphoresis _____	
Arrhythmias: skipped beats, palpitations _____	
Dyspnea _____	
Orthopnea or paroxysmal nocturnal dyspnea _____	
Cough _____	
Edema _____	
Nocturia _____	
Fatigue _____	
Cyanosis or pallor _____	
Cardiac History	
Do you have any past history of heart problems or heart disease? _____	
Do you have a history of: _____	
Heart murmur? _____	
Congenital heart disease? _____	
Rheumatic fever? _____	
Hypertension? _____	
Elevated cholesterol or triglycerides? _____	
Peripheral arterial disease? _____	
Cerebral arterial disease? _____	
Diabetes? _____	
When were your last ECG, cholesterol measurement, and other heart tests? What were the results? _____	
Family History	
Is there any family history of coronary artery disease, hypertension, sudden death at younger than 60 years of age, stroke, diabetes, or obesity? _____	
Lifestyle Habits	
Nutrition _____	
Smoking _____	
Alcohol _____	
Exercise: Describe your daily or weekly exercise: type and amount _____	
Medications/drugs _____	
Physical Examination	
Blood pressure and heart rate _____	
Face _____	
Great vessels of the neck _____	
Inspection and palpation of the precordium _____	
Auscultation of normal and extra heart sounds _____	
Peripheral edema _____	

The Peripheral Vascular System and Lymphatic System

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the locations of the peripheral pulses.
2. Obtain an accurate history of the peripheral vascular system.
3. Describe the structure and functions of arteries, veins, and lymph vessels and nodes.
4. Appropriately prepare and position the client for the peripheral vascular examination.
5. Describe the equipment necessary to perform a peripheral vascular examination.
6. Evaluate and interpret variations in pulse rhythm, rate, and amplitude.
7. Discuss risk factors for peripheral artery disease, chronic venous stasis, and thromboembolic disease.
8. Discuss risk reduction and health promotion strategies to reduce peripheral vascular disease.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

- A. _____ is caused by _____

_____ secondary to deep vein thrombosis or prolonged increased venous pressure as seen in _____ or _____.

- B. An _____ is a _____ in the walls of arteries.
- C. _____ and _____ of DVT are critical nursing tasks, especially in the care of hospitalized patients and patients with _____.
- D. Capillaries have an endothelial cell lining but no _____, facilitating _____ of _____ and _____.
- E. The aorta and its immediate branches are _____ or _____ arteries, such as the _____, _____, and _____ arteries.
- F. Dislodgement of the _____ produces an _____ that can travel to the _____, causing _____ and _____.

2. List the important topics for health promotion and counseling for arterial disease.

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____
 F. _____
 G. _____
 H. _____

3. List the parts of a comprehensive health history.

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____
 F. _____
 G. _____

Activity B MATCHING

4. Match the type of peripheral vascular disorder with the location of the pain it causes.

Answer	Peripheral Vascular Disorder	Location of Pain
	Acute arterial occlusion	A. Diffuse aching of the leg(s)
	Intermittent claudication	B. Tight, bursting pain, if present, usually in the calf; may be painless
	Compartment syndrome	C. An arm or a leg
	Chronic venous insufficiency (deep)	D. Intermittent claudication, particularly in the arch of the foot
	Atherosclerosis—rest pain	E. Pain in a local area along the course of a superficial vein
	Raynaud disease and phenomenon	F. Distal pain, usually involving the foot and leg
	Superficial thrombophlebitis	G. Distal pain, in the toes or forefoot
	Deep venous thrombosis (DVT)	H. Usually calf muscles
	Thromboangiitis obliterans (Buerger disease)	I. Distal portions of one or more fingers
	Acute lymphangitis	J. Tight, bursting pain in calf muscles, usually in the anterior tibial compartment

5. Match the score of the ankle–brachial Index with the interpretation of the score (with a range of 0.90 to 1.30).

Answer	Interpretation of Score	Score
	Normal lower extremity blood flow	A. <0.39
	Mild PAD	B. <0.59 to >0.40
	Moderate PAD	C. >0.90
	Severe PAD	D. <0.89 to >0.60

6. Match the type of ulcer to its corresponding definition.

Answer	Ulcer Type	Definition
	Chronic venous insufficiency ulcer (c)	A. Develops in pressure points of areas with diminished sensation
	Arterial insufficiency ulcer (h)	B. Usually appears over the medial and sometimes the lateral malleolus
	Neuropathic ulcer (a)	C. Occurs in the toes, feet, or possibly areas of trauma

Activity C SHORT ANSWER

7. Explain how you use the ankle–brachial index.

8. Discuss the different types of edema.

9. Discuss chronic arterial insufficiency.

10. Discuss chronic venous insufficiency.

Activity D NCLEX STYLE QUESTIONS

11. What is the Virchow triad? (Mark all that apply.)

- a. Arterial stasis
- b. Hypercoagulability
- c. Vessel wall damage
- d. High fat content in blood
- e. Venous stasis

12. What is a long-term complication of peripheral vascular disease?

- a. Decreased circulation
- b. Thickened skin
- c. Amputation
- d. Loss of hair

13. The nurse is testing the valvular competency of the saphenous system. What test is she performing on the patient?

- a. Trendelenburg test
- b. Ankle–brachial index test
- c. Allen test
- d. Venous occlusion test

14. You are studying the peripheral vascular system so you would know that the vasa vasorum is found where?

- a. Inferior vena cava
- b. Superior vena cava
- c. Venous intima
- d. Adventitia of the artery

15. The nursing instructor is discussing the great and small saphenous veins. What would the instructor say connects these two veins?

- a. Bridging veins
- b. Communicating veins
- c. Anastomotic veins
- d. Insight

16. Your patient has a difference between the highest and lowest systolic pressure of 12 mm Hg. What does this indicate? (Mark all that apply.)

- a. Obstructive airway disease
- b. Pericardial tamponade
- c. Possible constrictive pericarditis
- d. Peripheral arterial disease
- e. Complex atheroma

17. What is a function of the lymph system?

- a. Produce antibodies
- b. Clean the blood
- c. Drain lymph fluid from the vascular bed
- d. Transport nutrients to the tissues

18. You are preparing a class presentation on edema. What mechanisms would you cite as producing edema?
- Arterial insufficiency
 - Low plasma protein levels
 - Capillary leak syndrome
 - Increased capillary blood pressure
 - Hepatic disorders
19. The nurse is assessing a patient with Raynaud disease. When assessing the wrist pulses, what would the nurse expect to find?
- Normal wrist pulses
 - Decreased wrist pulses
 - Bounding wrist pulses
 - Absent wrist pulses
20. While assessing the legs of your patient you note that the legs and feet are cool to the touch. What would you know is most often the cause of bilateral coolness?
- Inadequate arterial circulation
 - Embolism
 - Anxiety
 - DVT

SECTION III: CASE STUDY

Activity E

Mitchell Olson, a 75-year-old white man, is admitted to the unit you are working on. His diagnosis is carotid insufficiency and he is scheduled for surgery in the morning. While you are conducting Mr. Olson's admission assessment he states, "I can't walk but a couple of blocks without getting pain in my legs."

- a. What additional assessments would you know to perform on this patient?

- b. What clinical tests would you do on this patient?

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

THE PERIPHERAL VASCULAR SYSTEM AND LYMPHATIC SYSTEM

Patient Name _____ Date/Time _____

Overview _____

Identifying Data _____

Source and Reliability _____

Common or Concerning Symptoms

Onset _____

Location _____

Duration _____

Characteristic symptoms _____

Associated manifestations _____

Relieving/exacerbating factors _____

Treatment _____

Current Health Status

Medications, especially oral contraceptives or hormone replacement therapy _____

Pregnancy or recent childbirth _____

Inflammatory diseases such as lupus, rheumatoid arthritis, or irritable bowel disease _____

Active cancer _____

Risk factors _____
 Obesity _____
 Smoking _____
 Hyperlipidemia _____
 Constrictive clothing _____
 Central venous lines _____

Past History

Coronary artery disease (CAD) _____
 Heart attack _____
 Congestive heart failure _____
 Stroke (cerebral arterial disease) _____
 Clotting disorders _____
 Hypertension _____
 Diabetes _____
 Problems in circulation, such as blood clots, leg ulcers, swelling, or poor healing of wounds _____
 Major surgery or fracture of a long bone in the past 4 weeks _____

Family History

Peripheral vascular disease _____
 Varicose veins _____
 Abdominal aortic aneurysm _____
 CAD _____
 Sudden death younger than 60 years of age _____
 Diabetes _____

Lifestyle or Health Patterns

Job requiring prolonged standing or sitting _____
 Sedentary lifestyle _____
 Decreased mobility such as paralysis or cast _____

Physical Examination

Important Areas of Examination _____
 Arms _____
 Inspection _____
 Palpation _____
 Legs _____

Health Promotion and Counseling

Arterial disease _____
 Smoking cessation _____
 Weight control _____
 Exercise program _____
 Hypertension control _____
 Hyperlipidemia control _____
 Diabetes management _____
 Limiting alcohol intake _____
 Foot care _____
 Venous disease _____
 Avoidance of prolonged sitting and standing _____
 Avoidance of constrictive clothing, including girdles and tight hose _____
 Exercise program _____
 Weight control _____
 Foot care _____
 Dehydration prevention _____

The Gastrointestinal and Renal Systems

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the landmarks of the abdominal wall and pelvis.
2. Identify the four quadrants and the organs in each quadrant.
3. Perform an accurate health history of the gastrointestinal and renal systems.
4. Describe the physical examination techniques and the order performed to evaluate the gastrointestinal and renal systems.
5. Determine the health promotion and counseling measures related to alcohol abuse, hepatitis, colorectal cancer, and urinary incontinence.
6. Perform and document a complete gastrointestinal and renal system assessment utilizing information from the health history and the physical examination.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

- A. For more chronic symptoms, _____ is defined as _____ or _____ discomfort or pain centered in the _____.

- B. Some acute pain, especially in the _____ area or _____ from the _____, originates in the _____.
 - C. Brownish or blackish _____ with a "_____ " appearance suggests _____ altered by _____.
 - D. Patients may complain of _____ after light or moderate meals, or _____, the inability to eat a full meal.
 - E. _____ pain is felt in the _____ and occasionally in the _____.
 - F. _____ refers to a _____ in 24-hour urine volume, roughly defined as exceeding _____.
 - G. _____ pain, fever, and _____ occur in _____.
 - H. A _____ abdomen with _____ suggests the possibility of _____.
2. List the screening options for colorectal cancer for people at average risk.
- A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____

3. List the risk factors for abdominal aortic aneurysm.

- A. _____
 B. _____
 C. _____
 D. _____

Activity B MATCHING

4. Match the information with the correct variety of hepatitis (varieties of hepatitis may have multiple information data).

Answer	Information	Variety of Hepatitis
	More serious threats to patient health	A. Hepatitis A
	Transmitted by repeated percutaneous exposure to blood	B. Hepatitis B
	Persons with chronic liver disease	C. Hepatitis C
	Sexual contacts	
	Transmission is fecal–oral	
	People with percutaneous (through the skin) or mucosal exposure to blood	
	Transfusion with clotting factors before 1987	
	Undiagnosed liver disease	
	Contamination of water and foods	
	Immune serum globulin can be administered before and within 2 weeks of contact	

5. Match the description with the type of incontinence it is describing.

Answer	Description	Type of Incontinence
	Detrusor contractions are insufficient to overcome urethral resistance.	A. Stress incontinence
	A functional inability to get to the toilet in time	B. Urge incontinence
	Detrusor contractions are stronger than normal and overcome the normal urethral resistance.	C. Overflow incontinence
	May contribute to any type of incontinence	D. Functional incontinence
	The urethral sphincter is weakened so that transient increases in intra-abdominal pressure raise the bladder pressure to levels that exceed urethral resistance.	E. Incontinence secondary to medications

6. Match the cause of a protuberant abdomen to its corresponding reason.

Answer	Cause of Protuberant Abdomen	Reason
	Fat	A. Air-filled bowel is displaced to the periphery
	Gas	B. Bulging flanks that are dull to percussion
	Tumor	C. Causes a tympanitic percussion note
	Pregnancy	D. Most common cause of a protuberant abdomen
	Ascitic fluid	E. Common cause of a pelvic "mass"

Activity C SHORT ANSWER

7. Discuss localized bulges in the abdominal wall.

8. Explain the process for palpating the abdomen, including which organs can be felt and where they can be felt.

9. Explain the patterns and mechanisms of visceral pain.

10. Discuss jaundice.

Activity D NCLEX STYLE QUESTIONS

11. Your patient has a bladder disorder. Where would you expect the pain to be?

- Upper abdomen
- Suprapubic
- Back
- Perineal

12. Which type of incontinence is caused by bladder pressure exceeding urethral pressure?

- Urge incontinence
- Functional incontinence
- Stress incontinence
- Overflow incontinence

13. You are admitting a patient who is in hypertensive crisis. The doctor's notes indicate that bruits that are both systolic and diastolic have been noted and renal artery stenosis is suspected as the cause of the hypertension. Where would you auscultate the patient's abdomen to hear these bruits? (Mark all that apply.)

- Right upper quadrant
- Femoral arteries
- Iliac arteries
- Epigastrium
- Costovertebral angles

14. A 55-year-old African American man presents at the clinic with a chief complaint of "indigestion." The patient tells the nurse, "It usually happens after I do things like mowing the lawn or doing other yard work." What should the nurse suspect?

- Angina
- Ulcer disease
- Aortic aneurysm
- Gallbladder disease

15. Mrs. Wells presents at the clinic with a chief complaint of pain in her upper abdomen. On assessment the nurse notes that Mrs. Wells has recurrent pain, more than two times weekly, in her upper abdomen, and that this recurrent pain started 2 months ago. What term should the nurse use for this type of pain?
- Discomfort
 - Dysphagia
 - Dyspepsia
 - Odynophagia
16. What can cause bladder distention? (Mark all that apply.)
- Medications
 - Stroke
 - Multiple sclerosis
 - Perineal fissure
 - Rectal abscess
17. You are assessing a patient for acute cholecystitis. What sign would you assess for?
- Psoas sign
 - Obstipation sign
 - Murphy sign
 - Cutaneous hyperesthesia
18. Your patient has epigastric pain that is poorly localized and radiates to the back. What would be an important diagnosis to assess for?
- Acute pancreatitis
 - Biliary colic
 - Acute cholecystitis
 - Acute diverticulitis
19. When assessing for an appendicitis, what signs might you look for? (Mark all that apply.)
- Murphy sign
 - Psoas sign
 - Obfuscator sign
 - Rovsing sign
 - Cutaneous hyperesthesia
20. Your patient describes her stool as soft, light yellow to gray, mushy, greasy, foul-smelling, and usually floats in the toilet. What would you suspect is wrong with your patient?
- Malabsorption syndrome
 - Lactose intolerance
 - Crohn disease
 - Ulcerative colitis

SECTION III: CASE STUDY

Activity E

Tiffany Christus, 25 years old, presents at the emergency department with complaints of nausea, vomiting, and acute abdominal pain of rapid onset.

- a. How would you assess this patient?

- b. Describe specific assessments you would make to confirm or rule out acute appendicitis.

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

COMPREHENSIVE ADULT HEALTH HISTORY	
Patient Name _____	Date/Time _____
Overview. _____	
Identifying Data _____	
Source and Reliability _____	
Common or Concerning Symptoms	
Gastrointestinal _____	
Abdominal pain, acute and chronic _____	
Indigestion, nausea, vomiting including blood, loss of appetite, early satiety _____	
Dysphagia and/or odynophagia _____	
Change in bowel function _____	
Diarrhea, constipation _____	
Jaundice _____	
Urinary and Renal _____	
Suprapubic pain _____	
Dysuria, urgency, or frequency _____	
Hesitancy, decreased stream in males _____	
Polyuria or nocturia _____	
Urinary incontinence _____	
Hematuria _____	
Kidney or flank pain _____	
Ureteral colic _____	
Onset _____	
Location _____	
Duration _____	
Characteristic symptoms _____	
Associated manifestations _____	
Relieving factors _____	
Treatment _____	
Past History	
Allergies _____	
Medications _____	
Childhood illnesses _____	
Adult illnesses _____	
Medical _____	
Surgical _____	
Psychiatric _____	
Risk Factors	
Tobacco _____	
Alcohol/drugs _____	
Family History	
Gastrointestinal disease _____	
Urinary tract disease _____	
Review of Systems	
General _____	
Inspection _____	
Skin _____	
Scars _____	

Striae _____
Dilated veins _____
Rashes and lesions _____
Contour of the abdomen _____
Peristalsis _____
Pulsations _____

Auscultation

Bowel sounds _____
Abdominal bruits and friction rub _____

Percussion _____

Palpation

Liver _____
Spleen _____
Kidneys _____
Bladder _____
Aorta _____

Health Promotion

Screening for alcohol abuse _____
Risk factors for hepatitis A, B, and C _____
Screening for colon cancer _____

The Breasts and Axillae

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the structures and function of the breasts and axillae.
2. Perform an accurate health history of the breasts and axillae.
3. Describe the physical examination techniques performed to evaluate the breasts and axillae.
4. Demonstrate how to perform a clinical breast examination.
5. Document a complete breast and axilla assessment utilizing information from the health history and the physical examination.
6. Determine the measures for prevention or early detection of breast cancer.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

- A. The breast is _____, responsive to the changes of _____ and _____.
- B. Lacking _____ and _____ stimulation, ductal branching and development of lobules are _____.
- C. All women should be _____ with the _____ and _____ of their breasts to _____.

- D. Long-standing _____ is usually a _____ of _____ clinical consequence, except for possible _____ when _____.
- E. Occasionally, these signs may be associated with _____ such as _____ or _____.
- F. _____ is best performed when the breast tissue is _____.
- G. Although the _____ may be examined with the patient _____, a _____ is _____.
- H. Clear, serous, green, black, or nonbloody discharges that are _____ usually require only _____.
- I. Masses, nodularity, and change in color or inflammation, especially in the _____, suggest _____ of _____.
- J. _____ breast density has been identified as “the most _____ and _____ risk factor” in studies of breast cancer.

2. List the risk factors for breast cancer.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____

3. List the common types of breast masses.

- A. _____
 B. _____
 C. _____
 D. _____

Activity B MATCHING

4. Match the descriptive information with the correct type of breast lump (type of breast lump will have multiple information data).

Answer	Information	Type of Breast Lump
	Usually single, although may coexist with other nodules	A. Fibroadenoma
	30–50, regress after menopause except with estrogen therapy	B. Cysts
	Well delineated	C. Cancer
	30–90, most common over age 50	
	Very mobile	
	15–25, usually puberty and young adulthood, but up to age 55	
	Often tender	
	Round, disc-like, or lobular	
	Firm or hard	

5. Match the description with the lymph nodes it is describing.

Answer	Description	Nodes
	Drain the posterior chest wall and a portion of the arm	A. Pectoral nodes
	Drain most of the arm	B. Subscapular nodes
	Drain the anterior chest wall and much of the breast	C. Central nodes
	Palpable most frequently	D. Lateral nodes

6. Match the visible sign of breast cancer to its corresponding description.

Answer	Visible Sign	Description
	Skin dimpling	A. Flattened or pulled inward
	Abnormal contours	B. Produced by lymphatic
	Nipple retraction	C. Usually starts as a scaly, eczema-like lesion that may weep, crust, or erode; breast mass may be present
	Peau d'orange (orange peel) sign	D. Look for this sign with the patient's arm at rest, during special positioning, and on moving or compressing the breast
	Edema of the skin	E. Any variation in the normal convexity of each breast
	Paget disease	F. Appears as thickened skin with enlarged pores

Activity C SHORT ANSWER

7. Discuss the challenges of communicating risks and benefits about breast cancer.

8. Explain the process for breast self-examination.

9. Describe the anatomy and physiology of the male breast.

10. Describe the anatomy and physiology of the female breast.

Activity D NCLEX STYLE QUESTIONS

11. The nursing student is learning to palpate the axillary nodes during a breast examination. Which nodes is he or she most likely to palpate?

- Central nodes
- Pectoral nodes
- Subscapular nodes
- Lateral nodes

12. The nursing instructor explains to the students that malignant cells from a breast cancer may spread directly to what nodes?

- Medial nodes
- Lateral nodes
- Supraclavicular nodes
- Infraclavicular nodes

13. When examining a breast, what would you consider a common or concerning symptom? (Mark all that apply.)

- Rash
- Bilateral green nipple discharge
- Breast discomfort
- Rectangular shape
- Edema

14. What is an accurate description of scaling?

- Small indents of the breast tissue
- Thin flakes of keratinized epithelium
- Red, rough patch of skin
- Silvery patches of itchy skin

15. When is the best time for examination of the breast?

- 3 to 5 days after the onset of menstruation
- 3 to 5 days before the onset of menstruation
- 5 to 7 days after the onset of menstruation
- 5 to 7 days before the onset of menstruation

16. Your patient is noted to have thickening of the skin and unusually prominent pores on her right breast. What might you suspect?
- Lymphatic obstruction
 - Inflammation
 - Cyst
 - Fibrocystic disease
17. You instruct your patient to lean forward so you can inspect the breasts. What might this position reveal that is not visible in another position?
- Retraction of the nipple and areola
 - Posttraumatic fat necrosis
 - Asymmetry of the breast or nipple
 - Mammary duct ectasia
18. What pattern of palpation is currently the best validated technique for detecting breast masses?
- Circular pattern
 - Vertical strip pattern
 - Wedge pattern
 - Supra to infra pattern
19. When palpating a breast, what must you examine the breast tissue carefully for? (Mark all that apply.)
- Dimples
 - Nodules
 - Tenderness
 - Consistency
 - Rash
20. You palpate a mobile mass that becomes fixed when your patient's arm relaxes. What would this tell you about the mass?
- It is attached to the ribs and intercostal muscles
 - It is attached to the pectoral fascia.
 - It is attached to the scapular fascia.
 - It is attached to the pectoral and scapular muscles.

SECTION III: CASE STUDY

Activity E

Letitia Gibbison, a 65-year-old African American woman, has come to the clinic for her annual check-up. She is 3 years post-right mastectomy for a cancerous tumor in the tail of Spence.

- a. How would Mrs. Gibbison's breast exam differ from the breast exam of someone who had never had breast cancer?

- b. When teaching Mrs. Gibbison about breast self-examination, what would you teach her about standing for part of the exam?

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

THE BREASTS AND AXILLAE HEALTH HISTORY

Patient Name _____ Date/Time _____

Overview _____

Identifying Data _____

Source and Reliability _____

Common or Concerning Symptoms

Breast lump or mass _____

Breast pain or discomfort _____

Change in shape _____

Nipple discharge _____

Edema _____

Dimpling _____

Rash _____

Onset _____

Location _____

Duration _____

Characteristic symptoms _____

Associated manifestations _____

Relieving factors _____

Treatment _____

History

Medications (current) _____

Medications (past) _____

Pregnancies _____

Menstrual history _____

Previous history of breast cancer and/or reproductive cancer _____

Previous breast biopsy _____

Breast self-examination (BSE) _____

Clinical breast examination (CBE) _____

Mammogram or MRI _____

Family History

Breast cancer _____

Genetic testing _____

Reproductive cancer _____

BRCA testing _____

Lifestyle Habits

Alcohol _____

Physical activity _____

Physical Examination

THE FEMALE BREAST _____

Inspection _____

Arms at sides _____

Arms over head _____

Hands pressed against hips _____

Leaning forward _____

Palpation _____
Right breast _____
Right nipple _____
Left breast _____
Left nipple _____
THE MALE BREAST _____
Inspection _____
Nipple and areola _____
Palpation _____
Nipple and areola _____
THE AXILLAE _____
Inspection _____
Palpation _____
Assessment of Spontaneous Nipple Discharge _____
Examination of the Mastectomy or Breast Augmentation Patient _____
Breast Awareness and Self-Examination Instructions _____
Health Promotion and Counseling
Palpable masses of the breast _____
Assessing risk of breast cancer _____
Breast cancer screening _____

The Musculoskeletal System

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Describe the structure and functions of the bones, muscles, and joints.
2. Identify the key landmarks of each joint.
3. Obtain an accurate history of the musculoskeletal system.
4. Appropriately prepare and position the client for the musculoskeletal examination.
5. Describe the equipment necessary to perform a musculoskeletal examination.
6. Inspect and palpate the joints, bones, and muscles.
7. Describe the range of motion of the major joints.
8. Assess muscle strength using the muscle strength grading scale.
9. Correctly document the findings of the musculoskeletal assessment.
10. Discuss risk factors for osteoporosis.
11. Discuss risk factors for falls.
12. Discuss risk reduction and health promotion strategies to reduce musculoskeletal injuries and disease.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Articular disease typically involves _____ and _____ of the _____ joint and _____ both _____ and _____ range of motion.
 - B. Many of the joints examined are _____, or _____, joints.
 - C. Generalized “_____” are called _____ if they occur in muscles, and _____ if there is pain in a _____ but no evidence of _____.
 - D. _____ is the second most common reason for _____.
 - E. Regular exercise that includes _____ and _____ can increase bone _____ and muscle _____ but has not yet been shown to reduce _____.
 - F. For the older person, _____ intake reduces age-related _____ and increases _____ of newly formed bone.

- G. A _____ drop in bone _____, equivalent to 1.0 _____, is associated with a _____ increase in risk for _____.
- H. _____ percent of patients with _____ hip fractures _____ within 1 year.
- I. Each _____ has its own specific _____ to _____ and _____.
- J. Observe the _____ for the _____ of the _____, the _____ of the _____, and _____ of the _____.

2. List the risk factors for falls.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
- I. _____
- J. _____
- K. _____
- L. _____

3. List the common types of breast masses.

- A. _____
- B. _____
- C. _____
- D. _____

Activity B MATCHING

4. Match the test with what is being tested.

Answer	Test	What Is Being Tested
	Flex the patient's forearm to 90° at the elbow and pronate the patient's wrist. Provide resistance when the patient supinates the forearm.	A. Infraspinatus strength
	Ask the patient to place arms at the side and flex the elbows to 90° with the thumbs turned up. Provide resistance as the patient presses the forearms outward.	B. Supraspinatus strength
	Adduct the patient's arm across the chest.	C. "Drop-arm" sign
	Elevate the arms to 90° and internally rotate the arms with the thumbs pointing down, as if emptying a can. Ask the patient to resist as you place downward pressure on the arms.	D. "Crossover test"
	Ask the patient to fully abduct the arm to shoulder level (or up to 90°) and lower it slowly.	E. Forearm supination

5. Match the description with the foot abnormality it is describing.

Answer	Abnormality	Description
	Neuropathic ulcer	A. A painful conical thickening of skin that results from recurrent pressure on normally thin skin
	Callus	B. Symptoms include hyperesthesia, numbness, aching, and burning from the metatarsal heads into the 3rd and 4th toes.
	Plantar wart	C. Characterized by hyperextension at the metatarsophalangeal joint with flexion at the proximal interphalangeal joint
	Corn	D. The head of the first metatarsal may enlarge on its medial side, and a bursa may form at the pressure point.
	Hammer toe	E. May develop at pressure points on the feet
	Hallux valgus	F. An area of greatly thickened skin that develops in a region of recurrent pressure
	Morton neuroma	G. It may look like a callus or even be covered by one.

6. Match the musculoskeletal entity to its corresponding description.

Answer	Musculoskeletal Entity	Description
	Ankle	A. Include the anterior tibial muscle and the toe extensors
	Transverse tarsal joint	B. A hinge joint formed by the tibia, the fibula, and the talus
	Tibiotalar joint	C. Fans out from the inferior surface of the medial malleolus to the talus and proximal tarsal bones
	Deltoid ligament	D. Powered by the gastrocnemius, the posterior tibial muscle, and the toe flexors
	Knee joint	E. Stabilizes the heel and inverts and everts the forefoot
	Plantar flexion	F. Dorsiflex and plantar flex the foot at the ankle
	Dorsiflexors	G. The largest joint in the body

Activity C SHORT ANSWER

7. Discuss the risk factors for osteoporosis.

8. Explain what is assessed in the general musculoskeletal assessment.

9. Discuss what is involved in assessing muscle bulk.

10. In your own words, discuss the tips for successful examination of the musculoskeletal system.

Activity D NCLEX STYLE QUESTIONS

11. You are testing your patient for extension of the wrist and note weakness on the right side. What central nervous system disease is indicated by your finding?
 - a. Fibromyalgia
 - b. Multiple sclerosis
 - c. Gillian-Barré
 - d. Lyme disease
12. How would you document normal muscle strength?
 - a. 1:1
 - b. 2 & 2
 - c. 4+
 - d. 5/5
13. When examining a patient's musculoskeletal system, you find acute involvement of only one joint. What would this suggest to you? (Mark all that apply.)
 - a. Gout
 - b. Duchenne muscular dystrophy
 - c. Septic arthritis
 - d. Trauma
 - e. Rheumatoid arthritis
14. What is increased muscle tone in both directions that is not rate dependent?
 - a. Rigidity
 - b. Spasticity
 - c. Atrophy
 - d. Atony
15. What are the principal muscles used in opening the mouth?
 - a. Temporalis
 - b. Masseter
 - c. External pterygoids
 - d. Internal pterygoids
16. You are the school nurse in the local high school. You note that a 15-year-old girl carries her left shoulder higher than her right shoulder. What would you assess this student for?
 - a. Torn rotator cuff
 - b. Dislocated shoulder
 - c. Broken clavicle
 - d. Scoliosis
17. The pitcher of the high school baseball team, 16 years old, is brought to the clinic by his mother with a complaint of pain in his right elbow. Where would you expect to locate his tenderness?
 - a. Distal to the right lateral epicondyle
 - b. Distal to the right medial epicondyle
 - c. Over the right olecranon process
 - d. Proximal to the right olecranon bursa
18. Birthmarks, port-wine stains, hairy patches, and lipomas often overlie what?
 - a. Bony defects
 - b. Muscular defects
 - c. Missing bursa
 - d. Malformed ligaments
19. A patient presents at the clinic with a history of cerebral palsy. When examining the patient you note increased resistance that is rate dependent and increases with rapid movement. What would you chart about this patient?
 - a. Patient has rigidity
 - b. Patient demonstrates spasticity
 - c. Patient has muscular atrophy
 - d. Patient demonstrates muscular atony
20. You note that your patient has decreased muscle tone. You know that this can be caused by what? (Mark all that apply.)
 - a. Brain stem injury
 - b. Cerebral disease
 - c. Acute stages of spinal cord injury
 - d. Cerebellar disease
 - e. Disease of the peripheral nervous system

SECTION III: CASE STUDY**Activity E**

Ryne Nordstrom, 16 years old, is injured during a high school basketball game. He is brought to the emergency department by ambulance with a long leg air splint on his left leg. EMTs report that vital signs are HR 130; BP 128/82; RR 21; T 38°C; and pain 10/10.

a. What musculoskeletal assessments would be made on this patient?

b. What diagnostic tests would be completed on this patient?

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

HEALTH HISTORY OF THE MUSCULOSKELETAL SYSTEM

Patient Name _____ Date/Time _____

Overview. _____

Identifying Data _____

Source and Reliability _____

Common or Concerning Symptoms

Joint pain _____

Joint pain associated with systemic symptoms, such as fever, chills, rash, weakness, and weight loss _____

Low back pain _____

Neck pain _____

Bone pain _____

Muscle pain or cramps _____

Muscle weakness _____

Onset _____

Location _____

Duration _____

Characteristic symptoms _____

Associated manifestations _____

Relieving factors _____

Treatment _____

History

Medications (current) _____

Medications (past) _____

Muscle or bone disease (present) _____

Muscle or bone disease (past) _____

Family History

Muscle or bone disease _____

Diabetes _____

Genetic testing _____

Lifestyle Habits

Alcohol _____

Physical activity _____

Physical Examination

Overview _____

Muscle bulk _____

Muscle tone _____

Muscle strength _____

TEMPOROMANDIBULAR JOINT _____

Inspection for joint symmetry, alignment, bony deformities _____

Inspection and palpation of surrounding tissues for skin changes, nodules, muscle atrophy, crepitus _____

Range of motion and maneuvers to test joint function and stability, and integrity of ligaments, tendons, bursae, especially if pain or trauma _____

Assessment of inflammation or arthritis, especially swelling, warmth, tenderness, redness _____

Assessment of muscle strength _____

THE SHOULDER _____

Inspection for joint symmetry, alignment, bony deformities _____

Inspection and palpation of surrounding tissues for skin changes, nodules, muscle atrophy, crepitus _____

Range of motion and maneuvers to test joint function and stability, and integrity of ligaments, tendons, bursae, especially if pain or trauma _____

Assessment of inflammation or arthritis, especially swelling, warmth, tenderness, redness _____

Assessment of muscle strength _____

THE ELBOW _____

Inspection for joint symmetry, alignment, bony deformities _____

Inspection and palpation of surrounding tissues for skin changes, nodules, muscle atrophy, crepitus _____

Range of motion and maneuvers to test joint function and stability, and integrity of ligaments, tendons, bursae, especially if pain or trauma _____

Assessment of inflammation or arthritis, especially swelling, warmth, tenderness, redness _____

Assessment of muscle strength _____

THE WRIST AND HANDS _____

Inspection for joint symmetry, alignment, bony deformities _____

Inspection and palpation of surrounding tissues for skin changes, nodules, muscle atrophy, crepitus _____

Range of motion and maneuvers to test joint function and stability, and integrity of ligaments, tendons, bursae, especially if pain or trauma _____

Assessment of inflammation or arthritis, especially swelling, warmth, tenderness, redness _____

Assessment of muscle strength _____

THE SPINE _____

Inspection for joint symmetry, alignment, bony deformities _____

Inspection and palpation of surrounding tissues for skin changes, nodules, muscle atrophy, crepitus _____

Range of motion and maneuvers to test joint function and stability, and integrity of ligaments, tendons, bursae, especially if pain or trauma _____

Assessment of inflammation or arthritis, especially swelling, warmth, tenderness, redness _____

Assessment of muscle strength _____

THE HIP _____

Inspection for joint symmetry, alignment, bony deformities _____

Inspection and palpation of surrounding tissues for skin changes, nodules, muscle atrophy, crepitus _____

Range of motion and maneuvers to test joint function and stability, and integrity of ligaments, tendons, bursae, especially if pain or trauma _____

Assessment of inflammation or arthritis, especially swelling, warmth, tenderness, redness _____

Assessment of muscle strength _____

THE KNEE _____

Inspection for joint symmetry, alignment, bony deformities _____

Inspection and palpation of surrounding tissues for skin changes, nodules, muscle atrophy, crepitus _____

Range of motion and maneuvers to test joint function and stability, and integrity of ligaments, tendons, bursae, especially if pain or trauma _____

Assessment of inflammation or arthritis, especially swelling, warmth, tenderness, redness _____

Assessment of muscle strength _____

THE ANKLE AND FOOT _____

Inspection for joint symmetry, alignment, bony deformities _____

Inspection and palpation of surrounding tissues for skin changes, nodules, muscle atrophy, crepitus _____

Range of motion and maneuvers to test joint function and stability, and integrity of ligaments, tendons, bursae, especially if pain or trauma _____

Assessment of inflammation or arthritis, especially swelling, warmth, tenderness, redness _____

Assessment of muscle strength _____

Health Promotion Topics

Nutrition, exercise, and weight _____

Low back: lifting and biomechanics _____

Falls: prevention _____

Osteoporosis: screening and prevention _____

Mental Status

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Describe the multiple areas assessed in the mental status examination.
2. Determine the symptoms and behaviors for mental health screening.
3. Obtain an accurate mental status history for a patient.
4. Perform a mini-mental status examination.
5. Identify the screening and health promotion and counseling tools for depression, suicide, and dementia.
6. Correctly document the findings of the mental status assessment.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Despite the prevalence of _____, detection is difficult and _____ and _____ rates are low.
 - B. Alcohol, tobacco, and illicit drugs account for more _____, _____, and _____ than any other _____ condition.
 - C. The U.S. Preventive Services Task Force recommends _____ in clinical settings that can provide _____, _____, and _____.

- D. The _____ that mental disorders impose is _____.
- E. _____ and _____, when observed clinically, provide a _____ of a person's _____.
- F. Note whether _____ and _____ are based on reality or, for example, on _____, _____, or disordered _____ content.
- G. Inquire about _____ in a manner similar to that used for _____.
- H. Watch for _____ in _____ with _____ under _____.
- I. _____ nurses may feel _____ to perform mental status examinations, wondering if it will _____ patients or _____.
- J. Two thirds of patients with _____ present with _____, and half report _____ unexplained _____ or _____ symptoms.

2. List the components of a mental status examination.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____

3. List the patient identifiers for mental health screening.

- A. _____
 B. _____
 C. _____
 D. _____

- E. _____
 F. _____
 G. _____
 H. _____
 I. _____
 J. _____

Activity B MATCHING

4. Match the term to its corresponding description.

Answer	Term	Description
	Level of consciousness	A. Awareness of personal identity, place, and time
	Attention	B. What the patient thinks about
	Memory	C. Distinguishing between daydreams and hallucinations that seem real
	Orientation	D. The ability to focus or concentrate over time on one task or activity
	Perceptions	E. Alertness or state of awareness of the environment
	Thought processes	F. Assessed by vocabulary, fund of information, abstract thinking, calculations, and construction of objects that have two or three dimensions
	Thought content	G. The process of registering or recording information
	Insight	H. A more sustained emotion that may color a person's view of the world
	Judgment	I. A complex symbolic system for expressing, receiving, and comprehending words
	Affect	J. How people think
	Mood	K. An observable, usually episodic, feeling or tone expressed through voice, facial expression, and demeanor
	Language	L. Process of comparing and evaluating alternatives when deciding on a course of action
	Higher cognitive functions	M. Sensory awareness of objects in the environment and their interrelationships

Activity C SHORT ANSWER

5. Discuss the meaning of patient symptoms.

6. Discuss health and human behavior.

7. Discuss unexplained symptoms

8. Discuss what is assessed during the general assessment overview.

9. Discuss suicide.

Activity D NCLEX STYLE QUESTIONS

10. What percent of the population identified as drug abusers abuse marijuana?
- 60%
 - 50%
 - 40%
 - 30%
11. The outcome and costs of care of what diseases improve when depression is treated? (Mark all that apply.)
- HIV/AIDS
 - Dementia
 - Kidney disease
 - Diabetes
 - Liver disease
12. When depression goes undiagnosed, what consequences occur eight times more frequently than in the general population?
- Polyhedonia
 - Comorbidity
 - Death
 - Bankruptcy
13. Which patients are most at risk for depressive symptoms? (Mark all that apply.)
- Married
 - Divorced
 - Females
 - Males
 - Chronically ill
14. Nurses are urged to conduct what kind of mental health screenings?
- General
 - Targeted
 - Focal
 - Mini
15. As a nurse, when do you screen for alcohol and drug use?
- Every patient/every patient history
 - Every patient/initial assessment
 - At-risk patient/every patient history
 - At-risk patient/initial assessment
16. When assessing your patient you note that he is delusional. You would know that delusional thinking can lead to what?
- Major depression
 - Suicide
 - Flight of ideas
 - Comorbidity
17. Mr. Hanks, 77 years old, is brought to the clinic by his son, who states, "My father just doesn't seem to be able to function as well as he used to." When assessing this patient the nurse is aware that she will be a what?
- Patient advocate
 - Diagnostician
 - Part of a health care team
 - Referral source
18. You are admitting a patient to your unit for open heart surgery the next morning. You note that the patient speaks at an accelerated pace and jumps from topic to topic, none of which progresses to sensible conversation. What would you document about this patient?
- Patient demonstrates confabulation
 - Patient is incoherent
 - Patient demonstrates flight of ideas
 - Patient demonstrates schizophrenia
19. You are assessing a patient with a history of Korsakoff syndrome. What would you expect this patient might demonstrate?
- Psychotic tendencies
 - Incoherence
 - Flight of ideas
 - Confabulation

SECTION III: CASE STUDY

Activity E

Belinda McGuire, 33 years old, presents at the clinic with vague complaints of aching joints, headache, and chronic fatigue. Vital signs are: temperature 37.9°C; BP 120/80; pulse 75; respirations 16; and pain 5/10. All physical findings are normal. She is tearful and responds only when spoken to.

a. How would you assess this patient?

b. What nursing diagnoses would you identify for this patient?

SECTION IV: ROLE PLAY

Demographics: 45 year old, married, lives in townhouse with wife. Plumber, self-employed.

Scenario: Referred by family physician for assessment after being arrested for DWI for the second time in 12 months.

Past medical history: 20-year history of alcohol use. No chronic illnesses.

Family history: Grandfather, father, and one sister "have drinking problem." No other significant family history.

Behavior during interview: Anxious, does not want to discuss alcohol use. Denies having a problem; states, "I only drink beer. I don't touch the hard stuff."

Presenting information: Appears well groomed.

Physical findings during assessment: Temperature 36.6°C tympanic; pulse 118; R 20; BP 108/66. Skin warm, pink, dry. Odor of alcohol on breath.

Using the information from the role play, write an assessment note including nursing diagnosis.

Nursing diagnosis or problem: _____

Signature _____ Date _____

SECTION V: DOCUMENTATION

FORM FOR USE IN PRACTICE

MENTAL HEALTH HISTORY

Patient Name _____ Date/Time _____

Overview. _____

Identifying Data _____

Source and Reliability _____

Common or Concerning Symptoms

Changes in attention, mood, or speech _____

Changes in insight, orientation, or memory _____

Delirium or dementia _____

Onset _____

Location _____

Duration _____

Characteristic Symptoms _____

Associated manifestations _____

Relieving factors _____

Treatment _____

History

Medications (current) _____

Medications (past) _____

Chronic Illness _____

Mental/emotional disease (present) _____

Mental/emotional disease (past) _____

Family History

Mental/emotional disease _____

Chronic illness _____

Genetic testing _____

Lifestyle Habits

Alcohol _____

Tobacco _____

Drugs _____

Physical activity _____

Physical Examination

Overview _____

APPEARANCE AND BEHAVIOR _____

Level of consciousness _____

Posture and motor behavior _____

Dress, grooming, and personal hygiene _____

Facial expression _____

Manner, affect, and relationship to people and things _____

SPEECH AND LANGUAGE

Quantity _____

Rate _____

Loudness _____

Articulation of words _____

Fluency _____

MOOD _____

THOUGHT AND PERCEPTIONS _____

Thought processes _____

Thought content _____

Perceptions _____

Insight and judgment _____

COGNITIVE FUNCTIONS _____

Orientation _____

Attention _____

Remote memory _____

Recent memory _____

New learning ability _____

HIGHER COGNITIVE FUNCTIONS _____

Information and Vocabulary _____

Calculating Ability _____

Abstract Thinking _____

Constructional Ability _____

Health Promotion Topics

Screening for depression _____

Screening for suicide _____

Screening for alcohol and substance abuse _____

Screening for dementia _____

The Nervous System

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Describe the structure and function of the nervous system.
2. Obtain an accurate history of the neurologic system.
3. Identify the cranial nerves and the motor and sensory functions.
4. Perform a screening neurologic examination.
5. Assess level of consciousness utilizing the Glasgow Coma Scale.
6. Document the findings of the nervous system examination.
7. Discuss risk reduction and health promotion strategies to reduce strokes.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Often the patient's mental status offers clues about _____, _____, and other _____.
 - B. Deep in the brain lies the _____, which affects _____, and the _____ and the _____ structures in the _____.
 - C. The _____, which lies at the _____ of the brain, coordinates all _____ and helps maintain the body _____ in space.
 - D. The _____, which connects the _____ of the brain with the _____, has three sections: the _____, the _____, and the _____.
 - E. The spinal cord is divided into _____ segments: _____, _____, _____, and _____.
 - F. Three kinds of _____ impinge on the anterior horn cells: the _____, the _____ system, and the _____ system.
 - G. Sudden _____ brain damage involving the _____ may produce a _____, which _____ in its course is _____.
 - H. _____ refers to a defect in the _____ control of the speech _____.
 - I. _____ begin with _____ body movements, impairment of _____, or _____.
 - J. Observe the _____ for the _____ of the _____, the _____ of the _____, and _____ of the _____.

2. List the cranial nerves.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
- I. _____

- J. _____
- K. _____
- L. _____

3. List the warning signs of stroke.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____

Activity B MATCHING

4. Match the level of consciousness with the definition.

Answer	Level of Consciousness	Definition
	Alertness	A. Arouses from sleep only after painful stimuli. Verbal responses are slow or even absent.
	Lethargy	B. Opens the eyes and looks at you, but responds slowly and is somewhat confused
	Obtundation	C. Unarousable with eyes closed
	Stupor	D. Opens the eyes, looks at you, and responds fully and appropriately
	Coma	E. Appears drowsy but opens the eyes and looks at you, responds to questions, and then falls asleep

5. Match the disorder of muscle tone with the location of the lesion.

Answer	Disorder of Muscle Tone	Location of Lesion
	Spasticity	A. Lower motor neuron system at any point from the anterior horn cell to the peripheral nerves
	Rigidity	B. Both hemispheres, usually in the frontal lobes
	Flaccidity	C. Upper motor neuron of the corticospinal tract at any point from the cortex to the spinal cord
	Paratonia	D. Basal ganglia system

6. Match the gait/posture to its description.

Answer	Gait/posture	Description
	Spastic hemiparesis	A. Patients appear to be walking through water.
	Steppage gait	B. Gait is unsteady and wide based. Patients throw their feet forward and outward and bring them down, first on the heels and then on the toes, with a double tapping sound.
	Parkinsonian gait	C. Gait is staggering, unsteady, and wide based, with exaggerated difficulty on turns.
	Scissors gait	D. Poor control of flexor muscles during swing phase
	Cerebellar ataxia	E. Posture is stooped, with flexion of head, arms, hips, and knees. Patients are slow getting started.
	Sensory ataxia	F. Patients either drag the feet or lift them high, with knees flexed, and bring them down with a slap onto the floor, thus appearing to be walking up stairs.

Activity C SHORT ANSWER

7. Explain nystagmus.

8. Discuss the disorders of speech.

9. Discuss peripheral nerves.

10. Discuss the spinal cord.

Activity D NCLEX STYLE QUESTIONS

11. Which of the following are types of diabetic neuropathies? (Mark all that apply.)

- a. Diabetic amyotrophy
- b. Autonomic dysfunction
- c. Mononeuritis multiplex
- d. Orthostatic hypotension
- e. Gastroparesis

12. Which cranial nerve controls pupillary constriction?

- a. Optic
- b. Oculomotor
- c. Trochlear
- d. Trigeminal

13. Where do the cell bodies of the lower motor neurons lie?

- a. Anterior roots
- b. Neuromuscular junction
- c. Motor strip
- d. Anterior horn cells

14. When assessing your patient you note bradykinesia. You would know that this abnormality is caused by damage to what?

- a. Basal ganglia system
- b. Medulla
- c. Cerebellar system
- d. Brainstem

15. What are attributed to sensory impulses?

- a. Cessation of cough reflex
- b. Stimulation of sneezing
- c. Help regulate internal autonomic functions
- d. Body position in space
- e. Conscious sensation

16. Mr. Clyde presents at the clinic with a complaint of weakness that is made worse with repeated effort and improves with rest. What would you suspect is wrong with Mr. Clyde?
- Multiple sclerosis
 - Lyme disease
 - Myasthenia gravis
 - Parkinson disease
17. You are admitting a patient new to the clinic who has a chief complaint of "My face feels funny." When you assess the patient you find isolated facial sensory loss to pain and no neurologic deficits in his extremities. What would you expect this patient to be diagnosed with?
- Stroke
 - Horner syndrome
 - Bell palsy
 - Trigeminal neuralgia
18. You are assessing your patient's coordination and you find that her movements are clumsy, unsteady, and inappropriately varying in their speed, force, and direction. You note the patient has dysmetria. What would you know this patient has?
- Cerebellar disease
 - Cerebral disease
 - Brainstem disease
 - Basal ganglia disease
19. Your patient is diagnosed with a peripheral neuropathy. You know that often the first sensation lost in a peripheral neuropathy is what?
- Light touch
 - Pain
 - Vibration
 - Temperature
20. What important questions guide the approach to this challenging clinical area? (Mark all that apply.)
- Where does the lesion lie?
 - Is the central nervous system intact?
 - Is the mental status intact?
 - Is the peripheral nervous system intact?
 - Are right-sided and left-sided examination findings symmetric?

SECTION III: CASE STUDY

Activity E

Margaret Blankenship, 76 years old, has fallen down her front steps. She is brought to the emergency department by ambulance with a large bruise on her right temple. EMTs report that vital signs are: HR 120; BP 109/77; RR 16; T 37.5°C; and pain 4/10.

- a. Document a brief neurologic exam on this patient.

- b. What diagnostic tests would be completed on this patient?

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

THE NEUROLOGIC SYSTEM

Patient Name _____ Date/Time _____

Overview _____

Identifying Data _____

Source and Reliability _____

Common or Concerning Symptoms

Headache _____

Dizziness or vertigo _____

Generalized, proximal, or distal weakness _____

Numbness, abnormal or loss of sensations _____

Loss of consciousness, syncope, or near syncope _____

Seizures _____

Tremors or involuntary movements _____

Onset _____

Location _____

Duration _____

Characteristic symptoms _____

Associated manifestations _____

Relieving factors _____

Treatment _____

History

Medications (current) _____

Medications (past) _____

Neurologic disease (present) _____

Neurologic disease (past) _____

Family History

Neurologic disease _____

Genetic testing _____

Lifestyle Habits

Alcohol _____

Tobacco _____

Physical activity _____

Physical Examination _____

Mental Status Exam _____

Level of alertness _____

Appropriateness of responses _____

Orientation to date and place _____

Cranial Nerves _____

Visual acuity _____

Pupillary light reflex _____

Eye movements _____

Hearing _____

Facial strength—smile, eye closure _____

Motor System _____

Strength—shoulder abduction, elbow extension, wrist extension, finger abduction, hip flexion, knee flexion, ankle dorsiflexion _____

Gait—casual, tandem _____

Coordination—fine finger movements, finger-to-nose _____

Sensory System _____

One modality at toes—can be light touch, pain/temperature, or proprioception _____

Reflexes _____

Deep tendon reflexes—biceps, patellar, Achilles _____

Plantar responses _____

Health Promotion Topics

Preventing stroke or transient ischemic attack (TIA) _____

Reducing risk of peripheral neuropathy _____

Reproductive Systems

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Describe the anatomy and physiology of the female and male reproductive systems.
2. Conduct a focused interview to obtain patient history pertinent to the reproductive system.
3. Explain appropriate technique in inspecting and palpating external reproductive structures.
4. Discuss factors related to developmental, psychosocial, cultural, and environmental areas that affect the reproductive systems.
5. Differentiate between normal and abnormal findings in the reproductive system.
6. Accurately document subjective and objective data findings related to the reproductive system using the appropriate terminology.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

- A. When detected early, _____ has an _____.
- B. Hernia _____ and _____ are more likely to occur when _____ abdominal _____.
- C. The openings of _____ are located _____ on

either side of the _____
_____ but are not usually visible.

- D. The _____ migrates toward the _____, creating the _____.
 - E. Increased _____ during _____ stimulate the development of _____, including the _____ and _____.
 - F. Lymph from the _____ and _____ drains into the _____.
 - G. Questions about _____, _____, and _____ often give the nurse an opportunity to _____ the _____ and _____ toward her body.
 - H. Obstetricians commonly record the _____ using the "_____" system.
 - I. Patients with _____ or _____ preferences may be _____ or _____ during clinical encounters.
 - J. The woman's _____ to the pelvic examination may reveal _____ about her _____ about the _____ and her _____.
2. List the symptoms of prostate disorders.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
 - F. _____

3. List the phases of a woman's reproductive health.

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____

Activity B MATCHING

4. Match the male reproductive term with its description.

Answer	Term	Description
	Scrotal hernia	A. A congenital displacement of the urethral meatus to the superior surface of the penis
	Hydrocele	B. Seen in congestive heart failure or nephrotic syndrome
	Carcinoma of the penis	C. Comes through the external inguinal ring, so the examining fingers cannot get above it within the scrotum
	Hypospadias	D. An indurated nodule or ulcer that is usually nontender
	Epispadias	E. It transilluminates, and the examining fingers can get above the mass within the scrotum
	Primary syphilis	F. Small scattered or grouped vesicles, 1–3 mm in size, on glans or shaft of penis
	Genital herpes simplex	G. A chancre, or <i>painless</i> erosion up to 2 cm in diameter
	Chancroid	H. Single or multiple papules or plaques of variable shapes
	Scrotal edema	I. A congenital displacement of the urethral meatus to the inferior surface of the penis
	Genital warts	J. A painful deep ulcer with ragged nonindurated margins

5. Match the female reproductive term with its description.

Answer	Term	Description
	Epidermoid cyst	A. A protozoan; often but not always acquired sexually
	Syphilitic chancre	B. Appears as a tense, hot, very tender abscess
	Genital herpes	C. Unpleasant fishy or musty genital odor
	Venereal wart	D. Shallow, small, painful ulcers on red bases
	Bartholin gland infection	E. Most commonly caused by trauma during childbirth, in particular multiple or difficult births
	Trichomonal vaginitis	F. A small, firm, round nodule in the labia that is yellowish in color
	Candidal vaginitis	G. Most develop internally; they often go undetected
	Bacterial vaginosis	H. Result from infection with human papillomavirus
	Uterine prolapse	I. White and curdy discharge

6. Match the abnormality of the male reproductive system to its description.

Answer	Abnormality	Description
	Cryptorchidism	A. Seen in mumps and other viral infections; usually unilateral
	Varicocele of the spermatic cord	B. A painless, movable cystic mass just above the testis
	Acute orchitis	C. Feels like a soft “bag of worms” separate from the testis, and slowly collapses when the scrotum is elevated in the supine patient
	Tumor of the testis	D. Coexisting urinary tract infection or prostatitis supports the diagnosis
	Torsion of the spermatic cord	E. The testis is atrophied and may lie in the inguinal canal or the abdomen, resulting in an unfilled scrotum
	Spermatocele and cyst of the epididymis	F. Most common in adolescents
	Acute epididymitis	G. Usually appears as a painless nodule

Activity C SHORT ANSWER

7. Explain the patient instructions for testicular self-examination.

8. Discuss the risk factors for prostate cancer.

9. Discuss dysmenorrhea.

10. Discuss menopause.

Activity D NCLEX STYLE QUESTIONS

11. What is a lay term for the spontaneous loss of pregnancy?

- a. Missed abortion
- b. Missed pregnancy
- c. Abortion
- d. Miscarriage

12. You are taking a sexual history on a new patient. What action is considered appropriate at this time? (Mark all that apply.)

- a. Encourage the patient to share what they consider pertinent
- b. Affirm that your conversation is confidential
- c. Note that you realize this information is highly impersonal
- d. Explain why you are taking the sexual history
- e. Relate that you gather this history on all your patients

13. A 35-year-old female has come to the clinic for her yearly check-up. During the history the patient tells you that she does not “feel anything” during sex with her husband. You know that a sexual problem is related to what?

- a. A situational factor
- b. A physical factor
- c. A medical factor
- d. A social factor

14. A rape victim is being examined in the emergency department. A special rape kit must be used to ensure what?

- a. Correct equipment is available
- b. Standardized tests are performed
- c. A chain of custody for evidence
- d. Only licensed personnel do the examination

15. What are the indications for a pelvic examination during adolescence? (Mark all that apply.)
- Onset of menarche at age 13
 - Minimal bleeding during menses
 - Dysmenorrhea
 - Prescription of contraceptives
 - Vaginal discharge
16. Mrs. Janis brings her 11- and 13-year-old daughters to the clinic to receive the HPV vaccine. Mrs. Janis wants to know how long her daughters will have immunity once they are vaccinated. What would be the correct response?
- Length of immunity is 5 years
 - Length of immunity is 25 years
 - Length of immunity is lifetime
 - Length of immunity is undetermined
17. Donovan Graham, a 45-year-old black male, tells the nurse that he has little or no interest in sex. He says he is concerned and he knows his wife is unhappy with his lack of libido. What can you tell Mr. Graham causes lack of libido?
- Manic episodes
 - Fatigue
 - Side effects of medications
 - Testosterone hypersecretion
18. You are presenting patient education on STDs to a high school health class. What infection would you tell the students can be transmitted by oral–penile transmission?
- Genital warts
 - Chlamydia
 - Candida* infection
 - Human papillomavirus
19. Your patient states that she does not enjoy sex because she does not attain adequate vaginal lubrication. What would you explain can be the cause of sexual dysfunction? (Mark all that apply.)
- Psychiatric conditions
 - Medical illness
 - Excessive testosterone
 - Sexual preference
 - Lack of estrogen
20. What ethnic group has a significantly higher incidence rate of prostate cancer?
- Native American
 - African American
 - Caucasian
 - Asian

SECTION III: CASE STUDY

Activity E

Sixty-seven-year-old Ernest Rand, a Dutch national, is touring the United States when he comes to an acute care clinic complaining of severe pain on urination.

- a. Describe a physical examination of this patient's penis.

- b. What diagnostic tests would be completed on this patient?

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

THE REPRODUCTIVE SYSTEM

Patient Name _____ Date/Time _____

Overview. _____

Identifying Data _____

Source and Reliability _____

Female Reproductive Tract

Common or Concerning Symptoms

Menarche, menstruation, menopause, postmenopausal bleeding _____

Dysmenorrhea _____

Pregnancy _____

Sexual abuse _____

Vulvovaginal symptoms _____

Sexual preference and sexual response _____

Onset _____

Location _____

Duration _____

Characteristic symptoms _____

Associated manifestations _____

Relieving factors _____

Treatment _____

History

Medications (current) _____

Medications (past) _____

Reproductive disorders (present) _____

Reproductive disorders (past) _____

Family History

Reproductive disorders _____

Genetic testing _____

Lifestyle Habits

Alcohol _____

Tobacco _____

Sexual preference _____

Sexual partners (#) _____

Menarche, menstruation, menopause _____

Obstetric history _____

Pregnancy _____

Contraception _____

Vulvovaginal symptoms _____

Sexual preference and sexual response _____

Sexually transmitted diseases _____

Physical Examination

External Examination _____

Mons pubis _____

Labia majora and minora _____

Urethral meatus, clitoris _____

Vaginal introitus _____

Perineum _____

Internal Examination _____
 Visual _____
 Vagina and cervix _____
 Vaginal muscle tone _____
 Color, ulcerations, inflammation, discharge, or masses _____
 Bimanual examination _____
 Cervix and uterus _____
 Ovaries _____

Health Promotion Topics

Anatomy and physiology of the reproductive system and its changes from puberty to menopause _____
 Cervical cancer screening: Pap smear and human papilloma virus (HPV) infection _____
 Early prenatal care _____
 Options for family planning _____
 Sexually transmitted diseases and HIV _____

Male Reproductive Tract

Common or Concerning Symptoms

Sexual preference and sexual response _____
 Penile discharge or lesions _____
 Scrotal pain, swelling, or lesions _____
 Problems with urination _____
 Onset _____
 Location _____
 Duration _____
 Characteristic symptoms _____
 Associated manifestations _____
 Relieving factors _____
 Treatment _____

History

Medications (current) _____
 Medications (past) _____
 Reproductive disorders (present) _____
 Reproductive disorders (past) _____

Family History

Reproductive disorders _____
 Genetic testing _____

Lifestyle Habits

Alcohol _____
 Tobacco _____
 Sexual preference _____
 Sexual partners (#) _____

Physical Examination

The Penis _____
 Inspection _____
 The Scrotum and its contents _____
 Inspection _____
 Hernias _____
 Inspection _____

Important Topics for Health Promotion and Counseling

Prevention of STDs and HIV _____
 Testicular self-examination _____
 Screening for prostate cancer _____

Putting It All Together

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Identify the components of the physical examination.
2. Identify the best approach for the physical examination based on individual patient needs.
3. Utilize lighting and the environment to ensure an accurate physical examination.
4. Demonstrate a head-to-toe physical examination.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Generally, a _____ is performed on _____ or _____ to a health care facility.
 - B. Generally, a _____ is performed in a _____-_____ sequence comparing _____ to _____ for symmetry.
 - C. Determining the most _____ for you to perform the physical examination is the _____.
 - D. During the _____, remember to consider the _____.

E. As a _____, your examination of the patient should take _____

_____ from start to finish.

F. If an _____ is missed, it may be _____ at another _____ in the exam.

G. It is recommended that _____ be inserted at the _____ or at the _____ of the examination to _____ the patient _____ another time.

H. The integration of the _____ and _____ data guides the _____ in preparing the best _____ of _____ for the patient.

2. List the symptoms of prostate disorders.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
- I. _____
- J. _____
- K. _____
- L. _____
- M. _____
- N. _____

- O. _____
- P. _____
- Q. _____
- R. _____
- S. _____
- T. _____
- U. _____
- V. _____

Activity B SHORT ANSWER

3. Explain the examination of the nose and sinuses.

4. Discuss the peripheral vascular examination.

5. Discuss the health assessment.

6. Describe how you would assess the posterior thorax.

Activity C NCLEX STYLE QUESTIONS

7. You have a hand-held Snellen. Where would you appropriately assess visual acuity?
 - a. General assessment
 - b. Eye assessment
 - c. Beginning of exam
 - d. End of exam

8. It is important to apprise the patient of what you are doing and what you find as it does what?
 - a. Relaxes the patient
 - b. Lets the patient know you know what you are doing
 - c. Opens up teaching/learning moments
 - d. Instills a friendly feeling for you in the patient
9. You are preparing to enter your patient's room. What would you assess first?
 - a. Your demeanor
 - b. Hand cleanliness
 - c. Patient's chart
 - d. Your breathing
10. At the beginning of the exam you would perform a general survey. What would you assess at this time?
 - a. Height
 - b. Weight
 - c. Pain
 - d. Safety
11. When inspecting the face for facial symmetry, what would you have the patient do? (Mark all that apply.)
 - a. Raise eyebrows
 - b. Frown
 - c. Grin
 - d. Stick out tongue
 - e. Close eyes

SECTION III: CASE STUDY

Activity D

Lucy Linquist, a 27-year-old elementary school teacher, comes to the emergency department after being in a motor vehicle accident. She complains of pain in the abdomen. Vital signs are as follows: T 36.9°C; pulse 125; BP 80/50; R 26; and pain 7/10.

- a. What physical assessment would be indicated for this patient?

The patient is found to have a ruptured kidney.

- b. What diagnostic tests would you expect to be run on this patient?

SECTION IV: ROLE PLAY

Demographics: 19 year old, single, lives in dormitory. College freshman.

Scenario: Comes to the student clinic for a physical assessment before playing college volleyball.

Past medical history: No chronic illness; childhood illness (mumps, measles, whooping cough). No disabilities.

Family history: None significant.

Behavior during interview: Calm, relaxed, communicative.

Presenting information: Appears well groomed.

Physical findings during assessment: Temperature 37°C tympanic, pulse 120, R 16, BP 100/62.

Using the information from the role play, write an assessment note for a comprehensive physical examination for this patient.

Nursing diagnosis or problem: _____

Signature _____ Date _____

SECTION V: DOCUMENTATION

FORM FOR USE IN PRACTICE

COMPREHENSIVE ASSESSMENT	
Patient Name _____	Date/Time _____
Overview. _____	
Identifying Data _____	
Source and Reliability _____	
Common or Concerning Symptoms	
Onset _____	_____
Location _____	_____
Duration _____	_____
Characteristic symptoms _____	_____
Associated manifestations _____	_____
Relieving factors _____	_____
Treatment _____	_____
History	
Medications (current) _____	_____
Medications (past) _____	_____
Surgeries _____	_____
Illnesses _____	_____
Family History	
Cancer _____	_____
Diabetes _____	_____
Other Chronic Illnesses _____	_____
Genetic Testing _____	_____
Lifestyle Habits	
Alcohol _____	_____
Tobacco _____	_____
Sexual preference _____	_____
Sexual partners (#) _____	_____
Overview	
Age—stated age versus apparent age _____	_____
Emotional state—compare verbal description and nonverbal indicators _____	_____
Developmental stage—compare with behavior _____	_____
Cultural background _____	_____
Health requirements and learning needs _____	_____
Mental Status	
a. Level of consciousness	
b. Facial expressions	
c. Speech	
d. Thought processes and perception	
e. Mood	
f. Grooming and hygiene	
g. Posture, gait, and body movements	
*If changes are noted, then a mini-mental status examination should be performed.	
Vital Signs	
a. Temperature	
b. Pulse	
c. Respirations	
d. Blood pressure—arm at heart level	
e. Pain	

Body Measurements

- a. Height
- b. Weight
- c. Body mass index and ideal body weight

Integument—assess throughout examination as you examine each part of the body.

- a. Inspect for color, lesions, scars, rashes, or any changes in the skin.
- b. Palpate for moisture, temperature, and texture.
- c. Palpate for skin turgor.
- d. Inspect the hair for color, distribution, and texture.
- e. Inspect and palpate the nails for size, shape, color, texture, angle, refill, and any changes.

Head

- a. Inspect the skull for size and shape.
- b. Inspect the scalp for tenderness, lesions, and bumps.

Face

- a. Inspect facial features for symmetry.
Cranial nerve VII, facial: symmetry of face—raise eyebrows, frown, close eyes, smile, puff out cheeks.
- b. Palpate temporal and masseter strength.
- c. Assess temporomandibular joint for pain, crepitus, and swelling.
- d. Assess sensation to sharp and light on face—forehead, cheeks, and chin. (Continue assessing arms and feet for sharp and light touch.) Cranial nerve V, trigeminal.

Eyes

- a. Inspect eyelids.
- b. Inspect eyelashes.
- c. Inspect eyebrows.
- d. Inspect lacrimal apparatus.
- e. Inspect conjunctiva.
- f. Inspect sclera.
- g. Inspect cornea.
- h. Inspect lens.
- i. Inspect pupils. Cranial nerve II, optic; cranial nerve III, oculomotor
– Direct light reaction; consensual light reaction
- j. Test confrontation. Cranial nerve II, optic
- k. Test six cardinal directions of gaze. Cranial nerve III, oculomotor; cranial nerve IV, trochlear; cranial nerve VI, abducens;
–Convergence; –Near reaction (accommodation); – Cover–uncover test
- l. Ophthalmoscopic examination—check optic disc for color, size, and shape.

Ears

- a. Inspect auricle, lobe, and tragus for position, shape, ulcers, lesions, or discharge.
- b. Palpate auricle and tragus for tenderness or lumps.
- c. Palpate mastoid firmly for tenderness.
- d. Otoscopic examination—inspect inner canal, tympanic membrane, and cone of light.
- e. Hearing acuity
– Cranial nerve VIII, acoustic; – Whisper test; – Weber (518 Hz on top of head); –Rinne (518 Hz on mastoid bone and compare to air conduction)

Nose and Sinuses

- a. Inspect for symmetry, alignment, and deformity.
- b. Palpate for tenderness and patency.
- c. Palpate frontal and maxillary sinuses.
- d. Inspect mucous membrane, septum, and turbinates for inflammation, polyps, ulcers, and deviation.
- e. Sense of smell—have patient identify two different scents with eyes closed. Cranial nerve I, olfactory

Mouth and Pharynx

- a. Inspect lips, oral mucosa, gums, roof of mouth, and floor of mouth for color, lesions, and moisture.
- b. Inspect dentition for condition, number, and placement.
- c. Tongue
– Inspect for size, shape, color, moisture, lesions, and texture.

- Articulation of words; Cranial nerve XII, hypoglossal; – Range of motion—assess at-rest, raised, sticking out, and side-to-side movements; – Taste; Cranial nerve VII, facial; cranial nerve IX, glossopharyngeal;
- d. Pharynx—inspect rise of palate and uvula; cranial nerve IX, glossopharyngeal; cranial nerve X, vagus

Neck

- a. Inspect anteriorly for symmetry, masses, enlarged glands, or deviation.
- b. Inspect trachea position.
- c. Inspect thyroid.
- d. Palpate thyroid.
- e. Palpate lymph nodes (preauricular, posterior auricular, occipital, tonsillar, submandibular, submental, superficial cervical, posterior cervical, deep cervical chain, supraclavicular).
- f. Test sternomastoid and upper trapezius muscle strength; cranial nerve XI, spinal accessory
- g. Test head and neck range of motion (flexion, extension, rotation, and lateral bends).

Posterior Thorax

- a. Inspect shape, deformities, retractions, symmetry, and skin integrity.
- b. Palpate for
 - Tenderness
 - Tactile fremitus
 - Respiratory expansion
- c. Percuss lung sounds and diaphragmatic excursion.
- d. Auscultate lung sounds.

Anterior Thorax (can also be performed with patient lying down if preferred)

- a. Inspect for shape, deformities, retractions, symmetry, and skin integrity.
- b. Palpate for
 - Tenderness
 - Tactile fremitus
 - Respiratory expansion
- c. Percuss sounds and diaphragmatic excursion.
- d. Auscultate lung sounds.

Cardiovascular (can also be performed with patient lying down if preferred)

- a. Inspect carotid arteries for pulsations.
- b. Palpate carotid arteries.
- c. Auscultate carotids with the Bell while patient holds breath.
- d. Inspect external jugular vein.
- e. Inspect precordium.
- f. Auscultate heart with the diaphragm at the right sternal border 2nd intercostal space (ICS), left sternal border 2nd ICS, left sternal border 3rd ICS, left sternal border 4th ICS, left sternal border 5th ICS, and left midclavicular line (MCL) 5th ICS.
- g. Auscultate heart with the Bell at the right sternal border 2nd ICS, left sternal border 2nd ICS, left sternal border 3rd ICS, left sternal border 4th ICS, left sternal border 5th ICS, and left MCL 5th ICS.
- h. Auscultate with the Bell at the apical impulse while in the left lateral decubitus position (listening for mitral murmur, S₃, S₄).

Breasts

- a. Inspect with
 - Arms at side
 - Hands pressed into hips
 - Arms raised over head

Axillary Nodes

- a. Palpate axillary nodes (central, lateral, pectoral, subscapular).

Patient Lying Down

Breast Examination

- a. Place the arm that is on the side of the breast being examined under the head.

Abdomen

- a. Inspect for contour, pulsations, bulges, and skin integrity.
- b. Auscultate for bowel sounds and aortic pulsation.
- c. Abdominal reflex—lightly stroke inward in all quadrants.

- d. Lightly palpate all four quadrants noting masses, tenderness, and patient's expression.
- e. Palpate for the liver, kidneys, and spleen.

Peripheral Vascular

- a. Inspect arms and legs for color, swelling, hair distribution, and nail bed color.
- b. Palpate
 - Carotid
 - Radial
 - Brachial
 - Femoral
 - At this time palpate the remaining lymph nodes: inguinal lymph nodes (vertical then horizontal groups).
 - Posterior tibial
 - Dorsalis pedis
- c. Palpate for pitting edema in feet and legs.

Musculoskeletal

- a. Inspect for deformity, swelling, nodules, redness, and muscle bulk.
- b. Palpate for tenderness, crepitus, swelling, and increased warmth.
- c. Palpate strength and range of motion
 - Hips (flexion, extension, abduction, adduction, internal and external rotation)
 - Knees (flexion and extension)
 - Ankles (dorsiflexion, plantarflexion, inversion, eversion)
 - Toes (flexion, extension, abduction, adduction)

Patient Seated

Neurologic—Motor

- a. Inspect body position, noting tremors.
- b. Deep tendon reflexes
 - Biceps
 - Triceps
 - Brachioradialis
 - Patellar
 - Achilles

Neurologic—Sensory (if not incorporated previously then complete now)

- a. Pain and light touch—if the patient is unable to feel pain and light touch, then assess for vibration and temperature.

Musculoskeletal

- a. Inspect for deformity, swelling, nodules, redness, and muscle bulk.
- b. Palpate for tenderness, crepitus, swelling, and increased warmth.
- c. Palpate strength and range of motion
 - Shoulders (flexion, extension, abduction, adduction, internal and external rotation)
 - Elbows (flexion, extension, pronation, supination)
 - Wrists (flexion, extension, radial and ulnar deviation)
 - Fingers (grip and flexion, extension, adduction, abduction)
 - Thumb (flexion, extension, opposition, abduction, adduction)

Patient Standing

Musculoskeletal—Spine

- a. Inspect for deformity, symmetry, and skin integrity.
- b. Palpate spinous processes.
- c. Assess range of motion (flexion, extension, lateral bends, rotation).

Neurologic

- a. Perform Romberg, gait, balance, and other appropriate neurologic screenings.

Assessing Children: Infancy through Adolescence

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Gather a history on an infant, child, and adolescent.
2. Perform a developmental assessment on infants, children, and adolescents.
3. Utilize age-appropriate techniques to perform a physical examination on infants, children, and adolescents.
4. Analyze findings against age-appropriate norms and standards.
5. Identify education topics for anticipatory guidance, health promotion, and risk reduction.
6. Correctly document infant, child, and adolescent assessment findings.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

A. When examining _____ and _____, the sequence should vary according to the child's _____ and _____.

- B. With _____, as with _____, the point at which the _____ sounds disappear constitutes the _____.
- C. Causes of _____ in childhood include _____ or _____ of the _____, and _____.
- D. For young children, _____ the _____ of the _____ for _____ 30-second intervals or _____, preferably before _____ them.
- E. _____ are the _____ health problem in children.
- F. Adolescence is the _____ of _____ from _____ to _____.
- G. Adolescence is a _____, marked by the transition from _____ to _____ and _____.
- H. Adolescents are more likely to _____ when the _____ focuses on _____ rather than on their _____.

- I. Your _____ is to help adolescents bring their _____ or _____ to their _____.
- J. The size of the _____ approaches the _____ size as the teen progresses through _____, and is _____ to the adolescent's _____.
2. List the principles of child development.
- A. _____
- B. _____
- C. _____
- D. _____
3. List the developmental tasks during middle childhood.
- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____

Activity B MATCHING

4. Match the common childhood lesions with their description.

Answer	Common Childhood Lesions	Description
	Insect bites	A. Annular lesion that has central clearing and papules along the border
	Urticaria (hives)	B. Scaling, crusting, and hair loss
	Tinea corporis	C. Intensely pruritic, red, distinct papules
	Tinea capitis	D. Pruritic, allergic sensitivity reaction that changes shape quickly

5. Match the developmental task of adolescence with its characteristic (tasks will have more than one characteristic dependent on the stage of adolescence).

Answer	Characteristic	Task
	Peers increasingly important	A. Physical
	Females more comfortable, males awkward	B. Cognitive
	"Formal operational"	C. Identity
	Sexuality	D. Independence
	Separation from family	
	Adult appearance	
	Global issues	
	Puberty	
	Ambivalence	
	Limit testing	
	Transition; many ideas	
	"Concrete operational"	

6. Match the primitive reflex to its description.

Answer	Primitive Reflex	Description
	Palmar grasp reflex	A. The arm/leg on side to which head is turned extends while the opposite arm/leg flexes.
	Plantar grasp reflex	B. The mouth will open and baby will turn the head toward the stimulated side and suck.
	Moro reflex	C. The toes curl
	Asymmetric tonic neck reflex	D. The spine will curve toward the stimulated side.
	Positive support reflex	E. The hip and knee of that foot will flex and the other foot will step forward. Alternate stepping will occur.
	Rooting reflex	F. The arms and legs will extend in a protective fashion.
	Galant reflex	G. The hips, knees, and ankles extend; the baby stands up, partially bearing weight, and sags after 20–30 seconds.
	Placing and stepping reflexes	H. The head will lift up, and the spine will straighten.
	Landau reflex	I. The arms abduct and extend, hands open, and legs flex. Baby may cry.
	Parachute reflex	J. The baby will flex all fingers to grasp your fingers

Activity C SHORT ANSWER

7. Discuss the test for scoliosis in the adolescent.

8. Discuss the principles of child development.

9. Discuss social and emotional development during middle childhood.

10. Discuss tips for examining 1- to 4-year-olds.

Activity D NCLEX STYLE QUESTIONS

11. What does laxity of the soft-tissue structures of the foot cause in young children?

- Pronation
- Pes planus
- Metatarsus adductus
- Talipes calcaneovalgus

12. After the age of 2 years, how much do toddlers grow per year?

- About 5 cm
- About 6 cm
- About 7 cm
- About 8 cm

13. You are examining a 3-year-old female patient who becomes very distressed during the examination. What should you tell the parents?

- "This behavior shows a lack of discipline."
- "This behavior shows inability to adjust."
- "This behavior is developmentally appropriate."
- "This behavior is socially inappropriate."

14. You are speaking to a local PTO about childhood obesity. What would you cite as the consequences of childhood obesity?
 - a. Hepatic disease
 - b. Hypertension
 - c. Metabolic syndrome
 - d. Poor self-esteem
 - e. Pulmonary disease
15. When examining visual acuity on a 30-month-old child, you should assess for what?
 - a. Fixation preference
 - b. "Lazy eye"
 - c. Hyperopia
 - d. Myopia
16. You detect a pulmonary flow murmur that is accompanied by a fixed split-second heart sound. What does this suggest?
 - a. Aortic insufficiency
 - b. Tricuspid valve prolapse
 - c. Left-heart volume load
 - d. Right-heart volume load
17. Your patient is a 15-year-old male. His testes and scrotum are enlarged and the scrotal skin is darkened. His pubic hair is coarse and curly but does not extend to the thighs. What Tanner stage would you assign to this patient?
 - a. Stage 2
 - b. Stage 3
 - c. Stage 4
 - d. Stage 5
18. Mrs. Mendellson has brought 14-year-old Lucretia to the clinic because of her weight. When weighed, Lucretia falls below the 5th percentile for her height. The nurse notes that Lucretia is so thin that her bony skeleton is readily observable. She has delayed sexual development. What would the nurse suspect?
 - a. Bulimia nervosa
 - b. Anorexia nervosa
 - c. Cystic fibrosis
 - d. AIDS
19. What is helpful in measuring older children, especially if the child is suspected of having endocrine disorders?
 - a. Age:weight comparison
 - b. WHO child growth standards
 - c. Symphysiofundal height growth curve
 - d. Velocity growth curves
20. What is the most frequent cause of an elevated blood pressure in children?
 - a. Obesity
 - b. An improperly performed examination
 - c. Diabetes
 - d. An improperly calibrated sphygmomanometer

SECTION III: CASE STUDY

Activity E

Eighteen-year-old George Kristus comes to the clinic for a sports physical.

- a. Describe a physical examination of this patient.

- b. Explain what you would pay special attention to with this patient and why.

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

PEDIATRIC HEALTH HISTORY AND PHYSICAL EXAMINATION	
Patient Name _____	Date/Time _____
Overview _____	
Referral _____	
Source and Reliability _____	
Chief Complaint _____	
Present Illness _____	
Medications _____	
Past History	
Pregnancy _____	
Newborn period _____	
Illnesses _____	
Accidents _____	
Preventive Care _____	
Family history _____	
Developmental history _____	
Personal and social history _____	
Environmental exposures _____	
Review of Systems	
General _____	
Skin _____	
Head, eyes, ears, nose, and throat (HEENT) _____	
Head _____	
Eyes _____	
Ears _____	
Nose _____	
Mouth _____	
Neck _____	
Respiratory _____	
Cardiovascular _____	
Gastrointestinal _____	
Urinary _____	
Genital _____	
Musculoskeletal _____	
Neurologic _____	
Psychiatric _____	
Physical Examination	
Vital signs _____	
Skin _____	
HEENT _____	
Head _____	
Eyes _____	
Ears _____	
Nose _____	
Mouth _____	

Neck	_____
Lymph nodes	_____
Lungs	_____
Cardiovascular	_____
Breasts	_____
Abdomen	_____
Genitalia	_____
Musculoskeletal	_____
Neurologic	_____
Mental status	_____
Developmental (DDST)	_____
Cranial nerves	_____
Cerebellar	_____
Deep tendon reflexes (DTRs)	_____
Sensory	_____

Assessing Older Adults

SECTION I: LEARNING OBJECTIVES

Learning Objectives

The student will:

1. Determine how to best facilitate the health history and physical examination of the older adult.
2. Identify areas of focus during the health history specific to the older adult.
3. Recognize normal physiologic changes in the older adult.
4. Address areas of health promotion and counseling specific to the older adult.
5. Utilize screening tools in the assessment of older adults.
6. Perform a health history and physical assessment on an older adult.
7. Document the older adult assessment findings.

SECTION II: STUDY GUIDE

Activity A FILL IN THE BLANK

1. Complete the following statements:

- A. Over the past _____ years, _____ actually have become _____ and _____.
- B. Self-neglect is a growing _____ and represents more than _____ of adult _____ referrals.
- C. Depressed men older than _____ have the _____

- _____ of suicide and _____ careful _____ and _____.
- D. Loss of _____ from _____ and _____ further impair _____.
 - E. _____ screening for selected conditions can be _____ because of _____ supporting its use for adults older than _____ to _____ years.
 - F. In general, base _____ on each older person's _____, rather than _____.
 - G. _____ the abdomen for _____, _____, or _____.
 - H. _____ may occur with poor _____ or _____ or _____.
 - I. Investigators have identified _____ in how people _____ and have distinguished "_____," _____, with its complex of diseases and impairments, from "_____."
 - J. Because their eyes produce fewer _____, aging patients may complain of _____.
2. List the home safety tips for older adults.
 - A. _____
 - B. _____
 - C. _____

- D. _____
- E. _____
- F. _____
3. List the important topics for health promotion and counseling in the older adult.
- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
- I. _____
- J. _____
- K. _____

Activity B MATCHING

4. Match the problem with its screening measure or positive screen.

Answer	Problem	Description
	Vision	A. Unable to complete task in 15 seconds
	Hearing	B. Weight <100 lbs
	Leg mobility	C. "Do you often feel sad or depressed?"
	Urinary incontinence	D. Unable to remember all three items after 1 minute
	Nutrition/weight loss	E. Inability to hear 1,000 or 2,000 Hz in both ears or either of these frequencies in one ear
	Memory	F. "Are you able to go shopping for groceries or clothes?"
	Depression	G. "Do you have difficulty driving or watching television?"
	Physical disability	H. "Have you lost urine on at least six separate dates?"

5. Match the characteristic with the type of pain. (Type of pain will have more than one characteristic.)

Answer	Characteristic	Type of Pain
	Can fluctuate in character and intensity over time	A. Acute
	Obvious pathology	B. Persistent
	Distinct onset	
	Lasts more than 3 months	
	Short duration	
	Common causes: arthritis, cancer, claudication, leg cramps, neuropathy, radiculopathy	

Activity C SHORT ANSWER

6. Discuss advanced directives.

7. Discuss dementia.

8. Discuss immunizations in the older population.

9. Discuss medications in the older population.

10. Discuss delirium versus dementia.

Activity D NCLEX STYLE QUESTIONS

11. When discussing palliative care with a patient, what would you say are the goals? (Mark all that apply.)

- a. Improvement in the quality of life
- b. Providing bereavement support
- c. Management of family values
- d. Relieving suffering
- e. Communication among family members

12. You are assessing an older adult patient for a closed head injury after a motor vehicle accident. What reflex would you assess for?

- a. The pig reflex
- b. The grasp reflex
- c. The snout reflex
- d. The spinal reflex

13. A 75-year-old female patient tells you that she is sexually active but that it causes her pain when she has intercourse. What would you suggest to alleviate this pain?

- a. Warm baths
- b. Only use a side-lying position
- c. Cold application
- d. Have sex in the morning

14. What would be important to assess when detecting alcohol use disorders in older adults?

- a. Increasing appetite
- b. Impaired proprioception
- c. Blood sugar control problems
- d. Difficulty managing Levoxyll dosing

15. You are providing an educational event for the families of elderly patients. What would you tell them that ER visits and fatalities are most likely to involve? (Mark all that apply.)

- a. Exercise injuries
- b. Hair dryers and nonflammable clothing
- c. Ladders and stepstools
- d. Bathroom injuries
- e. Yard and garden equipment

16. The nurse is assessing a new patient, age 68 years, for orthostatic hypotension. The nurse would know that this means a drop in systolic blood pressure of ≥ 20 mm Hg or diastolic blood pressure of ≥ 10 mm Hg within how many minutes of standing?

- a. 4 minutes
- b. 3 minutes
- c. 2 minutes
- d. 1 minute

17. Grady O'Bannion, a 70-year-old black male, is brought to the clinic by his daughter, who tells the nurse that she is concerned because her father appears to be losing weight and she doesn't know why. What would the nurse know is a cause of undernutrition?

- a. Loss of taste
- b. Obsessive/compulsive disorder
- c. Acute organ failure
- d. Poverty

18. When assessing the eyes of an older adult, what would you know might be a normal impairment?
 - a. Downward gaze
 - b. Upward gaze
 - c. Conjugate gaze
 - d. Consensual gaze

19. You are counseling an elderly patient and her family. Why would you recommend regular aerobic exercise? (Mark all that apply.)
 - a. Maintain energy level
 - b. Slow onset of disability
 - c. Improve energy level
 - d. Maintain physiologic reserve
 - e. Improve strength

20. You tell your patient that you are going to listen to his abdomen for sounds of blood rushing through the blood vessels. He wants to know what you are listening for. How would you answer him?
 - a. "Bruits over the aorta or renal or femoral artery are found in cardiovascular disease."
 - b. "Bruits over the aorta or renal or femoral artery are found in atherosclerotic disease."
 - c. "Bruits over the aorta or renal or femoral artery are found in chronic pulmonary disease."
 - d. "Bruits over the aorta or renal or femoral artery are found in rheumatoid arthritis disease."

SECTION III: CASE STUDY

Activity E

Eighty-one-year-old Phillip Lister has come to the clinic for a routine check-up.

- a. Document Mr. Lister's check-up using The Siebens Domain Management Model.

- b. What would you include in patient education for Mr. Lister and his family?

SECTION IV: DOCUMENTATION

FORM FOR USE IN PRACTICE

ASSESSMENT OF THE OLDER ADULT	
Patient Name _____	Date/Time _____
Overview _____	
Identifying Data _____	
Source and Reliability _____	
Vital Signs	
Ht (without shoes) _____	
Wt (dressed) _____	
Body mass index (BMI) _____	
BP: right arm supine, left arm supine _____	
Heart rate (HR) _____	
Respiratory rate (RR) _____	
Temperature (oral) _____	
10-Minute Geriatric Screener	
Vision _____	
Hearing _____	
Leg mobility _____	
Urinary incontinence _____	
Nutrition _____	
Memory _____	
Depression _____	
Physical disability _____	
Physical Examination	
Skin _____	
Head, eyes, ears, nose, throat (HEENT) _____	
Neck _____	
Lymph nodes _____	
Thorax and lungs _____	
Cardiovascular _____	
Abdomen _____	
Genitourinary _____	
Rectal _____	
Extremities _____	
Peripheral vascular _____	
Musculoskeletal _____	
Neurologic _____	

Answers

CHAPTER 1

Activity A FILL IN THE BLANK

- Complete the following statements:
 - diagnose and treat the actual or potential human responses.
 - as a basis for developing a nursing plan of care.
 - identify changes in the patient's body systems.
 - nursing health assessment.
 - change their behaviors and lifestyles to obtain optimal health.

- List the facets of health.
 - Physical health
 - Emotional health
 - Social well-being
 - Culture
 - Spiritual influences
 - Developmental level

Activity B MATCHING

- Match the level of prevention with its definition.

	Level of Prevention	Definition
B	Primary	A. Decreasing the effects of a disease or disability by preventing complications and additional loss that happens when a defect is permanent
C	Secondary	B. Improving the overall wellness and protection from disease or disability
A	Tertiary	C. Early detection and treatment of a disease when it is curable or has few complications or disabilities

- Match the examples of prevention with their corresponding level of prevention. (Level of prevention may be used more than once.)

	Example	Level of Prevention
B	Communicable disease control	A. Primary
A	Health education	B. Secondary
A	Periodic selective examinations	C. Tertiary
C	Sheltered communities	
A	Provision of adequate housing	
C	Provision of hospital and community facilities	
A	Reducing risk factors	
B	Early treatment of diseases	
B	Self-examination	
C	Rehabilitation programs	

Activity C SHORT ANSWER

5. The components for maintaining health named by the student should include the following:
 - a. Patient's behaviors and choices
 - b. Individual's personality and attitude
 - c. Patient's resilience
 - d. Family dynamics
 - e. Access to health care and resources
 - f. Nutrition
 - g. Exercise
 - h. Culture
 - i. Beliefs
6. The leading health indicators for 2020 are:
 - a. Adolescent Health
 - b. Blood Disorders and Blood Safety
 - c. Dementias, Including Alzheimer Disease
 - d. Early and Middle Childhood
 - e. Genomics
 - f. Global Health
 - g. Health Care–Associated Infections
 - h. Health-Related Quality of Life and Well-Being
 - i. Lesbian, Gay, Bisexual, and Transgender Health
 - j. Older Adults
 - k. Preparedness
 - l. Sleep Health
 - m. Social Determinants of Health

These indicators were developed from the following:

 - a. Results of the Healthy People 2010 outcomes of the past decade
 - b. Current data
 - c. New developments and challenges that are prevalent in the United States
 - d. Feedback from health care leaders and the community
7. In the health history, the review of systems forms the frame of the assessment and outlines how to proceed for the physical examination. As each puzzle piece is inserted the nurse is able to better see the patient as an individual. Really listening to and understanding a person are key to having all the pieces fit. Just as once the frame is in place it is easier to complete the puzzle, the health assessment assists you to figure out what is going on with a patient. As rapport with the patient develops more details are acquired and more of the inside puzzle pieces are added. As the information is collated actual health risks emerge and eventually those last hard-to-fit puzzle pieces are found and they are the potential health risks. This intricate puzzle is a person's life and all the pieces need to fit correctly to maintain health and quality of life. As the puzzle begins to take shape a picture is formed. Likewise, the nurse is able to see the patient as an individual more clearly and is able to identify a specific nursing plan of care and health promotion activities.
8. Nurses are able to assist their patients to change their behaviors and lifestyles to obtain optimal health, which enables individuals to increase control of and improve their overall health.

9. Nurses influence the health of the patient by the following:
 - a. Supporting the promotion of health and the prevention of disease
 - b. Educating and counseling individuals, families, groups, and communities toward higher levels of health and wellness
 - c. Viewing health as the focus with the patient, the environment, and the nurse

Activity D NCLEX STYLE QUESTIONS

10. **Answer: c**
RATIONALE: During the overall assessment of the patient, the nurse is able to utilize the findings and decide which areas the patient is in need of the most care and which levels of prevention are necessary.
11. **Answer: a and d**
RATIONALE: Developing the nursing care plan and working with the individual patient are paramount in health promotion.
12. **Answer: b**
RATIONALE: The health care team meets to collaborate on patients and decide the best overall care. This occurs throughout the lifespan, from the inception of life until death. The health care team is a partnership. The group includes the nurse, physician, nutritionist, social worker, physical therapist, occupational therapist, speech therapist, and/or dentist. They all work together on the same team for the benefit of the patient.
13. **Answer: d**
RATIONALE: Through the health assessment nurses are able to detect areas in need of health adjustments.
14. **Answer: d**
RATIONALE: Focusing on both the answers (verbal) and the actions (nonverbal) of the patient, the nurse is constantly assessing and formulating a plan of care to achieve the best possible health for the individual.
15. **Answer: a**
RATIONALE: In order to assist a patient with health promotion, a healthy environment must also be nurtured.
16. **Answer: c**
RATIONALE: As the nurse becomes more proficient and comfortable in her role the accountability does not decrease, but the knowledge base and expertise increase to foster confidence.
17. **Answer: b**
RATIONALE: Assessment is the foundation of nursing practice.
18. **Answer: b**
RATIONALE: Knowing how to facilitate the nursing health assessment by asking appropriate questions to obtain more information assists the nurse to solve the mystery or create a nursing care plan.
19. **Answer: c**
RATIONALE: The nurse or detective is always reassessing the patient or case for changes in order to achieve the best results. Each relies on both the science and art of his or her respective profession.

Activity E CASE STUDY

- a. The Healthy People 2020 health indicators that would apply to this patient include the following:
1. Health Care–Associated Infections
 2. Health-Related Quality of Life and Well-Being
 3. Sleep Health
 4. Social Determinants of Health
- b. The abilities the nurse would use would include:
1. Soliciting information
 2. Understanding the findings
 3. Applying knowledge

CHAPTER 2**Activity A FILL IN THE BLANK**

1. Complete the following statements:
 - A. Critical thinking is ongoing, as is assessment of the patient.
 - B. The nursing process is the broad systematic framework that supplies a methodical base applicable to the practice of nursing.

Activity B MATCHING

3. Match the term with its definition.

Answer	Term	Definition
C	Assessment	A. The development of the steps to execute the plan
E	Diagnosis	B. A continuing process that determines if the goals/outcomes have been attained
D	Planning	C. Subjective and objective data gathered initially during the health history and physical examination and the additional information collected on a daily basis
A	Implementation	D. Charting the best course to achieve the patient's optimal wellness and comfort
B	Evaluation	E. Has a nursing focus and is based on real or potential health problems or human responses

4. Match the part of the nursing process with its action

Answer	Part of Nursing Process	Action
D	Assessment	A. Use your inferences about the structures and processes involved
A	Diagnosis	B. Nursing interventions that help to achieve the goals stated
E	Planning	C. Continue to monitor
B	Implementation/interventions	D. Select the most specific and critical findings to support your problem list
C	Evaluation	E. Develop goals

- C. When localizing findings, be as specific as your data allow, but bear in mind that you may have to settle for a body region, such as the chest, or a body system, such as the musculo-skeletal system.
 - D. Problems may relate to stressful events in the patient's life.
 - E. Involvement of different body systems may help you to cluster the clinical data.
 - F. Almost all clinical information is subject to error.
2. List the steps in clinical reasoning.
 - A. Identify abnormal or positive findings.
 - B. Cluster the findings.
 - C. Interpret findings in terms of probable process.
 - D. Make hypotheses about the nature of the patient's problem.
 - E. Test the hypotheses and establish a working nursing diagnosis.
 - F. Develop a plan agreeable to the patient.

5. Match the term with its corresponding meaning.

Answer	Term	Meaning
G	Onset	A. How long the sign or symptom has been going on
F	Location	B. What else is going on when the patient experiences the sign or symptom
A	Duration	C. What the symptom feels like
C	Characteristic symptoms	D. Anything the patient has tried to make it go away
B	Associated manifestations	E. Nursing interventions that are recommended
D	Relieving factors	F. Where the sign or symptom is
E	Treatments	G. When the sign or symptom began

Activity C SHORT ANSWER

6. Student answers should include the following information:
- Diagnosis has a nursing focus.
 - It is based on real or potential health problems or human responses.
 - It is formulated based on the data collected during the assessment.
 - This focal point will be based on the patient's concerns, issues, and needs and is based on human responses.
 - It sets the stage for the remainder of the care plan.
 - The diagnosis is formulated based on the prioritized problem list utilizing the NANDA Nursing Diagnosis list.
7. Student answers should include that cognitive psychologists have shown that clinicians use the following three types of reasoning for clinical problem solving:
- Pattern recognition
 - Development of schemas
 - Application of relevant basic and clinical science
8. Student answers should include the following methods to ensure the quality of patient data:
- Ask open-ended questions and listen carefully and patiently to the patient's story.
 - When a patient answers "yes" to a question, continue further using "OLD CART" for additional details.
 - Craft a thorough and systematic sequence to history taking and physical examination.
 - Keep an open mind toward both the patient and the data.
 - Always include "the worst-case scenario" in your list of possible explanations of the patient's problem, and make sure it can be safely eliminated.
 - Analyze any mistakes in data collection or interpretation.
 - Confer with colleagues and review the pertinent literature to clarify uncertainties.
 - Apply principles of data analysis to patient information and testing.
9. Student answers should include discussions of the following principles:
- Reliability

- Validity
 - Sensitivity
 - Specificity
10. Student answers should include the following about writing a progress note:
- It needs to meet the same standards as the initial assessment.
 - It should be clear, sufficiently detailed, and easy to follow.
 - It should reflect your clinical reasoning.
 - It should delineate your assessment and plan.
 - It needs to meet your institution's billing requirements.

Activity D NCLEX STYLE QUESTIONS

11. **Answer: b**
RATIONALE: Nurses utilize many assessment tools. These tools are used in areas of prevention such as falls, malnutrition, and skin breakdown.
12. **Answer: d**
RATIONALE: By generating plans early and testing them sequentially, experienced nurses improve their efficiency and enhance the relevance and value of the data they collect.
13. **Answer: a, c, and e**
RATIONALE: The plan should make reference to diagnosis, therapy, and patient education based on each individual.
14. **Answer: a**
RATIONALE: *Neck.* Neck supple. Trachea midline. Thyroid isthmus barely palpable, lobes not felt.
15. **Answer: c**
RATIONALE: During the time spent with your patient, you have gained your patient's trust, gathered a detailed history, and completed the requisite portions of the physical examination. You have reached the critical step of formulating your *Assessment, Nursing Diagnosis, and Plan*. You must now analyze your findings and identify the patient's problems, then share your impressions with the patient, eliciting any concerns and making sure that he or she understands and agrees to the steps ahead. Finally, you must document your findings in the patient's record in a succinct and legible format that communicates the patient's story and your clinical reasoning and plan to other members of the health care team.

16. Answer: a

RATIONALE: Your clinical reasoning process is pivotal to determining how you interpret the patient's history and physical examination, single out the problems listed in your assessment, and move from each problem to its goals and then the implementation with specific nursing interventions.

17. Answer: b

RATIONALE: After the questioning and collection of the subjective data, the nurse will either do an entire head-to-toe physical assessment or a systems-specific assessment based on the patient's answers.

18. Answer: c and d

RATIONALE: Identify and record a plan for each patient problem. Your plan flows logically from the problems or diagnoses you have identified. Specify which steps are needed next. These steps range from monitoring daily weights, to consultations for evaluations, to timing of dressings or IVs, to arranging a family meeting.

19. Answer: d

RATIONALE: Some symptoms and signs cannot be localized, such as fatigue or fever, but are useful in the next set of steps. In addition, obtaining more information regarding psychosocial issues may add more depth when trying to pinpoint the "real" problem.

20. Answer: b

RATIONALE: Laboratory Data. None currently. See Plans.

Activity E CASE STUDY

a. Subjective data the nurse should gather would include:

1. Chief complaint
2. Present illness
3. Past history

4. Health maintenance

5. Family history

6. Personal and social history

7. Review of systems

b. Objective data the nurse should gather would include:

1. Vital signs
2. Skin
3. Extremities
4. Peripheral vascular
5. Musculoskeletal
6. Neurologic (reflexes)

CHAPTER 3**Activity A FILL IN THE BLANK**

1. Complete the following statements:

- A. The primary goal of the nurse-patient interview is to improve the well-being of the patient.
- B. The interviewing process that actually generates the pieces of health information is much more fluid and demands effective communication and relational skills.
- C. Being consistently respectful and open to individual differences is one of the clinician's challenges.
- D. Remember that cultural background and individual taste influence preferences about interpersonal space.
- E. Learning about the effects of the illness gives the nurse and the patient the opportunity to create a complete and congruent picture of the problem.

2. List the phases of the interviewing process

- A. Preinterview
- B. Introduction
- C. Working
- D. Termination

Activity B MATCHING

3. Match the technique of skilled interviewing with its definition.

Answer	Term	Definition
D	Active listening	A. Communication that occurs continuously and provides important clues to feelings and emotions
G	Guided questioning	B. Acknowledging the legitimacy of the patient's emotional experience
A	Nonverbal communication	C. Telling the patient when you are changing directions during the interview
I	Empathic responses	D. Closely attending to what the patient is communicating
B	Validation	E. Reinforcing the patient's primary responsibility for his or her health
H	Reassurance	F. Identifying what you know and what you don't know
J	Partnering	G. Options for expanding and clarifying the patient's story
F	Summarization	H. Interpreting for the patient what you think is happening and dealing openly with expressed concerns
C	Transitions	I. Communicating understanding and acceptance
E	Empowering the patient	J. Making the relationship collaborative

Activity C SHORT ANSWER

4. Student answers should include the following information:
 - A. Choose a trained interpreter in preference to a hospital worker, volunteer, or family member.
 1. Confidentiality and cultural norms may be violated.
 2. Meanings may be distorted.
 3. Transmitted information may be incomplete.
 - B. Use the interpreter as a resource for cultural information.
 1. Ideal interpreter is a neutral person who is familiar with both languages and cultures.
 - C. Orient the interpreter to the components you plan to cover in the interview; include reminders to translate everything the patient says.
 - D. Arrange the room so that you and the patient have eye contact and can read each other's non-verbal cues. Seat the interpreter next to the patient.
 - E. Allow the interpreter and the patient to establish rapport.
 - F. Address the patient directly. Reinforce your questions with nonverbal behaviors.
 - G. Keep sentences *short* and *simple*. Focus on the most important concepts to communicate.
 - H. Verify mutual understanding by asking the patient to repeat back what he or she has heard.
 - I. Be patient. The interview will take more time and may provide less information.
5. Student answers should include most of the following:
 - A. Find out the patient's preferred method of communicating.
 - B. Ask when the hearing loss occurred relative to the patient's development of speech.
 - C. Find out what schools the patient attended.
 - D. If the patient has a hearing aid, make sure the patient is using it and it is working.
 - E. For patients with unilateral hearing loss, sit on the hearing side.
 - F. Eliminate background noise as much as possible.
 - G. For patients who have partial hearing or can read lips, face them directly, in good light.
 - H. Speak at a normal volume and rate.
 - I. Do not let your voice trail off at the ends of sentences.
 - J. Avoid covering your mouth or looking down at papers while speaking.
 - K. Have patients repeat what you have said.
 - L. Write out any oral instructions.
6. Student answers should include the following:
 - A. The health history format
 1. A structured framework for organizing patient information in *written or verbal form* for other health care providers
 - B. Focuses the clinician's attention on specific kinds of information that must be obtained from the patient
7. Student answers should include discussions of the following parts of phase I of the interview process:
 - A. Take time for self-reflection.
 - B. Review the medical and nursing records.
 - C. Set goals for the interview.
 - D. Review clinical behavior and appearance.
 - E. Adjust the environment
 - F. Take notes.
8. Student answers should include the following seven attributes of a symptom:
 - A. Onset
 1. When did (does) it start?
 2. Setting in which it occurs, including environmental factors, personal activities, emotional reactions, or other circumstances that may have contributed to the illness
 - B. Location
 1. Does it move?
 2. Does it radiate?
 - C. Duration
 - D. Characteristic symptoms
 - E. Associated manifestations
 - F. Relieving/exacerbating factors
 - G. Treatment
9. Student answers should include the following aspects of the patient's perspective on his or her illness:
 - A. The patient's Feelings, including fears or concerns, about the problem
 - B. The patient's Ideas about the nature and the cause of the problem
 - C. The effect of the problem on the patient's life and Function
 - D. The patient's Expectations
 1. Of the disease
 2. Of the clinician
 3. Of health care

Activity D NCLEX STYLE QUESTIONS**10. Answer: d**

RATIONALE: Learning about the effects of the illness gives the nurse and the patient the opportunity to create a complete and congruent picture of the problem.

11. **Answer: a**
RATIONALE: Termination phase: planning for follow-up and closing.
12. **Answer: b**
RATIONALE: The goal is to facilitate the patient's fullest communication.
13. **Answer: c**
RATIONALE: Ask questions that require a graded response rather than a single answer. "How many steps can you climb before you get short of breath?" is better than "Do you get short of breath climbing stairs?"
14. **Answer: a**
RATIONALE: Matching your position to the patient's can signify increased rapport, just as mirroring your position can signify the patient's increasing sense of connectedness.
15. **Answer: c**
RATIONALE: Moreover, premature reassurance may block further disclosures, especially if the patient feels that the clinician is uncomfortable with the anxiety or has not appreciated the extent of the patient's distress.
16. **Answer: a, b, and e**
RATIONALE: Learning the following techniques encourages patient disclosures while minimizing the risk for distorting the patient's ideas or missing significant details.
- Moving from open-ended to focused questions
 - Using questioning that elicits a graded response
 - Asking a series of questions, one at a time
 - Offering multiple choices for answers
 - Clarifying what the patient means
 - Encouraging with continuers
 - Using reflection
17. **Answer: b**
RATIONALE: Summarization can be used at different points in the interview to structure the visit, especially at times of transition. This technique also allows the nurse to organize his or her clinical reasoning and to convey it to the patient, making the relationship more collaborative. It is also a useful technique for learners when they draw a blank on what to ask the patient next.
18. **Answer: a and e**
RATIONALE: The period of silence usually feels much longer to the nurse than it does to the patient. The nurse should appear attentive and give brief encouragement to continue when appropriate. During periods of silence, watch the patient closely for nonverbal cues, such as difficulty controlling emotions.
19. **Answer: b**
RATIONALE: At the start of the interview the patient should be told with whom the information will be shared.
20. **Answer: b, c, and d**
RATIONALE: Consciously or not, the nurse sends messages through both words and behavior. Posture, gestures, eye contact, and tone of voice all

convey the extent of interest, attention, acceptance, and understanding.

Activity E CASE STUDY

- a. The students should include in their answers the majority of the following:
1. What is culturally appropriate when meeting/greeting this patient and her husband
 2. Whether it is culturally appropriate to speak to the patient through her husband or to speak directly to the patient herself
 3. What interpersonal space is considered culturally appropriate to this patient
 4. Some nonverbal language is universal and some is culturally bound.
 5. In some cultures, social conversation of various lengths before "getting down to business" is considered polite.
 6. If a translator is needed you don't want to violate cultural norms.

CHAPTER 4

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. The HPI should reveal the patient's responses to his or her symptoms and what effect the illness has had on the patient's life.
 - B. Inquire about past occurrences of a symptom and ask what treatment(s) were previously used and their results.
 - C. Risk factors and other pertinent information related to the symptom are frequently relevant, such as risk factors for coronary artery disease in a patient with chest pain, or current medications that may have side effects similar to the complaint.
 - D. The Health Pattern section provides a guide for gathering personal/social history from the patient and daily living routines that may influence health and illness.
 - E. Disapproval of behaviors or elements in the health history will only interfere with learning about the patient.
 - F. How much history to gather varies by the purpose of the patient encounter.
2. List the clues to physical abuse.
 - A. If injuries are unexplained, seem inconsistent with the patient's story, are concealed by the patient, or cause embarrassment
 - B. If the patient has delayed getting treatment for trauma
 - C. If there is a past history of repeated injuries or "accidents"
 - D. If the patient or person close to the patient has a history of alcohol or drug abuse
 - E. If the partner tries to dominate the interview, will not leave the room, or seems unusually anxious or solicitous

3. List the parts of a comprehensive health history.
- A. Identifying Data and Source of the History
 - B. Chief Complaint(s)
 - C. History of Present Illness
 - D. Past History
 - E. Family History
 - F. Review of Systems
 - G. Health Patterns

Activity B MATCHING

4. Match the type of assessment with the description (assessments will have multiple descriptions).

Answer	Description	Type of Assessment
D	A systematic prioritization of need	A. Comprehensive assessment
C	Having a problem or treatment plan evaluated	B. Focused assessment
A	Strengthens the nurse–patient relationship	C. Follow-up history
B	Assesses symptoms restricted to a specific body system	D. Emergency history
B	Addresses specific concerns or symptoms	
C	Gathering data to evaluate the outcomes of the plan of care	
D	ABCs of airway, breathing, and circulation	
A	Provides fundamental and personalized knowledge about the patient	
B	Appropriate for established patients	
D	Data collection is focused on the patient's emergent problem	
A	Creates platform for health promotion through education and counseling	
C	Carried out by a second-shift nurse	

5. Match the component of the health history with the information obtained.

Answer	Component of the Health History	Information Obtained
D	Identifying Data	A. May include medications, allergies, and habits of smoking and alcohol
H	Reliability	B. Risk factors
F	Chief Complaint(s)	C. Documents historical presence or absence of specific illnesses
A	Present Illness	D. Establishes source of referral
B	Past History	E. Documents personal/social history
C	Family History	F. One or more symptoms or concerns
G	Review of Systems	G. Systemic documentation of presence or absence of common symptoms
E	Health Patterns	H. Varies according to the patient's memory, trust, and mood

6. Match the system to its corresponding data.

Answer	System	Data
F	General	A. Goiter
H	Skin	B. Paroxysmal nocturnal dyspnea
G	HEENT	C. Flank pain
A	Neck	D. Trouble swallowing
P	Breasts	E. Arthritis
I	Respiratory	F. Weakness, fatigue, or fever
B	Cardiovascular	G. Dentures
D	Gastrointestinal	H. Changes in hair or nails
O	Peripheral vascular	I. HPV
C	Urinary	J. Nervousness
I	Reproductive	K. Changes in mood
E	Musculoskeletal	L. Hemoptysis
J	Psychiatric	M. Easy bruising
K	Neurologic	N. Change in glove or shoe size
M	Hematologic	O. Swelling with redness or tenderness
N	Endocrine	P. Self-examination practices

Activity C SHORT ANSWER

7. Student answers should include the following information:
 - a. This provides a guide for gathering personal/social history from the patient.
 - b. This provides a guide for ascertaining daily living routines that may influence health and illness.
8. Student answers should include the following:
 - a. Reading about these topics in professional and lay literature
 - b. Talking to selected colleagues and teachers openly about your concerns
 - c. Taking courses that help you explore your own feelings and reactions
 - d. Reflecting on your own life experiences
 - e. Listening to experienced nurses and imitating them in your own practice
9. Student answers should include the following:
 - a. Comprehensive health assessment
 1. Used on admission of a new patient to a clinic, hospital, long-term care facility, or visiting nurse agency
 2. Allows the nurse to obtain a full picture of the patient's health status and current problems as well as health promotion and risk reduction education
 3. Is a source of personalized knowledge about the patient that strengthens the nurse-patient relationship
 4. Provides a basis for assessing patient concerns and answering patient questions
 - b. A focused or problem-oriented assessment
 1. Appropriate when the patients are known to the nurse
 2. The nurse focuses the information gathering on the patient's problem.
 3. The patient's symptoms, age, and history will help determine the extent of the physical examination to perform.
 - c. A follow-up history
 1. A form of a focused assessment used when the patient is returning to have a problem or treatment plan evaluated
 2. Used with a hospitalized patient by following shift nurses to assess the progress of the patient from a nursing standpoint
 - d. The emergency history
 1. Data collection is focused on the patient's emergent problem.
 2. Uses a systematic prioritization of need beginning with the ABCs of airway, breathing, and circulation
10. Student answers should include discussions of the following health history components:
 - a. Identifying Data
 1. Identifying data—such as age, date of birth, gender, occupation, marital status
 2. Source of the history—usually the patient, but can be a family member or friend, letter of referral, or the medical record
 3. If appropriate, establish source of referral, because a written report may be needed.
 - b. Reliability—varies according to the patient's memory, trust, and mood
 - c. Chief Complaint(s)—the one or more symptoms or concerns causing the patient to seek care
 - d. Present Illness
 1. Expands the Chief Complaint; describes how each symptom developed

2. Includes patient's thoughts and feelings about the illness
3. Pulls in relevant portions of the Review of Systems, called "pertinent positives and negatives"
4. May include medications, allergies, and habits of smoking and alcohol, which are frequently pertinent to the present illness
- e. Past History
 1. Lists childhood illnesses
 2. Lists adult illnesses with dates for at least four categories: medical, surgical, and psychiatric
 3. Includes health maintenance practices such as immunizations, screening tests, lifestyle issues, and home safety
 4. Includes risk factors
- f. Family History
 1. Outlines or diagrams age and health, or age and cause of death, of siblings, parents, and grandparents
 2. Documents presence or absence of specific illnesses in family, such as hypertension, coronary artery disease, etc.
- g. Review of Systems—documents presence or absence of common symptoms related to each major body system
- h. Health Patterns—documents personal/social history

Activity D NCLEX STYLE QUESTIONS

11. **Answer: c**
RATIONALE: Designating the source helps the nurse and reader assess the type of information provided and possible biases.
12. **Answer: d**
RATIONALE: Key elements of the History of Present Illness: Seven attributes of each principal symptom; self-treatment for the symptom by the patient or family; past occurrences of the symptom(s); and pertinent positives and/or negatives from the review of systems.
13. **Answer: a**
RATIONALE: Past History—*Childhood illnesses*, such as measles, rubella, mumps, whooping cough, chickenpox, rheumatic fever, scarlet fever, and polio, are included in the Past History. Also included are any chronic childhood illnesses.
14. **Answer: b**
RATIONALE: Health Maintenance—*Safety measures*: seat belts in cars, smoke/carbon monoxide detectors, sports helmets or padding, etc.
15. **Answer: c**
RATIONALE: Mastery of all the components of the comprehensive history provides proficiency and the ability to select the elements most pertinent to the patient encounter.
16. **Answer: a, b, and c**
RATIONALE:
17. **Answer: d**
RATIONALE: Present Illness
 - Amplifies the *Chief Complaint*; describes how each symptom developed
 - Includes patient's thoughts and feelings about the illness
 - Pulls in relevant portions of the *Review of Systems*, called "pertinent positives and negatives"
 - May include *medications, allergies*, and habits of *smoking and alcohol*, which are frequently pertinent to the present illness
18. **Answer: d**
RATIONALE: Chief Complaint(s)—Sometimes patients have no specific complaints. Report their goals instead. For example, "I have come for my regular check-up" or "I've been admitted for a thorough evaluation of my heart."
19. **Answer: b, d, and e**
RATIONALE: Two or more affirmative answers to the CAGE Questionnaire suggest alcohol misuse. If you detect misuse, you need to ask about blackouts (loss of memory about events during drinking), seizures, accidents or injuries while drinking, job problems, conflict in personal relationships, or legal problems.
20. **Answer: a**
RATIONALE: Review each of the following conditions and record whether they are present or absent in the family: hypertension, coronary artery disease, elevated cholesterol levels, stroke, diabetes, thyroid or renal disease, arthritis, tuberculosis, asthma or lung disease, headache, seizure disorder, mental illness, suicide, substance abuse, and allergies, as well as symptoms reported by the patient.

• The Health History: Comprehensive or Focused?

Comprehensive Assessment

- Is appropriate for new patients in all settings
- Provides fundamental and personalized knowledge about the patient
- Strengthens the nurse–patient relationship
- Provides baselines for future assessments
- Creates platform for health promotion through education and counseling

Focused Assessment

- Is appropriate for established patients, especially during routine or urgent care visits
- Addresses focused concerns or symptoms
- Assesses symptoms restricted to a specific body system

Activity E CASE STUDY

- a. Student answers will vary in particulars, however, all answers should include the following health history elements:

Patient Name _____ Date/Time _____ Overview. _____ Identifying Data _____ Age: _____ Date of birth: _____ Gender: _____ Chief Complaint: _____ History of Present Illness <ul style="list-style-type: none"> • Location _____ • Intensity _____ • Duration _____ • Description _____ • Aggravating factors _____ • Alleviating factors _____ • Pain level _____ • Functional impairment _____ Vital Signs: T (route) _____ P (with site) _____ R _____ BP (site) _____ SpO ₂ _____ Source of history _____ Risk factors _____ Past History (pertinent to present illness) _____ Family History (pertinent to present illness) _____ Common symptoms _____

Symptom	Yes	No	Additional Data
Chest pain			
Dyspnea			
Orthopnea			
Cough			
Diaphoresis			
Fatigue			
Edema			
Nocturia			
Palpitations			

CHAPTER 5

Activity A FILL IN THE BLANK

- Complete the following statements:
 - Nursing has long recognized and practiced holistic care of the patient and attention to culture is a part of caring for the whole patient.
 - You must evaluate each patient with pain as an individual, being aware of your reaction to the patient's communication style.
 - Knowledge of the cultural or minority groups in your practice region will help you better understand and interpret the patient's needs.
 - It can be disconcerting working with a person whose culture reverses nodding the head for "yes" and shaking the head for "no."
 - There are also cultural-bound syndromes, which are "illnesses" defined by a particular culture but that have no corresponding illness in Western medicine.
 - Spiritual distress may be a response to illness or health issues.
- List the aspects of culture relevant to health assessment.
 - Communication and language
 - Kinship and social networks
 - Educational background and learning style
 - Nutrition
 - Child-bearing and -rearing practices
 - High-risk behaviors
 - Health care beliefs and practices
 - Health care practitioners
 - Spirituality
- List the stages of grief.
 - Denial and isolation
 - Anger
 - Bargaining
 - Depression or sadness
 - Acceptance

Activity B MATCHING

- Match the dimension of cultural humility with its component.

Answer	Component	Definition
B	Self-awareness	A. Communication based on trust, respect, and a willingness to re-examine assumptions
C	Respectful communication	B. Intuitively knowing members of one's own group
A	Collaborative partnerships	C. Maintain an open and inquiring attitude

- Match the concept with the statement about the concept.

Answer	Concept	Statement
G	Spirituality	A. Involves a sincere connection and sharing of human experience
D	Religion	B. What do you think is going to happen to you?
E	Spiritual care	C. Has being sick (or what has happened to you) made any difference in your practice of praying?
A	Nursing presence	D. A system of beliefs or a practice of worship
B	Relation between spiritual beliefs and health	E. Being present during unpleasant experiences, listening to the patient, providing opportunities for the patient to practice religious rituals, or referring the patient to a religious leader of the patient's choice
H	Dying patients	F. Involves a two-tiered approach
C	Religious practices	G. Culture specific
F	Spiritual assessment	H. Don't wish to confide in everyone they meet

Activity C SHORT ANSWER

6. Student answers should include the following information about nursing presence:
 - a. It is holistic.
 - b. It involves a reciprocal exchange between the nurse and patient.
 - c. It involves:
 1. A sincere connection
 2. A sharing of human experience
 3. Active listening
 4. Attentiveness
 5. Intimacy
 6. Therapeutic touch
 7. Spiritual exploration
 8. Empathy
 9. Caring and compassion
 10. Recognition of the patient's psychological, psychosocial, and physiologic needs
 - d. It is often what patients value most from the nurse.
7. Student answers should include the following information about Stoll's guidelines for spiritual assessment:
 - a. Patient's concept of God or deity
 - b. Patient's sources of hope and strength
 - c. Patient's religious practices
 - d. Patient's relation between spiritual beliefs and health
8. Student answers should include the following about nursing care of the dying patient:
 - a. It is challenging for a student or new nurse.
 - b. It is important to work through your own feelings about death and dying.
 - c. Five stages in a person's response to loss or the anticipatory grief of impending death
 1. Denial and isolation
 2. Anger
 3. Bargaining
 4. Depression or sadness
 5. Acceptance
 - d. Stages may occur sequentially or overlap in any order or combination.
 - e. Be sensitive to the patient's feelings about dying.
 - f. Give patients opportunities to talk, and listen.
 - g. Communicate effectively.
 - h. Understand the patient's wishes about treatment at the end of life.
 - i. Be prepared to discuss hospice care.
9. Student answers should include the following:
 - a. Patients are part of:
 1. Families
 2. Communities
 3. Cultures
 4. Races
 5. Countries

- b. Nurse must assess patients within the context of this background.
- c. Culture determines:
 1. Interpersonal communication style
 2. Health beliefs
 3. Values and practices
- d. Individuals from the same culture share a biologic inheritance and share genetic patterns that impact:
 1. Health assessment
 2. Diagnoses
 3. Medical treatment
10. Student answers should include discussions of the following components of the Campinha-Bacote model of cultural competence:
 - a. Awareness
 - b. Skill
 - c. Knowledge
 - d. Encounters
 - e. Desire

Activity D NCLEX STYLE QUESTIONS

11. **Answer: b, d, and e**
RATIONALE: In other words, culture is the system of shared ideas, rules, and meanings that influences how we view the world, experience it emotionally, and behave in relation to other people.
12. **Answer: a**
RATIONALE: The concept of cultural humility is another approach for caring for patients from culturally diverse backgrounds.
13. **Answer: c**
RATIONALE: If you have established rapport and trust, patients will be willing to teach you.
14. **Answer: b**
RATIONALE: A patient's nonverbal communication may confuse or upset a novice nurse when it is different from the nurse's culture.
15. **Answer: a, b, and e**
RATIONALE: Aspects of culture relevant to health assessment include communication and language; kinship and social networks; educational background and learning style; nutrition; child-bearing and -rearing practices; high-risk behaviors; health care beliefs and practices; and health care practitioners.
16. **Answer: c**
RATIONALE: There are also cultural-bound syndromes, which are "illnesses" defined by a particular culture but that have no corresponding illness in Western medicine. For example, symptoms may be attributed to actions by another individual. This may be called "evil eye" or "mal ojo" in Spanish.

17. Answer: d

RATIONALE: Family is important in all cultures, but definitions of family and who is included in the family may vary among cultures. In the history, note the family structure and who the decision makers are for the family, especially for health care issues.

18. Answer: a

RATIONALE: Listening is an important part of being *present* with a patient.

19. Answer: c

RATIONALE: Investigate hospice services in your area and be prepared to discuss how hospice can help the patient and family. Hospice care offers palliative care at the end of life. Hospice social workers and nurses help the patient and family make end-of-life decisions, complete tasks, and provide pain relief and nursing care.

20. Answer: a, c, and d

RATIONALE: Campinha-Bacote sees “cultural desire” as the motivation the nurse needs to “want to” and not “need to” become culturally aware, culturally knowledgeable, and culturally skillful and to seek cultural encounters.

Activity E CASE STUDY

- a. Student answers should include the following:
 1. Patient’s sources of hope and strength
 - i. The Amish do not rely on federal or state programs for assistance.
 - ii. Amish families in a community take care of each other in times of crisis.
 - iii. Amish children care for parents when they become ill, old, or injured.
 2. Patient’s relation between spiritual beliefs and health
 - i. What has bothered the patient most about his injuries
 - ii. The patient’s perception of what is going to happen to him
 - (a) Will the patient accept help from outside his community (i.e., physical therapy, occupational therapy, home health nurses)?

iii. Has the accident and injuries made any difference in the patient’s feelings about God or the practice of his faith?

(a) Is he being punished by God for a past indiscretion (sin)?

iv. Is there anything that is especially frightening or meaningful to the patient now?

CHAPTER 6**Activity A FILL IN THE BLANK**

1. Complete the following statements:
 - A. The physical examination is a process to obtain objective data through patient assessment.
 - B. Before beginning the physical examination, review the measures that promote the patient’s physical comfort and make any adjustments needed in the lighting and surrounding environment.
 - C. The skillful nurse is thorough without wasting time, systematic without being rigid, gentle yet not afraid to cause discomfort should this be required.
 - D. The goal of the nurse is to visualize one area of the body at a time.
 - E. The strength of a reflex is used to gauge central and peripheral nervous system disorders.
 - F. As the nurse develops his or her own sequence of examination, an important goal is to minimize how often you ask the patient to change position.
2. List the elements of standard precautions.
 - A. When to use gloves, gowns, and mouth, nose, and eye protection
 - B. Respiratory hygiene and cough etiquette
 - C. Patient isolation criteria
 - D. Precautions relating to equipment, toys, and solid surfaces, and handling of laundry
 - E. Safe needle-injection practices

Activity B MATCHING

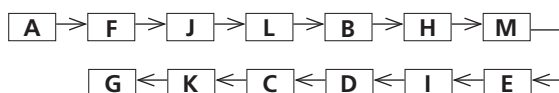
3. Match the cranial nerve with what it controls.

Answer	Cranial Nerve	Associated Function
H	Olfactory nerve	A. Somatic motor innervation to the superior oblique eye muscle
L	Optic nerve	B. Somatic motor innervation to the lateral rectus muscle
G	Oculomotor nerve	C. Innervates the hair cell receptors of the inner ear
A	Trochlear nerve	D. Provides sensory information from the esophagus, respiratory tract, and abdominal viscera
K	Trigeminal nerve	E. Somatic motor innervation to the muscles of the tongue
B	Abducens nerve	F. Somatic motor innervation to the throat muscles involved in swallowing
J	Facial nerve	G. Somatic motor innervation to four of the extrinsic eye muscles
C	Vestibulocochlear nerve	H. Sense of smell
F	Glossopharyngeal nerve	I. Provides muscle movement for the upper shoulders, head, and neck
D	Vagus nerve	J. Sensory information from the face (deep pressure sensation) and taste information from the anterior two thirds of the tongue
I	Accessory nerve	K. Provides sensory information from the face
E	Hypoglossal nerve	L. Visual information

Activity C SEQUENCING

4. Show the suggested sequence of the physical examination.

- A. General survey
- B. Back
- C. Abdomen
- D. Peripheral vascular system
- E. Vital signs
- F. Breasts, axillae, and epitrochlear nodes
- G. Nervous system
- H. Neck
- I. Anterior thorax and lungs
- J. HEENT
- K. Skin
- L. Lower extremities
- M. Posterior thorax and lungs

**Activity D SHORT ANSWER**

5. Student answers should include the following information:

a. Olfactory I

Equipment: At least two different items to smell
Procedure: Have your patient close both eyes and plug one nostril.

Hold a familiar smell under the open nostril and ask him or her to identify it. Test the other nostril with a different smell.

b. Optic II

Equipment: Newspaper or other printed material
Procedure: Ask your patient to cover one eye.

Hold the printed material approximately 18 inches away and have him or her read two sentences. Repeat the procedure using the other eye.

Peripheral vision is tested as you stand or sit 2 feet in front of your patient. Your eyes should be at the same level as the patient's. Ask your patient to cover the right eye. Extend your right arm to the side, and raise your finger. Your patient should let you know when he or she sees your finger.

- c. Oculomotor III, trochlear IV, and abducens VI (These nerves are usually tested together.)

Equipment: Penlight

Procedure: To check for extraocular muscle movement, hold your forefinger about 18 inches away from your patient's eyes. Ask your patient to follow your finger with his or her eyes as you draw the letter "H". Your patient's eyes should move together as he or she follows your finger with his or her eyes. The patient's head should not move.

Shine the penlight into your patient's eye from approximately 8 inches away. Pupil should constrict immediately. Repeat with other eye.

- d. Trigeminal V

Equipment: Cotton ball, ice, two different smells

Procedure: To evaluate the strength and symmetry of the temporal muscles, put your fingertips on your patient's temples and ask him or her to clench his or her teeth. To assess the masseter muscles, place your fingertips on your patient's jaw and ask him or her to clench the teeth. The muscles should feel strong and even on both sides of the head and face.

To test for the sensory function (ophthalmic, maxillary, and mandibular sensations), first have your patient close both eyes. Lightly touch his or her forehead, cheek, and jaw, on both sides of the face, using a cotton ball. Have the patient tell you when he or she feels the cotton touching him or her. Second, take a small piece of ice and apply it **briefly** to a maxillary and a mandibular incisor. Have your patient close his or her eyes and take three strong sniffs from two different items. Your patient should explain how they are different or how they are the same. (Some chemicals produce a cooling or irritating sensation in the nasal cavity by stimulating the trigeminal nerve.)

- e. Facial VII

Equipment: Cotton applicator and sugar solution

Procedure: Assess the taste buds by touching a cotton applicator dipped in a sugar solution to the tongue of the patient. Have the patient tell you where on the tongue he or she tastes the sugar.

To test the motor control of the muscles of facial expression, have your patient raise his or her eyebrows, frown, smile, and puff out the cheeks. Also, have your patient tightly close his or her eyes and resist your attempts to (gently) open them.

- f. Vestibulocochlear VIII

Equipment: Ticking watch

Procedure: To test for hearing, stand 2 feet slightly behind your patient's right side. Whisper several numbers and see if he or she can repeat them. Hold a ticking watch and have your patient tell you when he or she can hear it. (Repeat the test on the left side.)

To test the balance portion of this nerve, have the patient spin around 10 times. Watch the response of his or her eyes. A normal response to the spinning movement is vertigo. (A sense that the subject is dizzy or that the room is moving.) Do NOT permit your patient to fall or to walk until the dizziness is completely gone!

- g. Glossopharyngeal IX (sensory function)

Equipment: Unsweetened chocolate, cotton applicator

Procedure: Place the bitter-tasting chocolate on the tip, sides, and back of your patient's tongue. Have the patient let you know when he or she tastes it.

- h. Glossopharyngeal IX (motor function), vagus X

Equipment: Cotton applicator and tongue depressor

Procedure: Place your hand on your patient's throat and ask him or her to swallow. Check the gag reflex by gently touching the back of the throat with a cotton swab. Hold down the tongue with the tongue depressor. Explain what happens. Touch the uvula with a cotton swab slowly and gently. Describe what happens. Gently hold down the tongue with a tongue depressor and have your patient say "ah." Describe the movement of the uvula, if any.

- i. Accessory XI

Equipment: None

Procedure: Test the strength of the sternocleidomastoid muscle by placing your hand against your patient's cheek and having him or her turn his or her head as you apply resistance. Note the force the patient is able to apply against your hand.

To assess the strength of the trapezius muscle, place your hands on your patient's shoulders and have him or her shrug his or her shoulders as you apply resistance. Is the muscular strength equal on both sides?

- j. Hypoglossal XII

Equipment: Tongue depressor

Procedure: Have your patient stick out his or her tongue. Note any deviations from the midline. Ask your patient to move the tongue from side to side while you use the tongue depressor to prevent the movement. Note any lack of strength.

6. Student answers should include the following:

- a. Complete assessment

- i. Baseline for each patient
- ii. New patient to a medical setting
- iii. Hospital nursing admission assessment
- iv. Visiting nurse's admission assessment

- b. Focused assessment

- i. Concentrates on specific systems related to the problem or issue presented
- ii. An emergent situation
- iii. A follow-up to a patient previously assessed
- iv. If time allows only a brief time frame with a patient

7. Student answers should include the following:
 - a. Reflect on your approach to the patient.
 - b. Adjust the lighting and the environment.
 - c. Make the patient comfortable.
 - d. Check your equipment.
 - e. Choose the sequence of examination.
8. Student answers should include the following:
 - a. Appear calm, organized, and competent.
 - b. Put the patient at ease about the upcoming examination.
 - c. Be thorough without wasting time.
 - d. Be systematic without being rigid.
 - e. Be gentle yet not afraid to cause discomfort should this be required.
 - f. Sense the whole patient.
 - g. Always avoid showing distaste, alarm, or other negative reactions.

Activity E NCLEX STYLE QUESTIONS

9. **Answer: a**
RATIONALE: If not already examined, check sense of smell, strength of the temporal and masseter muscles, corneal reflexes, facial movements, gag reflex, and strength of the trapezia and sternomastoid muscles.
10. **Answer: b**
RATIONALE: Tangential lighting is optimal for inspecting structures such as the jugular venous pulse, the thyroid gland, and the apical impulse of the heart. It casts light across body surfaces that throws contours, elevations, and depressions, whether moving or stationary, into sharper relief.
11. **Answer: c and d**
RATIONALE: When you have completed the examination, tell the patient your general impressions and what to expect next.
12. **Answer: b**
RATIONALE: Diopters are a unit of measurement of the optical powers of a lens or a curved mirror. The diopter should be set at "0" for the beginning of the exam for patients and examiners without any refractive changes.
13. **Answer: d**
RATIONALE: 2 × 2 gauze pads are used during tongue examination.
14. **Answer: a**
RATIONALE: The strength of a reflex is used to gauge central and peripheral nervous system disorders.
15. **Answer: c, d, and e**
RATIONALE: Organize your comprehensive or focused examination around three general goals: maximize the patient's comfort; avoid unnecessary changes in position; and enhance clinical efficiency.
16. **Answer: b**
RATIONALE: Note that the physical examination relies on four classic techniques: inspection, palpation, percussion, and auscultation.
17. **Answer: c**
RATIONALE: Universal precautions are a set of guidelines designed to prevent transmission of

HIV, hepatitis B virus, and other blood-borne pathogens when providing first aid or health care.

18. Answer: b

RATIONALE: Inspect and palpate the cervical lymph nodes. Note any masses or unusual pulsations in the neck. Feel for any deviation of the trachea. Observe the sound and effort of the patient's breathing. Inspect and palpate the thyroid gland.

Activity F CASE STUDY

- a. Student answers should include the following:
 1. Inspection—visual assessment of the operative site will indicate:
 - i. Amount of swelling
 - ii. Redness
 - iii. Drainage from operative wound
 2. Palpation
 - i. Warmth of operative area
 - ii. Tenderness
 - iii. Firmness of operative area
 3. Auscultation
 - i. Breath sounds to assess for postoperative pneumonia
- b. Student answers should include the following:
 1. Universal precautions are a set of guidelines designed to prevent transmission of human immunodeficiency virus, hepatitis B virus, and other blood-borne pathogens when providing first aid or health care. The following fluids are considered potentially infectious: all blood and other body fluids containing visible blood, semen, and vaginal secretions; and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids. Protective barriers include gloves, gowns, aprons, masks, and protective eyewear. All health care workers should observe the important precautions for safe injections and prevention of injury from needlesticks, scalpels, and other sharp instruments and devices. Report to your health service immediately if such injury occurs.
 2. Gloves should be used when assessing the operative area.
 3. If there is drainage from the surgical wound, the nurse should use gloves, gown, and mask when changing the dressing on the operative area.

CHAPTER 7

Activity A FILL IN THE BLANK

1. Complete the following statements.
 - A. Fatigue is a nonspecific symptom with many causes.
 - B. Decreased eye contact may be cultural, or may suggest anxiety, fear, or sadness.
 - C. Blood pressure measurement should be verified in the contralateral arm.
 - D. Never assume that alcohol on a patient's breath explains changes in mental status or neurologic findings.

- E. When you cannot hear Korotkoff sounds at all, you may be able to estimate the systolic pressure by palpation.
- F. Tympanic measurements are more variable than oral or rectal measurements, including right and left comparisons in the same person.
- G. Thermometers used to measure fevers will not detect hypothermia as thermometers only measure core temperature and the core may still be warm.
2. List the focal points when monitoring patient outcomes in pain management.
- Analgesia
 - Activities of daily living
 - Adverse effects
 - Aberrant drug-related behaviors
3. List the components of a general survey.
- General appearance
 - Apparent state of health
 - Demeanor
 - Facial affect or expression
 - Grooming
 - Posture
 - Gait
 - Height
 - Weight
 - Vital signs

Activity B MATCHING

4. Match the description of the blood pressure cuff error with the type of error (type of error will have multiple descriptions).

Answer	Description of Error	Type of Error
B	Cuff too small (narrow)	A. False low readings
A	Cuff too large (wide)	B. False high readings
A	Pressing stethoscope too tightly against pulse	
B	Inflating or deflating cuff too slowly	
B	Cuff too loose or uneven	
A	Repeating assessments too quickly	
B	Deflating cuff too quickly	

5. Match the special technique with the problem obtaining an accurate blood pressure.

Answer	Special Technique	Problem
E	Doppler ultrasound stethoscope	A. Apical pulse should be taken
A	Radial pulse is difficult to find or there is an irregularity	B. Hypertension in people whose blood pressure measurements are higher in the office than at home or in more relaxed settings
F	Weak or inaudible Korotkoff sounds	C. The obese arm
G	Frequent premature contractions or atrial fibrillation	D. Atrial fibrillation
C	Important to use a wide cuff of 15 cm	E. Weak pulse
B	"White coat hypertension"	F. Consider technical problems
D	Palpation of an irregularly irregular rhythm	G. Determine the average of several observations and note that your measurements are approximate

6. Match the definition to its corresponding description.

Answer	Definition	Description
G	Night sweats	A. Can be used with unconscious patients
F	Sweating	B. Measures core body temperature
A	Axillary temperatures	C. Accompanies a rising temperature
C	Feeling cold	D. Usually blue
B	Tympanic membrane temperature	E. Usually red
E	Rectal thermometer	F. Accompanies a falling temperature
D	Oral thermometer	G. Occur in tuberculosis and malignancy

Activity C SHORT ANSWER

7. Student answers should include the following information:
 - a. Use a consistent method to determine severity.
 - b. Visual Analog Scale
 - c. The Numeric Rating Scale
 - d. Faces Pain Scale
 - e. Brief Pain Inventory
8. Student answers should include the following:
 - a. Lower use of analgesics in emergency rooms for African American and Hispanic patients
 - b. Use of analgesics for cancer, postoperative, and low back pain
 - c. Clinician stereotypes
 - d. Language barriers
 - e. Unconscious clinician biases
9. Student answers should include the following:
 - a. Nociceptive or somatic pain
 1. Can be either acute and remitting or chronic and persistent
 2. Mediated by the afferent A-delta and C-fibers of the sensory system
 3. Modulated by both neurotransmitters and psychological processes
 4. Afferent nociceptors can be sensitized by inflammatory mediators.
 - b. Neuropathic pain
 1. Pain resulting from direct injury to the peripheral or central nervous system
 2. May become independent of the inciting injury
 3. Persisting beyond healing from the initial injury
 4. Triggers appear to induce changes in pain signal processing through "neuronal plasticity."
 - c. Psychogenic pain
 1. Relates to the many factors that influence the patient's report of pain
 - i. Psychiatric conditions
 - ii. Personality and coping style
 - iii. Cultural norms
 - iv. Social support systems
 - d. Idiopathic pain
 1. Pain without an identifiable etiology

10. Student answers should include discussions of the following general survey components:
 - a. Temperature
 - b. Pulse
 - c. Respirations
 - d. Blood pressure

Activity D NCLEX STYLE QUESTIONS

11. **Answer: b, c, and d**
RATIONALE: Many factors contribute to the patient's makeup—socioeconomic status, nutrition, genetic composition, degree of fitness, mood state, early illnesses, gender, geographic location, and age cohort.
12. **Answer: d**
RATIONALE: Asymmetry of the face could be a stroke, palsy, or injury to the cranial nerve.
13. **Answer: a**
RATIONALE: Cardiac or respiratory distress: clutching the chest, pallor, diaphoresis, labored breathing, wheezing, cough, shortness of breath, or the tripod position.
14. **Answer: c**
RATIONALE: "Grown-out" hair and nail polish can help you estimate the length of an illness if the patient cannot give a history. Fingernails chewed to the quick may reflect stress.
15. **Answer: c**
RATIONALE: If the rhythm is regular and the rate seems normal, count the rate for 30 seconds and multiply by 2. If the rate is unusually fast or slow, however, count it for 60 seconds. The range of normal is 60–100 beats per minute.
16. **Answer: a, b, and d**
RATIONALE: Fatigue is a common symptom of depression and anxiety states, but also consider *infections* (such as hepatitis, infectious mononucleosis, and tuberculosis); *endocrine disorders* (hypothyroidism, adrenal insufficiency, diabetes mellitus, and panhypopituitarism); *heart failure*; *chronic disease of the lungs, kidneys, or liver*; *electrolyte imbalance*; *moderate to severe anemia*; *malignancies*; *nutritional deficits*; and *medications*.

17. Answer: b

RATIONALE: Follow the guidelines listed, and advise your patients about how to choose the best cuff for home use. Urge them to have their home devices recalibrated routinely.

18. Answer: a

RATIONALE: Ideally, instruct the patient to avoid smoking or drinking caffeinated beverages for 30 minutes before the blood pressure is measured.

19. Answer: b, d, and e

RATIONALE: The stare of hyperthyroidism; the immobile face of parkinsonism; the flat or sad affect of depression. Decreased eye contact may be cultural, or may suggest anxiety, fear, or sadness. Asymmetry of the face could be a stroke, palsy, or injury to the cranial nerve.

20. Answer: b

RATIONALE: Beats that occur earlier than others may not be detected peripherally, and the heart rate can be seriously underestimated.

Activity E CASE STUDY

- a. Student answers will vary in particulars; however, all answers should include the following elements:
1. Vital signs
 2. Pain
 3. General appearance
 - i. Apparent state of health
 - ii. Level of consciousness
 - iii. Facial expression
 - iv. Odors of the body and breath
 - v. Posture, gait, and motor activity
 - vi. Signs of distress
 - vii. Skin color and obvious lesions
 - viii. Dress, grooming, and personal hygiene

CHAPTER 8**Activity A FILL IN THE BLANK**

1. Complete the following statements:
 - A. The MyPyramid Tracker provides information on diet quality and physical activity status.

Activity B MATCHING

4. Match the assessment with the area of the health history in which it occurs (area of occurrence will have multiple assessments).

Answer	Assessment	Area of Occurrence
B	Nutrition	A. ROS
A	Weight changes	B. Health patterns
B	Exercise patterns	
A	Allergies	
A	Fatigue	

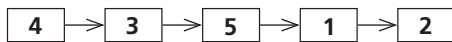
- B. Hydration status is critical to a patient's health.
 - C. Changes in weight result from changes in body tissues or body fluid.
 - D. In addition to the nutrition history, the nurse should collect a sample food intake record.
 - E. Do not use a scale to measure height for children or unstable elderly; instead, use a stadiometer attached to the wall.
 - F. Body fat consists primarily of adipose in the form of triglycerides and is stored in subcutaneous, interabdominal, and intramuscular fat deposits that are difficult to measure directly.
2. List the key messages for promoting patient health.
 - A. Consume a variety of foods within and among the basic food groups while staying within energy needs.
 - B. Control calorie intake and portion size to manage body weight.
 - C. Maintain moderate physical activity for at least 30 minutes each day, for example, walking 3 to 4 miles per hour.
 - D. Increase daily intake of fruits and vegetables, whole grains, and nonfat or low-fat milk and milk products.
 - E. Choose fats wisely, keeping intake of saturated fat, *trans* fat found in partially hydrogenated vegetable oils, and cholesterol low.
 - F. Choose carbohydrates—sugars, starches, and fibers—wisely for good health.
 - G. Choose and prepare foods with little salt.
 - H. If you drink alcoholic beverages, do so in moderation.
 1. Keep food safe to eat.
 3. List the assessment areas of a nutrition history.
 - A. Food pattern
 - B. Personal food preferences
 - C. Food preparation
 - D. Finances
 - E. Accessibility
 - F. Client health
 - G. Family health
 - H. Family dietary patterns

5. Match the assessment area of the nutrition history with the question used to obtain the data.

Answer	Assessment Area	Question
B	Food pattern	A. Are there any foods the client feels are harmful or beneficial?
A	Personal food preferences	B. How many meals are eaten outside the home?
H	Food preparation	C. Does the client take nutritional supplements or vitamins? What type?
G	Finances	D. Is there transportation to the market?
D	Accessibility	E. Are there any eating disorders, heart disease, osteoporosis, diabetes, obesity, or gastrointestinal disorders?
C	Client health	F. Is mealtime a social time?
E	Family health	G. Is any supplementary financial program used?
F	Family dietary patterns	H. Who does the cooking?

Activity C SEQUENCING

6. Show the suggested sequence for measuring height.
- Have the patient step off the scale or away from the wall.
 - Raise the horizontal bar above the patient's head and lower it until it just touches the crown of the head.
 - On a balance beam scale read the height at the point where the top of the measuring slide comes out of the lower portion of the measuring slide.
 - Have the patient remove shoes and hat.
 - The patient should stand facing away from the scale with a straight back and the heels, hips, shoulders, and occiput aligned.



Activity D SHORT ANSWER

7. Student answers should include the following information:
- Decreased intake of food
 - Anorexia
 - Dysphagia
 - Vomiting
 - Diarrhea
 - Inability to absorb nutrients
 - Increased metabolic needs
 - Allergies to foods
 - Problems with chewing
 - Dislike of foods
 - Peer pressure
 - Poor food choices
 - Inability to cook or poor cooking habits
 - Inability to access food stores
 - Lack of financial resources
8. Student answers should include the following:
- Abdominal distention and ascites may be due to protein deficiency.
 - Turgor recoil >2 seconds may indicate dehydration.
 - The waist circumference indicates central body fat.
 - Waist circumference >40 inches in men and >35 inches in women is related to an increased risk for cardiovascular disease.
9. Student answers should include the following:
- Unintended weight changes
 - Fluid retention
 - Physical problem versus nutritional problem
 - It is a source of personalized knowledge about the patient that strengthens the nurse-patient relationship.
 - Provide a basis for assessing patient concerns and answering patient questions.
 - Anorexia
 - Result of physical problem?
 - Eating disorder
 - Changes in the senses of taste or smell
 - Neurologic problem?
 - Malignancy?
 - Difficulty chewing or swallowing
 - Dentition
 - Neurologic problem

10. Student answers should include the following sources for the nutrients listed:

Calcium	Dairy foods such as yogurt, milk, and natural cheeses Breakfast cereals, fruit juice with calcium supplements Dark green leafy vegetables such as collards, turnip greens
Iron	Shellfish Lean meat, dark turkey meat Cereals with iron supplements Spinach, peas, lentils Enriched and whole-grain bread
Folate	Cooked dried beans and peas Oranges, orange juice Dark-green leafy vegetables
Vitamin D	Milk (fortified) Eggs, butter, margarine Cereals (fortified)

Activity E NCLEX STYLE QUESTIONS

11. **Answer: c, d, and e**

RATIONALE: Causes of weight loss include gastrointestinal diseases; endocrine disorders (diabetes mellitus, hyperthyroidism, adrenal insufficiency); chronic infections; malignancy; chronic cardiac, pulmonary, or renal failure; depression; and anorexia nervosa or bulimia.

12. **Answer: d**

RATIONALE: Edema may be secondary to a protein deficiency or overhydration in a patient with a weak heart.

13. **Answer: a**

RATIONALE: Note changes in mental status, irritability, inability to concentrate, or paresthesias. Dehydration and lack of vitamins may cause these symptoms.

14. **Answer: c**

RATIONALE:

TABLE 8-8 PATIENTS WITH HYPERTENSION: RECOMMENDED CHANGES IN DIET

Dietary Change	Food Source
Increase foods high in potassium	Baked white or sweet potatoes, cooked greens such as spinach Bananas, plantains, many dried fruits, orange juice
Decrease foods high in sodium	Canned foods (soups, tuna fish) Pretzels, potato chips, pickles, olives Many processed foods (frozen dinners, ketchup, mustard) Batter-fried foods Table salt, including for cooking

(Source: Adapted from Dietary Guidelines Committee, 2000 Report. Nutrition and Your Health: Dietary Guidelines for Americans. Washington, DC: Agricultural Research Service, U.S. Department of Agriculture, 2000.)

15. **Answer: a, c, and e**

RATIONALE: Obesity-Related Risk Factors and Diseases:

Endocrine

- The metabolic syndrome
- Type 2 diabetes
- Dyslipidemia
- Polycystic ovarian syndrome/androgenicity
- Amenorrhea/infertility/menstrual disorders

16. **Answer: b**

RATIONALE: Biologic complications—*neuroendocrine changes*: amenorrhea, increased corticotropin-releasing factor, cortisol, growth hormone, serotonin; decreased diurnal cortisol fluctuation, luteinizing hormone, follicle-stimulating hormone, thyroid-stimulating hormone; biologic complications—see changes listed for anorexia nervosa, especially weakness, fatigue, mild cognitive

disorder; also erosion of dental enamel, parotitis, pancreatic inflammation with elevated amylase, mild neuropathies, seizures, hypokalemia, hypochloremic metabolic acidosis, hypomagnesemia; *cardiovascular disorders*: bradycardia, hypotension, arrhythmias, cardiomyopathy; *metabolic disorders*: hypokalemia, hypochloremic metabolic alkalosis, increased BUN, edema; *other*: dry skin, dental caries, delayed gastric emptying, constipation, anemia, osteoporosis.

17. **Answer: b**

RATIONALE: Purposeful drinking is warranted for individuals who are exposed to heat stress or who perform sustained vigorous physical activity.

18. **Answer: d**

RATIONALE: Recent research has discovered that if a middle-aged or older woman with a normal body mass index wants to maintain her weight over an

extended period, she must engage in the equivalent of 60 minutes per day of physical activity at a moderate intensity.

19. Answer: a

RATIONALE: The recommended daily allowance (RDA) of sodium is less than 2400 mg, or 1 teaspoon, per day.

20. Answer: c

RATIONALE: Be prepared to help adolescent females and women of child-bearing age increase intake of iron and folic acid. Assist adults older than 50 years to identify foods rich in vitamin B₁₂ and calcium. Advise older adults and those with dark skin or low exposure to sunlight to increase intake of vitamin D.

Activity F CASE STUDY

a. Student answers should include the following:

1. General survey
 - i. Height
 - ii. Weight
 - iii. Vital signs
 - iv. BMI
2. Skin, hair, and nails
3. HEENT
4. Cardiovascular and peripheral vascular
5. Gastrointestinal
6. Musculoskeletal
7. Neurologic

b. Student answers will vary in particulars but should include the following:

1. Caloric intake at least adequate to maintain patient's weight within normal limits
2. At least three balanced meals a day

CHAPTER 9

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. The skin contains three layers: the epidermis, the dermis, and the subcutaneous tissues.
 - B. An increase in blood flow through the arteries to the capillaries causes a reddening of the skin, whereas the opposite change usually produces pallor.

Activity B MATCHING

4. Match the type of skin cancer with the description in (skin cancers will have multiple descriptions).

Answer	Description	Type of Skin Cancer
C	Most rapidly increasing U.S. malignancy	A. Basal cell carcinoma
B	Often crusted and scaly	B. Squamous cell carcinoma
A	Pearly white and translucent	C. Melanoma
B	Accounts for approximately 16% of skin cancers	
C	Can spread rapidly to the lymph system and internal organs	
A	Rarely metastasizes	

- C. Adults have two types of hair: vellus hair, which is short, fine, inconspicuous, and relatively unpigmented; and terminal hair, which is coarser, thicker, more conspicuous, and usually pigmented.
 - D. The firm, rectangular, and usually curving nail plate gets its pink color from the vascular nail bed to which the plate is firmly attached.
 - E. The eccrine glands are widely distributed, open directly onto the skin surface, and by their sweat production help to control body temperature.
 - F. Remember to correlate your findings with observations of the mucoous membranes, especially when assessing skin color, because diseases may appear in both areas.
 - G. Pressure sores result when sustained compression obliterates arteriolar and capillary blood flow to the skin.
 - H. The SPF is a ratio of the number of minutes for treated versus untreated skin to redden with exposure to UV-B.
 - I. Early detection of melanoma, when 3 mm or less, significantly improves prognosis.
 - J. Inspect the scalp for lesions, flaking, and parasites by separating the hair at 1- to 2-inch intervals.
2. List the functions of the skin.
 - A. Provides a barrier
 - B. Regulates body temperature
 - C. Synthesizes vitamin D
 - D. Provides sensory perception
 - E. Provides nonverbal communication
 - F. Provides identity
 - G. Allows wound repair
 - H. Allows excretion of metabolic wastes
 3. List the characteristics of the skin assessed in a physical examination.
 - A. Color
 - B. Moisture
 - C. Temperature
 - D. Texture
 - E. Mobility and Turgor
 - F. Edema
 - G. Lesions

5. Match the type of skin lesion with its description.

Answer	Type of Skin Lesion	Description
F	Primary skin lesions (primary presentation)	A. Comedones, papules, pustules, and alcohol
D	Secondary skin lesions	B. Pitting and scars
G	Secondary skin lesions—depressed	C. Ecchymosis
A	Acne vulgaris—primary lesion	D. Dry skin
B	Acne vulgaris—secondary lesion	E. Cherry angioma
E	Vascular lesion	F. Café-au-lait spot
C	Purpuric lesion	G. Excoriation

Activity C SEQUENCING

6. Put the following actions in the correct sequence for skin self-examination:
- Examine the right and left sides with arms raised.
 - Look at the backs of your legs and feet, the spaces between your toes, and the sole.
 - Examine the back of your neck and scalp with a hand mirror.
 - Check your back and buttocks with a hand mirror.
 - Examine your body front and back in the mirror.
 - Bend elbows and look carefully at forearms, upper underarms, and palms.

E → A → F → B → C → D

Activity D SHORT ANSWER

7. Student answers should include the following information:
The major function of the skin is to keep the body in homeostasis despite daily assaults from the environment. The skin:
- Provides a barrier protecting the body from:
 - Injury secondary to mechanical, chemical, thermal, and ultraviolet (UV) light ray sources
 - Penetration by microorganisms
 - Loss of water and electrolytes, thereby preventing dehydration
 - Regulates body temperature by allowing heat dissipation through sweat glands and heat storage through subcutaneous insulation
 - Synthesizes vitamin D from cholesterol by the action of UV light
 - Has end sensory organs for touch, pain, temperature, and pressure allowing, sensory perception
 - Provides nonverbal communication, such as posture, facial movements, or vasomotor responses such as blushing
 - Provides identity through skin color and facial features

- Allows wound repair through cell replacement of surface injuries
 - Allows excretion of metabolic wastes, such as electrolytes, minerals, sugar, or uric acid.
8. Student answers should include the following:
Identification of:
- Diseases of the skin
 - Systemic diseases that have skin manifestations
 - Physical abuse
 - Risk for pressure ulcer formation
 - Risk for skin cancer
 - Need for health promotion education regarding the skin
9. Student answers should include the following:
- Edema may be pitting or nonpitting.
 - In pitting edema the interstitial water is mobile
 - It can be translocated with the pressure exerted by a finger.
 - A “pit” or depression is left for 5 to 30 seconds.
 - The degree of pitting is measured on a 1 to 4 scale.

Scale	Depression
1+	2 mm
2+	4 mm
3+	6 mm
4+	8 mm

- Nonpitting edema reflects a condition in which serum proteins have accumulated in the interstitial space with the water and coagulated.
 - Frequently seen with local infection or trauma
 - Called brawny edema
10. Student answers should include the following characteristics of skin lesions:
- Anatomic location and distribution over the body
 - Their patterns and shapes

- c. The types of skin lesions (e.g., macules, papules, vesicles, nevi)
- d. Their color
- e. Their elevation

Activity E NCLEX STYLE QUESTIONS

11. Answer: b, d, and e

RATIONALE: The Braden Scale is a simple effective tool that evaluates levels of risk for ulcer development in the patient. With its high reliability, predictive validity, and ease of use, the Braden Scale can be used to assess patients as often as every shift if needed. Six factors are rated using a matrix scoring system: sensory perception, moisture, activity, mobility, nutrition, and friction and shear.

12. Answer: c

RATIONALE: Loss of hair on the legs may indicate peripheral artery disease, while changes in pubic or axilla hair may indicate hormonal problems.

13. Answer: a, b, and c

RATIONALE: Risk factors for melanoma: history of previous melanoma; age older than 50 years; regular dermatologist absent; mole changing; male gender; 50 or more common moles; one to four atypical or unusual moles, especially if dysplastic; red or light hair; actinic keratoses, lentigines, or macular brown or tanned spots usually on sun-exposed areas, such as freckles; ultraviolet radiation from heavy sun exposure, sunlamps, or tanning booths; light eye or skin color, especially skin that freckles or burns easily; severe blistering sunburns in childhood; immunosuppression from HIV or chemotherapy; family history of melanoma.

14. Answer: b

RATIONALE: In vitiligo, depigmented macules appear on the face, hands, feet, extensor surfaces, and other regions and may coalesce into extensive areas that lack melanin. The brown pigment is normal skin color; the pale areas are vitiligo. The condition may be hereditary. These changes may be distressing to the patient.

15. Answer: c

RATIONALE: Carotene is a golden yellow pigment that exists in subcutaneous fat and in heavily keratinized areas such as the palms and soles.

16. Answer: a

RATIONALE: Examination of the skin can reveal signs of systemic diseases, medication side effects, dehydration or overhydration, and physical abuse; allow early identification of potentially cancerous lesions and risk factors for pressure ulcer formation; and identify the need for hygiene and health promotion education.

17. Answer: d

RATIONALE: Levels of risk for developing pressure ulcers are rated according to the following scores:

- 19 to 23: not at risk
- 15 to 18: mild risk
- 13 to 14: moderate risk
- 10 to 12: high risk
- 9 or lower: very high risk

18. Answer: d

RATIONALE: Cyanosis is of two kinds. If the oxygen level in the arterial blood is low, cyanosis is *central* and indicates decreased oxygenation in the patient. If the oxygen level is normal, cyanosis is *peripheral*. Peripheral cyanosis occurs when cutaneous blood flow decreases and slows, and tissues extract more oxygen than usual from the blood. Peripheral cyanosis may be a normal response to anxiety or a cold environment.

19. Answer: a

RATIONALE: The eccrine glands are widely distributed, open directly onto the skin surface, and by their sweat production help to control body temperature. In contrast, the apocrine glands are found chiefly in the axillary and genital regions, usually open into hair follicles, and are stimulated by emotional stress.

20. Answer: b

RATIONALE: Although the U.S. Preventive Services Task Force has found insufficient evidence to recommend inspection for routine screening, the American Cancer Society recommends skin examination as part of a routine cancer-related check-up every 3 years for people aged 20 to 40 years, and yearly for those older than 40.

Activity F CASE STUDY

a. Student answers should include the following:

1. History of previous melanoma
2. Age older than 50
3. Regular dermatologist absent
4. Mole changing
5. Male gender
6. 50 or more common moles
7. One to four atypical or unusual moles, especially if dysplastic
8. Red or light hair
9. Actinic keratoses, lentigines, or macular brown or tanned spots usually on sun-exposed areas, such as freckles
10. Ultraviolet radiation from heavy sun exposure, sunlamps, or tanning booths
11. Light eye or skin color, especially skin that freckles or burns easily
12. Severe blistering sunburns in childhood
13. Immunosuppression from HIV or chemotherapy
14. Family history of melanoma

b. Student answers should include the following:

ABCDES OF EXAMINING MOLES FOR POSSIBLE MELANOMA

- **A** for asymmetry of one side of mole compared to the other
- **B** for irregular borders, especially ragged, notched, or blurred
- **C** for variation or change in color, especially blue or black
- **D** for diameter ≥ 6 mm or different from others, especially if changing, itching, or bleeding
- **E** for evolving, a mole or skin lesion that looks different from the rest or is changing in size, shape, or color

CHAPTER 10

Activity A FILL IN THE BLANK

- Complete the following statements:
 - Every headache warrants careful evaluation for life-threatening causes such as meningitis, subdural or intracranial hemorrhage, or tumor.
 - An aura, with neurologic symptoms, may precede a headache.
 - The function of the lymph system is to detect and eliminate foreign substances.
 - Deep to the sternomastoids run the great vessels of the neck: the carotid artery and the internal jugular vein.
 - Microcephaly is an anomaly characterized by a small head in proportion to the body and an underdeveloped brain.
 - The supraclavicular nodes lie in the angle between the clavicle and the sternomastoid.
 - Tracheal deviation may also signify important problems in the thorax, such as a mediastinal mass, atelectasis, or a large pneumothorax.
 - The thyroid cartilage, the cricoid cartilage, and the thyroid gland all rise with swallowing and then fall to their resting positions.
- List the “red flags” that suggest secondary causes to headaches.
 - Recent onset
 - Onset after 50 years of age
 - Acute onset
 - Markedly elevated blood pressure
 - Presence of rash
 - Signs of infection
 - Presence of cancer
 - Presence of HIV
 - Pregnancy
 - Vomiting
 - Recent head trauma
 - Persisting neurologic deficits
- List the steps for palpating the thyroid gland using the posterior approach.
 - Ask the patient to flex the neck slightly forward.
 - Place the fingers of both hands on the patient's neck so that your index fingers are just below the cricoid cartilage.
 - Ask the patient to sip and swallow water as before.
 - Displace the trachea and palpate the lobes of the thyroid.
 - Note the size, shape, and consistency of the thyroid gland.

Activity B MATCHING

- Match the description of head pain with the type of head pain.

Answer	Location of Head Pain	Type of Head Pain
I	Around and over the eyes	A. Sinus headache
H	Most often the temporal, but also the occipital	B. Subarachnoid hemorrhage
E	Cheek, jaws, lips, or gums	C. Brain tumor
B	Nausea, vomiting, possibly loss of consciousness, neck pain	D. Meningitis
G	Mental and physical exertion	E. Trigeminal neuralgia
J	Previous headache pattern	F. Acute glaucoma
F	In and around one eye	G. Posttraumatic headache
D	Generalized, fever, stiff neck	H. Giant cell arteritis
C	Often intermittent but progressive	I. Headaches from eye disorders
A	Usually above the eye	J. Analgesic rebound

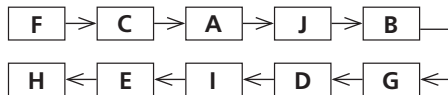
5. Match the facies with their description.

Answer	Facies	Description
D	Parkinson disease	A. The head is elongated, with bony prominence of the forehead, nose, and lower jaw.
E	Myxedema	B. Chronic bilateral asymptomatic swellings anterior to the ear lobes
F	Cushing syndrome	C. Swelling usually appears first around the eyes and in the morning.
A	Acromegaly	D. A mask-like face may result, with decreased blinking and a characteristic stare.
B	Parotid gland enlargement	E. A dull, puffy facies
C	Nephrotic syndrome	F. A round or "moon" face with red cheeks

Activity C SEQUENCING

6. Put the palpation of lymph nodes in the correct sequence.

- A. Occipital
- B. Submandibular
- C. Posterior auricular
- D. Superficial cervical
- E. Deep cervical chain
- F. Preauricular
- G. Submental
- H. Supraclavicular
- I. Posterior cervical
- J. Tonsillar

**Activity D SHORT ANSWER**

7. Student answers should include the following information to decrease the likelihood of falls:
- a. Install safety features in the home such as grab bars in the bathroom and nonslip mats in the bathtub.
 - b. Avoid the use of throw rugs.
 - c. Remove extension or phone cords from high-traffic areas.
 - d. Use rails on stairs.
 - e. Wear nonslip, well-fitting shoes.
 - f. Install gates on stairs.
 - g. Install window guards.
 - h. Don't use walkers for babies.
8. Student answers should include the following steps for palpating the thyroid gland (posterior approach):
- a. Ask the patient to flex the neck slightly forward to relax the sternomastoid muscles.

- b. Place the fingers of both hands on the patient's neck so that your index fingers are just below the cricoid cartilage.
- c. Ask the patient to sip and swallow water as before. Feel for the thyroid isthmus rising up under your finger pads. It is often but not always palpable.
- d. Displace the trachea to the right with the fingers of the left hand; with the right-hand fingers, palpate laterally for the right lobe of the thyroid in the space between the displaced trachea and the relaxed sternomastoid. Find the lateral margin. In similar fashion, examine the left lobe.

The lobes are somewhat harder to feel than the isthmus, so practice is needed. The anterior surface of a lateral lobe is approximately the size of the distal phalanx of the thumb and feels somewhat rubbery.

- e. Note the *size*, *shape*, and *consistency* of the gland and identify any *nodules* or *tenderness*.

If the thyroid gland is enlarged, listen over the lateral lobes with a stethoscope to detect a *bruit*, a sound similar to a cardiac murmur but of noncardiac origin.

9. Student answers should include the following:
- a. Process
 - b. Location
 - c. Quality and severity
 - d. Timing
 - i. Onset
 - ii. Duration
 - iii. Course
 - e. Associated factors
 - f. Factors that aggravate or provoke
 - g. Factors that relieve

10. Student answers should include the following common or concerning symptoms of the head:
- Headache
 - Headache is one of the most common symptoms in clinical practice.
 - Usually benign
 - Can be life-threatening
 - Head or neck surgery
 - Can be caused by traumatic injury
 - Can be caused by malignancy
 - Can cause deformity
 - Cause can be life-threatening
 - Traumatic brain injury

Activity E NCLEX STYLE QUESTIONS

11. **Answer: c**
RATIONALE: Factors that aggravate or provoke: sustained muscle tension, as in driving or typing.
12. **Answer: b**
RATIONALE: Is there a prodrome of unusual feelings such as euphoria, craving for food, fatigue, or dizziness? Is there an aura with neurologic symptoms, such as change in vision or numbness or weakness in an arm or leg?
13. **Answer: a, c, and d**
RATIONALE: Associated manifestations of headache associated with TBI: vision changes; nausea or vomiting; attention span deficits; drainage from the ears, nose, eyes, or mouth; tremors; seizures; or gait changes.
14. **Answer: d**
RATIONALE: The thyroid cartilage is readily identified by the notch on its superior edge.
15. **Answer: c**
RATIONALE: Knowledge of the lymphatic system is important to a sound clinical habit: whenever a malignant or inflammatory lesion is observed, look for involvement of the regional lymph nodes that drain it; whenever a node is enlarged or tender, look for a source such as infection in the area that it drains.
16. **Answer: a, b, and c**
RATIONALE: The anterior triangle is bordered by the mandible above, the sternomastoid laterally, and the midline of the neck medially.
17. **Answer: d**
RATIONALE: Intolerance to cold, preference for warm clothing and many blankets, and decreased sweating suggest hypothyroidism; the opposite symptoms, palpitations, and involuntary weight loss suggest hyperthyroidism.
18. **Answer: a**
RATIONALE: Part the hair in several places and look for scaliness, lumps, nevi, or other lesions. Redness and scaling may indicate seborrheic dermatitis, psoriasis; soft lumps of pilar cysts (wens); pigmented nevi.

19. **Answer: b, d, and e**

RATIONALE: Note the patient's facial expression and contours. Observe for asymmetry, involuntary movements, edema, and masses.

20. **Answer: a**

RATIONALE: Soft in Graves disease; firm in Hashimoto thyroiditis, malignancy. Benign and malignant nodules, tenderness in thyroiditis.

Activity F CASE STUDY

- a. Student answers will vary in particulars; however, all answers should include the following assessment areas (not necessarily in this order):
- Skull for edema/fracture
 - Cranial nerves
 - Sensation
 - Movement of extremities
 - Respiratory status
 - Neck for fracture or other trauma
 - Pain
 - Spine
 - Face
- b. Student answers should include the following information:
- Assess for fractures/dislocations.
 - Assess for intracranial bleeds.

CHAPTER 11

Activity A FILL IN THE BLANK

- Complete the following statements:
 - A film of tear fluid protects the conjunctiva and cornea from drying, inhibits microbial growth, and gives a smooth optical surface to the cornea.
 - A visual field is the entire area seen by an eye when it looks at a central point.
 - A light beam shining onto one retina causes pupillary constriction both in that eye, termed the direct reaction to light, and in the opposite eye, the consensual reaction.
 - Infections can occur and injure the eye if contact lenses are not taken care of properly.
 - Amblyopia, also known as "lazy eye," is a loss of vision due to lack of use, and strabismus is eye misalignment; these are found most frequently in infants and children up to 7 years old.
 - Vision is a critical sense for experiencing the world around us, and areas of importance are health promotion and disease prevention.
- List the structures of the eye seen through an ophthalmoscope.
 - Retina
 - Choroid
 - Fovea
 - Macula
 - Optic disc
 - Retinal vessels

3. List the cardinal directions of gaze.
- A. To the patient's extreme right
 - B. To the right and upward
 - C. Down on the right
 - D. To the extreme left
 - E. To the left and upward
 - F. Down on the left

Activity B MATCHING

4. Match the papillary abnormality with its description.

Answer	Description	Pupillary Abnormality
D	Unequal pupils	A. Tonic pupil
E	Does not cause anisocoria as long as the sympathetic and parasympathetic innervation to both irises is normal	B. Horner syndrome
A	Reaction to light is severely reduced and slowed, or even absent	C. Oculomotor nerve (CN III) paralysis
F	Pupils that accommodate but do not react to light	D. Anisocoria
C	The dilated pupil is fixed to light and near effort. Ptosis of the upper eyelid and lateral deviation of the eye are almost always present	E. Equal pupils and one blind eye
B	The affected pupil, though small, reacts briskly to light and near effort. Ptosis of the eyelid is present, perhaps with loss of sweating on the forehead	F. Small, irregular pupils (Argyll Robertson pupils)

5. Match the lump or swelling in and around the eye with its description.

Answer	Lump or Swelling	Description
E	Pinguecula	A. A localized ocular redness from inflammation of the episcleral vessels
D	Hordeolum	B. A swelling between the lower eyelid and nose
F	Xanthelasma	C. A subacute, nontender, and usually painless nodule involving a meibomian gland
A	Episcleritis	D. A painful, tender red infection in a gland at the margin of the eyelid
C	Chalazion	E. Yellowish triangular nodule in the bulbar conjunctiva on either side of the iris
B	Dacryocystitis	F. Slightly raised, yellowish, well-circumscribed plaques that appear along the nasal portions of one or both eyelids






Activity C SHORT ANSWER

6. Student answers should include the following information:
- a. Nuclear cataract
 - i. Looks gray when seen by a flashlight
 - ii. If the pupil is widely dilated, the gray opacity is surrounded by a black rim.

- b. Peripheral cataract
 - i. Produces spoke-like shadows that point inward
 - ii. Gray against black when seen with a flashlight
 - iii. Black against red when seen with an ophthalmoscope
 - iv. A dilated pupil facilitates this observation.

7. Student answers should include the following information:

TABLE 11-5 RED EYES

	 Conjunctivitis	 Subconjunctival Hemorrhage	
Pattern of Redness	Conjunctival injection: diffuse dilatation of conjunctival vessels with redness that tends to be maximal peripherally	Leakage of blood outside of the vessels, producing a homogeneous, sharply demarcated, red area that fades over days to yellow and then disappears	
Pain	Mild discomfort rather than pain	Absent	
Vision	Not affected except for temporary mild blurring due to discharge	Not affected	
Ocular Discharge	Watery, mucoid, or mucopurulent	Absent	
Pupil	Not affected	Not affected	
Cornea	Clear	Clear	
Significance	Bacterial, viral, and other infections; allergy; irritation	Often none. May result from trauma, bleeding disorders, or a sudden increase in venous pressure, as from cough	
	 Corneal Injury or Infection	 Acute Iritis	 Glaucoma
Pattern of Redness	Ciliary injection: dilation of deeper vessels that are visible as radiating vessels or a reddish violet flush around the limbus. Ciliary injection is an important sign of these three conditions but may not be apparent. The eye may be diffusely red instead. Other clues of these more serious disorders are pain, decreased vision, unequal pupils, and a less than perfectly clear cornea.		
Pain	Moderate to severe, superficial	Moderate, aching, deep	Severe, aching, deep
Vision	Usually decreased	Decreased	Decreased
Ocular Discharge	Watery or purulent	Absent	Absent
Pupil	Not affected unless iritis develops	May be small and, with time, irregular	Dilated, fixed
Cornea	Changes depending on cause	Clear or slightly clouded	Steamy, cloudy
Significance	Abrasions, and other injuries; viral and bacterial infections	Associated with many ocular and systemic disorders	Acute increase in intraocular pressure—an emergency

8. Student answers should include the following:
- Light reflected from the image must pass through the pupil.
 - Light from image must be focused on sensory neurons in the retina.
 - Image projected there is upside down and reversed right to left.
 - Nerve impulses, stimulated by light, are conducted through the:
 - Retina
 - Optic nerve
 - Optic tract
 - Optic radiation
 - Ends in the visual cortex
9. Student answers should include the following:
- Distal vision
 - Use a well-lit Snellen chart.
 - Position the patient 20 feet from the chart.
 - Patients who use glasses or contacts other than for reading should wear them for the examination.
 - Ask the patient to cover one eye with an index card and to read the smallest line of print possible
 - Coaxing to attempt the next line may improve performance.
 - Determine the smallest line of print from which the patient can identify more than half the letters.
 - Record the visual acuity designated at the side of this line, along with use of glasses or contacts, if any.
 - Near vision
 - Use the Rosenbaum chart.
 - Held 14 inches from the patient's eyes, the card simulates a Snellen chart.
 - Peripheral visual fields by confrontation
 - Starts in the temporal fields
 - Have the patient look into your eyes.
 - Place your hands about 2 feet apart, lateral to the patient's ears.
 - Tell the patient to point to your fingers as soon as they are seen.
 - Slowly move the wiggling fingers of both your hands along the imaginary bowl and toward the line of gaze until the patient identifies them.
 - Repeat this pattern in the upper and lower temporal quadrants.

Activity D NCLEX STYLE QUESTIONS

10. **Answer: b**
RATIONALE: In exophthalmos the eyeball protrudes forward. When bilateral, it suggests the infiltrative ophthalmopathy of Graves hyperthyroidism.
11. **Answer: d**
RATIONALE: The purpose of the health history is to identify changes in the eyes.

12. **Answer: b**
RATIONALE: In the United States, a person is usually considered legally blind when vision in the better eye, corrected by glasses, is 20/200 or less.
13. **Answer: a**
RATIONALE: When the patient's left eye repeatedly does not see your fingers until they have crossed the line of gaze, a left *temporal hemianopsia* is present.
14. **Answer: c**
RATIONALE: Ask the patient to follow your finger or pencil as you move it in toward the bridge of the nose. The converging eyes normally follow the object to within 5 cm to 8 cm of the nose.
15. **Answer: a and e**
RATIONALE: If you need a fuller view of the eye, rest your thumb and finger on the bones of the cheek and brow, respectively, and spread the lids. The local redness below is from nodular episcleritis, often self-limiting in younger adults; it is also seen in rheumatoid arthritis and system lupus erythematosus.
16. **Answer: a**
RATIONALE: Follow the blood vessels as they get wider. Follow the vessels medially toward the nose and look for the round yellowish orange structure which is the optic disc.
17. **Answer: c**
RATIONALE: *Papilledema* describes swelling of the optic disc and anterior bulging of the physiologic cup.
18. **Answer: d**
RATIONALE: Within the eyelids lie firm strips of connective tissue called tarsal plates. Each plate contains a parallel row of meibomian glands, which open on the lid margin.
19. **Answer: a**
RATIONALE: Nursing education is vital in maintaining vision and a healthy outlook for clients.

Activity E CASE STUDY

- a. Student answers should include the following: Adequate examination of the eye in search of a foreign body requires eversion of the upper eyelid. Follow these steps:
- Instruct the patient to look down.
 - Get the patient to relax the eyes—by reassurance and by gentle, assured, and deliberate movements.
 - Raise the upper eyelid slightly so that the eyelashes protrude, and then grasp the upper eyelashes and pull them gently down and forward.
 - Place a small stick such as an applicator or a tongue blade at least 1 cm above the lid margin (and therefore at the upper border of the tarsal plate).
 - Push down on the stick as you raise the edge of the lid, thus everting the eyelid or turning it "inside out." Do not press on the eyeball itself.

3. Secure the upper lashes against the eyebrow with your thumb and inspect the palpebral conjunctiva.
 - i. After your inspection, grasp the upper eyelashes and pull them gently forward.
 - ii. Ask the patient to look up. The eyelid will return to its normal position.
- b. Student answers should include the following:
 1. Vision screening
 2. Eye protection
 - i. Protective eyewear
 - ii. Emergency eye care
 - iii. Care of contact lenses

CHAPTER 12

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. The nurse's role is to detect changes and work with the health care team to prevent infections or loss of hearing.
 - B. In all components of the digestive system, the nurse assesses the patient for deviations from normal and teaches preventive practices to maintain these sensory organs.
 - C. The lowest portion of the temporal bone, the mastoid process, is palpable behind the lobule.
 - D. The second part of the hearing pathway, involving the cochlea and the cochlear nerve, is called the sensorineural phase; a disorder here causes sensorineural hearing loss.
 - E. Air enters the nasal cavity by way of the anterior naris on either side, then passes into a widened area known as the vestibule and on through the narrow nasal passage to the nasopharynx.
 - F. The paranasal sinuses are air filled and make the skull lighter and add to speech resonance.
 - G. Nasal sprays, if overused, can contribute to the rebound effect, causing inflammation and congestion.
 - H. A midline mucosal fold, called a labial frenulum, connects each lip with the gingiva.
 - I. At the base of the tongue the ducts of the submandibular gland pass forward and medially.
 - J. Each parotid duct opens onto the buccal mucosa near the upper second molar.
2. List the clues to physical abuse.
 - A. If injuries are unexplained, seem inconsistent with the patient's story, are concealed by the patient, or cause embarrassment
 - B. If the patient has delayed getting treatment for trauma
 - C. If there is a past history of repeated injuries or "accidents"
 - D. If the patient or person close to the patient has a history of alcohol or drug abuse
 - E. If the partner tries to dominate the interview, will not leave the room, or seems unusually anxious or solicitous
 3. List the parts of a comprehensive health history.
 - A. Identifying Data and Source of the History
 - B. Chief Complaint(s)
 - C. History of Present Illness
 - D. Past History
 - E. Family History
 - F. Review of Systems
 - G. Health Patterns

Activity B MATCHING

4. Match the term for dizziness with its description.

Answer	Term	Description
C	Vertigo	A. Causes include anxiety, panic disorder, hyperventilation, depression, somatization disorder, and alcohol and substance abuse
D	Presyncope	B. Unsteadiness or imbalance when walking
B	Dysequilibrium	C. A spinning sensation accompanied by nystagmus and ataxia
A	Psychiatric	D. A near faint from "feeling faint or lightheaded"

5. Match the abnormality of the eardrum with its description.

Answer	Abnormalities of the Eardrum	Description
C	Perforation of the drum	A. Viral infection characterized by painful hemorrhagic vesicles that appear on the tympanic membrane, the ear canal, or both
D	Tympanosclerosis	B. Caused by bacterial infection
E	Serous effusion	C. Holes in the eardrum that usually result from purulent infections of the middle ear
A	Bullous myringitis	D. A deposition of hyaline material within the layers of the tympanic membrane that sometimes follows a severe episode of otitis media
B	Acute otitis media with purulent effusion	E. Usually caused by viral upper respiratory infections or by sudden changes in atmospheric pressure as from flying or diving

6. Match the abnormality to its corresponding description.

Answer	Abnormality	Description
H	Geographic tongue	A. Painful, round or oval ulcer
G	Fissured tongue	B. Small purplish or blue-black round swellings under the tongue
F	Candidiasis	C. The undersurface of the tongue appears painted white
J	Hairy tongue	D. Slightly raised, oval, and covered by a grayish membrane
L	Smooth tongue	E. Rounded bony growths
K	Hairy leukoplakia	F. Thick white coating
B	Varicose veins	G. Sometimes termed scrotal tongue
D	Mucous patch of syphilis	H. A map-like pattern that changes over time
E	Tori mandibulares	I. Medially, note the reddened area of mucosa, called <i>erythroplakia</i> , suggesting possible malignancy
A	Aphthous ulcer	J. Yellowish to brown or black elongated papillae on the tongue's dorsum
C	Leukoplakia	K. Whitish raised areas with a feathery or corrugated pattern
I	Carcinoma, floor of the mouth	L. Suggests a deficiency in riboflavin, niacin, folic acid, vitamin B ₁₂ , pyridoxine, or iron, or treatment with chemotherapy

Activity C SHORT ANSWER

7. Student answers should include the following information:
- Vibrations of sound pass through the air of the external ear.
 - Vibrations are transmitted through the eardrum and ossicles of the middle ear to the cochlea.
 - The cochlea senses and codes the vibrations.
 - Nerve impulses are sent to the brain through the cochlear nerve.
8. Student answers should include the following:
- Tinnitus is a perceived sound that has no external stimulus.
 - Commonly heard as musical ringing or a rushing or roaring noise
 - Can involve one or both ears
 - May accompany hearing loss
 - Often remains unexplained
- Occasionally, popping sounds originate in the temporomandibular joint.
 - Vascular noises from the neck may be audible.
 - Common symptoms increase with age.
 - When associated with hearing loss and vertigo, it suggests Ménière disease.
9. Student answers should include the following:
- Four primary functions
 - It is the site of inspiration and expiration.
 - It filters, warms, and adds moisture to the air exchanged.
 - It is the sensory organ for smell.
 - It is the site of speech resonance.
 - Exterior
 - Upper third of the nose is supported by bone.
 - Lower two thirds of the nose is supported by cartilage.
 - Anterior nares on either side are points of entry for air.

- c. Interior
- Air passes into vestibule then nasal passage to nasopharynx.
 - Medial wall of each nasal cavity is formed by the nasal septum.
 - Nasal cavity is covered by a mucous membrane well supplied with blood.
 - Vestibule, unlike the rest of the nasal cavity, is lined with hair-bearing skin, not mucosa.
 - Curving bony structures, the turbinates, covered by a highly vascular mucous membrane, protrude into the nasal cavity.
 - Each groove, or meatus, is named according to the turbinate above it.
 - Nasolacrimal duct drains into the inferior meatus.
 - Most of the paranasal sinus drains into the middle meatus.
- d. Principle functions of the nasal cavities
- Cleansing
 - Humidification
 - Temperature control of inspired air
- e. Paranasal sinuses
- Air-filled cavities within the bones of the skull
 - Make the skull lighter
 - Add to speech resonance
 - Lined with mucous membranes
 - Not readily accessible to clinical examination
10. Student answers should include the following: Ask the patient to put out his or her tongue
- Note the color and texture of the dorsum of the tongue
 - Inspect the sides and undersurface of the tongue and the floor of the mouth
 - Note any white or reddened areas, nodules, or ulcerations.
 - Palpate the tongue for any induration.

Activity F NCLEX STYLE QUESTIONS

11. **Answer: a, c, and e**
RATIONALE: As nurses, prevention is key, and patients should be reminded to utilize ear plugs when exposed to loud noises in their daily lives (e.g., lawnmowers, leaf blowers, chainsaws, concerts, train stations, battlefields, and sirens) and to limit exposure (iPod buds and cell phones).
12. **Answer: d**
RATIONALE: When trying to distinguish between conductive and neurosensory hearing loss, you need a quiet room and a tuning fork, preferably of 512 Hz or possibly 1024 Hz. These frequencies fall within the range of human speech (300 Hz to 3000 Hz)—functionally the most important range.
13. **Answer: b**
RATIONALE: Tonsils are graded based on size: T1: tonsils are visible; T2: tonsils are between the tonsillar pillars and the uvula; T3: tonsils are touching the uvula; T4: tonsils are touching each other.
14. **Answer: b**
RATIONALE: Hearing screening should be completed before an infant leaves the hospital. Without such programs, the average age of detection of significant hearing loss is approximately 14 months.
15. **Answer: c**
RATIONALE: Use of dental dams during oral sex will act as a barrier to bodily fluids and help reduce transmission of STDs such as herpes, genital warts, and HIV.
16. **Answer: b**
RATIONALE: The labyrinth within the inner ear senses the position and movements of the head and helps to maintain balance.
17. **Answer: a**
RATIONALE: An alternate pathway, known as *bone conduction*, bypasses the external and middle ear and is used for testing purposes.
18. **Answer: d**
RATIONALE: Unusually soft wax, debris from inflammation or rash in the ear canal, or discharge through a perforated eardrum may be secondary to acute or chronic otitis media.
19. **Answer: b, d, and e**
RATIONALE: Inquire about drugs that might cause stuffiness: oral contraceptives, reserpine, guanethidine, and alcohol.
20. **Answer: c**
RATIONALE: The buccal mucosa lines the cheeks.

Activity G CASE STUDY

- a. Student answers will vary in particulars; however, all answers should utilize the following format:

EARS, NOSE, MOUTH, AND THROAT	
Name _____	Date/Time _____
Overview _____	
Identifying Data _____	
Source and Reliability _____	
Common or Concerning Symptoms of the Ears _____	
History of Present Illness	
Onset _____	
Location _____	
Duration _____	
Characteristic symptoms _____	
Associated manifestations _____	
Relieving/exacerbating factors _____	
Treatment _____	
Past History	
Congenital hearing loss _____	
Removal of cerumen _____	
Ear surgery _____	
Trauma or injury to ear(s) _____	
Exposure to hazardous noise levels (work, home, war) _____	
History of syphilis, rubella, meningitis _____	
Family History	
Hearing loss _____	
Otitis media _____	
Allergies _____	
Smoking or exposure to cigarette smoke _____	
Lifestyle Habits	
Are you exposed to loud noises? _____	
What is your occupation? Hobbies (e.g., hunting)? _____	
Do you attend concerts? Bars? Loud places? _____	
Do you use headphones or earbuds to listen to music? _____	
Do you use an iPod? How often? On what level? _____	
Do you use a lawnmower? Power tools? Firearms? _____	
Do you live near a busy road or train tracks? _____	
Have you ever used ear plugs/protectors? Currently? _____	
Have you ever used hearing aid(s)? Which ear? Currently? At all times? Brand? _____	
Have you used medications or drugs that interfere with how you hear or cause dizziness? _____	
Any medications that cause ototoxicity (e.g., large doses of antibiotics infused rapidly)? _____	
Physical Examination of the Ears	
The auricle _____	
Ear canal and drum _____	
Auditory acuity _____	
Air and bone conduction _____	

- b. Student answers may vary in the particulars of their teaching plan; however, they should all include the following topics:
1. Hearing screening
 2. Ear protection

CHAPTER 13

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. In a woman, to find the intercostal spaces, either displace the breast laterally or palpate closer to the sternum.
 - B. As you percuss down the chest on the left, the resonance of normal lung usually changes to the tympany of the gastric air bubble.
 - C. Percussion sets the chest wall and underlying tissues in motion, producing audible sound and palpable vibrations.
 - D. Fremitus refers to the palpable vibrations transmitted through the bronchopulmonary tree to the chest wall as the patient is speaking.
 - E. Try to visualize the underlying lobes, and compare one side with the other, so that the patient serves as his or her own control.
2. List the groups for whom the CDC recommends the pneumococcal vaccine.
 - A. All adults ages 65 years and older
 - B. People between the ages of 2 and 64 years with chronic illnesses specifically associated with increased risk from pneumococcal infection
 - C. Anyone with or about to receive a cochlear implant
 - D. Persons ages 2 years or older who are immunocompromised
 - E. Alaska natives of certain Native American groups
 - F. Healthy children older than 6 months
3. List the sources of chest pain.
 - A. Trachea and large bronchi
 - B. Parietal pleura
 - C. Chest wall, including the musculoskeletal system and skin
 - D. Myocardium
 - E. Pericardium
 - F. Aorta
 - G. Esophagus
 - H. Extrathoracic structures: neck, gallbladder, and stomach
 - I. Anxiety

Activity B MATCHING

4. Match the type of breath sound with its description (breath sounds may have multiple descriptions):

Answer	Description	Type of Breath Sound
B	Musical, prolonged	A. Crackles (or rales)
A	Discontinuous	B. Wheezes and rhonchi
C	Soft, high pitched, very brief	C. Fine crackles
B	Continuous	D. Course crackles
A	Like dots in time	E. Wheezes
E	Relatively high pitched with hissing or shrill quality	F. Rhonchi
D	Somewhat louder, lower in pitch, brief (20–30 msec)	
F	Relatively low pitched with snoring	
B	Like dashes in time	
A	Intermittent, nonmusical, and brief	

5. Match the respiratory term with its description.

Answer	Term	Description
F	Dyspnea	A. Inspiratory and expiratory sounds about equal in length
C	Wheezes	B. Fade away about one third of the way through expiration
E	Cough	C. Suggest partial airway obstruction from secretions, tissue inflammation, or a foreign body
A	Bronchovesicular sounds	D. Have a short silence between inspiratory and expiratory sounds
B	Vesicular sounds	E. May be caused by inflammation of the respiratory mucosa or tension in the air passages from a tumor or enlarged peribronchial lymph nodes
D	Bronchial sounds	F. Shortness of breath

6. Match the disease process to its corresponding location of chest pain.

Answer	Disease Process	Corresponding Location of Chest
F	Tracheobronchitis	A. Retrosternal or across the anterior chest
I	Pericarditis	B. Precordial, below the left breast, or across the anterior chest
H	Dissecting aortic aneurysm	C. Retrosternal, may radiate to the back
C	Reflex esophagitis	D. Often below the left breast
G	Diffuse esophageal spasm	E. Sometimes radiating to the shoulders, arms, neck, lower jaw, or upper abdomen
D	Costochondritis	F. Upper sternal or on either side of the sternum
J	Pleuritic pain	G. Retrosternal, may radiate to the back, arms, and jaw
B	Anxiety	H. Anterior chest, radiating to the neck, back, or abdomen
A	Angina pectoris	I. Precordial, may radiate to the tip of the shoulder and to the neck
E	Myocardial infarction	J. Chest wall overlying the process

Activity C SHORT ANSWER

7. Student answers should include the following information:
- Abnormalities of the chest are described in two dimensions:
 - Along the vertical axis
 - Around the circumference of the chest
 - Vertical locations
 - You must be able to count the ribs and inter-spaces.
 - Sternal *angle*, also termed the angle of Louis, is the best guide.
 - Move your finger down approximately 5 cm to the horizontal bony ridge joining the manubrium to the body of the sternum.
 - Move your finger laterally and find the adjacent 2nd rib and costal cartilage.
 - Using two fingers, “walk down” the intercostal spaces, one space at a time, on an oblique line.
 - Circumference of the chest
 - The midsternal and vertebral lines are precise.
 - Midclavicular line drops vertically from the midpoint of the clavicle.
 - Anterior and posterior axillary lines
 - Midaxillary line
 - Vertebral line
 - Scapular line
8. Student answers should include the following:
- Crackles
 - Late inspiratory crackles result from a series of tiny explosions when small airways, deflated during expiration, pop open during inspiration.
 - Coarse crackles
 - Crackles result from air bubbles flowing through secretions or lightly closed airways during respiration.

- c. Early inspiratory crackles
 - i. Appear and end soon after the start of inspiration
 - ii. Often coarse and relatively few in number
 - iii. Causes include chronic bronchitis and asthma.
- d. Midinspiratory and expiratory crackles
 - i. Heard in *bronchiectasis* but are not specific for this diagnosis
- e. Wheezes
 - i. Occur when air flows rapidly through bronchi that are narrowed nearly to the point of closure
 - ii. Causes of wheezes throughout the chest include asthma, chronic bronchitis, COPD, and congestive heart failure (cardiac asthma).
- f. Rhonchi
 - i. Secretions in the larger airways
- g. Stridor
 - i. High-pitched harsh sound that is entirely or predominantly inspiratory
 - ii. Indicates a partial obstruction of the larynx or trachea, and demands immediate attention
 - iii. Sometimes described as a seal's bark
- h. Pleural rub
 - i. Creaking sounds
 - ii. Inflamed and roughened pleural surfaces grate against each other.
 - iii. Usually confined to a relatively small area of the chest wall

9. Student answers should include the following:

TABLE 13-7 PHYSICAL FINDINGS IN SELECTED CHEST DISORDERS

The black boxes in this table suggest a framework for clinical assessment. Start with the three boxes under Percussion Note: resonant, dull, and hyperresonant. Then move from each of these to other boxes that emphasize some of the key differences among various conditions. The changes described vary with the extent and severity of the disorder. Abnormalities deep in the chest usually produce fewer signs than superficial ones, and may cause no signs at all. Use the table for the direction of typical changes, not for absolute distinctions.

Condition	Percussion Note	Trachea	Breath Sounds	Adventitious Sounds	Tactile Fremitus and Transmitted Voice Sounds
Normal The tracheobronchial tree and alveoli are clear; pleurae are thin and close together; mobility of the chest wall is unimpaired.	Resonant	Midline	Vesicular, except perhaps bronchovesicular and bronchial sounds over the large bronchi and trachea, respectively	None, except perhaps a few transient inspiratory crackles at the bases of the lungs	Normal
Chronic Bronchitis The bronchi are chronically inflamed and a productive cough is present. Airway obstruction may develop.	Resonant	Midline	Vesicular (normal)	None; or scattered coarse <i>crackles</i> in early inspiration and perhaps expiration; or <i>wheezes</i> or <i>rhonchi</i>	Normal
Left-Sided Heart Failure (Early) Increased pressure in the pulmonary veins causes congestion and interstitial edema (around the alveoli); bronchial mucosa may become edematous.	Resonant	Midline	Vesicular	<i>Late inspiratory crackles</i> in the dependent portions of the lungs; possibly <i>wheezes</i>	Normal

TABLE 13-7 PHYSICAL FINDINGS IN SELECTED CHEST DISORDERS (Continued)

Condition	Percussion Note	Trachea	Breath Sounds	Adventitious Sounds	Tactile Fremitus and Transmitted Voice Sounds
<p>Consolidation Alveoli fill with fluid or blood cells, as in pneumonia, pulmonary edema, or pulmonary hemorrhage.</p>	Dull over the airless area	Midline	<i>Bronchial</i> over the involved area	<i>Late inspiratory crackles</i> over the involved area	<i>Increased</i> over the involved area, with <i>bronchophony</i> , <i>egophony</i> , and <i>whispered pectoriloquy</i>
<p>Atelectasis (Lobar Obstruction) When a plug in a mainstem bronchus (as from mucus or a foreign object) obstructs air flow, affected lung tissue collapses into an airless state.</p>	Dull over the airless area	May be <i>shifted toward involved side</i>	<i>Usually absent</i> when bronchial plug persists. Exceptions include right upper lobe atelectasis, where adjacent tracheal sounds may be transmitted.	None	<i>Usually absent</i> when the bronchial plug persists. In exceptions (e.g., right upper lobe atelectasis) may be increased
<p>Pleural Effusion Fluid accumulates in the pleural space and separates air-filled lung from the chest wall, blocking the transmission of sound.</p>	Dull to flat over the fluid	<i>Shifted toward opposite side</i> in a large effusion	<i>Decreased to absent</i> , but bronchial breath sounds may be heard near top of large effusion	None, except a <i>possible pleural rub</i>	<i>Decreased to absent</i> , but may be <i>increased</i> toward the top of a large effusion
<p>Pneumothorax When air leaks into the pleural space, usually unilaterally, the lung recoils from the chest wall. Pleural air blocks transmission of sound.</p>		<i>Shifted toward opposite side</i> if much air	<i>Decreased to absent</i> over the pleural air	None, except a <i>possible pleural rub</i>	<i>Decreased to absent</i> over the pleural air
<p>Chronic Obstructive Pulmonary Disease (COPD) Slowly progressive disorder in which the distal air spaces enlarge and lungs become hyperinflated. Chronic bronchitis is often associated.</p>	Hyperresonant or tympanic over the pleural air	Midline	<i>Decreased to absent</i>	None, or the crackles, wheezes, and rhonchi of associated chronic bronchitis	<i>Decreased</i>

(continued)

TABLE 13-7 PHYSICAL FINDINGS IN SELECTED CHEST DISORDERS (Continued)

Condition	Percussion Note	Trachea	Breath Sounds	Adventitious Sounds	Tactile Fremitus and Transmitted Voice Sounds
Asthma Widespread narrowing of the tracheobronchial tree diminishes air flow to a fluctuating degree. During attacks, air flow decreases further, and lungs hyperinflate.	Diffusely hyperresonant Resonant to diffusely hyperresonant	Midline	<i>Often obscured by wheezes</i>	<i>Wheezes, possibly crackles</i>	<i>Decreased</i>

10. Student answers should include discussions of the following:
- Observation and documentation of the rate, rhythm, depth, and effort of breathing is the first step of the respiratory assessment.
 - Observe the patient's facial expression.
 - Observe level of consciousness.
 - Assess the patient's color.
 - Listen to the patient's breathing.
 - Inspect the neck.
 - Observe the shape of the chest.

Activity D NCLEX STYLE QUESTIONS

11. **Answer: b**
RATIONALE: To make vertical locations, you must be able to count the ribs and interspaces. The sternal angle, also termed the angle of Louis, is the best guide.
12. **Answer: d**
RATIONALE: Posteriorly, the 12th rib is another possible starting point for counting ribs and interspaces: it helps locate findings on the lower posterior chest and provides an option when the anterior approach is unsatisfactory.
13. **Answer: a**
RATIONALE: Note that the costal cartilages of the first seven ribs articulate with the sternum; the cartilages of the 8th, 9th, and 10th ribs articulate with the costal cartilages just above them. The 11th and 12th ribs, the "floating ribs," have no anterior attachments. The cartilaginous tip of the 11th rib usually can be felt laterally, and the 12th rib may be felt posteriorly. On palpation, costal cartilages and ribs feel identical.
14. **Answer: b**
RATIONALE: The trachea bifurcates into its mainstem bronchi at the levels of the sternal angle anteriorly and the T4 spinous process posteriorly.
15. **Answer: c**
RATIONALE: Dyspnea is air hunger, a nonpainful but uncomfortable awareness of breathing that is

inappropriate to the level of exertion, commonly termed shortness of breath.

16. **Answer: a**
RATIONALE: Breath sounds may be decreased when air flow is decreased (as in obstructive lung disease or muscular weakness) or when the transmission of sound is poor (as in pleural effusion, pneumothorax, or COPD).
17. **Answer: d**
RATIONALE: Increased transmission of voice sounds suggests that air-filled lung has become airless.
18. **Answer: b**
RATIONALE: Dullness replaces resonance when fluid or solid tissue replaces air-containing lung or occupies the pleural space.
19. **Answer: b, d, and e**
RATIONALE: Associated symptoms of chronic bronchitis include chronic productive cough and recurrent respiratory infections; wheezing may also develop.
20. **Answer: c**
RATIONALE: Risk factors for pulmonary embolism include postpartum or postoperative periods, prolonged bed rest, congestive heart failure, chronic lung disease, fractures of hip or leg, and deep venous thrombosis (often not clinically apparent).

Activity E CASE STUDY

- a. Student answers should include the following assessments:
- History of Present Illness
 - Onset
 - Location
 - Duration
 - Characteristic symptoms
 - Associated manifestations
 - Relieving/exacerbating factors
 - Treatment
 - Past History
 - Prior respiratory disease
 - Thoracic surgery, biopsy, or trauma
 - Allergies

- TB testing
- Flu vaccine
- Prior pulmonary testing
- Tdap version of the tetanus immunization
- Travel outside the United States?
- Contact with anyone diagnosed with SARS
- Lifestyle and Personal Habits
 - Snuff use
 - Second-hand smoke
 - Chewing tobacco
- Environmental conditions that might affect you breathing
- Medications
- Oxygen use
- Clinical assessment of pulmonary function
 - The “walk test”
 - Forced expiratory time
- b. Student answers should include the following:
 - Education on formal pulmonary function testing
 - Assessment on the desire to quit smoking
 - Education on smoking cessation (if the patient so desires)
 - Education on immunizations
 - Education on the use of prescribed inhalers/medications
 - Education on the disease processes of COPD

CHAPTER 14

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. The area of the exterior chest that overlays the heart and great vessels is called the precordium.
 - B. To reduce the risk for CHD, counsel patients to pursue aerobic exercise, or exercise that increases muscle oxygen uptake, for at least 30 minutes on most days of the week.

Activity B MATCHING

4. Match the heart rhythm with its usual resting rate.

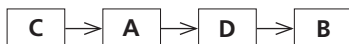
Answer	Heart Rhythm	Usual Resting Rate
G	Ventricular tachycardia	A. <60
D	Second-degree AV block	B. 100–175
E	Complete heart block	C. 100–180
B	Atrial flutter with a regular ventricular response	D. 60–100
C	Sinus tachycardia	E. <40
A	Sinus bradycardia	F. 150–250
H	Normal sinus rhythm	G. 110–250
F	Supraventricular (atrial or nodal) tachycardia	H. 60–90

- C. Auscultation of heart sounds and murmurs is an important skill of physical examination that leads directly to several clinical diagnoses.
 - D. If an impulse or heave is palpable, assess its location, amplitude, and duration.
 - E. To assess duration, listen to the heart sounds as you feel the apical impulse, or watch the movement of your stethoscope as you listen at the apex.
 - F. Carefully inspect the anterior chest for the location of the apical impulse or point of maximal impulse or heaves over the precordium, which indicate increased ventricular movement.
 - G. Note the anatomic location of sounds in terms of intercostal spaces and their distance from the midsternal or midclavicular lines.
 - H. The JVP provides valuable information about the patient's volume status and cardiac function.
2. List the lifestyle modifications to prevent cardiovascular disease and stroke.
 - A. Complete cessation of smoking
 - B. Optimal blood pressure control
 - C. Healthy eating
 - D. Lipid management
 - E. Regular aerobic exercise
 - F. Optimal weight
 - G. Diabetes management so that fasting glucose level is below 110 mg/dL and HgA1C is <7%
 - H. Conversion of atrial fibrillation to normal sinus rhythm or, if chronic, anticoagulation
 3. List the components of the cardiovascular examination.
 - A. Examination of the face
 - B. Examination of the great vessels of the neck
 - C. Inspection and palpation of the precordium
 - D. Auscultation of normal and extra heart sounds
 - E. Inspection for peripheral edema

5. Match the description with the correct gradation of murmur.

Answer	Gradation of Murmur	Description
E	Grade 1	A. Loud, with palpable thrill
D	Grade 2	B. Very loud, with thrill; may be heard when the stethoscope is partly off the chest
F	Grade 3	C. Very loud, with thrill; may be heard with stethoscope entirely off the chest
A	Grade 4	D. Quiet, but heard immediately after placing the stethoscope on the chest
B	Grade 5	E. Very faint; heard only after listener has "tuned in"
C	Grade 6	F. Moderately loud

6. Put the steps of the cardiac examination in the correct sequence.
- Listen at the 2nd right and left intercostal spaces.
 - Listen at the right sternal border.
 - Inspect and palpate the precordium.
 - Palpate the apical impulse.



Activity C SHORT ANSWER

7. Student answers should include the following information:
- Inspection
 - Apical impulse
 - Point of maximal impulse
 - Heaves
 - Palpation
 - Heaves, lifts, or thrills
 - Thrills
 - Right ventricular area
 - Apical impulse or point of maximal impulse
 - Location, diameter, amplitude, and duration of the apical impulse
 - Pulmonic area
 - Aortic area
 - Percussion
 - Rarely used today to estimate cardiac size
 - Percuss from resonance toward cardiac dullness in the 3rd, 4th, 5th, and possibly 6th interspaces.
 - Auscultation
 - Listen for heart sounds.
 - Identify heart murmurs.
 - Assess for peripheral edema.
8. Student answers should include the following:
- Superior and inferior vena cavae
 - Right atrium
 - Tricuspid valve
 - Right ventricle

- Pulmonary valve
- Pulmonary artery
- Lungs
- Pulmonary vein
- Left atrium
- Mitral valve
- Aortic valve
- Aorta

9. Student answers should include the following:
- Pericardium
 - Two tough fibrous membranes
 - Enclose and protect the heart
 - Serous fluid between the membranes
 - Myocardium
 - Does the pumping
 - Endocardium
 - Thin, smooth layer of endothelial tissue
 - Lines the inner surface
10. Student answers should include discussions of the following health history components:
- Initiated in the sinus node
 - Cardiac pacemaker
 - Automatically discharges an impulse about 60 to 100 times a minute
 - Impulse travels through both atria to the atrio-ventricular node
 - Located low in the atrial septum
 - Bundle of His
 - Ventricular myocardium
 - Muscular contraction follows

Activity D NCLEX STYLE QUESTIONS

11. Answer: a

RATIONALE: The right ventricle narrows as it rises to meet the pulmonary artery just below the sternal angle. This is called the "base of the heart" and is located at the right and left 2nd intercostal spaces next to the sternum.

12. **Answer: b**
RATIONALE: Obesity or a thick chest wall makes palpation of the apical impulse difficult.
13. **Answer: d**
RATIONALE: In the diagram below, pressure in the left ventricle rises from <5 mm Hg in its resting state to a normal peak of 120 mm Hg.
14. **Answer: b**
RATIONALE: In older adults, an S₃, sometimes termed “an S₃ gallop,” usually indicates a pathologic change in ventricular compliance.
15. **Answer: b and d**
RATIONALE: S₁ also has two components, an earlier mitral and a later tricuspid sound.
16. **Answer: a**
RATIONALE: The small P wave indicates atrial depolarization (duration up to 80 msec; *PR interval* 120 to 200 msec).
17. **Answer: d**
RATIONALE: Afterload refers to the degree of vascular resistance to ventricular contraction.
18. **Answer: b**
RATIONALE: Blood pressure in the arterial system varies during the cardiac cycle, peaking in systole and falling to its lowest trough in diastole.
19. **Answer: a, d, and e**
RATIONALE: Blood pressure levels fluctuate strikingly throughout any 24-hour period, varying with physical activity; emotional state; pain; noise; environmental temperature; use of coffee, tobacco, and other drugs; and even time of day.
20. **Answer: a**
RATIONALE: The oscillations that you see in the internal jugular veins, and often in the externals, reflect changing pressures within the right atrium.

Activity E CASE STUDY

- a. Student answers should include the following assessment elements:
1. Weight
 2. Activity level
 3. Tobacco use
 4. Dietary sodium intake
 5. Potassium intake
 6. Alcohol use
 7. Family history of hypertension and/or early CVD
- b. Student answers should include the following:
1. Time the murmur—is it in systole or diastole?
 2. Locate where the murmur is loudest on the precordium—at the base, along the sternal border, at the apex?
 3. Conduct any necessary maneuvers, such as having the patient lean forward and exhale or turn to the left lateral decubitus position.
4. Determine the shape of the murmur—for example, is it crescendo or decrescendo, is it holosystolic?
 5. Grade the intensity of the murmur from 1 to 6.
 6. Identify associated features such as the quality of S₁ and S₂; the presence of extra sounds such as S₃, S₄, or an opening snap; or the presence of additional murmurs.
 7. Be sure you are listening in a quiet room.

CHAPTER 15

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Chronic venous insufficiency is caused by incompetent vein valves secondary to deep vein thrombosis or prolonged increased venous pressure as seen in prolonged standing or pregnancy.
 - B. An atheroma is a fatty thickening in the walls of arteries.
 - C. Prevention and early identification of DVT are critical nursing tasks, especially in the care of hospitalized patients and patients with reduced mobility.
 - D. Capillaries have an endothelial cell lining but no media, facilitating rapid diffusion of oxygen and carbon dioxide.
 - E. The aorta and its immediate branches are large or highly elastic arteries, such as the pulmonary, common carotid, and iliac arteries.
 - F. Dislodgement of the thrombus produces an embolism that can travel to the lungs, causing pulmonary embolism and possible death.
2. List the important topics for health promotion and counseling for arterial disease.
 - A. Smoking cessation
 - B. Weight control
 - C. Exercise program
 - D. Hypertension control
 - E. Hyperlipidemia control
 - F. Diabetes management
 - G. Limiting alcohol intake
 - H. Foot care
3. List the parts of a comprehensive health history.
 - A. Identifying data and source of the history
 - B. Chief complaint(s)
 - C. History of present illness
 - D. Past history
 - E. Family history
 - F. Review of systems
 - G. Health patterns

Activity B MATCHING

4. Match the type of peripheral vascular disorder with the location of the pain it causes.

Answer	Peripheral Vascular Disorder	Location of Pain
F	Acute arterial occlusion	A. Diffuse aching of the leg(s)
H	Intermittent claudication	B. Tight, bursting pain, if present, usually in the calf; may be painless
J	Compartment syndrome	C. An arm or a leg
A	Chronic venous insufficiency (deep)	D. Intermittent claudication, particularly in the arch of the foot
G	Atherosclerosis—rest pain	E. Pain in a local area along the course of a superficial vein
I	Raynaud disease and phenomenon	F. Distal pain, usually involving the foot and leg
E	Superficial thrombophlebitis	G. Distal pain, in the toes or forefoot
B	Deep venous thrombosis (DVT)	H. Usually calf muscles
D	Thromboangiitis obliterans (Buerger disease)	I. Distal portions of one or more fingers
C	Acute lymphangitis	J. Tight, bursting pain in calf muscles, usually in the anterior tibial compartment

5. Match the score of the ankle–brachial index with the interpretation of the score (with a range of 0.90 to 1.30).

Answer	Interpretation of Score	Score
C	Normal lower extremity blood flow	A. <0.39
D	Mild PAD	B. <0.59 to >0.40
B	Moderate PAD	C. >0.90
A	Severe PAD	D. <0.89 to >0.60

6. Draw a line from the type of ulcer in column 1 to its corresponding definition in column 2.

- | | |
|--|---|
| A. Chronic venous insufficiency ulcer (c) | a. Develops in pressure points of areas with diminished sensation |
| B. Arterial insufficiency ulcer (b) | b. Usually appears over the medial and sometimes the lateral malleolus |
| C. Neuropathic Ulcer (a) | c. Occurs in the toes, feet, or possibly areas of trauma |

Activity C SHORT ANSWER

7. Student answers should include the following information:
- Patient should avoid caffeine and tobacco for at least 60 minutes prior to procedure.
 - Patient should rest supine in a warm room for at least 10 minutes before testing.
 - Place blood pressure cuffs on both arms and ankles.
 - Apply ultrasound gel over brachial, dorsalis pedis, and posterior tibial arteries.
 - Measure systolic pressures in the arms.
 - Use Doppler to locate brachial pulse. The probe may be adjusted between 30° and 60° to maximize sound.
 - Inflate cuff 20–50 mm Hg above last audible pulse.

- iii. Deflate cuff at a rate of 2–4 mm Hg/s and record pressure at which pulse becomes audible.
- iv. Obtain two measures in each arm and record the average as the brachial pressure in that arm.
- f. Measure systolic pressures in ankles.
 - i. Use Doppler to locate dorsalis pedis pulse.
 - ii. Inflate cuff 20 mm Hg above last audible pulse.
 - iii. Deflate cuff slowly and record pressure at which pulse becomes audible.
 - iv. Obtain two measures in each ankle and record the average as the dorsalis pedis pressure in that leg.
 - v. Repeat above steps for posterior tibial arteries.
- g. Calculate ABI.

$$\text{Right ABI} = \frac{\text{highest right average ankle pressure (DP or PT)}}{\text{highest average arm pressure (right or left)}}$$

$$\text{Left ABI} = \frac{\text{highest left average ankle pressure (DP or PT)}}{\text{highest average arm pressure (right or left)}}$$

8. Student answers should include the following:
- a. Pitting edema
 - i. Edema is soft, bilateral, with pitting on pressure.
 - ii. On the anterior tibiae and feet
 - iii. No skin thickening, ulceration, or pigmentation
 - iv. Results from:
 - (a) Prolonged standing or sitting
 - (b) Congestive heart failure
 - (c) Nephrotic syndrome
 - (d) Cirrhosis
 - (e) Malnutrition
 - b. Chronic venous insufficiency
 - i. Edema is soft, with pitting on pressure, and occasionally bilateral.
 - ii. Brawny changes and skin thickening
 - iii. Ulceration
 - iv. Brownish pigmentation
 - v. Edema in the feet
 - vi. Results from:
 - (a) Chronic obstruction
 - (b) Incompetent valves
 - c. Lymphedema
 - i. Edema is soft in the early stages.
 - ii. Becomes indurated, hard, and nonpitting
 - iii. Skin is markedly thickened.
 - iv. Ulceration is rare.
 - v. No pigmentation
 - vi. Found in the extremities, often bilaterally
 - vii. Results from:
 - (a) Obstructed lymph channels
 - (b) Axillary node dissection
 - (c) Radiation

- d. Capillary leak syndrome
 - i. Protein leaks into the interstitial space.
 - ii. Seen in:
 - (a) Burns
 - (b) Angioedema
 - (c) Snake bites
 - (d) Allergic reactions
- 9. Student answers should include the following:
 - a. Pain—intermittent claudication, progressing to pain at rest
 - b. Mechanism—tissue ischemia
 - c. Pulses—decreased or absent
 - d. Color
 - i. Pale, especially on elevation
 - ii. Dusky red on dependency
 - e. Temperature—cool
 - f. Edema
 - i. Absent or mild
 - ii. May develop as the patient tries to relieve rest pain by lowering the leg
 - g. Skin changes
 - i. Trophic changes:
 - (a) Thin, shiny, atrophic skin
 - (b) Loss of hair over the foot and toes
 - (c) Nails thickened and ridged
 - h. Ulceration
 - i. If present, involves toes or points of trauma on feet
 - i. Gangrene—may develop
- 10. Student answers should include discussions of the following health history components:
 - a. Pain—ulcer often painful; generalized leg aching, especially at end of day
 - b. Mechanism—venous hypertension
 - c. Pulses—normal, though may be difficult to feel through edema
 - d. Color
 - i. Normal or cyanotic on dependency
 - ii. Petechiae and then brown pigmentation appear with chronicity.
 - e. Temperature—normal
 - f. Edema
 - i. Present
 - ii. Often marked
 - g. Skin changes
 - i. Often brown pigmentation around the ankle
 - ii. Stasis dermatitis
 - iii. Possible thickening of the skin and narrowing of the leg as scarring develops
 - h. Ulceration
 - i. If present, develops at sides of ankle, especially medially
 - i. Gangrene—does not develop

Activity D NCLEX STYLE QUESTIONS

11. Answer: b, c, and e

RATIONALE: The Virchow triad—venous stasis, hypercoagulability, and vessel wall damage—sets the stage for the development of a DVT.

12. Answer: c

RATIONALE: Diseases of the peripheral vascular system, peripheral arterial disease, venous stasis, and thromboembolic disorders can severely affect the lifestyle and quality of life of patients. Identifying modifiable risk factors and providing health promotion counseling can prevent or delay long-term complications, such as decreased mobility and amputation.

13. Answer: a

RATIONALE: By the retrograde filling (Trendelenburg) test, you can assess the valvular competency in both the communicating veins and the saphenous system.

14. Answer: d

RATIONALE: The outer layer of the artery is the adventitia, connective tissue containing nerve fibers and the vasa vasorum.

15. Answer: c

RATIONALE: Anastomotic veins connect the two saphenous veins that are readily visible when dilated.

16. Answer: a, b, and c

RATIONALE: A difference between the highest and lowest systolic pressure of more than 10 mm Hg indicates a paradoxical pulse and suggests pericardial tamponade, possible constrictive pericarditis, but most commonly obstructive airway disease.

17. Answer: a

RATIONALE: The lymphatic system is an extensive vascular network that drains lymph fluid from body tissues and returns it to the venous circulation. In addition to its vascular functions, the lymphatic system plays an important role in the body's immune system. Cells within the lymph nodes engulf cellular debris and bacteria and produce antibodies.

18. Answer: b, c, and d

RATIONALE: Four mechanisms produce edema: (1) increased capillary blood pressure (increased hydrostatic pressure), which may be caused by venous insufficiency or congestive heart failure; (2) increased capillary membrane permeability (capillary leak syndrome), caused by burns, snake bites, angioedema, or allergic reactions; (3) low plasma protein levels (creating low colloid osmotic pressure), caused by renal disorders; and (4) blockage or removal of lymphatic drainage, as seen in lymph node removal.

19. Answer: a

RATIONALE: In Raynaud disease, wrist pulses are typically normal, but spasm of more distal arteries causes episodes of sharply demarcated pallor of the fingers.

20. Answer: c

RATIONALE: Palpate the temperature of both legs and feet simultaneously with the backs of your hands. Compare the temperature of the legs. Bilateral coolness is most often caused by a cold environment or anxiety.

Activity E CASE STUDY

- a. Student answers should include the following assessments:
- i. The location and the distance the patient walks before symptoms occur
 - ii. Pain at rest in the lower leg or foot
 - iii. Coldness, numbness, or pallor in the legs or feet
 - iv. Loss of hair over the anterior tibial surfaces
 - v. Poorly healing or nonhealing wounds of the legs or feet
 - vi. Erectile dysfunction
 - vii. Swelling of the feet or legs
 - viii. Varicose veins
 - ix. Fatigue or aching in the lower legs with prolonged standing
 - x. Tender swollen lymph nodes or glands
- b. Student answers should include the following assessments:
- i. Look for postural color changes.
 - (a) With the patient lying down, raise both legs to about 60° until maximal pallor of the feet develops—usually within a minute.
 - (b) Have the patient flex the ankles up and down to drain venous blood.
 - (c) Marked pallor on elevation suggests arterial insufficiency.
 - (d) Ask the patient to sit up and dangle the legs over the side of the examination table.
 - (e) Compare both feet, noting the time required for:
 - (i) Return of pinkness to the skin, normally about 10 seconds or less
 - (ii) Filling of the veins of the feet and ankles, normally about 15 seconds
 - (f) Look for any unusual *rubor* (dusky redness) to replace the pallor of the dependent foot. Rubor may take a minute or more to appear.

CHAPTER 16**Activity A FILL IN THE BLANK**

1. Complete the following statements:
 - A. For more chronic symptoms, dyspepsia is defined as chronic or recurrent discomfort or pain centered in the upper abdomen.
 - B. Some acute pain, especially in the suprapubic area or radiating from the flank, originates in the genitourinary tract.
 - C. Brownish or blackish vomit with a “coffee grounds” appearance suggests blood altered by gastric acid.
 - D. Patients may complain of unpleasant abdominal fullness after light or moderate meals, or early satiety, the inability to eat a full meal.
 - E. Prostatic pain is felt in the perineum and occasionally in the rectum.

- F. Polyuria refers to a significant increase in 24-hour urine volume, roughly defined as exceeding 3 liters.
- G. Kidney pain, fever, and chills occur in acute pyelonephritis.
- H. A protuberant abdomen with bulging flanks suggests the possibility of ascitic fluid.
2. List the screening options for colorectal cancer for people at average risk.
- A. Fecal occult blood test (FOBT) annually
- B. Flexible sigmoidoscopy every 5 years
- C. Combined FOBT and flexible sigmoidoscopy
- D. Colonoscopy every 10 years
- E. Double-contrast barium enema every 5 years
3. List the risk factors for abdominal aortic aneurysm.
- A. Age 65 years or older
- B. History of smoking
- C. Male gender
- D. A first-degree relative with a history of AAA repair

Activity B MATCHING

4. Match the information with the correct variety of hepatitis (varieties of hepatitis may have multiple information data).

Answer	Information	Variety of Hepatitis
B	More serious threats to patient health	A. Hepatitis A
C	Transmitted by repeated percutaneous exposure to blood	B. Hepatitis B
A	Persons with chronic liver disease	C. Hepatitis C
B	Sexual contacts	
A	Transmission is fecal–oral	
B	People with percutaneous (through the skin) or mucosal exposure to blood	
C	Transfusion with clotting factors before 1987	
C	Undiagnosed liver disease	
A	Contamination of water and foods	
A	Immune serum globulin can be administered before and within 2 weeks of contact	

5. Match the description with the type of incontinence it is describing.

Answer	Description	Type of Incontinence
C	Detrusor contractions are insufficient to overcome urethral resistance.	A. Stress incontinence
D	A functional inability to get to the toilet in time	B. Urge incontinence
B	Detrusor contractions are stronger than normal and overcome the normal urethral resistance.	C. Overflow incontinence
E	May contribute to any type of incontinence	D. Functional incontinence
A	The urethral sphincter is weakened so that transient increases in intra-abdominal pressure raise the bladder pressure to levels that exceed urethral resistance.	E. Incontinence secondary to medications

6. Match the cause of a protuberant abdomen to its corresponding reason.

Answer	Cause of Protuberant Abdomen	Reason
D	Fat	A. Air-filled bowel is displaced to the periphery
C	Gas	B. Bulging flanks that are dull to percussion
A	Tumor	C. Causes a tympanitic percussion note
E	Pregnancy	D. Most common cause of a protuberant abdomen
B	Ascitic fluid	E. Common cause of a pelvic "mass"

Activity C SHORT ANSWER

7. Student answers should include the following:

- a. Umbilical hernia
 - i. A protrusion through a defective umbilical ring
 - ii. Most often found in infants, can also be found in adults
 - iii. In infants, closes spontaneously within 1 to 2 years
 - b. Incisional hernia
 - i. A protrusion through an operative scar
 - ii. Palpate to detect the length and width of the defect.
 - iii. Small defect has greater potential for complications
 - c. Epigastric hernia
 - i. A defect in the linea alba
 - ii. Between the xiphoid process and the umbilicus
 - d. Diastasis recti
 - i. Separation of the two rectus abdominis muscles
 - ii. Forms a midline ridge
 - iii. Often seen in:
 - (a) Repeated pregnancies
 - (b) Obesity
 - (c) Chronic lung disease
 - iv. Has no clinical consequences
 - e. Lipoma
 - i. Common, benign, fatty tumor
 - ii. Usually in the subcutaneous tissues
 - iii. Usually soft and often lobulated
8. Student answers should include the following:
- a. Divide the abdomen into four quadrants with imaginary lines that cross at the umbilicus.
 - b. Right upper quadrant
 - i. Liver
 - (a) Difficult to feel through abdominal wall
 - (b) Lower margin often palpable at right costal margin
 - ii. Lower pole of right kidney may be felt at deeper level.
 - iii. Abdominal aorta often has visible pulsations and is usually palpable in the upper abdomen
 - c. Left upper quadrant
 - i. Spleen
 - (a) Lateral to and behind the stomach
 - (b) 9th, 10th, and 11th ribs protect most of the spleen

d. Left lower quadrant

- i. Sigmoid colon
 - (a) Firm, narrow, and tubular
 - ii. Transverse and descending colon
 - (b) Portions may be palpable
 - iii. Lower midline
 - (a) Bladder
 - (i) May be palpable if distended
 - (b) Sacral promontory
 - (c) Uterus and ovaries in women
 - e. Right lower quadrant
 - i. Bowel loops
 - ii. Appendix
 - (a) At the tail of the cecum
 - (b) No palpable findings in healthy people
9. Student answers should include the following:
- a. Hollow abdominal organs such as the intestine or biliary tree contract unusually forcefully or are distended or stretched.
 - b. Solid organs can also become painful when their capsules are stretched.
 - c. May be difficult to localize
 - d. Typically palpable near the midline at levels that vary according to the structure involved
 - e. Caries in quality and may be gnawing, burning, cramping, or aching
 - f. May be associated with sweating, pallor, nausea, vomiting, and restlessness if severe
 - g. Types of visceral pain
 - i. Parietal pain
 - (a) Originates from inflammation in the parietal peritoneum
 - (b) Steady, aching pain
 - (c) Usually more severe than visceral pain
 - (d) Usually more precisely localized over the involved structure
 - (e) Typically aggravated by movement or coughing
 - ii. Referred pain
 - (a) Felt in more distant sites
 - (b) Often develops as the initial pain
 - (c) Becomes more intense and thus seems to radiate or travel from the initial site
 - (d) Usually well localized
 - (e) May be superficial or deep

10. Student answers should include the following:
- Also called icterus
 - Yellowish discoloration of the skin and sclera
 - Caused by increased levels of bilirubin
 - Mechanisms include:
 - Increased production of bilirubin
 - Decreased uptake of bilirubin by the hepatocytes
 - Decreased ability of the liver to conjugate bilirubin
 - Decreased excretion of bilirubin into the bile
 - Intrahepatic jaundice
 - Hepatocellular
 - Damage to the hepatocytes
 - Cholestatic
 - Impaired excretion as a result of damaged hepatocytes or intrahepatic bile ducts
 - Extrahepatic jaundice
 - Arises from obstruction of the extrahepatic bile ducts

Activity D NCLEX STYLE QUESTIONS

11. **Answer: b**
RATIONALE: Bladder disorders may cause suprapubic pain.
12. **Answer: d**
RATIONALE: Stress incontinence with increased intra-abdominal pressure suggests decreased contractility of the urethral sphincter or poor support of bladder neck; urge incontinence, if unable to hold the urine, suggests detrusor overactivity; overflow incontinence, when the bladder cannot be emptied until bladder pressure exceeds urethral pressure, indicates anatomic obstruction by prostatic hypertrophy or stricture, or neurogenic abnormalities.
13. **Answer: a, d, and e**
RATIONALE: If the patient has high blood pressure, listen in the epigastrium and in each upper quadrant for bruits. Later in the examination, when the patient sits up, listen also in the costovertebral angles. A bruit in one of these areas that has both systolic and diastolic components strongly suggests renal artery stenosis as the cause of hypertension.
14. **Answer: a**
RATIONALE: Note that angina from inferior wall coronary artery disease may present as “indigestion,” but is precipitated by exertion and relieved by rest.
15. **Answer: c**
RATIONALE: For more chronic symptoms, dyspepsia is defined as chronic or recurrent discomfort or pain centered in the upper abdomen.
16. **Answer: a, b, and c**
RATIONALE: Bladder distention results from outlet obstruction due to *urethral stricture* or *prostatic hyperplasia*, and also from medications and neurologic disorders such as *stroke* or *multiple sclerosis*.
17. **Answer: c**
RATIONALE: A sharp increase in tenderness with a sudden stop in inspiratory effort constitutes a positive Murphy sign of acute cholecystitis. Hepatic tenderness may also increase with this maneuver but is usually less well localized.
18. **Answer: a**
RATIONALE: With acute pancreatitis, epigastric pain may radiate to the back or other parts of the abdomen; it may be poorly localized.
19. **Answer: b, d, and e**
RATIONALE: Pain in the right lower quadrant during left-sided pressure suggests appendicitis (a positive Rovsing sign). So does right lower quadrant pain on quick withdrawal (referred rebound tenderness).
 Look for a psoas sign. Place your hand just above the patient’s right knee and ask the patient to raise that thigh against your hand. Alternatively, ask the patient to turn onto the left side. Then extend the patient’s right leg at the hip. Flexion of the leg at the hip makes the psoas muscle contract; extension stretches it.
 Increased abdominal pain on either maneuver constitutes a *positive psoas sign*, suggesting irritation of the psoas muscle by an inflamed appendix.
 Look for an obturator sign. Flex the patient’s right thigh at the hip, with the knee bent, and rotate the leg internally at the hip. This maneuver stretches the internal obturator muscle.
 Right hypogastric pain constitutes a positive obturator sign, suggesting irritation of the obturator muscle by an inflamed appendix.
 Test for cutaneous hyperesthesia. At a series of points down the abdominal wall, gently pick up a fold of skin between your thumb and index finger, without pinching it. This maneuver should not normally be painful.
 Localized pain with this maneuver, in all or part of the right lower quadrant, may accompany appendicitis.
20. **Answer: a**
RATIONALE: Malabsorption syndrome is characterized by stool that is typically bulky, soft, light yellow to gray, mushy, greasy or oily, sometimes frothy, and particularly foul-smelling, and it usually floats in the toilet.

Activity E CASE STUDY

- a. Student answers will vary in particulars; however, all answers should include the following assessment:

Health history
 Abdominal pain
 Indigestion, nausea, vomiting including blood, loss of appetite, early satiety
 Dysphagia and/or odynophagia
 Change in bowel function
 Diarrhea, constipation

Onset

Location

Duration

Characteristic symptoms

Associated manifestations

Relieving factors

Treatment

Past History

Allergies

Medications

Adult Illnesses

Medical

Surgical

Psychiatric

Family History

Gastrointestinal disease

Review of Systems

General

Inspection

Skin

Scars

Striae

Dilated veins

Rashes and lesions

Contour of the abdomen

Peristalsis

Pulsations

Auscultation

Bowel sounds

Abdominal bruits and friction rub

Percussion

Palpation

Liver

Spleen

Kidneys

Bladder

Aorta

- b. Student answers should include the following:

1. Ask the patient to point to where the pain began and where it is now.
2. Ask the patient to cough.
3. Carefully determine an area of local tenderness.
4. Feel for muscular rigidity.

5. Perform a rectal examination and, in women, a pelvic examination.
6. Additional assessments include:
 - i. Check for rebound tenderness.
 - ii. Check for the Rovsing sign.
 - iii. Look for a psoas sign.
 - iv. Look for an obturator sign.
 - v. Test for cutaneous hyperesthesia.

CHAPTER 17**Activity A FILL IN THE BLANK**

1. Complete the following statements:
 - A. The breast is hormonally sensitive tissue, responsive to the changes of monthly cycles and aging.
 - B. Lacking estrogen and progesterone stimulation, ductal branching and development of lobules are minimal.
 - C. All women should be familiar with the look and feel of their breasts to detect any changes.
 - D. Long-standing inversion is usually a normal variant of no clinical consequence, except for possible difficulty when breast-feeding.
 - E. Occasionally, these signs may be associated with benign lesions such as posttraumatic fat necrosis or mammary duct ectasia.
 - F. Palpation is best performed when the breast tissue is flattened.
 - G. Although the axillae may be examined with the patient lying down, a sitting position is preferable.
 - H. Clear, serous, green, black, or nonbloody discharges that are multiductal usually require only reassurance.
 - I. Masses, nodularity, and change in color or inflammation, especially in the incision line, suggest recurrence of breast cancer.
 - J. Mammographic breast density has been identified as "the most undervalued and underused risk factor" in studies of breast cancer.
2. List the risk factors for breast cancer.
 - A. Previous breast cancer
 - B. An affected mother or sister
 - C. Biopsy showing atypical hyperplasia
 - D. Increasing age
 - E. Early menarche
 - F. Late menopause
 - G. Late or no pregnancies
 - H. Previous radiation to the chest wall
3. List the common types of breast masses.
 - A. Fibroadenoma
 - B. Cyst
 - C. Breast cancer
 - D. Fibrocystic changes

Activity B MATCHING

4. Match the descriptive information with the correct type of breast lump (type of breast lump will have multiple information data).

Answer	Information	Type of Breast Lump
C	Usually single, although may coexist with other nodules	A. Fibroadenoma
B	30–50, regress after menopause except with estrogen therapy	B. Cysts
B	Well delineated	C. Cancer
C	30–90, most common over age 50	
A	Very mobile	
A	15–25, usually puberty and young adulthood, but up to age 55	
B	Often tender	
A	Round, disc-like, or lobular	
C	Firm or hard	

5. Match the description with the lymph nodes it is describing.

Answer	Description	Nodes
B	Drain the posterior chest wall and a portion of the arm	A. Pectoral nodes
D	Drain most of the arm	B. Subscapular nodes
A	Drain the anterior chest wall and much of the breast	C. Central nodes
C	Palpable most frequently	D. Lateral nodes

6. Match the visible sign of breast cancer to its corresponding description.

Answer	Visible Sign	Description
D	Skin dimpling	A. Flattened or pulled inward
E	Abnormal contours	B. Produced by lymphatic blockage
A	Nipple retraction	C. Usually starts as a scaly, eczema-like lesion that may weep, crust, or erode; breast mass may be present
F	Peau d'orange (orange peel) sign	D. Look for this sign with the patient's arm at rest, during special positioning, and on moving or compressing the breast
B	Edema of the skin	E. Any variation in the normal convexity of each breast
C	Paget disease	F. Appears as thickened skin with enlarged pores

Activity C SHORT ANSWER

7. Student answers should include the following:
 - a. Framing
 - i. Increased benefit
 - ii. Decreased harm
 - b. Absolute risk versus relative risk
8. Student answers should include the following:
 - a. Lying
 - i. Lie down and place your right arm behind your head. The exam is done while lying down, not standing up.
 - ii. Use the finger pads of the three middle fingers on your left hand to feel for lumps in the right breast. Use overlapping dime-sized circular motions of the finger pads to feel the breast tissue.
 - iii. Use three different levels of pressure to feel all the breast tissue. Light pressure is needed to feel the tissue closest to the skin, medium pressure to feel a little deeper, and firm pressure to feel the tissue closest to the chest and ribs.
 - iv. Move in an up-and-down pattern. Be sure to check the entire breast.
 - v. Repeat the exam on your left breast, putting your left arm behind your head and using the finger pads of your right hand to do the exam.
 - b. Standing
 - i. Stand in front of a mirror with your hands pressing firmly on your hips, and look for any changes of size, shape, contour, dimpling, redness, or scaliness of the nipple or breast skin.
 - ii. Examine each underarm while sitting up or standing and with your arm only slightly raised so you can easily feel in this area.
9. Student answers should include the following:
 - a. Consists chiefly of a small nipple and areola
 - b. Overlies a thin disc of undeveloped breast tissue consisting primarily of ducts
 - c. Lacks estrogen and progesterone stimulation
 - d. Ductal branching and development of lobules
10. Student answers should include the following:
 - a. Lies against the anterior thoracic wall
 - b. Extends from:
 - i. The clavicle down to the sixth rib
 - ii. From the sternum across to the midaxillary line
 - c. Overlies
 - i. The pectoralis major
 - ii. The serratus anterior at its inferior margin
 - d. Hormonally sensitive tissue:
 - i. Changes of monthly cycles
 - ii. Aging
 - e. The areola
 - f. Nipple
 - g. Lactiferous ducts
 - h. Lobules
 - i. Reservoirs

- j. Tissue
 - i. Glandular tissue
 - ii. Fibrous connective tissue
 - iii. Adipose tissue

Activity D NCLEX STYLE QUESTIONS

11. **Answer: a**
RATIONALE: Of the axillary lymph nodes, the central nodes are palpable most frequently.
12. **Answer: d**
RATIONALE: Malignant cells from a breast cancer may spread directly to the infraclavicular nodes or into deep channels within the chest.
13. **Answer: a, b, c, d, and e**
RATIONALE: Common or concerning symptoms: breast lump or mass; breast pain or discomfort; change in shape; nipple discharge; edema; dimpling; and rash.
14. **Answer: b**
RATIONALE: Scaling consists of thin flakes of keratinized epithelium.
15. **Answer: c**
RATIONALE: The best time for examination is 5 to 7 days after the onset of menstruation.
16. **Answer: a**
RATIONALE: Thickening of the skin and unusually prominent pores may accompany lymphatic obstruction.
17. **Answer: c**
RATIONALE: This position may reveal an asymmetry of the breast or nipple not otherwise visible.
18. **Answer: b**
RATIONALE: Although a circular or wedge pattern can be used, the vertical strip pattern is currently the best validated technique for detecting breast masses.
19. **Answer: b, c, and d**
RATIONALE: Examine the breast tissue carefully for *consistency* of the tissues, *tenderness*, and *nodules*.
20. **Answer: a**
RATIONALE: A mobile mass that becomes fixed when the arm relaxes is attached to the ribs and intercostal muscles; if fixed when the hand is pressed against the hip, it is attached to the pectoral fascia.

Activity E CASE STUDY

- a. Student answers will vary in particulars; however, all answers should include the following information:
 - a. You would:
 - i. Inspect the mastectomy scar and axilla carefully for any masses or unusual nodularity.
 - ii. Note any change in color or signs of inflammation.
 - iii. Note that lymphedema may be present in the axilla and upper arm from impaired lymph drainage after surgery.
 - iv. Palpate gently along the scar:
 - (a) Use a circular motion with two or three fingers.
 - (b) Pay special attention to the upper outer quadrant and axilla.

- v. Note any enlargement of the lymph nodes or signs of inflammation or infection.
- b. You would teach Mrs. Gibson the same as someone who had not had a mastectomy with the exception of visualizing her scar for any changes that occurred in the past month.
 - i. Stand in front of a mirror with your hands pressing firmly on your hips; look for any changes of size, shape, contour, dimpling, redness, or scaliness of the nipple or breast skin.
 - ii. Examine each underarm while sitting up or standing and with your arm only slightly raised so you can easily feel in this area.

CHAPTER 18

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Articular disease typically involves swelling and tenderness of the entire joint and limits both active and passive range of motion.
 - B. Many of the joints examined are synovial, or movable, joints.
 - C. Generalized “aches and pains” are called myalgias if they occur in muscles, and arthralgias if there is pain in a joint but no evidence of arthritis.
 - D. Low back pain is the second most common reason for office visits.
 - E. Regular exercise that includes weight-bearing and resistance training can increase bone

Activity B MATCHING

4. Match the test with what is being tested.

Answer	Test	What Is Being Tested
E	Flex the patient's forearm to 90° at the elbow and pronate the patient's wrist. Provide resistance when the patient supinates the forearm.	A. Infraspinatus strength
A	Ask the patient to place arms at the side and flex the elbows to 90° with the thumbs turned up. Provide resistance as the patient presses the forearms outward.	B. Supraspinatus strength
D	Adduct the patient's arm across the chest.	C. “Drop-arm” sign
B	Elevate the arms to 90° and internally rotate the arms with the thumbs pointing down, as if emptying a can. Ask the patient to resist as you place downward pressure on the arms.	D. “Crossover test”
C	Ask the patient to fully abduct the arm to shoulder level (or up to 90°) and lower it slowly.	E. Forearm supination

- density and muscle strength but has not yet been shown to reduce fracture risk.
 - F. For the older person, increased calcium intake reduces age-related hyperparathyroidism and increases mineralization of newly formed bone.
 - G. A 10% drop in bone density, equivalent to 1.0 standard deviation, is associated with a 20% increase in risk for fracture.
 - H. Twenty percent of patients with osteoporotic hip fractures die within 1 year.
 - I. Each joint has its own specific vulnerabilities to trauma and wear.
 - J. Observe the gait for the width of the base, the shift of the pelvis, and flexion of the knee.
2. List the risk factors for falls.
 - A. Unstable gait
 - B. Imbalanced posture
 - C. Reduced strength
 - D. Previous fall
 - E. Impaired mobility
 - F. Medications
 - G. Incontinence
 - H. Hypertension
 - I. Dementia
 - J. Altered mental status
 - K. Deficits in vision and proprioception
 - L. Osteoporosis
 3. List the types of movement of the hip.
 - A. Flexion
 - B. Extension
 - C. Adduction
 - D. Abduction

5. Match the description with the foot abnormality it is describing.

Answer	Abnormality	Description
E	Neuropathic ulcer	A. A painful conical thickening of skin that results from recurrent pressure on normally thin skin
F	Callus	B. Symptoms include hyperesthesia, numbness, aching, and burning from the metatarsal heads into the 3rd and 4th toes.
G	Plantar wart	C. Characterized by hyperextension at the metatarsophalangeal joint with flexion at the proximal interphalangeal joint
A	Corn	D. The head of the first metatarsal may enlarge on its medial side, and a bursa may form at the pressure point.
C	Hammer toe	E. May develop at pressure points on the feet
D	Hallux valgus	F. An area of greatly thickened skin that develops in a region of recurrent pressure
B	Morton neuroma	G. It may look like a callus or even be covered by one.

6. Match the musculoskeletal entity to its corresponding description.

Answer	Musculoskeletal Entity	Description
B	Ankle	A. Include the anterior tibial muscle and the toe extensors
E	Transverse tarsal joint	B. A hinge joint formed by the tibia, the fibula, and the talus
F	Tibiotalar joint	C. Fans out from the inferior surface of the medial malleolus to the talus and proximal tarsal bones
C	Deltoid ligament	D. Powered by the gastrocnemius, the posterior tibial muscle, and the toe flexors
G	Knee joint	E. Stabilizes the heel and inverts and everts the forefoot
D	Plantar flexion	F. Dorsiflex and plantar flex the foot at the ankle
A	Dorsiflexors	G. The largest joint in the body

Activity C SHORT ANSWER

7. Student answers should include the following risk factors for osteoporosis:

- a. Postmenopausal status in white and Asian women
- b. Age older than 50 years
- c. Weight less than 70 kg
- d. Family history of fracture in a first-degree relative
- e. History of fracture
- f. Higher intakes of alcohol
- g. Women with delayed menarche or early menopause
- h. Current smokers
- i. Low levels of 25-hydroxyvitamin D
- j. Use of corticosteroids for more than 2 months
- k. Inflammatory disorders of the musculoskeletal, pulmonary, or gastrointestinal systems, including celiac sprue, chronic renal disease, organ transplantation, hypogonadism, and anorexia nervosa
- l. Sedentary lifestyle or extended bed rest

8. Student answers should include the following:
 - a. Patient's ability to carry out normal activities of daily living
 - b. General appearance
 - c. Body proportions
 - d. Ease of movement
9. Student answers should include the following:
 - a. Size and contours of muscles
 - b. Atrophy
 - c. Hypertrophy
 - d. Fasciculations
10. Student answers will vary but all should include the following concepts:
 - a. During inspection, look for symmetry of involvement.
 - b. Note any *joint deformities* or *malalignment of bones*.
 - c. Use inspection and palpation to assess the surrounding tissues, noting:
 - i. Skin changes
 - ii. Subcutaneous nodules
 - iii. Muscle atrophy
 - iv. *Crepitus*

- d. Test range of motion and maneuvers for:
 - i. *Limitations in range of motion*
 - ii. Joint instability from excess mobility of joint ligaments
- e. Test *muscle strength* to aid in the assessment of joint function.
- f. Be especially alert to *signs of inflammation and arthritis*:
 - i. *Swelling*. Palpable swelling may involve:
 - (a) The synovial membrane
 - (b) Effusion from excess synovial fluid within the joint space
 - (c) Soft-tissue structures such as bursae, tendons, and tendon sheaths
 - ii. *Warmth*
 - iii. *Tenderness*
 - iv. *Redness*

Activity D NCLEX STYLE QUESTIONS

- 11. **Answer: b**
RATIONALE: Weakness of extension is seen in peripheral nerve disease such as radial nerve damage and in central nervous system disease producing hemiplegia, as in *stroke* or *multiple sclerosis*.
- 12. **Answer: d**
RATIONALE: Scale for grading muscle strength: muscle strength is graded on a 0 to 5 scale:
 0—No muscular contraction detected
 1—A barely detectable flicker or trace of contraction
 2—Active movement of the body part with gravity eliminated
 3—Active movement against gravity
 4—Active movement against gravity and some resistance
 5—Active movement against full resistance without evident fatigue. This is normal muscle strength.
- 13. **Answer: a, c, and d**
RATIONALE: Acute involvement of only one joint suggests trauma, septic arthritis, or gout.
- 14. **Answer: a**
RATIONALE: Rigidity is increased resistance throughout the range of movement and in both directions (not rate dependent).
- 15. **Answer: c**
RATIONALE: The principal muscles opening the mouth are the *external pterygoids*.
- 16. **Answer: d**
RATIONALE: *Scoliosis* may cause elevation of one shoulder.
- 17. **Answer: b**
RATIONALE: Tenderness is distal to the epicondyle in *lateral epicondylitis* (tennis elbow) and less commonly in *medial epicondylitis* (pitcher's or golfer's elbow)
- 18. **Answer: a**
RATIONALE: Birthmarks, port-wine stains, hairy patches, and lipomas often overlie bony defects such as *spina bifida*.
- 19. **Answer: b**
RATIONALE: Spasticity is increased resistance that worsens at the extremes of range. Spasticity, seen in central corticospinal tract diseases, is rate dependent, increasing with rapid movement.
- 20. **Answer: c, d, and e**
RATIONALE: Decreased resistance suggests disease of the peripheral nervous system, cerebellar disease, or the acute stages of spinal cord injury.

Activity E CASE STUDY

- a. Student answers will vary in particulars; however, all answers should include the following information:
 - i. Assessment of the major muscle groups
 - (a) Quadriceps femoris
 - (b) Hamstring muscles
 - ii. Assessment of the bones, bony structures, and joints
 - (a) Tibiofemoral joints (2)
 - (b) Patellofemoral joint
 - (c) Femur
 - (d) Tibia
 - (e) Patella
 - (f) Condyles
 - (g) Tibial plateau
 - iii. Additional structures
 - (a) Medial and lateral menisci
 - (b) Medial collateral ligament
 - (c) Lateral collateral ligament
 - (d) Anterior cruciate ligament
 - (e) Posterior cruciate ligament
- b. Completion of the following diagnostic tests:
 - i. Range of motion
 - ii. Laxity of ligaments
 - iii. MRI

CHAPTER 19

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Despite the prevalence of mental disorders, detection is difficult and recognition and treatment rates are low.
 - B. Alcohol, tobacco, and illicit drugs account for more illness, deaths, and disabilities than any other preventable condition.
 - C. The U.S. Preventive Services Task Force recommends screening in clinical settings that can provide accurate diagnosis, treatment, and follow-up.
 - D. The burden of suffering that mental disorders impose is great.
 - E. Information and vocabulary, when observed clinically, provide a rough estimate of a person's intelligence.
 - F. Note whether decisions and actions are based on reality or, for example, on impulse, wish fulfillment, or disordered thought content.

- G. Inquire about false perceptions in a manner similar to that used for thought content.
- H. Watch for variations in expression with topics under discussion.
- I. Novice nurses may feel reluctant to perform mental status examinations, wondering if it will upset patients or invade their privacy.
- J. Two thirds of patients with depression present with physical complaints, and half report multiple unexplained physical or somatic symptoms.
2. List the components of a mental status examination.
- Speech and language
 - Appearance and behavior
 - Mood
 - Thoughts and perceptions
 - Cognitive function
3. List the patient identifiers for mental health screening.
- Medically unexplained physical symptoms
 - Multiple physical or somatic symptoms
 - High severity of the presenting somatic symptom
 - Chronic pain
 - Symptoms for more than 6 weeks
 - Rating as a “difficult encounter” with a patient
 - Recent stress
 - Low self-rating of health
 - High use of health care services
 - Substance abuse

Activity B MATCHING

4. Match the term to its corresponding description.

Answer	Term	Description
E	Level of consciousness	A. Awareness of personal identity, place, and time
D	Attention	B. What the patient thinks about
G	Memory	C. Distinguishing between daydreams and hallucinations that seem real
A	Orientation	D. The ability to focus or concentrate over time on one task or activity
M	Perceptions	E. Alertness or state of awareness of the environment
J	Thought processes	F. Assessed by vocabulary, fund of information, abstract thinking, calculations, and construction of objects that have two or three dimensions
B	Thought content	G. The process of registering or recording information
C	Insight	H. A more sustained emotion that may color a person's view of the world
L	Judgment	I. A complex symbolic system for expressing, receiving, and comprehending words
K	Affect	J. How people think
H	Mood	K. An observable, usually episodic, feeling or tone expressed through voice, facial expression, and demeanor
I	Language	L. Process of comparing and evaluating alternatives when deciding on a course of action
F	Higher cognitive functions	M. Sensory awareness of objects in the environment and their interrelationships

Activity C SHORT ANSWER

5. Student answers should include the following:
- May be psychological relating to:
 - Mood
 - Anxiety
 - Physical relating to:
 - A body sensation such as pain
 - Fatigue
 - Palpitation
 - Physical symptoms prompt more than 50% of U.S. office visits.
 - Approximately 5% of these symptoms are acute.
 - Seventy percent to 75% are minor or self-limited and resolve in 6 weeks.
- Approximately 25% of patients have persisting and recurrent symptoms.
 - Elude assessment through the history and physical examination
 - Fail to improve
 - Thirty percent of symptoms are medically unexplained.
 - Some of them involve single complaints that appear to persist longer than others.
 - Functional syndromes
 - A physical symptom
 - Explained physically
 - Explained medically
 - Unexplained
 - A somatoform symptom
 - Lacks an adequate medical or physical explanation

6. Student answers should include the following:
- Intimately linked
 - Importance of maintaining and promoting the mental and physical health of our patients
 - Detection is difficult.
 - Recognition and treatment rates are low.
 - Prevalence of mental disorders in the U.S. population
 - Approximately 20% of affected patients receive treatment.
 - Adherence to treatment guidelines in primary care offices is <50%.
 - Important for nurses to learn how to assess for both mental and physical changes.
 - Often patients:
 - Have more than one mental disorder
 - Have symptoms that mirror medical illnesses
 - Have multiple issues occurring simultaneously
 - “Difficult” patients
 - At risk without adequate assessment and treatment:
 - Patient health
 - Function
 - Quality of life
7. Student answers should include the following:
- Patients with depression, for example, present with physical complaints.
 - Half report multiple unexplained physical or somatic symptoms.
 - Functional syndromes have been shown to:
 - Frequently co-occur
 - Share key symptoms
 - Share selected objective abnormalities
 - Failure to recognize the combination of physical symptoms and functional syndromes with common mental health disorders
 - Adds to loss of the patient’s quality of life
 - Impaired treatment outcomes
 - These patients are often “high users” of the health care system and have significant disability.
8. Student answers should include the following concepts:
- Assessment of mental status begins with the patient’s first words.
 - Patient’s level of alertness
 - Patient’s orientation, mood, attention, and memory
 - Patient’s insight and judgment
 - Any recurring or unusual thoughts or perceptions
9. Student answers should include the following:
- A national public health imperative
 - Ranks as the 11th leading cause of death in the United States.
 - Clues are variable and subtle.
 - More than 50% of patients completing suicide have visited their physicians in the prior month
 - Ten percent to 40% in the prior week
- d. Two thirds of suicides occur on the first attempt.
- e. Risk factors
- Depression or other mental disorders
 - Substance abuse
 - Prior suicide attempts
 - Delusional or psychotic thinking
 - Family history of suicide
 - Mental disorders or substance abuse
 - Family violence, including physical or sexual abuse
 - Firearms in the home
 - Incarceration
- f. Ask patients directly about suicidal ideation and plans.
- g. Refer at-risk patients immediately.

Activity D NCLEX STYLE QUESTIONS

10. **Answer: a**
RATIONALE: An estimated 3% of the population are dependent on or abuse illicit drugs; of these cases, 60% involve marijuana.
11. **Answer: a, b, and d**
RATIONALE: Depression frequently accompanies serious medical illnesses, including diabetes, heart disease, cancer, stroke, dementia, and HIV/AIDS; outcomes and costs of care for these illnesses improve when depression is treated.
12. **Answer: c**
RATIONALE: Failure to diagnose depression can have fatal consequences—suicide rates among patients with major depression are eight times higher than in the general population.
13. **Answer: b, c, and e**
RATIONALE: Watch carefully for depressive symptoms, especially in patients who are young, female, single, divorced or separated, seriously or chronically ill, or bereaved. Those with a prior history or family history of depression are also at risk.
14. **Answer: b**
RATIONALE: Currently, given the low incidence of suicide, nurses are urged to intensify targeted rather than general screening.
15. **Answer: a**
RATIONALE: Screening for alcohol and drug use is part of every patient history.
16. **Answer: b**
RATIONALE: Other risk factors are prior suicide attempts; delusional or psychotic thinking; family history of suicide, mental disorders, or substance abuse; family violence, including physical or sexual abuse; firearms in the home; and incarceration.
17. **Answer: a**
RATIONALE: The nurse may assess the change in the patient and will be the advocate and detective, determining when the change occurred and what was new in the treatment.
18. **Answer: c**
RATIONALE: Flight of ideas is an almost continuous flow of accelerated speech in which a person changes abruptly from topic to topic. Changes are

usually based on understandable associations, plays on words, or distracting stimuli, but the ideas do not progress to sensible conversation.

19. Answer: d

RATIONALE: Confabulation is fabrication of facts or events in response to questions, to fill in the gaps in an impaired memory. It is seen in Korsakoff syndrome from alcoholism.

Activity E CASE STUDY

- a. Student answers will vary in particulars; however, all answers should include the following information:
- i. Assessment for depression:
 - (a) Over the past 2 weeks, have you felt down, depressed, or hopeless?
 - (b) Over the past 2 weeks, have you felt little interest or pleasure in doing things?
 - ii. Assessment for anxiety
 - (a) Anxiety disorders include generalized anxiety disorder, social phobia, panic disorder, posttraumatic stress disorder, and acute stress disorder.
 - (b) Panic disorder: In the past 4 weeks, have you had an anxiety attack—suddenly feeling fear or panic?
 - iii. Assessment for alcohol and substance abuse
 - (a) CAGE questions
 - iv. Mini-mental status exam
 - (a) Orientation to time
 - (b) Registration
 - (c) Naming
 - (d) Reading
- b. Student answers will vary but should include the following:
- i. Depression related to ... (life events)
 - ii. Pain related to depression

CHAPTER 20

Activity A FILL IN THE BLANK

1. Complete the following statements:

A. Often the patient's mental status offers clues about delirium, memory disorders, and other neurologic conditions.

- B. Deep in the brain lies the basal ganglia, which affects movement, and the thalamus and the hypothalamus, structures in the diencephalon.
 - C. The cerebellum, which lies at the base of the brain, coordinates all movement and helps maintain the body upright in space.
 - D. The brainstem, which connects the upper part of the brain with the spinal cord, has three sections: the midbrain, the pons, and the medulla.
 - E. The spinal cord is divided into five segments: cervical, thoracic, lumbar, sacral, and coccygeal.
 - F. Three kinds of motor pathways impinge on the anterior horn cells: the corticospinal tract, the basal ganglia system, and the cerebellar system.
 - G. Sudden unilateral brain damage involving the corticospinal tract may produce a hemiplegia, which early in its course is flaccid.
 - H. Dysarthria refers to a defect in the muscular control of the speech apparatus.
 - I. Generalized seizures begin with bilateral body movements, impairment of consciousness, or both.
 - J. Observe the gait for the width of the base, the shift of the pelvis, and flexion of the knee.
2. List the cranial nerves.
- A. Olfactory
 - B. Optic
 - C. Oculomotor
 - D. Trochlear
 - E. Trigeminal
 - F. Abducens
 - G. Facial
 - H. Acoustic
 - I. Glossopharyngeal
 - J. Vagus
 - K. Spinal accessory
 - L. Hypoglossal
3. List the warning signs of stroke.
- A. Sudden numbness or weakness of the face, arm, or leg
 - B. Sudden confusion or trouble speaking or understanding
 - C. Sudden trouble walking, dizziness, or loss of balance or coordination
 - D. Sudden trouble seeing in one or both eyes
 - E. Sudden severe headache

Activity B MATCHING

4. Match the level of consciousness with the definition.

Answer	Level of Consciousness	What Is Being Tested
D	Alertness	A. Arouses from sleep only after painful stimuli. Verbal responses are slow or even absent.
E	Lethargy	B. Opens the eyes and looks at you, but responds slowly and is somewhat confused
B	Obtundation	C. Unarousable with eyes closed
A	Stupor	D. Opens the eyes, looks at you, and responds fully and appropriately
C	Coma	E. Appears drowsy but opens the eyes and looks at you, responds to questions, and then falls asleep

5. Match the disorder of muscle tone with the location of the lesion.

Answer	Disorder of Muscle Tone	Location of Lesion
C	Spasticity	A. Lower motor neuron system at any point from the anterior horn cell to the peripheral nerves
D	Rigidity	B. Both hemispheres, usually in the frontal lobes
A	Flaccidity	C. Upper motor neuron of the corticospinal tract at any point from the cortex to the spinal cord
B	Paratonia	D. Basal ganglia system

6. Match the gait/posture to its description.

Answer	Gait/posture	Description
D	Spastic hemiparesis	A. Patients appear to be walking through water.
F	Steppage gait	B. Gait is unsteady and wide based. Patients throw their feet forward and outward and bring them down, first on the heels and then on the toes, with a double tapping sound.
E	Parkinsonian gait	C. Gait is staggering, unsteady, and wide based, with exaggerated difficulty on turns.
A	Scissors gait	D. Poor control of flexor muscles during swing phase
C	Cerebellar ataxia	E. Posture is stooped, with flexion of head, arms, hips, and knees. Patients are slow getting started.
B	Sensory ataxia	F. Patients either drag the feet or lift them high, with knees flexed, and bring them down with a slap onto the floor, thus appearing to be walking up stairs.

Activity C SHORT ANSWER

7. Student answers should include the following:
- A rhythmic oscillation of the eyes, analogous to a tremor in other parts of the body
 - Causes are multiple, including:
 - Impairment of vision in early life
 - Disorders of the labyrinth and the cerebellar system
 - Drug toxicity
 - Occurs normally when a person watches a rapidly moving object (e.g., a passing train)
 - Characteristics of nystagmus:
 - Direction of gaze in which nystagmus appears
 - Direction of the quick and slow components
8. Student answers should include the following:
- Disorders of speech fall into three groups:
 - Affecting the voice
 - Articulation of words
 - Comprehension of language
 - Aphonia
 - Loss of voice
 - Accompanies disease affecting the larynx or its nerve supply
 - Dysphonia
 - Impairment in the volume, quality, or pitch of the voice
 - Causes include laryngitis, laryngeal tumors, and a unilateral vocal cord paralysis
 - Dysarthria
 - A defect in the muscular control of the speech apparatus
 - Central symbolic aspect of language remains intact.
 - Causes include motor lesions of the central or peripheral nervous system, parkinsonism, and cerebellar disease.
 - Aphasia
 - A disorder in producing or understanding language
 - Often caused by lesions in the dominant cerebral hemisphere, usually the left
 - Two common types
 - Wernicke
 - A fluent (receptive) aphasia
 - Broca
 - Nonfluent (or expressive) aphasia
9. Student answers should include the following:
- Includes
 - Cranial nerves
 - Also includes spinal and peripheral nerves that carry impulses to and from the cord
 - Thirty-one pairs of nerves attach to the spinal cord:
 - 8 cervical
 - 12 thoracic
 - 5 lumbar
 - 5 sacral
 - 1 coccygeal

- Each nerve has:
 - An anterior (ventral) root containing motor fibers
 - A posterior (dorsal) root containing sensory fibers
 - The anterior and posterior roots merge to form a short *spinal nerve*
 - <5 mm long
 - Spinal nerve fibers blend with similar fibers from other levels in plexuses outside the cord, from which *peripheral nerves emerge*.
 - Most peripheral nerves contain both *sensory* (afferent) and *motor* (efferent) fibers.
10. Student answers will vary but all should include the following concepts:
- Lies below the medulla
 - Central nervous system extends itself as the elongated *spinal cord*
 - Encased within the bony vertebral column
 - Terminating at the first or second lumbar vertebra
 - Cord provides a series of segmental relays with the periphery.
 - Serves as a conduit for information flow to and from the brain
 - Motor and sensory nerve pathways
 - Relay neural signals that enter and exit the cord through posterior and anterior nerve roots through the spinal and peripheral nerves
 - The spinal cord is divided into five segments:
 - Cervical, from C1 to C8
 - Thoracic, from T1 to T12
 - Lumbar, from L1 to L5
 - Sacral, from S1 to S5
 - Coccygeal
 - The spinal cord is not as long as the vertebral canal.
 - Lumbar and sacral roots
 - Travel the longest intraspinal distance
 - Fan out like a horse's tail at L1 to L2
 - Called the *cauda equina*

Activity D NCLEX STYLE QUESTIONS

11. **Answer: a, b, and c**
RATIONALE: Diabetes causes several types of neuropathy, including a slowly progressive *distal symmetric sensorimotor polyneuropathy*, the "stocking" of the "stocking-glove" changes and the most common of the diabetic neuropathies; *autonomic dysfunction* leading to erectile dysfunction, orthostatic hypotension, and gastroparesis; *mononeuritis multiplex*, causing patchy sensory and motor deficits in at least two separate nerve areas; and *diabetic amyotrophy*, causing thigh pain and proximal lower extremity weakness, initially unilateral.
12. **Answer: b**
RATIONALE: The oculomotor nerve causes pupillary constriction, opening the eye (lid elevation), and most extraocular movements.

13. **Answer: d**
RATIONALE: Lower motor neurons have cell bodies in the spinal cord, termed anterior horn cells; their axons transmit impulses through the anterior roots and spinal nerves into peripheral nerves, terminating at the neuromuscular junction.
14. **Answer: a**
RATIONALE: Damage to the basal ganglia system produces changes in muscle tone (most often an increase), disturbances in posture and gait, a slowness or lack of spontaneous and automatic movements termed *bradykinesia*, and various involuntary movements.
15. **Answer: c, d, and e**
RATIONALE: Sensory impulses not only participate in reflex activity, as previously described, but also give rise to conscious sensation, calibrate body position in space, and help regulate internal autonomic functions like blood pressure, heart rate, and respiration.
16. **Answer: c**
RATIONALE: Weakness made worse with repeated effort and improved with rest suggests *myasthenia gravis*.
17. **Answer: d**
RATIONALE: Ask the patient to report whether it is “sharp” or “dull” and to compare sides. Isolated facial sensory loss is seen in peripheral nerve disorders like *trigeminal neuralgia*.
18. **Answer: a**
RATIONALE: In cerebellar disease, movements are clumsy, unsteady, and inappropriately varying in their speed, force, and direction. The finger may initially overshoot its mark, but finally reaches it fairly well, termed *dysmetria*. An *intention tremor* may appear toward the end of the movement.
19. **Answer: c**
RATIONALE: Vibration sense is often the first sensation to be lost in a peripheral neuropathy.
20. **Answer: a, c, and e**
RATIONALE: Let three important questions guide the approach to this challenging clinical area: Is the mental status intact? Are right-sided and left-sided examination findings symmetric? and If the findings are asymmetric or otherwise abnormal, does the lesion lie in the *central nervous system*, consisting of the brain and spinal cord, or in the *peripheral nervous system*, consisting of the 12 pairs of cranial nerves and the spinal and peripheral nerves?

Activity E CASE STUDY

- a. Student answers will vary in particulars; however, all answers should include the following information:
- Mental status
 - Cranial nerves

- Motor system
 - Sensory system
 - Reflexes
- b. Completion of the following diagnostic tests:
- CT scan
 - Possible MRI

CHAPTER 21

Activity A FILL IN THE BLANK

- Complete the following statements.
 - When detected early, testicular carcinoma has an excellent prognosis.
 - Hernia pain and swelling are more likely to occur when internal abdominal pressure increases.
 - The openings of Bartholin glands are located posteriorly on either side of the vaginal opening but are not usually visible.
 - The squamocolumnar junction migrates toward the os, creating the transformation zone.
 - Increased hormonal secretions during puberty stimulate the development of secondary sex characteristics, including the breasts and pubic hair.
 - Lymph from the vulva and lower vagina drains into the inguinal nodes.
 - Questions about menarche, menstruation, and menopause often give the nurse an opportunity to explore the patient's concerns and attitude toward her body.
 - Obstetricians commonly record the pregnancy history using the “gravida-para” system.
 - Patients with same-sex or transgender preferences may be anxious or fearful during clinical encounters.
 - The woman's response to the pelvic examination may reveal clues about her feelings about the examination and her sexuality.
- List the symptoms of prostate disorders.
 - Incomplete emptying of the bladder
 - Urinary frequency or urgency
 - Weak or intermittent stream
 - Straining to initiate flow
 - Nocturia
 - Bony pains in the pelvis
- List the phases of a woman's reproductive health.
 - Prepuberty
 - Puberty
 - Childbearing
 - Perimenopausal
 - Menopausal

Activity B MATCHING

4. Match the male reproductive term with its description.

Answer	Term	Description
C	Scrotal hernia	A. A congenital displacement of the urethral meatus to the superior surface of the penis
E	Hydrocele	B. Seen in congestive heart failure or nephrotic syndrome
D	Carcinoma of the penis	C. Comes through the external inguinal ring, so the examining fingers cannot get above it within the scrotum
I	Hypospadias	D. An indurated nodule or ulcer that is usually nontender
A	Epispadias	E. It transilluminates, and the examining fingers can get above the mass within the scrotum
G	Primary syphilis	F. Small scattered or grouped vesicles, 1–3 mm in size, on glans or shaft of penis
F	Genital herpes simplex	G. A chancre, or <i>painless</i> erosion up to 2 cm in diameter
J	Chancroid	H. Single or multiple papules or plaques of variable shapes
B	Scrotal Edema	I. A congenital displacement of the urethral meatus to the inferior surface of the penis
H	Genital Warts	J. A painful deep ulcer with ragged nonindurated margins

5. Match the female reproductive term with its description.

Answer	Term	Description
F	Epidermoid cyst	A. A protozoan; often but not always acquired sexually
G	Syphilitic chancre	B. Appears as a tense, hot, very tender abscess
D	Genital herpes	C. Unpleasant fishy or musty genital odor
H	Venereal wart	D. Shallow, small, painful ulcers on red bases
B	Bartholin gland infection	E. Most commonly caused by trauma during childbirth, in particular multiple or difficult births
A	Trichomonal vaginitis	F. A small, firm, round nodule in the labia that is yellowish in color
I	Candidal vaginitis	G. Most develop internally; they often go undetected
C	Bacterial vaginosis	H. Result from infection with human papillomavirus
E	Uterine prolapse	I. White and curdy discharge

6. Match the abnormality of the male reproductive system to its description.

Answer	Abnormality	Description
E	Cryptorchidism	A. Seen in mumps and other viral infections; usually unilateral
C	Varicocele of the spermatic cord	B. A painless, movable cystic mass just above the testis
A	Acute orchitis	C. Feels like a soft “bag of worms” separate from the testis, and slowly collapses when the scrotum is elevated in the supine patient
G	Tumor of the testis	D. Coexisting urinary tract infection or prostatitis supports the diagnosis
F	Torsion of the spermatic cord	E. The testis is atrophied and may lie in the inguinal canal or the abdomen, resulting in an unfilled scrotum
B	Spermatocele and cyst of the epididymis	F. Most common in adolescents
D	Acute epididymitis	G. Usually appears as a painless nodule

Activity C SHORT ANSWER

7. Student answers should include the following:

PATIENT INSTRUCTIONS FOR THE TESTICULAR**SELF-EXAMINATION**

This examination is best performed after a warm bath or shower. The heat relaxes the scrotum and makes it easier to find anything unusual.

- Standing in front of a mirror, check for any swelling on the skin of the scrotum.
- Examine each testicle with both hands. Cup the index and middle fingers under the testicle and place the thumbs on top.
- Roll the testicle gently between the thumbs and fingers. One testicle may be larger than the other . . . that’s normal, but be concerned about any lump or area of pain.
- Find the epididymis. This is a soft, tube-like structure at the back of the testicle that collects and carries sperm, not an abnormal lump.
- If you find any lump, don’t wait. See your doctor. The lump may just be an infection, but if it is cancer, it will spread unless stopped by treatment.

(Source: Medline Plus. U.S. National Library of Medicine and National Institutes of Health. *Medical Encyclopedia—Testicular self-examination*. Available at: www.nlm.nih.gov/medlineplus/ency/article/003909.htm. Accessed June 8, 2007.)

8. Student answers should include the following:

Age. Risk of prostate cancer increases sharply with each advancing decade after 50 years. Probability of diagnosis rises by age group, from 2.6% in men 40 to 59 years, to 7% in men 60 to 69 years, to 13% in men 70 years and older.

Ethnicity. For undetermined reasons, incidence rates are significantly higher in African American men than in Caucasian men: 243 cases per 100,000 compared with 156 cases per 100,000, even after adjustments for access to care. Prostate cancer occurs at an earlier age and more advanced stage in African American men.

Family history. Approximately 15% of men diagnosed with prostate cancer have an affected first-degree relative. One Scandinavian study of twins ascribed 42% of cases to inheritance. Rare autosomal dominant alleles appear to contribute to early-onset prostate cancer, and several X-linked alleles are under investigation in families with onset at older ages.

Diet. A series of studies suggests an association between intake of dietary fat, especially saturated fats and fats from animal sources, and risk of prostate cancer. However, the evidence remains inconclusive. Other possible influences include selenium, vitamins E and D, lycopene, and isoflavones.

9. Student answers should include the following:

- a. Up to 50% of women report dysmenorrhea, or pain with menses.
- b. Dysmenorrhea may be *primary*
 - i. Without an organic cause
 - ii. Results from increased prostaglandin production during the luteal phase of the menstrual cycle
- c. Secondary dysmenorrhea
 - i. With an organic cause
 - ii. Causes include endometriosis, adenomyosis (endometriosis in the muscular layers of the uterus), pelvic inflammatory disease, and endometrial polyps.

10. Student answers will vary but all should include the following concepts:

- a. Usually occurs between 48 and 55 years
- b. Follows a period of fluctuation in pituitary secretion of follicle-stimulating hormone (FSH) and luteinizing hormone (LH) and ovarian function
- c. Perimenopausal
 - i. Onset of variable cycle length
 - ii. Vasomotor symptoms
 - (a) Hot flashes
 - (b) Flushing
 - (c) Sweating
 - (d) Sleep disturbances are also common.

- d. Postmenopause
- i. May be
 - (a) Vaginal dryness and *dyspareunia*, or painful intercourse
 - (b) Hair loss
 - (c) Mild hirsutism
 - (d) Urinary symptoms may also occur in the absence of infection because of atrophy of the urethra and urinary trigone.

Activity D NCLEX STYLE QUESTIONS

11. **Answer: d**
RATIONALE: *Miscarriage* is a lay term for the spontaneous loss of a pregnancy.
12. **Answer: b, c, and d**
RATIONALE: Tips for taking the sexual history: explain why you are taking the sexual history; note that you realize this information is highly personal, and encourage the patient to be open and direct; relate that you gather this history on all your patients; affirm that your conversation is confidential.
13. **Answer: a**
RATIONALE: Sexual problems can be the result of physical or psychological issues. More commonly, however, a sexual problem is related to situational or psychosocial factors.
14. **Answer: c**
RATIONALE: Often there is a special rape kit, provided in many emergency departments, that must be used to ensure a chain of custody for evidence.
15. **Answer: c, d, and e**
RATIONALE: Indications for a pelvic examination during adolescence include menstrual abnormalities such as amenorrhea, excessive bleeding, or dysmenorrhea; unexplained abdominal pain; vaginal discharge; the prescription of contraceptives; bacteriologic and cytologic studies in a sexually active girl; and the patient's own desire for assessment.
16. **Answer: d**
RATIONALE: The duration of immunity provided by the HPV vaccine is currently undetermined.
17. **Answer: c**
RATIONALE: Lack of libido may arise from psychogenic causes such as depression, endocrine dysfunction, or side effects of medications.
18. **Answer: b**
RATIONALE: Infections from oral–penile transmission include gonorrhea, chlamydia, syphilis, and herpes.
19. **Answer: a, b, and e**
RATIONALE: Sexual dysfunction is classified by the phase of sexual response. A woman may lack desire, she may fail to become aroused and attain adequate vaginal lubrication, or, despite adequate arousal, she may be unable to reach orgasm. Causes include lack of estrogen, medical illness, and psychiatric conditions.

20. Answer: b

RATIONALE: For undetermined reasons, incidence rates are significantly higher in African American men than in Caucasian men: 243 cases per 100,000 compared with 156 cases per 100,000, even after adjustments for access to care. Prostate cancer occurs at an earlier age and more advanced stage in African American men.

Activity E CASE STUDY

- a. Student answers will vary in particulars; however, all answers should include the following information:
- i. Inspection of penis
 - (a) Skin
 - (b) The prepuce
 - (c) The glans
 - (d) Nits or lice at the bases of the pubic hairs
 - ii. Note the location of the urethral meatus
 - iii. Discharge
- b. Completion of the following diagnostic tests:
- i. UA
 - ii. Urinary culture and sensitivity
 - iii. Possible ultrasound of bladder

CHAPTER 22

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Generally, a complete assessment is performed on new patients or new admissions to a health care facility.
 - B. Generally, a complete assessment is performed in a head-to-toe sequence comparing side to side for symmetry.
 - C. Determining the most efficient format for you to perform the physical examination is the initial step.
 - D. During the examination, remember to consider the patient's privacy.
 - E. As a new practitioner, your examination of the patient should take less than 1 hour from start to finish.
 - F. If an assessment is missed, it may be inserted at another convenient place in the exam.
 - G. It is recommended that visual acuity be inserted at the beginning or at the end of the examination to alleviate the patient getting up another time.
 - H. The integration of the subjective and objective data guides the nurse in preparing the best nursing plan of care for the patient.
2. List the equipment needed to perform a comprehensive physical examination.
 - A. Sphygmomanometer
 - B. Stethoscope
 - C. Thermometer

- D. Watch with a second hand
- E. Pencil
- F. Paper
- G. Gloves
- H. Snellen chart or “E” card
- I. Rosenbaum, Targor, or near-vision card
- J. Index card
- K. Penlight
- L. Ophthalmoscope
- M. Tuning fork (512 Hz and 1024 Hz)
- N. Otoscope
- O. Speculum
- P. Sense of smell (e.g., mint, coffee, or alcohol swab if other scents not available)
- Q. Tangential light
- R. Cup of water
- S. Tongue depressor
- T. Stadiometer
- U. Reflex hammer
- V. Sheet

Activity B SHORT ANSWER

3. Student answers should include the following:
 - a. Inspect for symmetry, alignment, and deformity.
 - b. Palpate for tenderness and patency.
 - c. Palpate frontal and maxillary sinuses.
 - d. Inspect mucous membranes, septum, and turbinates for inflammation, polyps, ulcers, and deviation.
 - e. Sense of smell—have patient identify two different scents with eyes closed.
4. Student answers should include the following:
 - a. Inspect arms and legs for color, swelling, hair distribution, and nail bed color.
 - b. Palpate
 - Carotid
 - Radial
 - Brachial
 - Femoral
 - At this time palpate the remaining lymph nodes: inguinal lymph nodes (vertical then horizontal groups).
 - Posterior tibial
 - Dorsalis pedis
 - c. Palpate for pitting edema in feet and legs.
5. Student answers should include the following:
 - a. Combination of both the interview history and the physical examination
 - b. Learning each system in depth is important.
 - c. Integration of all systems into a complete physical examination
 - d. Performed on every patient in every setting
 - e. Focused assessment targets specific body systems
 - f. Initially, the complete examination may seem cumbersome and time consuming.
6. Student answers should include the following concepts:
 - a. Inspect shape, deformities, retractions, symmetry, and skin integrity.
 - b. Palpate for
 - Tenderness
 - Tactile fremitus
 - Respiratory expansion
 - c. Percuss lung sounds and diaphragmatic excursion.
 - d. Auscultate lung sounds.

Activity C NCLEX STYLE QUESTIONS

7. **Answer: b**
RATIONALE: If a hand-held Snellen is available, then inserting visual acuity in the eye assessment is appropriate.
8. **Answer: c**
RATIONALE: Letting the patient know what you are doing and your findings, such as blood pressure results, opens up teaching/learning moments and develops a rapport with your patient.
9. **Answer: a**
RATIONALE: Assess your demeanor, and take a breath before entering the room.
10. **Answer: d**
RATIONALE: General survey: wash hands; assess the environment for (a) noise, (b) safety, (c) privacy, and (d) lighting.
11. **Answer: a, b, and e**
RATIONALE: Face: inspect facial features for symmetry (cranial nerve VII, facial: symmetry of face—raise eyebrows, frown, close eyes, smile, puff out cheeks).

Activity D CASE STUDY

- a. Student answers will vary in particulars; however, all answers should include the following information:
 - i. General overview
 - ii. Cardiovascular system
 - iii. Abdomen
 - iv. Peripheral vascular system
 - v. Mental status exam
- b. Student answers will vary in sequence; however, all answers should include the following information:
 - i. Complete metabolic panel
 - ii. CBC
 - iii. Type and cross-blood
 - iv. UA
 - v. Urine culture and sensitivity
 - vi. PT
 - vii. PTT

CHAPTER 23

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. When examining infants and children, the sequence should vary according to the child's age and comfort level.
 - B. With children, as with adults, the point at which the Korotkoff sounds disappear constitutes the diastolic pressure.
 - C. Causes of sustained hypertension in childhood include renal parenchymal or artery disease, coarctation of the aorta, and primary hypertension.
 - D. For young children, observe the movements of the chest wall for two 30-second intervals or over 1 minute, preferably before stimulating them.
 - E. Dental caries are the most common health problem in children.
 - F. Adolescence is the period of transition from childhood to adulthood.
 - G. Adolescence is a tumultuous time, marked by the transition from family-dominated influences to increasing autonomy and peer influence.
 - H. Adolescents are more likely to open up when the interview focuses on them rather than on their problems.
 - I. Your goal is to help adolescents bring their concerns or questions to their parents.
 - J. The size of the liver approaches the adult size as the teen progresses through puberty, and is related to the adolescent's overall height.
2. List the principles of child development.
 - A. Child development proceeds along a predictable pathway.
 - B. The range of normal development is wide.
 - C. Various physical, social, and environmental factors, as well as diseases, can affect child development and health.
 - D. The child's developmental level affects how you conduct the history and physical examination.
 3. List the developmental tasks during middle childhood.
 - A. Enhanced strength and coordination
 - B. Competence in various tasks and activities
 - C. "Concrete operational": focus on the present
 - D. Achievement of knowledge and skills, self-efficacy
 - E. Achieving good "fit" with family, friends, school
 - F. Sustained self-esteem
 - G. Evolving self-identity

Activity B MATCHING

4. Match the common childhood lesions with their description.

Answer	Common Childhood Lesions	Description
C	Insect bites	A. Annular lesion that has central clearing and papules along the border
D	Urticaria (hives)	B. Scaling, crusting, and hair loss
A	Tinea corporis	C. Intensely pruritic, red, distinct papules
B	Tinea capitis	D. Pruritic, allergic sensitivity reaction that changes shape quickly

5. Match the developmental task of adolescence with its characteristic (tasks will have more than one characteristic dependent on the stage of adolescence).

Answer	Characteristic	Task
C	Peers increasingly important	A. Physical
A	Females more comfortable, males awkward	B. Cognitive
B	"Formal operational"	C. Identity
C	Sexuality	D. Independence
D	Separation from family	
A	Adult appearance	
C	Global issues	
A	Puberty	
D	Ambivalence	
D	Limit testing	
B	Transition; many ideas	
B	"Concrete operational"	

6. Match the primitive reflex to its description.

Answer	Primitive Reflex	Description
J	Palmar grasp reflex	A. The arm/leg on side to which head is turned extends while the opposite arm/leg flexes.
C	Plantar grasp reflex	B. The mouth will open and baby will turn the head toward the stimulated side and suck.
I	Moro reflex	C. The toes curl
A	Asymmetric tonic neck reflex	D. The spine will curve toward the stimulated side.
G	Positive support reflex	E. The hip and knee of that foot will flex and the other foot will step forward. Alternate stepping will occur.
B	Rooting reflex	F. The arms and legs will extend in a protective fashion.
D	Galant reflex	G. The hips, knees, and ankles extend; the baby stands up, partially bearing weight, and sags after 20–30 seconds.
E	Placing and stepping reflexes	H. The head will lift up, and the spine will straighten.
H	Landau reflex	I. The arms abduct and extend, hands open, and legs flex. Baby may cry.
F	Parachute reflex	J. The baby will flex all fingers to grasp your fingers

Activity C SHORT ANSWER

7. Student answers should include the following:
- Make sure the child bends forward with the knees straight (*Adams bend test*). Evaluate any asymmetry in positioning or gait. Scoliosis in a young child is unusual and abnormal; mild scoliosis in an older child is not uncommon.
 - If you detect scoliosis, use a *scoliometer* to test for the degree of scoliosis. With the patient

standing, look for asymmetry of the shoulder blades or gluteal folds. Have the teen bend forward as described. Look for prominence of the posterior ribs. Place the scoliometer over the spine at a point of maximum prominence, making sure that the spine is parallel to the floor at that point, as shown above. Have the teen bend fully forward to assess lumbar scoliosis, and less so to assess thoracic scoliosis.

- c. Several types of *scoliosis* may present during childhood. Idiopathic scoliosis (75% of cases), seen mostly in girls, is usually detected in early adolescence.
- d. You can also use a *plumb line*, a string with a weight attached, to assess symmetry of the back. Place the top of the plumb line at C-7 and have the child stand straight. The plumb line should extend to the gluteal crease (not shown here).
- e. Apparent scoliosis, including an abnormal plumb line test, can be caused by a *leg-length discrepancy*.
8. Student answers should include the following:
- The first principle of *child development* is that it *proceeds along a predictable pathway* governed by the maturing brain. You can measure age-specific milestones and characterize development as normal or abnormal according to the child's achievement of them. Once the child reaches a milestone, he or she proceeds to the next. Loss of milestones is concerning. Because physical examination takes place at one point in time, you need to determine where the child fits along a developmental trajectory.
 - The second principle is that the *range of normal development is wide*. Children mature at different rates. Each child's physical, cognitive, and social development should fall within a broad developmental range.
 - The third principle recognizes that *various physical, social, and environmental factors, as well as diseases, can affect child development and health*. For example, chronic illnesses, child abuse, and poverty can all cause detectable physical abnormalities and alter the rate and course of development. Children with physical or cognitive disabilities may not follow the expected age-specific developmental trajectory. Tailor the physical examination to the child's developmental level.
 - A fourth principle, specific to the pediatric examination, is that *the child's developmental level affects how you conduct the medical history and physical examination*. For example, interviewing a 5-year-old is fundamentally different from interviewing an adolescent. The physical examination of a curious toddler who is dismantling the examination room has little in common with that of a shy teenager. Both order and style differ from the examination of an adult. You must adjust your physical examination to the developmental level of the child while simultaneously attempting to ascertain that developmental level. An understanding of normal child development helps you achieve these tasks.
9. Student answers should include the following:
Children become progressively more independent, initiating activities and enjoying accomplishments. Achievements are critical for self-esteem and developing a "fit" within major social structures—family, school, and peer activity groups. Guilt and poor self-esteem also may emerge. Family and environment contribute enormously to the child's self-image. Moral development remains simple and concrete, with a clear sense of "right and wrong."
10. Student answers will vary but all should include the following concepts:
- Examine a child sitting on parent's lap.
 - Try to be at the child's eye level.
 - "Blow out" the otoscope light.
 - First examine the child's toy or teddy bear, then the child.
 - "Beep" the stethoscope on your nose.
 - Let the child do some of the exam (e.g., move the stethoscope). Then go back and "get the places we missed."
 - Make tongue-depressor puppets.
 - Ask the toddler who keeps pushing you away to "hold your hand." Then have the toddler "help you" with the exam.
 - Use the child's own toys for play.
 - Some toddlers believe that if they can't see you, then you aren't there. Perform the exam while the child stands on the parent's lap, facing the parent.
 - Jingle your keys to test for hearing.
 - If 2-year-olds are holding something in each hand (such as tongue depressors), they can't fight or resist!
 - Shine the otoscope through the tip of your finger, "lighting it up," and then examine the child's ears with it.
 - Use a reassuring voice throughout the examination.
 - Let the child see and touch the examination tools you will be using.
 - Avoid asking permission to examine a body part because you will do the examination anyway. Instead, ask the child which ear or which part of the body he or she would like you to examine "first."
 - Examine the child in the parent's lap. Let the parent undress the child.
 - If unable to console the child, give the child a short break.
 - Make a game out of the examination! For example, "Let's see how big your tongue is!" or, for lung examination, "Blow out the light" using a penlight.

Activity D NCLEX STYLE QUESTIONS

11. **Answer: b**
RATIONALE: Flat feet or *pes planus* results from laxity of the soft-tissue structures of the foot.
12. **Answer: a**
RATIONALE: After 2 years, toddlers gain about 2 to 3 kg and grow 5 cm per year.

- 13. Answer: c**
RATIONALE: Reassure parents that resistance to examination is developmentally appropriate.
- 14. Answer: b, c, and d**
RATIONALE: Consequences of childhood obesity include hypertension, diabetes, metabolic syndrome, and poor self-esteem.
- 15. Answer: a**
RATIONALE: For these children, the simplest examination is to assess for fixation preference by alternately covering one eye; the child with normal vision will not object, but a child with poor vision in one eye will object to having the good eye covered.
- 16. Answer: d**
RATIONALE: A pulmonary flow murmur accompanied by a fixed split-second heart sound suggests right-heart volume load such as an *atrial septal defect*.
- 17. Answer: c**
RATIONALE: Stage 4: Pubic hair, coarse and curly hair, as in the adult; area covered greater than in stage 3 but not as great as in the adult and not yet including the thighs. **Penis**, further enlarged in length and breadth, with development of the glans. **Testes and scrotum**, further enlarged; scrotal skin darkened.
- 18. Answer: b**
RATIONALE: The two most common causes of delayed sexual development in an extremely thin adolescent girl are anorexia nervosa and chronic disease.
- 19. Answer: d**
RATIONALE: Velocity growth curves are helpful in older children, especially those who are suspected of having endocrine disorders.
- 20. Answer: b**
RATIONALE: The most frequent “cause” of an elevated blood pressure in children is probably an improperly performed examination, often due to an incorrect cuff size.

Activity E CASE STUDY

- a. Student answers should include the following information:

Screening Musculoskeletal Examination for Sports

Position and Instruction to Patient	Common Abnormalities From Prior Injury
<p>Step 1: Stand straight, facing forward.</p> <p>Step 3: Shrug shoulders against resistance.</p>	<p>Step 1: Asymmetry, swelling of joints</p> <p>Step 2: Loss of range of motion</p> <p>Step 3: Weakness of shoulder, neck, or trapezius muscles</p>
<p>Step 5: Hold arms out to side with elbows bent 90°; raise and lower arms.</p> <p>Step 7: Hold arms down, bend elbows 90°, and pronate and supinate forearms.</p>	<p>Step 4: Loss of strength of deltoid muscle</p> <p>Step 5: Loss of external rotation and injury of glenohumeral joint</p> <p>Step 6: Reduced range of motion of elbow</p> <p>Step 7: Reduced range of motion from injury to forearm, elbow, or wrist</p> <p>Step 8: Protruding knuckle, reduced range of motion of fingers from prior sprain or fracture</p>
<p>Step 9: Squat and duck-walk for four steps forward.</p>	<p>Step 9: Inability to fully flex knees and difficulty standing up from prior knee or ankle injury</p>
<p>Step 11: Bend forward with knees straight and touch toes.</p>	<p>Step 10: Asymmetry from scoliosis, leg-length discrepancy, or weakness from injury</p> <p>Step 11: Asymmetry from scoliosis and twisting of back from low back pain</p> <p>Step 12: Wasting of calf muscles from ankle or Achilles tendon injury</p>
<p>Step 2: Move neck in all directions.</p> <p>Step 4: Hold arms out to the side against resistance.</p> <p>Step 6: Hold arms out, completely bend, and straighten elbows.</p> <p>Step 8: Make a fist, clench, and then spread fingers.</p> <p>Step 10: Stand straight with arms at sides, facing back.</p> <p>Step 12: Stand on heels and rise to the toes.</p>	

- b. Student answers should include the following information:
- i. Perform a general physical
 - (a) Special attention to the heart and lungs
 - (b) Vision and hearing screening
 - ii. A focused, thorough musculoskeletal examination
 - (a) Look for:
 - (i) Weakness
 - (ii) Limited range of motion
 - (iii) Evidence of previous injury
 - iii. Risk factors for sudden cardiovascular death during sports
 - (a) Episodes of *dizziness* or *palpitations*
 - (b) *Prior syncope* (particularly if associated with exercise)
 - (c) Family history of *sudden death* in young or middle-aged relatives
 - iv. Assess carefully for:
 - (a) Cardiac murmurs
 - (b) Wheezing in the lungs

CHAPTER 24

Activity A FILL IN THE BLANK

1. Complete the following statements:
 - A. Over the past 20 years, seniors actually have become more active and less disabled.
 - B. Self-neglect is a growing national concern and represents more than half of adult protective service referrals.
 - C. Depressed men older than 65 years have the highest incidence of suicide and require careful assessment and evaluation.
 - D. Loss of confidence from fear of falling and post-fall anxiety further impair full recovery.
 - E. Cancer screening for selected conditions can be controversial because of limited evidence sup-

Activity B MATCHING

4. Match the problem with its screening measure or positive screen.

Answer	Problem	Description
G	Vision	A. Unable to complete task in 15 seconds
E	Hearing	B. Weight <100 lbs
A	Leg mobility	C. "Do you often feel sad or depressed?"
H	Urinary incontinence	D. Unable to remember all three items after 1 minute
B	Nutrition/weight loss	E. Inability to hear 1,000 or 2,000 Hz in both ears or either of these frequencies in one ear
D	Memory	F. "Are you able to go shopping for groceries or clothes?"
C	Depression	G. "Do you have difficulty driving or watching television?"
F	Physical disability	H. "Have you lost urine on at least six separate dates?"

- porting its use for adults older than 70 to 80 years.
 - F. In general, base screening decisions on each older person's particular circumstances, rather than age alone.
 - G. Auscultate the abdomen for aortic, renal, or femoral artery bruits.
 - H. Malodor may occur with poor oral hygiene or periodontitis or caries.
 - I. Investigators have identified vast differences in how people age and have distinguished "usual" aging, with its complex of diseases and impairments, from "optimal" aging.
 - J. Because their eyes produce fewer lacrimal secretions, aging patients may complain of dry eyes.
2. List the home safety tips for older adults.
 - A. Handrails on both sides of any stairway
 - B. Well-lit stairways, paths, and walkways
 - C. Rugs secured by nonslip backing or adhesive tape
 - D. Removal of clutter or electric cords
 - E. Grab bars and nonslip mat or safety strips in the bath or shower
 - F. Carbon monoxide and smoke alarms with a plan for escaping
 3. List the important topics for health promotion and counseling in the older adult.
 - A. Screening
 - B. Cancer screening
 - C. Immunizations
 - D. Household safety
 - E. Fall assessment
 - F. Driving safety
 - G. Exercise
 - H. Depression
 - I. Dementia
 - J. Elder mistreatment
 - K. Advanced directive and palliative care

5. Match the characteristic with the type of pain. (Type of pain will have more than one characteristic.)

Answer	Characteristic	Type of Pain
B	Can fluctuate in character and intensity over time	A. Acute
A	Obvious pathology	B. Persistent
A	Distinct onset	
B	Lasts more than 3 months	
A	Short duration	
B	Common causes: arthritis, cancer, claudication, leg cramps, neuropathy, radiculopathy	

Activity C SHORT ANSWER

6. Student answers should include the following:
- Many older patients are interested in expressing their wishes about end-of-life decisions.
 - Would like providers to initiate these discussions before any serious illness develops
 - Advance care planning involves several tasks
 - Providing information
 - Invoking the patient's preferences
 - Identifying proxy decision makers
 - Conveying empathy and support
 - Use clear and simple language.
 - Ask about preferences relating to written "do not resuscitate" orders.
 - Encourage the patient to establish in writing:
 - A health care proxy
 - Durable power of attorney for health care
 - Plan to include these discussions in an office setting.
7. Student answers should include the following:
- Dementia, an acquired syndrome
 - Decline in memory
 - At least one other cognitive domain
 - Sufficient to interfere with social or occupational functioning in an alert person
 - Affects roughly 4.5 million people
 - Prominent features include:
 - Short- and long-term memory deficits
 - Impaired judgment
 - Thought processes are impoverished.
 - Speech may be hesitant as a result of difficulty in finding words.
 - Loss of orientation to place
 - Most dementias represent:
 - Alzheimer disease
 - Vascular multi-infarct dementia
 - Patients with a positive family history
 - Risk is three times higher than the risk in the general population
- Often has a slow, insidious onset
 - May escape detection by both families and clinicians
 - Especially in the early stages of *mild cognitive impairment (MCI)*
 - MCI refers to:
 - Milder syndrome of cognitive loss
 - Not of such magnitude as to interfere with social or vocational function
 - Person may or may not complain of cognitive deterioration.
 - Standardized cognitive testing reveals reasonable evidence of significant decline in at least one cognitive domain.
 - Amnesic MCI*
 - Domain affected is memory.
 - Nonamnesic MCI*
 - When the domain affected is language or visuospatial function
 - Significant percentage of patients progress to clinical diagnosis of Alzheimer disease
 - Age-associated cognitive impairment (AACI)*
 - Age-associated cognitive loss
 - Deterioration cannot be documented on cognitive testing.
 - Clinical significance is not yet known.
 - Alzheimer dementia
 - Look for amnesic memory impairment.
 - Deterioration of language
 - Deterioration of visuospatial deficits
 - Initial loss of higher-level ADLs progresses to eventual loss of basic activities.
 - Mood change and apathy often appear early.
 - Psychosis and agitation emerge in the later stages.
 - Family complaints of new or unusual behaviors

- viii. If cognitive changes investigate contributing factors, such as:
- Medications
 - Depression
 - Metabolic abnormalities
 - Other medical and psychiatric conditions
- m. Counsel families about potential for:
- Disruptive behavior
 - Accidents
 - Falls
 - Termination of driving privileges
- n. Foster discussion of legal arrangements
- Power of attorney
 - Advance directives
 - While the patient can still contribute to decision making
8. Student answers should include the following:
- Advise your patients to have:
 - Influenza vaccine*
 - People 50 years or older
 - Any older adult with chronic disorders of the cardiovascular or pulmonary systems, diabetes, renal or hepatic dysfunction, immunosuppression, or HIV/AIDS
 - Residents and health care personnel of nursing homes and long-term care facilities
 - Caregivers of children
 - Anyone requesting vaccination
 - Pneumococcal vaccine*
 - Should be given every 5 years to adults 65 years or older with chronic disorders of the cardiovascular or pulmonary systems, diabetes, renal or hepatic dysfunction, asplenia, chronic alcoholism, immunosuppression, cerebrospinal fluid leak, or HIV/AIDS
 - Residents of nursing homes or long-term care facilities
 - Alaska Natives and selected American Indian populations, such as the Navajo and Apache
 - Zoster vaccine*
 - Recommended at age 60 years, regardless of whether the patient reports a prior episode of herpes zoster
 - Studies show that vaccination reduces incidence of herpes zoster by approximately 50% and incidence of postherpetic neuralgia by more than 65%.
9. Student answers will vary but all should include the following concepts:
- Approximately 80% of older adults:
 - Have at least one chronic disease
 - Take at least one prescription drug each day
 - Those older than 65 years receive approximately 30% of all prescriptions.
 - Roughly 30% take more than eight prescribed drugs each day.
 - Older adults have more than 50% of all reported adverse drug reactions:
 - Causing hospital admission
 - Reflecting pharmacodynamic changes in the distribution, metabolism, and elimination of drugs that place them at increased risk
 - Take a thorough medication history, including name, dose, frequency, and indication for each drug.
 - Explore all components of polypharmacy, including:
 - Suboptimal prescribing
 - Concurrent use of multiple drugs
 - Underuse
 - Inappropriate use
 - Nonadherence
 - Ask about use of:
 - Over-the-counter medications
 - Vitamin and nutritional supplements
 - Mood-altering drugs such as:
 - Narcotics
 - Benzodiazepines
 - Recreational substances
 - Assess medications for drug interactions.
 - Be particularly careful with patients being treated for insomnia, as it is estimated to occur in approximately 40% of older adults.
 - Medications are the most common modifiable risk factor associated with falls.
 - Review strategies for avoiding polypharmacy
 - Collaborate with the patient's physician or nurse practitioner.
 - It is wise to keep the number of drugs prescribed to a minimum.
 - Learn about drug-drug interactions and drugs contraindicated in older adults.

10. Student answers should include the following:

DELIRIUM AND DEMENTIA

Delirium and dementia are common and very important disorders that affect multiple aspects of mental status. Both have many possible causes. Some clinical features of these two conditions and their effects on mental status are compared below. A delirium may be superimposed on dementia.

	Delirium	Dementia
Clinical Features		
<i>Onset</i>	Acute	Insidious
<i>Course</i>	Fluctuating, with lucid intervals; worse at night	Slowly progressive
<i>Duration</i>	Hours to weeks	Months to years
<i>Sleep/Wake Cycle</i>	Always disrupted	Sleep fragmented
<i>General Medical Illness or Drug Toxicity</i>	Either or both present	Often absent, especially in Alzheimer disease
Mental Status		
<i>Level of Consciousness</i>	Disturbed. Person less clearly aware of the environment and less able to focus, sustain, or shift attention	Usually normal until late in the course of the illness
<i>Behavior</i>	Activity often abnormally decreased (somnolence) or increased (agitation, hypervigilance)	Normal to slow; may become inappropriate
<i>Speech</i>	May be hesitant, slow or rapid, incoherent	Difficulty in finding words, aphasia
<i>Mood</i>	Fluctuating, labile, from fearful or irritable to normal or depressed	Often flat, depressed
<i>Thought Processes</i>	Disorganized, may be incoherent	Impoverished. Speech gives little information.
<i>Thought Content</i>	Delusions common, often transient	Delusions may occur.
<i>Perceptions</i>	Illusions, hallucinations, most often visual	Hallucinations may occur.
<i>Judgment</i>	Impaired, often to a varying degree	Increasingly impaired over the course of the illness
<i>Orientation</i>	Usually disoriented, especially for time. A known place may seem unfamiliar.	Fairly well maintained, but becomes impaired in the later stages of illness
<i>Attention</i>	Fluctuates. Person easily distracted, unable to concentrate on selected tasks	Usually unaffected until late in the illness
<i>Memory</i>	Immediate and recent memory impaired	Recent memory and new learning especially impaired
Examples of Cause	Delirium tremens (due to withdrawal from alcohol)	<i>Reversible:</i> Vitamin B ₁₂ deficiency, thyroid disorders
	Uremia	<i>Irreversible:</i> Alzheimer disease, vascular dementia (from multiple infarcts), dementia due to head trauma
	Acute hepatic failure	
	Acute cerebral vasculitis	
	Atropine poisoning	

Activity D NCLEX STYLE QUESTIONS**11. Answer: a, b, and d**

RATIONALE: The goal of palliative care is “to relieve suffering and improve the quality of life for patients with advanced illnesses and their families through specific knowledge and skills, including communication with patients and family members; management of pain and other symptoms; psychosocial, spiritual, and bereavement support; and coordination of an array of medical and social services.”

12. Answer: c

RATIONALE: The snout reflex is a pursing of the lips or pouting after tapping of the closed lips near the midline. If present, then involvement of the frontal lobe, such as dementia, or closed head injury is suspected.

13. Answer: a

RATIONALE: Suggestions to alleviate pain might be changes in positions, use of lubrication, heat application, and warm baths.

14. Answer: c

RATIONALE: Detecting alcohol use disorders in older adults: clinical clues; memory loss, cognitive impairment; depression, anxiety; neglect of hygiene, appearance; poor appetite, nutritional deficits; sleep disruption; hypertension refractory to therapy; blood sugar control problems; seizures refractory to therapy; impaired balance and gait, falls; recurrent gastritis and esophagitis; difficulty managing warfarin dosing.

15. Answer: a, b, c, d, and e

RATIONALE: ER visits and deaths were most likely to involve yard and garden equipment, ladders and stepstools, personal use items like hair dryers and flammable clothing, and bathroom and sports injuries.

16. Answer: b

RATIONALE: Assess the patient for orthostatic hypotension, defined as a drop in systolic blood pressure of ≥ 20 mm Hg or diastolic blood pressure of ≥ 10 mm Hg within 3 minutes of standing.

17. Answer: d

RATIONALE: Low weight is a key indicator of poor nutrition. Undernutrition is seen with depression, alcoholism, cognitive impairment, malignancy, chronic organ failure (cardiac, renal, pulmonary), medication use, social isolation, and poverty.

18. Answer: b

RATIONALE: The pupils should respond to light and near effort. Except for possible impairment in upward gaze, extraocular movements should remain intact.

19. Answer: b, c, and e

RATIONALE: Recommend regular aerobic exercise to improve strength and aerobic capacity, increase physiologic reserve, improve energy level for doing ADLs, and slow onset of disability.

20. Answer: b

RATIONALE: Auscultate the abdomen for aortic, renal, or femoral artery bruits. Bruits over these vessels are found in atherosclerotic disease.

Activity E CASE STUDY

a. Student answers will vary in particulars; however, all answers should include the following information:

MANAGING OLDER ADULTS: THE SIEBENS DOMAIN MANAGEMENT MODEL

One framework to guide care of older adults is the Siebens Domain Management Model.^{a,b} With practicality as a goal, the model organizes a patient's health-related problems and strengths into four domains: I. Medical/Surgical Issues; II. Mental Status/Emotions/Coping; III. Physical Function; and IV. Living Environment. Using these domain headings helps make care planning and documentation efficient and comprehensive and promotes interdisciplinary teamwork.

Format for Provider History & Physical Reports

(Modify as needed for Follow-Up Visits)

Revised with Siebens Domain Management Model (SDMM)^a

Subjective ^b	Objective ^b
<p>Chief Concern or Reason for Visit (follow-up) History of Present Illness Symptoms/Workups to date/Patient's Perspective/ Worries</p> <p>Medications</p> <p>Allergies</p> <p>Past Medical History Health maintenance</p> <p>Family History</p> <p>Social History Education/functional health literacy Marital status, Children, Pets Nature of relationships (support/caregiver burden) Alcohol/Tobacco/Drugs Spirituality and Religious beliefs, practices Health Power of Attorney/medical directive</p> <p>Functional History Prior level of function in Mobility Self-care Medication management, paying bills Work/Leisure/Fun activities</p> <p>Review of Systems Inclusive of sexuality</p>	<p>Pertinent Physical Exam Vital Signs and pertinent organ systems Cognition, Affect Mobility—moving in bed, getting out of bed or a chair, walking, etc.</p> <p>Pertinent Labs Electrolytes, renal function, CBC, alb, etc.</p> <p>Assessment/Plan^b (or Hospital Course) (Note: Identified strengths and problems are best listed with assessment and plan together; each domain must, ideally, be listed with selected categories as appropriate or else described as "no issues"; topics deemed important but not assessed can be listed with reminder "address tomorrow/next visit.")</p> <p>I. Medical/Surgical Issues Symptoms/Diseases/Prevention</p> <p>II. Mental Status/Emotions/Coping Cognition (preceded with Communication if any issues including a listing of vision/hearing/speech/language issues) Emotions Coping/Behavioral Symptoms Spirituality Patient Preferences—Advance Directives</p> <p>III. Physical Function Basic ADLs—(self-care—dressing, bathing, home mobility, etc.) Intermediate ADLs—(meals, medication and money management, etc.) Advanced ADLs—(sexuality, work, parenting, leisure/fun, driving, general physical activity/exercise, etc.)</p> <p>IV. Living Environment A. Physical (home, adaptations, community) B. Social (family supports/coping, social interactions, etc.) C. Financial (health insurance, personal income, etc.) & Community Resources</p>

^a Siebens H. Applying the Domain Management Model in Treating Patients with Chronic Diseases. *Jt. Comm J Qual Improvement* 2001;27:302–314.

^b Note that information is also organized in the familiar SOAP format—Subjective, Objective, Assessment, Plan.

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Also available at: www.siebenspcc.com.

- b.** Student answers will vary in particulars, but all should include the following topics:
1. Screening
 2. Cancer screening
 3. Immunizations
 4. Household safety
 5. Fall assessment
 6. Driving safety
 7. Exercise
 8. Depression
 9. Dementia
 10. Elder mistreatment
 11. Advanced directive and palliative care