Study Guide For

Wong’s Essentials of Pediatric Nursing

Ninth Edition

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Kelley Ward
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Chapter 1 provides an overview of the nursing care of children from a child-centered perspective as unique individuals with specific developmental needs. The chapter explores the current state of health care for children, childhood health problems, and family-centered care. After completing this chapter, the student will be able to use the nursing process as a tool to critically think about ways to deliver individualized and effective nursing care to children and their families.

**REVIEW OF ESSENTIAL CONCEPTS**

**Health Care for Children**

1. What is the major goal of pediatric nursing?

2. _______________ 2020 provides a framework for identifying essential components for child health promotion programs designed to prevent future health problems in our nation’s children.

3. Child health promotion provides opportunities to reduce differences in current health status and ensure _______________ and resources to enable all children to achieve their fullest health potential.

4. During childhood, the eating preferences and attitudes related to food habits are established by _______________ and _______________. During adolescence, parental influence diminishes as the adolescent makes food choices related to _______________ and _______________.

5. _______________ is the single most common chronic disease of childhood.

6. What two public health interventions have had the greatest impact on world health?
   a.
   b.

**Childhood Health Problems**

7. Childhood _______________ is the most common nutritional problem among American children, is increasing in epidemic proportions, and is associated with type 2 diabetes.

8. The majority of bicycling deaths are from _______________ injuries.
**Mortality**

9. _______________ is considered the major determinant of neonatal death in technologically developed countries.

10. Define *infant mortality*.

11. What is considered the major determinant of neonatal death in technologically developed countries?

   _______________.

12. The chief illness of childhood is the _______________.

13. The major cause of death for children over the age of 1 year is _______________.

14. Identify the four most common causes of death during infancy.
   a. 
   b. 
   c. 
   d. 

15. Children ages _______________ to _______________ years have the lowest rate of death.

16. _______________ deaths have been steadily increasing among young people ages 10 through 25 years, especially in _______________ males.

17. _______________ is the second leading cause of death in the 15- to 19-year age group.

**Morbidity**

18. What is a major cause of childhood morbidity?

19. The most common acute childhood illness is respiratory illness, which accounts for _______________ % of all acute conditions.

**Philosophy of Care**

20. Nursing care of infants, children, and adolescents is consistent with the definition of nursing. Nursing is defined as “the diagnosis and treatment of _______________ to _______________ or _______________ health problems.”
**Family-Centered Care**

21. Family-centered care recognizes the family as the ________________ in a child’s life.

22. Family-centered care considers not only the individual needs of the child but also the needs of the ________________.

23. Two basic concepts in family-centered care are ________________ and ________________.

**Atraumatic Care**

24. Atraumatic care is the provision of therapeutic care in settings, by personnel, and through the use of interventions that eliminate or minimize the ________________ and ________________ distress experienced by children and their families in the health care system.

25. List the three principles that provide the framework for achieving the goal in providing atraumatic care.

   a.

   b.

   c.

**Role of the Pediatric Nurse**

26. The establishment of a ________________ is the essential foundation for providing high-quality nursing care.

27. Staff members’ concerns about their peer’s actions with a family are often signs of a ________________ relationship.

28. In a therapeutic relationship, caring, well-defined ________________ separate the nurse from the child and family.

29. As an advocate, the nurse assists children and their families in making informed choices and acting in the child’s best interest. Please choose the best answer from the statements below. Advocacy involves ensuring that families are

   a. aware of all available health services.

   b. informed and involved in treatments and procedures.

   c. encouraged to change or support existing health care practices.

   d. all of the above.
30. Pediatric nursing involves the practice of __________________________ health care.

31. The best approach to prevention is __________________________ and __________________________.

32. What enables the nurse to guide parents regarding childrearing practices aimed at preventing potential problems?

33. To provide high-quality health care, pediatric nurses __________________________ and __________________________ nursing services with the activities of other professionals.

**Critical Thinking and the Process of Nursing Children and Families**

34. Explain evidence-based practice (EBP) and what it provides for the field of nursing.

35. Describe clinical reasoning.

**Nursing Process**

36. Define nursing process and list the five steps of the nursing process.
   a. 
   b. 
   c. 
   d. 
   e. 

37. Match each of the following definitions with the appropriate term.
   a. ______ Assessment
   b. ______ Diagnosis
   c. ______ Planning
   d. ______ Implementation
   e. ______ Evaluation

   1. Once the nursing diagnoses have been identified, the nurse engages in this to establish outcomes or goals.
   2. This is a continuous process that operates at all phases of problem solving and is the foundation for decision making.
   3. This phase begins when the nurse puts the selected intervention into action and accumulates feedback data regarding its effects.
   4. This phase begins when the nurse must interpret and make decisions about the data gathered.
   5. In this phase the nurse gathers, sorts, and analyzes data to determine whether (1) the established outcome has been met, (2) the nursing interventions were appropriate, (3) the plan requires modification, or (4) other alternatives should be considered.
38. The three components of nursing diagnosis are ________________, ________________, and ________________.

39. Match each of the following definitions with the appropriate term.
   a. _______ Problem statement  
      1. Describes the child’s response to health pattern deficits in the child, family, or community
   b. _______ Etiology  
      2. The cluster of cues and/or defining characteristics that are derived from the patient assessment
   c. _______ Signs and symptoms  
      3. The physiologic, situational, and maturational factors that cause the problem or influence its development

40. Define quality of care.

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. Spend a day following a nurse in a pediatric unit of an acute care facility. Briefly describe and give examples of the roles of the pediatric nurse in a pediatric unit.
   1. Family advocacy
      
      2. Disease prevention and health promotion
      
      3. Restorative role
      
      4. Coordination and collaboration
      
      5. Ethical decision making
      
      6. Research
      
      7. Family-centered care
B. You observe the care of a group of five children on an acute care unit of a children’s hospital for one shift. Identify whether the principle of family-centered care is being applied or violated in the following examples. What steps could be taken to make these situations more family centered?

1. A child’s father is allowed to visit for 3 hours per day. During his visitation time, the nurse decides to give the child a bath and asks the father to wait outside in the waiting room.

2. The posted visiting hours are noon to 8 pm for families, and no children under 14 years of age are allowed.

3. A mother changes the dressing on her child’s leg. The nurse observes and assists as necessary.

4. The nurse would like to perform the morning bath on a child, but the nurse notes the child’s mother is just awakening. The nurse asks the mother whether she would prefer the bath occur now or at a more convenient time for her and the child.
Chapter 2 explores the nurse’s role in the multidisciplinary approach to the care of children and families in a community setting. Concepts and principles of community health nursing are studied. The components of the community nursing process are explained and contrasted with the nursing process used for an individual child or family. The information in this chapter will assist the student in defining and describing the community health nurse’s different roles and functions in providing care for the child and family.

REVIEW OF ESSENTIAL CONCEPTS

Community Concepts

1. Community is defined as _________________________.

2. Community health initiatives are directed either at the community’s _________________ or _________________ at _________________ populations within the community that have unique needs.

3. Does the definition “narrowly defined groups (e.g., nonimmunized preschoolers, obese middle school children) for whom nurses direct activities to improve the health status of individuals in the group” describe populations or target populations?

4. Community health nursing focuses on ________________________ and ________________________ the health of individuals, families, and groups in a community setting. Community health nursing is a synthesis of ________________________ and ________________________.

5. List three traditional community health settings.
   a. ________________________
   b. ________________________
   c. ________________________

6. Describe three different situations in which the evolution of the nursing role has contributed to a need for competent public or community health nurses.
   a. ________________________
   b. ________________________
   c. ________________________
7. List the traditional roles of the community health nurse.
   a. 

   b. 

   c. 

   d. 

   e. 

   f. 

   g. 

   h. 

   i. 

   j. 

8. The Council on Linkages, a group of university educators and public health professionals, delineated core functions to guide public health professionals and developed a list of skills to improve all public health workers’ ability. List the eight categories of skills included in the core functions.
   a. 

   b. 

   c. 

   d. 

   e. 

   f. 

   g. 

   h.
9. The study of population characteristics is called ____________________.

10. An increased probability of developing a disease, injury, or illness is called ____________________.

11. Define epidemiology.

12. The epidemiologic process identifies the ____________________ and ____________________ of disease or injury across a(n) ____________________.

13. Morbidity (disease and injury) is reported using what two types of rates?
   a. ____________________
   b. ____________________

14. ____________________ measures the occurrence of new events in a population during a period of time. ____________________ measures existing events in a population during a period of time.

15. The epidemiologic triangle is formed by three factors whose interrelationship alters the risk for acquiring a disease or condition; these three factors are ____________________, ____________________, and ____________________.

16. Match each level of prevention with its description.
   a. ______ Primary prevention 1. Intervention that focuses on health promotion and prevention of disease or injury. An example would be a safety program for installing infant car seats.
   b. ______ Secondary prevention 2. Intervention that optimizes functions for children with a disability or chronic disease. An example would be diabetes disease management.
   c. ______ Tertiary prevention 3. Intervention that promotes early detection and treatment of illness or efforts to prevent the spread of contagious diseases, progression of disease, or disability. An example would be tuberculosis screening.

**Community Nursing Process**

17. In community nursing, the focus of the nursing process shifts from the individual child and family to the ____________________, or target, population.

18. A community needs assessment requires the collection of both ____________________ and ____________________ information about a community.

19. Subjective information includes community members’ ____________________ of their most important needs through questionnaires or interviews.
20. Internet sites of voluntary health organizations are a way for the nurse to obtain
________________________ data.

21. Based on an analysis of the community assessment, the nurse formulates a(n) _____________________.

22. In the planning phase of the community nursing process, the nurse collaborates with ________________
to develop a(n) ____________________ to address the target population’s needs and problems.

23. Community interventions are often offered in the form of ____________________, which are based on the
________________________ levels of prevention.

24. Evaluation identifies whether the ____________________ and ____________________ were met.

25. Program evaluation should be ____________________ so that performance improvement initiatives are monitored and so that an improvement in the way health care is delivered will affect the target population’s health status.

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Spend a day following an elementary school nurse. Identify which level of prevention is illustrated by the nurse’s following activities.

1. Evaluating the immunization status of the children entering the first grade and encouraging compliance with requirements

2. Teaching third-grade students about the importance of safety when riding a bicycle

3. Assisting a fourth-grade child in complying with the medication schedule for the child’s asthma

4. Consulting with the classroom teacher regarding health education of a third-grade child with cystic fibrosis

5. Organizing and conducting a support group for children of recently divorced parents

6. Screening at-risk children for lead poisoning
B. A nursing student, a community health nurse, and a health promotion community group are conducting a community needs assessment.
   1. What eight community systems does the nurse need to examine?

   2. Give an example of how the nurse would gather subjective information about the community. How does including a nursing approach add to the community needs assessment?

   3. What sources of objective data about the community could the nurse access?

   4. After analyzing the assessment data, the nurse and the community group discover that 38% of the childhood population between 5 and 12 years of age is overweight. Based on these data, what is the priority community nursing diagnosis?

   5. Identify three goals for the nursing diagnosis chosen in question 4.
Chapter 3 provides an overview of family and parenting influences on the health promotion of children. Different family structures, functions, and roles are explored. Motivation, preparation, and transition to parenting are presented and discussed. After completing this chapter, the student will have information on a variety of family situations that will form a foundation for developing appropriate nursing strategies to promote the health of children.

REVIEW OF ESSENTIAL CONCEPTS

General Concepts
1. What is the definition of a family?

2. The most common type of relationships within the family are ____________, or blood relationships; ____________, or marital relationships; and ____________, or the family unit a person is born into.

3. A family theory can be used to describe families and how the family unit ____________ both within and outside the family.

4. Explain the following three major family theories. Include the theory’s emphasis in relation to the family.
   a. Family system theory
   b. Family stress theory
   c. Developmental theory
Family Structure and Function

5. Match the following family structures with the appropriate definition.

a. _______ Traditional nuclear 1. One parent, one or more children, and one or more members (related or unrelated) other than a parent or sibling
b. _______ Single parent 2. A man or woman alone as head of a household as a result of divorce, death, desertion, illegitimacy, or adoption
c. _______ Blended 3. A common-law tie (or, in some states, marriage) between two persons of the same sex who have children
d. _______ Extended 4. A married couple (one man and one woman) and their biologic children
e. _______ Gay/lesbian 5. Adults, one or both of whose children from a previous marriage reside in the household
f. _______ Communal 6. A family that consists of multiple wives.
g. _______ Polygamous 7. A group of individuals, who may have divergent beliefs, practices, and organization, and who often form a bond as a result of dissatisfaction with the nuclear family structure, social systems, and goals of the larger community.

6. __________________________ refers to the interactions of family members, especially the quality of those relationships and interactions.

Family Roles and Relationships

7. Roles are learned through the __________________________ process.

8. A conflict of role expectations is known as __________________________.

9. Identify the six elements of family configuration that influence child development.
   a.
   b.
   c.
   d.
   e.
   f.
   g.

10. The increase in the number of larger multiples (quintuplets, sextuplets) during recent years has been associated with __________________________. Two examples of such treatment include __________________________ drugs and __________________________ fertilization.
11. In differentiating between small and large families, is each of the following statements true or false?
   a. T F Emphasis is placed on family development as a whole in the small family.
   b. T F Children in large families are unable to adjust to a variety of changes and crises.
   c. T F Adolescents from a large family are often more peer oriented than family oriented.

12. Ordinal position in a family may influence a child’s personality development. Indicate whether each of the following statements is true or false.
   b. T F First-born children are more achievement oriented and more dominant.
   c. T F Youngest children are more dependent than first-born children.
   d. T F Middle children are able to compromise and be adaptable.

**Parenting**

13. A dominant characteristic in all societies is that adults are expected to become __________________________ and to be gratified by the experience.

14. The number of children reduces the __________________________ between the parent and any individual child.

15. Identify the three basic goals of parenting.
   a. ________________
   b. ________________
   c. ________________

16. In the transition to parenthood, the birth of the first child requires __________________________ changes. In addition to the roles of husband and wife, the couple must assume the roles of __________________________ and __________________________.

17. The advent of a new family member requires that the family cope with greater __________________________ responsibilities, a possible loss of __________________________, changes in __________________________, and less __________________________ for the husband and wife to spend with each other.

18. Identify eight factors that can influence the transition to parenthood.
   a. ________________
   b. ________________
   c. ________________
   d. ________________
19. What type of parenting style leaves the decision making to the children?

20. Differentiate among the following three styles of parental control.
   a. Authoritarian (dictatorial)
   
   b. Permissive (laissez-faire)
   
   c. Authoritative (democratic)

21. Identify the seven most common strategies (types) for discipline.
   a. 
   
   b. 
   
   c. 
   
   d. 
   
   e. 
   
   f. 
   
   g.
22. Indicate whether each of the following statements is true or false.
   a. T  F  When reprimanding children, focus only on the misbehavior, not on the child.
   b. T  F  Logical consequences occur without any intervention, such as being late and missing dinner.
   c. T  F  Consistency is when disciplinary action is implemented exactly as agreed on for each infraction.

**Special Parenting Situations**

23. State five areas of concern for adoptive parents.
   a.
   b.
   c.
   d.
   e.

24. Identify four factors that will influence the impact of divorce on children.
   a.
   b.
   c.
   d.

25. What element is important for parents to emphasize when discussing divorce with their children?

26. Define *joint legal custody*.

27. High levels of ongoing _____________________ are related to problems of social development, emotional stability, and cognitive skills for the child.
A. Interview an expectant couple and then parents with a school-age child to contrast their views of parenthood. Answer the following questions. Include the parents’ responses to illustrate these concepts.

1. According to Duvall’s developmental stages of the family theory, what are the tasks for each of the following families? Are the families you interviewed successful in accomplishing these tasks?
   a. Expectant couple
   b. Parents of a school-age child

2. What factors affect the transition to parenthood?

B. After talking with a variety of families with children of various developmental ages, answer the following questions, which deal with the effects of different family structures on child development. Include specific examples to illustrate these concepts.

1. What life events might alter family structure?

2. What implication does an alteration in composition have for the family and child?

3. List the qualities of strong families, regardless of their configuration.
   a.
   b.
   c.
   d.
   e.
   f.
   g.
C. Talk to a working, recently divorced single parent to assess problem areas. Answer the following questions.
   1. What changes or feelings accompany single parenthood?

2. List four social supports and community resources needed by single-parent families.
   a.
   b.
   c.
   d.

D. Interview a couple who are dual-career parents and a couple who consist of a stay-at-home parent and a career parent. Assess both problem and strength areas in these families. Identify two strengths and two weaknesses associated with the dual-career parents and with the stay-at-home parent and career parent.

E. A nurse is educating a family in the process of adopting a 2-year-old boy. What information would be important for the nurse to include regarding the task of telling the boy that he was adopted?
Chapter 4 provides an overview of the social, cultural, religious, and economic factors influencing the growth and development of children in the United States. After completing this chapter, the student will have a greater understanding of the social, economic, cultural, and religious factors that promote children’s health. This information will assist the student in delivering high-quality nursing care to meet the unique needs of the child and family.

REVIEW OF ESSENTIAL CONCEPTS

Culture
1. Match each concept with its definition.
   a. _______ Culture
   b. _______ Race
   c. _______ Ethnicity
   d. _______ Socialization

   1. The process by which society imparts its competencies, values, and expectations to children
   2. A pattern of learned beliefs, values, and practices shared by a group of people
   3. The affiliation of a set of persons who share a unique cultural, social, and linguistic heritage
   4. A division of humankind possessing traits that are transmissible by descent and that are sufficient to characterize it as a distinct human type

2. By age __________________, children can identify persons who belong to their own race or cultural background.

3. Much of children’s self-concept is derived from their ideas about their __________________.

4. A social group consists of a system of roles carried out in both primary and secondary group.
   a. What are the characteristics of a primary group? Give two examples of a primary social group.
   b. What are the characteristics of secondary group? Give two examples of a secondary social group.

Self-Esteem and Culture
5. A child from a(n) __________________ culture will hold a(n) __________________ view of self.
   Self-evaluation is related to the accomplishments or competencies of the entire family or community.

6. Describe culture shock.

Subcultural Influences
7. The term __________________ refers to the emotional attitude that one’s own culture proves the right and natural way to do things while all other ways are unnatural and inferior.

8. Families in the lower socioeconomic class have children who are less likely to be __________________ against preventable diseases than children in the middle and upper classes.
9. The term *visible poverty* refers to ________________________.

10. What type of care requires changing the way people think about, understand, and interact within the world around them?


12. ______________________ is a strong predictor of a child’s health and is closely associated with poorer physical, developmental, and mental health outcomes.

13. A large group of homeless children described as “runaways” or “throwaways” are ________________________.

14. ______________________, ______________________ families, who are on the low end of the economic scale, are often subject to inadequate sanitation, substandard housing, social isolation, and lack of educational and medical facilities.

15. ______________________ are the fastest growing minority in the United States and have many health needs that are not being met.

16. Identify four categories of stressors of immigrants that youth receive from the community.
   a.
   b.
   c.
   d.

17. The ______________________ faith is an influential factor in shaping the culture of the United States.

18. Next to the family, the ______________________ exert the major force in providing continuity between generations by conveying a vast amount of culture from the older members to the young.

19. List the eight categories of internal and external assets that youth receive from the community.
   a.
   b.
   c.
   d.
20. The values imposed by the peer group are especially compelling because children must
              and to them to be accepted as members of the group.

21. In the United States, young adults rely to a greater extent on the , , and for acquisition of
              acceptable patterns of behavior, including childrearing practices.

22. Match the following terms with the correct statement.
        a. Cultural diversity
        b. Acculturation
        c. Assimilation
        d. Cultural relativism
        e. Culture shock

        1. A certain degree of cultural and ethnic blending that occurs through an involuntary process
        2. When people from different cultures interact
        3. The process of developing a new cultural identity
        4. The feelings of helplessness and discomfort and a state of disorientation experienced by an outsider attempting to comprehend or effectively adapt to a different cultural group because of differences in cultural practices, values, and beliefs
        5. The process for understanding behavior in its cultural context and seeing other ways of doing things as being different but equally valid

23. List the six elements included in the process of developing cultural competence.
        a.
        b.
        c.
        d.
        e.
        f.
Cultural and Religious Influences on Health Care

24. The most overwhelming adverse influence on the health of children is __________________________ status.

25. There is a high correlation between __________________________ and the prevalence of illness.

26. In 2007, families with children make up __________________________ % of the homeless population.

27. Identify the areas in which there might be a conflict of values and customs for the nurse interacting with a child and family from a different cultural or ethnic group.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 
   h. 
   i. 
   j. 
   k. 
   l. 
   m. 
   n.
28. The most common natural forces held responsible for ill health if the body is not adequately protected include the following:
   a. 
   b. 

29. Illnesses caused by an imbalance of the four humors—phlegm, blood, black bile, and yellow bile—supported by many of the Hispanic, Filipino, Chinese, and Arab cultures are believed to improve with ________________ and ________________ remedies.

30. Match the following religious beliefs with the religion they represent.
   
   a. ______ Oppose human intervention with drugs or other therapies
   b. ______ Prohibit all pork and alcohol and fast during the ninth month of the year
   c. ______ Oppose blood transfusions
   d. ______ May resist surgical procedures during Sabbath
   e. ______ Abstain from eating meat from Ash Wednesday to Good Friday and on Fridays during Lent
   f. ______ Wear a thread around wrist or body and do not remove it
   g. ______ Practice last rite chanting at bedside after death

   1. Roman Catholicism
   2. Judaism
   3. Christian Science
   4. Islam (Muslim/Moslem)
   5. Jehovah’s Witness
   6. Buddhism
   7. Hinduism

31. Match the following broad cultural characteristics related to health care of children and families with the culture they represent.
   
   a. ______ Goal of therapy to restore balance of yin and yang
   b. ______ Illness classified as natural or unnatural; self-care and folk medicine prevalent
   c. ______ Subscribe to hot-cold theory of causation of illness
   d. ______ Believe health is a state of harmony with nature and the universe

   1. Native Americans
   2. African Americans
   3. Asian Americans
   4. Puerto Ricans

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Interview parents from two different cultural, ethnic, economic, and religious backgrounds to determine the differences in childrearing practices. Answer the following questions and include specific parental responses that illustrate the concepts.

1. What subcultural influences may affect this family’s childrearing practices?
   a. 
   b. 
c.

d.

e.

f.

g.

2. Briefly describe how the contemporary American culture (including an optimistic view of the world, increasing geographic and economic mobility, and family orientation) is influencing child social development, family roles, and cultural diversity.

B. Spend a day in a school setting that serves a multicultural community. Answer the following questions and include specific observations.

1. What factors would you need to assess in order to determine children’s susceptibility to health problems in this community?

2. How do the following factors contribute to the development of health problems in children from lower socioeconomic classes?
   a. Inadequate funds for food
   b. Lack of funds for and access to health care
   c. Poor sanitation and crowded living conditions
3. Why is it important for all nurses to be aware of their own attitudes and values?

4. What three areas of religious belief should be evaluated when assessing health care practices?
   a. 
   b. 
   c. 

C. Spend a morning in an inner-city health clinic at a homeless shelter. Observe how patients interact with the health care team. In the following areas, describe how the listed factors related to multicultural differences might lead to conflict between the health care personnel and the patients.
   1. Orientation to time
   2. Parental expectations
   3. Approach to child
   4. Involvement of family
   5. Communication
   6. Health beliefs and practices
Chapter 5 provides an overview of the physiologic, psychologic, environmental, and social factors influencing the growth and development process in child health. The role of temperament, personality, and play in the development of the child is presented. On completion of this chapter, the student will understand the developmental influences on child health promotion. This knowledge will serve as a basis for the nursing interventions necessary to meet the complex needs of the developing child.

REVIEW OF ESSENTIAL CONCEPTS

Growth and Development
1. Match each term with its definition.

   a. _____ Growth
   1. An increase in competence, adaptability, and aging, usually used to describe
      a qualitative change; a change in the complexity of a structure that makes it
      possible for that structure to begin functioning; to function at a higher level
   b. _____ Maturation
   2. A gradual growth and expansion involving a change from lower to more
      advanced stages of complexity
   c. _____ Development
   3. An increase in the number and size of cells as they divide and synthesize new
      proteins; results in increased size and weight of the whole or any of its parts
   d. _____ Differentiation
   4. A biologic description of the processes by which early cells and structures are
      modified and altered to achieve specific, characteristic physical and chemical
      properties

2. Growth can be viewed as a(n) _________________ change, and development as a(n)
   _________________ change.

3. Human growth and development has _________________ patterns characterized by
   _________________, _________________, and _________________ changes.

4. A(n) ____________________ is a set of skills and competencies peculiar to each developmental stage that
   children must accomplish or master in order to deal effectively with their environment.

5. Define and describe cephalocaudal development.

6. Define and describe proximodistal development.

7. Generalized development precedes specific or specialized development. _________________ movements
   take place before _________________ muscle control.
8. Indicate whether each of the following statements is true or false.
   a. T F In growth and development, there is a definite, predictable sequence, with each child normally passing through every stage.
   b. T F Growth and development progress at the same pace and rate in all humans.
   c. T F The last three months of prenatal life are the most sensitive periods for physical growth of the fetus.

9. For each of the following stages of development, match the body part in which growth predominates.
   a. _______ Prenatal
      1. Trunk predominates
   b. _______ Infancy
      2. Head
      3. Trunk elongates
   c. _______ Early and middle childhood
      4. Legs
   d. _______ Adolescence

10. Double the child’s height at age ____________________ years to estimate how tall he or she will be as an adult.

11. By ____________________ to ____________________ months of age, the birth weight doubles. By the end of the first year, it ____________________. By age 2, the birth weight usually ____________________.

12. The first centers of ossification appear in the ____________________ month-old embryo; at birth, the number is approximately ____________________ or about half the number at maturity.

13. List three factors that influence skeletal muscle injury rates and types in children and adolescents.
   a. 
   b. 
   c. 

Development of Organ Systems
14. Describe the process of lymphoid tissue development in humans.

15. What determines the caloric requirements of children?
16. The basal caloric requirement for infants is about ____________ kcal/kg of body weight. This amount decreases to somewhere between ____________ and ____________ kcal/kg at maturity.

17. In the healthy neonate, what three negative metabolic consequences can occur as a result of hypothermia?
   a. 
   b. 
   c. 

18. The length of a sleep cycle increases from approximately 50 to 60 minutes in the newborn infant to approximately ________________ minutes in adolescence.

19. Identify the temperamental category that is described by each of the following.
   a. Highly active, irritable, and irregular in habits, such as feeding and sleep; adapts slowly to routines, people, and new situations
   b. Reacts negatively and mildly intensely to new stimuli and situations; is inactive and moody but shows only moderate irregularity in functions
   c. Even-tempered, regular, and predictable in habits; has a positive approach to new stimuli and situations; is open and adaptable to change

20. Children who display the difficult or slow-to-warm-up patterns of behavior are more vulnerable to the development of ________________ in early and middle childhood.

**Development of Personality and Mental Function**

21. Match the five stages of psychosexual development (Freud) with the ages encompassed by each.
   a. ______ Oral stage
   b. ______ Anal stage
   c. ______ Latency period
   d. ______ Genital stage
   e. ______ Phallic stage
   1. 1 to 3 years
   2. Birth to 1 year
   3. 3 to 6 years
   4. 6 to 12 years
   5. 12 to 18 years
22. For each of the following age groups, identify Erikson’s stage of psychosocial development.
   a. Birth to 1 year

   b. 1 to 3 years

   c. 3 to 6 years

   d. 6 to 12 years

   e. 12 to 18 years

23. Match each stage of cognitive development (Piaget) with its defining characteristics (more than one answer may apply).
   a. ______ Sensorimotor stage
      (birth to 2 years)  1. Predominant characteristic is egocentrism.
                          2. Thought is adaptable and flexible.
                          3. Child progresses from reflex activity to imitative behavior; problem solving is trial and error.
                          4. Thought becomes increasingly logical and coherent; conservation is developed; problems are solved in a concrete, systematic fashion.
                          5. Child displays a high level of curiosity, experimentation, and enjoyment of novelty and begins to develop a sense of self as he or she is able to differentiate the self from the environment.
   b. ______ Preoperational stage
      (2 to 7 years) 6. Child can think in abstract terms, use abstract symbols, and draw logical conclusions from a set of operations.
   c. ______ Concrete operations
      (7 to 11 years) 7. Child can now consider a point of view other than his or her own; socialized thinking occurs.
   d. ______ Formal operations
      (11 to 15 years) 8. Child is unable to see things from any perspective other than his or her own; thinking is concrete.

24. The rate of speech development varies from child to child and is directly related to ________________
    and ________________.

25. At all stages of language development, a child’s ________________ vocabulary is greater than his or her ________________ vocabulary.
26. Describe the three stages of moral development (Kohlberg).
   a. Preconventional morality
   b. Conventional level
   c. Postconventional, autonomous, or principled level

27. Describe the stages Fowler identified that are closely associated with and parallel cognitive and psychosocial development in childhood in the development of faith.
   a. Stage 0: Undifferentiated
   b. Stage 1: Intuitive-projective
   c. Stage 2: Mythical-literal
   d. Stage 3: Synthetic-convention
   e. Stage 4: Individuating-reflexive

**Development of Self-Concept**

28. Self-concept includes all of the ________________, ________________, and ________________, that constitute an individual’s self-knowledge and that influence that individual’s relationships with others.

29. A vital component of self-concept is the subjective concepts and attitudes that individuals have toward their own bodies; this is termed ________________.

30. ________________, or the value that an individual places on himself or herself, refers to an overall evaluation of oneself.
Role of Play in Development

31. Match each type of play with its defining characteristics.

a. ______ Solitary play 1. Child watches what other children are doing but makes no attempt to enter into the play activity. An example is watching an older sibling color a picture.
b. ______ Cooperative play 2. Child plays alone and independently with toys different from those of other children within the same area. The child’s interest is centered on his or her own activity.
c. ______ Onlooker play 3. Child plays independently among other children with toys that are like those that the children around him or her are using, neither influencing nor being influenced by them. There is no group association.
d. ______ Associative play 4. Child plays with other children, engaging in a similar or identical activity in which there is no organization, division of labor, or mutual goal. An example is two children playing with dolls.
e. ______ Parallel play 5. Child plays in a group with other children with discussion and planning of activities for accomplishing an end.

32. List the seven functions that play serves to develop throughout childhood.

a.

b.

c.

d.

e.

f.

g.

33. Research has indicated that a positive ________________ interaction can enhance early childhood brain development.
Selected Factors that Influence Development

34. What seven factors influence human growth?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 

35. _____________________ is the single most important influence on growth.

36. The _____________________ is unquestionably the single most influential person during early infancy.

37. The most prominent features of emotional deprivation, particularly during the first year, are _____________________

Developmental Assessment

38. What question should the nurse ask the parent after completing the Denver II?

39. Match each developmental assessment tool with the proper statement.
   a. _______ Denver II Prescreening
      Developmental Questionnaire
      1. Is nonthreatening, requires no painful or unfamiliar procedures, and capitalizes on the child’s natural activity of play
   b. _______ Denver II
      2. Parent-answered screening tool
APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Levi, a 1-year-old boy, comes into the clinic for a well-child visit. The nurse assesses Levi’s growth and development. Interpret the following assessment data.

1. Levi weighed 3.2 kg (7 pounds, 2 ounces) at birth. His weight today is 10 kg (22 pounds). Is this a normal increase? ________________ If not, what would be the expected gain? ________________

2. Levi’s mother wants to know whether his height at this age has any significance for his adult height. What should the nurse tell her?

3. The nurse observes Levi interacting with his mother. After the assessment, Levi wants to be held closely by his mother. His mother gladly pulls him into her body. Describe Levi’s mother’s response to him.

B. Observe a child from each age group: infant, toddler, preschool, school age, and adolescent.

1. Although children vary in both their rate of growth and their acquisition of developmental skills, certain predictable patterns are universal and basic to all human beings. Why is this factor important for nurses to understand?

2. Identify the psychosocial conflict of each age group, provide a specific intervention that will assist in the resolution of this conflict, and describe the unfavorable conflict (Erikson).
   a. Infant

   b. Toddler

   c. Preschool

   d. School age

   e. Adolescent
3. Describe the characteristics of spiritual development in each age group.
   a. Infant

   b. Toddler

   c. Preschool

   d. School age

   e. Adolescent

C. Interview the parents of a newborn regarding the infant’s temperament.
   1. Why is it important to assess a child’s temperament?

   2. List behaviors typical of the following temperament patterns.
      a. The easy child

      b. The difficult child
Chapter 6 introduces the essential components of communication and physical assessment in the nursing care of children. Communication, along with physical and developmental assessment, is an essential skill of nurses who care for children and their families. Guidelines for effectively communicating, taking a health history, and performing a physical assessment are presented. At the completion of this chapter, the student will have the foundation to assess communication patterns and the child’s physical and developmental progress.

REVIEW OF ESSENTIAL CONCEPTS

Guidelines for Communicating and Interviewing

1. When the nurse is interviewing a child and his or her family, which three characteristics of the physical environment in which the interview occurs contribute to an effective interview?
   a. 
   b. 
   c. 

2. When the nurse is talking to a parent suspected of child abuse or a teenager contemplating suicide, it is important to let the parent or teenager know that __________________________ cannot be ensured.

3. Successful outcomes of triage services are based on the __________________________ and __________________________ of the information provided.

Communicating with Families

4. Various communication strategies are useful when interviewing parents. Identify the purpose of each of the following strategies.
   a. Encouraging the parent to talk
   b. Directing the focus
   c. Listening and having cultural awareness
   d. Being silent
e. Being empathetic

f. Providing anticipatory guidance

g. Avoiding blocks to communication

5. __________________________ is the most important component of effective communication.

6. What three things should the nurse do to assist parents through anticipatory guidance in becoming more competent in their abilities?
   a. 
   b. 
   c. 

7. Identify three signs of information overload.
   a. 
   b. 
   c. 

8. Communicating with families through an interpreter requires sensitivity to ______________________.
   ______________________, and ______________________ considerations.

9. Indicate whether each of the following statements regarding interpreters is true or false.
   a. T  F  Communicate directly with the interpreter when asking questions to be as clear as possible.
   b. T  F  Limit the use of medical terms as much as possible.
   c. T  F  In obtaining informed consent through an interpreter, it is important that the family be fully informed of all aspects of the particular procedure to which they are consenting.
   d. T  F  When a child is translating, it is important to stress the need for literal translation of parent responses.
10. Match each communication strategy to the age group with which it is best used.
   a. _______ Infants  
      1. Tell them what they will do and how they will feel. Allow them to touch articles that will come in contact with them.
      2. Cuddle, pat, or gently hold them.
   b. _______ Young children  
      3. Tell them what is going on and why it is being done to them. Explain all procedures to them in a specific manner.
   c. _______ School-age children  
      4. Be attentive and do not pry.
   d. _______ Adolescents

11. Communicating with adolescents is especially challenging for the nurse. How should a nurse establish a foundation to facilitate communication? List seven behaviors.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 

**Communication Techniques**

12. __________________ is the universal language of children.

13. Play sessions serve not only as assessment tools for determining children’s awareness and perception of their illness, but also as methods of _______________ and _______________.

**History Taking**

14. The ______________ is the specific reason for the child’s visit to the clinic, office, or hospital.

15. The present illness is a narrative of the chief complaint, from its earliest onset through its progression to the present. Identify its four major components.
   a. 
   b. 
16. Pain assessment includes the following factors.
   a.
   b.
   c.
   d.
   e.

17. What 14 components are included in the history part of the assessment?
   a.
   b.
   c.
   d.
   e.
   f.
   g.
   h.
   i.
   j.
18. What are the most important previous growth patterns to record?
   a. 
   b. 
   c. 

19. The sexual history is an essential component of adolescents’ health assessment. What are three important reasons for obtaining a sexual history?
   a. 
   b. 
   c. 

**Review of Systems**

20. The family medical history is used primarily for the purpose of discovering the potential existence of ________________ or ________________ in the parents and child.

21. *Family structure* refers to the composition of the family—who lives in the home and those ________________, ________________, ________________, and ________________ characteristics that influence the child’s and family’s overall psychobiologic health.

22. Give an example of a broad statement with which the nurse can introduce the review of a specific system.
Nutritional Assessment
23. Match each dietary reference intake (DRI), or the four nutrient-based reference values, to the statement that describes it.
   a. _______ Estimated average requirement (EAR)
   b. _______ Recommended dietary allowance (RDA)
   c. _______ Adequate intake (AI)
   d. _______ Tolerable upper intake level (UL)

   1. Average daily dietary intake sufficient to meet the nutrient requirement of nearly all (97% to 98%) healthy individuals for a specific age and gender group
   2. Recommended intake level based on estimates of nutrient intake by healthy groups of individuals
   3. Nutrient intake estimated to meet the requirement of half of the healthy individuals (50%) for a specific age and gender group
   4. As intake increases above the UL, risk of adverse effects increase.

24. The most common and probably easiest method of assessing daily intake is the _______________________.

Clinical Examination
25. Define anthropometry.

Evaluation of Nutritional Assessment
26. What three conclusions can be drawn from the nutritional assessment data?
   a. __________
   b. __________
   c. __________

General Approaches to Examining the Child
27. Using developmental and chronologic age as the main criteria for assessing each body system accomplishes what five goals?
   a. __________
   b. __________
   c. __________
   d. __________
   e. __________
Physical Examination
28. Weight, height (length), skinfold thickness, arm circumference, and head circumference are ________________

29. The most prominent change to the complement of growth charts for older children and adolescents is the
   addition of the ________________ growth curves.

30. Why is it essential that nurses understand the revised growth charts?

31. Describe the findings in three cases in which children’s growth may be questionable.
   a. ________________
   b. ________________
   c. ________________

32. Measurements taken when a child is supine are referred to as ________________, whereas measurements
    taken when the child is standing upright are referred to as ________________.

33. What is an important safety measure to take when measuring an infant’s weight?

34. One convenient measure of body fat is ________________, which is measured with skin calipers.

35. Head circumference is measured in children up to ________________ months of age.

Physiologic Measurements
36. For best results in taking vital signs of infants, count ________________ first (before the infant is
    disturbed), take the ________________ next, and measure ________________ last.

37. What is an acceptable rectal temperature in children?

38. What factor most affects the accuracy of temperature measurement?
39. Which site is best for assessing the pulse in infants? ________________ Which site is best for assessing the pulse in children older than 2 years of age? ________________ .

40. Are respirations in infants assessed by observing for diaphragmatic or intercostal breathing patterns?

41. What is the most important factor in ensuring a reliable blood pressure measurement?

42. Identify at least five causes of orthostatic hypotension in children.
   a. 
   b. 
   c. 
   d. 
   e. 

43. If respirations in the infant are irregular, they should be counted for ________________ .

44. An accurate pulse in infants must be taken ________________ for 1 full minute.

**General Appearance**

45. Match each abnormal color change with its description.
   a. ______ Cyanosis 1. Small pinpoint hemorrhages
   b. ______ Erythema 2. Blue tinge to the skin
   c. ______ Jaundice 3. Redness of the skin
   d. ______ Petechiae 4. Yellow staining of the skin

46. What two methods of assessment are primarily used to assess the skin?
   a. 
   b.
47. Hair that is stringy, dull, brittle, dry, friable, and depigmented may suggest ________________.

48. Describe the technique for palpating lymph nodes.

49. By ________________ months of age, most infants should be able to hold the head erect and in midline when in a vertical position.

50. Hyperextension of the head (opisthotonos) with pain on flexion is a serious indication of ________________ irritation.

51. Normal findings of examination of the pupils can be documented as ________________.

52. The nurse can prepare the child for the ophthalmoscopic examination by doing the following three things.
   a. ________________
   b. ________________
   c. ________________

53. The most common test for measuring visual acuity is the ________________ letter chart.

54. Low-set ears are commonly associated with ________________ or ________________

55. In infants and children younger than 3 years, assess the inner ear by pulling the pinna ________________ and ________________ . In children older than 3 years, assess the inner ear by pulling the pinna ________________ and ________________ .

56. What is the color of a normal tympanic membrane?

57. What is the reason for leaving assessment of the mouth toward the end of the physical assessment in children?

58. In children younger than 6 or 7 years of age, respiratory movement is principally ________________ or ________________ . In older children, particularly girls, respirations are chiefly ________________ .
59. Identify the three classifications or descriptions of lung sounds.
   a. 
   b. 
   c. 

60. The two classifications of adventitious breath sounds are ________________
    and ________________.

61. The apical impulse (AI) is found just lateral to the left midclavicular line and fourth intercostal space in
    children ________________ years of age and at the left midclavicular line and fifth intercostal
    space in children ________________ years of age.

62. To distinguish between S₁ and S₂ heart sounds, simultaneously palpate the carotid pulse with the index and middle
    fingers and listen to the heart sounds; ________________ is synchronous with the carotid pulse.

63. Identify and define the four characteristics for which heart sounds are evaluated.
   a. 
   b. 
   c. 
   d. 

64. When documenting a murmur, what four elements need to be recorded?
   a. 
   b. 
   c. 
   d.
65. Indicate whether each of the following statements is true or false.
   a. T  F  The correct sequence for assessing the abdomen is inspection, palpation, and auscultation.
   b. T  F  A tense, boardlike abdomen is a serious sign of paralytic ileus and intestinal obstruction.
   c. T  F  A femoral hernia occurs more frequently in boys.
   d. T  F  Absence of femoral pulses is a significant sign of coarctation of the aorta and is referred for medical evaluation.

66. What approach should the nurse take when examining the genitalia of a child or adolescent?

67. A lateral curvature of the spine is called ______________________.

68. What is the most common gait problem in young children? What does it result from?

69. An estimation of muscle strength is assessed by having the child use an extremity to _________________ or _________________ against resistance.

Neurologic Assessment

70. The ______________________ assessment is the broadest and most diverse part of the examining process.

71. To prevent younger children from _________________ during the reflex assessment, the nurse should distract them with toys or talk to them.

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Interview a preschool child and his or her family.
   1. What are the key elements of an appropriate introduction to an interview?

   2. Why is it important to include the parents in the problem-solving process?

   3. Identify one way to direct the focus of the interview, while also allowing for maximum freedom of expression for both the family and child.

   4. What creative communication techniques are effective in encouraging communication with the child?
B. Mrs. Gonzales brings her son Val, age 3 months, to the pediatric clinic for an annual checkup. It is the first time they have visited the clinic. Mrs. Gonzales’s English is poor. The Gonzales family has been living in the United States for 3 months.

1. Identify at least four verbal strategies that would enhance the cultural sensitivity of the interaction.
   a. 
   b. 
   c. 
   d. 

2. During the interview, Mrs. Gonzales begins to comment about her two other children. What is an effective yet respectful way the nurse can redirect the focus of the interview?

3. What portion of the past history section of the health history is of particular importance because Val has been in this country only 3 months?

4. What additional information in the family medical history section of the health history would be important for the nurse to obtain from Mrs. Gonzales?

C. Todd, age 5 years, was referred to the nutrition clinic by the nurse practitioner. The nurse was concerned because Todd’s weight was above the 90th percentile for his age. A complete nutritional assessment was performed.

1. What three methods can Todd’s mother use to record his dietary intake?
   a. 
   b. 
   c. 

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2. Anthropometry is an important part of Todd’s nutritional assessment. Why is it important?

3. The results of the nutritional assessment reveal that Todd’s mother knows little about nutrition, there is a history of overeating in Todd’s family, and Todd’s obesity is the result of his excessive intake of nutrients. Form two nursing diagnoses based on the assessment results.
   a. 
   b. 

D. Tina, age 4 years, is at urgent care because she is complaining of a sudden onset of abdominal pain.
   1. What are some ways the nurse can help Tina relax during the abdominal assessment?

   2. How can the nurse minimize the sensation of tickling during the examination?
Chapter 7 provides the theoretical basis for assessing and managing pain in children. The chapter addresses pain in specific populations, including children in a variety of different cultures who have cognitive impairment or chronic illness. On completion of this chapter, the student will have the foundation to assess and manage pain in children.

REVIEW OF ESSENTIAL CONCEPTS

**Pain Assessment**

1. What are the three types of measures for pain?
   a. 
   b. 
   c. 

2. Which pain assessment method is useful for measuring pain in infants and preverbal children, who do not have the language skills to communicate that they are in pain?

3. In what situations are behavioral measures most reliable when measuring pain?

4. What is a major disadvantage in using physiologic assessments for pain?

5. By ________________ years of age, the ability to discriminate degrees of pain in facial expressions appears to be reasonably established.

6. By ________________ to ________________ years of age, most children are able to use the 0 to 10 numeric rating scale that is currently used by adolescents and adults.
Pain Assessment in Specific Populations

7. Match the following pain assessment tools with their proper definition or usage.

a. _______ Adolescent Pediatric Pain Tool (APPT)
   1. A multidimensional pain instrument to assess patient and parental perceptions of the pain experience in a manner appropriate for the cognitive-development level of children and adolescents
b. _______ Pediatric Pain Questionnaire (PPQ)
   2. A multidimensional pain instrument for children and adolescents that is used to assess three dimensions of pain: location, intensity, and quality
c. _______ CRIES
   3. An acronym for the tool’s physiologic and behavioral indicators of pain: crying, requiring increased oxygen, increased vital signs, expression, and sleeplessness
d. _______ Neonatal Pain, Agitation, and Sedation Scale (NPASS)
   4. Originally developed to measure pain or sedation in preterm infants after surgery, it measures five criteria in two dimensions—pain and sedation

Children with Communication and Cognitive Impairment

8. List at least four patient groups that may have significant difficulties in communicating with others about their pain.

a. 

b. 

c. 

d. 

9. The ______________ or ______________ is an important source of information during assessment.

10. The Noncommunicating Children’s Pain Checklist is a pain measurement tool specifically designed for children with ______________.

Cultural Issues in Pain Assessment

11. Self-report observational scales and interview questionnaires for pain may not be a reliable measure of pain assessment in ______________ children.

12. Which pain scale for children has been tested with White, African-American, and Hispanic populations?

Children with Chronic Illness and Complex Pain

13. What is the most important factor during assessment of children with chronic illness, particularly during assessment of complex pain?
Pain Management
14. List at least four nonpharmacologic techniques that reduce pain perception in children.
   a. 
   b. 
   c. 
   d. 

15. What interventions have been demonstrated to have a calming and pain-relieving effect for invasive procedures in neonates?

16. How do infants who spend 1 to 3 hours in kangaroo care benefit?

Complementary Pain Medicine
17. List the five classifications of complementary and alternative medicine (CAM) therapies, and give some examples of each.
   a. 
   b. 
   c. 
   d. 
   e. 

Pharmacologic Management
18. What medications are suitable for mild to moderate pain in children?
19. What class of medications is used for severe pain in children?

20. Nonopioids primarily act at the ____________________________, ____________________________, ____________________________, and opioids primarily act at the ____________________________, ____________________________, ____________________________.

21. ____________________________ is considered the gold standard for the management of severe pain.

22. Match each of the following adjuvants to the correct statement.
   a. ______ Tricyclic antidepressants
   b. ______ Antiepileptics
   c. ______ Stool softeners and laxatives
   d. ______ Antiemetics
   e. ______ Antianxiety
   f. ______ Diphenhydramine
   g. ______ Steroids
   h. ______ Dextroamphetamine and caffeine

   1. Senna and docusate sodium
   2. Gabapentin, carbamazepine, clonazepam
   3. Amitriptyline, imipramine
   4. Diazepam, midazolam
   5. Promethazine, droperidol
   6. For inflammation and pain
   7. Consider opioid switch if sedation is persistent
   8. For itching

23. Describe how the nurse determines the optimum dosage of an analgesic.

24. Indicate whether each of the following statements is true or false.
   a. T  F Children (except infants younger than about 3 to 6 months) metabolize drugs less rapidly than adults do.
   b. T  F Younger children may require higher doses of opioids to achieve the same analgesic effect.
   c. T  F Children’s dosages are usually calculated according to body weight, except in children with a weight greater than 50kg (110 pounds), where use of the weight formula may mean that the children’s dosage exceeds the average adult dosage.

25. Define a ceiling effect. Describe the major difference between opioids and nonopioids regarding a ceiling effect.

26. What are the requirements for a child to use a patient-controlled anesthesia (PCA) pump?
27. List four typical cases in which PCA is used for controlling pain.
   a. 
   b. 
   c. 
   d. 

28. __________________________ is the drug of choice for PCA and is usually prepared in a concentration of 1 mg/ml.

29. __________________________ is the least potent and shortest-acting of the synthetic opioids and the least effective in providing analgesia for severe pain.

30. Match each of the following statements to the correct description.
    a. _____ Epidural analgesia         1. LMX, fentanyl, EMLA, and LidoSite are examples of medications administered by this route.
    b. _____ Intradermal analgesia     2. This route is used to inject a local anesthetic, typically lidocaine, into the skin to reduce the pain from a lumbar puncture, bone marrow aspiration, or venous or arterial access.
    c. _____ Transdermal analgesia     3. A catheter is placed into a space of the spinal column at the lumbar or caudal level.

31. The right __________________________ for administering analgesics depends on the type of pain. For continuous pain control, such as for postoperative or cancer pain, a preventive schedule of medication __________________________, __________________________, __________________________ is effective.

32. Indicate whether each of the following statements is true or false.
    a. T F Preventive pain control is best provided through continuous intravenous (IV) infusion rather than intermittent boluses.
    b. T F The intervals between doses should exceed the drug’s expected duration of effectiveness.
    c. T F Continuous analgesia is always appropriate in pain control of children.
    d. T F Respiratory depression is the most serious complication of analgesia and is most likely to occur in sedated patients.
    e. T F Lower limits of normal respiratory rates are not established for children.
    f. T F A slower respiratory rate does not necessarily reflect decreased arterial oxygenation.

33. __________________________ is a common, and sometimes serious, side effect of opioids.

34. What two things can occur with prolonged use of opioids?
   a. 
   b. 
35. Describe the manifestations of the following symptoms of opioid withdrawal.
   a. Neurologic excitability
      b. Gastrointestinal dysfunction
      c. Autonomic dysfunction

36. Withdrawal symptoms can be anticipated and prevented by weaning patients from opioids that were administered for more than ________________ to ________________ days.

37. ________________ occurs when the dose of an opioid needs to be increased to achieve the same analgesic effect that was previously achieved at a lower dose. This may develop after ________________ to ________________ days of morphine administration.

38. Explain whether infants or children can become psychologically dependent on or addicted to pain medication.

39. What tools are used to evaluate the effectiveness of pain regimens?

40. The response to therapy should be evaluated ________________ to ________________ minutes after each dose.

41. What is a priority guiding principle of pain management?
Painful and Invasive Procedures
42. Match each of the following statements with the correct response.

   a. ______ Caudal or penile blocks are used for ______
   b. ______ Bupivacaine is used for ______
   c. ______ Foam dressing soaked with bupivacaine is used for ______
   d. ______ A local anesthetic infiltration with bupivacaine is used for ______
   e. ______ Nitrous oxide inhalations are used for ______

Postoperative Pain
43. Which four outcomes can be a result of severe postoperative pain due to sympathetic overactivity?

   a. ______
   b. ______
   c. ______
   d. ______

44. Define preemptive analgesia.

Recurrent Headaches in Children
45. What is the defining symptom in migraine headaches?

46. What is a method for obtaining assessment data on headaches in children?

47. What are the two main behavioral approaches for preventing headaches in children?

   a. ______
   b. ______
Recurrent Abdominal Pain in Children


49. The use of __________________________ therapy has been documented to reduce or eliminate pain in children with RAP and highlights the involvement of parents in supporting their child’s self-management behavior.

Cancer Pain in Children

50. In young adult survivors of childhood cancer, __________________________ conditions may develop.

51. Almost 40% of all pain episodes in children with cancer may be attributed to __________________________

52. What is the most common clinical syndrome of neuropathic pain?

53. Abdominal pain after allogeneic bone marrow transplantation may be associated with what acute disease?

__________________________

Pain and Sedation in End-of-Life Care

54. Why would a continuing high-dose infusion of opioids along with sedation be prescribed in end-of-life care?

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Valery, age 7, comes into the acute care center of the local children’s hospital. She has been hurt in an automobile accident. On assessment, the nurse notices she has multiple bruises on her head, shoulder, and right knee. X-ray studies reveal she has dislocated her right knee and right shoulder. She is screaming in pain. Her mother and father were also in the vehicle but uninjured. Just before the accident, Valery had taken off her seatbelt to grab a piece of paper off the floor of the car. She has rated her pain at 9 on a scale from 0 to 10, with 10 being the most extreme pain and 0 being the least amount of pain. She has an elevated heart rate of 100 beats/min, blood pressure of 150/99 mm Hg, and respirations of 18 breaths/min. She is also talking very fast and has a stiff body posture. You are a nursing student assigned to assist the nurse in the care for Valery during the first morning shift after her accident. Answer the following questions pertaining to the nursing care for Valery.

1. What behavioral symptoms would the nurse notice when using the FLACC to further assess Valery’s pain? What other tool, involving her parents, could the nurse use as a secondary resource for evaluating Valery’s pain?

2. Describe at least five physiologic parameters that could give the nurse additional information on the severity of her pain.
3. The physician prescribed a combination of nonsteroidal antiinflammatory drugs (NSAIDs) and opioids for optimum pain relief. Why is this a preferred treatment of severe pain?

4. Based on your assessment data, what adjuvant therapy can you anticipate the physician will prescribe for these symptoms?

**B.** You are a nursing student assigned to care for a 4-year-old boy, Simon. When you arrive to care for him, he is just getting back from surgery. You find out in report that he had an emergency appendectomy. His mother and father are in the room with him. On assessment, you note he appears frightened and is clenching his jaw. His eyebrows are furrowed, and his forehead is wrinkled. He is wiggling his toes, and his respirations seem slightly labored. With movement, his eyes get more pronounced, and he cries.

1. What is the first thing you need to assess in Simon? How would you assess this?

2. What kind of complication can occur after any type of abdominal surgery that could affect his airway and breathing?

3. How can acute pain further complicate his recovery process?

4. Based on the assessment data, what would the priority nursing diagnosis be?

**C.** You are a nursing student caring for a 7-year-old boy, Sajin, who has come to the clinic to receive his annual flu vaccine. What expected response to receiving an injection should you be prepared to see in a child his age?
Chapter 8 introduces the factors the nurse must consider when caring for the newborn and family during delivery and the neonatal period. After completing this chapter, the student will understand the fundamentals for providing nursing care for the neonate and family. This knowledge will enable the student to assess and formulate nursing goals and interventions that facilitate normal physiologic and psychologic adjustment and development in the newborn and family.

**REVIEW OF ESSENTIAL CONCEPTS**

**Adjustment to Extrauterine Life**

1. Indicate whether each of the following statements is true or false.
   a. T  F  The most profound physiologic change required of the neonate is the transition from fetal or placental circulation to independent respiration.
   b. T  F  The most critical and immediate physiologic change required of the newborn is the onset of thermoregulation.
   c. T  F  The stimuli that help initiate the first respiration are primarily chemical and thermal.
   d. T  F  A change in the cardiovascular system that occurs after birth involves an increase in pressure in the right atrium of the heart.

2. Which of the following is the most important factor in controlling the closure of the ductus arteriosus?
   a. Increased oxygen concentration of the blood
   b. Deposition of fibrin and cells
   c. Rise of endogenous prostaglandin
   d. Presence of metabolic acidosis

3. Factors that predispose the neonate to heat loss include the following.
   a.
   b.
   c.

4. Why is it essential that newly born infants be quickly dried and either provided with warm, dry blankets or placed skin-to-skin with the mother after delivery?
5. The infant’s rate of metabolism is ________________ as great as that of the adult, relative to body weight.

6. Human milk, despite its high fat content, is easily digested because it contains enzymes such as ________________, which assist in digestion.

7. Which of the following limits a newborn’s gastrointestinal system?
   a. The large volume of the colon
   b. A decreased number of secretory glands
   c. An increased gastric capacity
   d. A lower esophageal sphincter pressure

8. All structural components are present in the renal system of newborn, but there is a functional deficiency in the kidney’s ability to ________________ and to cope with conditions of fluid and electrolyte stress, such as dehydration or a concentrated solute load.

9. Plugging of the sebaceous glands causes ________________.

10. What are the infant’s three lines of defense against infection?
    a.
    b.
    c.

11. In the newborn, the pituitary gland’s posterior lobe produces limited quantities of antidiuretic hormone, or vasopressin, which inhibits diuresis. This renders the young infant highly susceptible to ________________.

12. Indicate whether each of the following statements is true or false.
   a. T F At birth, the eye is structurally complete.
   b. T F After the amniotic fluid has drained from the ears, the infant probably has auditory acuity similar to that of an adult.
   c. T F Infants are able to differentiate the breast milk of their mother from the breast milk of other women by smell.
   d. T F During early childhood, the taste buds are distributed mostly on the back of the tongue.
   e. T F The face (especially the mouth), hands, and soles of the feet seem to be most sensitive to touch in infancy.
13. The Apgar score comprises the following five elements:
   a. 
   b. 
   c. 
   d. 
   e. 

14. The maximum score an infant can receive on the Apgar is _________________.

15. Which two factors of infants at birth are used to predict morbidity and mortality risks?
   a. 
   b. 

16. Indicate whether each of the following statements is true or false.
   a. T  F  The normal head circumference of the neonate is 48-53 cm (19 to 21 inches).
   b. T  F  Head circumference is usually about 2 to 3 cm (about 1 inch) greater than chest circumference.
   c. T  F  Normally the neonate loses about 20% of birth weight by 3 or 4 days of age.
   d. T  F  Tympanic thermometers have been found to be more accurate than temporal artery thermometers.
   e. T  F  The normal pulse rate of the neonate is 120 to 140 beats/min.
   f. T  F  Respiration and pulse rate are counted for a full 60 seconds to detect irregularities in rate or rhythm.

17. List at least 12 areas to be assessed in the general appearance section of the newborn assessment.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
18. Of the following responses, which reflex is present in a healthy neonate?
   a. Landau
   b. Moro
   c. Parachute
   d. Neck-righting

19. Both the anterior and posterior fontanels should feel ________________, ________________, and well demarcated against the bony edges of the skull.

20. ________________ is a normal finding that results from the newborn’s lack of binocularity of the eyes.

21. Describe how the nurse would elicit the rooting reflex in an infant.

22. What would the plan of action be if, on auscultation of the newborn a few hours after birth, the nurse hears lung sounds with wheezes or medium or coarse crackles along with stridor?
23. Bowel sounds are heard within the first _________________ to _________________ minutes after birth.

24. __________________ is a manifestation of the abrupt decrease of maternal hormones within the mother and usually disappears by 2 to 4 weeks.

25. In small newborn males, particularly preterm infants, the _________________ may be palpable within the inguinal canal.

26. A protruding sac anywhere along the spine, but most commonly in the sacral area, indicates some type of _________________.

27. What could asymmetry of muscle tone indicate?

**Transitional Assessment: Periods of Reactivity**

28. For the first _________________ to _________________ hours after birth, the infant is in the first period of reactivity.

29. An alert and active infant, increased heart and respiratory rate, active gag reflex, increased gastric and respiratory secretions, and passage of meconium occur during the _________________ of reactivity.

30. What is the Brazelton Neonatal Behavioral Assessment Scale (BNBAS)?

31. It is important for the nurse to educate new parents that infants need _________________ to _________________ hours of sleep in a 24-hour period.

**Assessment of Attachment Behaviors**

32. Name four attachment behaviors.
   a. __________________
   b. __________________
   c. __________________
   d. __________________
Physical Assessment

33. What is the primary objective immediately after delivery?

34. Identify the five cardinal signs of respiratory distress in the newborn.
   a. 
   b. 
   c. 
   d. 
   e. 

35. Identify four major causes of heat loss at birth.
   a. 
   b. 
   c. 
   d. 

Protection from Infection and Injury

36. The most important practice for preventing cross-infection is thorough ____________________.

37. The nurse needs to discuss safety issues with the mother the first time the infant is brought to her. The National Center for Missing and Exploited Children (NCMEC) has reported that ____________________% of infant abductions occur in the mother’s room.

38. Describe the typical profile of an infant abductor.
39. List the clinical features of a chemical conjunctivitis, which can occur 24 hours after instillation of ophthalmic prophylaxis in the newborn.

40. Why is vitamin K administered to the newborn?

41. What is the nurse’s responsibility regarding newborn screening for disease?

42. What forms the skin’s “acid mantle”?

43. The average umbilical cord separation time is _________________ to _________________ days.

44. Indicate whether each of the following statements is true or false.
   a. T   F When undergoing circumcision, infants need no anesthesia, because they feel no pain.
   b. T   F Normally, on the second day after circumcision, a yellowish white exudate forms as part of the granulation process.

**Provision of Optimum Nutrition**

45. Why is breast milk more easily digestible to the newborn?

46. What five conditions has human milk been proven, through research, to protect the newborn from?
   a. 
   b. 
   c. 
   d. 
   e. 
47. What five factors have been implicated in the decline of breastfeeding after discharge from the hospital?
   a. 
   b. 
   c. 
   d. 
   e. 

48. What has the American Academy of Pediatrics stated as its position on breastfeeding?

49. Successful breastfeeding depends on which three factors?
   a. 
   b. 
   c. 

50. List the three main criteria that have been proposed as essential in promoting positive breastfeeding.
   a. 
   b. 
   c. 

51. What can nurses teach new mothers who choose to bottle feed their infant to help ensure the emotional component of feeding?
52. Identify the four reasons that propping the bottle is discouraged.
   a. 
   
   b. 
   
   c. 
   
   d. 

53. Identify the four categories of commercially prepared infant formulas.
   a. 
   
   b. 
   
   c. 
   
   d. 

54. Describe the five behavioral stages that occur during successful feeding.
   a. 
   
   b. 
   
   c. 
   
   d. 
   
   e. 

55. Describe two ways nurses can positively influence the attachment of parent and child.
   a. 
   
   b. 
56. What are the three attributes of parent-infant attachment?
   a. 
   b. 
   c. 

57. Identify at least four ways a nurse can encourage the father’s engrossment.
   a. 
   b. 
   c. 
   d. 

58. What is the most important principle for the nurse to assist parents of twins in the bonding process?

**Preparation for Discharge and Home Care**

59. When does discharge teaching for the new family begin?

60. Why are discharge planning and care at home of increasing importance?

61. Infants who weigh less than 9.07 kg (20 pounds) or who are younger than ____________ should always be placed in a rear-facing child safety seat in the car’s back seat.

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. You are a new nursing student who has performed the initial assessment on a newborn. Answer the following questions regarding that assessment.
   1. The infant received a score of irregular, slow, weak cry under respiratory effort and a 1 under the Apgar’s heart rate category. This indicates that the neonate’s heart rate was ________________.
2. Name at least one factor that could affect a newborn’s Apgar score.

3. On assessment, you noted that the infant appeared to be alert, cried vigorously, sucked his fist, and seemed interested in his surroundings. How would you describe the infant’s state of activity?

4. Which of the following is an appropriate nursing intervention in the first stage of reactivity?
   a. Giving the initial bath
   b. Administering eyedrops before the child has contact with the parents
   c. Encouraging the mother to breastfeed
   d. Minimizing contact with the parents until the child’s temperature has stabilized

B. The following questions relate to determining a neonate’s gestational age.
   1. Why is it important to know the neonate’s gestational age?

   2. What six neuromuscular signs are assessed to determine gestational age?
      a. 
      b. 
      c.
3. After plotting the infant’s height, weight, and head circumference on standardized graphs, you determine that the infant is normal for gestational age because _________________.

C. The following questions relate to the stooling patterns of newborns.

1. The first stool is called _________________. Describe the characteristics of this stool.

2. The transitional stool is characterized by what features?

3. Differentiate between breastfed and bottle-fed infant stools.

D. The following questions relate to a newborn’s physical assessment.

1. What should you suspect if the head circumference is significantly smaller than the chest circumference?

2. You note an absence of arm movement on range of motion of the left arm. What could be the cause for this finding?

E. Baby boy Keating is a 1-day-old infant who is rooming in with his mother. Baby Keating is a full-term healthy infant who received a normal newborn examination. Baby boy Keating is the first child to his mother.

1. Formulate at least three nursing diagnoses for Baby Keating during the newborn period.
   a.

   b.

   c.
2. List at least four nursing interventions that should be used to maintain a patent airway in Baby Keating.
   a. 
   b. 
   c. 
   d. 

3. What criteria could be used to evaluate nursing interventions aimed at maintaining a patent airway in the transition period?

4. What areas should be included in the discharge planning of Baby Keating and his parents?
Chapter 9 addresses common health problems in the newborn, including birth injuries and high-risk neonatal care. This chapter outlines nursing care related to prematurity, postmaturity, and physiologic factors. Nursing care of newborns related to infectious processes and maternal conditions is also presented. After completing this chapter, the student will be able to formulate nursing goals and interventions to provide for the normal development of the newborn and to assist the family in coping with the stress of a neonatal health problem.

REVIEW OF ESSENTIAL CONCEPTS

Birth Injuries
1. What are five signs of a subgaleal brain hemorrhage?
   a. 
   b. 
   c. 
   d. 
   e. 

2. What bone in the newborn is most commonly fractured during the birth process?

3. Any newborn who is large for gestational age or weighs more than 3855 g (8.5 pounds) and is delivered vaginally should be evaluated for a(n) ____________________.

4. A neonate exhibits loss of movement on one side of the face and an absence of wrinkling of the forehead. What does this assessment suggest?
Common Problems in the Newborn

5. Match the following statements with the correct response.
   a. _______ Erythema toxicum neonatorum 1. This yeastlike fungus (it produces yeast cells and spores) can be acquired from a maternal vaginal infection during delivery; by person-to-person transmission (especially poor hand-washing technique); or from contaminated hands, bottles, nipples, or other articles.
   b. _______ Neonatal herpes 2. Lesions are firm, 1- to 3-mm, pale yellow or white papules or pustules on an erythematous base; they resemble flea bites.
   c. _______ Candidiasis 3. This manifests in one of three ways: with skin, eye, and mouth involvement; as a localized central nervous system disease; or as a disseminated disease involving multiple organs. In skin and eye disease, a rash appears as vesicles or pustules on an erythematous base.

6. Match each type of birthmark with its definition.
   a. _______ Capillary hemangioma 1. Involves deep vessels in the dermis, is a bluish red color, and has poorly defined margins
   b. _______ Port-wine stains 2. Multiple light brown discolorations, often associated with autosomal dominant hereditary disorders
   c. _______ Café au lait spots 3. Pink, red, or purple stains of the skin that thicken, darken, and enlarge as the child grows
   d. _______ Cavernous venous hemangioma 4. Benign cutaneous tumor that involves only capillaries

Nursing Care of the High-Risk Newborn and Family

7. A(n) __________________________ can be defined as a newborn, regardless of gestational age or birth weight, who has a greater-than-average chance of morbidity or mortality because of conditions or circumstances superimposed on the normal course of events associated with birth and the adjustment to extrauterine existence.

8. How are high-risk newborns classified?

9. Although most high-risk newborns are monitored by equipment with an alarm system that indicates when the vital signs are above or below preset limits, it is essential to check the __________________________ and compare it with the monitor reading.

10. In what two ways can an accurate output be obtained in high-risk newborns?
   a.
   b.

11. What is the primary objective in the care of high-risk infants?
12. Prevention of heat loss in the distressed infant is absolutely essential for survival. Maintaining a(n) _________________ is a challenging aspect of neonatal intensive nursing care.

13. Identify the three consequences of cold stress.
   a. 
   
   b. 
   
   c. 

   a. 
   
   b. 

15. What does a weight gain of more than 30 g or 1 ounce in 24 hours, periorbital edema, tachypnea, and crackles on lung auscultation indicate?

16. Coordination of sucking and swallowing mechanisms does not occur until approximately _________________ to _________________ weeks of gestation and is not fully developed until _________________ to _________________ weeks of gestation.

17. _________________ feedings have been recommended as the standard of care for feeding very low–birth-weight (VLBW) infants.

18. Identify the four positive outcomes demonstrated by preterm infants who are breastfed rather than bottle fed.
   a. 
   
   b. 
   
   c. 
   
   d. 

19. The amount and method of feeding the preterm infant is determined by the infant’s _________________ and _________________ of previous feeding.
20. A developmental approach to feeding considers the individual infant’s ______________ for feeding.

21. What can be indicated by poor feeding behaviors such as apnea, bradycardia, cyanosis, pallor, and decreased oxygen saturation in any infant who has previously fed well?

22. What are the five signs that indicate readiness for oral feedings in high-risk neonates?
   a. 
   b. 
   c. 
   d. 
   e. 

23. Early in hospitalization, the ______________ position is best for most preterm infants and results in improved oxygenation, better-tolerated feedings, and more organized sleep-rest patterns.

24. Recommendations for protecting the integrity of premature skin include using minimal adhesive tape, backing the tape with cotton, and ______________, and ______________, removal until adherence is reduced.

25. ______________, a common preservative in bacteriostatic water and saline, has been shown to be toxic to newborns. Products containing this preservative should not be used to flush IV catheters, to dilute or reconstitute medications, or to use as an anesthetic when starting IVs.

26. Low-birth-weight (LBW) infants receiving skin-to-skin contact with breastfeeding mothers maintain a higher ______________ and are less likely to have ______________ below 90%, and their mothers are more likely to continue breastfeeding both in the hospital and for 1 month after discharge.

27. List the six categories of nursing interventions to foster development in the high-risk infant.
   a. 
   b. 
   c. 
   d. 
28. List two ways personnel can reduce noise in the neonatal intensive care unit (NICU).
   a. 
   
   b. 

29. List two ways personnel can establish a night-day sleep pattern for infants in the NICU.
   a. 
   
   b. 

30. To alleviate distress in NICU infants, _________________ may be used before invasive procedures, such as heel stick.

31. Before the first visit to the neonatal unit, what should the nurse do to prepare the parents?

32. _________________ is the first act of communication between parents and child.

33. In neonatal loss, it is important for the nurse to help parents understand that the death is a reality by encouraging the family to _________________ their infant before death and, if possible, to _________________ at the time of death so that their infant can die in their arms if they choose.

High Risk Related to Dysmaturity

34. Match each characteristic with its corresponding type of maturity.
   a. ______ Minimal subcutaneous fat deposits
   b. ______ Presence of subcutaneous fat
   c. ______ Cracked and parchmentlike skin
   1. Preterm
   2. Postmature
   3. Term

High Risk Related to Physiologic Factors

35. _________________ is an excessive level of accumulated bilirubin in the blood and is characterized by _________________.

36. List seven possible causes of hyperbilirubinemia in the newborn.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 

37. Treatment for hyperbilirubinemia that involves the use of intense fluorescent light is called ________________.

38. Major causes of increased erythrocyte destruction are _____________________ and _____________________ incompatibility, which results in hemolytic disease of the newborn.

39. The most common blood group incompatibility in the neonate is between a mother with ________________ blood and an infant with ________________ or ________________ blood.

40. ________________, in which the infant’s blood is removed in small amounts (usually 5 to 10 ml at a time) and replaced with compatible blood (such as Rh-negative blood), is a standard mode of therapy for treatment of severe hyperbilirubinemia and is the treatment of choice for hyperbilirubinemia and hydrops caused by Rh incompatibility.

41. Which of the following is a factor in the pathophysiology of respiratory distress syndrome?
   a. Decreased pulmonary vascular resistance
   b. Increase in pulmonary blood flow
   c. Deficient production of surfactant
   d. Respiratory alkalosis

42. What are the three goals of oxygen therapy?
   a. 
   b. 
   c. 
43. Describe the most advantageous positions for maintaining an infant’s open airway.

44. The most serious cardiovascular disorders of the newborn are __________________ defects.

45. Seizures in the neonatal period are usually the clinical manifestation of a(n) __________________.

**High Risk Related to Infectious Processes**

46. What is the most prominent feature of neurologic dysfunction in the neonatal period?

47. The most common infecting organism in early-onset sepsis (fewer than 3 days after birth) is __________________.

48. Late-onset sepsis (1 to 3 weeks after birth) is primarily __________________

49. Antibiotic therapy is continued for __________________ to __________________ days if cultures are positive, but it is __________________ in 48 to 72 hours if cultures are negative and the infant is asymptomatic.

50. Define necrotizing enterocolitis (NEC).

51. Identify three factors that play a significant role in the development of NEC.
   a. 
   b. 
   c.

52. Identify at least four specific signs of NEC.
   a. 
   b. 
   c. 
   d.
High Risk Related to Maternal Conditions

53. The single most important factor influencing the fetal well-being of a diabetic mother is the mother’s ________________ status.

54. Elevated levels of hemoglobin A$_{1c}$ during the ________________ trimester appear to be associated with a higher incidence of congenital malformations.

55. Which of the following is a characteristic clinical manifestation of an infant whose mother’s diabetes is not under complete control?
   a. Hyperglycemia
   b. Loss of subcutaneous fat
   c. Absence of vernix caseosa
   d. Large for gestational age

56. Identify the most common clinical characteristics that drug-narcotic exposed infants display.

57. Identify appropriate drug therapies to decrease withdrawal side effects for narcotic-addicted infants.

58. In infants exposed to cocaine in utero, ________________ may be one of the best predictors of long-term development.

59. ________________ usage during pregnancy may result in a shortened gestation and a higher incidence of intrauterine growth restriction (IUGR).

Maternal Infections

60. The TORCH is a test used to detect maternal infection that may be teratogenic. Briefly explain this acronym.

61. A recognized pattern of congenital malformations due to a single specific cause is called a(n) ________________.

62. An agent that produces congenital malformations or increases their incidence is called a(n) ________________. List some of the most recognized drugs (chemical agents) for treating this agent.

Inborn Errors of Metabolism

63. Most inborn errors of metabolism are characterized by abnormal ________________, ________________, or ________________ metabolism.
64. Because of early discharge of newborns, what do the three recommendations for screening include?
   a. 
   b. 
   c. 

65. Worldwide, the most common cause of congenital hypothyroidism resulting in endemic cretinism is 
   __________________________ deficiency.

66. The hepatic enzyme __________________________ is absent in phenylketonuria (PKU).

67. What is the most effective method of identifying neonates with PKU?

68. Identify the disorder in which galactose accumulates in the blood, inadvertently affecting several body organs.
   This includes hepatic dysfunction leading to cirrhosis, which results in jaundice in the infant by the second week of life.

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Baby Abigail is admitted to the newborn nursery after an uncomplicated vertex delivery. During the initial 
   assessment, the nurse notes a caput succedaneum over the left frontal area of Abigail’s head.
   1. Differentiate between the following two types of head trauma that can occur during the birth process. Include 
      information that the nurse would use to describe the injury to Abigail’s parents.
      a. Caput succedaneum
      b. Cephalhematoma

   2. Early detection of a subgaleal hemorrhage is important. Identify the various ways a nurse can detect this 
      hemorrhage on assessment.
B. The nurse is providing developmental care for a high-risk infant.
   1. What does a developmental approach for feeding the high-risk infant include?

   2. What does a developmental approach for conservation of energy include?

   3. What sleeping position is best for preterm infants, and why is this position best for them? How can the nurse prepare the infant and family to alter this position before discharge?

   4. List at least four developmental interventions the nurse can include in the care plan.
      a. 
      b. 
      c. 
      d. 

C. The nurse is caring for a neonate who is receiving phototherapy.
   1. What two factors are primarily responsible for the development of physiologic jaundice in the newborn?
      a. 
      b. 

   2. How soon after birth would the nurse expect the following phases of physiologic jaundice to occur in the full-term infant?
      a. Onset 
      b. Peak 
      c. Resolution
3. Identify the nursing interventions associated with the care of a child receiving phototherapy.
   a.
   b.
   c.
   d.
   e.

4. Identify three potential negative effects related to parent-infant interaction in the infant receiving phototherapy.
   a.
   b.
   c.

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D. Mandy is a premature infant in the intensive care unit (ICU). She has recovered from her respiratory distress and has been diagnosed as having an intraventricular hemorrhage. She is suspected of having sepsis.
   1. Postnatally, how might Mandy have obtained her infection?

   2. What clinical signs and symptoms suggest sepsis?

   3. What is the most important nursing goal for Mandy?

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E. Mitch is a 3-day-old infant born to a mother who developed diabetes during pregnancy. Mitch was admitted to the NICU for observation.
   1. What is a common occurrence in infants of mothers with diabetes, and why?
2. Why are early feedings of infants born to mothers with diabetes so important?

3. What birth injuries are more common for the very large infant of a mother with diabetes?
   a.
   
   b.
   
   c.
Chapter 10 explores infancy, which is described as the period of development that has the fastest gain in physical size and the most dramatic developmental achievements. The biologic, psychosocial, cognitive, developmental, and social developments during the first year of life are presented. Factors related to temperament, concerns with parenting, and issues related to normal growth and development are also addressed. After completing this chapter, the student will be better prepared to provide nursing care that promotes optimal development in the infant and family.

**REVIEW OF ESSENTIAL CONCEPTS**

**Promoting Optimal Growth and Development**

1. An infant who is 6 months of age should have _________________ his or her birth weight.

2. Identify three factors that predispose the infant to more severe and acute respiratory problems.
   a. 
   b. 
   c. 

3. At what age do maternal-derived iron stores begin to diminish in the infant?

4. The _________________ is the most immature of all the gastrointestinal organs throughout infancy.

5. List two reasons infants are susceptible to dehydration.
   a. 
   b. 

6. At _________________ month(s) of age, the hands are predominantly closed, and by _________________ month(s), they are mostly open.

7. Which of the following abilities best describes the fine motor development of a normal 6-month-old?
   a. Can transfer objects from one hand to the other.
   b. Can use one hand for grasping.
   c. Can hold a cube in each hand simultaneously.
   d. Can feed him- or herself a cracker.

8. By _________________ to _________________ months of age, head control is well established.
9. The infant is in Erikson’s stage of developing a sense of trust. What are the crucial elements for achievement of this task?

10. The infant (birth to 24 months) is in the __________________ stage, according to Piaget.

11. What three crucial events take place during the sensorimotor phase, when infants progress from reflexive behaviors to simple repetitive acts to imitative activity?
   a. 

   b. 

   c. 

12. __________________ disorder is a psychologic and developmental problem that stems from maladaptive or absent attachment between the infant and parent and that may persist into childhood and even adulthood.

13. Separation anxiety begins between ages __________________ and __________________ months, when the infant progresses through the first stage of separation-individuation and begins to have some awareness of self and mother as separate beings.

14. __________________ is the infant’s first means of verbal communication.

15. At what age can an infant ascribe meaning to a word?

16. Stimulation (in the form of play) is as important for __________________ growth as food is for biologic growth.

17. Indicate whether each of the following statements is true or false.
   a. T  F  The type of toys given to the child is much less important than the quality of personal interaction that occurs.
   b. T  F  Problems with dental development are associated with the use of a pacifier.
   c. T  F  The more harmony between the child’s temperament and the parent’s ability to accept and deal with the behavior, the greater the risk for subsequent parent-child conflicts.
   d. T  F  Children with “high activity” levels require vigilant watching, and parents need to take extra precautions in safeguarding the home.
   e. T  F  Pacifier use may have a protective effect on reducing the incidence of sudden infant death syndrome.

Promoting Optimal Health During Infancy
18. What mineral is human milk deficient in after the infant turns 6 months of age?
19. Expressed breast milk can be safely stored in the refrigerator for up to ________________ day(s) without the risk of bacterial contamination.

20. When is it okay to introduce whole cow’s milk to an infant?

21. Identify and offer a rationale for the first solid food introduced into the infant’s diet.

22. What four elements need to be in place before introducing solid food to an infant?
   a. 
   b. 
   c. 
   d. 

23. Indicate whether each of the following statements is true or false.
   a. T F The best way to prevent infant sleep problems is to encourage parents to establish bedtime rituals that do not foster problematic patterns.
   b. T F The American Academy of Pediatric Dentistry recommends beginning fluoride supplementation at 3 months of age.

24. The new oral rotavirus vaccine is licensed for administration to infants at ________________ to ________________ weeks of age.

25. Identify the three leading causes of accidental death injury in infants.
   a. 
   b. 
   c. 

26. ___________________ has been approved and is recommended for children and adolescents to prevent HPV-related cervical cancer.

27. ___________________ is a general contraindication for all immunizations.

28. When driving a vehicle, the safest place for an infant is in the ________________ seat.
A. Dean is a 6-month-old infant who is at the clinic for his checkup. Dean’s mother, Tami, states that Dean is having difficulty sleeping. Tami says she has tried “everything” and is now completely exhausted and losing her patience with him. She is concerned about Dean’s sleeping pattern.
1. What should the nurse assess regarding Dean’s sleeping pattern?
   a. 
   b. 
   c. 
   d. 
   e. 
2. What interventions can the nurse implement with Tami and Dean to help Dean sleep?

B. Beverly is a 4-month-old infant in for a routine checkup. The nurse is providing anticipatory guidance to her mother, Becky, and father, John, on what they can expect over the next 2 months.
1. List seven guidelines the nurse should give Becky and John related to starting Beverly on solid foods.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g.
2. The nurse stresses that the introduction of solid foods into Beverly’s diet at this age is primarily for taste and chewing experience. Becky and John ask why that is the case. How should the nurse respond?

C. A nurse in a clinic is primarily responsible for administering immunizations. Answer the following questions related to immunizations.
1. What two nursing interventions should be used to properly store vaccines?
   a. 
   b. 

2. What is the safest site for administration of immunizations in the infant?

3. Why is needle length an important factor when giving immunizations to children?

D. The nurse is responsible for educating parents of 8- to 12-month-old infants on how to prevent accidental injury to their child.
1. Identify at least five developmental characteristics the nurse assesses in the 8- to 12-month-old infant that predispose him or her to injury.
   a. 
   b. 
   c. 
   d. 
   e. 
2. What interventions can the nurse suggest to prevent burns in the child?
   a.
   b.
   c.
   d.
   e.
   f.
   g.
   h.
   i.
   j.

3. Why is choking still such a problem in this age group?

4. What is the rationale for not administering medications as candy?
Chapter 11 introduces common health problems of the first year of life, including nutritional disorders, feeding difficulties (e.g., colic), growth failure, and sudden infant death syndrome (SIDS). After completing this chapter, the student will have the knowledge to provide adequate family-centered nursing care to infants who have these specific health problems.

REVIEW OF ESSENTIAL CONCEPTS

**Nutritional Disorders**

1. Identify four populations at risk for vitamin D deficiency, or rickets.
   a. 
   b. 
   c. 
   d. 

2. An excessive dose of a vitamin is generally defined as __________________ or more times the recommended dietary allowance.

3. What vitamin supplement to prevent neural tube birth defects is recommended for all women of childbearing age? ____________________ What is the daily recommended dose? ____________________

4. Low levels of zinc can cause what condition?

5. An imbalance in the intake of calcium and phosphorous may occur in infants who are given __________________ instead of infant formula.

6. Children receiving high doses of __________________ may have impaired vitamin C storage.

7. Hypervitaminosis of A and D presents the greatest problems because these __________________ vitamins are stored in the body.

8. Vitamin __________________ supplementation is recommended if the breastfeeding mother’s intake of the vitamin is inadequate or if she is not taking vitamin supplements.
9. Malnutrition is a major health problem in the world for children under 5 years of age. What are the two major causes of this problem?
   a.
   b.

10. In the United States, protein and energy malnutrition is seen in children and adolescents with specific illnesses or diseases. Provide some examples of these illnesses or diseases.

11. Describe the appearance of a child with kwashiorkor.

12. ______________________ is a common occurrence in underdeveloped countries during times of drought, especially in cultures where adults eat first; the remaining food is often insufficient in quality and quantity for the children.

13. Identify the three management goals in treating protein and energy malnutrition that occurs as a result of persistent diarrhea.
   a.
   b.
   c.

14. Children who have one parent with a food allergy have a ______________________ % or greater risk of developing the allergy.

15. In most children, anaphylactic food reactions do not begin with skin signs, such as hives, red rash, and flushing. Rather, the reactions mimic what condition?

16. What three things should children with extremely sensitive food allergies do to ensure their safety?
   a.
   b.
   c.
17. What are common manifestations of lactose intolerance?

**Feeding Difficulties**

18. Match each feeding problem with its definition.

a. _______ Regurgitation 1. Paroxysmal abdominal pain 2. Return of undigested food from the stomach 3. Dribbling of unswallowed formula

b. _______ Spitting up

c. _______ Colic

19. List nine elements of the nursing assessment that would be noted regarding colic.

a.

b.

c.

d.

e.

f.

g.

h.

i.

20. Once the diagnosis of colic is established, what is the most important nursing intervention?

21. How do nurses play a critical role in the diagnosis of failure to thrive?
22. What is the primary management of failure to thrive?

23. Some parents of infants with failure to thrive are at increased risk for attachment problems because of ________________________, ________________________, inadequate ________________________, and poor ________________________ as a child.

24. To prevent plagiocephaly, nurses should teach parents to do what when infants are awake?

**Disorders of Unknown Etiology**

25. To prevent SIDS, the American Academy of Pediatrics recommends that healthy infants be placed in the ________________________ position to sleep.

26. It has been postulated that ________________________% of all SIDS deaths could be prevented with prenatal maternal smoking cessation.

27. What should the nurse avoid saying to parents after a SIDS death?

28. Some studies have found that ________________________ in infants is a protective factor against the occurrence of SIDS.

29. The most widely used test in the diagnostic evaluation of apnea of infancy is the ________________________.

30. What two regimens are used in the treatment of recurrent apnea (without an underlying organic problem)?
   a. 
   b. 

31. What three safety measures should the nurse discuss with parents of an infant being monitored at home for apnea?
   a. 
   b. 
   c.
A. Katie, age 16 years, comes into the emergency department with her parents. Katie has broken out in a red, itchy, raised rash over her face, chest, and upper outer thighs. On taking a detailed history, the nurse discovers Katie has recently eaten strawberry shortcake. Her tongue was swelling up and she was complaining of difficulty breathing, so her parents brought her in to the emergency department.
1. Differentiate between a food allergy and food intolerance.

2. Did Katie have a reaction that would be classified as a food allergy or food intolerance?

B. Don and Helen have brought in Kalen, their 2-month-old infant, to see the pediatrician. The parents’ chief complaint is that for the past 3 weeks, Kalen has been having loud crying spells that last 4 hours a day. The parents report that Kalen draws his legs up to his abdomen while crying. On further examination, the nurse notes that he is tolerating breast milk and growing at a normal rate for his age.
1. After reviewing the assessment data, the nurse determines that the infant may have colic on the basis of which symptoms?

2. What interventions can the nurse offer that might help with the colic symptoms?

C. Tommy, a 1-month-old infant, is admitted to the hospital for a diagnostic workup for apnea of infancy. Tommy’s parents called the pediatrician when they noticed periods during which he stopped breathing and turned “blue.”
1. Why is safety a major area of nursing intervention if the infant is to be monitored at home?

2. What is the rationale for informing the local utility company and rescue squad of the home monitoring?

3. It must be stressed that monitors are only effective if they are __________________________ and there is a __________________________ to alarms.
Chapter 12 presents issues relevant to the toddler period of development. The chapter highlights biologic, psychosocial, social, cognitive, and spiritual development during toddlerhood. Body image, gender identity, and coping with concerns related to normal growth and development are presented. At the completion of this chapter, the student will have the foundation to promote health and to meet the toddler’s growth and development needs.

REVIEW OF ESSENTIAL CONCEPTS

Promoting Optimal Growth and Development

1. What period of time defines toddlerhood?

2. The growth rate slows considerably during the toddler years, and the birth weight is quadrupled by ____________ years of age.

3. T  F Chest circumference continues to increase in size and exceeds head circumference during the toddler years.

4. The toddler has a less well-developed abdominal musculature and short legs, giving him or her a(n) ____________ appearance.

5. T  F The respiratory and heart rates and the blood pressure increase during the toddler years.

6. One of the most prominent changes in the gastrointestinal system during the toddler period is the voluntary control of ____________.

7. The physiologic ability to control the sphincters probably occurs between ages ___________ and ___________ months.

8. Identify the seven major psychosocial developmental tasks that must be dealt with during the toddler years.
   a.
   
   b.
   
   c.
   
   d.
   
   e.
9. What is the developmental task of toddlerhood, according to Erikson?

10. Differentiate between negativism and ritualism, which are two characteristics typical of toddlers in their quest for autonomy.

11. According to Erikson, when the child can delay gratification, he or she has developed
   the _____________________.

12. How does Piaget describe the stage a 23-month-old child is in?

13. Describe Piaget's preoperational stage.

14. The child's ____________________ and ____________________ strongly influence his or her perception of the world, and this often includes spirituality.

15. At what age can children recognize themselves in a mirror and make verbal references to who they are?

16. Gender identity is developed by ____________________ of age.

17. Describe the two phases of the toddler's task of differentiation of self from significant others.
   a. Separation
   b. Individuation
18. ________________ is when the toddler separates from the mother and begins to make sense of experiences in his or her environment and then is drawn back to her for assistance in verbally articulating the meaning of the experiences.

19. The typical child of 2 years has a vocabulary of approximately ________________ words, and approximately ________________% of this speech is understandable.

20. What are some signs of independence in 15-month-old children?

21. Describe the type of play in which toddlers engage.

22. **T**  **F** Bowel training is usually accomplished before bladder training in the toddler.

23. Identify the five markers that signal a child’s readiness to toilet train.
   a. 
   b. 
   c. 
   d. 
   e. 

24. When is a good time to start talking to a toddler about the addition of a new sibling to the family?

25. To minimize sibling rivalry, the parents should ________________ the toddler in caregiving activities.

26. The best approach toward tapering temper tantrums requires ________________ and developmentally appropriate expectations and rewards.

27. What is one way in which parents can deal with negativism?
**Promoting Optimal Health During Toddlerhood**

28. The toddler’s decreased nutritional requirements are manifested in a phenomenon known as ________________.

29. An appropriate way to determine adequate serving size for a toddler is to give ________________ of food for each year of age.

30. The most effective ways to remove plaque from teeth are ________________ and ________________.

31. When adequate amounts of ________________ are ingested, the incidence of tooth decay is reduced.

32. When do toothbrushes need to be replaced?

33. ________________ cause more deaths in children 4 years of age or younger than in any other childhood period except adolescence.

34. Studies indicate that toddlers up to 24 months of age are safer riding in convertible seats in the ________________ position.

35. Children should use specially designed car restraints until they are 145 cm (4 feet, 9 inches) in height or are ________________ to ________________ years old.

36. The most common type of thermal injury in children is ________________.

37. What is the major reason for accidental poisoning in young children?

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

**A.** A young mother brings her 2-year-old son, Greg, into a well-child clinic for a routine checkup. The child is apprehensive and clings to his mother. Height and weight are obtained; the child’s height is 89 cm (35 inches), and his weight is 13.6 kg (30 pounds).

1. Plot Greg’s height and weight on a growth chart. How do his measurements compare with norms for this age?
   a. Height
   b. Weight

2. Greg’s mother is concerned because he has gained only 2 pounds and grown 2 inches since his 20-month checkup. What information does the nurse need to give this mother regarding healthy toddler development?
3. Identify three developmental milestones that Greg should have accomplished in the following areas:
   a. Gross motor development
   b. Fine motor development
   c. Language development

4. Greg’s mother describes his play activity as, “He plays near others his age but makes no attempt to play or interact with them.” How should the nurse respond to this comment?

5. What information can the nurse relay to Greg’s mother on selecting appropriate play activities for him?
   a. 
   b. 

6. Greg is not yet toilet-trained, but he is showing signs of interest in flushing the toilet and asking questions about the potty. His mother asks when she should begin trying to train him. Which of the following is the best response the nurse can give this mother?
   a. Greg will need to be able to sit on the toilet for 10 to 15 minutes at a time.
   b. A factor in successful training is the child’s desire to please the mother by controlling impulses to defecate and urinate.
   c. Bladder training should be attempted first, since the child usually has a stronger and more regular urge to urinate.
   d. Attempts to begin toilet training before age 3 are usually unsuccessful because myelinization of the spinal cord is incomplete.

7. Greg’s mother asks questions about dental care. The nurse describes the following four components for a preventive dental hygiene teaching plan for a toddler:
   a. 
   b. 
   c. 
   d. 


B. Interview the parents of a toddler about typical toddler behaviors (e.g., negativism, management of temper tantrums, and eating and sleep patterns). Answer the following questions, including specific interventions associated with these issues.

1. How is negativism most often manifested in the toddler? How can this manifestation be decreased?

2. How does negativism contribute to the toddler’s acquisition of a sense of autonomy?

3. Why are temper tantrums so prevalent in the toddler age group?

4. Identify four eating behaviors that are characteristic of the toddler.
   a. 
   b. 
   c. 
   d. 

5. Why is nutritional counseling for parents with toddlers an important nursing intervention?

6. Sleep problems are common in this age group. The problems are most likely related to fears of _____________________.

7. What two interventions can a parent use to reduce toddler sleep problems?
   a. 
   b. 
C. You are going on a routine visit with a home health care nurse. Assess the home of a toddler for the presence of potential safety hazards. Answer the following questions.

1. What are the two key determinants in injury prevention?
   a.
   b.

2. Why is there a critical increase in injuries during the toddler years?

3. What categories of injuries are common during the toddler years?
   a.
   b.
   c.
   d.
   e.
   f.
   g.

4. What five factors could pose a safety hazard to a toddler in the home?
   a.
   b.
   c.
   d.
   e.
5. Match the following developmental accomplishments with the appropriate safety measures. (Answers may be used more than once.)

   a. _______ Walks, runs, climbs
   b. _______ Exhibits curiosity
   c. _______ Pulls objects
   d. _______ Puts things in mouth

   1. Closely supervise when toddler is near a source of water.
   2. Choose toys without removable parts.
   3. Turn pot handles toward the back of the stove.
   4. Place all toxic agents out of reach in a locked cabinet.
   5. Place child-protector caps on all medicines and poisons.
   6. Cover electrical outlets with protective plastic caps.
   7. Avoid giving sharp or pointed objects to the toddler.
   8. Keep hanging tablecloths out of toddler’s reach.
   9. Lock fences and doors if toddlers are not directly supervised.
Chapter 13 focuses on the development of the child in the preschool period, which is the most critical period of emotional and psychologic development. The chapter discusses biologic, cognitive, psychosocial, moral, and spiritual development of the preschooler and family. Issues related to body image, sexuality, and normal growth and development are outlined. The chapter provides the student with information for promoting optimal health during the preschool years and introduces areas of special concern for parents and family members. This knowledge will enable the student to develop nursing goals and interventions that foster the normal development of the preschooler and that assist parents in coping with the associated developmental difficulties.

REVIEW OF ESSENTIAL CONCEPTS

Promoting Optimal Growth and Development

1. The preschool years range from ________________ to ________________ years of age.

2. The rate of physical growth ________________ and ________________ during the preschool years.

3. T  F  During preschool, the separation-individuation process is completed.

4. By ________________ years of age, the child skips on alternate feet, jumps rope, and begins to skate and swim.

5. According to Erikson, the chief psychosocial task of the preschool period is acquiring a sense of ________________. Conflict arises when preschoolers experience _________________.

6. One of the tasks related to the preschool period is ________________ for school and scholastic learning.

7. Piaget’s preoperational phase consists of which two phases?
   a.
   b.

8. According to Piaget, ________________ becomes the child’s way of understanding, adjusting to, and working out life’s experiences.

9. T  F  Preschoolers increasingly use language without comprehending the meaning of words, particularly concepts of right and left, causality, and time.

10. Describe how preschoolers use causality and give an example.
11. Preschoolers’ thinking is often magical. What does this mean?

12. T F In preschoolers’ minds, calling them bad means they are bad persons.

13. Development of the _________________ is strongly linked to spiritual development.

14. T F During the preschool years, vocabulary increases dramatically.

15. Why are bandages critical to the preschooler who has just had abdominal surgery?

16. Preschoolers are forming strong attachments to the _________________ parent while identifying with the _________________ parent.

17. An average child can be expected to have a vocabulary of more than _________________ words by the age of 6 years.

18. Contrast language development in 3- to 4-year-old children with language development in 4- to 5-year-old children.

19. Describe the type of play most apparent during the preschool years.

20. Identify three functions served by imaginary playmates.
   a.
   b.
   c.

21. There are no absolute indicators for school readiness, but the child’s social maturation, especially _________________, is as important as his or her academic readiness.
22. List three opportunities that nursery schools and daycare centers provide for children.
   a.

   b.

   c.

23. What is the most important factor in terms of the overall evaluation of a nursery school or daycare center?

24. Identify the two rules that govern answering a child’s questions about sex or other sensitive issues.
   a.

   b.

25. _________________ in the preschool child is a normal part of sexual curiosity and exploration.

26. What are some of the preschool child’s most common fears?
   a.

   b.

   c.

   d.

   e.

   f.

27. What is the best way to help children overcome their fears?
28. Why are young children especially vulnerable to stress?

29. Identify the five factors that differentiate “problematic” aggression from “normal” aggression.
   a. 
   b. 
   c. 
   d. 
   e. 

30. The most critical period for speech development occurs between ________________ and ________________ years of age.

31. The failure to master sensorimotor integrations results in ________________ during the preschool years. Is this finding more frequent in boys or girls?

32. T F The Denver Articulation Screening Examination is an excellent tool for assessing a child’s articulation skills.

33. Promoting Optimal Health During the Preschool Years
   Protein requirements increase with age, and the recommended intake for preschoolers is ________________ to ________________ g/day.

34. In children over 2 years of age, intake of fiber, fruits, and vegetables should equal the child’s age plus ________________ g/day.

35. Excessive consumption of ________________ has been associated with adverse health effects, such as dental caries and gastrointestinal symptoms.

36. T F The quality of the food consumed is more important than the quantity.

37. Differentiate between nightmares and sleep terrors.
38. T F Although preschoolers’ fine motor control is improved, they still require assistance and supervision with brushing, and flossing should be performed by parents.

39. T F During the preschool years, the emphasis in injury prevention is placed on education for safety and potential hazards to prevent injury.

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. Thom, a 5-year-old boy, is brought to the pediatrician’s office by his mother for a well-child visit. During the assessment, the nurse finds that Thom is 106.7 cm (42 inches) tall and weighs 17.7 kg (39 pounds).

1. Plot Thom’s height and weight on a growth chart. How do his measurements compare with the norms for this age?
   - a. Height
   - b. Weight

2. What factors should the nurse include in the teaching plan regarding the physical growth of a preschooler?

3. Before the physical examination, the nurse questions Thom’s mother about his developmental progress. Identify three developmental milestones that Thom should have accomplished in the following areas:
   - a. Gross motor development
   - b. Fine motor development
   - c. Language development

4. Thom has had an imaginary friend, named “Boy,” since he turned 3 years old. His mother is beginning to wonder whether “Boy” will be with Thom forever. What information should the nurse give Thom’s mother regarding imaginary friends?

5. What types of toys, playthings, and activities could be recommended to foster Thom’s development in each of the following areas?
   - a. Physical play
   - b. Dramatic play
6. How could the nurse guide Thom’s mother on family-centered care during the preschool years?

B. Sydney, a 5-year-old girl, and her parents are in for a well-child checkup. The nurse is interviewing her parents. The interview reveals that Sydney is attending a preschool program. Answer the following questions and include specific responses to illustrate these concepts.
1. What does the nurse identify as the most important aspect of a preschool or daycare program?

2. List the four steps Sydney’s parents should take in assessing a preschool.
   a. 
   b. 
   c. 
   d. 

3. The nurse questions Sydney’s parents on how they prepared Sydney for preschool. Identify four ways parents should prepare children for preschool.
   a. 
   b. 
   c. 
   d. 

C. Interview the parents of a preschool child about the following common parental concerns: sex education, sleep disturbances, dental health, and eating patterns. Answer the following questions and include specific responses to illustrate these concepts.
1. Why is preschool age an appropriate time to begin sex education?
2. Identify why preschool years are a prime time for sleep disturbances.

3. What sleep problems that might concern parents typically occur in this age group?

4. How often should routine dental care by a dentist be provided to preschoolers?

5. A variety of health problems among adults is thought to be influenced by eating patterns established in the preschool years. What goal would you encourage parents to achieve related to the intake of fat in this age group?

6. What should parents be informed of regarding the intake of carbonated beverages in young children?
Chapter 14 introduces nursing considerations essential to the care of the young child experiencing health problems. This chapter addresses a variety of topics, including infectious disorders, intestinal parasitic diseases, ingestion of injurious agents, and child maltreatment. After completing this chapter, the student will be prepared to develop nursing goals and interventions directed at assessing and managing health problems of toddlers and preschoolers, with the goal of achieving a state of optimum health.

REVIEW OF ESSENTIAL CONCEPTS

Infectious Disorders
1. What four factors are helpful to assess in identifying communicable diseases in children?
   a. 
   b. 
   c. 
   d. 

2. List four nursing goals in the care of the child with a communicable disease and his or her family.
   a. 
   b. 
   c. 
   d. 

3. Primary prevention of communicable diseases focuses on ___________________.

4. What is the most significant way to prevent the spread of infection?
5. What two diseases does varicella-zoster virus (VZV) cause?
   a. 
   b. 

6. Vitamin A supplementation reduces the morbidity and mortality of children with ___________________.

7. When lotions with active ingredients such as diphenhydramine in Caladryl are used, they should be applied ___________________. Use special caution in children who are simultaneously receiving an oral ___________________.

8. Match each communicable disease with its etiologic agent.
   a. ______ Diphtheria
   b. ______ Mumps
   c. ______ Erythema infectiosum
   d. ______ Pertussis (whooping cough)
   e. ______ Scarlet fever

   1. Paramyxovirus
   2. Human parvovirus B19 (HPV)
   3. Corynebacterium diphtheriae (fifth disease)
   4. Bordetella pertussis
   5. Group A beta-hemolytic streptococci

9. What is conjunctivitis?

10. In newborns, conjunctivitis can occur from infection during birth, most often from ___________________ (inclusion conjunctivitis) or Neisseria gonorrhoeae.

11. What steps can the nurse discuss with a child’s parents to reduce the chances of spreading bacterial conjunctivitis to other members of the family?

12. What are two major nursing goals for nursing care management in the care of a child with conjunctivitis?
   a. 
   b. 

13. ___________________ is a type of stomatitis whose onset is usually associated with mild traumatic injury (biting the cheek, hitting the mucosa with a toothbrush, or a mouth appliance rubbing on the mucosa), allergy, or emotional stress. The lesions are painful, small, whitish ulcerations surrounded by a red border.

14. ___________________ usually begins with a fever; the pharynx becomes edematous and erythematous; and vesicles erupt on the mucosa, causing severe pain.
15. Differentiate between aphthous and herpetic gingivostomatitis by labeling the following clinical characteristics appropriately.
   a. _______ A benign painful condition with an unknown cause  
      1. Aphthous stomatitis
   b. _______ Caused by the herpes simplex virus (HSV)  
      2. Herpetic gingivostomatitis
   c. _______ Small, whitish ulcerations surrounded by a red border, with no vesicles and no systemic illness
   d. _______ Commonly called “cold sores” or “fever blisters”

Intestinal Parasitic Diseases
16. In the United States, giardiasis and pinworms are the two most common __________________________.

17. Identification of the parasitic organism is accomplished by laboratory examination of substances containing the __________________________, its __________________________, or __________________________. Most are identified by examining __________________________ from the stools of persons suspected of harboring the parasite.

18. Name three nursing responsibilities related to parasitic intestinal infections.
   a.
   
   b.
   
   c.

19. What is the most common intestinal parasitic pathogen?

20. Identify the five chief modes of transmission of *Giardia lamblia*.
   a.
   
   b.
   
   c.
   
   d.
   
   e.
21. _______________ , or _______________ , is the most common helminthic infection in the United States.

22. _______________ conditions, such as classrooms and daycare centers, favor the transmission of pinworms.

23. T F The typical hand-to-mouth activity of youngsters makes them especially prone to reinfection with pinworms.

24. T F The most common symptom of pinworms is intense perianal itching.

25. How are pinworms most commonly diagnosed?

**Ingestion of Injurious Agents**

26. What action is recommended to parents if the exact quantity or type of ingested toxin is not known?

27. List the three principles of emergency treatment following the ingestion of toxic agents.
   a.
   b.
   c.

28. What is the first and most important principle in dealing with a poisoning?

29. _______________ is no longer recommended for immediate treatment of poison ingestion.

30. _______________ may replace ipecac as the home remedy of choice for poisoning.
31. Match the following poisoning with the correct antidote.

   a. _______ Acetaminophen poisoning
   b. _______ Carbon monoxide inhalation
   c. _______ Opioid overdose
   d. _______ Benzodiazepine overdose
   e. _______ Digoxin toxicity
   f. _______ Cyanide poisoning
   g. _______ Poisonous bites

   1. Oxygen
   2. \( N \)-acetylcysteine
   3. Flumazenil (Romazicon)
   4. Naloxone
   5. Digibind
   6. Amyl nitrate
   7. Antivenin

32. Why are young children at risk for lead poisoning?

33. The most frequent source of acute childhood lead poisoning is deteriorating ____________________________ in older homes or lead-contaminated ____________________________ in the yard.

34. List the risk factors for having high blood lead levels.
   a.

   b.

   c.

   d.

   e.

35. The ____________________________ system is the most at risk for being damaged when young children are exposed to lead.

36. What test is now used to determine the level of lead exposure?

37. What are some of the long-term neurocognitive signs of lead poisoning?
38. What are some of the acute signs of lead poisoning?

39. What is the most important nursing goal (and other professionals’ goal) related to lead poisoning?

**Child Maltreatment**

40. In 2007, Child Protective Service agencies in the United States confirmed that an estimated ____________ children were victims of child maltreatment.

41. The most common form of child maltreatment is ________________.

42. What are common internal findings in infants who have been violently shaken?

43. Define the term *Munchausen syndrome by proxy* (MSP).

44. **T**  **F**  Child maltreatment occurs most often in lower socioeconomic families.

45. What three broad categories describe factors that predispose children to physical abuse?
   a.
   
   b.

   c.
46. Identify five significant risk factors for child sexual abuse.
   a. 
   b. 
   c. 
   d. 
   e. 

47. T  F Cases of abuse are often detected by inconsistencies in the history of events given by the child or caregiver, with the history of events not matching physical findings.

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Mrs. Knight brings her 5-month-old daughter into the clinic. The infant has been gagging, coughing, and having periods of apnea. A medical diagnosis of pertussis is given.
   1. Why is it important to identify pertussis early and initiate early treatment?
   2. What is the typical medication prescribed for pertussis?
   3. What factor related to the medication regimen is significant to stress to parents who have an infant on antibiotic treatment?

B. Mrs. Walker brings her 4-year-old daughter, Haley, to the pediatric clinic. She tells the nurse practitioner that Haley has been scratching herself around the anus and has been sleeping restlessly. A tentative diagnosis of pinworm infection is made.
   1. How would the nurse assist the nurse practitioner in confirming a diagnosis of pinworms?
2. Identify three nursing goals associated with pinworm infection in a child.
   a. 
   b. 
   c. 

C. Spend a day in a hospital emergency department to observe the types of poisoning that have occurred and their emergency treatment. Answer the following questions and include specific examples to illustrate these concepts.
1. Identify at least three nursing interventions for each of the following areas of emergency treatment.
   a. Assessment
   b. Gastric decontamination
   c. Prevention of recurrence

2. Two of the most commonly ingested drugs among children are acetylsalicylic acid (ASA) and acetaminophen. For each of the following statements, mark “A” if the statement applies to acetaminophen ingestion and “S” if it applies to ASA ingestion.
   a. ______ Hyperpnea and hyperpyrexia are common clinical manifestations.
   b. ______ It is the most common accidental drug poisoning in children.
   c. ______ Bleeding is treated by vitamin K.
   d. ______ Acute overdose results in hepatic damage.

D. Katie brought her 9-year-old son, James, to see the nurse practitioner. She complains that James has developed learning and behavior problems over the past year since they moved into town. Answer the following questions related to this scenario.
1. What question could the nurse practitioner ask to assess James’s level of possible contamination from lead exposure?

2. What are some early signs of moderate- to low-dose exposure to lead?
3. What does the nurse identify as the initial goal for children with low-level exposure to lead?

4. After James is tested, the results reveal he has an elevated blood lead level of 11 mcg/dl. What factors need to be included in the family-centered teaching plan related to the care of James?

E. Danny is a 2-year-old boy hospitalized as a result of maltreatment. He is a highly energetic boy. He is being raised by his mother, who has to work two full-time jobs to make ends meet. He is in the hospital because his mother hit him and locked him in the closet because she “just can’t take it anymore.” Answer the following questions related to this scenario.

1. Identify characteristics in each of the following areas that can be used to assess the vulnerability of families, in general, to abuse.
   a. Parents
   b. Child
   c. Environment

2. Identify at least five red flags that the nurse should link to possible abuse when obtaining a patient and family history.
   a.
   b.
   c.
   d.
   e.
3. Develop three nursing diagnoses that could be used as a basis for the care of this family.
   a. 
   b. 
   c. 
Chapter 15 discusses the school-age developmental stage, which is characterized by greater social awareness and social skills. Biologic, cognitive, psychosocial, moral, and spiritual development related to the school-age child and family are outlined. At the completion of this chapter, the student will be able to use knowledge of the school-age child’s growth and development to formulate nursing goals and interventions that foster health promotion and maintenance behaviors in school-age children and their families.

REVIEW OF ESSENTIAL CONCEPTS

Promoting Optimal Growth and Development
1. Physiologically, the middle years begin with the shedding of the first _______________ and end at puberty, with the acquisition of the final _______________.

2. T F During the school-age years, a child will grow approximately 5 cm (2 inches) per year and will almost triple in weight.

3. Identify the three most pronounced physiologic changes that indicate increasing maturity in the school-age child.
   a. 
   b. 
   c. 

4. The average age of puberty in girls is _______________ years, and in boys, it is _______________ years.

5. According to Freud, the school-age child is in which of the following periods?
   a. Oral
   b. Anal
   c. Oedipal
   d. Latency

6. According to Erikson, the developmental task of middle childhood is acquiring a sense of which of the following?
   a. Trust
   b. Autonomy
   c. Initiative
   d. Industry

7. According to Erikson, failure to develop a sense of accomplishment results in a sense of _______________.

8. T F Children with chronic physical or mental limitations may be at a disadvantage for skill acquisition and are therefore at risk of feeling inferior.
9. According to Piaget, the school-age child is in which stage?
   a. Sensorimotor
   b. Preoperational
   c. Concrete operational
   d. Formal operational

10. According to Piaget, ______________ occurs when children can recognize that changing the shape of a substance, such as a lump of clay, does not alter its total mass.

11. There is a developmental sequence in children’s capacity to conserve matter. Conservation of ______________ usually is accomplished first, ______________ sometime later, and ______________ last.

12. Define the term classification.

13. T F The most significant skill acquired during the school-age years is the ability to read.

14. Which of the following best describes the younger (6- or 7-year-old) school-age child’s perception of rules and judgment of actions?
   a. Judges an act by its intentions rather than by the consequences alone.
   b. Believes that rules and judgments are not absolute.
   c. Understands the reasons behind rules.
   d. Interprets accidents and misfortunes as punishments for misdeeds.

15. Which of the following best describes the older (10- to 12-year-old) school-age child’s perception of rules and judgment of actions?
   a. Does not understand the reasons for rules.
   b. Takes into account different points of view to make a judgment.
   c. Judges an act by its consequences.
   d. Believes that rules and judgments are absolute.

16. One of the most important socializing agents in the school-age years is the ______________ group.

17. What has a strong influence on the child’s attainment of independence from parents?

18. Identify three valuable lessons children learn from daily interactions with age-mates.
   a.
   b.
   c.
19. Poor relationships with peers and a lack of group identification can contribute to __________________________.

20. When does bullying most frequently occur?

21. Team play teaches children to modify or exchange personal goals for goals of the group; it also teaches them that __________________________ __________________________ is an effective strategy for attaining a goal.

22. The term __________________________ refers to a conscious awareness of self-perceptions, such as one’s physical characteristics, abilities, values, ideals, and expectations, as well as an idea of self in relation to others. It also includes one’s body image, sexuality, and self-esteem.

23. After the family, __________________________ is the second most important socializing agent in the lives of children.

24. __________________________ serve as role models with whom children identify and whom they try to emulate.

25. Children who spend some amount of time before or after school without supervision of an adult are termed __________________________.

26. Identify five factors that influence the amount and manner of discipline and limit-setting imposed on school-age children.
   a. __________________________
   b. __________________________
   c. __________________________
   d. __________________________
   e. __________________________

27. Identify eight signs of stress in school-age children.
   a. __________________________
   b. __________________________
   c. __________________________
d. 

e. 

f. 

g. 

h. 

Promoting Optimal Health During the School Years

28. Match each behavior with the age at which it is typically exhibited.

a. ______ Develops concept of numbers.  
   1. 6 years 

b. ______ Enjoys group activities involving own sex but is beginning to mix with members of opposite sex.  
   2. 9 years 

c. ______ Enjoys group sports and organizations such as Girl Scouts or Boy Scouts.  
   3. 12 years 

d. ______ Loves friends; talks incessantly about them. 

29. Several factors have been identified as contributing to childhood obesity. Name three of those factors.

a. 

b. 

c. 

30. T  F The appearance of permanent teeth in the school-age child begins with the eruption of the 6-year molar.

31. T  F An important component of ongoing sex education is effective communication with parents.

32. T  F School nurses are vital to the development, implementation, and evaluation of health care plans for chronically ill or disabled children.

33. T  F The most common cause of severe accidental injury and death in school-age children is motor vehicle accidents.
A. Cole, age 9 years, is brought to the pediatrician’s office by his mother, Ann, for his annual physical examination. His height is 132 cm (52 inches), and his weight is 28.1 kg (62 pounds). His vision is evaluated as 20/30 in both eyes.
   1. Plot Cole’s height and weight on a growth chart. How do his measurements compare with the norms for this age?
      a. Height

      b. Weight

2. Ann tells the nurse that Cole likes to help his father with the yard work. However, Cole’s work is not always up to his father’s expectations. What information about normal development could the nurse offer Ann?

3. Ann expresses concern because she is having a problem with dishonesty in her 6-year-old daughter. What information could the nurse provide to assist her in dealing with this concern?

B. A nurse interviews a school-age child and his or her parents about changing interpersonal relationships and peer groups. Answer the following questions and include specific responses to illustrate the concepts.
   1. The parents ask the nurse why school-age children spend an increased amount of time away from their homes and families. What is the best response the nurse can offer this family?

2. The parents want to know why relationships with age-mates are so important in the life of the school-age child. What is the best response the nurse can offer this family?
3. What would the nurse include in a teaching plan for parents of a school-age child to prevent injury to the child from motor vehicle accidents?
   a. 
   
   b. 
   
   c. 
   
   d. 
   
   e. 

4. What would the nurse include in a teaching plan for parents of a school-age child to prevent accidental drowning?
   a. 
   
   b. 
   
   c. 
   
   d. 
   
   e. 
   
   f.
Chapter 16 examines the adolescent period, which is a difficult transition from childhood to adulthood. After completing this chapter, the student will understand the interplay of physical, psychosocial, and emotional factors in the adolescent’s development and interpersonal relationships. This knowledge will enable the student to provide anticipatory guidance to assist the child and family with the intricate developmental issues of adolescence.

**REVIEW OF ESSENTIAL CONCEPTS**

*Promoting Optimal Growth and Development*

1. Describe the characteristics of when adolescence begins and ends.

2. Define the following terms:
   a. Puberty
   b. Adolescence

3. What are the two most obvious physical changes that occur during adolescence?
   a.
   b.

4. ___________________________ are the external and internal organs that carry out the reproductive functions (e.g., ovaries, uterus, breasts, penis).

5. ___________________________ are the changes that occur throughout the body as a result of hormonal changes (e.g., voice alterations, development of facial and pubertal hair, fat deposits), but that play no direct part in reproduction.

6. ___________________________ is the feminizing hormone, whereas ___________________________ are the masculinizing hormones.

7. What assessment tool is used to determine maturity level based on sex characteristics and stages of genital development?

8. The normal age range for the onset of menarche is usually considered to be ___________________________ to ___________________________ years; the average age is ___________________________.

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9. The first pubescent changes in boys are __________________________ enlargement and the initial appearance of __________________________.

10. What happens to the apocrine glands during puberty?

11. T  F  Enlargement of the larynx and vocal cords occurs in both boys and girls to produce voice changes.

12. Which glands contribute to the development of acne during adolescence?

13. T  F  The size and strength of the heart, blood volume, systolic blood pressure, pulse rate, and basal heat production all increase during adolescence.

14. What is the developmental crisis of adolescence, according to Erikson?

15. A sense of __________________________ identity appears to be an essential precursor to the sense of __________________________ identity.

16. Why are adolescents frequently labeled as unstable, inconsistent, and unpredictable?

17. According to Piaget, adolescents are no longer restricted to the real and actual, which was typical of the period of concrete thought; now they are concerned with the possible and can think beyond the present. What does Piaget call this stage of development?

18. Identify five characteristics that are typical of the adolescent’s thought processes.
   a.
   
   b.
   
   c.
   
   d.
   
   e.
19. Which has more influence on an adolescent’s self-evaluation and behavior: peer group or parents?

20. Greater levels of ________________ and ________________ are associated with fewer high-risk behaviors and more health-promoting behaviors.

21. Feelings of immortality serve what important developmental function during adolescence?

22. What adolescent behaviors has parental monitoring been found to directly influence?

23. T F Adolescents prefer to bring up the subject of sex to the health care provider rather than having the health care provider broach the subject.

24. What should sexuality education consist of?

25. T F It has been determined that the body image established during adolescence is temporary and subject to change.

Promoting Optimal Health During Adolescence

26. Identify six new causes of morbidity in adolescence.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

27. T F The increase in height, weight, muscle mass, and sexual maturity of adolescence is accompanied by greater nutritional requirements.
28. What are two major contributing factors to the increase in adolescent obesity in the United States?
   a. 
   b. 

29. When teaching adolescents about proper nutrition, what method should the nurse employ to ensure that teens will respond to the teaching?

30. To have improved health outcomes, school-aged children and adolescents should engage in __________________________ minutes or more of moderate to vigorous physical activity daily.

31. Identify five major areas of stress for the adolescent.
   a. 
   b. 
   c. 
   d. 
   e. 

32. T  F The long-term effects of tanning include premature aging of the skin; increased risk of skin cancer; and, in susceptible individuals, phototoxic reactions.

33. T  F Suicide is the greatest single cause of death in the adolescent age group.

34. T  F The use of alcohol is a major contributing factor for fatal and nonfatal motor vehicle accidents in teenagers.

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Britney is a 14-year-old girl who comes to the pediatric clinic for a yearly checkup. She is accompanied by her mother. Britney appears overweight and has noticeable acne on her face and forehead. Her age of menarche was 1 year ago.
   1. Britney’s height is 162.6 cm (64 inches), and her weight is 73 kg (161 pounds). How do her measurements compare with those of other girls her age?
      a. Height
      b. Weight
2. What principles related to adolescent growth and hormonal changes should be explained to Britney, since she is concerned about her weight and acne?

B. Billy, age 16, came into the physician’s office for an annual physical examination. His mother, Kim, is concerned because he has recently developed a lack of interest in family activities and prefers to “hang out” with his buddies from school. Answer the following questions on how the nurse can provide education on normal adolescent behaviors and stages to Kim.
1. How could the nurse explain to Kim the role of the peer group in the development of adolescent identity?

2. What specific examples could the nurse give Kim on how group identity is demonstrated by the adolescent?

3. Kim asks the nurse why peer groups are so important during the adolescent years. What is the nurse’s best response to her question?

C. Interview an adolescent about his health promotion behavior. Answer the following questions and include specific responses to illustrate these concepts.
1. Why do adolescents complain of fatigue?

2. What positive benefits come from participation in sports?

3. What developmental characteristics predispose the adolescent to accidents?

4. What elements should the nurse include in a sex education program for adolescents?
   a.

   b.

   c.

   d.
Chapter 17 details common health problems and situations that are integral to the care of the school-age child and the adolescent. This chapter introduces students to concepts needed in the care of school-age children and adolescents with altered growth and maturation, issues related to sexuality, and a variety of other health problems.

**REVIEW OF ESSENTIAL CONCEPTS**

**Problems Related to Elimination**

1. __________ is a common and troublesome disorder that is defined as intentional or involuntary passage of urine into bed (usually at night) in children who are beyond the age when voluntary bladder control should normally have been acquired.

2. List the various therapeutic techniques that can be employed to manage enuresis.
   a. 
   b. 
   c. 
   d. 
   e. 

3. **T**  **F** Punishment for bed-wetting is a successful way to reduce its occurrence.

4. __________ is the repeated voluntary or involuntary passage of feces of normal or near-normal consistency into places not appropriate for that purpose according to the individual’s own sociocultural setting.

5. __________ is the most frequently used drug to treat enuresis.

6. What should be considered before psychogenic factors in the case of enuresis?

7. Enuresis is more common in __________; nocturnal bed-wetting usually ceases between 6 and 8 years of age.

8. A bladder volume of __________ to __________ ml (10–12 ounces) is sufficient to hold a night’s urine.
Altered Growth and Maturation
9. On a worldwide scale, the most common cause of short stature or developmental delay is
______________________.

10. Identify three nursing interventions that could be used with an adolescent who is growth delayed.
   a. ____________________
   b. ____________________
   c. ____________________

Disorders Related to the Reproductive System
11. Define the two types of amenorrhea.
    a. Primary
    b. Secondary

12. The treatment of choice for dysmenorrhea in adolescents is the administration of nonsteroidal antiinflammatory drugs, which block the formation of ____________________.

13. ____________________ is important in the prevention and management of vaginitis.

14. The usual presenting symptom for testicular cancer is a heavy, hard, painless ____________________ on the ____________________.

15. What is a major role of the nurse in teaching adolescent boys about early detection of testicular cancer?

Health Problems Related to Sexuality
16. Identify six factors that put an adolescent at risk for pregnancy.
    a. ____________________
    b. ____________________
    c. ____________________
17. What are the two most popular methods of contraception for adolescents in the United States?
   a. 
   b. 

18. Identify four behavioral factors that contribute to an increased risk of sexually transmitted infections (STI’s).
   a. 
   b. 
   c. 
   d. 

19. Name the two sexually transmitted infections that do not have a cure.
   a. 
   b. 

20. Match the following sexually transmitted infections with their causative organisms and the drug of choice for treatment.
   a. _______ Gonorrhea
      1. C. trachomatis
   b. _______ Chlamydial infection
      2. Herpes simplex virus (HSV)
      3. Trichomonas vaginalis
      4. Neisseria gonorrhoeae
      5. Treponema pallidum
      6. Metronidazole
      7. Doxycycline
      8. Acyclovir
      9. Penicillin
      10. Ciproflaxin
   c. _______ Herpes progenitalis
   d. _______ Syphilis
   e. _______ Trichomoniasis

21. T F Infertility is a long-term effect of pelvic inflammatory disease.

22. Identify the presenting symptoms of pelvic inflammatory disease.
23. T F Acquaintance rape is far more common than stranger rape; however, stranger rape is reported more often.

24. T F Rape victims need to know that they are all right and are not being blamed for the situation.

25. T F The primary goal of nursing care for the rape victim is to get every detail of the rape, even if the patient is overwhelmed.

**Eating Disorders**

26. The ______________________ measurement is recommended as the most accurate method for screening children and adolescents for obesity.

27. What eight health conditions are related to childhood and adolescent obesity?
   a.
   b.
   c.
   d.
   e.
   f.
   g.
   h.

28. ______________________ results from a caloric intake that consistently exceeds caloric requirements and expenditure.

29. Twin studies suggest that approximately ______________________% to ______________________% of the tendency toward obesity is inherited.

30. In childhood, ______________________ is the dominant feature in obesity; in adult life, however, ______________________ with normal intake is more likely.

31. T F The best approach to the management of obesity is preventive.

32. The key to success in losing weight is ______________________.

33. Define anorexia nervosa.
34. Identify five typical characteristics of individuals with anorexia nervosa.
   a. 
   b. 
   c. 
   d. 
   e. 

35. List the eight clinical manifestations of anorexia nervosa.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 
   h. 

36. List five family characteristics associated with eating disorders.
   a. 
   b. 
   c. 
   d. 
   e. 
37. Define *bulimia*.

38. Briefly describe the two categories of bulimics.
   a.

   b.

39. T  F  Medical complications occur in bulimics primarily as a result of their frequent vomiting.

40. Identify two nursing interventions that are important during the acute phase of treatment of bulimia.
   a.

   b.

41. Describe the diagnosis of eating disorders not otherwise specified.

**Disorders with Behavioral Components**

42. Define *attention deficit hyperactivity disorder (ADHD)*.

43. To be diagnosed as ADHD, the children must have shown symptoms before age ________________ years and must be present in at least ________________ settings.

44. List the five components of the multifactorial approach to the management of ADHD.
   a.

   b.

   c.

   d.

   e.
45. **T** **F** Posttraumatic stress disorder (PTSD) refers to the development of characteristic symptoms after exposure to an extremely traumatic experience or catastrophic event.

46. **T** **F** A striking feature of school phobia is the prompt subsiding of symptoms when it is evident that the child can remain at home.

47. Recurrent abdominal pain is almost always attributed to a(n) __________________________ cause.

48. Children at risk for recurrent abdominal pain are often characterized with what behaviors?
   a. 
   b. 
   c. 
   d. 
   e. 

49. Define conversion reaction.

50. Why is depression often difficult to detect in children?

51. List the eight better behavioral characteristics of children with depression.
   a. 
   b. 
   c. 
   d. 
   e. 
52. T  F  The basic disturbance in childhood schizophrenia is a lack of contact with reality and the subsequent development of a world of the child’s own.

**Serious Health Problems of Later Childhood and Adolescence**

53. What risk behaviors are related to smoking in adolescence?

54. T  F  Smoking-prevention programs that focus on the negative, long-term effects of smoking on health have been effective.

55. What are the two broad categories of adolescents who use drugs?

   a.

   b.

56. What are the most notable effects of alcohol on the central nervous system?

57. A crash after a cocaine high consists of a long period of _________________.

58. Addiction to narcotic drugs brings an additional risk for ________________ and ________________ infection because of self-neglect and contamination of needles.

59. Why is it important that nurses who care for adolescents know whether the adolescents use drugs compulsively?

60. T  F  Depression is common in adolescents who commit suicide.

61. Differentiate between suicidal ideation and parasuicide.

62. Nursing care of the suicidal adolescent includes the following:

   a.

   b.

   c.
APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Jim, age 15 years, has been experiencing a deep, persistent, dull ache over the right tibia that progressed to pain with each heel strike during a cross-country meet. The coach referred Jim to the sports medicine team at the university medical center for evaluation. A stress fracture of the right tibia was discovered.

1. How are overuse syndromes like Jim’s stress fracture therapeutically managed?

2. Although the nurse recognizes that Jim must rest from his stress fracture, what information about mobility should be stressed?

3. What medications are often given to help with the pain and discomfort from overuse syndromes?

4. What nursing interventions might the nurse, together with the coaches and athletic trainers, employ?
   a.
   b.
   c.
   d.

B. Spend a day in a gynecology clinic to oversee the diseases and disorders affecting the female reproductive system. Answer the following questions and include specific examples to illustrate these concepts.

1. Besides pregnancy, what could lead to secondary amenorrhea?

2. The nursing responsibilities in relation to sexually transmitted infections are all-encompassing. For each of the following nursing goals, identify one appropriate intervention to accomplish this goal.
   a. Informing the patient of the condition
   b. Primary prevention of sexually transmitted infections (STIs)
   c. Tertiary prevention through treatment
C. Answer the following questions about obesity in adolescence.
   1. Why is obesity considered a major problem of adolescence?

2. An obese adolescent tells the nurse that her obesity is a result of her low metabolism. What is the nurse’s best response to this statement?

3. Formulate five nursing diagnoses that could apply to the obese adolescent.
   a. 
   b. 
   c. 
   d. 
   e. 

D. Answer the following questions related to eating disorders.
   1. What lifestyle factor appears to be common to the initiation of both anorexia nervosa and bulimia nervosa?

2. What role does society have in the increased incidence of anorexia and bulimia?

E. Becky is a 16-year-old girl admitted to the adolescent unit after ingesting seven of her mother’s pain pills with an unknown quantity of alcohol. After the drugs have been removed from her system and she has stabilized, Becky tells the nurse that she is so stressed out by her parents’ recent divorce that she wishes she were dead.
   1. In assessing Becky’s family status, what factors might the nurse discover?

   2. What are the most important nursing interventions for preventing further suicide attempts?
Chapter 18 introduces nursing considerations essential to the care of the child with a chronic illness, disability, or terminal illness. At the completion of this chapter, the student will understand the impact that a diagnosis of a chronic illness or disability has on both the child and family and be able to develop appropriate nursing interventions to assist each family member in adjusting and developing to his or her fullest potential, despite the disability. The student will also be prepared to provide family-centered end-of-life care.

REVIEW OF ESSENTIAL CONCEPTS

Perspectives on the Care of Children with Special Needs

1. A new trend in the care of children with special needs is to focus on the child’s _______________ rather than on his or her chronologic age or diagnosis, thus stressing the child’s abilities and strengths rather than his or her disabilities.

2. Part of family-centered care is having effective _______________ and _______________ between parents and nurses to form trusting and effective partnerships.

3. Clinicians need to know that siblings of children with chronic illnesses are at risk for _______________.

4. List three factors that have been found to influence parent dissatisfaction with the communication between themselves and the health care system.
   a. _______________
   b. _______________
   c. _______________

5. What is a primary goal for nurses who work with people of other cultural backgrounds?

The Family of the Child with Special Needs

6. Identify two critical times for parents of children with special needs.
   a. _______________
   b. _______________
7. List the adaptive tasks of parents who have children with chronic conditions.
   a.

   b.

   c.

   d.

   e.

   f.

   g.

   h.

8. Identify two ways parents can promote healthy sibling relationships for children with special needs.
   a.

   b.

9. Define *empowerment*.

10. Identify three types of denial in family members that may be exhibited at the time a child is diagnosed with a chronic illness or disability. diagnosis.
    a.

    b.

    c.
11. Name the four most common responses of the parents that manifest during the adjustment stage.
   a. 
   b. 
   c. 
   d. 

12. What four types of parental reactions to the child with special needs may occur during the period of adjustment?
   a. 
   b. 
   c. 
   d. 

13. Identify six variables that influence the resolution of a crisis in families.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

**The Child with Special Needs**

14. T  F  The impact of a chronic illness or disability on a child is influenced by the age of onset.

15. Identify the two maladaptive coping patterns found in children with special needs that are associated with poorer adaptation.
   a. 
   b. 
16. How can having a sense of hope help adolescent children with special needs?

17. **T** **F** Children with *less* severe disorders often cope better than those with *more* severe conditions.

**Nursing Care of the Family and Child with Special Needs**

18. Why must assessment of the family and child with special needs be a continuous process?

19. List the three most common responses of families to the diagnosis of a disability.
   a. 
   b. 
   c. 

20. What is the best way for the nurse to end the informing conference with the family of a child with special needs?

21. Identify a way in which the nurse can promote normal development in children with special needs.

22. Rather than quickly dispelling family members’ expressions of guilt, what should the nurse allow them to do?

23. What is an extension of revealing the diagnosis?

24. One of the most difficult adjustments of parents with a special-needs child is the ability to set ______________________ for the child.

25. Because adolescence is a time of enormous physical and emotional changes, it is important for the nurse to make a distinction between ______________________ that are related to disability and those that are a result of normal body development.
Perspectives on the Care of Children at the End of Life

26. List three factors that affect the causes of death that nurses are likely to encounter in children.
   a. 
   b. 
   c. 

27. The goal of __________________ is for children to live life to the fullest without pain, with choices and dignity, in the familiar environment of their home, and with the support of their family.

28. Differentiate between assisted suicide and euthanasia.

Nursing Care of the Child and Family at the End of Life

29. List some of the fears usually experienced by the terminally ill child and his or her family.
   a. 
   b. 
   c. 

30. In the final hours of life, the dying patient’s respiration may become labored, with deep breaths and long periods of apnea; this is referred to as __________________ respiration. What should the nurse reassure families about when the dying patient has labored respirations?

31. T F After the child’s death, the family should be allowed to remain with the body and hold or rock the child if they desire.

Applying Critical Thinking to Nursing Practice

A. The hospice nurse is caring for a dying child and her family. The nurse must understand the following in order to give the family and child the best patient care.
   1. What kind of information to dying children need from a nurse?
2. When is it acceptable to withhold or withdraw treatments that cause pain and suffering and instead provide interventions that promote comfort?

B. Answer the following questions related to the care of a child with a chronic health problem in the home.

1. What does home care represent?

2. What three goals does home care seek to achieve?
   a. 
   b. 
   c. 

C. Interview the parents of a child with a disability to determine the family’s adjustment. Answer the following questions and include specific responses to illustrate these concepts.

1. Identify three areas that the nurse should assess when determining the adequacy of a family’s support systems.
   a. 
   b. 
   c. 

2. Why is it necessary for the nurse to assess the family’s specific perceptions concerning the illness or disability?

3. Briefly describe at least three behaviors that might be observed in a child who has coped with a disability.
   a. 
   b. 
   c. 
4. What are the basic nursing goals for families and children with special needs?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

D. Interview children in various age groups to determine their perceptions of death. Answer the following questions and include specific responses to illustrate these concepts.
   1. How do children between the ages of 3 and 5 years of age view death?

   2. If a preschooler becomes seriously ill, how is he or she likely to perceive the illness?

   3. By between ______________ and _______________ years of age, most children have an adult concept of death.

   4. Identify at least five nursing interventions that could be used when caring for a terminally ill adolescent in the hospital.
   a. 
   b. 
   c. 
   d. 
   e.
E. A child is dying in a hospital. The child’s family has many questions and concerns related to the child’s impending death. Answer the following questions related to this situation.

1. How can the nurse assist the parents of a child who is dying in the hospital after an accident, trauma or acute illness?
   a. 
   b. 
   c. 

2. How can the nurse control the environment to provide family-centered end-of-life care to this child and family?
   a. 
   b. 
   c. 
   d. 

3. What is the nurse’s role in providing family-centered care after the child’s death?

4. Describe the nurse’s role in discussing organ or tissue donation with the family of a terminally ill child.

5. A family might have concerns about whether they can have an open-casket burial if they decide to donate their child’s organs or tissue. What is the best response a nurse can give to this question?
Chapter 19 introduces nursing considerations essential to the care of the child with a cognitive impairment or a sensory or communication disorder. Cognitive or sensory impairments can pose a threat to the child’s potential development; therefore, it is important for students to understand specific issues related to the care of children with these types of disorders. This knowledge will enable the student to develop nursing strategies that will promote optimum achievement of the child’s potential.

REVIEW OF ESSENTIAL CONCEPTS

Cognitive Impairment
1. A child with cognitive impairment must demonstrate functional impairment in at least 2 of 10 different adaptive skill areas. Identify these 10 adaptive skill areas.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 
   h. 
   i. 
   j. 

2. Results of standardized tests are used in making the diagnosis of intellectual disability based on ______________________ deficits.
3. In addition to the intelligent quotient (IQ), what four dimensions of care for mental impairment are considered in classifying the intellectually disabled?
   a.
   b.
   c.
   d.

4. Identify at least four of the nine general categories of events that may lead to cognitive impairment.
   a.
   b.
   c.
   d.

5. Identify at least 4 of the 12 nursing roles used when caring for a child with impaired cognitive function and his or her family.
   a.
   b.
   c.
   d.

6. Describe the Individuals with Disabilities Education Act (Public Law 101-476).
7. When a nurse is teaching self-help skills to the family of a child with cognitive deficits, what two factors are important to assess before giving the instruction?
   a. 
   b. 

8. Safety is an important consideration in selecting ________________ and ________________ activities.

9. **T**  **F**  The majority (about 80%) of infants with Down syndrome are born to women younger than age 35.

10. What are the chief causes of death during the first year of life in infants with Down syndrome?

11. How is the presence of Down syndrome confirmed?

12. Children with Down syndrome are at risk for spinal cord compression. What signs of spinal cord compression should the nurse immediately report?

13. ________________ syndrome is the most common inherited cause of mental retardation and the second most common genetic cause of mental retardation after Down syndrome.

**Sensory Impairment**

14. Define the following terms.
   a. *Hearing impaired*
   
   b. *Deaf*
   
   c. *Hard-of-hearing*
15. Differentiate between conductive and sensorineural hearing loss.

16. When the conductive loss is permanent, hearing can be improved with the use of a _____________________.

17. Treatment for sensorineural hearing loss involves a _____________________ implant.

18. Differentiate among the following terms used to describe receptive-expressive disorders caused by an organic central auditory defect.
   a. Aphasia
   b. Agnosia
   c. Dysacusis

19. What is the legal definition of blindness?

20. The bending of light rays as they pass through the lens of the eye is called ____________________, and ____________________ are the most common cause of visual impairment in children.

21. Match the type of refractive error with its defining characteristics. (Answers may be used more than once.)
   a. _______ Myopia
      1. Also referred to as farsightedness
      2. Also referred to as nearsightedness
   b. _______ Hyperopia
      3. Refers to unequal curvatures in the cornea or lens so that light rays are bent in different directions, producing a blurred image
      4. Refers to the ability to see objects clearly at close range but not at a distance
      5. Refers to a difference of refractive strength in each eye
      6. Corrected with special lenses that compensate for refractive errors
      7. Refers to the ability to see objects clearly at a distance
      8. Biconcave lenses used in the correction of defect
      9. Treated with corrective lenses to improve vision in each eye so that the eyes work as a unit
      10. Convex lenses used in the correction of defect
   c. _______ Anisometropia
   d. _______ Astigmatism

22. Define strabismus.
23. Differentiate between cataracts and glaucoma.

24. What are some clues nurses can teach parents to determine whether infants are visually responding to them?

25. How do children who are both deaf and blind learn to communicate?

26. Describe the effects that auditory and visual impairment have on a child’s development.

27. Define *retinoblastoma* and include the first observed symptom of the disease.


29. T F Autism appears to be caused by the measles-mumps-rubella (MMR) and thimerosal-containing vaccines.

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. Spend a day in a school with children of various cognitive impairments. Answer the following questions.
   1. What are some early behavioral signs of cognitive impairment?

   2. List at least two clinical manifestations of Down syndrome under each body system.
      a. Head and eyes
      b. Nose and ears
      c. Mouth and neck
      d. Chest and heart
3. What is the nurse’s role in relation to family-centered care when parents are informed of a diagnosis of Down syndrome in their child?
   a. 
   
   b. 
   
   c. 
   
   d. 

B. Spend a day in a vision clinic to observe testing, evaluation, and treatment modalities for a child with a visual impairment. Answer the following questions and include specific examples to illustrate these concepts.
   1. Identify the various causes of visual impairment.

   2. For each of the following nursing goals, list at least three nursing interventions that would be used when caring for a child with a visual impairment and his or her family.
      a. Prevention of vision loss in infancy

      b. Detection of vision loss in childhood
3. Nursing care related to caring for a blind child must include interventions aimed at teaching the child and family how to promote the child’s independence in navigational skills. What are the two main techniques that promote this in blind children?
   a. 
   b. 

4. When the nurse is counseling the parents of an infant who is blind, what interventions would accomplish the goal “promote parent-child attachment”?
   a. 
   b. 

C. Tom, age 2 years, is admitted for treatment of retinoblastoma. How can the nurse prepare Tom’s parents for his postoperative appearance after enucleation of his affected eye?

D. Answer the following questions concerning the care for a child with autism spectrum disorders.
   1. What is known about the intellectual capacity of most autistic children?

   2. What assessment data are critical to implementing appropriate interventions and family involvement when caring for autistic children?

   3. Which children diagnosed with autism spectrum disorders have the most favorable prognosis?
Chapter 20 presents important concepts related to family-centered home care, discharge planning, case management, and promotion of optimum development in the home care setting. After completing this chapter, the student will be prepared to use the nursing process to develop plans for implementing safe, appropriate, and effective home care delivery.

REVIEW OF ESSENTIAL CONCEPTS

General Concepts of Home Care

1. Define home care.

2. What are three benefits of home health care programs?
   a.
   b.
   c.

3. With an increased demand for nurses in home health and a continued short supply of nurses, there has been an increased focus on the role of ____________________.

4. What three factors are contributing to the shortage of nurses for children in the home care setting?
   a.
   b.
   c.

5. ____________________ is where children with special health care needs obtain permanent family placement and ongoing relationships with caring adults. In this care plan, the child’s ____________________ environment is perceived as the best place for the child to be reared.
6. What five factors should be assessed for the nurse to be able to provide adequate home care for the child and his or her family?
   a. 
   b. 
   c. 
   d. 
   e. 

7. T F One family member should learn and demonstrate all aspects of the child’s care in the hospital as part of discharge planning.

8. What seven factors are important in the discharge planning process of a child who needs home care?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 

9. T F An excellent method of providing home care instructions is with video recordings.

10. What is the primary goal of coordination of care?
11. What three purposes should be served by coordinating care among multiple providers?
   a. 
   b. 
   c. 

12. T F Care coordination is most effective if a single person works with the family to accomplish the many tasks and responsibilities involved.

13. A(n) ________________________ is a multidisciplinary care plan aimed at measuring the quality of patient care outcomes derived from standardized patient outcomes; it evaluates the quality of patient care with respect to cost-effectiveness and timeliness.

14. T F Nurses in pediatric home health face fewer demands for providing high-quality care with more resources to achieve positive patient outcomes.

**Family-Centered Home Care**

15. What is the family’s central role in home care?

16. Describe the three central concepts of Roush and Cox’s framework for helping the home health care nurse understand the significance of the home to the family.
   a. 
   b. 
   c. 

17. T F Believing that no one knows the child better than the family does is critical to the success of any home care plan.

18. T F In some cultures, religion and beliefs about health care and illness are closely intertwined.
19. What five broad areas of diversity need to be respected when providing home care?
   a. 
   b. 
   c. 
   d. 
   e. 

20. Collaborative caring is essential in the home care setting. What 11 factors are included in collaborative caring?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 
   h. 
   i. 
   j. 
   k. 

21. **F** It is sometimes okay for the nurse to withhold information from the family concerning aspects of the child’s condition and care information.
The Nursing Process
22. The nursing assessment should address family _________________ and _________________.

23. The nurse should recognize that the _________________ of the family’s most important needs will guide their behavior and consume their attention and energy.

24. As part of the evaluation process, families should be acknowledged for their _________________ and _________________.

Promotion of Optimum Development, Self-Care, and Education
25. List four ways in which home care plans are designed to promote optimum development.
   a. 
   b. 
   c. 
   d. 

26. The extent to which a child is involved in his or her own care depends on what four factors?
   a. 
   b. 
   c. 
   d. 

27. What items augment effective teaching for self-care that is focused at the child’s level of conceptual understanding?

28. Each family is entitled to a(n) _________________ plan to help ensure early intervention.

29. What important intervention in relation to the telephone and electric companies must home care nurses implement in families with children on ventilators?
30. Before hospital discharge, ________________ protocols should be developed and reviewed with both the ________________ and professional caregivers.

31. What time of day poses particular safety problems in the home care setting?

**Family-to-Family Support**

32. Describe the vulnerable child syndrome.

33. Which family member’s needs should the nursing care plan acknowledge?

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. Dee, a 3-months-old infant born 8 weeks prematurely, is being discharged home in 5 days. She is on a nasal cannula and an apnea monitor. Her home care will require oxygen therapy, along with management and usage of the apnea monitor. Dee’s parents are 18 years old and anxious about their ability to care for her at home.

1. What are some areas that the nurse responsible for discharge planning must address with this family?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

2. What are two possible approaches that could help Dee’s parents develop new caregiving skills and confidence in their abilities?
   a. 
   b. 
3. In addition to providing direct care for Dee, what are the home health care nurse’s two areas of teaching responsibility during the first few days after discharge?
   a. 
   
   b. 

4. The home care agency case manager coordinates Dee’s ongoing care. What needs and issues of the child and family must be addressed through care coordination?
   a. Needs of the child
   
   b. Issues of the child and family

B. Follow a home health care nurse in the home of a family receiving home care for a child with complex medical needs. Observe the nurse’s caregiving behaviors and the interactions between the nurse and the family. Answer the following questions and provide specific examples that illustrate these concepts.
   1. Identify two approaches the nurse could use to gather much needed data related to the child’s care.
   
   2. What must the home care nurse do to preserve trust, dignity, and respect when in the homes of various families?
   
   3. When disagreement arises between the parents and the home care nurse regarding proper procedures for the child’s care, what should the nurse do in each of the following situations?
      a. If the situation does not lead to danger or risk for the child
      
      b. If the disagreement cannot be resolved
      
      c. If the parents decide to change a treatment plan that is part of medical orders
Chapter 21 provides an overview of how children of various ages react to illness, pain, and hospitalization. After completing this chapter, the student will understand the different ways in which children and families react to the stress of illness, pain, and hospitalization. This chapter prepares the student to provide family-centered care of the child during illness and hospitalization.

REVIEW OF ESSENTIAL CONCEPTS

Stressors of Hospitalization and Children’s Reactions

1. Identify four major stressors of hospitalization.
   a.
   b.
   c.
   d.

2. What five factors affect the child’s reaction to the stress of hospitalization?
   a.
   b.
   c.
   d.
   e.

3. From middle infancy through preschool years, ___________________ is the major stressor related to hospitalization.

4. Identify some physiologic responses to stress in children.
5. **T**  **F**  Because toddlers are more interpersonally secure than preschoolers, the former can tolerate brief periods of separate from their parents.

6. Lack of __________________________ increases the perception of threat and can affect children’s coping skills.

7. The needs of children vary with age. Match each response to a loss of control with the age group that the response exemplifies. (Answers can be used more than once.)

   a. ______ They strive for autonomy and react with negativism to any physical restriction.

   b. ______ Explanations are understood only in terms of real events.

   c. ______ Their initial reaction to dependency is negativism and aggression.

   d. ______ They respond with depression, hostility, and frustration to physical restrictions.

   e. ______ They often voluntarily isolate themselves from age mates until they can compete on an equal basis.

   1. Toddlers
   2. Preschoolers
   3. School-age children
   4. Adolescents

8. What is more important than age and intellectual maturity in predicting the level of anxiety a child has before hospitalization?

9. List the individual risk factors that increase a child’s vulnerability to the stresses of hospitalization.
   a. 

   b. 

   c. 

   d. 

   e. 

10. **T**  **F**  Without special attention devoted to meeting the child’s psychosocial and developmental needs in the hospital environment, the detrimental consequences of prolonged hospitalization may be severe.
Stressors and Reactions of the Family of the Child Who Is Hospitalized

11. Identify some common themes concerning stressors and reactions of the family of a child who is hospitalized.

12. Identify four factors specific to the hospital experience that have been found to have a negative effect on siblings of a child who is hospitalized.
   a. 
   b. 
   c. 
   d. 

Nursing Care of the Child Who is Hospitalized

13. The rationale for preparing children for the hospital experience and related procedures is based on the principle that fear of the ____________________________ exceeds fear of the ____________________________.

14. Identify one of the main purposes for gathering the child’s historical health data.

15. A primary nursing goal when a child is hospitalized (particularly children 5 years old or younger) is to prevent negative effects from ____________________________.

16. Describe family-centered care as a philosophy of care.

17. What four actions can the nurse take to minimize feelings of loss of control?
   a. 
   b. 
   c. 
   d.
18. Helping children maintain their usual contacts minimizes the effects of ________________ imposed by hospitalization.

19. Because of toddler’s and preschool children’s poorly defined body boundaries, the use of ________________ is helpful after drawing blood.

20. What is an important nursing intervention for children who fear mutilation of body parts?

21. Why is it important for nurses to be keenly aware of the medical terminology and vocabulary that they use every day when working with children?

22. List two ways the nurse can alter the perception of a child who is upset about his or her illness.
   a. ________________
   b. ________________

23. T F A primary goal of nursing care for the child who is hospitalized is to minimize threats to the child’s development.

24. Identify three nursing interventions that can be used to help children resume school activities while hospitalized.
   a. ________________
   b. ________________
   c. ________________

25. ________________ is one of the most important aspects of a child’s life and one of the most effective tools for managing stress.

26. Identify the various functions of play in the hospital.
   a. ________________
   b. ________________
   c. ________________
   d. ________________
27. What nursing intervention can be used as a diversion for a child who is hospitalized for a length of time and whose parents are unable to visit frequently?

28. Match each type of play with its description or purpose.

   a. ________ Offers the best opportunity for emotional expression, including the release of anger
   b. ________ A psychologic technique reserved for use by trained therapists as an interpretative method
   c. ________ A nondirective method for helping children deal with their concerns and fears
   d. ________ Allows children to reenact frightening or puzzling hospital experiences

29. What are some potential benefits of hospitalization to the child or family?

Nursing Care of the Family
30. List the main goals for nursing care of the family.

   a. 
   b. 
   c. 
   d.
31. Identify the three benefits of ambulatory care.
   a. 
   b. 
   c. 

32. When a child is placed in isolation, what is the best approach the nurse can take in preparing the young child to feel in control?

33. T F Because the young child’s ability to tolerate parental absence is strong, it is okay to limit the amount of parental visits.

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Paul, age 1 year, is admitted to the pediatric unit with a diagnosis of pneumonia. When his mother leaves the room, he screams and cries. As the nurse approaches Paul, he screams louder and turns away.
   1. The nurse assesses Paul’s behavior and understands it is a characteristic of the _________________ stage of separation.
   2. Paul had complications related to pneumonia and has now been hospitalized for a month. The nurse notices that when his mother leaves the room now, he does not cry and seems to be withdrawn from all people much of the time. The nurse understands his behavior is now characteristic of the _________________ stage of separation.
   3. What nursing intervention is appropriate for both stages of separation?

B. Kristi, 2 years old, is admitted to the pediatric unit with a diagnosis of influenza. She has been in the unit for the past 4 days and is now refusing to eat, demanding a bottle, and asking her mother to feed her. She is demonstrating anxiety related to the loss of control of her environment.
   1. What is Kristi demonstrating through her behaviors?
2. Identify at least three appropriate nursing interventions that will help Kristi feel a sense of control over her environment.
   a. 
   b. 
   c. 

C. Robert, 4 years old, is admitted to the pediatric unit with a diagnosis of gastroenteritis.
   1. List at least three nursing interventions to accomplish the nursing goal “Family will receive adequate support.”
      a. 
      b. 
      c. 

   2. List at least three nursing interventions to accomplish the nursing goal “Child will experience positive relationships.”
      a. 
      b. 
      c. 

   3. Identify play activities appropriate for Robert during hospitalization.
Chapter 22 provides detailed information relating to specific nursing interventions employed in the nursing care of children. The chapter highlights the importance of providing family-centered nursing care and of understanding that hospitalized children are separated from their usual environment and do not possess the capacity for abstract thinking and reasoning. After completing this chapter, the student will have the theoretical basis to safely implement nursing procedures with the pediatric population.

REVIEW OF ESSENTIAL CONCEPTS

General Concepts Related to Pediatric Procedures

1. Define informed consent.

2. What three conditions must be met for informed consent to be valid and legal?
   a. 
   b. 
   c. 

3. T F When there are multiple procedures in one surgery, one universal consent is sufficient.

4. Define emancipated minor.

5. List three interventions that can be used to reduce anxiety in children undergoing procedures.
   a. 
   b. 
   c. 

6. T F Procedures should be performed in the child’s room whenever possible.

7. What can the nurse do to help give children a sense of control during hospital procedures?
8. Hospital personnel should encourage and allow children to express feelings, because ____________ is children’s primary means of communication and coping.

9. One of the most effective interventions to encourage children to express their feelings is ____________ play.

10. Match each common nursing procedure with the play activity that would best prepare the child for the experience.
   
   a. _______ Injections 1. Blowing bubbles
   b. _______ Ambulation 2. Giving a toddler a push-pull toy
   c. _______ Deep breathing 3. Letting a child handle the syringe and vial and give an “injection to a doll”
   d. _______ Increasing fluid intake 4. Cutting gelatin into fun shapes

11. Clinical observations show that ____________ decreases anxiety in children and reduces the need for heavy doses of preoperative sedation.

12. When might preoperative medication be unnecessary?

13. What is a major responsibility for a nurse after pediatric surgery?

14. Identify family characteristics associated with an adolescent’s good compliance with the treatment plan.

15. Strategies to enhance a child’s compliance are grouped into what four categories?
   
   a.

   b.

   c.

   d.

**General Hygiene and Care**

16. List some of the risk factors for skin breakdown in children.
   
   a.

   b.
17. _____________, or flush, is the earliest sign of tissue compromise and pressure-related ischemia.

18. Staging of pressure ulcers is used to classify the _____________ of _____________ that has occurred.

19. What is the nurse’s responsibility regarding the oral care of older children?

20. T  F In a child who is dehydrated, it is helpful if the nurse forces fluids by awakening the child several times throughout the night to drink liquids.

21. What are some indications to not advance the diet?
   a. 
   b. 
   c. 
   d. 
   e. 
22. Elevated temperature is a common symptom of _____________ in children.

23. Match each term regarding body temperature with its definition.
   a. _____ Set point
   b. _____ Fever
   c. _____ Hyperthermia

24. Indicate whether each of the following statements regarding elevated temperature is true or false.
   a. T  F Environmental measures to reduce fever may be used if they are tolerated by the child and if they do not induce shivering.
   b. T  F Children’s Motrin and Children’s Advil are approved for fever reduction in children younger than 6 months of age.
   c. T  F The sponge bath should be restarted until the skin surface is warm or if the child feels chilled.
   d. T  F Antipyretics are of no value in hyperthermia.
   e. T  F Tepid water baths are not effective in hyperthermia.

Safety
25. Identify a special hazard associated with children in electronically controlled beds.

26. What can be used as a handy guide to determine whether a toy is a potential choking danger to a young child?

27. What are some risk factors for falls in hospitalized children?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
28. Define the following terms related to infection control and provide an example of each.
   a. Standard precautions

   b. Transmission-based precautions

29. ______________________ is the most critical infection-control practice.

30. Define restraint.

31. T  F  The nurse must have an order before applying a restraint to a patient.

32. What is the proper technique for holding an infant during a lumbar puncture to enlarge spaces between the vertebrae?

### Collection of Specimens

33. The ______________________ reflex, in infants 4 to 6 months of age, causes crying, extension of the back,
   flexion of the extremities, and urination.

34. Suprapubic aspiration is useful in clarifying the diagnosis of a suspected ______________________ in acutely ill infants.

35. T  F  When drawing a blood culture, the nurse should discard the first sample of blood and collect the second sample.

### Administration of Medication

36. Why are newborns and premature infants particularly vulnerable to the harmful effects of drugs?

37. The most reliable method for determining children’s dosages is to calculate the proportional amount of

   ______________________ to body weight.

38. What are the preferred sites for intramuscular injections in infants and small children?
   a. ______________________

   b. ______________________
39. T F The oral route is preferred for administering medications to children because of the ease of administration.

40. Identify a nursing intervention that can be used to help infants up to 11 months of age and children with neurologic impairments to swallow.

41. T F After administering a medication that has an opaque preparation like penicillin, the nurse should aspirate for blood.

**Maintaining Fluid Balance**

42. What are some disadvantages of the weighed-diaper method of fluid measurement?
   a. 
   b. 
   c. 

43. _________________ provides a rapid, safe, and lifesaving alternate route for the administration of fluids and medications until intravascular access can be attained, especially in children who are 6 years of age or younger.

**Procedures for Maintaining Respiratory Function**

44. The organs (tissues) most vulnerable to damage from excessive oxygenation (oxygen toxicity) are the _________________ and the _________________.

45. Describe oxygen-induced carbon dioxide narcosis.

46. List the three advantages of oximetry over transcutaneous monitoring.
   a. 
   b. 
   c. 

47. T F Bronchial drainage is more effective immediately after aerosol therapy.
48. What are some techniques of chest physiotherapy?
   a. 
   
   b. 
   
   c. 
   
   d. 
   
   e. 
   
   f. 

49. Air or gas delivered directly to the trachea must be __________________________.

50. A child with a tracheostomy may be unable to signal for help; therefore, direct observation and use of ________________, and ________________ monitors are essential.

Procedures Related to Alternative Feeding Techniques

51. What function does pH paper serve in nasogastric tube placement?

52. Children at high risk for regurgitation or aspiration, such as children with gastroparesis, mechanical ventilation, or brain injuries, may require placement of a(n) __________________ feeding tube.

53. Total parenteral nutrition (TPN) involves the intravenous (IV) infusion of highly concentrated solutions of a variety of elements, minerals, and other nutrients. List three elements that can be included in this mixture.
   a. 
   
   b. 
   
   c.
Procedures Related to Elimination

54. Fleet enema is not recommended for children. What are the possible complications of this form of enema when used in children?
   a.
   b.

55. The most frequent causes of ostomies in infants are _____________________ and ____________________.

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Henry is admitted with a diagnosis of meningitis and a fever of 39.4° C (103° F).
   1. How and when should the nurse evaluate whether intervention of administration of an antipyretic has been effective?

   2. What nursing interventions will help reduce Henry’s fever?

   3. During discharge teaching, what educational instructions should the nurse give to the parents regarding care of a child who has a fever?

B. Danny, age 3 months, is a patient on the pediatric unit. He is in elbow restraints after a cleft lip repair.
   1. A Nursing Diagnosis is “risk of harm if sutures are removed, dislodged, or ruptured.” What nursing interventions could be performed to ensure safety while the child is in restraints?

   2. What safety measures must be taken to ensure that the restraints are properly secured?

C. Evan, age 6 months, is a patient on the pediatric unit. He is admitted to the unit in severe respiratory distress. He is placed in a mist tent in 35% oxygen.
   1. What interventions could the nurse implement to decrease Evan’s fear of the mist tent?
      a.
      b.
      c.
2. How should the nurse perform chest physiotherapy on Evan?

3. How should the nurse evaluate whether the chest physiotherapy was successful in removing excess fluid?

D. The nurse is caring for a child with a tracheostomy.
   1. What complications should the nurse monitor in the child?

2. What is the focus of nursing care when caring for a child who has a tracheostomy?

3. What should the nurse assess in the child to determine whether the lungs need to be suctioned?

4. When suctioning the child’s tracheostomy, the nurse should hyperventilate him or her with 100% oxygen before and after suctioning. What is the underlying rationale for this action?
The Child with Respiratory Dysfunction

Chapter 23 introduces nursing considerations essential to the care of the child experiencing respiratory dysfunction. Respiratory dysfunction is often more serious in young children. After completing this chapter, the student will be able to formulate nursing goals and identify nursing responsibilities to help the child and family effectively cope with the physical, emotional, and psychosocial stressors imposed by an alteration in respiratory function.

REVIEW OF ESSENTIAL CONCEPTS

Respiratory Infection
1. __________ account for the majority of acute illnesses in children.

2. What factors influence the etiology and course of respiratory infections in children?
   a. 
   b. 
   c. 
   d. 

3. Explain why anatomic size is a significant variable in respiratory tract infections of children.

4. Indicate whether each of the following statements is true or false.
   a. T F Newborns may not develop a fever, even with severe infections.
   b. T F The 6-month-old to 3-year-old will develop a fever even with a mild respiratory illness.
   c. T F Meningeal signs without infection of the meninges may be present in small children who have an abrupt onset of fever.
   d. T F Vomiting is unlikely to occur with a respiratory tract infection.
   e. T F A small child with a respiratory tract infection is unlikely to complain of abdominal pain.

5. What can a nurse instruct a family to do at home with a child who is experiencing mild respiratory symptoms, such as a stuffy nose caused by mucosal swelling?

6. What instructions can a nurse give a family on how to suction an infant who is going home but still has mucosal swelling?
Upper Respiratory Tract Infections

7. Differentiate between the clinical manifestations of nasopharyngitis in younger and older children. Match each item with the correct responses (more than one answer will apply to each).

   a. ______ Younger child
   b. ______ Older child

   1. Fever
   2. Irritability and poor feeding
   3. Dryness and irritation of the throat and nose
   4. Cough
   5. Decreased fluid intake
   6. Mouth breathing
   7. Vomiting or diarrhea
   8. Muscle aches

8. Antihistamines are ________________ in the treatment of nasopharyngitis.

9. Why are throat cultures often performed in children who present with respiratory symptoms?

10. What is the treatment for streptococcal sore throat?

11. Children with pharyngitis are considered noninfectious to others at the onset of symptoms and up to ________________ hours after initiation of antibiotic therapy. However, they should not return to school or daycare until they have been taking antibiotics for a full ________________ period.

12. The ________________ filter and protect the respiratory and alimentary tracts from invasion by pathogenic organisms and play a role in antibody formation.

13. What are the typical symptoms of tonsillitis?

14. List three instances in which a tonsillectomy is recommended.
   a. 
   b. 
   c. 

15. The major complication of a tonsillectomy and adenoidectomy is ________________, which is signaled by ________________ swallowing.

16. Why should children who have viral symptoms not receive aspirin?
17. Define the following terms.
   a. Otitis media
   b. Acute otitis media
   c. Otitis media with effusion
   d. Chronic otitis media with effusion

18. What does otoscopy reveal in acute otitis media (AOM)?

19. Current literature indicates that waiting up to ____________ hours for spontaneous resolution is safe and appropriate management of AOM in healthy infants over 6 months and in children.

20. When antimicrobial drug therapy is needed, what is the first drug of choice in the treatment of AOM?

21. What is a potential complication of antibiotic therapy in children?

22. The principal cause of infectious mononucleosis is the ____________ virus, which is thought to be transmitted through saliva by direct intimate contact.

23. Identify seven early symptoms of mononucleosis.
   a.
   b.
   c.
   d.
24. Describe the “spot test” for diagnosing infectious mononucleosis.

25. What clinical manifestations of infectious mononucleosis require medical attention?

**Croup Syndromes**

26. What are the characteristics of croup symptoms?

27. Define *epiglottitis*.

28. What three clinical observations are predictive of epiglottitis?
   a.
   b.
   c.

29. Describe the following areas of assessment characteristic of a child with epiglottitis.
   a. Voice
   b. Chest
   c. Color
   d. Throat
30. Why should the nurse not use a tongue depressor to examine the throat of a child with suspected epiglottitis?

31. What is the most common type of croup syndrome?

**Infections of the Lower Airways**

32. ____________ is an acute viral infection with maximum effect at the bronchiolar level. The infection occurs primarily in winter and spring.

33. T  F  Severe respiratory syncytial virus (RSV) infections in the first year of life represent a significant risk factor for the development of asthma up to age 13.

34. Describe the pathophysiology of RSV.

35. T  F  Antibiotics are the treatment of choice for RSV.

36. ____________ and ____________ precautions are employed with patients who have RSV.

37. The most useful classification of pneumonia is based on the ____________.

38. Identify at least three viruses that cause pneumonia in infants or children.
   a.

   b.

   c.

39. List seven clinical manifestations of severe acute respiratory syndrome (SARS).
   a.

   b.

   c.

   d.

   e.
Other Infections of the Respiratory Tract

40. _______________ is an acute respiratory infection caused by *Bordetella pertussis* that occurs primarily in children younger than 4 years of age who have not been immunized.

41. The causative organism in tuberculosis (TB) is _______________.

42. In TB, the ________________ is the usual portal of entry for the organism.

43. Medical management of TB in children consists of which six factors?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

44. ________________ and a(n) ________________ room are required for children who are contagious and hospitalized with active TB disease.

45. The only certain means to prevent TB is to ________________ with the tubercle bacillus.

46. The success of TB therapy depends on ________________ with the drug regimen.

Pulmonary Dysfunction Caused by Noninfectious Irritants

47. T  F  Small children characteristically explore matter with their mouths and are prone to aspirate a foreign body.

48. What does laryngotracheal obstruction most commonly cause?
   a. 
   b. 
   c. 
   d. 
49. ______________ is required for a definitive diagnosis of objects in the larynx and trachea.

50. What two lifesaving procedures should a nurse be able to implement to treat aspiration of a foreign body?
   a. 
   b. 

51. What are three symptoms of a child in severe respiratory distress?
   a. 
   b. 
   c. 

52. T  F Acute respiratory distress syndrome (ARDS) is the least severe in the spectrum of illnesses in relation to the degree of hypoxemia.

53. ______________ during childhood may be the most important precursor of chronic lung disease in the adult.

**Long-Term Respiratory Dysfunction**

54. List the reasons for the increase in the prevalence and the morbidity and mortality rates related to asthma in the United States.
   a. 
   b. 
   c. 
   d. 

55. Indicate whether each of the following statements is true or false.
   a. T  F Boys are affected by asthma more frequently than girls until adolescence.
   b. T  F Children may experience asthma symptoms that range from acute episodes of shortness of breath, wheezing, and cough followed by a quiet period, to a relatively continuous pattern of chronic symptoms that fluctuate in severity.

56. ______________ control is basic to any therapeutic plan for asthma.

57. What is the goal of drug therapy in asthma management?
58. What class of drugs is used to decrease inflammation in asthma?

59. _______________ are the major therapeutic agents for the relief of bronchospasm.

60. What are the benefits of using levalbuterol (Xopenex) instead of albuterol?

61. Describe exercise-induced bronchospasm.

62. Describe the recent changes in recommendations related to hyposensitization of children.

63. Define status asthmaticus.

64. What are the drugs of choice for treating status asthmaticus?

65. Identify the principles of self-management of asthma.
   a.
   b.
   c.

66. Identify 10 objective signs of bronchospasm in children.
   a.
   b.
   c.
   d.
67. What clinical features characterize cystic fibrosis?
   a. 
   b. 
   c. 
   d. 

68. The primary factor of cystic fibrosis, and the one that is responsible for many of its clinical manifestations, is ____________, which is caused by the increased viscosity of mucous gland secretions.

69. What role does meconium ileus have in the manifestation of cystic fibrosis?

70. Describe the effects of thickened secretions on the gastrointestinal tract of the child with cystic fibrosis.

71. Describe the stools of the child with cystic fibrosis.

72. What is a common gastrointestinal complication associated with cystic fibrosis?
73. A unique diagnostic characteristic of the child with cystic fibrosis is an increased amount of __________ and __________ in the sweat.

74. What is the goal of pulmonary therapy in treating cystic fibrosis?

75. Pancreatic enzymes are administered to the child with cystic fibrosis. Answer the following questions regarding the guidelines for administering the enzymes.
   a. When are they administered?

   b. Upon what does the dosage depend?

   c. Why is the amount of enzyme adjusted?

76. Describe the suggested diet for children with cystic fibrosis.

77. The ultimate prognosis for the child with cystic fibrosis is determined by the degree of __________.

78. Identify common symptoms of obstructive sleep-disordered breathing. Yes!
   a.

   b.

   c.

   d.

79. A common treatment for sleep-disordered breathing in children is __________.

**Respiratory Emergency**

80. Describe the two types of respiratory insufficiency.
   a.

   b.
81. Differentiate between respiratory arrest and apnea.

82. What are the cardinal signs of respiratory failure?

83. Indicate whether each of the following statements is true or false.
   a. T F When a child’s airway is obstructed, the nurse should attempt to remove the object by a blind finger sweep of the mouth.
   b. T F The victim of a motor vehicle accident should be placed in the recovery position if rescue breathing or cardiopulmonary resuscitation (CPR) is required.

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Rick, age 12 months, comes to urgent care with a fever of 39.4° C (103° F), rhinitis, nasal congestion, irritability, and difficulty feeding. He is diagnosed with an acute upper respiratory tract infection.
   1. List two possible nursing diagnoses for Rick.
      a. 
      b. 
   2. Identify two nursing interventions that could help alleviate his nasal congestion.
      a. 
      b. 

B. Ally, a 1-year-old girl, comes into the pediatrician’s office with complaints of ear pain, a low-grade fever of 37.2° C (99° F), irritability, rhinitis, cough, difficulty sleeping, and poor appetite over the past 3 days. On inspection, the physician notes a purulent, discolored effusion and a bulging, reddened, immobile tympanic membrane. She is diagnosed with acute otitis media (AOM).
   1. What does current literature suggest in treating AOM in a 1-year-old child?
   2. What signs of AOM would you teach her parents to look for that indicate a possible infection?

C. Jenna, age 16 years, is admitted to the adolescent unit with a severe sore throat, persistent fever, fatigue, and general malaise. A diagnosis of infectious mononucleosis is made.
   1. How is infectious mononucleosis diagnosed?
2. Jenna asks the nurse how she got mononucleosis. What is the nurse’s best response to this question?

3. How would the nurse prepare Jenna for the monospot test?

4. What are the nursing goals in caring for Jenna?
   a. 
   b. 

D. Sandy, the mother of Billy, age 2, comes to the emergency department with a chief complaint that her son went to bed with a low-grade fever and woke up 4 hours later with a barky, brassy cough. The nurse notes Billy has inspiratory stridor and suprasternal retractions. On further examination, it is discovered that Billy has an inflamed mucosal lining of the larynx and trachea. He is now coughing loudly and has a hoarse voice. Sandy says he developed a runny nose 3 days ago.
1. It is highly likely that Billy has what condition?

2. At what point did Billy’s symptoms of hypoxia become evident and why?

3. What can this type of obstruction lead to?

4. What is the most important nursing function in the care of children with acute laryngotracheobronchitis?

5. What is the rationale for the use of high humidity with cool mist?
E. Darrin, a 3-month-old infant, is brought into the emergency department by his parents. He has had rhinorrhea and low-grade fever for the past 3 days. This evening, his mother noticed that his left eye was red and that he had begun coughing. Darrin has been refusing to nurse over the past 6 hours, appears slightly lethargic, and is extremely irritable. The enzyme-linked immunosorbent assay (ELISA) was positive for respiratory syncytial virus (RSV) antigen detection.

1. The physician orders ribavirin. Why is the use of this drug controversial?

2. What nursing intervention could the nurse implement to ensure that Darrin’s nutritional needs are met?

F. Alice, a 6-year-old girl, came to the emergency department with acute respiratory distress. Her mother noted that she appeared “fine” but over the past 2 hours had begun to cough without production and seemed unable to catch her breath. There is a family history of asthma (her father) and hay fever (her mother).

1. What are some typical signs and symptoms of an acute asthmatic attack?

2. As the attack progresses, what additional symptoms would the nurse expect to assess?

3. Alice will be treated with a β-adrenergic agent. Before administering this drug, the nurse should know its intended effects and side effects.
   a. Intended effects
   b. Side effects

4. List the overall goals of asthma management that guide the nursing care plan for the child with asthma and the child’s family.
   a.
   b.
   c.
   d.
   e.
5. What are some expected outcomes for the patient goal “Child will not have chronic symptoms and recurrent exacerbations”?
   
   a.
   
   b.
   
   c.

6. What nonpharmacologic interventions could the nurse teach this family to prevent further asthma attacks?
Chapter 24 presents disorders of the gastrointestinal tract that affect children. These disorders constitute one of the largest categories of illness in infancy and childhood. After completing this chapter, the student will be able to assess the child with alterations in gastrointestinal function, such as disorders that affect gastrointestinal motility and inflammatory and functional disorders. The chapter will help the student develop family-centered nursing plans and interventions to assist the child with gastrointestinal dysfunction.

REVIEW OF ESSENTIAL CONCEPTS

Gastrointestinal Dysfunction
1. List five factors that contribute to dehydration in children.
   a.
   b.
   c.
   d.
   e.

2. Why are infants and young children more vulnerable than older children and adults to alterations in fluid and electrolyte balance?

3. Infants lose a large amount of fluid at birth and maintain a larger amount of ________________ than the adult until about 2 years of age. This contributes to greater and more rapid ________________ during this age period.

4. Why is the basal metabolic rate (BMR) in infants and children higher than it is in adults?

5. ________________ is the chief solute in extracellular fluid, and ________________ is primarily intracellular.

6. The child with isotonic dehydration displays symptoms characteristic of ________________

Disorders of Motility
7. Diarrheal disturbances involve various areas of the gastrointestinal system. Match the anatomic area with the correct term.
   a. ______ Stomach and intestines
   b. ______ Colon
   c. ______ Small intestine
   d. ______ Colon and intestines
   1. Enterocolitis
   2. Colitis
   3. Enteritis
   4. Gastroenteritis
8. What causes acute infectious diarrhea (infectious gastroenteritis)?

9. Malabsorption syndromes, inflammatory bowel disease, immunodeficiency, food allergy, lactose intolerance, causes __________________________ diarrhea.

10. Which of the following is a common clinical manifestation of diarrhea?
   a. Shock
   b. Overhydration
   c. Metabolic alkalosis
   d. Dehydration

11. __________________________ is the most important cause of serious gastroenteritis among children and a significant nosocomial (hospital-acquired) pathogen, accounting for 55,000 to 70,000 hospitalizations annually.

12. Watery, explosive stools suggest __________________________; foul-smelling, greasy, bulky stools suggest __________________________.

13. Identify four major goals in the management of acute diarrhea.
   a.
   b.
   c.
   d.

14. List the six elements of the model for rehydration proposed by the American Academy of Pediatrics.
   a.
   b.
   c.
   d.
   e.
   f.

15. The best intervention for diarrhea in infants and children is __________________________.
16. T  F  **Constipation** is defined as the frequency of bowel movements.

17. __________________ is the most common cause of constipation in children between 1 and 3 years of age.

18. The functional defect in aganglionic megacolon is __________________ (or peristalsis) in the affected section of the colon.

19. __________________ is a developmental disorder of the enteric nervous system that is characterized by the absence of ganglion cells.

20. What clinical manifestations characterize enterocolitis?

21. __________________ is a well-defined, complex, coordinated process that is under central nervous system control and is often accompanied by nausea and retching.

22. What are the goals in the management of vomiting?

23. Define *gastroesophageal reflux* (GER).

24. When does GER become a disease?

**Functional Abdominal Pain Disorders**

**Inflammatory Disorders**
26. Identify the clinical manifestations of appendicitis.
   a. 
   
   b. 
   
   c.
d.

e.

f.

g.

h.

i.

j.

k.

l.

27. What is McBurney point?

28. Identify the symptomatic complications of Meckel diverticulum.
   a.
   
   b.
   
   c.
   
   d.
29. How is Meckel diverticulum treated? ____________________.

30. Which has a better prognosis, Crohn disease or ulcerative colitis?

31. Children with ____________________ are usually seen with diarrhea, rectal bleeding, and abdominal pain, often associated with tenesmus and urgency.

32. Growth ____________________ is a common serious complication, especially in Crohn disease.

33. A(n) ____________________ ulcer involves the mucosa of the stomach; a(n) ____________________ ulcer involves the pylorus or duodenum.

Hepatic Disorders

34. Hepatitis ____________________ virus is the most common form of acute viral hepatitis in most parts of the world. It is spread via the ____________________ route.

35. Identify the two possible routes of maternal-fetal-infant transmission of hepatitis B virus.
   a.
   b.

36. What four groups does the American Academy of Pediatrics suggest screening for hepatitis C?
   a.
   b.
   c.
   d.
37. What is a diagnosis of hepatitis based on?
   a. 
   b. 
   c. 

38. T  F  Hand washing is the single most effective measure in the prevention and control of hepatitis.

39. List four factors that can result in cirrhosis of the liver in children.
   a. 
   b. 
   c. 
   d. 

40. What are the two main goals of therapeutic management of cirrhosis?
   a. 
   b. 

**Structural Defects**
41. T  F  In children with deformities of both the lip and the palate, the lip is repaired first.

42. T  F  The incidence of children born with cleft lip to mothers who smoke during pregnancy is twice as great as the incidence in mothers who do not smoke during pregnancy.

43. _________________ is the most immediate nursing problem in the care of the newborn with cleft lip and palate deformities.

44. Treatment of the child with cleft lip is _________________ and involves no long-term interventions other than possible scar revision.
45. What are the three Cs of a tracheoesophageal fistula?
   a. 
   
   b. 
   
   c. 

46. Differentiate between an incarcerated and strangulated hernia.

**Obstructive Disorders**

47. Obstruction in the gastrointestinal tract that occurs when the passage of nutrients and secretions is impeded by impaired motility is called a(n) ________________________________

48. Pyloric stenosis is characterized by ________________________________ vomiting.

49. Define *intussusception*.

50. The peak age of intussusception is ________________________________ to ________________________________ months.

51. **T**  **F**  Intussusception is more common in females than in males.

52. The surgical treatment of anorectal malformations varies according to the defect but usually involves one or possibly a combination of the following procedures: anoplasty, colostomy, and ________________________________.

**Malabsorption Syndromes**

53. ________________________________ is characterized by chronic diarrhea and malabsorption of nutrients.

54. Please list the initial symptoms of Celiac disease in children ages 5 to 7 years, :
   a. 
   
   b. 
   
   c. 
   
   d. 
   
   e.
55. ________________ can occur in celiac disease and is characterized by acute, severe episodes of profuse, watery diarrhea and vomiting.

56. The main nursing consideration in celiac disease is helping the child adhere to ________________.

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. Kevin, age 3 years, is admitted to the hospital unit with a diagnosis of dehydration and acute diarrhea related to rotavirus infection.

1. What is the priority nursing diagnosis?

2. The nurse conducting the initial assessment on Kevin should note the following assessment findings that suggest dehydration.

   a. 

   b. 

   c. 

   d. 

   e. 

   f. 

   g. 

   h.
3. When are intravenous (IV) fluids initiated in the case of dehydration?

4. What nursing intervention is essential to determine whether renal blood flow is sufficient to permit the addition of potassium to the IV fluids?

5. How should the nurse instruct Kevin’s parents with regard to diaper changing and the disposal of diapers to prevent the spread of the virus?

B. Bailey, a 4-month-old infant, is brought into the pediatric clinic for evaluation. Her mother reports that she spits up small amounts of formula after each feeding and fusses and cries after spitting up. Bailey has difficulty sleeping at night because she is irritable after feedings. The physician diagnosed her with gastroesophageal reflux (GER). Right now the treatment of choice is symptom management, because Bailey is gaining weight and thriving.

1. Bailey’s mother wants to know why there is nothing more they can do for Bailey. What is the best response by the nurse?

2. What two suggestions could the nurse offer Bailey’s mother that might help alleviate some of Bailey’s discomfort?
   a. 
   b. 

3. What are three expected patient/parent outcomes for the nursing goals of providing information and promoting comfort for Bailey?
   a. 
   b. 
   c. 

C. Allen, age 10 years, is admitted for treatment of appendicitis.

1. What is the first classic symptom of appendicitis?

2. Peritonitis is a possible risk associated with a ruptured appendix. What are some signs of peritonitis the nurse should be aware of?
3. What would be the expected outcome of the nursing goal “Child will not experience abdominal distention”?

D. The nurse is caring for a child with ulcerative colitis (UC).
   1. What symptoms should the nurse expect a child with UC to manifest?

2. When is surgery indicated for UC?

E. Samuel, age 11 years, is admitted to the pediatric unit with a diagnosis of hepatitis B.
   1. The nursing goals for Samuel’s care depend on what three factors?
      a. 
      b. 
      c. 

2. What should the nurse encourage Samuel and his family to do to promote healing and rest?

F. The nurse is caring for a child who has hypertrophic pyloric stenosis.
   1. When does this condition usually develop?

2. What are the presenting symptoms?

3. What nursing interventions with regard to infant feedings are instituted soon after surgery?
G. Patricia, age 3 years, is admitted with a diagnosis of celiac disease.
   1. A gluten-free diet usually produces dramatic clinical improvement within 2 weeks. The nursing goal is to teach
      Patricia and her parents to adhere to this diet. What foods must she avoid?

   2. What grains would be included in Patricia's diet?

   3. Which organization should the nurse refer the parents for help with a child diagnosed with celiac disease?
Chapter 25 introduces nursing considerations essential to the care of the child experiencing cardiovascular dysfunction. After completing this chapter, the student should have the information needed to provide family-centered care, develop appropriate nursing care plans, and implement appropriate interventions for the child with cardiovascular dysfunction.

REVIEW OF ESSENTIAL CONCEPTS

Cardiovascular Dysfunction

1. What is the first step in assessing an infant or child for possible heart disease?

2. What signs and symptoms of cardiovascular dysfunction can be seen on inspection of the child?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

3. ___________________________ is one of the most frequently used tests for detecting cardiac dysfunction in children.

4. Which of the following is a complication that the nurse might assess after a cardiac catheterization?
   a. Hemorrhage at the entry site
   b. Rapidly rising blood pressure
   c. Hyostatic pneumonia
   d. Congestive heart failure

Congenital Heart Disease

5. Defects that allow blood flow from the higher-pressure left side of the heart to the lower-pressure right side (left-to-right shunt) result in increased ___________________________ and cause ___________________________.

6. Defects that cause decreased pulmonary blood flow result in ___________________________.

7. The ductus arteriosus starts to close after birth in the presence of ________________ in the blood and other factors.

8. Identify patient risk factors for increased morbidity and mortality related to congenital heart disease.
   a. 
   b. 
   c. 
   d. 
   e. 

9. The classification of acyanotic congenital heart defects is subdivided into the blood flow pattern groups of “increased pulmonary blood flow” and “obstruction to blood flow from ventricles.” Match each of the following defects with the appropriate group.
   a. ______ Atrial septal defect 
   b. ______ Pulmonic stenosis 
   c. ______ Aortic stenosis 
   d. ______ Ventricular septal defect 
   e. ______ Patent ductus arteriosus 
   f. ______ Atrioventricular canal defect 
   g. ______ Coarctation of the aorta 
   1. Increased pulmonary blood flow 
   2. Obstruction to blood flow from ventricles
10. Match the following definitions, clinical manifestations, or treatments with the appropriate congenital cardiac defect.

a. _______ An abnormal opening exists between the atria, allowing blood from the higher-pressure left atrium to flow to the lower-pressure right atrium.

b. _______ Patients are at risk for bacterial endocarditis and pulmonary vascular obstructive disease. Eisenmenger syndrome may develop.

c. _______ Incomplete fusion of endocardial cushions creates a large central atrioventricular valve, allowing blood to flow between all four chambers of the heart.

d. _______ This defect causes a characteristic machinelike murmur. Administration of indomethacin has proved successful in treating this.

e. _______ Patient has high blood pressure and bounding pulses in arms; weak or absent femoral pulses; and cool lower extremities with lower blood pressure.

f. _______ Narrowing occurs at the entrance to the pulmonary artery. Resistance to blood flow causes right ventricular hypertrophy and decreased pulmonary blood flow.

g. _______ The prominent anatomic consequence is hypertrophy of the left ventricular wall, leading to increased end-diastolic pressure.

11. The classification of cyanotic congenital heart defects is subdivided into the blood flow pattern groups of “decreased pulmonary blood flow” and “mixed blood flow.” Match each of the following defects with the appropriate group.

a. _______ Tetralogy of Fallot

b. _______ Tricuspid atresia

c. _______ Transposition of great arteries

d. _______ Total anomalous pulmonary venous return

e. _______ Truncus arteriosus

f. _______ Hypoplastic left heart syndrome

Clinical Consequences of Congenital Heart Disease

12. ___________________ is the inability of the heart to pump an adequate amount of blood to the systemic circulation at normal filling pressures to meet the body’s metabolic demands.

13. What is the most common cause of congestive heart failure (CHF) in children?
14. Match the following conditions with the appropriate term.

   a. _______ The ventricle is unable to pump blood effectively into the pulmonary artery, resulting in increased pressure in the right atrium and systemic venous circulation.

   b. _______ The ventricle is unable to pump blood into the systemic circulation, resulting in increased pressure in the left atrium and pulmonary veins.

   c. _______ Systemic venous hypertension causes hepatosplenomegaly and occasionally edema.

   d. _______ The lungs become congested with blood, causing elevated pulmonary pressures and pulmonary edema.

15. Into what three groups are the signs and symptoms of CHF divided?

   a.

   b.

   c.

16. Identify the clinical manifestations of pulmonary congestion induced by cardiac failure.

   a.

   b.

   c.

   d.

   e.

   f.

   g.

   h.
17. List the four goals of the therapeutic management of CHF.
   a. 
   b. 
   c. 
   d. 

18. During digitalization, the child is monitored by means of a(n) _________________ to observe for the desired effects. What are the desired effects during digitalization?

19. Identify the signs of digoxin toxicity in children.

20. Angiotensin-converting enzyme (ACE) inhibitors block the conversion of angiotensin I to angiotensin II, so that _________________ occurs instead of _________________.

21. Indicate whether each of the following statements regarding nursing care of the child with a congenital heart disease and CHF is true or false.
   a. T  F The radial pulse is always taken before administering digoxin.
   b. T  F Because infants with CHF tire easily and may sleep through feedings, smaller feedings every 3 hours are often indicated.
   c. T  F A fall in the serum potassium level enhances the effects of digitalis, decreasing the risk of digoxin toxicity.
   d. T  F Infants and children should be positioned in at least a 45-degree angle to increase chest expansion.
   e. T  F Infants should be fed on a 4-hour schedule to decrease fatigue.
   f. T  F Sodium-restricted diets are used as often in children as in adults to control CHF.
   g. T  F Cyanosis is apparent when oxygen saturation is 80% to 85%.
   h. T  F Patients with severe hypoxemia may exhibit fatigue with feeding, poor weight gain, tachypnea, and dyspnea.
22. Mothers, fathers, and siblings are all affected when a child is diagnosed with a serious heart defect. Describe how mothers report feeling when their child is diagnosed with a serious heart defect.

23. Identify major nursing interventions that are included after cardiac surgery.
   a.
   b.
   c.
   d.

24. Acquired Cardiovascular Disorders
   Describe bacterial endocarditis, including the most common causative agents of the disorder.

25. Prevention of bacterial endocarditis involves the administration of ___________ therapy ___________ hour(s) before procedures known to increase the risk of entry of organisms in very high-risk patients.

26. ___________ is a poorly understood inflammatory disease that occurs after infection with group A beta-hemolytic streptococcal pharyngitis.

27. Diagnosis of rheumatic fever is based on the presence of two major manifestations, or one major and two minor manifestations, as identified by the ___________ criteria, in combination with evidence of a recent ___________ infection. The most objective evidence supporting a recent streptococcal infection is an elevated or rising ___________ titer.

28. Describe the following terms.
   a. Low-density lipoproteins (LDLs)
   b. High-density lipoproteins (HDLs)
29. The first step in the treatment of high cholesterol is oriented to ________________.

30. Pharmacologic therapy is recommended for children with LDL cholesterol of more than ________________ mg/dl without other risk factors or of more than ________________ mg/dl and with two or more other risk factors.

31. When a dysrhythmia is suspected, the ________________ rate is counted for a full minute and compared with the ________________ rate, which may be lower. Consistently ________________ or ________________ heart rates should be regarded as suspicious.

32. What is the treatment for atrioventricular blocks?

33. Children with sinus bradycardia may need to have a permanent ________________ implanted to assist the heart’s conduction function.

34. ________________ describes a group of rare disorders that result in an elevation of pulmonary artery pressure above 25 mm Hg at rest after the neonatal period.

35. ________________ refers to abnormalities of the myocardium that impair the cardiac muscles’ ability to contract.

Heart Transplantation
36. Differentiate between an orthotopic and a heterotopic heart transplantation.

Vascular Dysfunction
37. What are the most common situations in which hypertension is observed in young children?

38. There is no specific diagnostic laboratory test for Kawasaki disease, so the diagnosis is based on the presence of five of six characteristic symptoms, which must always include an elevated ________________ not attributed to other causes.

39. ________________, or ________________, is a complex clinical syndrome characterized by inadequate tissue perfusion to meet the body’s metabolic demands, resulting in cellular dysfunction and eventual organ failure.
40. What three clinical manifestations result in circulatory failure in children?
   a. 
   b. 
   c. 

41. Identify the three major goals of the therapeutic management of shock.
   a. 
   b. 
   c. 

42. What does anaphylaxis result from?

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. Greg, 10 years old, is admitted to the pediatric unit for a cardiac catheterization the next morning. He and his parents appear anxious and uninformed.
   1. What should be included in the nursing assessment of Greg before the procedure?

   2. After the cardiac catheterization, Greg appears drowsy and has a pressure dressing on his right groin area. The most important nursing responsibility associated with the postprocedural care of Greg would be the detection of complications. Identify the rationale(s) for each of the following nursing interventions or observations.
      a. Taking frequent vital signs
      b. Monitoring blood pressure, especially for hypotension
      c. Assessing pulses distal to the catheterization site
      d. Assessing the temperature and color of the affected extremity

   3. What nursing intervention is appropriate to implement if bleeding occurs from the catheterization site?
B. Spend a day in an outpatient cardiac clinic to observe the nurse’s role in the proper administration and evaluation of digoxin treatment.
   1. Describe the nurse’s responsibility in administering digoxin.

   2. Why is the apical rate taken in a patient being treated with digoxin?

   3. Why must the nurse maintain a high index of suspicion for signs of toxicity when administering digoxin?

C. The nurse is caring for a hospitalized child with congestive heart failure.
   1. Why would a child with congestive heart failure be placed on a regimen of oral digitalis and diuretics?
      a. Digitalis
      b. Diuretics

   2. Why is it important for the nurse to monitor potassium levels in patients receiving potassium-losing diuretics and digoxin?

   3. What is a priority nursing diagnosis for the child with congestive heart failure?

   4. Identify two nursing interventions that can be used to help meet the goal of “Patient will exhibit improved cardiac output.”
      a. 
      b. 

   5. Identify at least one expected outcome to the priority nursing diagnosis.

D. Demi, age 5, has just been diagnosed with coarctation of the aorta. Answer the following questions regarding nursing care of the family and child with congenital heart disease.
   1. When does nursing care of the child with a congenital heart defect begin?

   2. Explain the best approach the nurse use to deal with the issue of the child’s overdependence as a result of parental fear that their child may die.
3. What should be included when educating the family about the child’s cardiac disorder?

4. What should the nurse tell the family regarding usage of the Internet as a source of information about heart disease in children?

E. Katie, age 14, comes into the emergency department. Immediately after eating strawberry jam, she started to feel uneasy, restless, dizzy, and disoriented. Her mother rushed her to the local hospital’s emergency department. On assessment, the nurse notes hives on her face and neck, and urticaria. She is not having respiratory difficulty at this time.

1. What is the possible cause of these clinical manifestations?

2. What is the treatment of choice since she is not manifesting respiratory difficulty at this time?

3. When anaphylaxis is suspected, what is the priority nursing intervention?
Chapter 26 introduces nursing considerations essential to the care of the child experiencing hematologic or immunologic dysfunction. The disorders discussed in this chapter are inherited, chronic, or terminal in nature and can result in extensive systemic and structural responses within the body. After completing this chapter, the student will be prepared to formulate a family-centered nursing care plan for the child with a hematologic or immunologic disorder.

REVIEW OF ESSENTIAL CONCEPTS

Hematologic and Immunologic Dysfunction

1. What four indicators (both subjective and objective) can be obtained from a parent concerning the child’s health history that might suggest hematologic dysfunction in a child?
   a. 
   b. 
   c. 
   d. 

2. A term used when describing an abnormal complete blood count (CBC) is __________, which refers to the presence of immature cells in the peripheral blood from hyperfunction of the bone marrow.

3. ________ is the most common hematologic disorder of infancy and childhood. Although it is not a disease itself, it is an indication or manifestation of an underlying pathologic process.

4. Name and explain the two ways anemias are classified.
   a. 
   b. 

5. T  F The basic physiologic defect caused by anemia is a decrease in the blood’s oxygen-carrying capacity and consequently a reduction in the amount of oxygen available to the cells.

6. The following are suggested explanations for teaching children about blood components. Match each term with its defining characteristic.
   a. ______ Red blood cells 1. Help keep germs from causing infection
   b. ______ White blood cells 2. Small parts of cells that help make bleeding stop by forming a clot or scab over the hurt area
   c. ______ Platelets 3. The liquid part of blood that has clotting factors to help make bleeding stop
   d. ______ Plasma 4. Carry the oxygen you breathe from your lungs to all parts of your body
7. To assess and interpret laboratory studies for integration into a patient assessment, the nurse must understand the following laboratory measures. Identify the average value for each test, along with what each test measures.
   a. Red blood cell (RBC) count
   b. Hemoglobin (Hgb)
   c. Hematocrit (Hct)
   d. White blood cell (WBC) count
   e. Platelet count

Red Blood Cell Disorders
8. After the diagnosis of iron-deficiency anemia is made, therapeutic management focuses on increasing the amount of ________________.

9. An essential nursing responsibility is instructing parents in the administration of iron. How would the nurse instruct parents to administer oral iron to their child?

10. What is the objective of the medical management of anemia?

11. Children ________________ to ________________ months of age are at risk for anemia as a result of ________________ being a major staple of the child’s diet.

12. Iron stores in infants are usually adequate for the first ________________ to ________________ months.
13. Packed red blood cells (RBCs), not whole blood, are given during transfusions for the most severe cases of anemia to minimize the chance of ____________________.

14. What are some side effects of oral iron therapy?

15. Describe the teaching interventions regarding iron supplementation that the nurse should provide in the following situations.
   a. Families of breastfed babies
   b. Families of formula-fed babies

16. Stools usually turn ____________________ in color when the proper dose of supplemental iron is reached.

17. The clinical features of sickle cell anemia (SCA) are primarily the result of what two factors?
   a.
   b.

18. Identify the sequence of sickling and infarction that occurs in organ structures related to the complications of SCA.
   a.
   b.
   c.

19. Identify the four types of sickle cell crisis.
   a.
   b.
   c.
   d.
20. Because early identification of SCA is essential, the __________________ test is used for screening and case-finding.

21. Identify the two major aims of the therapeutic management of SCA.
   a. 
   b. 

22. T  F  Oxygen administration reverses sickling of red blood cells.

23. What therapeutic treatment can result in depression of bone marrow, which further aggravates the anemia found in patients with SCA?

24. What is the most frequent problem for patients with SCA?

25. Patients with SCA are particularly at risk for ___________________ seizures.

26. Which ethnic groups have the highest incidence of thalassemia?
   a. 
   b. 
   c. 

27. What are three other features of b-thalassemia outside of anemia?
   a. 
   b. 
   c. 

28. What is the objective of supportive therapy in managing thalassemia?

29. What is one potential complication of frequent blood transfusions?
30. ____________ is the medication used to minimize the development of hemosiderosis.

31. Because of the risk of sepsis in a child with asplenia, what symptom should the family be told to notify the health professional?

32. List the onset of clinical manifestations in aplastic anemia.
   a. 
   b. 
   c. 

33. A definitive diagnosis of aplastic anemia is determined from a _________________.

**Defects in Hemostasis**

34. ________________ refers to a group of bleeding disorders in which there is a deficiency of one of the factors necessary for coagulation of the blood.

35. The two most common forms of hemophilia are classic hemophilia and Christmas disease. ________________ accounts for 80% to 85% of all cases of hemophilia.

36. List the five signs of hemarthrosis.
   a. 
   b. 
   c. 
   d. 
   e. 

37. What is the primary treatment for hemophilia?

38. Identify four nursing considerations in working with the family of a child who has hemophilia.
   a. 
   b. 

39. Hemophiliacs treated with factor replacement between 1979 and 1985 were exposed to ____________________.

40. Identify and provide a brief description of the three factors that characterize idiopathic thrombocytopenic purpura (ITP).
   a.  
   b.  
   c.  

41. A diagnosis of ITP is based on the platelet count being less than ____________________. Treatment is primarily ____________________.

42. Disseminated intravascular coagulation (DIC) is known as ____________________ and is characterized by diffuse fibrin deposition in the microvasculature. It is a(n) ____________________ disorder of coagulation that occurs through processes such as ____________________, ____________________, ____________________, and ____________________ damage.

43. DIC is suspected when the patient has a tendency to ____________________.

**Neoplastic Disorders**

44. What are the two major types of leukemia?
   a.  
   b.  

45. Leukemia is an unrestricted proliferation of ____________________ in the body’s blood-forming tissues.

46. List the three main consequences of bone marrow dysfunction.
   a.  
   b.  
   c.  
47. What is the typical clinical manifestation of bone marrow dysfunction secondary to infiltration of the central nervous system?

48. A definitive diagnosis of leukemia is based on flow cytometry of the cells obtained in the
__________________________ or ____________________________.

49. List the phases of chemotherapeutic therapy for leukemia.
   a. 
   b. 
   c. 
   d. 

50. Peripheral blood __________________________ transplants are capable of differentiating into specialized cells of the hematologic system.

51. T  F  Boys appear to have a more favorable prognosis than girls in the survival rate for children with acute lymphoblastic leukemia (ALL).

52. Differentiate between Hodgkin disease and non-Hodgkin lymphoma. Include the typical age of onset of each disease.
   a. Hodgkin disease
   b. Non-Hodgkin lymphoma

53. __________________________ are the third most common group of malignancies in children and adolescents.

54. What is the most common presentation of Hodgkin disease?
Immunologic Deficiency Disorders

55. The human immunodeficiency virus (HIV) is transmitted by ____________________ and ____________________ .

56. What are the three major pathways through which children acquire HIV?
   a. 
   b. 
   c. 

57. Identify common clinical manifestations of HIV in children.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 

58. What is the cause, therapeutic management, and prognosis of acquired immune deficiency syndrome (AIDS)?
   a. Cause
      b. Therapeutic management
      c. Prognosis

59. ____________________ (SCID) is a defect characterized by an absence of both humoral and cell-mediated immunity.
60. What is the only definitive treatment for SCID?

61. Wiskott-Aldrich syndrome (WAS) is a(n) ___________________-linked recessive disorder. At birth, the presenting symptoms may be __________________ as a result of thrombocytopenia.

Technologic Management of Hematologic and Immunologic Disorders

62. What type of immediate reactions can occur as the result of a blood transfusion?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 

63. ________________ is the removal of blood from an individual, separation of the blood into its components, retention of one or more of these components, and reinfusion of the remainder of the blood into the individual.

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Regan, age 1 year, is admitted to the pediatric unit. In obtaining the neonatal and infant history, the nurse discovers that Regan was born 6 weeks prematurely. The nurse also discovers from the family history that Regan seemed to have excessive cow’s milk ingestion over the past 2 months. On physical assessment, it is noted that Regan appears underweight and small for her age. Her family participates in the Women, Infants, and Children (WIC) program.

1. To determine the underlying condition, Regan will be undergoing a variety of blood tests. What nursing interventions can help prepare Regan and her family for these tests?
   a. 
   b. 
   c. 

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2. What factors put Regan at risk for iron-deficiency anemia?

3. A primary nursing objective is to use family education to prevent nutritional anemia. What information would be important for the nurse to explain to this family about preventing nutritional anemia?

B. Alicia, age 6, is hospitalized with sickle cell anemia. The nurse records her pain as 5 on the FACES pain scale (0–5). On physical assessment, it is noted that Alicia has a fever, cough, hematuria, tachypnea, and swollen extremities. Alicia is in a vaso-occlusive sickle cell crisis.

1. Describe two nursing diagnoses appropriate for Alicia.
   a. 
   b. 

2. Describe the most common pain control measure for managing severe pain during an SCA crisis. Include the medication regimen, along with specific pain medications used to treat SCA pain.

3. Alicia’s parents are worried about addiction to pain medicine. What information could the nurse give this family about this concern?

C. Ryan, age 5, is hospitalized for treatment of primary aplastic anemia, called Fanconi syndrome.

1. What are the typical characteristics of this disorder?
   a. 
   b. 
   c. 

2. What are the objectives of treatment based on?

3. Describe the two ways therapy is directed at restoring function to the bone marrow.
   a. 
   b. 
D. Dave, age 7, is hospitalized with a diagnosis of leukemia.
   1. What patient goal is appropriate for the nursing diagnosis “Risk for Infection related to depressed body defenses”?

2. List at least four nursing interventions appropriate for achieving this goal.
   a. 
   
   b. 
   
   c. 
   
   d. 

3. Identify two expected outcomes for this goal.
   a. 
   
   b. 

E. Dan, age 6 months, is being treated for AIDS.
   1. One of the patient goals for Dan is “Child will not spread disease to others.” List some interventions that would accomplish this goal.
   a. 
   
   b. 
   
   c. 
   
   d. 
   
   e. 

2. List at least three nursing diagnoses for Dan and his family.
   a. 
   
   b. 
   
   c.
Chapter 27 introduces the nursing considerations essential to the care of the child who is experiencing genitourinary dysfunction. After completing this chapter, the student will be equipped with knowledge on nursing care of the child with common disorders of renal function, various types of diagnostic tests, renal dialysis, and transplantation. The student can use this knowledge to provide family-centered nursing care to the child with genitourinary dysfunction.

REVIEW OF ESSENTIAL CONCEPTS

Genitourinary Dysfunction
1. In the newborn, urinary tract disorders are associated with a number of obvious malformations of other body systems, including the curious and unexplained, but frequent, association between __________ and urinary tract anomalies.

2. The single most important diagnostic laboratory test to detect renal problems is the __________.

3. Match each of the following urine tests of renal function tests with its purpose or significance of deviation.
   a. Blood urea nitrogen
   b. Specific gravity
   c. Urine culture and sensitivity
   d. Appearance
   e. pH
   f. Creatine

   1. Determines the presence of pathogens and the drugs to which they are sensitive
   2. Normal result: 1.016–1.022; reflects the state of hydration
   3. Normal result of urine: newborn 5–7; thereafter, 4.8–7.8
   4. Newborn: 4–18; infant, child: 5–18
   5. Normal result: clear, pale yellow to deep gold
   6. Infant: 0.2–0.4; child: 0.3–0.7; adolescent: 0.5–1.0

Genitourinary Tract Disorders and Defects
4. The single most important host factor influencing the occurrence of urinary tract infections (UTIs) is __________.

5. What are specific symptoms of UTIs in children?
   a. __________
   b. __________
   c. __________

6. List the four objectives of the therapeutic management of the child with a UTI.
   a. __________
   b. __________
7. In vesicoureteral reflux (VUR), it is clear that reflux is more likely to be associated with __________________________ than with cystitis.

8. Children with VUR are very symptomatic. List some of the common symptoms they often display.
   a. 
   b. 
   c. 

9. Indicate whether each of the following statements is true or false.
   a. T  F  Hypertension is a common result of glomerulonephritis.
   b. T  F  Urinary tract infections are commonly seen in patients with obstructive uropathy.

10. Indicate whether each of the following statements is true or false.
    a. T  F  The hazard of progressive renal injury is greatest when infection occurs in older children.
    b. T  F  Prevention is the most important goal in both primary and recurrent infection.
    c. T  F  Hydronephrosis occurs when interference with urine flow leads to a backup of urine.
    d. T  F  Hypospadias is where the urethral opening is located on the dorsal surface of the penis.

Glomerular Disease

11. __________________________ is a clinical state that includes massive proteinuria, hypoalbuminemia, hyperlipidemia, and edema.

12. The __________________________ is responsible for the initial step in the formation of urine.

13. List the four objectives of the therapeutic management of nephrotic syndrome.
    a. 
    b. 
    c. 
    d. 

    a. 
    b. 
15. __________________________ is the most common of the postinfectious renal diseases in childhood and the one for which a cause can be established in the majority of cases.

16. Identify at least four clinical manifestations of acute poststreptococcal glomerulonephritis.
   a. __________________________
   b. __________________________
   c. __________________________
   d. __________________________

**Miscellaneous Renal Disorders**

17. __________________________ syndrome is an uncommon, acute renal disease that occurs primarily in infants and small children between the ages of __________________________ months and __________________________ years.

18. List the triad of diagnostic criteria for hemolytic uremic syndrome.
   a. __________________________
   b. __________________________
   c. __________________________

19. What are the two goals of therapy for hemolytic uremic syndrome?
   a. __________________________
   b. __________________________

20. What is the most common malignant renal and intraabdominal tumor of childhood?
21. The peak age at diagnosis of a Wilms tumor is ___________________________ years, and the occurrence is slightly more frequent in ___________________________ than in ___________________________.

22. List the clinical manifestations of Wilms tumor without metastasis.
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

23. Chemotherapy is indicated for all clinical stages of Wilms tumor. The most effective agents for treatment of Wilms tumor are ___________________________, ___________________________, and ___________________________.

**Renal Failure**

24. Define the following terms.
   a. Azotemia
   b. Uremia

25. The principal feature of acute renal failure is ___________________________.

26. Treatment of poor perfusion resulting from dehydration consists of ___________________________.

27. Hyperkalemia is the most immediate threat to a child in acute renal failure (ARF). This can be minimized and sometimes avoided by taking what three steps?
   a. 
   b. 
   c. 

28. ________________ is a frequent and serious complication of ARF; to detect it early, ________________ measurements are made every 4 to 6 hours.

29. When does chronic renal failure begin?

30. ________________ is the most effective means, short of dialysis, for reducing the quantity of materials that require renal excretion.

**Technologic Management of Renal Failure**

31. List the three types of dialysis.
   a. 

   b. 

   c. 

32. Which type of dialysis is preferred to preserve the child’s independence?

33. When should the nurse notify the physician regarding the output of the dialysate?

34. **T** **F** The preferred site for an atriovenous fistula arteriovenous is the bronchial artery and a hand vein.

35. Kidney ________________ is now an acceptable and effective means of therapy in the pediatric age group.

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. Tami, age 4, is brought to the pediatrician by her mother, Nancy, who explains that for the past few days, Tami has been wetting her bed at night and complaining of painful urination. In addition, just this morning, Tami ran a high temperature. Tami has also been complaining of not being hungry and frequently seems thirsty. A urine culture is obtained, and the pediatrician diagnoses Tami with a urinary tract infection (UTI).

1. Which signs and symptoms of urinary tract infection should the nursing assessment yield?
   a. 

   b. 

   c. 

   d. 

   e. 

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2. What are the objectives of treatment for Tami?
   a. 
   b. 
   c. 
   d. 

3. What factors are considered when initiating antibiotic therapy for Tami?

4. What is the most important nursing goal when caring for children with UTIs?

B. Troy, age 5, is admitted to the acute pediatric floor. The nursing assessment reveals he has facial edema around his eyes, ascites, diarrhea, ankle and leg swelling, and lethargy. His parents report that he has been tired and irritable over the past week and that his clothes are fitting more tightly. They also report that he seems to be going to the bathroom less often than in the past.
   1. What should Troy be evaluated for based on these clinical manifestations?
   2. What would be an important nursing diagnosis related to the presence of edema in Troy?
   3. What is the rationale for providing meticulous skin care?
   4. The nurse must be cognizant that children on corticosteroid therapy are particularly vulnerable to what type of infection?

C. Tina, age 2, is admitted to the pediatric unit. Tina’s history reveals that she has been vomiting, irritable, lethargic, and pale and has been bruising easily. Her mother reports she has also had bloody diarrhea.
   1. What do Tina’s clinical manifestations suggest she might have?
2. What is the most effective treatment for the identified condition?

3. For the family to maintain home dialysis, the nurse must educate the family. What should be included in this teaching plan?
   a. 
   b. 
   c. 

4. Identify one nursing goal for Tina related to diet.

5. What objective data could the nurse obtain to evaluate whether nursing interventions were successful in assisting Tina and her family with the stresses of chronic renal failure?

D. The nurse is planning care for the child with chronic renal failure.
   1. If the nursing diagnosis “Risk for Injury related to accumulated electrolytes and waste products” was chosen, what would be an appropriate patient goal?

2. What are four appropriate nursing interventions for this nursing diagnosis?
   a. 
   b. 
   c. 
   d. 

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Chapter 28 introduces the nursing considerations essential to the care of the child experiencing cerebral dysfunction. Dysfunction in the brain can produce alterations in the ways in which the child receives, integrates, and responds to stimuli. This chapter introduces the student to methods used to assess neurologic function in the unconscious child, along with methods to assess and intervene in the treatment of a child with cerebral trauma, nervous system tumors, and seizure disorders. After completing this chapter, the student will be able to develop nursing goals and responsibilities that help the child and family effectively cope with the multiple stressors imposed by an alteration in cerebral function.

**REVIEW OF ESSENTIAL CONCEPTS**

**Cerebral Dysfunction**

1. Most information about infants and small children regarding their cerebral function is gained by observing their _______ and _______ responses as they develop increasingly complex locomotor and fine motor skills and by eliciting progressively sophisticated _______ and _______ behaviors.
   
   Persistence or reappearance of _______ that normally disappear indicates a pathologic condition.

2. What are the general aspects of assessment for cerebral dysfunction?
   
   a. 

   b. 

   c. 

3. What are the signs and symptoms of increased intracranial pressure for infants and for older children?
   
   a. Infants

   b. Children

4. What are some signs the nurse could expect to find in a child whose intracranial pressure becomes progressively worse?
5. Provide the name and explanation for the two components of consciousness.
   a.

   b.

6. ______________ is defined as a state of unconsciousness from which the patient cannot be aroused, even with powerful stimuli.

7. Match the following terms that describe levels of consciousness with their defining characteristics.
   a. ______ Disorientation
   b. ______ Persistent vegetative state
   c. ______ Full consciousness
   d. ______ Obtundation
   e. ______ Confusion
   f. ______ Coma
   g. ______ Stupor
   h. ______ Lethargy

   1. Awake and alert; orientated to time, place, and person; behavior appropriate for age
   2. Decision making impaired
   3. Inability to recognize the appropriate time and place; decreased level of consciousness
   4. Limited spontaneous movement, sluggish speech, drowsiness
   5. Arousable with stimulation
   6. In a deep sleep that is responsive only to vigorous and repeated stimulation
   7. No motor or verbal response to noxious (painful) stimuli
   8. Eyes following objects only by reflex; all four limbs spastic but can withdraw from painful stimuli

8. What three areas does the Glasgow Coma Scale (GCS) assess?
   a. 

   b. 

   c. 

9. Why is it essential that the neurologic examination be documented in a fashion that is able to be reproduced by others?

10. What pupil assessment would be considered a neurosurgical emergency?

11. How long does it take papilledema to develop in the early course of unconsciousness?
12. Define the types of posturing.
   a. Flexion posturing
   
   b. Extension posturing

13. Three key reflexes that demonstrate neurologic health in young infants are the ____________, ____________, and ____________ reflexes.

14. Since magnetic resonance imaging (MRI) can provoke anxiety in young children, sedation may be required. ____________ has been used for years to sedate children for procedures such as MRI.

**Nursing Care of the Unconscious Child**

15. What three areas are the focus of emergency measures when caring for the unconscious child?
   a.
   
   b.
   
   c.

16. One of most important priorities for nursing care when caring for an unconscious patient is to maintain a(n) ____________.

17. What are the four indications for inserting an intracranial pressure (ICP) monitor?
   a.
   
   b.
   
   c.
   
   d.

**Cerebral Trauma**

18. Indicate whether each of the following statements is true or false.
   a. T F Young children tolerate increases in ICP better than older children and adults do.
   b. T F Children have a significantly higher percentage of good outcomes and a lower mortality rate, as well as a lower incidence of surgical mass lesions, after severe head trauma.
   c. T F Children have a thicker and harder skull than adults, making them less likely to sustain long-term damage.
   d. T F Children with an acceleration/deceleration injury demonstrate diffuse generalized cerebral swelling that is produced by increased blood volume or a redistribution of cerebral blood volume (cerebral hyperemia) rather than by increased water content (edema), as is seen in adults.
19. Identify the three types of head injuries.
   a. 
   b. 
   c. 

20. What danger can occur from blood accumulation between the skull and cerebral surfaces?

21. Indicate whether each of the following statements is true or false.
   a. T F Clinically significant epidural hematomas are common in children younger than 4 years of age.
   b. T F Subdural hematomas are fairly common in infants, frequently as a result of birth trauma, falls, assaults, or violent shaking.
   c. T F Some degree of brain edema is expected, especially 24 to 72 hours after craniocerebral trauma.
   d. T F Deep, rapid, periodic, or intermittent and gasping respirations; wide fluctuations or noticeable slowing of the pulse; and widening pulse pressure or extreme fluctuations in blood pressure are signs of temporal involvement.
   e. T F Computed tomography (CT) scan is the diagnostic test essential in diagnosing neurologic trauma.
   f. T F Bleeding from the nose or ears needs further evaluation, and a watery discharge from the nose (rhinorrhea) that is positive for glucose (as tested with Dextrostix) suggests leakage of cerebrospinal fluid (CSF) from a skull fracture.

22. What is the most important nursing consideration in caring for a child with a head injury?

**Near-Drowning**

23. Accidental drowning occurs five times more often in ____________ than in ______________.

24. What are the major problems caused by near-drowning?
   a. 
   b. 
   c. 

25. What is the first priority in the therapeutic management of a near-drowning victim?
Nervous System Tumors

26. Indicate whether each of the following statements is true or false.
   a. T F Brain tumors are the most common solid tumors in children and are the second most common childhood cancer.
   b. T F Young child display many detectable signs and symptoms of a brain tumor.
   c. T F The most common symptoms of a brain tumor in infants are headache, especially on awakening, and vomiting that is not related to feeding.
   d. T F MRI is the most common diagnostic procedure for a brain tumor.

27. The treatment of choice for brain tumors is total ________________.

28. Temperature measurement is particularly important in treating brain tumors because of ________________, which can result from surgical intervention in the hypothalamus or brainstem and from some types of general anesthesia.

29. Postsurgical headaches are largely caused by ________________.

30. A neuroblastoma is often called the “_______________” tumor. Why is this so?

31. Diagnostic evaluation of neuroblastoma is aimed at locating what two things?
   a.

   b.

32. What three methods are used to treat neuroblastoma?
   a.

   b.

   c.

33. Neuroblastoma is one of the few tumors that demonstrate spontaneous ________________.

Intracranial Infections

34. The nervous system is limited in the ways in which it responds to injury. If the inflammatory process affects the meninges, it is called ________________; if it affects the brain, it is called ________________.

35. The introduction of conjugate vaccines against ________________ type b, better known as the ________________ vaccine, in 1990 has led to the most dramatic change in the epidemiology of ________________ meningitis.

36. What organisms are responsible for 95% of the cases of bacterial meningitis in children older than 2 months?
   a.

   b.

   c.
37. Indicate whether each of the following statements regarding bacterial meningitis is true or false.
   a. T F Pneumococcal and meningococcal infections can occur at any time but are more common in late winter or early spring.
   b. T F Invasion by direct extension from infections in the paranasal and mastoid sinuses is less common than invasion from an infection elsewhere in the body.
   c. T F There are no vaccines for bacterial meningitis.
   d. T F The onset of bacterial meningitis in children and adolescents is likely to be abrupt, with fever, chills, headache, and vomiting that are associated with or quickly followed by alterations in sensorium.

38. Why does a child who is ill and develops a purpuric or petechial rash need immediate medical attention?

39. List the interventions for the initial therapeutic management of acute bacterial meningitis.
   a.
   b.
   c.
   d.
   e.
   f.
   g.
   h.
   i.

40. __________________ is an inflammatory process of the central nervous system (CNS) that is caused by a variety of organisms, including bacteria, spirochetes, fungi, protozoa, helminthes, and viruses.

41. Encephalitis can occur as a result of:
   a.
   b.

42. Treatment for encephalitis is primarily ______________, and includes conscientious nursing care, control of cerebral manifestations, and adequate nutrition and hydration, with observation and management for other cerebral disorders.
43. ____________ is transmitted to humans by the saliva of an infected mammal and is introduced through a bite or skin abrasion.

44. Reye syndrome is a disorder defined as ____________ associated with other characteristic organ involvement. What are three clinical manifestations of Reye syndrome?
   a. 
   b. 
   c. 

45. Research has confirmed an association between the use of ____________ and the incidence of Reye syndrome.

46. Definitive diagnosis of Reye syndrome is established by ____________ .

**Seizure Disorders**

47. Seizures in children have many different causes. Seizures are classified not only according to ____________ but also to ____________.

48. ____________ are a frequent cause of seizures in late infancy and early childhood.

49. Identify and describe the three major categories of seizures?
   a. 
   b. 
   c. 

50. Seizure activity is believed to be caused by spontaneous electrical discharges initiated by a group of hyperexcitable cells, referred to as the ____________.

51. Identify 10 clinical entities that mimic seizures in children.
   a. 
   b. 
   c. 
   d. 
52. ______________ (_____________) is obtained for all children with seizures and is the most useful tool for evaluating a seizure disorder. What does this test confirm?

53. What are the goals of the therapeutic management of seizures?
   a. 
   b. 
   c. 

54. What is the primary therapy for seizure disorders?

55. How is the dosage of anticonvulsant drugs monitored?

56. When anticonvulsant drugs are discontinued, what precautions should be taken?

57. The _______________ diet has been shown to be an efficacious and tolerable treatment for difficult-to-control seizures.
58. When seizures are determined to be caused by a hematoma, tumor, or other cerebral lesion, __________ is the treatment.

59. __________ is a continuous seizure that lasts more than 30 minutes or a series of seizures from which the child does not regain a premorbid level of consciousness.

60. What criteria in an of itself is enough to diagnose epilepsy?

61. Children taking phenobarbital or phenytoin should receive adequate __________ and __________, since deficiencies of both have been associated with these drugs.

62. List various seizure precautions.

63. __________ seizures are one of the most common neurologic conditions of childhood, affecting approximately 3% to 8% of children.

Cerebral Malformations
64. Match the following time period with the correct statement regarding the normal time all sutures and fontanels are ossified.

   a. ______ 8 weeks  
   b. ______ 6 months
   c. ______ 18 months
   d. ______ After 12 years

   1. Posterior fontanel closed
   2. Anterior fontanel closed
   3. Fibrous union of suture lines and interlocking of serrated edges
   4. Sutures unable to be separated by increased ICP

65. The majority of infants with craniosynostosis have __________ brain development.

66. __________ is a condition caused by an imbalance in the production and absorption of CSF in the ventricular system, usually under increased pressure.

67. What are the two results of hydrocephalus?
   a. 
   b. 

68. Hydrocephalus is so often associated with __________ that all infants with this condition should be observed for the development of hydrocephalus.

69. What are the most commonly observed clinical manifestations of hydrocephalus in the infant?
   a. 
   b. 
   c. 

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Chapter 28 The Child with Cerebral Dysfunction
70. What is the typical treatment of hydrocephalus?

APPLYING CRITICAL THINKING TO NURSING PRACTICE

A. Tommy, age 6 months, was admitted to the pediatric unit after sustaining head trauma in an automobile accident. When admitted, he was conscious, but the nurse noted he had a bulging anterior fontanel, seemed irritable, had a high-pitched cry, and had distended scalp veins.
   1. What nursing diagnosis could be formulated from these assessment data?

2. Tommy is becoming sleepy. When the nurse checked his pupils, they appeared fixed and dilated. What does this finding suggest?

B. Heather, age 10, has been unconscious for 2 days after surgery related to the trauma she endured from a motor vehicle accident.
   1. List signs of pain that Heather may demonstrate.
      a. 
      b. 
      c. 
      d.
2. A patient goal is that Heather will exhibit no signs of pain. List three nursing interventions that could be used to achieve this goal.
   a.
   b.
   c.

3. What parameters are assessed to monitor Heather’s neurologic status?
   a.
   b.
   c.

4. What nursing measure is taken to protect Heather’s eyes from possible damage?

C. Spend a day in an emergency department for pediatric patients. Answer the following questions and include specifics (examples, responses) to illustrate these concepts.
1. Tara, age 2 years, sustained head trauma when she fell down some stairs. She was just admitted to the pediatric unit. The nurse notes a watery discharge from her nose. What is this nasal discharge called, and what does it suggest?

2. Sam, age 3 years, comes to the emergency department after being rescued from a swimming pool. What problems should the nurse recognize that could develop as a result of a near-drowning accident?
   a.
   b.
   c.
D. Aden, age 8 months, is admitted to the pediatric unit with possible meningitis.
   1. What clinical manifestations would you expect to assess in Aden?

   2. What is a major priority of nursing care of a child with suspected meningitis?

E. Zach, age 6 years, was admitted to the pediatric unit for diagnosis and treatment of a possible seizure.
   1. What are the two major foci of the process of diagnosis in a child with a seizure disorder?
      a.

      b.

   2. While the nurse is assisting with breakfast, Zach has a brief loss of consciousness. The nurse noted that his eyelids twitched and his hands moved slightly. He then needed to reorient himself to previous activity. How would the nurse keep Zach safe?
      a.

      b.

      c.

      d.

      e.

      f.

F. Adam, a newborn, is transferred to the pediatric unit for treatment of hydrocephalus.
   1. What are some of the clinical manifestations of hydrocephalus?
      a.

      b.

      c.

      d.
2. List some of the postoperative nursing interventions for the newborn with hydrocephalus.
   a.
   b.
   c.
   d.
   e.
   f.
   g.
   h.
   i.
   j.

3. List the evaluative data that would indicate accomplishment of the following goal: The family will receive adequate education and emotional support.
Chapter 29 introduces the nursing considerations essential to the care of the child experiencing endocrine dysfunction. The conditions discussed in this chapter interfere with the body’s ability to produce or to respond to the major hormones. After completing this chapter, the student will be able to develop a nursing care plan to help provide family-centered care to the child with endocrine dysfunction.

**REVIEW OF ESSENTIAL CONCEPTS**

**Disorders of Pituitary Function**

1. List the disorders that can result from an overproduction of the anterior pituitary hormones.
   a. 
   b. 
   c. 
   d. 

2. The most common organic cause of pituitary undersecretion is ________________, especially craniopharyngiomas, in the pituitary or hypothalamic region.

3. What is a principal nursing consideration in working with children with hypopituitarism?

4. Why is it important to assess the parental history in children with constitutional growth delays?

5. What is the definitive treatment of growth hormone deficiency?

6. When is the best time to administer growth hormone?

7. __________________________ includes typical facial features of the head, lips, nose, tongue, jaw, and paranasal and mastoid sinuses overgrowth; separation and malocclusion of the teeth in the enlarged jaw; disproportion of the face to the cerebral division of the skull; increased facial hair; thickened, deeply creased skin; and an increased tendency toward hyperglycemia and diabetes mellitus.
8. What is the primary nursing responsibility regarding hypopituitarism and hyperpituitarism?

9. Define precocious puberty.

10. The principal disorder of the posterior pituitary hypofunction is ______________________, which causes hyposecretion of antidiuretic hormone (ADH), producing a state of uncontrolled ______________________.

11. Identify the two cardinal signs of diabetes insipidus.
   a. 
   b. 

12. What is the usual treatment of diabetes insipidus?

13. What causes the syndrome of inappropriate antidiuretic hormone (SIADH)?

14. What is the immediate nursing management goal of SIADH?

**Disorders of Thyroid Function**

15. ______________________ is one of the most common endocrine problems of childhood.

16. What is the main physiologic action of the thyroid hormone?

17. Growth cessation or retardation in a child whose growth has previously been normal should alert the nurse to the possibility of ______________________.

18. A(n) ______________________ is an enlargement or “hypertrophy” of the thyroid gland.

19. ______________________ (also known as Hashimoto disease or ______________________) is the most common cause of thyroid disease in children and adolescents and accounts for the largest percentage of juvenile hypothyroidism.
20. Most cases of Graves disease in children occur between the ages _______________ and _______________, with a peak incidence at _______________ to _______________ years of age. However, the disease may be present at birth in children of thyrotoxic mothers.

   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

22. Identify the three methods for treating Graves disease.
   a. 
   b. 
   c. 

23. The most serious side effect of antithyroid drugs used to treat Graves disease is _______________.

24. Identify the most common early symptom of hypoparathyroidism.

25. The diagnosis of hypoparathyroidism is made on the basis of clinical manifestations associated with decreased _______________ and increased _______________.

Disorders of Parathyroid Function

24. Identify the most common early symptom of hypoparathyroidism.

25. The diagnosis of hypoparathyroidism is made on the basis of clinical manifestations associated with decreased _______________ and increased _______________.

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Disorders of Adrenal Function

26. Identify whether the following clinical manifestations are indicative of acute adrenocortical insufficiency or of hyperfunction of the adrenal gland (Cushing syndrome).
   a. Increased irritability, headache, diffuse abdominal pain, weakness, nausea and vomiting, diarrhea, fever, and central nervous system (CNS) symptoms
   b. Centripetal fat distribution, “moon” face, muscular wasting, thin skin and subcutaneous tissue, poor wound healing, increased susceptibility to infection, decreased inflammatory response, excessive bruising, petechial hemorrhages, facial plethora, reddish purple abdominal striae, hypertension, hypokalemia, alkalosis, osteoporosis, hypercalciuria and renal calculi, psychoses, peptic ulcer, hyperglycemia, virilization, amenorrhea, and impotence

27. What should the nurse be alert to in the care and treatment of acute adrenocortical insufficiency in regard to the monitoring of electrolyte levels?

28. Cushing syndrome is a characteristic group of manifestations caused by excessive circulating free ________________.

29. A characteristic sign of excess cortisol, whether from exogenous steroid therapy or a malfunction of the adrenal gland, is the ________________ face.

30. A sex is assigned to the child with adrenogenital hyperplasia that is consistent with the ________________.

   and ________________ is administered to suppress the abnormally high secretions of adrenocorticotropic hormone (ACTH).

31. What should parents have available when their infant is being treated with cortisol and aldosterone?

32. What causes the clinical manifestations of pheochromocytoma?

Disorders of Pancreatic Hormone Secretion: Diabetes Mellitus

33. What hormone is partially or completely deficient in diabetes mellitus?

34. When there is a deficiency in insulin, ________________ cannot enter the cell.
35. Describe the two types of diabetes mellitus (DM), including the etiology of the disease processes.
   a. Type 1 diabetes
   b. Type 2 diabetes

36. Indicate whether each of the following statements is true or false.
   a. T F Acanthosis nigricans may be found in as many as 90% of children with type 2 diabetes and is characterized by velvety hyperpigmentation.
   b. T F Type 2 DM is the predominant form of diabetes in the pediatric age group, and type 1 diabetes is less common.
   c. T F Insulin is needed for the entry of glucose into the muscle and fat cells.
   d. T F When the glucose concentration in the glomerular filtrate exceeds the renal threshold (6180 mg/dl), glucose spills into the urine (glycosuria), along with an osmotic diversion of water (polyuria), which is a cardinal sign of diabetes.
   e. T F Urinary fluid losses cause the excessive thirst (polydipsia) observed in diabetes.
   f. T F Without the use of carbohydrates for energy, fat and protein stores are replenished as the body attempts to meet its energy needs.
   g. T F Alteration in serum and tissue potassium can lead to cardiac arrest.
   h. T F Kussmaul respirations are characteristic of respiratory acidosis.

37. Identify the three principal microvascular complications of diabetes.
   a. 
   b. 
   c. 

38. Diabetes is a great imitator of what conditions?
   a. 
   b. 
   c. 

39. What are the three “polys” of diabetes mellitus?
   a. 
   b. 
   c. 

40. Diagnosis of diabetes can be obtained through an 8-hour fasting blood glucose level of ______________ mg/dl or more, or a random blood glucose value of ______________ mg/dl or more accompanied by
classic signs of diabetes. An oral glucose tolerance test (OGTT) finding of ________________ mg/dl or more in the 2-hour sample is almost certain to indicate diabetes.

41. Human insulin is packaged in the strength of 100 units/ml. Match each of the following types of insulin with the appropriate rate of action (peak effect).
   a. _______ Neutral protamine Hagedorn (NPH) 1. Rapid acting
   b. _______ Regular insulin 2. Short acting
   c. _______ NovoLog insulin 3. Intermediate acting
   d. _______ Lantus insulin 4. Long acting

42. Match each of the following age groups with the appropriate target A₁c (%).
   a. _______ Toddlers and preschoolers (>6 years) 1. <8%
   b. _______ School age (6–12 years) 2. ≤8.5% (but ≥7.5%)
   c. _______ Adolescents (>12 years) and young adults 3. <7.5%

43. __________________________ are designed to deliver fixed amounts of regular insulin continuously, thereby imitating the release of the hormone by the islet cells.

44. What has improved diabetes management and can be used successfully by children?

45. What does exercise do for the child with diabetes?


47. What are the most common causes of hypoglycemia?

48. What are some signs of hypoglycemia?

49. The appropriate emergency measure when a child with diabetes is having a hypoglycemic reaction is to administer ______________________ in some form.

50. Diabetic ketoacidosis (DKA) is a state of medical emergency. The nurse must recognize that the priority is to obtain a ______________________ for administration of fluids, electrolytes, and insulin.
A. Spend a day in a pediatric endocrine clinic. Answer the following questions and include specific examples or responses to illustrate these concepts.

1. What cardinal signs would the nurse expect to assess in a child with diabetes insipidus?
   a. 
   b. 

2. What clinical manifestations would the nurse expect to assess in a child with hyperpituitarism before epiphyseal closure?
   a. 
   b. 
   c. 
   d. 

3. What clinical manifestations of lymphocytic thyroditis would the nurse expect to find?
   a. 
   b. 
   c. 

4. What physical signs would the nurse expect to see in the acute onset of a thyroid storm?
   a. 
   b. 
   c. 
   d. 
   e. 
   f.
5. What are the clinical manifestations of pseudohypoparathyroidism?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 

B. The nurse is caring for a child with adrenocortical insufficiency. Answer the following questions and include specifics (examples, responses) to illustrate these concepts.
1. During the neurologic assessment on admission, the nurse notes muscular weakness, mental fatigue, irritability, apathy, negativism, increased sleeping, and listlessness. Which type of adrenocortical insufficiency do these signs describe?

2. After the nurse instructs the child’s parents about the administration of cortisol to the child, what should the parents demonstrate regarding their understanding of cortisol and the dangers in stopping the medication?

3. As treatment progresses, the nurse continually assesses the child for signs of hypokalemia. What are these signs?
C. The nurse is caring for a child with pheochromocytoma.
   1. What are at least five clinical manifestations that the nurse recognizes as being characteristic of pheochromocytoma?
      a.
      b.
      c.
      d.
      e.

2. The nurse understands the palpation of the mass in the child with pheochromocytoma may lead to the release of _________________. What can these do?

D. Joe, a 10-year old boy, is on the pediatric unit for diagnosis and treatment of diabetes mellitus.
   1. When Joe arrived on the unit, he had ketonuria and acetone breath. What emergency condition is he displaying?

   2. What is the definitive treatment for Joe’s condition?

   3. Joe says he is “scared to death” of needles. Based on his stated fear, explain what would be the best approach to administering insulin to treat his newly diagnosed diabetes mellitus?

   4. What is the best method to determine the amount of insulin Joe will need to regulate his blood glucose?

   5. What should the nurse recognize as the cornerstone of diabetes management and the major responsibility in diabetes nursing care?
6. After Joe’s first week of insulin therapy, he plays a game of basketball. He starts to feel nervous and irritable. He notices he has difficulty concentrating on the game and is unable to focus on what he is doing. He begins to shake and sweat.

a. What is Joe experiencing?

b. Intervene to treat this experience. What measures could the nurse suggest to Joe to help prevent this occurrence from happening in future basketball games?

7. The nurse identifies the nursing diagnosis of “Risk for Injury related to hypoglycemia” for Joe. What are three interventions that will help Joe meet the patient goal of “Patient will exhibit no evidence of hypoglycemia”?

a. 

b. 

c. 

8. What is the expected outcome for this goal?

9. It is important for Joe and his parents to know that his blood sugar levels will be affected by illness. What should the nurse stress about the importance of taking insulin when Joe is ill?
Chapter 30 introduces the various disorders that affect the skin, from skin lesions to wounds. It explores alterations in the integrity of the skin by the following causes: bacterial, viral, and fungal infections; environmental and internal antigens; stings and bites; and thermal injury. The information gained in this chapter will prepare the student to formulate an effective family-centered care plan for the child with integumentary dysfunction.

**REVIEW OF ESSENTIAL CONCEPTS**

**Integumentary Dysfunction**

1. What is an important factor in the etiology of skin manifestations?

2. More than half of the dermatologic problems in children are forms of ________________________.

3. What is the most common local symptom found in integumentary dysfunction?

4. Atopic dermatitis, often associated with ________________________, frequently begins in infancy.

5. Match the following terms used to describe skin lesions with the correct definitions or characteristics.
   a. ______ Erythema  
      1. Tiny pinpoint and sharply circumscribed spots in the superficial layers of the epidermis
   b. ______ Ecchymoses  
      2. Localized red or purple discolorations caused by extravasation of blood into the dermis and subcutaneous tissues
   c. ______ Petechiae  
      3. Changes that result from alteration in a lesion, such as those caused by rubbing
   d. ______ Primary lesions  
      4. A reddened area caused by increased amounts of oxygenated blood in the dermal vasculature
   e. ______ Secondary lesions  
      5. Skin changes produced by some causative factor
   f. ______ Macule  
      6. Elevated, flat-topped, and firm; rough, superficial papule greater than 1 cm in diameter
   g. ______ Patch  
      7. Flat, nonpalpable, and irregular in shape; macule greater than 1 cm in diameter
   h. ______ Plaque  
      8. Flat, nonpalpable, and circumscribed; less than 1 cm in diameter; brown, red-purple, white, tan
   i. ______ Wheal  
      9. Elevated, irregular-shaped area of cutaneous edema; solid, pale pink with lighter center

6. ________________________ are structural or physiologic disruptions of the skin that activate normal or abnormal tissue repair responses.

7. ________________________ are the most common epidermal wounds in children.
8. What are the four stages of wound healing?
   a.
   b.
   c.
   d.

9. Identify four factors that influence wound healing.
   a.
   b.
   c.
   d.

10. What are the major goals of therapeutic management in wound healing?
    a.
    b.
    c.
    d.

11. As with the use of any steroids, the usage of ______________ in large amounts may mask signs of infection, and symptoms may worsen after termination of the drug.

12. In most incidences of open wounds traditional gauze dressings have been replaced
    with ______________ healing dressings.

13. What are the signs of wound infection?
14. What should the nurse assess the wound bed for?

15. The nurse instructs that the patients should not put anything into a wound that they would not put into their _________________.

16. When removing transparent or hydrocolloid dressings, the nurse or parent should raise one edge of the dressing and pull _________________ to the skin to loosen the adhesive.

17. When giving a child who has pruritus and inflammation a bath, it’s important to use a solution of _________________.

**Infections of the Skin**

18. Match each of the following bacterial infections with the proper manifestations of the infection.
   
a. ______ Impetigo contagiosa
   b. ______ Cellulitis
   c. ______ Pyoderma
   d. ______ Folliculitis

1. Inflammation of skin and subcutaneous tissues with intense redness, swelling, and firm infiltration; lymphangitis “streaking” frequently seen
2. Begins as a reddish macule; ruptures easily, leaving superficial, moist erosion; exudate dries to form heavy, honey-colored crusts
3. Infection of hair follicle
4. Deeper extension of infection into the dermis; systemic effects include fever and lymphangitis

19. What are the two major nursing interventions related to bacterial skin infections?
   a.
   b.

20. _________________ are intracellular parasites that produce their effect by using the intracellular substances of the host cells.

21. Dermatophytoses (ringworms) are treated with the drug _________________ for a period of weeks or months.

**Skin Disorders Related to Chemical or Physical Contacts**

22. _________________ is an inflammatory reaction of the skin to chemical substances, natural or synthetic, that evokes a hypersensitivity response or direct irritation.

23. What is the major nursing goal in the treatment of contact dermatitis?

24. What is the offending substance in poison oak, ivy, and sumac?
25. When it is known that the child has made contact with poison oak, ivy, or sumac, what immediate response should the nurse educate the family to implement?

26. Adverse reactions to drugs are seen more often in the ______________________ than in any other organ, although any organ of the body can be affected.

27. Describe the nurse’s responsibility when a rash is suspected of representing a drug reaction.

**Skin Disorders Related to Animal Contacts**

28. Describe scabies lesions in the following ages.
   a. Infants
   
   b. Children

29. What is the drug of choice in the treatment of scabies?

30. In teaching parents about pediculosis capitis, what should the nurse emphasize?

31. What emergency medication should children who are hypersensitive to insect bites or stings carry with them at all times?

32. The nurse recognizes that in the treatment of Lyme disease, children older than 8 years of age are treated with oral ______________________, whereas ______________________ is recommended for children younger than 8 years of age.

33. The most important aspect related to animal bites is ______________________.

34. ______________________ are a heterogeneous group of disorders characterized by scaling that create challenging problems in treatment.
Skin Disorders Associated with Specific Age Groups

35. What does contact dermatitis in infants result from?

36. Identify the three aims of nursing management for diaper dermatitis.
   a.
   b.
   c.

37. Match each skin disorder with its clinical manifestations.
   a. ______ Seborrheic dermatitis
   b. ______ Atopic dermatitis (eczema)
   c. ______ Diaper dermatitis
      1. Appears on scalp, face, arms, and legs; lesions are red, have papules and vesicles, and are itchy
      2. Appears on the scalp, eyelids, and external ear canal; lesions are thick, yellowish, and scaly
      3. Appears on convex skin surfaces of buttocks, inner thighs, mons pubis, or scrotum

38. What skin disorder appears predominantly during the adolescent period?

39. What are the three pathophysiologic factors involved in the development of acne?
   a.
   b.
   c.

40. What is the only drug that interrupts the abnormal follicular keratinization that produces microcomedones in acne?

41. What are the side effects of taking Accutane (isotretinoin)?
Thermal Injury

42. Hot-water scalds are most frequent in what age group?

43. What factors are considered in assessing the severity of a burn?
   a. 
   b. 

44. What is the most frequent mechanism of electrical injury?

45. Match the type of burn with the correct definition
   a. _____ Partial-thickness (second-degree) burn
   b. _____ Superficial (first-degree) burn 
   c. _____ Fourth-degree burn
   d. _____ Full-thickness (third-degree) burn

   1. Minor burn consisting of a latent period followed by erythema; minimal tissue damage 
   2. Involves the epidermis and varying degrees of the dermis; painful, moist, red, and blistered
   3. Involves the muscle, fascia, and bone
   4. Involves the epidermis and dermis and extends into subcutaneous tissue; destroys nerve endings, sweat glands, and hair follicles

46. What are some of the clinical manifestations of an inhalation injury?

47. Following a serious thermal injury what is the immediate threat to life?

48. A less common complication of a thermal injury is ____________. __________________, resulting from fluid overload or acute respiratory distress syndrome (ARDS) in association with gram-negative sepsis.

49. Indicate whether each of the following statements regarding emergency care of burns is true or false.
   a. T  F It is helpful to place a wet dressing on a burn victim to promote vasoconstriction, which results in enhanced circulation to the burned area and less tissue damage.
   b. T  F Chemical burns require continuous flushing with large amounts of water before transport to a medical facility.
   c. T  F The use of neutralizing agents on the skin is contraindicated, because a chemical reaction is initiated and further injury may result.

50. What immunization should be administered prophylactically to a burn patient if more than 5 years have passed since the last immunization?
51. List the primary concerns in the therapeutic management of major burns.
   a.
   b.
   c.
   d.

52. What kind of diet is encouraged for the burn patient to provide adequate nutrition for healing?

53. ___________________________ is the drug of choice for managing pain in burn victims.

54. Management of partial-thickness wounds requires ___________________________ of devitalized tissue to promote healing.

55. Describe the following dressings for burns.
   a. Open
   b. Occlusive

56. Indicate whether each of the following statements regarding nursing care in the management phase of wound healing is true or false.
   a. T F Disorientation in the burned patient is one of the first signs of overwhelming sepsis and may indicate inadequate hydration.
   b. T F Assessment of the sensorium is an important indicator of the adequacy of nutrition.

57. Treatment of sunburn involves what three factors?
   a.
   b.
   c.
58. What does frostbite result from?

59. ___________________________ waves are shorter and are responsible for tanning, burning, and most of the harmful effects attributed to sunlight, especially skin cancer.

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. Mrs. Evans needs home instructions in caring for her 10-year-old boy, Adam, who sustained a deep wound on his left foot when he fell off his skateboard. Adam also has diabetes mellitus.
   1. What factors in Adam’s life might delay his wound healing?
      a. 
      b. 

   2. Formulate a nursing diagnosis for Adam and his situation.

B. Mrs. Ryan brings 5-year-old Sean to the clinic because he has several patches over his legs and arms that are red, swollen, and itching. She reports he was out playing in a wooded area with his father 2 days previously. On examination, you discover that Sean has localized, streaked impetiginous lesions typically resulting from poison ivy, oak, or sumac.
   1. What is the treatment of choice?

   2. Identify three nursing interventions for teaching Sean’s family how to immediately respond to this type of incident in the future.
      a. 
      b. 
      c. 

C. Britney, age 8 years, is brought to the pediatric health center by her mother. Her mother states that Britney has been scratching her head, and she has found small white specks in Britney’s hair. Britney’s mother brings a note from the school stating that head lice have been found in several children in her classroom.
   1. Why are schoolchildren highly susceptible to infestations of head lice?
2. What causes the characteristic itching seen with pediculosis?

3. What is the drug of choice in treatment of pediculosis?

4. What two factors must accompany the treatment of pediculosis for it to be effective?
   a. 
   b. 

D. The nurse is caring for a child who has sustained a thermal injury.

   1. What interventions will achieve the patient goal, “Child will achieve optimal physical functioning”? 
      a. 
      b. 
      c. 
      d. 
      e. 
      f. 
      g. 

   E. Describe how sunscreen should be applied, including what area needs to be avoided.
Chapter 31 introduces nursing considerations in the care of the child immobilized with an injury or a degenerative disease. The disorders considered are of congenital, acquired, traumatic, infectious, neoplastic, or idiopathic origin. On completion of this chapter, the student will be prepared to formulate nursing goals and interventions to provide family-centered care to the child with musculoskeletal or articular dysfunction.

REVIEW OF ESSENTIAL CONCEPTS

**The Immobilized Child**

1. What three factors cause most of the pathologic changes that occur during immobilization?
   a. 
   b. 
   c. 

2. When does joint contracture begin during immobilization?

3. All children who are immobilized are at risk for skin breakdown. What two factors put some children at an even greater risk for skin breakdown?
   a. 
   b. 

**Traumatic Injury**

4. Define the following traumatic injuries.
   a. Contusion 
   b. Dislocation 
   c. Sprain 
   d. Strain
5. The first minutes to 12 hours are the most critical period for virtually all soft-tissue injuries. Basic principles of managing sprains and other soft-tissue injuries are summarized in the acronyms RICE and ICES. What do these acronyms stand for?
   a. RICE
   b. ICES

6. Any investigation of fractures in infants, particularly multiple fractures, should include consideration of__________________________

7. If the fracture does not produce a break in the skin, it is a ______________________, or ______________________, fracture. Fractures with an open wound through which the bone protrudes are called ______________________, or ______________________, fractures.

8. What is the most effective diagnostic tool in evaluating skeletal trauma?

9. What are the four goals of the therapeutic management of fractures?
   a. ______________________
   b. ______________________
   c. ______________________
   d. ______________________

10. Identify the five Ps of ischemia from a vascular injury.
    a. ______________________
    b. ______________________
    c. ______________________
    d. ______________________
    e. ______________________
11. During the first few hours after a cast is applied, what is the chief concern about the extremity? How is this likelihood reduced?

12. Identify and describe the three essential components of traction management.
   a. 
   b. 
   c. 

13. What are the three types of traction?
   a. 
   b. 
   c. 

14. ________________ is the process of separating opposing bone to encourage regeneration of new bone in the created space.

15. When amputated, a severed part should be preserved in what manner to facilitate reattachment?

**Congenital Defects**

16. Identify and describe the three broad categories of predisposing factors associated with developmental dysplasia of the hip (DDH)?
   a. 
   b. 
   c. 
17. Why is radiographic examination in early infancy for DDH not reliable?

18. Match each type of clubfoot position with its defining characteristic.

a. _______ Talipes varus
b. _______ Talipes equinus
c. _______ Talipes valgus
d. _______ Talipes calcaneus

1. Plantar flexion, in which the toes are lower than the heel
2. An eversion, or bending outward
3. Dorsiflexion, in which the toes are higher than the heel
4. An inversion, or bending inward

19. Therapeutic management of congenital clubfoot involves:

a. 

b. 

c. 

20. Deletion or shortening of digits or limbs may also be associated with ____________________________, especially before 10 to 12 weeks of gestation; however, the incidence and relationship remain uncertain.

Acquired Defects

21. The aims of treatment of Legg-Calvé-Perthes disease include what four factors?

a. 

b. 

c. 

d. 

22. Match the following deformities of the spine with the proper defining characteristics of that deformity.

a. _______ Kyphosis
b. _______ Lordosis
c. _______ Scoliosis

1. An accentuation of the cervical or lumbar curvature beyond physiologic limits
2. An abnormally increased convex angulation in the curvature of the thoracic spine
3. A lateral curvature and spinal rotation causing rib asymmetry

23. How is scoliosis definitively diagnosed?
24. What are the two main methods of therapeutic management of scoliosis?
   a. 
   b. 

25. What bracing system requires that postoperatively the child is log-rolled to prevent spinal motion and a molded plastic jacket is used to stabilize the spine until the fusion is solid?

**Infections of Bones and Joints**

26. __________________________ is an infectious process in the bone. It can occur at any age but is most frequently seen in children 10 years of age or younger. __________________________ is the most common causative organism.

27. When the infective agent of osteomyelitis is identified, vigorous __________________________ therapy is initiated with an appropriate __________________________.

**Bone and Soft-Tissue Tumors**

28. Eighty-five percent of all primary malignant bone tumors in children are either __________________________ sarcoma or __________________________ sarcoma. The peak ages during childhood are 15 to 19 years.

29. In osteogenic sarcoma, needlelike new bone formation growing at right angles to the diaphysis (shaft) produces a “________________________” appearance. In Ewing sarcoma, the deposits of new bone in layers under the periosteum produce a(n) “________________________” appearance.

30. If an amputation is performed for osteogenic sarcoma, the child may be fitted with a temporary __________________________ immediately after surgery.

31. __________________________ is the most common bone cancer in children. The surgical approach consists of surgical biopsy followed by either __________________________ or __________________________.

32. Describe phantom limb pain.

33. What is the treatment of choice for Ewing sarcoma?
34. Many of the signs and symptoms attributable to __________________ are vague and frequently suggest a common childhood illness, such as “earache” or “runny nose.”

35. What are the three main nursing responsibilities in care of the child with a rhabdomyosarcoma?
   a. 
   b. 
   c. 

**Disorders of Joints**

36. What is the new name replacing juvenile rheumatoid arthritis? Why was a new name given?

37. What are the major goals of therapy for the child with JIA?
   a. 
   b. 
   c. 
   d. 

38. What are the primary groups of drugs prescribed for JIA?
   a. 
   b. 
   c. 
   d. 

39. T  F  Practitioners may recommend nighttime splinting to help minimize pain and reduce flexion deformity.

40. T  F  Corticosteroids are the first drugs of choice for JIA.
41. __________________________ (__________________________) is a chronic, multisystem, autoimmune disease of the connective tissues and blood vessels characterized by inflammation in potentially any body tissue.

42. Describe a characteristic cutaneous response of SLE.

43. Identify the principal drugs employed to control the inflammation of SLE.

44. The child with SLE and his or her family must learn to recognize subtle signs of __________________________

and potential complications of __________________________ and to communicate these concerns to their health care provider.

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

**A.** Spend a day on the neurologic unit observing the care of immobilized children. On the unit, the nurse must plan the care of the immobilized child with the knowledge that immobilization causes functional and metabolic responses in most of the body’s systems.

1. What are the major musculoskeletal consequences of immobilization?

2. What is the rationale for frequent position changes?

3. What are some of the primary effects of immobilization on the cardiovascular system?

**B.** Billy, a 2-year-old child, comes into the after-hours care center with his father and mother. Billy’s father said he was holding Billy’s hand when they were walking down the stairs to leave the crowded football game. Billy began to try to pull and run away, so the father jerked tightly onto Billy’s arm to keep him close. Billy cried, was anxious, and began holding his right arm. In the after-hours clinic, Billy is sitting and still bracing his arm.

1. What type of injury did Billy probably sustain?

2. How is this type of injury treated?
C. Kendra, a 10-year old girl, is in 90-degree traction after a fall from a two-story building.
1. List at least four ways skin breakdown is prevented in the child who is in traction.
   a. 
   b. 
   c. 
   d. 

2. How is alignment maintained for the child who is in traction?
   a. 
   b. 
   c. 

D. The nurse is caring for a child with developmental dysplasia of the hip (DDH).
1. During the infant assessment process, what clinical signs could indicate DDH in the newborn?
   a. 
   b. 
   c. 
   d. 
   e. 

2. How does the method of handling infants in various cultures relate to the development of dysplasia of the hip in the newborn?

3. How is the hip joint maintained to promote normal hip development?
E. Jose, age 8 years, is admitted for treatment of osteogenesis imperfecta.
   1. What clinical manifestations would the nurse expect to find in Jose if the diagnosis is correct?

   2. What two things does the rehabilitative approach to management of osteogenesis imperfecta aim to prevent?
      a. 
      b. 

F. Tina, age 13 years, is admitted to the pediatric unit for treatment of JIA.
   1. The former drug of choice for treating JIA was aspirin. What class of drug has replaced aspirin as the drug of choice? Why was aspirin replaced?

   2. How is JIA diagnosed?

   3. Identify five nursing goals for treating Tina.
      a. 
      b. 
      c. 
      d. 
      e. 
Chapter 32 introduces nursing considerations essential to the care of the child with a disorder of neuromuscular function. The conditions discussed in this chapter may result from defective transmission of nerve impulses to muscles, dysfunction of peripheral motor or sensory nerves, or damage to the central nervous system. After completing this chapter, the student will be prepared to formulate nursing goals and interventions that provide family-centered care to the child with neuromuscular or muscular dysfunction.

REVIEW OF ESSENTIAL CONCEPTS

Congenital Neuromuscular or Muscular Disorders

1. ___________________________ is a group of permanent disorders of the development of movement and posture, causing activity limitation, that are attributed to nonprogressive disturbances that occurred in the developing fetal or infant brain.

2. Intrauterine exposure to maternal ___________________________ is associated with an increased risk of cerebral palsy (CP) in infants of normal birth weight and preterm infants.

3. List the four classifications of CP, which are based on the nature and distribution of neuromuscular dysfunction.
   a. 
   b. 
   c. 
   d.

4. Neuroimaging of the child with suspected brain abnormality and CP is now recommended for diagnostic assessment, with ___________________________ (__________________________) preferred to computed tomography (CT) scan.

5. What are some physical warning signs that point toward possible CP early in life?
   a. 
   b. 
   c. 
   d.
6. Identify the five broad areas of therapeutic management for the child with CP.
   a.
   b.
   c.
   d.
   e.

7. What drug is used to decrease spasticity in children with CP?

8. What are five problems common among children with CP?
   a.
   b.
   c.
   d.
   e.

9. According to available data, approximately ________________% to ________________% of individuals with CP are mentally retarded.
10. The two major forms of spina bifida (SB) cystica are ________________________, which encases meninges and spinal fluid but no neural elements, and ________________________, which contains meninges, spinal fluid, and nerves.

11. Which of the following is an important nursing intervention when caring for a child with a myelomeningocele in the preoperative stage?
   a. Applying a heat lamp to facilitate drying and toughening of the sac
   b. Assessing sensory and motor function frequently to monitor for signs of impairment
   c. Applying a diaper to prevent contamination of the sac
   d. Placing the child on his or her side to decrease pressure on the spinal cord

12. It has been estimated that a daily intake of 0.4 mg of folic acid in women of childbearing age will prevent ______________________% to ______________________% of all cases of neural tube defects.

13. What are some symptoms of latex allergy in infants?
   a.
   b.
   c.
   d.
   e.

14. What are the important goals of therapy regarding latex allergy?
   a.
   b.

15. ______________________ disease is a disorder characterized by progressive weakness and wasting of skeletal muscles caused by degeneration of anterior horn cells. It is inherited as an autosomal recessive trait and is the most common paralytic form of the floppy infant syndrome (congenital hypotonia).
16. How is Werdnig-Hoffmann disease treated?

17. All of the muscular dystrophies have a genetic origin in which there is a gradual degeneration of __________________. What is the most common form of muscular dystrophy?

18. What is the most common cause of death in Duchenne muscular dystrophy?

19. What are the primary goals of therapeutic management of muscular dystrophy?
   a. 
   b. 

**Acquired Neuromuscular Disorders**


21. What are the initial symptoms of GBS?
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 
   g. 
   h. 
22. How is GBS treated?

23. Tetanus, or lockjaw, is an acute, preventable, but often fatal disease caused by an exotoxin produced by the anaerobic spore-forming, gram-positive bacillus _________________.

24. Preventive measures for tetanus are based on the _______________________ of the affected child and the nature of the injury.

25. What is the treatment for the unimmunized child who sustains a tetanus-prone wound?

26. What causes infant botulism? Where are prime sources of botulism found?

27. What are some common symptoms of infant botulism?
   a. 
   b. 
   c. 
   d. 

28. What is the diagnosis of botulism based on?

29. How is infant botulism treated?

30. The most common cause of serious spinal cord damage in children is trauma involving _________________.

31. Define the following terms.
   a. Paraplegia
   b. Quadriplegia
32. What three factors are the focus in the nursing management of spinal cord injury (SCI)?
   a.
   
   b.
   
   c.

33. During the recovery and rehabilitation phase, patients with SCI must be carefully monitored for complications of immobility, such as _______________________________ and _______________________________.

**APPLYING CRITICAL THINKING TO NURSING PRACTICE**

A. Angela, age 10 years, is being treated for problems related to cerebral palsy. Her biggest concern right now is her repeated injuries and accidents due to her physical disabilities.
   1. Identify the priority nursing diagnosis for Angela.
   2. What would a patient goal be for Angela related to this diagnosis?
   3. What are some nursing interventions the nurse could implement to meet this goal?
      a.
      
      b.
      
      c.
      
      d.
      
      e.
      
      f.
   4. Identify nursing intervention for Angela and her family.
B. Ada, a newborn, is transferred to the pediatric unit for surgical evaluation of a myelomeningocele.
   1. What are three nursing goals for Ada’s initial care?
      a. 
      b. 
      c. 

   2. What assessment data would indicate the accomplishment of each of the nursing goals identified in question 1?
      a. 
      b. 
      c. 

C. Spend a day in a clinic that treats children with muscular dystrophy.
   1. What is the major emphasis of nursing care for a child with muscular dystrophy?

   2. What type of counseling is recommended for parents, sisters, and maternal aunts and their female offspring?

D. Tina, age 16 years, has been admitted to the pediatric unit with a diagnosis of Guillain-Barré syndrome (GBS).
   1. On what three factors is the diagnosis of GBS based?
      a. 
      b. 
      c. 

   2. What medication has been reported to be most effective in treating chronic neuropathic pain in GBS?
E. Jim, age 16 years, is hospitalized in a rehabilitation center for treatment of paraplegia caused by a spinal cord injury he sustained in a motor vehicle crash.
1. Explain the physiologic trauma that is responsible for most spinal cord injuries in children.

2. What is the major aim of Jim’s physical rehabilitation?
CHAPTER 1

Review of Essential Concepts

1. To improve the quality of health care for children and their families
2. Healthy People
3. equal opportunities
4. family influences, culture, peer acceptability, sociability
5. Dental caries
6. a. Clean drinking water
5. b. Vaccines
7. obesity
8. head
9. Birth weight
10. The number of deaths per 1000 live births during the first year of life
12. common cold
13. unintentional injuries (or “accidents”)
14. a. Congenital anomalies
5. b. Disorders relating to short gestation and unspecified low birth weight
5. c. Sudden infant death syndrome
5. d. Newborn affected by maternal complications of pregnancy
15. 5, 14
16. Violent, African Americans, males
17. Homicide
18. Barriers to health care
19. 50
20. human responses, actual, potential
21. constant
22. family
23. enabling, empowerment
24. psychological, physical
25. a. Prevent or minimize the child’s separation from the family.
5. b. Promote a sense of control.
5. c. Prevent or minimize bodily injury and pain.
26. therapeutic relationship
27. nontherapeutic
28. boundaries
29. d
30. preventive
31. education, anticipatory guidance
32. collaborate, coordinate
33. An appreciation of the hazards or conflicts of each developmental period
34. It is the collection, interpretation, and integration of valid, important, and applicable patient-reported, nurse-observed, and research-derived information. EBP provides a rational approach to decision making for the field of nursing.
35. It is a cognitive process that uses formal and informal thinking to gather and analyze patient data, evaluate the significance of the information, and consider alternative actions.
36. The nursing process is a method of problem identification and problem solving that describes what the nurse actually does.
5. a. Assessment
5. b. Diagnosis
5. c. Planning
5. d. Implementation
5. e. Evaluation
37. a. 2
5. b. 4
5. c. 1
5. d. 3
5. e. 5
38. problem statement, etiology, signs, symptoms
39. a. 1
5. b. 3
5. c. 2
40. The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge

Applying Critical Thinking to Nursing Practice

A.
1. Ensure families’ awareness of various health services; inform families of treatments and procedures; involve families in child’s care; change or support existing health care practices.

B.
1. Violated: Recognize that the family is the constant in a child’s life. Consider the needs of the family members— not just the child. Work to extend family visitation hours. Cluster care in units that still have times when the unit is closed to visitors to provide the family with more meaningful interaction times with their child.
2. Violated: Family members, especially siblings, should have free access to their family member. Work to extend visitation hours and to allow siblings of any age to visit. If this is not possible, strive to have a viewing room so that siblings can see their brother or sister.
3. Applied: Enabling family members to display their ability and competence fosters a parent-professional partnership. This could be enhanced by including the family members in scheduling activities of daily living throughout the day.
4. Applied: This empowers the family member to maintain a sense of control over daily activities. This intervention could be further enhanced by asking the mother what activities of daily living she would like to assist with or perform throughout the day during the initial morning assessment.

CHAPTER 2

Review of Essential Concepts

1. A group of individuals with shared characteristics or interests who interact with one another
2. General health, specific
3. Target populations
4. Promoting, maintaining, nursing, public health
5. Any three of the following are acceptable:
   - Home health agencies
   - Schools
   - Doctors’ offices
   - Ambulatory health clinics
   - Emergency departments
   - Triage call centers
   - Insurance agencies
   - Health departments
   - International relief agencies
   - Health education agencies
   - Juvenile detention facilities
   - Camps
   - Daycare centers
   - Foster care facilities
   - Hospice centers
   - Rehabilitation agencies
6. A. Times of natural disasters
   B. Public health threats
   C. Terrorism attacks
7. A. Caregiver
   B. Advocate
   C. Case manager
   D. Case finder
   E. Counselor
   F. Educator
   G. Epidemiologist
   H. Group process leader
   I. Health planner
   J. Manager
8. A. Analytics/assessment
   B. Policy development/program planning
   C. Communication
   D. Cultural competency
   E. Community dimensions of practice
   F. Basic public health sciences
   G. Financial planning and management
   H. Leadership and systems thinking
   I. Demographics
   J. Risk
   K. The science of population health applied to the detection of morbidity and mortality in a population
   L. Distribution, causes, population
   M. Incidence, prevalence
   N. Incidence, Prevalence
   O. Agent, host, environmental
   P. Subjective, objective
   Q. Statements
   R. Objective
   S. Community health diagnosis
   T. Community members, plan
   U. Health programs, three
   V. Goals, program objectives
   W. Ongoing

Applying Critical Thinking to Nursing Practice

A. 1. Primary prevention
   2. Primary prevention
   3. Tertiary prevention
   4. Tertiary prevention
   5. Secondary prevention
   6. Secondary prevention

B. 1. Health and social services, communication, recreation, physical environment, education, safety and transportation, politics and government, and economics
   2. Distribute questionnaires to a sample of people living in the community. Interview a sample of community members directly or by telephone. Interview community leaders. The nursing approach adds to the depth of the community assessment by including the nursing process, which provides a rational way to make a decision as well as a systematic framework for assessing communities.
   3. Conduct a windshield tour. Access records at the chamber of commerce, census bureau, libraries, state health department, Internet sites of voluntary health organizations, or government agencies.

CHAPTER 3

Review of Essential Concepts

1. Whatever the individual considers it to be
2. Consanguineous, affinal, family of origin
3. Responds to events
4. A. Family system theory is derived from general systems theory, a science of “wholeness” that is characterized by interaction among the components of the system and between the system and the environment. The family is viewed as a system that continually interacts with its members and the environment. The emphasis is on interaction.
   B. Family stress theory explains how families react to stressful events and suggests factors that promote adaptation to stress. The emphasis is on the family’s response to the stressful situation.
   C. Developmental theory addresses family change over time using Duvall’s family life cycle stages, based on predictable changes in the structure, function, and roles of the family, with the age of the oldest child as the marker for stage transition. The theory delineates developmental tasks for the family, much like the individual developmental tasks discussed in relation to personality development. The emphasis is on the family’s developmental tasks.
allow children to regulate their own activities. Children are involved in decision-making processes. Discipline is lax and inconsistent.

Parents direct children’s behavior and attitudes by emphasizing the reason for rules and by negatively reinforcing deviations. This is a combination of authoritarian and permissive practices. Control is focused on the issue. “Inner-directedness” is fostered.

Parents view themselves as a resource for their children rather than a role model. They also spend more time away from parents. Parental role changes include adjusting to children’s peer and school relationships while maintaining the marital bond.

2. Parental age, father’s involvement, parenting education, stressors in the family, having a child with a difficult temperament, stressed marital relationships, support systems

B.

1. Events such as marriage, divorce, birth, sickness, stressors (new sibling, career change, moving residences), financial stress, marital stress, lack of social support, death, abandonment, and incarceration

2. Roles must be redefined or redistributed.

3. a. Commitment
b. Appreciation
c. Time
d. Purpose
e. Congruence
f. Communication
g. Family rules, values, beliefs
h. Coping strategies
i. Problem solving
j. Positive attitude
k. Flexibility and adaptability
l. Balance

C.

1. The parent may feel guilty about time spent away from children; overburdened by responsibility and demands on time; depressed and doubtful of ability to cope with the child’s emotional needs; isolated and lonely; and overworked and anxious about the financial difficulties often associated with being a single-parent family.

2. a. Health care services that are open nights and weekends
b. High-quality child care
c. Respite child care
d. Parent enhancement centers

D. Examples of weakness of dual-career parents include less quality time spent with the children, more reported guilt, overload, stress, and undefined roles. Strengths of dual-career parents may include higher education levels of parents, better child care options, less isolation and loneliness, and fewer

Applying Critical Thinking to Nursing Practice

A.

1. a. Tasks include integrating infants into the family unit, accommodating to new parenting roles, and maintaining the marital bond.

b. Children develop new peer relations and new roles. They
financial stressors. Examples of weakness of a family with a career parent and a stay-at-home parent include specific and somewhat fixed gender roles, less quality time to care for self, risk of isolation and loneliness, and more pressure and stress on the career parent. Strengths of families with a career parent and a stay-at-home parent include more defined roles, more social support from one another and often more support for the children, less hectic schedules throughout the work week, and more quality time for the children at home with a parent.

CHAPTER 4

Review of Essential Concepts

1. a. 2
   b. 4
   c. 3
   d. 1
2. 5
3. social roles
4. a. Primary groups have intimate, continued, face-to-face contact; mutual support of the members; and the ability to order or constrain a considerable proportion of individual members’ behavior. Examples of primary groups include family and the peer group.
   b. Secondary groups have limited, intermittent contact and generally less concern for members’ behavior. Examples of secondary groups include professional associations and church organizations.
5. collective, inclusive
6. The feelings of helplessness and state of disorientation experienced by an outsider attempting to comprehend or effectively adapt to a different cultural group.
7. ethnocentrism
8. immunized
9. lack of money or material resources, which includes insufficient clothing, poor sanitation, and deteriorating housing.
10. Culturally competent care.
11. 29
12. Poverty
13. adolescents
14. Migrant
15. Immigrant
16. Any four of the following are acceptable:
   • Depression, grief, and anxiety related to migration and acculturation
   • Separation from extended family and supports
   • Language barriers
   • Disparities in socioeconomic status from their country of origin
   • Possible traumatic events that necessitated their immigration
17. Judeo-Christian
18. schools
19. a. Support
   b. Empowerment
   c. Boundaries and expectations
   d. Constructive use of time
   e. Commitment to learning
   f. Positive values
   g. Social competencies
   h. Positive identity
20. accept, conform
21. professed experts, peers, mass media
22. a. 2
   b. 1
   c. 3
   d. 5
   e. 4
23. a. Working on changing one’s world view by examining one’s own values and behaviors and working to reject racism and institutions that support it
   b. Becoming familiar with core cultural issues by recognizing these issues and exploring them with patients
   c. Becoming knowledgeable about the cultural groups we work with while learning about each patient’s unique history
   d. Becoming familiar with core cultural issues related to health and illness and communicating in a way that encourages patients to explain what an illness means to them
   e. Developing a relationship of trust with each patient and creating a welcoming atmosphere in the health care setting
24. a. 4
   b. 1
   c. 3
   d. 2
25. socioeconomic
26. poverty
27. families
28. a. Attitude toward time and waiting
   b. Person responsible for health care
   c. Manner of approach to child
   d. Family involvement
   e. Tension with members of majority group
   f. Verbal and nonverbal communication
   g. Level of comfort with body space or distance from others
   h. Eye contact
   i. Gestures
   j. Terms of address
   k. Expressions of emotion
   l. Food customs
   m. Health beliefs
   n. Health practices
29. a. Cold air entering the body
   b. Impurities in the air
   c. Other natural sources
30. hot, cold
31. a. 3
   b. 4
   c. 5
   d. 2
   e. 1
   f. 7
   g. 6
32. a. 3
   b. 2
   c. 4
   d. 1
33. Applying Critical Thinking to Nursing Practice
A. 1. a. Ethnicity
   b. Socioeconomic class
   c. Religion
   d. Schools
   e. Communities
   f. Peer influences
   g. Bicultural status
2. There is more of a future orientation with the possibility of upward social mobility, less reliance on tradition and extended
family, and more exposure to different views from adults who serve as role models and teachers.

B.
1. a. Hereditary factors, relationships with health care providers, and communication between members of the community and health care providers
   b. Socioeconomic factors, including aspects of impoverished living conditions such as crowding, poverty, homelessness, poor sanitation, access to lead-containing substances, and inadequate access to health services
2. a. Result in a diet lacking in protein, vitamins, and iron, leading to nutritional deficiency disorders and growth retardation in children. Healthy nutritious food, such as fruits and vegetables, costs more than less healthy alternatives, such as prepackaged food loaded with preservatives or fast food, which is often loaded with calories and fat.
   b. Result in family only seeking medical care for serious or life-threatening illness. There is often a lack of preventive health care, dental care, prenatal care, and immunizations.
   c. Facilitates the spread of disease.
3. When nurses are aware of their own culturally founded values and beliefs, they are often more sensitive to cultural behavior in others. They will project less of their own values and beliefs onto others when they recognize the freedom they have had in forming their own beliefs. Culturally aware nurses often identify behaviors as being characteristic of a culture rather than being “abnormal;” they can therefore relate more effectively with the families.
4. a. Beliefs about diet and food practices
   b. Beliefs regarding birth, death, or other rituals
   c. Beliefs regarding medical care

C.
1. Persons from some cultures may be late for appointments and consider this to be acceptable.
2. Who is responsible for the care of the child (mother, father, grandmother, etc.)?
3. Is the child allowed to speak for himself or herself, or does the parent make all decisions for the child?
4. Samoan families are often willing to relinquish care of the child to the hospital. Some health care professionals might interpret this as indifference or abandonment.
5. These could be difficulties resulting from language differences or interpretation of eye contact used by different cultures.

CHAPTER 5

Review of Essential Concepts

1. a. 3
   b. 1
   c. 2
   d. 4
2. quantitative, qualitative
3. predictable, continuous, orderly, progressive
4. developmental task
5. The head end of the organism develops first and is very large and complex, whereas the lower end is small and simple and takes shape at a later period. The physical evidence of this trend is most apparent during the period before birth, but it also applies to postnatal behavior development. Infants achieve structural control of the head before they have control of the trunk and extremities, hold their back erect before they stand, use their eyes before their hands, and gain control of their hands before they have control of their feet.
6. Development is near-to-far or midline-to-peripheral. A conspicuous illustration is the early embryonic development of limb buds, which is followed by rudimentary fingers and toes. In the infant, shoulder control precedes mastery of the hands, the whole hand is used as a unit before the fingers can be manipulated, and the central nervous system develops more rapidly than the peripheral nervous system.
7. Gross, fine
8. a. T
   b. F: Growth and development progress at different rates.
   c. F: It is the first three months.
9. a. 2
   b. 1
   c. 4
   d. 3
10. 2
11. 4, 7, triples, quadruples
12. 2, 400
13. a. Improper or inadequate use of protective sports equipment for children
   b. Inadequate conditioning, especially in flexibility
   c. The rapid growth rate of the physisal (the segment of tubular bone that is concerned mainly with growth) zone of hypertrophy in adolescents may lead to a higher incidence of fractures than of ligamentous ruptures.
14. The tissues are small in relation to body size but are well developed at birth. They increase rapidly to reach adult dimensions by 6 years of age and continue to grow. At about age 10 to 12 years, they reach a maximum development that is approximately twice their adult size. This is followed by a rapid decline to stable adult dimensions by the end of adolescence.
15. The rate of metabolism
16. 108, 40, 45
17. a. Hypoglycemia
   b. Elevated bilirubin levels
   c. Metabolic acidosis
18. 90
19. a. The difficult child
   b. The slow-to-warm-up child
   c. The easy child
20. behavior problems
21. a. 2
   b. 1
   c. 3
   d. 4
   e. 5
22. a. Trust vs. mistrust  
b. Autonomy vs. shame and doubt  
c. Initiative vs. guilt  
d. Industry vs. inferiority  
e. Identity vs. role confusion  

23. a. 3, 5  
b. 1, 8  
c. 4, 7  
d. 2, 6  

24. neurologic competence, cognitive development  

25. comprehension, expressed  

26. a. Children conform to rules imposed by authority figures and are culturally oriented to the labels of good-bad and right-wrong.  
b. Children endeavor to define moral values and principles that the entire society agrees to. Emphasis is on the possibility of changing law in terms of societal needs.  
c. Children are concerned with conformity and loyalty and with actively maintaining, supporting, and justifying the social order.  

27. a. This stage of development encompasses the period of infancy during which children have no concept of right or wrong, no beliefs, and no convictions to guide their behavior. However, the beginnings of a faith are established with the development of basic trust through their relationships with the primary caregiver.  
b. Toddlerhood is primarily a time of imitating the behavior of others. Children imitate the religious gestures and behaviors of others, without comprehending any meaning or significance to the activities. Parental attitudes toward moral codes and religious beliefs convey to children what they consider to be good and bad. Children still imitate behavior at this age and follow parental beliefs as part of their daily lives, rather than through an understanding of these basic concepts.  
c. Through the school-age years, spiritual development parallels cognitive development and is closely related to children’s experiences and social interactions. Most have a strong interest in religion during the school-age years. They accept the existence of a deity, and petitions to an omnipotent being are important and expected to be answered; good behavior is rewarded, and bad behavior is punished. Their developing conscience bothers them when they disobey. They may even question its validity.  
d. As children approach adolescence, they become increasingly aware of spiritual disappointments. They recognize that prayers are not always answered (at least on their own terms) and may begin to abandon or modify some religious practices. They begin to reason, to question some of the established parental religious standards, and to drop or modify some religious practices.  
e. Adolescents become more skeptical and begin to compare the religious standards of their parents with those of others. They attempt to determine which standards to adopt and incorporate into their own set of values. They also begin to compare religious standards with the scientific viewpoint. It is a time of searching rather than reaching. Adolescents are uncertain about many religious ideas but will not achieve profound insights until late adolescence or early adulthood.  

28. notions, beliefs, convictions  
29. body image  
30. Self-esteem  
31. a. 2  
b. 5  
c. 1  
d. 4  
e. 3  
32. a. Sensorimotor development  
b. Intellectual development  
c. Creativity  
d. Socialization  
e. Self-awareness  
f. Therapeutic value  
g. Moral value  

33. parent-child  
34. a. Heredity  
b. Neuroendocrine factors  
c. Nutrition  
d. Interpersonal relationships  
e. Socioeconomic level  
f. Disease  
g. Environmental hazards  

35. Nutrition  
36. mothering person  
37. developmental delays  
38. Was the child’s behavior at the time of testing typical for the child?  
39. a. 2  
b. 1  
40. Genomics  

Applying Critical Thinking to Nursing Practice  

A.  
1. Yes  
2. No, it does not. At 2 years of age, a child’s height is typically 50% of his or her eventual adult height.  
3. His mother demonstrates an appropriate response to him.  

B.  
1. It is important for health care providers to understand general patterns of development before performing an assessment of a child’s developmental status.  
2. a. Trust vs. mistrust: Trust develops when the child’s basic needs are consistently met. A specific intervention is to provide loving care. The unfavorable conflict is mistrust  
b. Autonomy vs. shame and doubt: Autonomy allows the child to make choices. An intervention would be to give the child a sense of control over his or her environment by letting the child assist with the care routine. The unfavorable conflict is shame and doubt, which arises when children are made to feel small and self-conscious, when their choices are disastrous, when others shame them, or when they are forced to be dependent in areas in which they are capable of assuming control.
c. Initiative vs. guilt: Initiative encourages exploration of the environment and setting realistic limits. An intervention would be to let the child choose when his or her bath will be given (in the morning or the evening). The unfavorable conflict is guilt. Children sometimes undertake goals or activities that are in conflict with those of parents or others, and being made to feel that their activities or imaginings are bad produces a sense of guilt.

d. Industry vs. inferiority: Industry encourages competition and cooperation and assisting in setting achievable goals. An intervention would be to have the child complete a task after setting a goal (e.g., to learn how to keep his dressing clean and dry). The unfavorable conflict is inferiority, which may develop if too much is expected of children or if they believe that they cannot measure up to the standards set for them by others.

e. Identity vs. role confusion: Identity provides positive feedback regarding appearance and activities. An intervention would be to provide privacy for the adolescent to have some time alone while hospitalized. The unfavorable conflict is role confusion or the inability to establish new and separate roles, which will allow the child to enter the next stage of life.

3. a. No concept of right or wrong, no beliefs, and no convictions to guide behavior

b. Imitation of religious gestures and behaviors of others without comprehension of meaning; typically, assimilation of some of the parents’ values and beliefs

c. Imitation of religious behavior and following of parental religious beliefs as part of daily lives without a real understanding of basic concepts

d. Strong interest in religion with acceptance of a deity; making petitions to this deity and expecting them to be answered; a developing conscience that bothers them when they disobey; a reverence for thoughts and an ability to articulate their faith, perhaps even question its validity

e. Realization that prayers are not always answered; initiation and then modification or abandonment of religious practices of their parents; beginning to determine which religious practices they will adopt and incorporate into their own set of values; perhaps comparing religious standards with a scientific viewpoint

C. Any child can experience problems if there is incongruency between his or her temperament and the environment. Infants with difficult or slow-to-warm-up patterns of behavior are more vulnerable to the development of behavioral problems in early and middle childhood. Children of parents who fail to accept and connect with the child’s temperamental behaviors often demonstrate behavioral problems.

2. a. Even-tempered, regular, predictable, adaptable, and open

b. Highly active; irritable; irregular in habits; has negative withdrawal responses; slow to adapt to new routines, people, or situations

CHAPTER 6

Review of Essential Concepts

1. a. Privacy

b. Minimal distractions

c. Play opportunities for children while parent is interviewed

2. Confidentiality

3. Consistency, accuracy

4. a. Allows the nurse to obtain information concerning the child’s health and developmental status, factors that may influence the child’s life, and cues to aspects in the child’s health and development that may concern the parents.

b. Enables the nurse to allow maximum freedom of expression while ensuring the interview does not go off on tangents.

c. Allow the nurse to make objective judgments concerning the parents’ perception, prevent the nurse’s views from being interjected into the interview process, and help the nurse detect cues from the parents that may aid in identifying problem areas.

d. Allows the interviewee to sort out thoughts and feelings.

e. Allows the nurse to see the problem from the parents’ perspective, which is an important part of understanding another’s feelings.

f. Provides preventive steps and actions so that problems will not occur.

g. Allows the nurse to recognize and prevent blocks that may alter the quality of the helping relationship.

5. Listening

6. a. Base interventions on needs identified by the family, not the professional.

b. View the family as competent or as having the ability to be competent.

c. Provide opportunities for the family to achieve competence.

7. Any three of the following are acceptable:

- Long periods of silence
- Wide eyes and fixed facial expression
- Constant fidgeting or attempting to move away
- Nervous habits (e.g., tapping)
- Sudden disruptions
- Looking around
- Yawning
- Frequently looking at a watch or clock
- Attempting to change the topic of discussion

8. Cultural, legal, ethical

9. a. F

b. T

c. T

d. T
10. a. 2  
   b. 1  
   c. 3  
   d. 4  

11. a. Spend time together.  
   b. Encourage the expression of ideas and feelings.  
   c. Respect their views.  
   d. Tolerate differences.  
   e. Praise good points.  
   f. Respect their privacy.  
   g. Set a good example.  

12. Play  
13. intervention, evaluation  
14. chief complaint  
15. a. The details of onset  
   b. A complete interval history  
   c. The present status  
   d. The reason for seeking help now  

16. a. Type  
   b. Location  
   c. Severity  
   d. Duration  
   e. Influencing factors  

17. a. Birth history  
   b. Dietary history  
   c. Previous illnesses, injuries, and operations  
   d. Allergies  
   e. Current medications  
   f. Immunizations  
   g. Growth and development  
   h. Habits  
   i. Sexual history  
   j. Family medical history  
   k. Geographic location  
   l. Family structure  
   m. Psychosocial history  
   n. Review of systems  

18. a. Approximate weight at 6 months, 1 year, 2 years, and 5 years of age  
   b. Approximate length at 1 and 4 years of age  
   c. Dentition, including age of onset, number of teeth, and symptoms during teething  

19. a. The history uncovers areas of concern related to sexual activity.  
   b. It alerts the nurse to circumstances that may indicate screening for sexually transmitted diseases or testing for pregnancy.  
   c. It provides information related to the need for sexual counseling, such as safe sex practices.  
   d. 4  

20. hereditary diseases, familial diseases  
21. social, cultural, religious, economic  
22. “How has your child’s general health been?” or “Has your child had any problems with his eyes, ears, nose, mouth, etc.?”  

23. a. 3  
   b. 1  
   c. 2  
   d. 4  

24. 24-hour recall  
25. An essential parameter of nutritional status, anthropometry is the measurement of height, weight, head circumference, proportions, skinfold thickness, and arm circumference in young children.  

26. a. Malnourished  
   b. At risk for becoming malnourished  
   c. Well nourished with adequate reserves  

27. a. Minimizes stress and anxiety associated with the assessment of various body parts.  
   c. Allows for maximum preparation of the child.  
   d. Preserves the essential security of the parent-child relationship, especially with young children.  
   e. Maximizes the accuracy and reliability of assessment findings.  

28. physical growth parameters  
29. BMI (body mass index)-for-age  
30. Nurses are often responsible for measuring growth in children.  
31. a. Children whose height and weight percentiles are widely disparate.  
   b. Children who fail to show the expected growth rates in height and weight, especially during the rapid growth periods of infancy and adolescence.  
   c. Children who show a sudden increase (except during puberty) or decrease in a previously steady growth pattern.  

32. length, height  
33. Place your hand lightly above the infant’s body to prevent accidental falls off the scale.  
34. skinfold thickness  
35. 36  
36. respirations, pulse, temperature  
37. 37° C to 37.5° C (98.6° F to 99.5° F)  
38. Proper technique  
39. Apical, Radial  
40. Diaphragmatic  
41. Appropriate cuff size  
42. Any five of the following: hypovolemia, which may be induced by medications such as diuretics; vasodilation medications; prolonged immobility; dehydration; diarrhea; emesis; fluid loss from sweating and exertion; alcohol intake; dysrhythmias; diabetes mellitus; sepsis; and hemorrhage  

43. 1 full minute  
44. apically  
45. a. 2  
   b. 3  
   c. 4  
   d. 1  

46. crackles, wheezes  
47. a. Inspection  
   b. Palpation  
48. poor nutrition  
49. Pulsate nodes using the distal portion of the fingers and gently but firmly pressing in a circular motion along the regions where nodes are normally present.  
50. 4  
51. meningeal  
52. PERRLA, which stands for pupils equal, round, react to light, and accommodation  

53. a. Showing the child the instrument  
   b. Demonstrating the light source and how it shines in the eye  
   c. Explaining the reason for darkening the room  

54. Snellen  
55. renal anomalies, mental retardation  
56. down and back, up and back  
57. A translucent, light pearly pink or gray  
58. Children often get upset with having to open their mouth.  
59. abdominal, diaphragmatic, thoracic  
60. a. Vesicular  
   b. Bronchovesicular  
   c. Bronchial  

61. over 7, less than 7  
62. S
63. a. Quality (They should be clear and distinct, not muffled, diffuse, or distant.)
   b. Intensity, especially in relation to the location or auscultatory site (They should not be weak or pounding.)
   c. Rate (They should have the same rate as the radial pulse.)
   d. Rhythm (They should be regular and even.)
64. a. Location of the area of the heart in which the murmur is heard best
   b. Time of the occurrence of the murmur within the S₁–S₂ cycle
   c. Intensity (evaluation in relationship to the child’s position)
   d. Loudness
65. a. F. Palpation should be performed last so bowel sounds are not altered.
   b. T
   c. F. A femoral hernia occurs more often in girls.
   d. T
66. The best approach is to examine the genitalia matter-of-factly, placing no more emphasis on this part of the assessment than on any other segment. With an adolescent, this part of the assessment should be performed last. With both children and adolescents, privacy, respect, comfort, and confidentiality should be provided.
67. scoliosis
68. Pigeon toe, or toeing in, which usually results from torsional deformities, such as internal tibial torsion
69. push, pull
70. neurologic
71. tensing

**Applying Critical Thinking to Nursing Practice**

**A.**
1. Introduce yourself to, and ask the name of, each family member who is present. Communicate with them using their preferred names, rather than using first names or “mother” or “father.” Include children in the interaction by asking them their name, age, and other information.
2. It is important to include the parents in the problem-solving process because family-centered care is a holistic approach to nursing care that helps ensure the care plan is understood and implemented and evaluated by the parent(s) and child working as a team.
3. One way is to use open-ended or broad questions, followed by guiding statements.
4. A number of techniques are effective. These include “I” messages, third-person technique, facilitative responding, storytelling, books, dreams, “what if” questions, three wishes, rating games, word association games, sentence completion, pros and cons, writing, drawing, magic, and play.

**B.**
1. Any four of the following are acceptable:
   - Learn proper terms of address.
   - Use a positive tone of voice to convey interest.
   - Speak slowly and carefully, not loudly.
   - Encourage questions.
   - Learn basic words and sentences of the family’s language.
   - Avoid professional terms.
   - Explain why questions are being asked.
   - Repeat important information as needed.
   - Explain in simple terms the reason or purpose for a treatment.
   - Provide handouts written in the family’s primary language.
   - Make arrangements for an interpreter when necessary.
   - Study about various cultures and learn from families and representatives of their culture.
   - Use various methods of communicating information.
   - Be sincere, open, and honest.
2. Tell the mother she can talk about the other children later in the interview. Then, at the end of the interview, allow her to verbalize her concerns and to ask basic questions.
3. He may not have received the immunizations required by law here in the United States; therefore it is important for the nurse to get a detailed history and accurate record of his immunizations from Mrs. Gonzales.
4. The nurse should obtain information concerning the age of Mrs. Gonzales and the father of Val, her marital status, and the current state of health and presence of existing illness of both parents. It is also important to know whether there is any evidence of heart disease, diabetes, stroke, high cholesterol, and similar conditions among first-degree relatives.

**C.**
1. a. 24-hour recall
   b. Food diary
   c. Food frequency record
2. Anthropometry is the measurement of height, weight, head circumference, proportions, skinfold thickness, and arm circumference. Skinfold thickness is a measurement of the body’s fat content and would be useful in determining whether Parker is overweight or obese.
3. a. Altered Nutrition: More Than Body Requirements related to eating practices
   b. Altered Nutrition: More Than Body Requirements related to knowledge deficit of parents

**D.**
1. Position the child comfortably in the mother’s lap, with the child’s knees flexed.
   Warm hands before touching skin. Use distraction.
   Teach the child to use deep breathing and to concentrate on an object. Begin with light and then move to deeper palpation.
   Palpate the most tender areas last. Have the child hold the parent’s hand and squeeze if painful.
   Use the nonpalpating hand to comfort the child.
2. Have the child “help” by placing her hand over the nurse’s hand. Have the child place her hand on her abdomen with fingers spread out wide. The nurse can then palpate between the child’s fingers.

Answer Key
CHAPTER 7
Review of Essential Concepts

1. a. Behavioral
   b. Physiologic
   c. Self-report
2. Behavioral assessment
3. For short, sharp procedural pain, such as during injections or lumbar punctures
4. Physiologic measures are not able to distinguish between physical responses to pain and other forms of stress to the body.
5. 3
6. 7, 10
7. a. 2
   b. 1
   c. 3
   d. 4
8. Children on ventilation or under sedation, or who have any of the following:
   • Neurologic impairments
   • Neuromuscular disorders
   • Severe brain damage
   • Vision loss
   • Hearing loss
   • Mental retardation
   • Metabolic disorders
   • Autism
   • Severe brain injury
9. mother, primary caregiver
10. cognitive impairments
11. Hispanic
12. Oucher Pain Scale
13. To develop a trusting relationship with the child and the family, so that a deeper understanding of the pain experience may be obtained
14. Any four of the following are appropriate:
   • Distraction
   • Relaxation
   • Guided imagery
   • Positive self-talk
   • Thought stopping
   • Behavioral contracting
15. The administration of concentrated sucrose with and without nonnutritive sucking
16. They have an increased frequency in quiet sleep, longer duration of quiet sleep, and decreased crying in the neonatal intensive care unit. Pain scores were also significantly lower in kangaroo-held infants.

17. a. Biologically based (foods, special diets, herbal or plant preparations, vitamins, other supplements)
   b. Manipulative treatments (chiropractic, osteopathy, massage)
   c. Energy based (Reiki, bioelectric or magnetic treatments, pulsed fields, alternating and direct currents)
   d. Mind-body techniques (mental healing, expressive treatments, spiritual healing, hypnosis, relaxation)
   e. Alternative medical systems (homeopathy; naturopathy; ayurvedic; and traditional Chinese medicine, which includes acupuncture and moxibustion)
18. Nonopioids, including acetaminophen (Tylenol, Paracetamol) and nonsteroidal antiinflammatory drugs (NSAIDs)
19. Opioids
20. peripheral nervous system, central nervous system
21. Morphine
22. a. 3
   b. 2
   c. 1
   d. 5
   e. 4
   f. 8
   g. 6
   h. 7
23. When the analgesic controls pain without causing severe side effects in the patient
24. a. F. They metabolize more rapidly.
   b. T
   c. T
25. A ceiling effect means that dosages higher than the recommended dosage will not produce greater pain relief. A major difference between opioids and nonopioids is that nonopioids have a ceiling effect.
26. Children who are physically able to “push a button” (i.e., 5 to 6 years of age) and who can understand the concept of pushing a button to obtain pain relief can use PCA.
27. a. Surgery
   b. Sickle cell crisis
   c. Trauma
   d. Cancer
28. Morphine
29. Meperidine
30. a. 3
   b. 2
   c. 1
31. timing, around the clock
32. a. T
   b. F. They should not exceed the expected duration.
   c. F. It is not always appropriate, since not all pain is continuous.
   d. T
   e. T
   f. T
33. Constipation
34. a. Tolerance
   b. Physical dependence
35. a. Irritability, tremors, seizures, increased motor tone, insomnia
   b. Nausea, vomiting, diarrhea, abdominal cramps
   c. Sweating, fever, chills, tachypnea, nasal congestion, rhinitis
36. 5, 10
37. Tolerance, 10, 21
38. Infants and children do not have the cognitive ability to make the cause-effect association and therefore cannot become addicted.
39. Pain relief scales or periodic ratings of pain intensity
40. 15, 30
41. Prevention of pain is always better than treatment.
42. a. 2
   b. 1
   c. 4
   d. 3
   e. 5
43. a. Increased heart rate
   b. Peripheral resistance
   c. Blood pressure
   d. Cardiac output
44. Preemptive analgesia involves administration of medications (e.g., local and regional anesthetics, analgesics) before the child experiences the pain or before surgery is performed, so that the sensory activation and changes in the pain pathways of the peripheral and central nervous system can be controlled.
45. Severe pain
46. Headache diary
47. a. Teaching patients self-control skills to prevent headache (e.g., biofeedback techniques, relaxation training)
Applying Critical Thinking to Nursing Practice

A.
1. You should notice Valery’s facial expression (F), leg movement (L), activity (A), cry (C), and consolability (C). This tool measures pain by quantifying pain behaviors with scores ranging from 0 (no pain behaviors) to 10 (most possible pain behaviors). The Parent’s Postoperative Pain Rating Scale could also be used.
2. It could be a combination of the following: heart rate, respiratory rate, blood pressure, palmar sweating, cortisone levels, transcutaneous oxygen, vagal tone, and endorphin concentrations. These reflect a generalized and complex response to stress.
3. The combination provides increased analgesia without increased side effects.
4. An antianxiety medication such as diazepam (Valium) or midazolam (Versed)

B.
1. Obtaining his level of pain by assessing his behaviors and placing these behaviors on a pain scale from 1 to 10
2. Pulmonary complications (pneumonia atelectasis) can occur after abdominal surgery and would affect his airway and breathing.

CHAPTER 8
Review of Essential Concepts

1. a. T
   b. F. It is onset of breathing.
   c. T
   d. F. It decreases in pressure.
2. c
3. a. Large surface area
   b. Thin layer of subcutaneous fat
   c. Inability to shiver
4. Newborns are predisposed to loss of body heat.
5. twice
6. lipase
7. d
8. concentrate urine
9. milia
10. a. Skin and mucous membranes
    b. Macrophage system
    c. Formation of antibodies to an antigen
   d. dehydration
12. a. F
   b. T
   c. T
   d. F. They are on the anterior of the tongue.
13. a. Heart rate
    b. Respiratory effort
    c. Muscle tone
    d. Reflex irritability
   e. Color
14. 10
15. Birth weight, gestational age
16. a. F. It is 13 to 14 inches.
   b. T
   c. F. The neonate loses about 10% of birth weight.
   d. F
   e. T
   f. T
17. a. skin
   b. head
   c. eyes
   d. ears
   e. nose
   f. mouth and throat
   g. neck
   h. chest
   i. lungs
   j. heart
   k. abdomen
   l. genitalia
   m. back
   n. anus
   o. extremities
   p. neurologic system
18. b
19. flat, firm
20. Strabismus
21. The rooting reflex is elicited by stroking the cheek and noting the infant’s response of turning toward the stimulated side and sucking.
22. The findings should be reported for further investigation.
23. 15, 20
24. Pseudomenstruation
25. undescended testes
26. spina bifida
27. A degree of paralysis from brain damage or nerve damage
28. 6, 8
29. second period
30. An effective method of systematically assessing the infant’s behavior
31. 16, 18
32. a. En face position
   b. Kissing, smiling
   c. Talking, cradling
   d. Holding, rocking
33. Establishing a patent airway
34. a. Tachypnea
   b. Nasal flaring
   c. Grunting
   d. Intercostal retractions
   e. Cyanosis
35. a. Evaporation
   b. Radiation
   c. Conduction
   d. Convension
36. hand washing
37. 55
38. The typical abductor is a female between the ages of 15 and 44 who is often overweight and has low self-esteem; she may be emotionally disturbed because of the loss of her own child or an inability to conceive and may have a strained relationship with her husband or partner.
39. Mild lid edema and a sterile, nonpurulent eye discharge
40. To prevent hemorrhagic disease of the newborn
41. To educate parents regarding the importance of screening and to collect appropriate specimens at the recommended time (after 24 hours of age)
42. The uppermost horny layer of the epidermis; sweat; superficial fat; metabolic products; and external substances, such as amniotic fluid, microorganisms, and chemicals
43. 10, 14
44. a. F. Infants can feel pain.
     b. T
45. Breast milk consists of a number of bioavailable micronutrients, meaning these nutrients are available in quantities and qualities that make them easily digestible by the newborn’s intestine and absorbed for energy and growth.
46. a. Respiratory infections
     b. Gastrointestinal infections
     c. Numerous allergies
     d. Type 2 diabetes
     e. Atopy
47. a. Early separation of mother and newborn
     b. Delays in initiating breastfeeding
     c. Provision of formula in the hospital and in discharge packs
     d. Conflicting information by health care workers
     e. Formula coupons given at discharge
48. The American Academy of Pediatrics recommends breastfeeding until at least 1 year of age as the best form of infant nutrition.
49. a. The mother’s desire to breastfeed
     b. Satisfaction with breastfeeding
     c. Available support systems
50. a. Absence of a rigid feeding schedule
     b. Correct positioning of the infant at the breast to achieve latch-on
     c. Correct sucking technique
51. Hold them close to the body while rocking or cuddling them.
52. a. It denies the infant the important component of close human contact.
     b. The infant may aspirate formula into the trachea and lungs while sleeping.
     c. It may facilitate the development of middle ear infections in the infant. If the infant lies flat and sucks, milk that has pooled in the pharynx becomes a suitable medium for bacterial growth. Bacteria then enter the eustachian tube, which leads to the middle ear, causing acute otitis media.
     d. It encourages continuous pooling of formula in the mouth, which can lead to nursing caries when the teeth erupt.
53. a. Cow’s milk–based formulas
     b. Soy milk–based formulas
     c. Whey-hydrolysate formulas
     d. Amino acid formulas
54. a. Prefeeding behavior
     b. Approach behavior
     c. Attachment behavior
     d. Consummatory behavior
     e. Satiety behavior
55. a. Recognizing individual differences and explaining to parents that such characteristics are normal
     b. Enhancing the infant’s development during awake periods
56. a. Proximity
     b. Reciprocity
     c. Commitment
57. a. Pointing out normal characteristics
     b. Encouraging identification through consistent referral to the child by name
     c. Encouraging the father to cuddle, hold, talk to, or feed the infant
     d. Demonstrating, whenever necessary, the soothing powers of caressing, stroking, and rocking the child
58. Recognizing the individuality of the children
59. Before birth
60. Postpartum hospitalizations are shorter.
61. 1 year

**Answer Key**

**Applying Critical Thinking to Nursing Practice**

A.  
1. fewer than 100 beats/min
2. Any of the following are acceptable:
   - The degree of physiologic immaturity
   - Infection
   - Congenital malformations
   - Maternal sedation or analgesia
   - Neuromuscular disorders
3. He is in the first period of reactivity.
4. c

**B.**

1. Perinatal mortality and morbidity are related to gestational age.
2. a. Posture
   b. Square window
   c. Arm recoil
   d. Popliteal angle
   e. Scarf sign
   f. Heel-to-ear maneuver
3. his or her weight falls between the 10th and 90th percentiles

**C.**

1. meconium: It is composed of amniotic fluid and its constituents, intestinal secretions, shed mucosal cells, and possibly blood (ingested maternal blood or minor bleeding of alimentary tract vessels).
2. It usually appears by the third day after initiation of feeding; is greenish brown to yellowish brown, thin, and less sticky than meconium; and may contain some milk curds.
3. In breastfed infants, stools are yellow to golden, are pasty in consistency, and have an odor similar to that of sour milk. In formula-fed infants, stools are pale yellow to light brown, are firmer in consistency, and have a more offensive odor.

**D.**

1. Microcephaly or craniostenosis
2. The absence of arm movement signals a potential birth injury paralysis, such as Klumpke’s or Erb-Duchenne palsy.
E.

1. Any three of the following are acceptable:
   - Ineffective Airway Clearance related to excess mucus, improper positioning
   - Risk for Altered Body Temperature related to immature temperature control or change in environmental temperature
   - Risk for Infection related to deficient immunologic defenses, environmental factors, or maternal disease
   - Risk for Trauma related to physical helplessness
   - Altered Nutrition: Less Than Body Requirements (potential), related to immaturity or parental knowledge deficit
   - Altered Family Processes related to maturational crisis, birth of full-term infant, or change in family unit

2. Any four of the following are acceptable:
   - Suction the mouth and nasopharynx with a bulb syringe.
   - Position the infant on his right side after feeding.
   - Position the infant on his back during sleep.
   - Perform as few procedures as possible on the infant during the first hour of life.
   - Take vital signs.
   - Observe for signs of respiratory distress.
   - Keep diapers, clothing, and blankets loose.
   - Clean nares of crusted material.
   - Check for patency of nares.
   - Keep the head of the bed elevated.

3. The airway remains patent, breathing is regular and unlabored, and the infant has a normal respiratory rate.

4. The parents should be instructed on routine baby care such as feeding, bathing, and umbilical and circumcision care. They should also be encouraged to participate in parenting classes, and the use of car restraints should be discussed.

CHAPTER 9

Review of Essential Concepts

1. a. Boggy fluctuant mass of scalp
   b. Pallor
   c. Tachycardia
   d. Increasing head circumference
   e. Forward and lateral positioning of the newborn’s ears

2. The clavicle, or collarbone

3. fractured clavicle

4. Pressure on the facial nerve (cranial nerve VII) during delivery, causing facial nerve paralysis

5. a. 2
   b. 3
   c. 1

6. a. 4
   b. 3
   c. 2
   d. 1

7. high-risk newborn

8. By birth weight, gestational age, and predominant pathophysiologic problems

9. apical heart rate

10. a. By collecting urine in a plastic urine collection bag specifically made for premature infants
    b. By weighing the diapers

11. To establish and maintain respiration

12. neutral thermal environment

13. a. Hypoxia
    b. Metabolic acidosis
    c. Hypoglycemia

14. a. Daily (at least) weights
    b. Accurate intake and output of all fluids, including medications and blood products

15. Overhydration

16. 32, 34, 36, 37

17. Minimal enteral

18. a. Fewer oxygen desaturations
    b. Absence of bradycardia
    c. Warmer skin temperature
    d. Better coordination of breathing, sucking, and swallowing

19. weight gain, tolerance

20. readiness

21. An underlying illness

22. a. A strong, vigorous suck
    b. Coordination of sucking and swallowing
    c. A gag reflex
    d. Sucking on the gavage tube, hands, or a pacifier
    e. Rooting and wakefulness before and after feedings

23. prone

24. delaying adhesive, pectin barrier

25. Benzyl alcohol

26. oxygen saturation, desaturations

27. a. Tactile
    b. Auditory
    c. Vestibular
    d. Olfactory
    e. Gustatory
    f. Visual

28. Any two of the following would be acceptable:
   - Closing doors (e.g., incubator portholes)
   - Not listening to loud radios or talking loudly
   - Not handling noisy equipment (e.g., trash containers)

29. Any two of the following would be acceptable:
   - Darkening the room
   - Covering the crib
   - Placing eye patches over the infant’s eyes at night

30. facilitated tucking

31. Discuss the infant’s appearance and the equipment attached to the child and give some indication of the unit’s general atmosphere.

32. Touching

33. hold, be present

34. a. 1
    b. 3
    c. 2

35. Hyperbilirubinemia, jaundice (or icterus)

36. a. Physiologic (developmental) factors (prematurity)
    b. An association with breastfeeding or breast milk
    c. Excess production of bilirubin (e.g., hemolytic disease, biochemical defects, bruises)
    d. Disturbed capacity of the liver to secrete conjugated bilirubin (e.g., enzyme deficiency, bile duct obstruction)
    e. Combined overproduction and undersecretion (e.g., sepsis)
    f. Some disease states (e.g., hypothyroidism, galactosemia, infant of a diabetic mother)
    g. Genetic predisposition to increased production (Native Americans, Asians)

37. phototherapy

38. Rh, ABO

39. O, A, B
40. Exchange transfusion
41. c
42. a. Provide adequate oxygen to the tissues.
b. Prevent lactic acid accumulation resulting from hypoxia.
c. Avoid the potentially negative effects of oxygen and baro-trauma.
43. On the side with the head supported in alignment by a small folded blanket, or, when on the back, positioned to keep the neck slightly extended
44. congenital heart
45. serious underlying disease
46. Jitteriness is not accompanied by ocular movement as are seizures. Whereas the dominant movement in jitteriness is tremor, seizure movement is clonic jerking that cannot be stopped by flexion of the affected limb. Jitteriness is highly sensitive to stimulation, but seizures are not.
47. Sepsis
48. Escherichia coli (or E. coli)
49. nosocomial
50. 7, 10, discontinued
51. An acute inflammatory disease of the bowel that has increased incidence in preterm infants
52. a. Intestinal ischemia
   b. Colonization by pathogenic bacteria
   c. Substrate in intestine
53. Any four or more of the following would be acceptable:
   • Abdominal distention
   • Blood in stools or gastric contents
   • Gastric retention
   • Localized abdominal wall erythema or induration
   • Bilious vomiting
   • Lethargy
   • Apnea
   • Poor feeding
   • Decreased urinary output
   • Unstable temperature
54. euglycemic
55. first
56. d
57. The infants suck avidly on fists, display an exaggerated rooting reflex, and are poor feeders with uncoordinated and inefficient sucking and swallowing reflexes.
58. Phenobarbital, chlorpromazine, clonidine, diazepam, methadone, and morphine
59. head growth
60. Marijuana
61. Toxoplasmosis, other, rubella, cytomegalovirus infection, herpes simplex
62. syndrome
63. teratogen; alcohol, tobacco, antiepileptics, isotretinoin, lithium, cocaine, diethylstilbestrol
64. protein, carbohydrate, fat
65. a. Collecting the initial specimen as close as possible to discharge or no later than 7 days afterward
   b. Obtaining a subsequent sample by 2 weeks of age if the initial specimen is collected before the newborn is 24 hours old
   c. Designating a primary care provider for all newborns before discharge for adequate newborn screening follow-up
66. iodine
67. phenylalanine hydroxylase
68. Screening with the Guthrie blood test
69. Galactosemia

Applying Critical Thinking to Nursing Practice
A.
1. a. Caput succedaneum is a vaguely outlined area of edematous tissue situated over the portion of the scalp that presents in a vertex delivery. The swelling consists of serum, blood, or both, accumulated in the tissues above the bone, and it may extend beyond the bone margins. It is present within 24 hours of birth. The injury usually disappears after a few days.
   b. Cephalhematoma is formed when blood vessels rupture during labor or delivery, producing bleeding into the area between the bone and its periosteum. The boundaries are sharply demarcated and do not extend beyond the limits of the bone. Swelling is usually minimal at birth and increases on the second or third day. It is absorbed within 2 weeks to 3 months.
2. Early signs of subgaleal hemorrhage are detected through serial head circumference measurements and inspection of the back of the neck for increasing edema. Subgaleal hemorrhage is indicated by a firm mass or a boggy fluctuant mass over the scalp that crosses the suture line and moves as the baby is repositioned. Other signs include pallor, tachycardia, increasing head circumference, and forward and lateral positioning of the newborn’s ears because the hematoma extends posteriorly.
B.
1. The nurse considers the individual infant’s readiness, rather than initiating feedings based on weight and age or a predetermined time schedule. Feeding readiness is determined by each infant’s medical status, energy level, ability to sustain a brief quiet alert state, gag reflex (demonstrated with a gavage tube insertion), spontaneous rooting and sucking behaviors, and functional sucking reflex.
2. Disturbing the infant as little as possible, maintaining a neutral thermal environment, gavage feeding as appropriate, promoting oxygenation, judiciously implementing any caregiving activities that increase oxygen and caloric consumption
3. Prone position is best for most preterm infants and results in improved oxygenation, better-tolerated feedings, and more organized sleep-rest patterns. Infants exhibit less physical activity and energy expenditure when placed in the prone position. Prolonged supine positioning for preterm infants is not desirable, because they appear to lose their sense of equilibrium when supine and use vital energy in attempts to recover balance by postural changes. In addition, prolonged supine positioning is associated with long-term problems, such as decreased flexion of the limbs, pelvis, and trunk; widely abducted hips (frog-leg position); retracted and abducted shoulders; ankle and
foot eversion; increased neck extension; and increased trunk extension with neck and back arching. When medically stable, preterm infants should also be placed in a supine position to sleep, unless conditions such as gastroesophageal reflux or upper airway anomalies make this impractical. Prone positioning for play should be provided in the nursery. Before discharge, the nurse should demonstrate for the parents how to position the infant supine, how to provide comfort such as a pacifier during the transition from prone to supine, and how to use neck rolls to make the position more comfortable for the infant, where the limbs and trunk are in flexion and the infant’s hands are to his or her face at midline.

4. Any four of the following answers are correct:
   • Clustering care so that the family can have quality time bonding with the infant
   • Turning down the lights
   • Assessing for signs of appropriate stimulation
   • When signs of overstimulation are observed, implementing interventions to decrease this stimulation
   • Providing a comforting touch
   • Adequately managing the infant’s pain
   • Providing stimulating sights, smells, and sounds for the infant
   • Offering stimulus during periods of alertness
   • Keeping interventions as short as possible
   • Providing times of uninterrupted sleep
   • Beginning one type of stimulus at a time
   • Providing firm boundaries (nesting)
   • Encouraging kangaroo care
   • Reducing noise levels
   • Having the mother softly speak to her infant or playing tapes of the parents’ and siblings’ voices
   • Positioning with limbs and trunk in flexion and hands to face at midline
   • Avoiding quick position changes
   • Dipping pacifiers in mother’s breast milk for nonnutritive sucking
   • Initiating eye contact as appropriate for the infant’s level of stimulation

C. 1. a. Immaturity of hepatic function
    b. Increased bilirubin load from increased hemolysis of red blood cells
    2. a. After 24 hours
       b. By the third day
       c. By the fifth day
    3. a. Shield the infant’s eyes with an opaque mask.
       b. Place the infant nude under the fluorescent light with a Plexiglas shield.
       c. Monitor body temperature.
       d. Give additional fluids.
       e. Provide meticulous skin care.
    4. a. Parental anxiety
       b. Less eye-to-eye contact because of eye patches
       c. Interruption of breastfeeding for phototherapy

D. 1. Nosocomially through cross-contamination; the sources of this could include a humidifying apparatus, suction machines, improper use of sterile technique, inadequate education and performance of hand-washing skills, or indwelling catheters and the like.
   2. Some of the signs of sepsis are poor temperature control, pallor, hypotension, edema, respiratory distress, diminished or increased activity, full fontanel, poor feeding, vomiting, diarrhea, jaundice, and an infant not doing well.
   3. Identification of the existing problem

E. 1. Hypoglycemia is common and occurs as a result of the hyperplasia and hypertrophy of the islet cells in utero. The islet cells continue to excrete large amounts of insulin after birth, resulting in decreased blood glucose levels (hypoglycemia).
   2. They help prevent hypoglycemia.
   3. a. Brachial plexus injury and palsy
       b. Fractured clavicle
       c. Phrenic nerve palsy

CHAPTER 10

Review of Essential Concepts

1. doubled
2. a. The close proximity of the trachea to the bronchi
   b. The short, straight eustachian tube
   c. The inability of the immune system to produce immunoglobulin A (IgA)
3. 6 months of age
4. liver
5. a. Greater proportion of extracellular fluid
   b. Immaturity of renal function
6. 1, 3
7. d
8. 4, 6
9. The quality of both the parent (caregiver)–child relationship and the care the infant receives
10. sensorimotor
11. a. Separation
    b. Achievement of object permanence
    c. Use of symbols
12. Reactive attachment
13. 4, 8
14. Crying
15. 10 or 11 months
16. psychosocial
17. a. T
    b. F
    c. F
    d. T
    e. T
18. Iron
19. 5
20. After 1 year of age
21. Infant cereal is introduced because of its high iron content.
22. a. Disappearance of the extrusion reflex
    b. Head control
    c. Voluntary grasping
    d. Maturation of the gastrointestinal tract
23. a. T
    b. F. It should begin at 6 months of age.
24. 6, 12
25. a. Suffocation
    b. Motor vehicle–related death
    c. Drowning

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Applying Critical Thinking to Nursing Practice

A.
1. a. The reason for the concern
   b. The frequency and duration of waking
   c. The usual bedtime routine
   d. The number of nighttime feedings
   e. The interventions Dean’s mother has already attempted

2. Educate Tami about putting Dean to bed when drowsy and not when asleep. Emphasize the importance of putting him to sleep in a crib or a separate place every night around the same time, teach her ways to prepare Dean for sleep, and come up with a sleep care plan for Tami to implement just before bedtime.

B.
1. a. Start Beverly on cereal first.
   b. Mix cereal with formula or breast milk.
   c. Introduce spoon feeding after Beverly has had some formula or breast milk.
   d. Beverly will at first push the spoon away; be persistent.
   e. Introduce new foods one at a time. New foods are fed in small amounts (about 1 teaspoon) for a period of 4 to 7 days.
   f. As the amount of solids increases, decrease the amount of formula.
   g. Do not introduce foods by mixing them with formula or breast milk in the bottle.

2. The nurse should explain that the majority of the infant’s caloric needs is derived from the primary milk source (human or formula); therefore, solids should not be perceived as a substitute for milk until Beverly is older than 12 months.

C.
1. a. Ensure proper storage such as refrigeration.
   b. Ensure protection from exposure to light.

2. The safest site for the administration of immunizations is the vastus lateralis or ventrogluteal muscle, because it is free of major arteries and nerves.

3. Needle length is an important factor because fewer reactions to immunizations are observed when the vaccine is given deep into the muscle rather than into subcutaneous tissue; deep intramuscular tissue has a better blood supply and fewer pain receptors than adipose tissue and thus is an optimum site for immunizations with fewer side effects.

D.
1. Such developmental landmarks include crawling, standing, cruising, walking, climbing, pulling on objects, throwing objects, picking up small objects, exploring by mouthing, and exploring away from the parent.

2. a. Place guards around heating appliances, fireplaces, or furnaces.
   b. Keep electrical wires hidden.
   c. Place plastic guards over electrical outlets; place furniture in front of outlets.
   d. Keep a hanging tablecloth out of reach.
   e. Apply sunscreen when the infant is exposed to sunlight.
   f. Check the temperature of food after warming it up.
   g. Lower the water heater to a safe temperature.
   h. Turn handles of cooking utensils toward the back of the stove.
   i. Have the child wear flame-resistant fabric.
   j. Avoid poorly ventilated vehicles.

3. Infants at this age still explore objects by mouthing them and might choke on a small object.

4. The child may think the medication is candy, eat some, and accidentally be poisoned.

CHAPTER 11

Review of Essential Concepts

1. a. Children exclusively breastfed by mothers who have an inadequate intake of vitamin D or children who are breastfed longer than 6 months without adequate maternal vitamin D intake or supplementation
b. Children with dark skin pigmentation who are exposed to minimal sunlight because of socioeconomic, religious, or cultural beliefs or housing in urban areas of high pollution
c. Children with diets that are low in sources of vitamin D and calcium
d. Individuals who use milk products not supplemented with vitamin D (e.g., yogurt, raw cow’s milk) as the primary source of milk

2. 10
3. Folic acid, 0.4 mg/day
4. Nutritional failure to thrive
5. whole cow’s milk
6. salicylates
7. fat-soluble
8. B₁₂
9. a. Inadequate food intake
   b. Diarrhea (gastroenteritis)
10. Cystic fibrosis; renal dialysis; gastrointestinal malabsorption; or acute illnesses, such as prolonged, untreated anorexia nervosa
11. Thin, wasted extremities and a prominent abdomen from edema
12. Marasmus
13. a. Rehydration with an oral rehydration solution that also replaces electrolytes
   b. Administration of medications such as antibiotics and antidiarrheals
   c. Provision of adequate nutrition by either breastfeeding or a proper weaning diet
14. 50
15. An acute asthma attack (wheezing, decreased air movement in airways, dyspnea)
16. a. Wear medical identification such as a bracelet.
   b. Have an injectable epinephrine cartridge (EpiPen) readily available and know how to use it.
   c. Have a copy of the individualized written treatment plan on hand for prompt diagnosis and treatment.
17. Abdominal pain, bloating, flatus, diarrhea
18. a. 2
   b. 3
   c. 1
19. a. Infant’s diet
b. Diet of the breastfeeding mother
c. Time of day when attacks occur
d. Relationship of the attack to feeding times
e. Presence of specific family members during attacks and those family members’ habits, such as smoking
f. Activity of caregiver before, during, and after the crying

Applying Critical Thinking to Nursing Practice

A. Food allergy, or hypersensitivity, is a reaction involving immunologic mechanisms, usually immunoglobulin E (IgE); the reactions may be immediate or delayed and mild or severe, such as anaphylactic reaction. Food intolerance, on the other hand, refers to reactions involving known or unknown nonimmunologic mechanisms; lactose intolerance is an example of a reaction that looks like allergy but is due to deficiency of the enzyme lactase.

2. Food allergy

B. 1. Loud crying spells lasting for 4 hours for the past 3 weeks; pulling his feet up toward his abdomen; and thriving normally despite the pain reaction
2. Changing the formula or eliminating cow’s milk protein from breastfeeding mothers, adding a chamomile tea at the onset of crying (with caution, because the risks associated with this are unknown), and behavioral interventions (massage infant’s abdomen, respond immediately to crying, swaddle infant, change environment, add a pacifier)

C. 1. Monitors can cause electrical burns and electrocution.
2. Inform the utility company so that if there is a power outage, emergency power may be provided. Notify the rescue squad so that if the infant stops breathing, they will be aware of the problem and may respond more quickly to a call.
3. used, response

CHAPTER 12

Review of Essential Concepts

1. Between 12 and 36 months
2. 2.5 years
3. T
4. potbellied
5. F
6. elimination
7. 18, 24
8. a. Differentiation of self from others, particularly the mother
   b. Toleration of separation from the parent
   c. Ability to delay gratification
   d. Control over bodily functions
   e. Acquisition of socially acceptable behavior
   f. Verbal means of communication
9. g. Ability to interact with others in a less egocentric manner

10. Negativism is an attempt by children to express their will by using words such as “no.” This frequently disrupts the environment. On the other hand, ritualism is the need to maintain sameness and reliability, providing a sense of comfort in the environment.
11. ego
12. Invention of new means through mental combinations or the final sensorimotor stage

13. In this stage, children cannot think in terms of operations—that is, the ability to manipulate objects in relation to each other in a logical fashion. Rather, toddlers think primarily on the basis of their perception of an event. Problem solving is based on what they see or hear directly, rather than on what they recall about objects and events.
14. family, environment
15. 2 years
16. 3 years
17. a. The child’s emergence from a symbiotic fusion with the mother
   b. Those achievements that mark children’s assumption of their individual characteristics in the environment

18. Rapprochement
19. 300, 65
20. They can feed themselves, drink well from a covered cup, and manage a spoon with considerable spilling.
21. Toddlers engage in parallel play alongside, not with, other children. There is less emphasis on the exclusive use of one sensory modality. The toddler inspects the toy, talks to the toy, tests its strength and durability, and invents several uses for it. Imitation is one of the most distinguishing characteristics of play and enriches children’s opportunity to engage in fantasy.

22. T
23. a. Bladder readiness
   b. Bowel readiness
   c. Cognitive readiness
   d. Motor readiness
   e. Psychologic readiness
A good time to start talking about the new baby is when toddlers become aware of the pregnancy and of the changes taking place in the home in anticipation of the new member.

The nurse should let the mother know this is a normal characteristic of parallel play, which is typical during the toddler years.

5. a. Toys should be purchased using safety and developmental level as guidelines.
   b. The child should be allowed to choose the toys he wishes to play with at a given time.

6. b

7. a. If drinking water is not fluoridated, provide fluoride supplements.
   b. Arrange a visit to the dentist so that the child may become familiar with the equipment.
   c. Introduce the use of a soft toothbrush as part of the child’s bedtime regimen.
   d. Encourage the consumption of a low-cariogenic diet.

B.

1. Toddlers give a persistent “no” response to most requests. Interventions include decreasing the opportunity for the word “no” by offering the toddler choices.

2. As an assertion of self-control and an attempt to control the environment, it increases independence. Interventions include educating the parents so they recognize that this is a normal and natural step in the toddler’s development.

3. Toddlers assert their independence by violently objecting in this manner to restrictions on their behavior. Interventions include educating the parents to allow some independence with restrictions on the behalf of their toddler so he or she can progress and develop in a healthy way.

4. a. Unpredictable table manners
   b. Rituals involving mealtime and utensils
   c. Inability to sit through family mealtimes
   d. Food fads or jags

5. This is important because the eating habits established in the first 2 or 3 years of life tend to have lasting effects. Interventions include educating parents about healthy choices for toddlers and discussing the importance of role modeling healthy eating.

6. separation

7. a. Bedtime rituals
   b. Use of transitional objects

C.

1. a. Child protection
   b. Parent and child education

2. The toddler has found new freedom in his or her increased locomotion and is unaware of danger in the environment.

3. a. Motor vehicle injuries
   b. Drowning
   c. Burns
   d. Poisoning
   e. Falls
   f. Aspiration and suffocation
   g. Bodily damage

4. Any five of the following are acceptable:
   • Matches and cigarette lighters
   • Sources of water—tubs, swimming pools
   • Medications, toxic agents, plants
   • Unguarded stairways
   • Uncovered electrical outlets
   • Tools, garden equipment
   • Firearms

5. a. 1, 3, 4, 5, 7, 8, 9
   b. 1, 4, 5, 6
   c. 3, 8
d. 2, 4, 5, 7

CHAPTER 13

Review of Essential Concepts

1. 3, 5
2. slows, stabilizes
3. F
4. 5
5. initiative, guilt
6. readiness

7. a. The preconceptual phase (ages 2 to 4 years)
   b. The phase of intuitive thought (ages 4 to 7 years)

8. play
9. T

10. Causality resembles logical thought.

11. Because of their egocentrism and transductive reasoning, preschoolers believe their thoughts are all-powerful.
the integrity of the skin, such as injections and surgery. They fear that if their skin is “broken,” all of their blood and “insides” can leak out. Therefore bandages are critical to “keep everything from coming out.”

opposite-sex, same-sex

Children aged 3 to 4 years can speak in sentences of three or four words. Their speech is telegraphic. They ask questions and use plurals and past-tense verbs. They can name familiar objects. Children aged 4 to 5 years use sentences of four to five words. They can repeat a question until they receive an answer.

Associative play is defined as group play in similar or identical activities but without rigid organization or rules.

a. They become friends for the child in times of loneliness.
b. They accomplish what the child is still attempting.
c. They experience what the child wants to forget or remember.

to cope

18. Children aged 3 to 4 years can speak in sentences of three or four words. Their speech is telegraphic. They ask questions and use plurals and past-tense verbs. They can name familiar objects. Children aged 4 to 5 years use sentences of four to five words. They can repeat a question until they receive an answer.

19. Associative play is defined as group play in similar or identical activities but without rigid organization or rules.

20. a. They become friends for the child in times of loneliness.
b. They accomplish what the child is still attempting.
c. They experience what the child wants to forget or remember.

to deal with the frightening in finding practical methods to cope

21. attention span

22. a. Learning group cooperation
b. Adjusting to various sociocultural differences
c. Coping with frustration, dissatisfaction, and anger

23. Personal observation

24. a. Determine what the child knows and thinks.
b. Be honest with responses.

25. Masturbation

26. a. Fear of the dark
b. Fear of being left alone
c. Fear of animals
d. Fear of ghosts
e. Fear of sexual matters
f. Fear of objects or persons associated with pain

27. By actively involving them in finding practical methods to deal with the frightening experience

28. Because of their limited capacity to cope

a. Quantity (number of occurrences)
b. Severity (interference with function)
c. Distribution (different manifestations)

d. Onset (sudden change in behavior)
e. Duration (at least 4 weeks)

30. 2, 4
31. stuttering; Boys
32. T
33. 13, 19
34. 5
35. fruit juices
36. T
37. Nightmares are scary dreams that take place during rapid eye movement (REM) sleep and are followed by full awakening. After the nightmare is over, the child wakes and cries. Night terrors are a partial arousal from very deep non-REM sleep. The child screams and thrashes during the terror and then is calm.

38. T
39. T

Applying Critical Thinking to Nursing Practice

A.

1. a. Slightly above the 25th percentile
b. Falls at the 25th percentile
2. Physical growth of a preschooler slows and stabilizes. The average child gains about 2.3 kg (5 pounds) per year and increases in height by about 6.5 to 9 cm (2.5 to 3.5 inches) per year.
3. a. Skips and hops on alternate feet; throws and catches ball well; jumps rope; skates with good balance; walks back-ward with heel to toe; jumps from height of 12 inches and lands on toes; balances on alternate feet with eyes closed
b. Ties shoelaces; uses scissors well; copies a diamond and triangle; prints a few letters, numbers, or words
c. Has a vocabulary of 2100 words; uses six- to eight-word sentences; names coins and names four or more colors; describes drawing; knows days of the week and names of months; can follow three commands in succession
4. The nurse could inform Thom’s mother that imaginary friends serve three purposes: they become friends in times of loneliness, they accomplish what the child is still attempting, and they experience what the child wants to forget or remember. Reassure Thom’s mother that his fantasy is a sign of health that helps him differentiate between make-believe and reality.

5. a. Jumping, running, climbing, swimming, skiing, skating, tricycles, scooter trucks, wagons, gym and sports equipment, sandboxes, wading pools, and winter sleds
b. Dress-up clothes, dolls, housekeeping toys, doll-houses, play-store toys, telephones, toy farm animals and equipment, trains, trucks, cars, planes, hand puppets, and doctor and nurse kits

6. The nurse could inform Thom’s mother to expect a tranquil period at 5 years of age; help Thom’s mother prepare him for entrance into school; ensure he is up-to-date on immunizations; suggest that unemployed parental caregivers consider their own activities when Thom begins school; and suggest swimming lessons or other activities for Thom.

B.

1. The social climate, type of guidance, and attitude toward the children that is fostered by the teacher or leader rather than whether structured learning is imposed
2. a. Meet the director.
b. Meet some of the caregivers or teachers.
c. Systematically evaluate the facility in comparison with others.
d. Observe the program in action.
3. a. Present the idea of school as exciting and pleasurable.
b. Talk to the child about the activities that he or she will participate in at school.

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Answer Key
c. Introduce the child to the teacher and familiarize him or her with the school.
d. Provide the school with detailed information about the child’s home environment, such as familiar routines and food preferences.

C.
1. At about age 3 years, children are aware of anatomic differences between the sexes and are concerned with how the anatomy of the opposite sex works. They are really concerned about eliminative functions. This leads to physical exploration and questions to obtain more information.
2. As toddlers and preschoolers cope with autonomy, separation, and object permanence, they begin to have more sleep problems. Some have trouble going to sleep, especially after so much activity and stimulation during the day. Others may develop bedtime fears, wake during the night, or have nightmares or sleep terrors. Still others may prolong the inevitable through elaborate rituals.
3. An inability to fall asleep, bedtime fears, waking during the night, nightmares, prolonging bedtime through rituals
4. Routine dental care should be well established during preschool years and is recommended at 6- to 12-month intervals, depending on the family history, the child’s dental development, and the presence or absence of dental caries.
5. The American Academy of Pediatrics Committee on Nutrition recommends that by 5 years old, fatty acid consumption should be less than 10% of caloric intake. Parents should provide foods with less saturated fat (e.g., low-fat milk) and consider including soy-enriched foods.
6. Carbonated beverages are known to contribute to dental caries, and they also provide nonnutritive calories that may displace or preclude the intake of nutrients necessary for growth.

CHAPTER 14
Review of Essential Concepts
1. a. Recent exposure to a known case
   b. History of prodromal symptoms or evidence of constitutional symptoms
   c. History of previous immunizations
   d. History of having the disease
2. a. Child will not spread the infection to others.
   b. Child will not experience complications.
   c. Child will remain comfortable.
   d. Child and family will receive adequate emotional support through family-centered care.
3. Immunizations
4. Hand washing
5. a. Varicella (chickenpox)
   b. Herpes zoster (shingles)
   c. Measles
6. Measles
7. Sparingly, antihistamine
8. a. 3
   b. 1
   c. 2
   d. 4
   e. 5
9. Inflammation of the conjunctiva
10. Chlamydia trachomatis
11. Keep the washcloth and towel of the child with the infection separate from those used by others. Make certain to discard the tissues that the child uses to clean the eye. Other important factors include encouraging the child to refrain from rubbing the eye and instructing the child on good hand-washing technique.
12. a. Keeping the eye clean
   b. Properly administering ophthalmic medications
13. Aphthous stomatitis
14. Herpetic gingivostomatitis (HGS)
15. a. 1
   b. 2
   c. 1
   d. 2
16. Parasitic infections
17. a. Identifying the organism
   b. Treating the infection
   c. Preventing initial infection or reinfection
18. Giardia lamblia
19. Enterobiasis, pinworm
20. a. Person to person
   b. Contaminated water
   c. Swimming or wading pools frequented by diapered infants
   d. Food
   e. Animals
21. a. Infants and toddlers are avid oral explorers of their environment.
   b. The sense of taste is less discriminating in small children, often leading them to ingest unpalatable substances.
   c. Toddlers and preschoolers are developing autonomy and initiative, which increase their curiosity.
   d. They are powerfully motivated by imitation, which is combined with a lack of awareness of danger.
22. Take the child to a health care facility with pediatric emergency treatment services for laboratory evaluation and surveillance.
23. a. Assessment
   b. Gastic Decontamination
   c. Prevention of Recurrence
24. Treat the child first, not the poison.
25. a. Infants and toddlers may not be a priority where lead decontamination
26. b. Dwelling in urban areas
27. c. Poverty
28. d. Living in older rental homes, where lead decontamination may not be a priority
29. a. Being of Hispanic origin
   b. Poverty
30. c. Being younger than 6 years of age
31. d. Dwelling in urban areas
32. e. Living in older rental homes, where lead decontamination may not be a priority
33. f. Neurologic
34. g. The blood lead level (BLL) test
35. h. Developmental delays, lowered intelligence quotient (IQ), reading skill deficits, visual-spatial
40. 900,000
41. child neglect
42. Intracranial bleeding (subdural and subarachnoid hematomas) and retinal hemorrhages; Signs may also include fractures of the ribs and long bones. However, often there are no signs of external injury.
43. A physical illness that one person fabricates or induces in another person. Perpetrators are seeking attention for themselves from medical staff.
44. F
45. a. Parental characteristics
   b. Characteristics of the child
   c. Environmental characteristics
46. a. Parental unavailability
   b. Lack of emotional closeness and flexibility
   c. Social isolation
   d. Emotional deprivation
   e. Communication difficulties
47. T

**Applying Critical Thinking to Nursing Practice**

**A.**
1. Pertussis is very contagious, especially among close household members. Pertussis should be identified early and treatment initiated for the child and those who have been exposed.
2. Erythromycin
3. The need to complete the entire course of therapy

**B.**
1. Through a tape test or inspection of the anal area while the child sleeps
   a. Identify the parasite.
   b. Eradicate the organism.
   c. Prevent reinfection.

**C.**
1. a. Assess the patient’s vital signs and initiate any needed respiratory and/or circulatory support; continually reevaluate the patient’s condition; institute measures to reduce effects of shock; maintain respiratory function; anticipate and prepare for potential problems.
   b. Induce vomiting with activated charcoal or ipecac, if necessary; administer antidotes; assess the gastrointestinal system and assist with gastric lavage; be alert to indications and contraindications for the various decontamination procedures.
   c. Discuss the daily difficulties related to constantly safeguarding young children; make a follow-up home visit for assessment of potential hazards; ask specific questions to isolate risk factors; emphasize proper storage of poisons.

**D.**
1. In what year was the home built?
2. Permanent neurologic deficits, increased distractibility, short attention span, impulsivity, reading disabilities, and school failure
3. Identifying the sources of lead in the environment
4. The child’s blood lead level and what it means; potential adverse health effects of an elevated blood lead level; sources of lead exposure and suggestions on how to reduce exposure; importance of wet cleaning to remove lead dust on floors, window sills, and other surfaces; importance of good nutrition in reducing the absorption and effects of lead; for persons with poor nutritional patterns, adequate intake of calcium and iron and importance of regular meals; need for follow-up testing to monitor the child’s blood lead level; results of an environmental investigation, if applicable; hazards of improper removal of lead paint (dry sanding, scraping, or open-flame burning).

**E.**
1. a. Type of parenting received; negative relationship with own parents; social isolation; low self-esteem; substance abuse; no support system; presence of concurrent stressors; inadequate knowledge of normal development; lack of knowledge of parenting skills; victims of child abuse themselves
   b. Temperament; position in the family; age (between birth and 3 years old); additional physical or emotional needs; activity level; illegitimacy; reminding parents of someone they dislike; prematurity; product of difficult delivery; disabilities
   c. Chronic stress from many sources, such as divorce, poverty, unemployment, poor housing, frequent relocation, alcoholism, overcrowding, and drug addiction
2. Any five of the following are acceptable:
   • Conflicting stories about the accident or injury
   • Cause of injury blamed on sibling or other party
   • An injury inconsistent with the history
   • History inconsistent with the child’s developmental level
   • A complaint other than the obvious injury
   • Inappropriate response of caregiver
   • Inappropriate response of child
   • Repeated visits to emergency facilities with injuries
3. a. Risk for Trauma related to previous history of physical abuse, caregiver stress, and child’s high level of energy
   b. Fear/Anxiety related to maltreatment by mother, powerlessness, and potential loss of parent
   c. Altered Parenting related to inadequate support, lack of education related to normal toddler behavior, and inadequate maternal coping skills

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CHAPTER 15

Review of Essential Concepts

1. deciduous tooth, permanent teeth
2. F
3. a. A decrease in head circumference in relation to standing height
   b. A decrease in waist circumference in relation to height
   c. An increase in leg length in relation to height
4. 10, 12
5. d
6. d
7. inferiority
8. T
9. c
10. conservation
11. mass, weight, volume
12. The ability to group and sort objects according to the attributes they share, place things in a sensible and logical order, and hold a concept in mind while making decisions based on that concept
13. T
14. d
15. b
16. peer
17. Peer group identification
18. a. To appreciate the various points of view found in the peer group
   b. To become more sensitive to the social norms and pressures of the peer group
   c. To form intimate friendships between same-sex peers
19. bullying
20. Bullying occurs most frequently at school during unstructured times, with recess being the most common time for bullying, followed by gym classes, lunchrooms, hallways, and then buses.
21. division of labor
22. self-concept
23. school
24. Teachers
25. latchkey children
26. a. The psychosocial maturity of the parents
   b. The childhood and childrearing experiences of the parents
   c. The temperament of the children
   d. The context of the children’s misconduct
   e. The response of the children to rewards and punishments
27. a. Stomach pains or headaches
   b. Sleep problems
   c. Bed-wetting
   d. Changes in eating habits
   e. Aggressive or stubborn behavior
   f. Reluctance to participate in activities
   g. Regression to earlier behaviors
   h. Trouble concentrating or changes in academic performance
28. a. 1
   b. 2
   c. 2
   d. 3
29. Any of the following answers are appropriate:
   • The easy availability of fast-food restaurants
   • The influence of the mass media
   • The temptation to eat “junk food”
   • Sedentary lifestyles
   • High-fat diets
   • Overworked and overstressed family life
   • Lack of sleep and exercise
30. T
31. T
32. T
33. T

Applying Critical Thinking to Nursing Practice

A.
1. a. Falls at the 50th percentile
   b. Falls at the 50th percentile
2. The nurse could explain to Ann that at Cole’s stage of development, he needs and wants real achievement. When he is recognized for his own unique talents and abilities and is positively rewarded, he will be able to achieve a sense of industry and accomplishment. Another important piece of information the nurse could offer Ann is that trying to make children into someone or something they are not often leads them to a sense of inferiority.
3. Lying, cheating, and stealing are frequent occurrences in the young school-age child. Children of this age often have difficulty separating fact and fantasy. The nurse could inform Ann that it is important for her to teach her daughter the difference between fact and fantasy.

B.
1. Children at this age need to belong to a peer group, where they gain a sense of industry through individual and cooperative performance. It is necessary for school-age children to move away from the familiar relationships of the family group to increase the scope of interpersonal interactions and explore the environment. This is one way they gain the independence they will need to function as a healthy adult in society.
2. Children learn to appreciate the numerous and varied points of view that are represented in the peer group. As children interact with peers who see the world in ways that are somewhat different from their own, they become aware of the limits of their own point of view. Because age-mates are peers and are not forced to accept each other’s ideas as they are expected to accept those of adults, other children have a significant influence on expanding the child’s egocentric outlook. Consequently, children learn to argue, persuade, bargain, cooperate, and compromise in order to maintain friendships.
3. a. Instruct them on the proper use of seat belts while a passenger in a vehicle.
   b. Stress the importance of maintaining discipline while riding as a passenger in a vehicle (e.g., keeping arms inside, not leaning against doors, not interfering with the driver).
   c. Remind the family that the child should never ride in the bed of a pickup truck.
   d. Teach the child safe pedestrian skills for crossing the road.
CHAPTER 16
Review of Essential Concepts

1. Adolescence begins with the gradual appearance of secondary sex characteristics at about 11 or 12 years of age and ends with cessation of body growth at 18 to 20 years.

2. Puberty is the maturational, hormonal, and growth processes that occur when the reproductive organs begin to function and secondary sex characteristics develop.

a. Adolescence means “to grow into maturity” and is generally regarded as the psychological, social, and maturational process initiated by the pubertal changes.

3. Increased physical growth
   a. Appearance and development of secondary sex characteristics

4. Primary sex characteristics

5. Secondary sex characteristics

6. Estrogen, androgens

7. Tanner stages

8. 10 ½ to 15 years, 12, 9 ½ months

9. Testicular, pubic hair

10. They reach secretory capacity.

11. True

12. Sebaceous

13. False

14. Sense of identity

15. Group, personal (or individual)

16. Because of the normal mood swings present in adolescence

17. Formal operations

18. a. Can imagine a sequence of events that might occur
   b. Is capable of formal logic
   c. Is capable of mentally manipulating more than two categories of variables at the same time
   d. Is able to detect logical inconsistencies and can evaluate a system of values in a more analytic manner
   e. Is able to think about his or her own thinking and the thinking of others

19. Peer group

20. Religiosity, spirituality

21. They give adolescents the courage to separate from their parents and become independent.

22. Sexual and substance use behaviors

23. False

24. Instruction concerning normal body functions

25. False

26. a. Injury
   b. Depression
   c. Violence
   d. Sexually transmitted infections
   e. Pregnancy
   f. Obesity

27. True

28. a. Poor dietary habits
   b. Increasingly sedentary lifestyle

29. Respect their independence by giving them the opportunity to make their own decisions regarding food choices.

30. 60

31. Any five of the following are acceptable:

   a. Body image
   b. Sexuality conflicts
   c. Scholastic pressures
   d. Competitive pressures
   e. Relationship with parents
   f. Relationship with siblings
   g. Relationship with peers
   h. Finances
   i. Decisions about present and future roles
   j. Career planning
   k. Ideologic conflicts

32. True

33. False

34. True

Applying Critical Thinking to Nursing Practice

A.

1. a. Between the 50th and 75th percentiles
   b. At the 95th percentile

2. Nonlean body mass, primarily fat, increases in adolescence. Fatty tissue deposition is more pronounced in girls, particularly in the regions over the thighs, hips, buttocks, and breast tissue. Although the 95th percentile is the top of the normal range, nutritional counseling to prevent additional weight gain or eating disorders should be instituted. The nurse should also explain to Britney that adolescent acne is normal because of the hormonal changes she is currently experiencing. The nurse can observe Britney in her cleansing routine and point out ways to help decrease acne flare-ups.

B.

1. The peer group offers Billy a sense of group identity, which is essential to the later development of personal identity. Younger adolescents must resolve questions concerning relationships with a peer group before they are able to resolve questions about who they are in relation to the family and society.

2. Wearing clothes, makeup, and hairstyles according to group criteria; enjoying music and dancing that is exclusive to the age-group; using the same language; conforming to the peer group rather than to the adult world

3. They serve as a strong support to the adolescent, individually and collectively, providing a sense of belonging and a feeling of strength and power. They also form a transitional world between dependence and autonomy.

C.

1. Rapid physical growth, increased activity, poor nutrition, and a propensity for staying up late

2. Exercise for growing muscles, interactions with peers, competition, following rules of the game, socially acceptable means to enjoy stimulation and conflict
3. The need for independence and risk taking, feelings of indestructibility, and the need for peer approval
4. a. Simple, straightforward explanations of the body and its sexual functions
   b. Accurate information about menarche, pregnancy, contraception, and masturbation
   c. Accurate information regarding the transmission, symptoms, and treatment of sexually transmitted diseases
   d. Open information about various aspects of sexuality

CHAPTER 17

Review of Essential Concepts

1. Enuresis
2. a. Medications
   b. Bladder training
   c. Restriction or elimination of fluids after evening meal
   d. Interruption of sleep to void
   e. Devices to establish a conditioned reflex response (alarms)
3. False
4. Encopresis
5. Imipramine
6. organic causes related to enuresis should be ruled out
7. boys
8. 300 to 350 ml
9. inadequate nutrition
10. Any of three of the following: Listening to distressed adolescents and conveying interest and concern, offering support and reassurance, referring to individual counseling and therapy, pointing out and encouraging these children to focus on the positive aspects of their bodies and personalities and to adopt sound health practices and practice good grooming to foster a more positive self-image
11. a. Absence of secondary sex characteristics and no uterine bleeding by 14 to 15 years of age, or absence of uterine bleeding with secondary sex characteristics by 16 years of age
   b. Absence of menses for 6 months or at least three cycles after menstruation was previously established
12. prostaglandins
13. Health teaching
14. mass, tests
15. Teaching about testicular self-examination
16. a. Having sex with an older partner
   b. The type of contraception used
   c. Living in poverty
   d. Having a mother who was a teen parent
   e. School failure
   f. Lack of access to confidential health care
   g. Living in a poor community
17. a. birth control pill
   b. condoms
18. a. Initiating sexual intercourse at an early age
   b. High disease prevalence among sexual partners
   c. Inconsistent use of barrier or other types of contraceptives
   d. Participation in unprotected oral or anal sex, with the belief that STDs cannot be transmitted through those activities
19. a. herpes progenitalis
   b. acquired immunodeficiency syndrome (AIDS) (or human immunodeficiency virus [HIV] infection)
20. a. 4, 10
   b. 1, 7
   c. 2, 8
   d. 5, 9
   e. 3, 6
21. True
22. Fever; abdominal pain; urinary tract symptoms; vague influenza-like manifestations, such as malaise, nausea, diarrhea, or constipation
23. True
24. True
25. False
26. body mass index
27. a. Elevated blood cholesterol
   b. High blood pressure
   c. Respiratory disorders
   d. Orthopedic conditions
   e. Cholelithiasis
   f. Some types of adult-onset cancer
   g. Nonalcoholic fatty liver disease
   h. An increase in type 2 diabetes mellitus
28. Obesity
29. 50%, 70%
30. overeating, reduced physical activity
31. True
32. motivation
33. The refusal to maintain a minimally normal body weight and severe weight loss in the absence of obvious physical causes
34. a. Perfectionists
   b. Academically high achievers
   c. Conforming
   d. Conscientious
35. a. Severe and profound weight loss
   b. Secondary or primary amenorrhea
   c. Bradycardia
   d. Lowered body temperature
   e. Decreased blood pressure
   f. Cold intolerance
   g. Dry skin and brittle nails
   h. Appearance of lanugo hair
36. a. adolescent perception of high parental expectations for achievement and appearance,
   b. difficulty managing conflict and poor communication styles,
   c. enmeshment and occasionally estrangement between family members
   d. devaluation of the mother or the maternal role
   e. marital tension.
37. Behavior of repeated episodes of binge eating followed by inappropriate compensatory behaviors, such as self-induced vomiting; misuse of laxatives, diuretics, or other medications; fasting; or excessive exercise
38. a. Those who purge
   b. Those who do not purge
39. True
40. a. Monitoring fluid and electrolyte alterations
   b. Observation for signs of cardiac complications
41. Has components of both anorexia nervosa and bulimia with varying degrees of symptomatology that are not always characteristic of the established diagnostic criteria for anorexia and bulimia
42. Developmentally inappropriate degrees of inattention, impulsiveness, and hyperactivity
43. 7, two
44. a. Medication
   b. Family education and counseling
   c. Behavioral therapy
   d. Environmental manipulation
   e. Appropriate classroom placement
45. True
46. True
47. Psychogenic
48. a. tend to be high achievers who have extensive personal goals.
   b. have parents who have unusually high expectations.
   c. are described as sensitive.
   d. are overly concerned about what others think of them.
   e. are uncomfortable with expressions of anger or arguments.
49. Psychophysiological disorder with a sudden onset that can usually be traced to a precipitating environmental event
50. Because children may be unable to express their feelings and tend to act out their problems and concerns
51. a. Predominantly sad facial expression with absence or diminished range of affective response
   b. Solitary play, work, or tendency to be alone; disinterest in play
   c. Withdrawal from previously enjoyed activities and relationships
   d. Lowered grades in school; lack of interest in doing homework or achieving in school
   e. Diminished motor activity; tiredness
   f. Tearfulness or crying
   g. Dependent and clinging or aggressive and disruptive behavior
52. True
53. Approximately three times as many adolescents who smoke report carrying weapons and drinking alcohol compared with adolescents who do not smoke; other associated risks in Caucasians include use of smokeless tobacco, marijuana use, multiple sexual partners, not using bicycle helmets, and binge drinking.
54. False
55. a. Experimenters
   b. Compulsive users
56. Central nervous system changes in cognitive and autonomic functions such as judgment, memory, learning ability, and other intellectual capacities
57. Sleep
58. HIV, hepatitis B
59. Because drug withdrawal can seriously complicate other illnesses
60. True
61. Suicidal ideation is a preoccupation with thoughts about committing suicide and may be a precursor to suicide. Parasuicide refers to all behaviors ranging from gestures to serious attempts to kill oneself.
62. a. early recognition.
   b. management.
   c. prevention.

**Applying Critical Thinking to Nursing Practice**

**A.**

1. Rest or alteration of activities, physical therapy, and medication. Alternative exercise should be used to help the athlete maintain conditioning.
2. It is important to keep the child or adolescent mobile, and then training can be continued.
3. Medications such as nonsteroidal antiinflammatory drugs (NSAIDs) are sometimes prescribed to reduce inflammation and pain.
4. a. Ensure that safety measures are used.
   b. Require proper warm-up and cool-down activities.
   c. Establish appropriate training requirements for safe participation.
   d. Ensure that protective equipment is used.

**B.**

1. Stress, changes in environment, weight changes, hyperandrogenism, eating disorders, and exercise-induced amenorrhea
2. a. Teach information about the disease to the patient directly.
   b. Encourage abstinence or postponement of sexual intercourse; encourage condom use; advise to take hepatitis B vaccination and Gardasil (human papillomavirus quadrivalent) vaccine.
   c. Decrease the medical and psychologic effects through support groups.

**C.**

1. Because it is obvious to others, is difficult to treat, and has long-term effects on psychologic and physical health status
2. There is little evidence to support a relationship between obesity and “low metabolism.” There may be small differences in regulation of dietary intake or metabolic rate between obese and nonobese children that could lead to an energy imbalance and inappropriate weight gain, but these small differences are difficult to accurately quantify.
3. a. Altered Nutrition: More Than Body Requirements, related to excess caloric intake, disordered eating patterns, hereditary factors, environmental conditions
   b. Activity Intolerance related to sedentary lifestyle, physical bulk, pain on exertion
   c. Ineffective Individual Coping related to little or no exercise, poor nutrition, personal vulnerability, body image disturbance
   d. Self-Esteem Disturbance related to perception of physical appearance, internalization, or negative feedback
   e. Altered Family Processes related to management of child who is obese, familial excessive caloric intake, lack of proper nutrition

**D.**

1. Dieting
2. a. The current emphasis on tall, thin individuals
   b. Increased family stress, adolescent feeling lack of personal control

**E.**

1. A history of family conflict; possibly a family history of suicide, depression, substance abuse, or emotional disturbance; parents who are unavailable and poor communicators. There is often also

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Answer Key

303
a history of unrealistically high parental expectations or parental indifference with low expectations.
2. Family support and counseling, having Becky sign a contract that she will not attempt another suicide, and individual counseling.

CHAPTER 18

Review of Essential Concepts
1. developmental level
2. communication, negotiation
3. fears, anger, or embarrassment
4. a. unsympathetic and brief diagnostic interviews.
   b. lack of privacy during diagnostic discussions.
   c. not being provided the opportunity to ask questions.
5. Understanding and articulating the family’s perspective
6. a. The time of diagnosis
   b. During the initial discharge home
7. a. Accept the child’s condition.
   b. Manage the child’s condition on a day-to-day basis.
   c. Meet the child’s normal developmental needs.
   d. Meet the developmental needs of other family members.
   e. Cope with ongoing stress and periodic crises.
   f. Assist family members in managing their feelings.
   g. Educate others about the child’s condition.
   h. Establish a support system.
8. Any two of the following are acceptable:
   • Value each child individually and avoid comparisons.
   • Help siblings see differences and similarities between themselves and the child with special needs.
   • Teach siblings ways to interact with the child.
   • Seek to be fair in terms of discipline, attention, and resources.
   • Let siblings settle their own differences.
   • Legitimize reasonable anger.
   • Respect a sibling’s reluctance to be with or to include the child with special needs in activities.
9. A process of recognizing, promoting, and enhancing competence
10. Any three of the following are acceptable:
   • Physician shopping
   • Attributing the symptoms of the actual illness to a minor condition
   • Refusing to believe the diagnostic tests
   • Delaying consent for treatment
   • Acting happy and optimistic despite the revealed diagnosis
   • Refusing to tell or talk to anyone about the condition
   • Insisting that no one is telling the truth, regardless of others’ attempts to do so
   • Denying the reason for admission
   • Asking no questions about the diagnosis, treatment, or prognosis
11. a. guilt.
    b. self-accusation.
    c. bitterness.
    d. anger.
12. a. Overprotection
    b. Rejection
    c. Denial
    d. Gradual acceptance
13. a. Available support system
    b. Perception of the event
    c. Coping mechanisms
    d. Reactions to the child
    e. Available resources
    f. Concurrent stresses within the family
14. True
15. a. “Feels different and withdraws”
    b. “Is irritable, is moody, and acts out”
16. It can produce increased participation in health-seeking behaviors and an improved sense of well-being.
17. False
18. Because factors affecting the family’s response may change at any point during the illness
19. a. Denial
    b. Guilt
    c. Anger
20. By presenting the child’s strengths, appealing behaviors, and potential for development
21. By encouraging self-care abilities in both activities of daily living and the medical regimen
22. To talk about their feelings
23. Educating the family about the disorder
24. future goals
25. body changes
26. a. Developmental factors
    b. Medical advances and technology
    c. Changing social patterns
27. hospice care
28. Euthanasia involves an action carried out by a person other than the patient to end the life of the patient suffering from a terminal condition. The intent of this action is based on the belief that the act is “putting the person out of his or her misery”; this action has also been called mercy killing. Assisted suicide, on the other hand, occurs when someone provides the patient with the means to end his or her life and the patient uses that means to do so.
29. a. fear of pain and suffering.
    b. fear of dying alone (child) or of not being present when the child dies (parent).
    c. fear of actual death.
30. Cheyne-Stokes; that this breathing is not distressing to the child and that it is a normal part of the dying process
31. True

Applying Critical Thinking to Nursing Practice
A. 1. children need honest and accurate information about their illness, treatments, and prognosis in a clear simply way
   2. When the prognosis for a patient is poor and death is the expected outcome.
B. 1. Home care represents the return to a system and set of priorities in which family values are as important in the care of a child with a chronic health problem as they are in the care of other children.
   2. a. Normalize the life of a child with special needs, including those with technologically complex care, in a family and community context and setting.
      b. Minimize the disruptive impact of the child’s condition on the family.
      c. Foster the child’s maximum growth and development.
C.
1. a. Status of the marital relationship
   b. Alternate support systems
   c. Ability to communicate
2. This assists in the ability to evaluate the individual’s coping patterns with various aspects of the crisis and identifies possible areas for intervention.
3. Could be any of the following:
   a. Develops competence and optimism
   b. Seeks support
   c. Displays fewer behavior problems at home and school
   d. Accepts limitations
   e. Assumes responsibility of care
   f. Assists in treatment regimens
4. a. Provide support at the time of diagnosis.
   b. Accept the family’s emotional reactions.
   c. Support the family’s coping methods.
   d. Educate about the disorder and general health care.
   e. Establish an environment of normalization for the child.
   f. Establish realistic future goals.

D.
1. Answers may vary.
   a. May view death as a departure like sleep
   b. May recognize the fact of physical death but fail to separate it from living
   c. May view death as temporary, as though life and death can change places
   d. May have no understanding of universality and inevitability of death
2. As punishment for his or her behavior
3. 9, 10
4. a. Help parents deal with their feelings.
   b. Avoid alliances with either parents of child.
   c. Structure hospital admission to allow for maximum self-control and independence.
   d. Answer the adolescent’s questions honestly and treat them with respect.
   e. Help parents understand child’s reactions to death and dying.

E.
1. a. Providing detailed information about what will happen as supportive equipment is withdrawn
   b. Ensuring that appropriate pain medications are administered to prevent pain during the dying process
   c. Allowing the parents time before the start of the withdrawal to be with and speak to their child
2. a. Providing privacy
   b. Asking whether they would like to play music
   c. Softening lights and monitor noises
   d. Arranging for any religious or cultural rituals that the family may want performed
3. After the child’s death, the family should be allowed to remain with the body and hold or rock the child if they desire. After the nurse has removed all tubes and equipment from the body, parents should be given the option of assisting with the preparation of the body, such as bathing and dressing. It is important for the nurse to determine whether the family has any specific needs, since many cultures have adapted specific methods for coping and mourning death and impeding these practices may interfere with the grieving process.
4. If there is a full-time transplant coordinator, the nurse’s role is to contact that coordinator to meet with the family. If such services are not available, the staff needs to determine which members should discuss this topic with the family. Often nurses are in an optimal position to suggest tissue donation after consultation with the attending physician. When possible, the topic should be raised before death occurs. The request should be made in a private and quiet area of the hospital and should be simple and direct, with questions such as “Are you a donor family?” or “Have you ever considered organ donation?”
5. The family may have an open casket, and there is no delay in the funeral. There is no cost to the donor family, but organ donation does not eliminate funeral or cremation responsibilities.

CHAPTER 19
Review of Essential Concepts
1. a. Communication
   b. Self-care
   c. Home living
   d. Social skills
   e. Leisure
   f. Health and safety
   g. Self-direction
   h. Functional academics
   i. Community use
   j. Work
2. Cognitive
3. a. Intellectual functioning and adaptive skills.
   b. Psychologic/emotional considerations.
   c. Physical health/etiology considerations.
   d. Environmental considerations.
4. Any four of the following are acceptable:
   a. Infection and intoxication, such as congenital rubella, syphilis, maternal drug consumption (e.g., fetal alcohol syndrome), chronic lead ingestion, or kernicterus
   b. Trauma or physical agent (i.e., injury to the brain suffered during the prenatal, perinatal, or postnatal period)
   c. Inadequate nutrition and metabolic disorders, such as phenylketonuria or congenital hypothyroidism
   d. Gross postnatal brain disease, such as neurofibromatosis and tuberous sclerosis
   e. Unknown prenatal influence, including cerebral and cranial malformations, such as microcephaly and hydrocephalus
   f. Chromosomal abnormalities resulting from radiation, viruses, chemicals, parental age, and genetic mutations, such as Down syndrome and fragile X syndrome
   g. Gestational disorders, including prematurity, low birth weight, and postmaturity
13. Fragile X
14. a. Hearing impaired is a general term indicating disability that may range in severity from mild to profound and includes the subsets of deaf and hard-of-hearing.
   b. Deaf refers to a person whose hearing disability precludes successful processing of linguistic information through audition, with or without a hearing aid.
   c. Hard-of-hearing refers to a person who, generally with the use of a hearing aid, has residual hearing sufficient to enable successful processing of linguistic information through audition.
15. Conductive or middle-ear hearing loss results from interference of transmission of sound to the middle ear. It is the most common of all types of hearing loss and most frequently is a result of recurrent serous otitis media. Sensorineural hearing loss, also called perceptive or nerve deafness, involves damage to the inner ear structures or the auditory nerve. Sensorineural hearing loss results in distortion of sound, severely affecting discrimination and comprehension.
16. hearing aid
17. cochlear
18. a. An inability to express ideas in any form, either written or verbal
   b. The inability to interpret sound correctly
   c. Difficulty in processing details or discriminating among sounds
19. When there is visual acuity of 20/200 or less and/or a visual field of 20 degrees or less in the better eye
20. refraction, refractive errors
21. a. 2, 4, 8
   b. 1, 7, 10
   c. 5, 9
   d. 3, 6
22. Malalignment of the eyes
23. Cataracts are an opacity of the crystalline lens, whereas glaucoma is a condition in which intraocular pressure is increased, causing pressure on the optic nerve and eventually (if left untreated) atrophy and blindness.
24. Look for blinking. Also check to see whether the infant’s activity level accelerates or slows or respiratory patterns change when an object comes near; also check to see whether the infant makes throaty sounds when the parents speak to him or her.
25. Through finger spelling
26. They interfere with the normal sequence of physical, intellectual, and psychosocial growth.
27. It is a congenital malignant tumor arising from the retina. The first symptom observed is a “whitish glow” in the pupil known as the cat’s eye reflex.
28. Inability to make eye contact
29. False

Applying Critical Thinking to Nursing Practice
A.
1. Dysmorphic features of Down syndrome or fragile X syndrome, irritability or unresponsiveness to contact, abnormal eye contact during feeding, gross motor delay, decreased alertness to voice or movement, language difficulties or delay, feeding difficulties
2. For each body system any two of the following are acceptable.
   a. Head and eyes: separated sagittal suture, brachycephaly, rounded and small skull, flat occiput, enlarged anterior fontanel, oblique palpebral fissures, inner epicanthal folds, speckling of iris
   b. Nose and ears: small nose, depressed nasal bridge, small ears and narrow canals, short pinna, overlapping upper helices, conductive hearing loss
   c. Mouth and neck: high, arched, narrow palate; protruding tongue; hypoplastic mandible; delayed teeth eruption and microdontia; abnormalities in tooth alignment; periodontal disease; neck skin excess and laxity; short and broad neck
   d. Chest and heart: shortened rib cage, twelfth rib anomalies,
pectus excavatum, congenital heart defects
e. Abdomen and genitalia: protruding, lax, and flabby abdominal muscles; diastasis recti abdominis; umbilical hernia; small penis; cryptorchidism; bulbous vulva
f. Hands and feet: broad, short hands and stubby fingers; incurved little finger; transverse palmar crease; wide space between big and second toes; plantar crease between big and second toes; broad, short feet and stubby toes
g. Musculoskeletal system and skin: short stature; hyperflexibility and muscle weakness; hypotonia; atlantoaxial instability; dry, cracked skin and frequent fissuring; cutis marmorata (mottling)
h. Other: reduced birth weight, learning difficulty, hypothyroidism, impaired immune function, increased risk of leukemia

3. a. Ensure that the parents are informed as soon as possible after the birth of the child.
b. Encourage parents to be together at this time to emotionally support each other.
c. Provide parents with written material concerning the syndrome when they are ready to receive it.
d. Offer referrals to parent groups or professional counseling.

B. Perinatal infections (herpes, chlamydia, gonococci, rubella, syphilis, toxoplasmosis); retinopathy of prematurity; trauma; postnatal infections (meningitis); and disorders such as sickle cell disease, juvenile rheumatoid arthritis, Tay-Sachs disease, albinism, and retinoblastoma. In many instances, such as with refractive errors, the cause of the defect is unknown.

2. a. One intervention is assessing parents’ concerns regarding visual responsiveness in their child such as lack of eye contact from the infant. Another intervention is to test for strabismus. Lack of binocularity after 4 months of age is considered abnormal and must be treated to prevent amblyopia. The nurse should also observe the neonate’s response to visual stimuli, such as following a light or object and cessation of body movement.
b. Because the most common visual impairment during childhood is refractive errors, testing for visual acuity is essential. The school nurse usually assumes major responsibility for vision testing in schoolchildren. In addition to refractive errors, the nurse should be aware of signs and symptoms that indicate other ocular problems. Additional interventions include educating parents on how to prevent sports-related injuries and infections, identifying behaviors that suggest visual problems, and identifying children who are at risk because of genetic factors.

3. a. Tapping method (use of a cane to survey the environment for direction and to avoid obstacles)
b. Guides such as a sighted human guide or a dog guide (such as a seeing eye dog)

4. a. Help parents identify clues other than eye contact from the infant that signify communication.
b. Encourage parents to show affection using nonvisual methods, such as talking, reading, cuddling, or massaging the infant.

C. Show them a picture of a child with an eye prosthesis. Prepare them for the appearance of the wound. Within 3 weeks the child will be fitted for a prosthesis, and the facial appearance will return to normal. Care of the socket is minimal and easily accomplished.

D. The majority (50% to 70%) have some degree of cognitive impairment.

2. Early recognition of behaviors associated with autism spectrum disorders, including speech and language delays, no babbling by 12 months, single words by 16 months, two-word phrases by 24 months, and a sudden deterioration in extant expressive speech.

CHAPTER 20
Review of Essential Concepts

1. Care provided for children with simple or complex health care needs and their families in their places of residence for the purpose of promoting, maintaining, or restoring health or for maximizing the level of independence while minimizing the effects of disability and illness, including terminal illness

2. a. Greater parent satisfaction
b. Improved quality of life
c. Reduction in length of hospital stay
3. family caregivers
4. a. Lack of pediatric training in some nursing programs
b. Increased acuity of home care patients
c. Increased pay for nurses working in acute care settings
5. Permanency planning, home
6. a. Safety
b. Support systems
c. Nutrition
d. Parental ability
e. Actual health care practices required
7. False

8. a. Must begin early
b. Should be based on criteria of child and family readiness
c. Must be a multidisciplinary process
d. Includes representatives from acute care facilities
e. Includes specific issues related to the plan of care at home
f. Coordinates the family with community services
g. Must involve the family
9. True
10. To ensure continuity for the child and family across hospital, home, educational, therapeutic, and other settings
11. a. Reduce the complexity of care for the child.
b. Reduce fragmentation of care.
c. Decrease the burden of care for the family.
12. True
13. care path
14. F
15. To nurture and raise the child
16. a. Home as familiar
   b. Home as center
   c. Home as protector
17. True
18. True
19. a. Racial
    b. Ethnic
    c. Cultural
    d. Spiritual
    e. Socioeconomic
20. a. Encouraging activities to develop self-confidence and self-esteem
    b. Displaying increased awareness of and respect for family caregivers
    c. Recognizing that families vary in defining their role
    d. Demonstrating an ability to understand the family's approach to caregiving
    e. Sharing perspectives, not just tasks and functions
    f. Supporting family in their primary, irreplaceable role as caregivers
    g. Exchanging expertise in providing care to the child
    h. Assisting family in recognizing their contributions as worthwhile
    i. Identifying strengths and resources of child and family
    j. Negotiating options, priorities, and preferences
    k. Assisting with coping by allowing family to find meaning in caring for child at home
21. False
22. strengths, resources
23. family's perception
24. successes, accomplishments
25. a. Initial and periodic assessment
    b. Planning
    c. Referrals for further assessment or therapeutic services
    d. Interventions that address normalization issues and self-care
26. a. Child's developmental age
    b. Level of interest
    c. Physical ability
    d. Parental comfort and support
27. Dolls, other models and diagrams
28. individual family service plan
29. Notify the phone and electrical companies that the family needs to be placed on a priority service list.
30. emergency, parents (family)
31. Night
32. Where parents may spend too much time preoccupied with the child's welfare while ignoring other family members' needs
33. All family members' needs

**Applying Critical Thinking to Nursing Practice**

**A.**
1. a. Making the teaching family centered by involving every member of the family
   b. Contacting the insurance company for arrangements of home care
   c. Contacting the home care agency to promote continuity and a smooth transition
   d. Identifying community resources available to Dee and her family
   e. Developing a comprehensive family-focused plan of home care instructions
   f. Teaching and evaluating all family members involved in Dee's care
2. a. Encourage her parents to practice their new skills in a safe environment with nursing personnel directly available to answer their questions and provide feedback.
   b. Arrange for Dee's parents to take her home on a day pass with the home care nurse present before making final discharge plans.
3. a. Strengthening factors relevant to discharge teaching
   b. Implementing additional teaching measures as needed
4. a. A multifactorial approach to Dee's medical, nursing, and health maintenance needs is required.
   b. Financial, psychosocial, spiritual, emotional, and educational issues of the child and family must be addressed.

**B.**
1. The nurse could gather data from the child's record and also from the parents or caregivers in the home who are the constant in the child's life.
2. Respect their privacy and confidentiality.
3. a. The nurse should respect their privacy and their choices, because family is the constant in the child's life.
   b. The nurse should contact the home care case manager or the superior to assist in the problem-solving process.
   c. The nurse should encourage the parents to negotiate the change with the physician, because the nurse must follow the written medical orders.

**CHAPTER 21**

**Review of Essential Concepts**

1. a. Separation
   b. Loss of control
   c. Bodily injury
   d. Pain
2. a. Developmental age
   b. Previous experience with illness, separation, or hospitalization
   c. Innate and acquired coping skills
   d. Seriousness of diagnosis
   e. Available support system
3. separation anxiety
4. Temper tantrum, anger expressions, bed-wetting
5. False
6. control
7. a. 1
   b. 2
   c. 1
   d. 3
   e. 4
8. The child's concept of illness
9. a. “Difficult” temperament
   b. Lack of fit between child and parent
   c. Age (especially between 6 months and 5 years)
   d. Male gender
   e. Below-average intelligence
   f. Multiple and continuing stresses (e.g., frequent hospitalizations)
10. True
11. Feeling an overall sense of helplessness, questioning the skills of staff, accepting the reality of hospitalization, needing to have information explained in simple language, dealing with fear,
coping with uncertainty, seeking reassurance from caregivers
12. a. Being younger and experiencing many changes
   b. Being cared for outside the home by care providers who are not relatives
   c. Receiving little information about their ill brother or sister
   d. Perceiving that their parents treat them differently compared with before their sibling’s hospitalization
13. unknown, known
14. To assess the child’s usual health habits at home to promote a more normal environment in the hospital
15. separation
16. This care recognizes the integral role of the family in a child’s life and acknowledges the family as an essential part of the child’s care and illness experience. The family is considered to be partners in the child’s care.
17. a. Promote freedom of movement
   b. Maintain the child’s routine
   c. Encourage independence
   d. Promote understanding
18. separation
19. bandages
20. The nurse repeatedly stressing the reason for a procedure and evaluating the child’s understanding
21. It is important not to use this terminology with children because it often leads to greater fears in hospitalized children.
22. a. By providing a somewhat different and less negative account of the disease
   b. By offering an explanation that is characteristic of the next stage of cognitive development
23. True
24. a. The nurse can encourage children to resume schoolwork as quickly as their condition permits.
   b. The nurse can help them schedule and protect a selected time for studies.
   c. The nurse can help the family coordinate hospital educational services with their children’s schools.
25. Play
26. a. Provides diversion and promotes relaxation
   b. Helps the child feel more secure in a strange environment
   c. Helps reduce the stress of separation and feeling of homesickness
   d. Provides a means for release of tension and expression of feelings
   e. Encourages interaction and development of positive attitudes toward others
   f. Provides an expression outlet for creative ideas and interests
   g. Provides a means for accomplishing therapeutic goals
   h. Places child in active role and provides opportunity to make choices and be in control
27. Have the parents bring a box with several small, inexpensive, brightly wrapped items with a different day of the week printed on the outside of each package.
28. a. 4
   b. 1
   c. 2
   d. 3
29. a. Fostering parent-child relationships
   b. Providing educational opportunities
   c. Promoting self-mastery
   d. Providing socialization
30. a. Family will receive support.
   b. Family will be provided with information about the child’s care.
   c. Family will be encouraged to participate in the child’s care.
   d. Family will be prepared for discharge and home care.
31. a. Minimization of the stressors of hospitalization
   b. Reduced chance of infection
   c. Cost savings
32. Giving simple explanations, such as “You need to be in this room to help you get better.”
33. False

Applying Critical Thinking to Nursing Practice
A. 1. protest
   2. despair
3. Any one of the following is acceptable:
   • Allow Paul to cry or encourage the child to express his feelings.
   • When Paul withdraws, encourage the parents to continue to move toward him and attempt to get him to play or communicate with them.
   • Provide support through physical presence in the room even when Paul rejects strangers.
   • Acknowledge to Paul that it is all right to miss his parents and it is all right to cry.
   • Encourage the parents to stay with Paul as much as possible.
   • Parents should let Paul know when they are leaving and when they will be returning.
   • Parents should bring favorite articles from home to comfort Paul.

B.
1. Regression
2. Any three of the following are acceptable:
   • Encourage her to perform all the self-care activities she can.
   • Provide positive feedback for the activities Kristi performs on her own.
   • Give Kristi two choices whenever possible.
   • Encourage Kristi to freely express her needs, ideas, and feelings.
   • Try to make Kristi’s routine as consistent and familiar as possible.
   • Minimize the restraint of physical activity.

C.
1. Any three of the following are acceptable:
   • Respect parental rights, values, beliefs, and individuality.
   • Convey an attitude of caring concern for both child and family.
   • Support and emphasize the family’s strengths and abilities.
   • Provide feedback and praise.
   • Refer to other professionals for additional support.
   • Create an atmosphere of shared communication, respect, trust, and openness.
   • Serve as a family advocate.
   • Provide continuity of care.
2. Any three of the following are acceptable:
   • Recognize that family members know the child best and are “cued in” to the child’s needs.
   • Allow the family to have unlimited presence.
   • Encourage family to provide the child with significant but manageable items from home.
   • Arrange for family members to have a meal together.
   • Attempt to make the hospital environment as much like home as possible.
3. Games such as puzzles; reading material; quiet, individual activities; stringing beads; Lego blocks and other building materials

CHAPTER 22

Review of Essential Concepts

1. It is the legal and ethical requirement that the patient or the patient’s legal surrogate receive sufficient information on which to make an informed health care decision. The patient must also demonstrate a clear, full, and complete understanding of the medical treatment to be performed and all risks of treatment and nontreatment before giving informed consent.

2. a. The person must be capable of giving consent, must be over the age of majority (usually age 18), and must be considered competent.
b. The person must receive the information needed to make an intelligent decision.
c. The person must act voluntarily when exercising freedom of choice, without force, fraud, deceit, duress, or other forms of constraint or coercion.

3. False

4. One who is legally under the age of majority but is recognized as having the legal capacity of an adult under circumstances prescribed by law (e.g., marriage, pregnancy)

5. a. Imagery
   b. Distraction
   c. Relaxation
   6. False
   7. Let them make some choices.
   8. behavior
   9. therapeutic
   10. a. 3
       b. 2
       c. 1
       d. 4
   11. parental presence
   12. If children have no preoperative pain and are well prepared psychologically for surgery
   13. To assess pain frequently and administer analgesics to provide comfort and facilitate cooperation with postoperative care such as ambulation and deep breathing
   14. a. Family support
       b. Family reminders
c. Good communication
d. Expectations for successful completion of the therapeutic regimen
   15. a. Organizational strategies
       b. Educational strategies
c. Treatment strategies
d. Behavioral strategies
   16. a. impaired mobility.
       b. protein malnutrition.
c. edema.
d. incontinence.
e. sensory loss.
f. anemia.
g. infection.
h. not turning the patient.
i. intubation.
   17. Reactive hyperemia
   18. amount, tissue damage
   19. Although they are capable of brushing and flossing without assistance, the nurse’s role is to remind them to brush and floss.
   20. False
   21. a. Vomiting or diarrhea
       b. Decrease in appetite
c. Abdominal cramping or distention
d. Absence of bowel sounds
e. Dehydration or weight loss
   22. illness
   23. a. 3
       b. 1
       c. 2
   24. a. True
       b. False
   25. Entrapment when it is activated to descend
   26. A toilet paper roll
   27. a. Medication effects: postanesthesia or sedation; analgesics or narcotics, especially in those who have never had narcotics in the past and in whom effects are unknown
       b. Altered mental status: secondary to seizures, brain tumors, or medications
c. Altered or limited mobility: difficulty in ambulation secondary to developmental abilities, disease process, tubes, drains, casts, splints, or other appliances; inexperience with ambulation with assistive devices such as walkers or crutches
d. Postoperative status: risk of hypotension or syncope secondary to large blood loss, a heart condition, or extended bed rest
e. History of falls
   28. a. Combine the major features of universal precautions and body substance isolation; designed for use with all patients, especially those who are undiagnosed; involve the use of barrier protection such as gloves, masks, and gowns
       b. Used for patients known or suspected to be infected with epidemiologically important pathogens for which additional precautions beyond standard precautions are needed to interrupt transmission in hospitals; include airborne, droplet, and contact precautions
   29. Hand washing
   30. Any means, physical or mechanical, that restricts a person’s movement, physical activity, or normal access to his or her body
   31. True
   32. Maintain the child’s spine in a flexed position by holding the child with one arm behind the neck and the other behind the thighs.
33. Perez
34. urinary tract infection
35. False
36. Because they have immature enzyme systems in the liver (where most drugs are metabolized and detoxified), lower plasma concentrations of protein for binding with drugs, and immaturely functioning kidneys (where most drugs are excreted)
37. body surface area
38. a. Vastus lateralis muscle
   b. Ventrogluteal muscle
39. True
40. Blowing a small puff of air in the face
41. False
42. a. Inability to differentiate one type of loss from another because of admixture
   b. Loss of urine or liquid stool from leakage or evaporation (especially if the infant is under a radiant warmer)
   c. Additional fluid in the diaper (superabsorbent disposable type) from absorption of atmospheric moisture
43. Intraosseous infusion
44. retina, lungs
45. It is a physiologic hazard of oxygen therapy that may occur in persons with chronic pulmonary disease, such as cystic fibrosis. In these patients the respiratory center has adapted to continuously higher arterial carbon dioxide tension (PaCO₂) levels, and therefore hypoxia becomes the more powerful stimulus for respiration.
46. a. Oximetry does not require heating the skin, thus reducing the risk of burns.
   b. Oximetry eliminates a delay period for transducer equilibration.
   c. Oximetry maintains an accurate measurement regardless of the patient’s age or skin characteristics or the presence of lung disease.
47. True
48. a. Manual percussion
   b. Vibration
   c. Squeezing of the chest
   d. Cough
   e. Forceful expiration
   f. Breathing exercises
49. humidified
50. respiratory, cardiac
51. It is used to check for proper placement.
52. postpyloric
53. Any three of the following are acceptable:
   • Carbohydrates
   • Lipids
   • Amino acids
   • Vitamins
   • Minerals
   • Water
   • Trace elements and other additives in a single container
   • Protein
   • Glucose
54. a. Osmotic effect of the enema may produce diarrhea, which can lead to metabolic acidosis.
   b. Extreme hyperphosphatemia, hypernatremia, and hypocalcemia can occur, which may lead to neuromuscular irritability and coma.
55. necrotizing enterocolitis, imperforate anus

Applying Critical Thinking to Nursing Practice

A.
1. Measure the rectal temperature 30 minutes after the antipyretic is given to assess whether the temperature is lowered.
2. Having the child wear minimum clothing; exposing the skin to the air; reducing room temperature; increasing air circulation; and applying cool, moist compresses to the skin (e.g., the forehead) are effective if employed approximately 1 hour after an antipyretic is given so that the set point is lowered.
3. Parents should know how to take the child’s temperature and read the thermometer accurately. They also need instruction in administering the drug. Emphasize accuracy in both the amount of drug given and the time intervals at which the drug is administered.

B.
1. Ensure the order is renewed daily; monitor the patient at least every 2 hours for signs of irritation, redness, or swelling around the restraints; remove restraints every 2 hours to exercise arms and joints; frequently monitor and assess his nutrition and hydration, circulation and range-of-motion of extremities, vital signs, hygiene and elimination, physical and psychologic status and comfort, and readiness for discontinuation of restraint.
2. Restraints with ties must be secured to the bed or crib frame, not the side rails. Leave one finger breadth between skin and the device; tie knots that allow for quick release; ensure the restraint does not tighten as the child moves; decrease wrinkles or bulges in the restraint; place jacket restraints over an article of clothing; place limb restraints below waist level, below knee level, or distal to the IV; and tuck in dangling straps.

C.
1. a. Talk often to Evan so that he knows someone is always nearby.
   b. Place a familiar toy inside the tent.
   c. Remove Evan from the tent for feeding and bathing if medically stable.
2. For infants, special devices are available for percussing small areas. A “popping,” hollow sound should be the result, not a slapping sound. The procedure should be done over the rib cage only and should be painless.
3. The nurse would auscultate the chest before treatment and then after treatment to hear whether the chest sounds are clearer.

D.
1. Hemorrhage, edema, aspiration, accidental decannulation, tube obstruction, and the entrance of free air into the pleural cavity
2. Maintaining a patent airway, facilitating the removal of pulmonary secretions, providing humidified air or oxygen, cleansing the stoma, monitoring the child’s ability to swallow, and teaching while simultaneously preventing complications
3. Noisy breathing, bubbling, or coughing
4. To prevent hypoxia
CHAPTER 23

Review of Essential Concepts

1. Respiratory infections
   a. Age of the child
   b. The season
   c. Living conditions
   d. Preexisting medical problems
2. The diameter of the airways is smaller in young children than in older children or adults and is subject to considerable narrowing from edematous mucous membranes and increased production of secretions. The distance between structures within the respiratory tract is also shorter in the young child, and organisms may move rapidly down the respiratory tract, causing more extensive involvement. The relatively short and open eustachian tube in infants and young children allows pathogens easy access to the middle ear.

4. a. True
   b. True
   c. True
   d. False
   e. False

5. Running a shower of hot water into the empty bathtub or open shower stall with the bathroom door closed produces a quick source of steam. Keeping a child in this environment for 10 to 15 minutes offers the same advantages as the mist tent without the fear and restraint often associated with the confines of a tent.

6. Apply saline nose drops (which can be prepared at home by dissolving 1 teaspoon of salt in 1 pint of warm water) into the child’s nares and suction with a bulb syringe.

7. a. 1, 2, 5, 6, 7
   b. 3, 4, 8
   c. Ineffective

8. To differentiate between a viral and bacterial throat infection
9. Penicillin or another antibiotic for at least 10 days
10. Tonsils
11. A child who has difficulty swallowing and breathing and therefore breathes through his or her mouth

14. a. malignancy,
    b. recurrent peritonsillar abscess,
    c. airway obstruction.
15. hemorrhage, frequent
16. Because it is associated with Reye syndrome
17. a. An inflammation of the middle ear without reference to etiology or pathogenesis
    b. A rapid and short onset of signs and symptoms lasting approximately 3 weeks
    c. An inflammation of the middle ear in which a collection of fluid is present in the middle ear space
18. Middle ear effusion that persists beyond 3 months
19. Bulging or full, opacified, or very reddened immobile membrane
20. Oral amoxicillin
21. Hearing loss
22. Epstein-Barr
23. a. Headache
    b. Malaise
    c. Fatigue
    d. Chills
    e. Low-grade fever
    f. Loss of appetite
    g. Puffy eyes
24. Monospot is a rapid, sensitive, inexpensive, and easy-to-perform test, and it has the advantage that it can detect significant agglutinins at lower levels than the heterophil antibody test, thus allowing earlier diagnosis. Blood is usually obtained for the test by finger puncture and is placed on special paper. If the blood agglutinates, forming fragments or clumps, the test is positive for the infection.
25. Breathing difficulties, severe abdominal pain, sore throat so severe the child cannot drink liquids, and respiratory stridor
26. Hoarseness, a resonant cough described as “barking” or “brassy,” varying degrees of inspiratory stridor, and varying degrees of respiratory distress resulting from swelling or obstruction in the region of the larynx.
27. An obstructive inflammatory process of the epiglottis
28. a. Absence of spontaneous cough
    b. Drooling
    c. Agitation
29. a. The voice is thick and muffled, with a froglike croaking sound on inspiration, but the child is not hoarse.
    b. Suprasternal and substernal retractions may be evident. The child seldom struggles to breathe, and slow, quiet breathing provides better air exchange.
    c. The sallow color of mild hypoxia may progress to frank cyanosis.
    d. The throat is red and inflamed, and a distinctive large, cherry red, edematous epiglottis is visible on careful throat inspection.
30. It could precipitate a spasm of the epiglottis and complete obstruction of the airway.
31. Acute laryngotracheobronchitis
32. Bronchiolitis
33. True
34. RSV affects the epithelial cells of the respiratory tract. The ciliated cells swell, protrude into the lumen, and lose their cilia. RSV produces a fusion of the infected cell membrane with cell membranes of adjacent epithelial cells, thus forming a giant cell with multiple nuclei. At the cellular level this fusion results in multinucleated masses of protoplasm, or syncytia.
35. False
36. Contact and standard precautions
37. etiologic agent
38. Any three of the following are acceptable:
   • RSV in infants
   • Parainfluenza
   • Influenza
   • Human metapneumovirus
   • Adenovirus in older children.
39. a. Fever greater than 38° C (100.4° F)
    b. Headache
    c. Cough
    d. Shortness of breath
    e. Difficulty breathing
    f. Dry, nonproductive cough
    g. Dyspnea
40. Pertussis
41. *Mycobacterium tuberculosis*
42. airway
43. a. Adequate nutrition  
  b. Pharmacotherapy  
  c. General supportive measures  
  d. Prevention of unnecessary exposure to other infections  
  e. Prevention of reinfection  
  f. Sometimes surgical procedures
44. Airborne precautions, negative-pressure
45. avoid contact
46. compliance
47. True
48. a. Dyspnea  
  b. Cough  
  c. Stridor  
  d. Hoarseness
49. Bronchoscopy
50. a. Back blows  
  b. Heimlich maneuver
51. a. Cannot speak  
  b. Becomes cyanotic  
  c. Collapses
52. False
53. Second-hand (or passive) smoke
54. a. Worsening air pollution  
  b. Lack of access to medical care  
  c. Underdiagnosis  
  d. Undertreatment
55. a. True  
  b. True
56. Allergen
57. Prevent and control asthma symptoms.
58. Corticosteroids
59. Bronchodilators
60. Fewer reported side effects
61. Exercise-induced bronchospasm is an acute, reversible, usually self-terminating airway obstruction that develops during or after vigorous activity, reaches its peak 5 to 10 minutes after stopping the activity, and usually stops in another 20 to 30 minutes.
62. It is not recommended for allergens that can be eliminated, such as foods, drugs, and animal dander.
63. An asthma attack in which the child continues to display respiratory distress despite vigorous therapeutic measures
64. β₂-Agonists and corticosteroids. If the child is not responding, epinephrine is also given.
65. a. asthma is a common disease that can be controlled.  
  b. an asthmatic attack is easier to prevent than to treat.  
  c. persons with asthma are able to live full and active lives.
66. a. Rhinorrhea  
  b. Cough  
  c. Low-grade fever  
  d. Irritability  
  e. Itching (especially in front of the neck and chest)  
  f. Apathy  
  g. Anxiety  
  h. Sleep disturbance  
  i. Abdominal discomfort  
  j. Loss of appetite
67. a. Increased viscosity of mucous gland secretions  
  b. A striking elevation of sweat electrolytes  
  c. An increase in several organic and enzymatic constituents of saliva  
  d. Abnormalities in autonomic nervous system function
68. mechanical obstruction
69. The first manifestation of cystic fibrosis
70. Because essential pancreatic enzymes are unable to reach the duodenum, digestion and absorption of nutrients are markedly impaired.
71. Large, frothy, and extremely foul smelling
72. Rectal prolapse
73. sodium, chloride
74. Preventing and treating pulmonary infection
75. a. At mealtimes  
  b. degree of insufficiency, how the child’s body responds to enzyme therapy, and the physician’s philosophy.  
  c. normal growth and development and reduction in stools to one or at the most two per day.
76. Well-balanced, high-protein, high-calorie diet supplemented with A, D, E, and K vitamins; when high-fat foods consumed, must increase enzyme replacement
77. pulmonary involvement
78. a. Nightly snoring  
  b. Interrupted or disturbed sleep patterns
79. adenotonsillectomy
80. a. Increased work of breathing but with gas exchange function near normal  
  b. Inability to maintain normal blood gas tensions; development of hypoxemia and acidosis as result of carbon dioxide retention
81. Respiratory arrest is the cessation of respiration; apnea is the cessation of breathing for more than 20 seconds or a shorter amount of time when associated with hypoxemia or bradycardia.
82. Restlessness, tachypnea, tachycardia, diaphoresis
83. a. False  
  b. False

**Applying Critical Thinking to Nursing Practice**

**A.**
1. Any two of the following are acceptable:
   - Ineffective Breathing Pattern related to inflammatory process
   - Fear/Anxiety related to difficulty breathing, unfamiliar procedures, and possibly environment (hospital)
   - Ineffective Airway Clearance related to mechanical obstruction, inflammation, increased secretions, pain
   - Risk for Infection related to presence of infective organisms
   - Activity Intolerance related to inflammatory process, imbalance between oxygen supply and demand
   - Pain related to inflammatory process, surgical incision
   - Altered Family Process related to illness or hospitalization of a child
   - Altered Nutrition: Less Than Body Requirements related to illness or hospitalization of the child

2. a. Warm cool mist in the form of a mist tent or warm shower  
   b. Instillation of saline nose drops to clear nasal passages
Review of Essential Concepts

1. Lack of oral intake (especially in elevated environmental temperatures)
2. Vomiting
3. Diarrhea
4. Diabetic ketoacidosis
5. Extensive burns

2. Compared with older children and adults, infants and young children have a greater fluid intake and output relative to size. Water and electrolyte disturbances occur more frequently and more rapidly in infants and children, who adjust less promptly to these alterations.

3. extracellular fluid, water loss
4. Because it supports growth
5. Sodium, potassium
6. hypovolemic shock
7. a. 4
   b. 2
   c. 3
   d. 1
8. A variety of viral, bacterial, and parasitic pathogens
9. chronic
10. d
11. Rotavirus
12. glucose intolerance, fat malabsorption
13. a. Assessment of fluid and electrolyte imbalance
b. Rehydration
c. Maintenance fluid therapy
d. Reintroduction of an adequate diet
14. a. The rehydration solution should consist of 75 to 90 mEq of sodium (Na+) per liter.
b. Give 40 to 50 mL/kg of rehydration solution over 4 hours.
c. The replacement and maintenance solution should consist of 40 to 60 mEq of Na+ per liter.
d. Reevaluate the need for further rehydration; initiate maintenance therapy using maintenance formulations, with daily volumes not to exceed 150 mL/kg/day.
e. In children with diarrhea without significant dehydration, the maintenance phase may be initiated without the need for rehydration solution.
f. If additional fluids are needed, use low-salt fluids, such as breast milk or water.

CHAPTER 24

Answer Key

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23. The transfer of gastric contents into the esophagus
24. When complications such as failure to thrive, bleeding, or dysphagia develop
25. Functional abdominal pain (FAP) consists of nearly continuous abdominal pain in school-aged children or adolescents, with only occasional relation of pain to eating, menses, or defecation. This pain may be accompanied by dizziness, headache, nausea, and vomiting.

26. a. Right lower quadrant abdominal pain
   b. Fever
   c. Rigid abdomen
   d. Decreased or absent bowel sounds
   e. Vomiting
   f. Constipation or diarrhea
   g. Anorexia
   h. Tachycardia; rapid, shallow breathing
   i. Pallor
   j. Lethargy
   k. Irritability
   l. Stooped posture

27. It is the most intense site of pain with appendicitis and is located between the anterior superior iliac crest and the umbilicus.

28. a. Ulceration
   b. Bleeding
   c. Intussusception
   d. Intestinal obstruction
   e. Diverticulitis
   f. Perforation

29. surgical removal
30. Ulcerative colitis
31. ulcerative colitis
32. failure
33. gastric ulcer, duodenal ulcer
34. A, fecal-oral
35. a. Leakage of virus across the placenta late in pregnancy or during labor
   b. Infant’s ingestion of amniotic fluid or maternal blood
36. a. All infants born to hepatitis C virus–infected women
   b. Individuals who received blood products before 1992
   c. Individuals involved in injection drug use
   d. Individuals who receive hemodialysis
37. a. History
   b. Physical assessment
   c. Serologic markers in A, B, C
38. T
39. a. Infections
   b. Autoimmune disease
   c. Toxins
   d. Chronic diseases (e.g., hemophilia and cystic fibrosis)
40. a. Frequent assessment of liver status with physical examination and liver function tests
   b. Management of specific complications
41. F
42. T
43. Feeding
44. surgical
45. a. Coughing
   b. Choking
   c. Cyanosis
46. A hernia that cannot be reduced easily is called an incarcerated hernia. A strangulated hernia is one in which the blood supply to the herniated organ is impaired.
47. paralytic ileus
48. projectile
49. Intussusception occurs when a proximal segment of the bowel telescopes into a more distal portion, pulling the mesentery with it.

50. 3, 9
51. F
52. manual dilations
53. Malabsorption syndrome
54. a. abdominal pain.
   b. nausea.
   c. vomiting.
   d. bloating.
   e. constipation.
   f. short stature.
   g. pubertal delay.
   h. iron deficiency.
   i. dental enamel defects.
   j. abnormal liver function tests.
55. Celiac crisis
56. dietary management

Applying Critical Thinking to Nursing Practice

A.
1. Fluid Volume Deficit related to excessive gastrointestinal losses in stool
2. a. Dry mucous membranes
   b. Absent tears
   c. Irritability
   d. Delayed capillary refill

B.
1. The nurse tells the mother that no therapy is needed for the infant who is thriving and has no respiratory complications.
2. a. Elevate the head of the bed 30 degrees or place Bailey in an infant seat elevated 30 degrees for 1 hour after feedings.
   b. Feedings thickened with 1 teaspoon to 1 tablespoon of rice cereal per ounce of formula might help alleviate the pain.
3. a. Parents will identify three symptoms of GER in Bailey.
   b. Parents will demonstrate an understanding of home care (i.e., feeding, positioning) measures that will improve her comfort level.
   c. Parents will report that Bailey demonstrates an increased level of comfort after feedings.

C.
1. Periumbilical pain
2. Fever, sudden relief from pain after perforation, subsequent increase in pain (usually diffuse and accompanied by rigid guarding of the abdomen), progressive abdominal distention, tachycardia, rapid shallow breathing, pallor, chills, and irritability
3. Child does not exhibit signs of discomfort, and abdomen remains soft and nondistended.

D.
1. Diarrhea, rectal bleeding, and abdominal pain, often associated with tenesmus and urgency
2. When medical and nutritional therapies fail to prevent complications

E.
1. a. Severity of hepatitis
   b. Medical management
   c. Factors influencing control and transmission of the disease
2. Consume a well-balanced diet and set a realistic schedule of rest and activity.

F.
1. In the first 2 to 5 weeks of life
2. Projectile nonbilious vomiting, dehydration, metabolic alkalosis, and failure to thrive as a result of prolonged vomiting
3. Feedings are usually instituted soon after surgery, beginning with clear liquids containing glucose and electrolytes, and then advancing to formula or breast milk as tolerated. The food is offered slowly, in small amounts, and at frequent intervals as ordered by the practitioner. Observation and recording of feedings and the infant’s responses to feedings are a vital part of postoperative care. Positioning the head elevated 30 degrees is usually continued postoperatively. Care of the operative site consists of observation for any drainage or signs of inflammation and care of the incision as directed by the surgeon.

G.
1. Foods containing wheat, rye, barley, and some oats
2. Corn, rice
3. 

CHAPTER 25
Review of Essential Concepts
1. Taking an accurate health history
   2. a. Nutritional state
      b. Color
      c. Chest deformities
      d. Unusual pulsations
      e. Respiratory excursion
      f. Clubbing of fingers
   3. Echocardiography
   4. a. Prematurity or low birth weight
      b. A genetic syndrome
      c. Multiple cardiac defects
      d. A noncardiac congenital anomaly
   5. pulmonary blood flow, congestive heart failure
   6. cyanosis
   7. increased oxygen concentration
   8. a. Age at the time of surgery
      b. 1
      c. 2
      d. 3
      e. 4
      f. 5
      g. 6
   9. a. 1
      b. 2
      c. 3
      d. 4
      e. 5
      f. 6
      g. 7
   10. a. 1
      b. 2
      c. 3
      d. 4
      e. 5
      f. 6
      g. 7
   11. a. 1
      b. 1
      c. 2
      d. 2
      e. 2
      f. 2
      g. 2
   12. Congestive heart failure
   13. It is secondary to structural abnormalities (e.g., septal defects) that result in increased blood volume and pressure within the heart.
   14. a. 2
      b. 1
      c. 2
      d. 1
   15. a. Impaired myocardial function
      b. Pulmonary congestion
      c. Systemic venous congestion
   16. Tachypnea, dyspnea, retractions, flaring nares, exercise intolerance, orthopnea, cough, hoarseness, cyanosis, wheezing, grunting
   17. a. Improve cardiac function.
      b. Remove accumulated fluid and sodium.
      c. Decrease cardiac demands.
      d. Improve tissue oxygenation and decrease oxygen consumption.
   18. Electrocardiography (ECG); A prolonged pulse rate interval and reduced ventricular rate
   19. Nausea, vomiting, anorexia, bradycardia, dysrhythmias
   20. Vasodilation, vasoconstriction
   21. a. 1
      b. 2
      c. 3
      d. 4
      e. 5
      f. 6
      g. 7
      h. 8
   22. Mothers frequently feel inadequate in their mothering ability because of the more complex care required by infants with congenital heart defects. Mothers often feel constantly exhausted from the pressures of caring for these children and other family members.
   23. a. Assessing vital signs
      b. Assessing respiratory status
      c. Assessing rest and promoting activity
      d. Promoting comfort and providing emotional support
   24. An infection of the valves and inner lining of the heart most commonly caused by Streptococcus viridans
   25. Prophylactic antibiotic, 1
   26. Rheumatic fever
   27. Jones, streptococcal, antistreptolysin O (ASO)
   28. a. LDLs contain low concentrations of triglycerides, high levels of cholesterol, and moderate levels of protein.
      b. HDLs contain very low concentrations of triglycerides, relatively little cholesterol, and high levels of protein.
   29. Lifestyle modification
   30. 190, 160
   31. Apical, radial, high, low
   32. Temporary epicardial wires are placed in most patients at surgery; if a rhythm disturbance occurs, temporary pacing can be employed.
   33. Pacemaker
   34. Pulmonary artery hypertension
   35. Cardiomyopathy
   36. Orthotopic heart transplantation refers to removing the recipient’s own heart and implanting a new heart from a donor who has had brain death but a healthy heart. The donor and recipient are matched by weight and
blood type. *Heterotopic heart transplantation* refers to leaving the recipient’s own heart in place and implanting a new heart to act as an additional pump or “piggyback” heart; this type of transplant is rarely done in children.

37. Secondary to a structural abnormality or an underlying pathologic process
38. temperature
39. Shock, circulatory failure
40. a. Hypovolemia
   b. Altered peripheral vascular resistance
   c. Pump failure
41. a. Ventilation
   b. Fluid administration
   c. Improvement of the heart’s pumping action
42. The interaction of an allergen and a patient who is hypersensitive

**Applying Critical Thinking to Nursing Practice**

A.

1. Height, weight, history of allergic reactions, signs and symptoms of infection, baseline oxygen saturation, signs of anxiety and/or fear, and location and marking of pedal pulses

2. a. To detect abnormalities in rate and rhythm
   b. To detect cardiac hemorrhage from perforation or bleeding at the site of the initial catheterization
   c. To detect vessel obstruction
   d. To detect possible arterial obstruction

3. Apply direct, continuous pressure 1 inch above the percutaneous skin site to localize pressure over the vessel puncture.

B.

1. Observing for signs of toxicity, calculating and administering the correct dosage, and instituting parental teaching regarding the drug administration at home if needed

2. Because a pulse deficit, in which the radial pulse rate is lower than the apical, may be present with decreased cardiac output

3. Because the margin of safety between therapeutic, toxic, and lethal doses is very narrow

**C.**

1. a. Improves cardiac functioning by beneficial effects such as increased cardiac output, decreased heart size, decreased venous pressure, and relief of edema

   b. Removes accumulated fluid and sodium

2. Low potassium increases the cardiac effects of digitalis.

3. Decreased Cardiac Output related to structural defect, myocardial dysfunction

4. Any two of the following are acceptable:
   • Administer digoxin as ordered.
   • Make certain dosage is safe.
   • Check dosage with another nurse to ensure safety.
   • Count apical pulse for 1 full minute before giving medication.
   • Recognize signs of digoxin toxicity.
   • Ensure adequate intake of potassium.
   • Observe for signs of hypokalemia.
   • Monitor serum potassium levels, because a decrease enhances digoxin toxicity.
   • Check blood pressure.
   • Monitor electrolyte levels.
   • Attach cardiac monitor if ordered.

5. Heartbeat is strong, regular, and within normal limits for age, and peripheral perfusion is adequate.

**D.**

1. As soon as the diagnosis is suspected

2. Prevention; Parents need guidance to recognize the eventual hazards of continuing dependency and protectiveness as the child grows older, and the nurse can assist parents in learning ways to foster optimum development.

3. A clear explanation based on the parents’ level of understanding; a review of the heart’s basic structure and function; simple diagrams, pictures, or a model of the heart; written information about the specific condition; a glossary of frequently used terms; information about prognosis and treatment options

4. Recognize that more families are using the Internet as a source of information. It is important for parents to realize that not all websites offer accurate information.

**E.**

1. Anaphylaxis to strawberries
2. Because she is not exhibiting respiratory distress or cardiovascular compromise, antihistamines such as diphenhydramine (Benadryl) and epinephrine can be administered.

3. Ensuring adequate ventilation by establishing an airway, elevating the bed, preparing for the administration of oxygen, administering emergency medications, and preparing for the initiation of cardiopulmonary resuscitation

**CHAPTER 26**

**Review of Essential Concepts**

1. a. Child’s lack of energy
   b. Food diary of poor sources of iron intake
   c. Frequent report of infections
   d. Bleeding that is difficult to control
2. shift to the left
3. Anemia

4. a. Etiology and physiology: manifested by erythrocyte and/or hemoglobin depletion
   b. Morphology; the characteristic changes in red blood cell size, shape, and/or color

5. T
6. a. 4
   b. 1
   c. 2
   d. 3
7. a. 4.5 to 5.5 million/mm³ of blood
   b. 11.5 to 15.5 g/dl; amount of Hgb/g/dl of whole blood
   c. 35% to 45%; percentage or volume of packed RBCs to whole blood
   d. 4.5 to 13.5 × 10³ cells/mm³; number of WBCs/mm³ of blood
   e. 150 to 400 × 10³ cells/mm³; number of platelets/mm³ of blood
8. supplemental iron
9. It should be given as prescribed in two divided doses between

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meals with citrus fruit or juice to increase absorption of the medication.
10. To reverse anemia by treating the underlying cause and to make up for the deficiency
11. 12, 36, cow’s milk
12. 5, 6
13. circulatory overload
14. Vomiting, diarrhea, stools turning green, staining of teeth
15. a. Reinforce the importance of administering iron supplementation in the exclusively breastfed infant by 6 months of age.
b. Reinforce the importance of using iron-fortified formula and introducing iron-fortified cereal at 6 months of age.
16. tarry green
17. a. Obstruction caused by sickled RBCs
   b. Increased RBC destruction
18. a. Stasis with enlargement
   b. Infarction with ischemia and destruction
   c. Replacement with fibrous tissue (scarring)
19. a. Vaso-occlusive crisis
   b. Sequestration crisis
   c. Aplastic crisis
   d. Hyperhemolytic crisis
20. Sickledeg
21. a. To prevent sickling phenomenon, which are responsible for the pathologic sequelae
   b. To treat the medical emergencies of the sickle cell crisis
22. F
23. Prolonged oxygen administration
24. Vasoocclusive pain
25. normeperidine-induced
26. a. Italians
   b. Greeks
   c. Syrians
27. a. small stature,
   b. delayed sexual maturation,
   c. brozed, freckled complexion
28. To maintain sufficient hemoglobin B (Hgb) levels in order to prevent bone marrow expansion and the resulting bony deformities and to provide sufficient RBCs to support normal growth and physical activity
29. Iron overload
30. Deferoxamine (Desferal)
31. All fevers of 38.5°C (101.3°F) or higher
32. a. Anemia
   b. Leukopenia
   c. Decreased platelet count (thrombocytopenia)
33. bone marrow aspiration
34. Hemophilia
35. Factor VIII
36. a. Swelling
   b. Warmth
   c. Redness
   d. Pain
   e. Loss of movement
37. Replacement of missing clotting factor
38. a. Prevent bleeding.
   b. Recognize and control bleeding.
   c. Prevent crippling effects of bleeding.
   d. Support family and prepare for home care.
39. human immunodeficiency virus (HIV)
40. a. Thrombocytopenia, or excessive destruction of platelets
   b. Purpura, a discoloration caused by petechiae beneath the skin
   c. A normal bone marrow with normal or increased number of immature platelets and eosinophils
41. 20,000/mm³, supportive
42. consumption coagulopathy, secondary, hypoxia, acidosis, shock, endothelial damage
43. bleed
44. a. Acute lymphoid leukemia (ALL)
   b. Acute nonlymphoid myelogenous leukemia (ANLL or AML)
45. immature WBCs
46. a. Anemia
   b. Infection
   c. Bleeding tendencies
47. Increased intracranial pressure
48. bone marrow aspiration, biopsy
49. a. Induction therapy
   b. CNS prophylactic therapy
   c. Intensification or consolidation therapy
   d. Maintenance therapy
50. stem cell
51. F
52. a. Hodgkin disease originates in the lymphoid system and primarily involves the lymph nodes. It predictably metastasizes to nonnodal or extralymphatic sites, especially the spleen, liver, bone marrow, and lungs. It is more prevalent in adolescence and young adulthood (15 to 19 years).
   b. Non-Hodgkin lymphoma in children is strikingly different from Hodgkin disease. The disease is usually diffuse, rather than nodular; the cell type is either undifferentiated or poorly differentiated; dissemination occurs early, more often than in Hodgkin disease, and rapidly; mediastinal involvement and invasion of meninges are common. It is more prevalent in children younger than 14 years old.
53. Lymphomas
54. Asymptomatic enlarged cervical or supraclavicular lymphadenopathy
55. lymphocytes, monocytes
56. a. Perinatal transmission (in utero, delivery, breastfeeding)
   b. Receiving tainted blood products through transfusion
   c. Adolescents infected during sexual activity or children during sexual abuse
57. a. Lymphadenopathy
   b. Hepatosplenomegaly
   c. Oral candidiasis
   d. Chronic or recurrent diarrhea
   e. Failure to thrive
   f. Developmental delay
   g. Parotitis
58. a. HIV
   b. There is no cure. Therapy is directed primarily toward slowing growth of the virus; preventing and managing the opportunistic infections; providing nutritional support and symptomatic treatment; using antiviral drugs; providing prophylaxis for Pneumocystis carinii pneumonia with trimethoprim-sulfamethoxazole (TMP-SMZ); providing prophylaxis for disseminated Mycobacterium avium-intracellulare complex (MAC), candidiasis, and herpes simplex; providing immunizations; and managing nutrition.
   c. It is changing from a fatal to a chronic disease.
59. Severe combined immunodeficiency disease
60. Hematopoietic stem cell transplant (HSCT)
61. X, bloody diarrhea
62. a. Hemolytic reactions
b. Febrile reactions
c. Allergic reactions
d. Circulatory overload
e. Air emboli
f. Hypothermia
g. Electrolyte disturbances
63. Apheresis

Applying Critical Thinking to Nursing Practice

A.
1. a. Explaining the significance of each test
b. Encouraging parents or another supportive person to be with Regan during the procedure
c. Allowing Regan to play with the equipment on a doll and/or participate in the actual procedure
2. Prematurity, excessive cow’s milk ingestion, underweight or small for her age
3. Educate the family on how cow’s milk interferes with iron absorption, on the proper administration of oral iron, and on the introduction of solid foods (iron-fortified cereal) at an appropriate age.

B.
1. a. Pain related to tissue ischemia
b. Altered Tissue Perfusion related to impaired arterial blood flow
2. Analyze the current drug dosage and suggest an increase to prevent, rather than treat, pain. Add psychologic support to counter depression, anxiety, and fear. Administer medication around the clock or via patient-controlled analgesia. Opioids, such as immediate- and sustained-release morphine, oxycodone, hydromorphone, and methadone, can be given intravenously or orally.
3. Few, if any, children who receive opioids for severe pain become behaviorally addicted to the drug. When the pain is gone, the need for the drug is gone. Addiction is rare in children.

C.
1. a. Pancytopenia
b. Hypoplasia of bone marrow
c. Patchy brown discoloration of skin
2. Recognition that the underlying disease process is a result of the failure of the bone marrow to carry out its hematopoietic functions
3. a. Immunosuppressive therapy to remove the presumed immunologic functions that prolong aplasia
b. Replacement of the bone marrow through transplantation

D.
1. Patient will experience minimized risk of infection.
2. a. Place child in a private room to minimize exposure to infective organisms.
b. Screen all visitors and staff for signs of infection.
c. Monitor the child’s temperature to detect possible infection.
d. Administer antibiotics as prescribed.
3. a. Child will not come in contact with infected persons or contaminated articles.
b. Child will not exhibit signs of infection.

E.
1. a. Implement and carry out standard precautions.
b. Instruct others in appropriate precautions; clarify any misconceptions about the communicability of the virus.
c. Teach the family protective methods.
d. Prevent the infant from placing his hands and objects in contaminated areas.
e. Assess the home situation and implement protective measures, as feasible, in individual circumstances.
2. Any three of the following are acceptable:
   • Risk for Infection related to impaired body defenses, presence of infective organisms
   • Altered Nutrition: Less Than Body Requirements related to recurrent illness, diarrheal losses, loss of appetite, oral candidiasis
   • Impaired Social Interaction related to physical limitations, hospitalizations, social stigma toward HIV infection
   • Chronic Pain related to disease process
   • Interrupted Family Processes related to having an infant with a dreaded and life-threatening disease
   • Anticipatory Grief related to having a child with a potentially fatal illness

CHAPTER 27

Review of Essential Concepts

1. malformed, low-set ears
2. urinalysis
3. a. 4
   b. 2
   c. 1
   d. 5
   e. 3
   f. 6
4. urinary stasis
5. a. Incontinence if toilet-trained
   b. Strong-smelling urine
   c. Frequency or urgency
6. a. Eliminate current infection.
b. Identify contributing factors to reduce the risk for recurrence.
c. Prevent systemic spread of the infection.
d. Preserve renal function.
7. recurrent kidney infections
8. a. High fevers
   b. Vomiting
   c. Chills
9. a. T
   b. T
10. a. F
    b. T
    c. T
    d. F
11. Nephrotic syndrome
12. Nephrotic syndrome
b. Reduce fluid retention in the tissues.
c. Prevent infection.
d. Minimize complications related to therapies.
14. a. Weight gain
    b. Rounded moon face
    c. Behavior changes
    d. Increased appetite
15. Acute poststreptococcal glomerulonephritis (APSGN)
Applying Critical Thinking to Nursing Practice

A.  
1. a. Fever  
   b. Poor appetite  
   c. Excessive thirst  
   d. Incontinence  
   e. Painful urination  
2. a. Eliminate current infection.  
   b. Identify contributing factors to decrease the risk of recurrence.  
   c. Prevent systemic spread of infection.  
   d. Preserve renal function.  
3. The decision is based on the proper identification of the pathogen, the child’s history of antibiotic use, and the location of the infection.  
4. Prevention of recurrence  
B.  
1. Nephrotic syndrome  
2. Fluid Volume Excess  
3. The presence of edema may predispose the child to skin breakdown and may make routine care more difficult.  
4. Upper respiratory tract infection  
C.  
1. Hemolytic uremic syndrome  
2. Hemodialysis or peritoneal dialysis  
3. a. The disease, its implications, and the therapeutic plan  
   b. The possible psychologic effects of the disease and its treatment  
   c. The technical aspects of the procedure  
4. Tina will consume a healthy diet.  
5. The nurse could observe Tina and her family successfully coping with the stresses of illness (e.g., performing routine care of the activities of daily living).  
D.  
1. Patient will maintain normal electrolyte levels.  
2. a. Assist with dialysis to maintain excretory function.  
   b. Administer sodium polystyrene sulfate (Kayexalate) as prescribed to decrease serum potassium levels.  
   c. Provide a diet low in potassium, sodium, and phosphorus.  
   d. Observe for evidence of accumulated waste products (hyperkalemia, hyperphosphatemia, uremia).  
3. Child will exhibit no evidence of waste product accumulation.
9. This allows for comparison of the findings so the observer can detect subtle changes in the neurological status that might not otherwise be evident.
10. The sudden appearance of a fixed and dilated pupil(s)
11. 24 to 48 hours after insult
12. a. Flexion posturing is seen with severe dysfunction of the cerebral cortex or with lesions to corticospinal tracts above the brainstem. Typical flexion posturing includes rigid flexion, with arms held tightly to the body; flexed elbows, wrists, and fingers; plantar-flexed feet; legs extended and internally rotated; and possibly the presence of fine tremors or intense stiffness.
b. Extension posturing is a sign of dysfunction at the level of the midbrain or lesions to the brainstem. It is characterized by rigid extension and pronation of the arms and legs, flexed wrists and fingers, clenched jaw, extended neck, and possibly an arched back.
13. Moro, tonic neck, withdrawal
14. Chloral hydrate
15. a. Patent airway
   b. Treatment of shock
   c. Reduction of intracranial pressure (ICP)
16. patent airway
17. a. Glasgow Coma Scale evaluation of 8
   b. Glasgow Coma Scale evaluation of less than 8 with respiratory assistance
   c. Deterioration of condition
   d. Subjective judgment regarding clinical appearance and response
18. a. T
   b. T
   c. F
   d. T
19. a. Concussion
   b. Contusion and laceration
   c. Fractures
20. Accumulation of blood between the skull and cerebral surfaces can compress the underlying brain and produce effects that can be rapidly fatal or insidiously progressive.
21. a. F
   b. T
   c. T
   d. F
   e. T
   f. T
22. The most important nursing observation is assessment of the child's LOC.
23. five, 5, private swimming pools
24. a. Hypoxia and asphyxiation
   b. Aspiration
   c. Hypothermia
25. To restore oxygen delivery to the cells and prevent further hypoxic damage
a. T
b. F
c. T
d. T
26. a. T
   b. F
   c. T
   d. T
27. removal of the tumor
28. hyperthermia
29. cerebral edema
30. silent; In more than 70% of cases, diagnosis is made after metastasis occurs, with the first signs caused by involvement in the nonprimary site, usually the lymph nodes, bone marrow, skeletal system, skin, or liver.
31. a. Primary site
   b. Areas of metastasis
32. a. Surgery
   b. Radiotherapy
   c. Chemotherapy
33. regression
34. meningitis, encephalitis
35. Haemophilus influenzae, Hib, bacterial
36. a. H. influenzae type b
   b. Streptococcus pneumoniae
   c. Neisseria meningitidis (meningococcus)
37. a. T
   b. T
   c. F
   d. T
38. Because he or she may have (overwhelming) meningococcemia
39. a. Isolation precautions
   b. Initiation of antimicrobial therapy
   c. Maintenance of hydration
   d. Maintenance of ventilation
   e. Reduction of increased ICP
   f. Management of systemic shock
   g. Control of seizures
   h. Control of temperature
   i. Treatment of complications
40. Encephalitis
41. a. direct invasion of the CNS by a virus.
b. postinfectious involvement of the CNS after a viral disease.
42. supportive
43. Rabies
44. toxic encephalopathy
   a. Fever
   b. Profoundly impaired consciousness
   c. Disordered hepatic function
45. aspirin
46. liver biopsy
47. type, etiology
48. Acute infections
49. a. Partial seizures, which have a local onset and involve a relatively small location in the brain
   b. Generalized seizures, which involve both hemispheres of the brain and are without local onset
   c. Unclassified epileptic seizures
50. epileptogenic focus
51. a. Migraine headaches
   b. Toxic effects of drugs
   c. Syncope (fainting)
d. Breath-holding spells in infants and young children
   e. Movement disorders (tics, tremor, chorea)
   f. Prolonged QT syndrome
g. Sleep disturbances (sleep-walking, night terrors)
h. Psychogenic seizures
   i. Rage attacks
   j. Transient ischemic attacks (rare in children)
52. Electroencephalography (EEG); It confirms the presence of abnormal electrical discharges and provides information on the seizure type and the focus.
53. a. Control the seizures or reduce their frequency.
b. Discover and correct the cause of seizures when possible.
c. Help the child who has recurrent seizures to live as normal a life as possible.
54. The administration of the appropriate antiepileptic drug, or combination of drugs, in a dosage that provides the desired effect.
Applying Critical Thinking to Nursing Practice

A.
1. Risk for Ineffective Cerebral Tissue Perfusion, related to head injury, secondary to ICP
2. A neurosurgical emergency

B.
1. a. Increased agitation
b. Increased rigidity
c. Increased heart rate
d. Increased respiratory rate
e. Increased blood pressure
f. Decreased oxygen saturation
2. a. Assess for evidence of pain.
b. Use the pain assessment record to document the effectiveness of interventions.
c. Administer pain medication as needed.
3. a. Vital signs
b. Pupillary reactions
c. Level of consciousness
4. Administration of artificial tears (methylcellulose)

C.
1. Rhinorrhea; CSF from a skull fracture
2. a. Hypoxia
b. Aspiration
c. Hypothermia

D.
1. Clinical manifestations include fever, poor feeding, vomiting, marked irritability, seizures, a high-pitched cry, and a bulging fontanel. Nuchal rigidity may or may not be present. Brudzinski and Kernig signs are not usually used in making the diagnosis, since they are difficult to evaluate in children in this age group.
2. Administer the antibiotic as soon as it is ordered.

E.
1. a. Ascertain the type of seizure the child has experienced.
b. Attempt to understand the cause of the events.
2. a. Do not attempt to restrain him or use force.
b. Remove objects from the bed.
c. Place a pillow or folded blanket under his head.
d. Protect him from injury on side rails.
e. Have someone in the room with him at all times.
f. Make certain he calls for assistance when getting out of bed.

F.
1. a. Abnormally rapid head growth
b. Bulging fontanels
c. Dilated scalp veins
d. Separated sutures
e. Macewen sign
f. Thinning of the skull bones
2. a. Position Adam on his unoperated side to prevent pressure on the shunt valve.
b. Keep Adam flat to prevent too rapid reduction of intracranial fluid.
c. Manage pain with acetaminophen, acetaminophen with codeine, or opioids.
d. Monitor his neurologic status.
e. Monitor his vital signs.
f. Monitor his abdominal girth.
g. Monitor his hydration status.
h. Monitor for infection of the operative site.
i. Inspect the incision site for leakage.
j. Provide meticulous skin care.
3. Family discusses their feelings and concerns regarding the child’s condition; family demonstrates adequate and proper care of Adam in relation to his diagnosis and the treatment of hydrocephalus.

CHAPTER 29
Review of Essential Concepts

1. a. Gigantism (caused by excess growth hormone production during childhood)
b. Hyperthyroidism
c. Hypercortisolism (Cushing syndrome)
d. Precocious puberty from excessive gonadotropins
2. tumors
3. Identifying children with growth problems
4. Because these children frequently have parents who experienced similar slow growth patterns and delayed sexual maturation
5. Replacement of growth hormone
6. At night
7. Acromegaly
8. Early identification of children with excessive growth rates
9. Manifestations of sexual development before age 9 years in boys or age 8 years in girls
10. diabetes insipidus, diuresis
11. a. Polyuria
   b. Polydipsia
12. Hormone replacement
13. Oversecretion of the posterior pituitary hormone or antidiuretic hormone (ADH)
14. Fluid restriction
15. Hypothyroidism
16. It regulates the basal metabolic rate and thereby controls the processes of growth and tissue differentiation.
17. hypothyroidism
18. goiter
19. Lymphocytic thyroiditis, juvenile autoimmune thyroiditis
20. 6, 15, 12, 14
21. a. Irritability
   b. Hyperactivity
   c. Short attention span
d. Tremors
e. Insomnia
f. Emotional lability
22. a. Antithyroid drugs, which interfere with the biosynthesis of thyroid hormone, including propylthiouracil (PTU) and methimazole (MTZ, Tapazole)
b. Subtotal thyroidectomy
c. Ablation with radioactive iodine ($^{131}$I iodide)
23. agranulocytosis (severe leukopenia)
24. Muscle cramps are an early symptom, progressing to numbness, stiffness, and tingling in the hands and feet.
25. serum calcium, serum phosphorus
26. a. acute adrenocortical insufficiency
   b. hyperfunction of the adrenal gland
27. Monitor and observe for signs of hypokalemia or hyperkalemia (e.g., weakness, poor muscle control, paralysis, cardiac dysrhythmias, and apnea).
28. cortisol
29. moon
30. genotype, cortisone
31. Injectable hydrocortisone
32. Increased production of catecholamines
33. three, 50
34. a. Glucagon: stimulates the liver to release stored glucose
   b. Insulin: facilitates the entrance of glucose into cells for metabolism
c. Somatostatin: regulates the release of insulin and glucagon
35. a. Type 1 diabetes mellitus (DM) is characterized by destruction of the pancreatic cells, which produce insulin; this usually leads to absolute insulin deficiency. Type 1 DM has two forms. Immune-mediated DM results from an autoimmune destruction of the cells; it typically starts in children or young adults who are slim, but it can arise in adults of any age. Idiopathic type 1 refers to rare forms of the disease that have no known cause.
b. Type 2 DM arises because of insulin resistance, in which the body fails to use insulin properly, combined with relative (rather than absolute) insulin deficiency. People with type 2 can range from being predominantly insulin resistant with relative insulin deficiency to being predominantly deficient in insulin secretion with some insulin resistance. It typically occurs in those who are over 45 years of age, are overweight and sedentary, and have a family history of diabetes.
36. a. T
   b. F
   c. T
d. T
e. T
   f. F
g. T
   h. F
37. a. Nephropathy
   b. Retinopathy
c. Neuropathy
38. a. Influenza
   b. Gastroenteritis
c. Appendicitis
39. a. Polyphagia
   b. Polydipsia
c. Polyuria
40. 126, 200, 200
41. a. 3
   b. 2
c. 1
d. 4
42. a. 2
   b. 1
c. 3
43. Insulin pumps
44. Self-monitoring of blood glucose
45. Lowers blood glucose levels
46. The Somogyi effect may occur at any time but often entails an elevated blood glucose level at bedtime and a drop at 2 AM, with a rebound rise following. The treatment for this phenomenon is decreasing the nocturnal insulin dose to prevent the 2 AM hypoglycemia. The rebound rise in the blood glucose level is a result of counterregulatory hormones (epinephrine, growth hormone, and corticosteroids), which are stimulated by hypoglycemia.
47. Insulin reactions; bursts of physical activity without additional food; or delayed, omitted, or incompletely consumed meals
48. Nervousness, pallor, tremulousness, palpitations, sweating, hunger, weakness, dizziness, headache, drowsiness, irritability, loss of coordination, seizures, and coma
49. glucose (i.e., sugar)
50. venous access

Applying Critical Thinking to Nursing Practice

A.

1. a. Polyuria
   b. Polydipsia
2. a. Overgrowth of long bones; may reach a height of 8 feet
   b. Rapid and increased development of muscles and viscera
c. Weight increase, but in proportion to height
d. Proportional enlargement of head circumference
3. a. Enlarged thyroid gland
   b. Tracheal compression
c. Hyperthyroidism
4. a. Severe irritability
   b. Restlessness
c. Vomiting
d. Diarrhea
e. Hyperthermia
f. Hypertension
g. Severe tachycardia
   h. Prostration
5. a. Short stature
   b. Round face
c. Short, thick neck
d. Short, stubby fingers and toes
e. Dimpling of skin over knuckles
f. Subcutaneous soft tissue calcifications
g. Mental retardation a prominent feature
B.
1. Chronic adrenocortical insufficiency
2. They must demonstrate awareness of the continuous need for cortisol replacement. Sudden termination of the drug places the child in danger of an acute adrenal crisis.
3. Weakness, poor muscle control, paralysis, cardiac dysrhythmias, and apnea

C.
1. Any five of the following are acceptable:
   • Hypertension
   • Tachycardia
   • Headache
   • Decreased gastrointestinal activity, constipation
   • Anorexia
   • Weight loss
   • Hyperglycemia
   • Polyuria
   • Polydipsia
   • Hyperventilation
   • Nervousness
   • Heat intolerance
   • Diaphoresis
   • Signs of congestive heart failure in severe cases
2. catecholamines; stimulate severe hypertension and tachyarrhythmias

D.
1. Ketoacidosis
2. Insulin replacement therapy
3. Insulin pump, because he will only need to insert the needle into his subcutaneous tissue every 48 hours, instead of several times a day with self-injections
4. Blood glucose monitoring
5. Education
   6. a. Hypoglycemia
      b. immediate treatment of hypoglycemia
7. a. He will recognize signs of hypoglycemia early and be particularly alert at times when blood glucose levels are lowest (after or during physical activity without additional food).
   b. Offer 10 to 15 g of readily absorbed carbohydrates, such as orange juice, hard candy, or milk, to elevate the blood glucose level and alleviate symptoms of hypoglycemia.
   c. Follow with a complex carbohydrate and protein, such as bread or cracker spread with peanut butter or cheese, to maintain blood glucose level.
8. Child ingests an appropriate carbohydrate; child displays no evidence of hypoglycemia.
9. CHAPTER 30

Review of Essential Concepts
1. The child's age
2. dermatitis
3. Pruritus
4. allergies
5. a. 4
   b. 2
   c. 1
   d. 5
   e. 3
   f. 8
   g. 7
   h. 6
   i. 9
6. Wounds
7. Abrasions
8. a. Hemostasis
   b. Inflammation
   c. Proliferation
   d. Remodeling
9. Any four of the following are acceptable:
   • Dry wound environment
   • Nutritional deficiencies
   • Immunocompromisation
   • Impaired circulation
   • Stress
   • Antisepsics
   • Medications
   • Foreign bodies
   • Infection
   • Mechanical friction
   • Fluid accumulation
   • Radiation
   • Diseases
10. a. To prevent further damage
    b. To eliminate the cause of the damage
    c. To prevent complications
    d. To provide relief from discomfort while tissues undergo healing
11. topical corticosteroids
12. moist wound
13. Increased erythema, edema, purulent exudate, pain, increased temperature
14. Color, drainage, odor, necrosis, granulation tissue, fibrin slough, condition of wound edges, and color of surrounding skin
15. eye
16. parallel
17. baking soda
18. a. 2
   b. 1
   c. 4
   d. 3
19. a. Prevent the spread of infection.
   b. Prevent complications.
20. Viruses
21. griseofulvin
22. Contact dermatitis
23. To prevent further exposure of the skin to the offending substance
24. An oil called urushiol
25. Flush (preferably within 15 minutes) the affected area with cold running water to neutralize the urushiol not yet bonded to the skin.
26. skin
27. Further doses of the medication should be withheld, and the rash should be reported to the attending physician.
28. a. Eczematous eruption; pruritic
   b. Minute grayish-brown thread-like (mite burrows); pruritic with a black dot at the end of the burrow
29. Permethrin 5% cream (Elimite)
30. Anyone can get lice.
31. Epinephrine
32. doxycycline, amoxicillin
33. prevention
34. Ichthyoses
35. Urine, feces, soaps, detergents, ointments, and friction
36. a. Minimize skin wetness.
   b. Allow the skin to maintain its normal acidic pH.
   c. Minimize the interaction of urine and feces on the skin.
37. a. 2
   b. 1
   c. 3
38. Acne vulgaris
39. a. Excessive sebum production
   b. Comedogenesis
   c. Overgrowth of Propionibacterium acnes
40. Tretinoin (retin-A)
41. Dry skin and mucous membranes, nasal irritation, dry eyes,
Applied Critical Thinking to Nursing Practice

A. 1. a. Active infection
   b. Diabetes
2. Any of the following are acceptable:
   - Impaired Skin Integrity related to foot wound
   - Risk for Infection related to primary lesion
   - Interrupted Family Processes related to child’s discomfort and therapy

B. 1. Calamine lotion, soothing Burow solution compresses, or Aveeno baths for discomfort; topical corticosteroid gel for prevention or relief of inflammation; and oral corticosteroids for severe reactions. Benadryl may also be ordered for a sedative.
2. a. When the child has made contact with the plant, immediately flush the area with cold running water to neutralize the urushiol.
   b. Remove all clothing and thoroughly launder it in hot water and detergent.
   c. Prevent the child from scratching the lesions.

C. 1. Because of their social nature and proximity to other children
2. The crawling insect and the insect’s saliva on the skin
3. Nix
4. a. Parental education
   b. Prevention of reinfection

D. 1. a. Carry out range-of-motion exercises to maintain optimal joint and muscle function.
   b. Encourage mobility if the child is able to move extremities.
   c. Have the child ambulate as soon as feasible.
   d. Splint any involved joints in extension at night and during rest periods to minimize contracture formation.
   e. Encourage and promote self-help activities to increase mobility.
   f. Administer analgesics before painful activity.

g. Encourage participation in activities of daily living and play activities.

CHAPTER 31

Review of Essential Concepts

1. a. Decreased muscle strength and mass
   b. Decreased metabolism
   c. Bone demineralization
2. When the arrangement of collagen, the main structural protein of connective tissues, is altered, resulting in a denser tissue that does not glide as easily. Eventually, muscles, tendons, and ligaments can shorten and reduce joint movement, ultimately producing contractures that restrict function.
3. a. Prolonged immobilization
   b. Orthotic and prosthetic devices
4. a. Damage to the soft tissue, subcutaneous structures, and muscle
   b. Occurs when the force of stress on the ligament is so great that it displaces the normal position of the opposing bone ends or the bone end to its socket
   c. Occurs when trauma to a joint is so severe that a ligament is partially or completely torn or stretched by the force created as a joint is twisted or wrenched, often accompanied by damage to associated blood vessels, muscles, tendons, and nerves
   d. Microscopic tear to the musculotendinous unit; has features in common with sprains
5. a. Rest, Ice, Compression, Elevation
   b. Ice, Compression, Elevation, Support
6. Osteogenesis imperfecta
7. simple, closed, open, compound
8. Radiographic examination
9. a. To regain alignment and length of the bony fragments (reduction)
   b. To retain alignment and length (immobilization)
   c. To restore function to the injured parts
d. To prevent further injury
10. a. Pain
b. Pallor
c. Paresthesia
d. Paresthesia
e. Paralysis

11. The extremity may continue to swell to the extent that the cast becomes a tourniquet, shutting off circulation and producing neurovascular complications. To prevent this, the body part can be elevated, thereby increasing venous return.

12. a. Traction is used to reduce or realign a fracture site; traction (forward force) is produced by attaching weight to the distal bone fragment.
b. Countertraction is where the body weight provides backward force.
c. Frictional force is the patient’s contact with the bed.

13. a. Manual traction
b. Skin traction
c. Skeletal traction

14. Distraction

15. A severed part should be rinsed with normal saline; the limb should be wrapped loosely in sterile gauze and placed in a watertight plastic bag; cool the bag, without freezing, in ice water (do not pack in ice); label the bag with the patient’s name, date, and time; and transport the patient to the hospital.

16. a. Physiologic factors, which include maternal hormone secretion and intrauterine positioning
b. Mechanical factors, which include breech presentation, multiple fetuses, oligohydramnios, large infant size, and continued maintenance of the hips in adduction and extension that will in time cause a dislocation
c. Genetic factors, which entail a higher incidence (6%) of DDH in siblings of affected infants and an even greater incidence (36%) of recurrence if a sibling and one parent were affected

17. Because ossification of the femoral head does not normally take place until the third to sixth month of life

18. a. 4
b. 1

19. a. correction of the deformity,
b. maintenance of the correction until normal muscle balance is regained.
c. follow-up observation to avert possible recurrence.
20. chorionic villus sampling
b. Restore and maintain adequate range of hip motion.
c. Prevent capital femoral epiphyseal collapse, extrusion, or subluxation.
d. Ensure a well-rounded femoral head at the time of healing.
22. a. 2
b. 1
c. 3

23. By radiographs of the child in the standing position and use of the Cobb technique (standard measurement of angle curvature), which establishes the degree of curvature
24. a. Bracing and exercise
b. Surgery
25. Harrington system
26. Osteomyelitis, Staphylococcus aureus
27. intravenous, antibiotic
28. osteogenic, Ewing
29. sunburst, onion skin
30. prosthesis
31. Osteosarcoma, limb salvage, amputation
32. This symptom is characterized by such sensations as tingling, itching, and, more frequently, pain felt in the amputated limb.
33. Intensive irradiation of the involved bone, combined with chemotherapy
34. rhabdomyosarcoma
35. a. Careful assessment for signs of the tumor, especially during well-child examinations
b. Preparation of the child and family for the multiple diagnostic tests
c. Supportive care during each stage of multimodal therapy
36. Juvenile idiopathic arthritis (JIA); the name was changed in part because the term rheumatoid is only minimally applicable to this disease, since only a small percentage of children have a positive rheumatoid factor.

Rheumatoid may also burden the family with images of adult disfiguring rheumatoid arthritis. Furthermore, the junior rheumatoid arthritis classification system focused more on disease at onset as opposed to disease progression, which is more important.

37. a. To control pain
b. To preserve joint range of motion and function
c. To minimize the effects of inflammation, such as joint deformity
d. To promote normal growth and development

38. a. Nonsteroidal antiinflammatory drugs (NSAIDs)
b. Methotrexate
c. Corticosteroids
d. Tumor necrosis factor inhibitor

39. T
40. F
41. Systemic lupus erythematosus (SLE)
42. A classic photosensitive erythematous butterfly rash extending across the nose and cheeks
43. Corticosteroids
44. Disease exacerbation, medication therapy

Applying Critical Thinking to Nursing Practice

A.

1. Significant decrease in muscle size, strength, and endurance; bone demineralization, leading to osteoporosis; and contractures and decreased joint mobility
2. To prevent dependent edema and to stimulate circulation, respiratory function, gastrointestinal motility, and neurologic sensations
3. Decreased efficiency of orthostatic neurovascular reflexes, diminished vasopressor mechanism, altered distribution of blood volume, venous stasis, and dependent edema

B.

1. Subluxation or partial dislocation of the radial head (i.e., nursemaid’s elbow)
2. The practitioner manipulates the arm by applying firm finger pressure to the head of the radius, then supinates and flexes the forearm to return the bone structure to normal alignment.
A click may be heard or felt, and functional use of the arm returns within minutes.

C.
1. Any four of the following are acceptable:
   a. Provide an alternating-pressure mattress underneath the hips and back.
   b. Make total-body skin checks for redness or breakdown, especially over areas that receive the greatest pressures.
   c. Wash and dry the skin daily.
   d. Inspect pressure points daily or more if risk for breakdown is observed.
   e. Use a skin breakdown assessment scale, such as Modified Braden Q.
   f. Stimulate circulation with gentle massage over the pressure areas.
   g. Change position at least every 2 hours to relieve pressure.
   h. Encourage increased intake of oral fluids.
   i. Provide and encourage the patient to eat a balanced diet with fruits and vegetables.

2. a. Observe for correct body alignment.
   b. Check alignment after the child has moved.
   c. Maintain the correct angles at joints.

D.
1. a. Leg shortening on the affected side
   b. Asymmetry of the thigh and gluteal fold
   c. Limited abduction of the hip on the affected side
   d. Positive Ortolani test
   e. Positive Barlow test

2. Newborn infants who are tightly wrapped in blankets or other swaddling material or are strapped to cradle boards have the highest incidence of dislocation. In cultures such as Asia, where mothers traditionally carry infants on their backs or hips in the widely abducted straddle position, the disorder is virtually unknown.

3. By dynamic splinting in a safe position, with the proximal femur centered in the acetabulum in an attitude of flexion by a harness like the Pavlik harness

E.
1. Bone fragility, deformity, and fracture; blue sclerae; hearing loss; and dentinogenesis imperfecta
2. a. Muscle weakness
   b. Osteoporosis

F.
1. NSAIDs; fewer side effects, easier to administer, and very effective
2. It is a diagnosis of exclusion based on the clinical criteria of age of onset before 16 years, arthritis in one or more joints for 6 weeks or longer, and exclusion of other conditions. Plain radiographs during initial imaging may show soft-tissue swelling and joint space widening from increased synovial fluid in the joint. Later films may show osteoporosis, narrow joint space, erosions, subluxation, and ankylosis.

3. a. Relieve pain.
   b. Promote general health.
   c. Facilitate compliance.
   d. Encourage heat and exercise.
   e. Support the child and family in self-care, school participation, and recreational activities

CHAPTER 32
Review of Essential Concepts
1. Cerebral palsy
2. Chorioamnionitis
3. a. Spastic cerebral palsy
   b. Dyskinetic cerebral palsy (nonspastic)
   c. Ataxic cerebral palsy (nonspastic)
   d. Mixed-type cerebral palsy (spastic and dyskinetic)
4. Magnetic resonance imaging (MRI)
5. a. Poor head control after 3 months of age
   b. Stiff or rigid arms or legs
   c. Pushing away or arching back
   d. Floppy or limp body posture
   e. Inability to sit up without support by 8 months of age
   f. Using only one side of the body or only the arms to crawl
6. a. Establishing locomotion, communication, and self-help
   b. Gaining optimum appearance and integration of motor functions
   c. Correcting associated defects as effectively as possible
   d. Providing educational opportunities adapted to the needs and capabilities of the individual child
   e. Promoting socialization experiences with other affected and unaffected children
7. Botulinum toxin type A (Botox)
8. a. Constipation caused by neurologic deficits and lack of exercise
   b. Poor bladder control and urinary retention
   c. Chronic respiratory tract infections and aspiration pneumonia, which occur as a result of gastroesophageal reflux, abnormal muscle tone, immobility, and altered positioning
   d. Skin problems as a result of altered positioning, poor nutrition, and immobility
   e. Dental problems

9. 30, 50
10. Meningocele, myelomeningocele (or meningomyelocele)

11. b

12. 50, 70
13. a. Wheezing
   b. Facial swelling
   c. Facial rash
   d. Anaphylaxis

14. a. Prevention of latex allergy
   b. Identification of children with a known hypersensitivity

15. Werdnig-Hoffmann

16. It is treated symptomatically and preventively, primarily by preventing joint contractures and treating orthopedic problems, the most serious of which is scoliosis. Hip subluxation and dislocation may also occur.

17. Muscle fibers, Duchenne

18. Respiratory or cardiac failure

19. a. Maintaining optimal function of all muscles
   b. Preventing contractures

20. An acute demyelinating polyneuropathy with a progressive, usually ascending, flaccid paralysis

21. a. Muscle tenderness
   b. Paresthesia and cramps
   c. Proximal symmetric muscle weakness
   d. Ascending paralysis from lower extremities
   e. Frequent involvement of muscles of the trunk, upper extremities, and those extremities
supplied by cranial nerves (especially the facial nerve)
f. Flaccid paralysis with loss of reflexes
g. Possible involvement of facial, extraocular, labial, lingual, pharyngeal, and laryngeal muscles
h. Involvement of intercostal and phrenic nerves (breathlessness in vocalization; shallow, irregular respirations)
22. Symptomatically, often with assisted ventilation
23. Clostridium tetani
24. Immune status
25. Tetanus immune globulin (TIG) and tetanus toxoid
26. It is caused by the ingestion of spores or vegetative cells of Clostridium botulinum and the subsequent release of the toxin from organisms colonizing the gastrointestinal tract. Prime sources include inadequately cooked or improperly canned food, honey, and light or dark corn syrup. Infant botulism occurs in breast fed infants who are being introduced to nonhuman milk substances.
27. a. Constipation
   b. Generalized weakness and a decrease in spontaneous movements
   c. Deep tendon reflexes that are usually diminished or absent
   d. Cranial nerve deficits (loss of head control, difficulty feeding, weak cry, and reduced gag reflex)
28. Clinical history, physical examination, and laboratory detection of toxin or the organism in the patient’s blood or stool
29. With the immediate intravenous administration of botulism immune globulin
30. Motor vehicle crashes
31. a. Complete or partial paralysis of the lower extremities
   b. No functional use of any of the four extremities
32. a. Maintenance of airway patency
   b. Prevention of complications
   c. Maintenance of function
33. Deep vein thrombosis, pulmonary embolus

Applying Critical Thinking to Nursing Practice

A.
1. Risk for Injury related to physical disability, neuromuscular impairment, and perceptual and cognitive impairment
2. Angela will experience no physical injury.
3. a. Educate her family to provide a safe physical environment.
   b. Educate her family to select toys appropriate for Angela’s age and ability.
   c. Encourage sufficient rest to reduce fatigue and decrease risk of injuries.
   d. Use safety restraints when Angela is in a chair or vehicle.
   e. Provide Angela with a protective helmet and enforce its use to prevent head injuries.
   f. Institute seizure precautions.
4. Her family will provide a safe environment for Angela by (add something specific, e.g., furnishing with sturdy furniture that does not slip to prevent falls).
B.
1. a. To prevent damage to the myelomeningocele sac.
   b. To prevent complications.
   c. To provide family with support and education.
2. a. The myelomeningocele sac sustains no damage.
   b. The child exhibits no evidence of complications.
   c. The family members discuss their feelings and concerns and participate in the infant’s care.
C.
1. Helping the child and family cope with a chronic, progressive, incapacitating disease; helping design a program that will afford maximal independence and reduce the predictable and preventable disabilities associated with the disorder; and helping the child and family deal constructively with the limitations that the disease imposes on their daily lives
2. Genetic counseling
D.
1. a. Clinical manifestations
   b. Cerebrospinal fluid analysis
   c. Electromyography findings
2. Gabapentin
E.
1. Indirect trauma caused by sudden hyperflexion or hyperextension of the neck, often combined with a rotational force
2. Preparing the child and family to live at home and function as independently as possible