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| **UNIT 9: DEVELOPMENTAL PSYCHOLOGY**  |

**INTRODUCTION**

**OBJECTIVE 1: State the three areas of change that developmental psychologists study, and identify three major issues in developmental psychology.**

1. Scientists who study physical, cognitive, and social changes throughout the life cycle are called \_\_\_\_\_**DEVELOPMENTAL**\_\_\_\_ \_\_\_\_**PSYCHOLOGISTS**\_\_\_.
2. One of the major issues in developmental psychology concerns the relative importance of genes and experience in determining behavior; this is called the \_\_\_\_\_\_**NATURE**\_\_\_\_\_\_/\_\_\_\_\_\_**NURTURE**\_\_\_\_ issue.
3. A second developmental issue, \_\_\_\_\_**CONTINUITY**\_\_\_\_\_\_/\_\_\_\_\_**STAGES**\_\_\_\_\_, concerns whether developmental changes are gradual or abrupt.
4. A third controversial issue concerns the tendency of personality and whether development is characterized by more \_\_\_\_**STAGES**\_\_\_\_\_\_\_ over time or by change.

**PRENATAL DEVELOPMENT AND THE NEWBORN**

**OBJECTIVE 2: Describe the union of sperm and egg at conception.**

1. Conception begins when a woman’s \_\_\_\_**OVARY\_**\_\_\_\_\_\_\_ releases a mature\_\_\_\_\_\_\_\_**EGG**\_\_\_\_\_\_\_\_\_\_.
2. The few \_\_\_\_\_\_**SPERM**\_\_\_\_\_\_\_\_\_\_ from the man that reach the egg release digestive \_\_\_\_**ENZYMES\_\_\_\_**\_\_\_\_\_\_ that eat away at the egg’s protective covering. As soon as one sperm penetrates the egg, the egg’s surface \_\_\_\_\_\_**BLOCKS**\_\_\_\_\_\_\_\_\_ all other sperm.
3. The egg and sperm \_\_\_\_\_**NUCLEI**\_\_\_\_\_\_\_\_ fuse and become one.

**OBJECTIVE 3: Define *zygote, embryo* and *fetus*, and explain how teratogens can affect development.**

1. Fertilized human eggs are called \_\_\_\_**ZYGOTES\_\_**\_\_\_\_\_\_\_. During the first week, the cells in this cluster begin to specialize in structure and function, that is, they begin to \_\_\_\_\_**DIFFERENTIATE**\_\_\_\_\_\_. The outer part of the fertilized egg attaches to the \_\_\_\_\_**UTERINE**\_\_\_\_\_\_\_ wall, forming the \_\_\_**PLACENTA**\_\_\_\_\_\_\_\_\_\_.
2. From about 2 until 8 weeks of age, the developing human, formed from the inner cells of the fertilized egg, is called a(n) \_\_\_\_**EMBRYO**\_\_\_\_\_\_\_\_. During the final stage of prenatal development, the developing human is called a(n) \_\_\_\_\_\_**FETUS**\_\_\_\_\_\_\_.
3. Along with nutrients, a range of harmful substances known as \_\_\_**TERATOGENS**\_\_\_\_ can pass through the placenta.
4. Moderate consumption of alcohol during pregnancy \_\_\_\_**CAN AFFECT**\_\_\_\_\_\_ (usually does not affect/can affect) the fetal brain. If a mother drinks heavily, her baby is at risk for the birth defects and mental retardation that accompany \_\_\_\_\_\_**FETAL**\_\_\_\_\_ \_\_\_**ALCOHOL**\_\_\_\_\_\_ \_\_\_\_**SYNDROME**\_\_\_.

**OBJECTIVE 4: Describe some abilities of the newborn, and explain how researchers use habituation to assess infant sensory and cognitive abilities.**

1. When an infant’s cheek is touched, it will vigorously search for a nipple, a response known as the \_\_\_\_**ROOTING**\_\_\_\_\_\_\_ \_\_\_\_\_\_\_**REFLEX**\_\_\_\_\_\_\_.
2. American psychologist \_\_**WILLIAM JAMES**\_\_\_ believed that the newborn experiences a “blooming, buzzing confusion.” This belief is \_\_\_\_\_**INCORRECT**\_\_\_\_ (correct/incorrect).

Give some evidence supporting the claim that a newborn’s sensory equipment is biologically prewired to facilitate social responsiveness.

**NEWBORNS REFLEXIVELY TURN THEIR HEADS IN THE DIRECTION OF HUMAN VOICES. THEY GAZE LONGER AT A DRAWING OF A HUMAN FACE THAN AT A BULL’S-EYE PATTERN. THEY FOCUS BEST ON OBJECTS ABOUT 8 TO 12 INCHES AWAY, WHICH IS ABOUT THE DISTANCE BETWEEN A NURSING INFANT’S EYES AND THE MOTHER’S. WITHIN DAYS, THEY RECOGNIZE THEIR MOTHER’S SMELL AND VOICE.**

1. To study infants’ thinking, developmental researchers have focused on a simple form of learning called \_\_\_\_**HABITUATION**\_\_\_\_\_, which involves a \_\_\_\_\_\_**DECREASE**\_\_\_\_\_\_\_\_ in responding with repeated stimulation. Using this procedure, researchers have found that infants can discriminate \_\_\_\_**COLORS**\_\_\_\_, \_\_\_\_\_**SHAPES**\_\_\_\_\_\_\_, and \_\_\_**SOUNDS**\_\_\_\_\_\_\_; they also understand some basic concepts of \_\_\_**NUMBERS**\_\_\_\_\_ and \_\_\_\_**PHYSICS**\_\_\_\_\_.

**INFANCY AND CHILDHOOD**

**OBJECTIVE 5: Describe some developmental changes in a child’s brain, and explain why maturation accounts for many of our similarities.**

1. The developing brain \_\_\_\_\_\_**OVER**\_\_\_\_\_\_\_\_\_ (over/under) produces neurons, with the number peaking at \_\_\_\_**28 WEEKS**\_\_\_\_\_ (what age?). At birth the human nervous system \_\_\_\_\_\_**IS NOT**\_\_\_\_\_\_\_\_\_(is/is not) fully mature.
2. Between 3 and 6 years of age, the brain is developing most rapidly in the \_\_\_\_**FRONTAL**\_\_\_\_\_\_\_\_\_ lobes, which enable \_\_**RATIONAL**\_\_\_\_\_ \_\_\_**PLANNING**\_\_\_.
3. After puberty, a process of \_\_\_\_**PRUNING\_\_\_**\_\_\_\_\_\_ shuts down some neural connections and strengthens others.
4. Biological growth processes that enable orderly changes in behavior are called \_\_\_**MATURATION**\_\_\_\_.

**OBJECTIVE 6: Outline four events in the motor development sequence from birth to toddlerhood, and evaluate the effects of maturation and experience on that sequence.**

1. Infants pass the milestones of \_\_\_\_\_\_**MOTOR**\_\_\_\_\_\_\_ development at different rates, but the basic \_\_\_**SEQUENCE**\_\_\_\_\_\_\_of stages is fixed. They sit before they \_\_\_\_\_\_**CRAWL**\_\_\_\_\_\_\_\_ and walk before they \_\_\_\_\_\_\_\_**RUN**\_\_\_\_\_\_\_\_\_.
2. Genes play a \_\_\_\_\_\_\_**MAJOR**\_\_\_\_\_\_\_\_ (major/minor) role in motor development.
3. Until the necessary muscular and neural maturation is complete, including the rapid development of the brain’s \_\_\_\_\_**CEREBELLUM**\_\_\_\_\_\_, experience has a \_\_\_\_\_\_\_**SMALL\_**\_\_\_\_\_\_\_ (large/small) effect on behavior.

**OBJECTIVE 7: Explain why we have few memories of experiences during our first three years of life.**

1. Our earliest memories generally do not occur before age \_\_\_\_\_\_\_\_\_**3 - 3.5**\_\_\_\_\_\_\_\_\_\_\_.
2. This phenomenon has been called “\_\_\_\_**INFANTILE\_\_**\_\_\_\_ \_\_\_\_**AMNESIA**\_\_\_\_.”
3. Memories of the preschool years are very few because infants’ \_\_\_\_\_**PREVERBAL**\_\_\_\_\_\_\_\_ memories do not easily translate into their later \_\_\_\_\_\_**LANGUAGE**\_\_\_\_.

**OBJECTIVE 8: State Piaget’s understanding of how the mind develops, and discuss the importance of assimilation and accommodation in this process.**

1. The first researcher to show that the thought processes of adults and children are very different was \_\_\_\_**PIAGET**\_\_\_\_\_\_\_\_.
2. To organize and interpret his or her experiences, the developing child constructs cognitive concepts called \_\_\_\_\_\_**SCHEMAS**\_\_\_\_\_\_\_\_.
3. The interpretation of new experiences in terms of existing ideas is called \_\_\_\_**ASSIMILATION**\_\_\_\_\_\_\_. The adaptation of existing ideas to fit new experiences is called \_\_\_\_**ACCOMMODATION**\_\_\_\_\_.

**OBJECTIVE 9: Outline Piaget’s four main stages of cognitive development, and comment on how children’s thinking changes during these four stages.**

1. The term for all the mental activities associated with thinking, remembering, communicating, and knowing is \_\_\_**COGNITION**\_\_\_\_\_\_\_.
2. In Piaget’s first stage of development, the \_\_**SENSIORMOTOR**\_\_\_\_\_\_\_ stage, children experience the world through their motor and sensory interactions with objects. This stage occurs between infancy and nearly age \_\_\_\_\_\_\_\_\_**2**\_\_\_\_\_\_\_\_\_.
3. The awareness that things continue to exist even when they are removed from view is called \_\_\_\_**OBJECT**\_\_\_\_\_\_\_ \_\_\_**PERMANENCE**\_\_. This awareness begins to develop at about \_\_\_\_\_\_\_\_**8**\_\_\_\_\_\_\_\_\_\_ months of age.
4. Developmental researchers have found that Piaget and his followers \_\_\_**UNDERESTIMATED**\_\_\_\_\_\_ (overestimated/underestimated) young children’s competence. For instance, babies have an understanding of \_\_\_\_**NUMBERS**\_\_\_\_\_\_\_\_, as Karen Wynn demonstrated.
5. According to Piaget, during the preschool years and up to age \_\_\_\_\_\_**6 OR 7**\_\_\_\_\_\_\_\_\_, children are in the \_\_\_\_**PREOPERATIONAL**\_\_\_\_ stage.
6. The principle that the quantity of a substance remains the same even when the shape of its container changes is called \_\_\_**CONSERVATION**\_\_\_\_\_\_\_. Piaget believed that preschoolers \_\_\_\_\_**HAVE NOT**\_\_\_\_\_\_\_ (have/have not) developed this concept.
7. Preschoolers have difficulty perceiving things from another person’s point of view. This inability is called \_\_\_\_**EGOCENTRISM**\_\_\_\_\_\_\_.
8. The child’s growing ability to take another’s perspective is evidence that the child is acquiring a \_\_\_**THEORY**\_\_\_\_\_ \_\_\_**OF**\_\_\_\_ \_\_\_\_\_**MIND**\_\_\_\_\_. Between 3 ½ and 4, children come to realize that others may hold \_\_\_\_\_**FALSE**\_\_\_\_ \_\_\_**BELIEFS**\_\_\_\_\_\_. Between 5 and 8, they learn that self-produced thoughts can create \_\_\_\_\_**FEELINGS**\_\_\_\_\_\_\_.
9. The disorder characterized by deficient \_\_\_**COMMUNICATION**\_\_\_\_ and \_\_\_\_**SOCIAL**\_\_\_\_\_\_\_\_ interaction and an impaired \_\_\_**THEORY**\_\_\_\_ \_\_\_**OF**\_\_\_ \_\_\_**MIND**\_\_\_\_ is \_\_\_\_**AUTISM**\_\_\_\_\_\_\_. This disorder is related to malfunctions of brain areas that enable \_\_\_\_**ATTENDING**\_\_\_\_\_\_\_ to others. The”high functioning” form of this disorder is called \_\_\_**ASPERGER**\_\_ \_\_**SYNDROME**\_\_\_\_\_.
10. A new theory proposes that autism represents an “extreme \_\_\_\_\_\_**MALE**\_\_\_\_\_\_\_ brain.” According to this theory, girls tend to be \_\_\_\_\_\_**EMPATHIZERS**\_\_\_\_\_, who are better than boys at reading facial expressions and gestures. Boys tend to be \_\_\_**SYSTEMIZERS**\_\_\_\_\_\_\_, who understand things in terms of rules or laws.
11. In contrast to Piaget’s findings, researchers have more recently discovered that the ability to perform mental \_\_**OPERATIONS**\_\_\_\_\_, to think \_\_\_**SYMBOLICALLY**\_\_\_, and to take another’s \_\_\_\_\_**PERSPECTIVE**\_\_\_\_\_\_ develops \_\_\_\_**GRADUALLY**\_\_\_\_\_\_(abruptly/gradually) during the preschool years.
12. Russian psychologist \_\_\_\_\_**LEV**\_\_\_\_\_\_ \_\_\_\_**VYGOTSKY**\_\_\_\_\_\_\_\_ noted that by age \_\_\_\_**7**\_\_\_\_\_ children stop thinking aloud and instead rely on \_\_\_**INNER**\_\_\_\_\_ \_\_\_**SPEECH**\_\_\_\_\_. When parents give children words, they provide, according to this theorist, a \_\_\_\_\_**SCAFFOLD**\_\_\_\_\_ upon which the child can build higher-level thinking.
13. Piaget believed that children acquire the mental abilities needed to comprehend mathematical transformations and conservation by about \_\_\_\_**6 OR 7**\_\_\_\_ years of age. At this time, they enter the \_\_\_**CONCRETE**\_\_\_\_\_ \_\_\_**OPERATIONAL**\_\_\_\_\_ stage.
14. In Piaget’s final stage, the \_\_\_\_**FORMAL**\_\_\_\_\_\_ \_\_\_\_**OPERATIONAL**\_\_\_\_\_\_ stage, reasoning expands from the purely concrete to encompass \_\_\_\_**ABSTRACT**\_\_\_\_\_\_ thinking. Piaget believed most children begin to enter this stage by age \_\_\_\_\_\_\_\_**12**\_\_\_\_\_\_\_\_\_\_.

**OBJECTIVE 10: Discuss psychologists’ current views on Piaget’s theory of cognitive development.**

Explain briefly how contemporary researchers view Piaget’s theory.

**CONTEMPORARY RESEARCHERS SEE DEVELOPMENT AS MORE CONTINUOUS THAN DID PIAGET. BY DETECTING THE BEGINNINGS OF EACH TYPE OF THINKING AT EARLIER AGES, THEY HAVE REVEALED CONCEPTUAL ABILITIES THAT PIAGET MISSED. THEY ALSO SEE FORMAL LOGIC AS A SMALLER PART OF COGNITION THAN PIAGET DID. DESPITE THESE REVISIONS TO PIAGET’S THEORY, STUDEIS SUPPORT THE BASIC IDEAL THAT COGNITIVE DEVELOPMENT UNFOLDS AS A SEQUENCE OF DISTINCT STAGES.**

**OBJECTIVE 11: Define *stranger anxiety.***

1. Soon after \_\_\_\_**OBJECT**\_\_\_ \_\_\_\_**PERMANENCE**\_\_\_\_ emerges and children become mobile, a new fear, called \_\_\_**STRANGER**\_\_\_\_\_ \_\_\_**ANXIETY**\_\_\_\_\_\_, emerges.
2. This fear emerges at age \_\_\_\_\_\_\_**8 MONTHS**\_\_\_\_\_\_\_.

**OBJECTIVE 12: Discuss the effects of nourishment, body contact, and familiarity on infant social attachment.**

1. The development of a strong emotional bond between infant and parent is called \_\_\_\_\_**ATTACHMENT**\_\_\_\_.
2. Harlow’s studies of monkeys have shown that mother-infant attachment does not depend on the mother providing nourishment as much as it does on her providing the comfort of \_\_\_\_\_**BODY**\_\_\_\_\_ \_\_\_\_\_**CONTACT**\_\_\_\_\_\_\_\_. Another key to attachment is \_\_\_\_**FAMILIARITY**\_\_\_\_\_\_\_.
3. Human attachment involves one person providing another with a \_\_\_\_\_\_**SAFE**\_\_\_\_\_ \_\_\_\_\_**HAVEN**\_\_\_\_\_\_\_\_\_ when distressed and a \_\_\_\_\_**SECURE**\_\_\_\_\_\_\_\_ \_\_\_\_\_\_**BASE**\_\_\_\_\_\_ from which to explore.
4. In some animals, attachment will occur only during a restricted time called a \_\_\_\_**CRITICAL**\_\_\_\_\_\_\_ \_\_\_\_\_**PERIOD**\_\_\_\_\_\_\_\_. Konrad Lorenz discovered that young birds would follow almost any object if it were the first moving thing they observed. This phenomenon is called \_\_\_\_\_**IMPRINTING**\_\_\_\_\_.
5. Human infants \_\_\_\_\_**DO NOT**\_\_\_\_\_\_\_ (do/do not) have a precise critical period for becoming attached.

**OBJECTIVE 13: Contrast secure and insecure attachment, and discuss the roles of parents and infants in the development of attachment and an infant’s feelings of basic trust.**

1. Placed in a research setting called the \_\_\_\_**STRANGE**\_\_\_\_ \_\_\_**SITUATION**\_\_\_, children show one of two patterns of attachment:

\_\_\_\_\_\_\_**SECURE**\_\_\_\_\_\_\_ attachment or \_\_\_\_\_**INSECURE**\_\_\_\_\_\_\_\_\_ attachment.

Contrast the responses of securely and insecurely attached infants to strange situations.

**PLACED IN A STRANGE SITUATION, SECURELY ATTACHED INFANTS PLAY COMFORTABLY, HAPPILY EXPLORING THEIR NEW ENVIRONMENT. IN CONTRAST, INSECURELY ATTACHED INFANTS ARE LESS LIKELY TO EXPLORE THEIR SURROUDNINGS AND MAY CLING TO THEIR MOTHERS. WHEN SEPARATED FROM THEIR MOTHERS, INSECURELY ATTACHED INFANTS ARE MUCH MORE DISTRESSED THAN SECURELY ATTACHED INFANTS. WHEN REUNITED WITH THEIR MOTHERS, INSECURELY ATTACHED INFANTS MAY BE INDIFFERENT.**

Discuss the impact of responsive parenting on infant attachment.

**RESEARCH STUDIES CONDUCTED BY MARY AINSWORTH HAVE REVEALED THAT SENSITIVE, RESPONSIVE MOTHERS TEND TO HAVE SECURELY ATTACHED INFANTS, WHEREAS INSENSITIVE, UNRESPONSIVE MOTHERS OFTEN HAVE INSECURELY ATTACHED INFANTS. OTHER STUDIES HAVE FOUND THAT TEMPERAMENTALLY DIFFICULT INFANTS WHOSE MOTHERS RECEIVE TRAINING IN RESPONSIVE PARENTING ARE MORE LIKELY TO BECOME SECURELY ATTACHED THAN ARE CONTROL INFANTS. THIS POINTS TO THE IMPORTANCE OF CONSIDERING THE INFANT’S TEMPERAMENT IN STUDYING ATTACHMENT.**

1. A father’s love and acceptance for his children are \_\_\_**COMPARABLE TO** \_\_\_ (comparable to/less important than) a mother’s love in predicting their children’s health and well-being.
2. Separation anxiety peaks in infants around \_\_\_\_\_\_\_**13**\_\_\_\_\_\_\_\_\_\_\_ months, then \_\_**GRADUALLY DECLINES**\_\_\_\_ (gradually declines/remains constant for about a year). This is true of children in \_\_**THROUGHOUT THE WORLD**\_\_ (North America/throughout the world).
3. According to Erikson, securely attached infants approach life with a sense of \_\_\_\_**BASIC**\_\_\_ \_\_\_\_**TRUST**\_\_\_\_\_.

**OBJECTIVE 14: Assess the impact of parental neglect, family disruption, and day care on attachment patterns and development.**

1. Harlow found that when monkeys reared in social isolation are placed with other monkeys, they reacted with either fear or \_\_\_**AGGRESSION**\_\_\_\_.
2. Most abused children \_\_\_\_\_ **DO NOT**\_\_\_\_\_\_\_\_ (do/do not) later become abusive parents.
3. Although most children who grow up under adversity are\_\_\_\_\_**RESILIENT**\_\_\_\_\_\_\_\_ and become normal adults, early abuse and excessive exposure to \_\_\_\_**STRESS**\_\_\_\_\_\_ \_\_\_\_**HORMONES**\_\_\_\_\_ may alter the development of the brain chemical \_\_\_**SEROTONIN**\_\_\_\_\_\_\_\_.
4. When placed in a more positive and stable environment, most infants \_\_\_\_\_**RECOVER**\_\_\_\_ (recover/do not recover) from disruptions in attachment.
5. Experts agree that child care per se \_\_\_\_**DOES NOT**\_\_\_\_\_\_\_\_ (does/does not) constitute a risk factor in children’s development. High-quality child care consists of warm, supportive interactions with adults in an environment that is \_\_\_\_\_\_**SAFE**\_\_\_\_\_\_\_\_\_, \_\_\_\_\_**HEALTHY**\_\_\_\_\_\_\_\_, and \_\_\_\_\_**STIMULATING**\_\_\_\_\_\_. More important than time spend in day care influencing a child’s development are \_\_**THE MOTHER’S SENSITIVITY, THE CHILD’S TEMPERAMENT, AND THE FAMILY’S ECONOMIC AND EDUCATIONAL LEVEL**\_\_\_\_\_.

**OBJECTIVE 15: Trace the onset and development of children’s self-concept.**

1. The primary social achievement of childhood is the development of a \_\_\_\_\_**SELF-CONCEPT**\_\_\_\_, which occurs in most children by age \_\_\_\_\_\_\_**12**\_\_\_\_\_\_\_\_\_\_.
2. A child’s self-image generally becomes stable between the ages of \_\_\_\_\_\_**8**\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_**10**\_\_\_\_\_\_\_\_\_, when children begin to describe themselves in terms of gender, group memberships, and psychological \_\_\_\_\_\_\_\_**TRAITS**\_\_\_\_\_\_.

Identify several characteristics of children who have formed a positive self-image.

**CHILDREN WHO HAVE FORMED A POSITIVE SELF-CONCEPT TEND TO BE MORE CONFIDENT, INDEPENDENT, OPTIMISTIC, ASSERTIVE AND SOCIABLE.**

**OBJECTIVE 16: Describe three parenting styles, and offer three potential explanations for the link between authoritative parenting and social competence.**

1. Parents who impose rules and expect obedience are exhibiting a(n) \_\_\_\_\_\_**AUTHORITARIAN**\_\_\_ style of parenting.
2. Parents who make few demands of their children and tend to submit to their children’s desires are identified as \_\_\_\_\_**PERMISSIVE**\_\_\_\_\_ parents.
3. Setting and enforcing standards after discussion with their children is the approach taken by \_\_\_\_**AUTHORITATIVE**\_\_\_\_ parents.
4. Studies have shown that there tends to be a correlation between high self-esteem on the part of the child and the \_\_\_\_\_\_**AUTHORITATIVE**\_\_\_\_\_\_ style of parenting. This may be because this parenting style gives children the greatest sense of \_\_\_\_\_\_**CONTROL**\_\_\_\_\_ over their lives.

Explain why the correlation between authoritative parenting and social competence does not necessarily reveal cause and effect.

**THERE ARE AT LEAST THREE POSSIBLE EXPLANATIONS FOR THE CORRELATION BETWEEN AUTHORITATIVE PARENTING AND SOCIAL COMPETENCE IN CHILDREN. (1) PARENTING MAY FOSTER CHILDREN’S COMPETENCE. (2) CHILDREN’S COMPETENCE MAY PROMOTE AUTHORITATIVE PARENTING. (3) A THIRD FACTOR, SUCH AS HEREDITY OR PARENTAL EDUCATION OR SOCIOECONOMIC STATUS, MAY FOSTER BOTH AUTHORITATIVE PARENTING AND CHILD COMPETENCE.**

**ADOLESCENCE**

**OBJECTIVE 17: Define *adolescence.***

1. Adolescence is defined as the transition period between \_\_\_**CHILDHOOD**\_\_\_ and \_\_\_\_\_**ADULTHOOD**\_\_\_.
2. The “storm and stress” view of adolescence is credited to \_**G. STANLEY HALL**\_\_\_\_, one of the first American psychologists to describe adolescence.

**OBJECTIVE 18: Identify the major physical changes during adolescence.**

1. Adolescence begins with the time of developing sexual maturity known as \_\_\_\_\_**PUBERTY**\_\_\_\_. A two-year period of rapid physical development begins in girls at about the age of \_\_\_\_\_\_\_**11**\_\_\_\_\_\_\_\_\_\_ and in boys at about the age of \_\_\_\_\_\_\_**13**\_\_\_\_\_\_\_\_\_\_\_\_. This growth spurt is marked by the development of the reproductive organs and external genitalia, or \_\_\_\_**PRIMARY**\_\_\_\_\_ \_\_\_\_\_**SEX**\_\_\_\_\_\_\_ characteristics, as well as by the development of traits such as pubic hair and enlarged breasts in females and facial hair in males. These nonreproductive traits are known as \_\_**SECONDARY**\_\_\_\_ \_\_\_\_\_**SEX**\_\_\_\_\_\_\_ characteristics.
2. The first menstrual period is called \_\_\_\_**MENARCHE**\_\_\_\_\_\_. In boys, the first ejaculation is called \_\_\_\_**SPERMARCHE**\_\_\_\_\_\_\_.
3. The \_\_\_\_\_**SEQUENCE**\_\_\_\_\_\_ (timing/sequence) of pubertal changes is more predictable than their \_\_\_\_\_**TIMING**\_\_\_\_\_\_\_\_ (timing/sequence).
4. Boys who mature \_\_\_\_\_\_\_**EARLY**\_\_\_\_\_\_\_ (early/late) tend to be more popular, self-assured, and independent; they are also at increased risk for \_\_\_**ALCOHOL USE AND PREMATURE SEXUAL ACTIVITY**\_\_\_\_\_. For girls, \_\_\_\_\_\_**EARLY**\_\_\_\_\_\_\_\_ (early/late) maturation can be stressful, especially when their bodies are out of sync with their \_\_\_\_**EMOTIONAL**\_\_\_\_\_ \_\_\_\_**MATURITY**\_\_\_. This reminds us that \_\_\_\_\_**HEREDITY**\_\_\_\_\_\_\_\_ and \_\_\_**ENVIRONMENT**\_\_\_\_ interact.
5. The adolescent brain undergoes a selective \_\_\_\_\_**PRUNING**\_\_\_\_\_\_ of unused connections. Also, teens’ occasional impulsiveness and risky behaviors may be due, in part, to the fact that development in the brain’s \_\_\_\_\_**FRONTAL**\_\_\_\_ \_\_\_\_\_**LOBE**\_\_\_\_\_ lags behind that of the \_\_\_**LIMBIC**\_\_\_\_\_\_\_ \_\_\_\_**SYSTEM**\_\_\_\_\_\_.

**OBJECTIVE 19: Describe the changes in reasoning abilities that Piaget called formal operations.**

1. Adolescents’ developing ability to reason gives them a new level of \_\_\_\_\_**SOCIAL**\_\_\_\_\_\_ awareness and \_\_\_\_**MORAL**\_\_\_\_\_\_\_\_ judgment.
2. During the early teen years, reasoning is often \_\_**SELF-FOCUSED**\_\_\_, as adolescents often feel their experiences are unique.
3. Piaget’s final stage of cognitive development is the stage of \_\_\_**FORMAL**\_\_\_\_ \_\_\_**OPERATIONS**\_\_. The adolescent in this stage is capable of thinking logically about \_\_\_\_**ABSTRACT**\_\_\_\_\_\_\_ as well as concrete propositions. This enables them to detect \_\_\_**INCONSISTENCIES**\_\_\_ in others’ reasoning and to spot hypocrisy.

**OBJECTIVE 20: Discuss moral development from the perspectives of moral thinking, moral feeling, and moral action.**

1. The theorist who proposed that moral thought progresses through stages is \_\_\_\_**KOHLBERG**\_\_\_\_. These stages are divided into three basic levels: \_\_**PRECONVENTIONAL**\_\_\_\_, \_\_\_**CONVENTIONAL**\_, and \_**POST-CONVENTIONAL**\_\_.
2. In the preconventional stages of morality, characteristic of children, the emphasis is on obeying rules in order to avoid \_\_\_**PUNISHMENT**\_\_\_\_ or gain \_\_\_\_**REWARDS**\_\_\_.
3. Conventional morality usually emerges by early \_\_\_**ADOLESCENCE**\_\_\_\_\_. The emphasis is on gaining social \_\_\_**APPROVAL**\_\_\_ or upholding the social \_\_\_\_**ORDER**\_\_\_\_\_\_\_.
4. Individuals who base moral judgments on their own perceptions of basic ethical principles are said by Kohlberg to employ \_\_\_**POSTCONVENTIONAL**\_\_ morality.

Summarize the criticisms of Kohlberg’s theory of moral development.

**CRITICS OF KOHLBERG’S THEOR ARGUE THAT THE PERCEPTION OF POSTCONVENTIONAL MORAL REASONIGN AS THE HIGHEST LEVEL OF MORAL DEVELOPMENT REFLECTS A WESTERN MIDDLE-CLASS BIAS. OTHERS HAVE ARGUED THAT FOR WOMEN, MORALITY IS LESS A MATTER OF ABSTRACT, IMPERSONAL JUSTICE AND MORE AN ETHIC OF CARING RELATIONSHIPS.**

1. The idea that moral feelings precede moral reasoning is expressed in the \_\_\_**SOCIAL**\_\_\_\_ \_\_\_**INTUITIONIST**\_\_ explanation of morality. Research studies using \_\_\_**MORAL**\_\_\_\_ \_\_**PARADOXES**\_\_\_ support the idea that moral judgment involves more than merely thinking; it is also gut-level feeling.
2. Morality involves doing the right thing, and what we do depends on \_\_\_\_\_**SOCIAL**\_\_\_\_\_\_\_ influences. Today’s \_\_**CHARACTER**\_\_\_ \_\_**EDUCATION**\_\_ \_\_**PROGRAMS**\_\_ focus on moral issues and doing the right thing.
3. Children who learn to delay \_\_\_**GRATIFICATION**\_\_\_ become more socially responsible, often engaging in responsible action through \_\_\_\_**SERVICE**\_\_\_\_ learning. They also become more \_\_\_\_**ACADEMICALLY**\_\_\_\_ successful and productive.
4. More ideas grow \_\_\_\_**STRONGER**\_\_\_\_\_ (stronger/weaker) when acted on.

**OBJECTIVE 21: Identify Erikson’s eight stages of psychosocial development and their accompanying issues.**

Complete the missing information in the following table of Erikson’s stages of psychosocial development.

**Group Age Psychosocial Stage**

Infancy **TRUST VS MISTRUST**

**TODDLERHOOD** Autonomy vs. shame/doubt

Preschooler **INITIATIVE VS GUILT**

**ELEMENTARY SCHOOL** Competence vs inferiority

Adolescence **IDENTITY VS ROLE CONFUSION**

Y**OUNG ADULTHOOD** Intimacy vs isolation

Middle adulthood **GENERATIVITY VS STAGNATION**

**LATE ADULTHOOD** Integrity vs despair

**OBJECTIVE 22:** **Explain how the search for identity affects us during adolescence, and discuss how forming an identity prepares us for intimacy.**

1. To refine their sense of identity, adolescents in Western cultures experiment with different \_\_\_\_\_\_**SELVES**\_\_ in different situations. The result may be role \_\_\_**CONFUSION**\_\_\_\_\_, which is resolved by forming a self-definition, or \_\_\_\_\_**IDENTITY**\_\_\_\_.
2. Cultures that place less value on \_**INDIVIDUALISM**\_\_ inform adolescents about who they are, rather than letting them decide on their own. Some adolescents may form a \_\_\_\_**NEGATIVE**\_\_\_\_\_\_ identity in opposition to parents and society.
3. During the early to mid-teen years, self-esteem generally \_\_\_\_\_**FALLS**\_\_\_\_\_\_\_\_(rises/falls/remains stable). During the late teens and twenties, self-esteem generally \_\_\_\_\_\_\_**RISES**\_\_\_\_\_\_ (rises/falls/remains stable) and identity becomes more \_\_\_**PERSONALIZED**\_\_\_.
4. Erikson saw the formation of identity as a prerequisite for the development of \_\_\_**INTIMACY**\_\_\_ in young adulthood.

**OBJECTIVE 23:** **Contrast parental and peer influences during adolescence.**

1. Adolescence is typically a time of increasing influence from one’s \_\_\_\_\_**PEERS**\_\_\_\_\_\_ and decreasing influence from \_\_\_\_**PARENTS**\_\_\_\_\_\_.
2. Most adolescents report that they \_\_\_\_\_\_\_**DO**\_\_\_\_\_\_\_\_ (do/do not) get along with their parents.
3. When rejected adolescents withdraw, they are vulnerable to \_\_\_**LONELINESS**\_\_\_\_\_, low \_\_\_\_**SELF-ESTEEM**\_\_\_\_\_\_ and \_\_\_\_**DEPRESSION**\_\_\_.

**OBJECTIVE 24: Discuss the characteristics of emerging adulthood.**

1. As a result of increased \_\_\_\_**BODY**\_\_\_\_ \_\_\_\_**FAT**\_\_\_\_\_\_ and weakened \_\_\_\_**PARENT**\_\_\_-\_\_\_\_**CHILD**\_\_\_ bonds, sexual maturity is beginning \_\_\_**EARLIER**\_\_\_ (earlier/later) than in the past.
2. Because the time from 18 to the mid-twenties is increasingly a not-yet-settled phase of life, some psychologists refer to this period as a time of \_\_**EMERGING**\_\_\_ \_\_**ADULTHOOD**\_\_.

**ADULTHOOD**

1. During adulthood, age \_\_\_\_\_**IS NOT**\_\_\_ (is/is not) a very good predictor of people’s traits.
2. The mid-twenties are the peak years for \_\_\_**MUSCULAR**\_\_\_\_ \_\_\_\_\_**STRENGTH**\_\_\_\_\_, \_\_\_**REACTION**\_\_\_\_\_\_\_ \_\_\_\_\_**TIME**\_\_\_\_\_\_, \_\_\_**SENSORY**\_\_\_\_\_\_ \_\_\_\_\_**KEENNESS**\_\_\_, and \_\_\_\_\_**CARDIAC**\_\_\_\_\_\_\_ \_\_\_**OUTPUT**\_\_\_\_\_\_. Because they mature earlier, \_\_\_**WOMEN**\_\_\_\_\_\_\_\_ (women/men) also peak earlier.

**OBJECTIVE 25: Identify the major physical changes that occur in middle adulthood.**

1. During early and middle adulthood, physical vigor has less to do with \_\_\_\_\_\_**AGE**\_\_\_\_\_\_\_ than with a person’s \_\_\_\_**HEALTH**\_\_\_\_\_\_\_ and \_\_\_\_\_\_**EXERCISE**\_\_\_\_\_ habits.
2. The cessation of the menstrual cycle, known as \_\_\_\_**MENOPAUSE**\_\_\_\_\_\_, occurs within a few years of \_\_\_\_\_\_\_**50**\_\_\_\_\_\_\_\_\_. This biological change results from lowered levels of the hormone \_\_\_\_**ESTROGEN**\_\_\_\_\_\_. A woman’s experience during this time depends largely on her \_\_\_\_**EXPECTATIONS**\_\_\_ and \_\_\_**ATTITUDE**\_\_\_\_\_\_.
3. Although men experience no equivalent to menopause, they do experience a more gradual decline in \_\_\_\_**SPERM**\_\_\_\_\_\_ count, level of the hormone \_\_**TESTOSTERONE**\_\_\_\_\_\_, and speed of erection and ejaculation during later life.
4. Worldwide, life expectancy at birth increased from 49 years in 1950 to \_\_\_\_\_\_\_\_**75**\_\_\_\_\_\_\_ years and beyond in 2004 in some developed countries. Women outlive men by nearly \_\_\_\_\_\_\_**4**\_\_\_\_\_\_\_\_\_ years worldwide and by \_\_\_\_\_\_\_**5 TO 6**\_\_\_\_\_\_ years in Canada, the United States, and Australia.
5. According to one evolutionary theory, our bodies age and wear out because once we’ve completed our \_\_\_\_**GENE**\_\_\_\_\_\_\_ - \_\_\_**REPRODUCING**\_\_ task by raising our young, there are no \_\_\_**NATURAL**\_\_\_\_ \_\_\_**SELECTION**\_\_\_\_ pressures against genes that cause degeneration in later life.
6. With age, the eye’s pupil \_\_\_\_\_**SHRINKS**\_\_\_\_\_\_\_ (shrinks/enlarges) and its lens becomes \_\_\_\_**LESS**\_\_\_\_\_\_\_\_ (more/less) transparent. As a result, the amount of light that reaches the retina is \_\_\_\_\_**REDUCED**\_\_\_\_\_\_\_ (increased/reduced).
7. Although older adults are \_\_\_\_**MORE**\_\_\_\_\_\_\_\_\_ (more/less) susceptible to life-threatening ailments, they suffer from short-term ailments such as flu \_\_\_\_\_**LESS**\_\_\_\_\_\_\_\_ (more/less) often than younger adults.
8. Aging \_\_\_\_\_**SLOWS**\_\_\_\_\_\_ (slows/speeds/has no effect on) neural processing and causes a gradual loss of \_\_**BRAIN**\_\_\_\_\_ \_\_\_\_**CELLS**\_\_\_\_\_.
9. Physical exercise stimulates \_\_\_\_\_**BRAIN**\_\_\_\_ \_\_\_**CELL**\_\_\_\_\_ development, thanks to increased \_\_\_\_**OXYGEN**\_\_\_\_\_\_\_ and nutrient flow.
10. The mental erosion that results from progressive damage to the brain is called \_\_\_\_**DEMENTIA**\_\_\_\_\_.
11. The irreversible disorder that causes progressive brain deterioration is \_\_\_\_**ALZHEIMER’S**\_\_\_\_\_ disease. This disease has been linked to a deterioration of neurons that produce the neurotransmitter \_\_\_**ACETYLCHOLINE**\_.

**OBJECTIVE 27: Assess the impact of aging on recall and recognition in adulthood.**

1. Studies of developmental changes in learning and memory show that during adulthood there is a decline in the ability to \_\_\_\_\_**RECALL**\_\_\_\_\_\_\_ (recall/recognize) new information but not in the ability to \_\_\_\_\_**RECOGNIZE**\_\_\_\_\_ (recall/recognize) such information. One factor that influences memory in the elderly is the \_\_\_**MEANINGFULNESS**\_\_\_ of material.
2. Adults’ \_\_\_**PROSPECTIVE**\_\_\_\_\_\_ memory remains strong when events help trigger recall.
3. Cognitive abilities among 70-year-olds are \_\_\_\_\_**MORE**\_\_\_\_\_\_\_\_ (less/more) varied than among 20-year-olds.

**OBJECTIVE 28: Summarize the contributions of cross-sectional and longitudinal studies to our understanding of the normal effects of aging on adult intelligence.**

1. A research study in which people of various ages are compared with one another is called a \_\_\_\_**CROSS**\_\_\_\_\_ - \_\_\_**SECTIONAL**\_\_\_\_ study. This kind of study found evidence of intellectual \_\_\_**DECLINE**\_\_\_\_\_\_ during adulthood.
2. A research study in which the same people are retested over a period of years is called a \_\_**LONGITUDINAL**\_\_\_\_ study. This kind of study found evidence of intellectual \_\_\_\_**STABILITY**\_\_\_\_\_ during adulthood.

Explain why studies of intellectual decline and aging yielded conflicting results.

**BECAUSE CROSS-SECTIONAL STUDIES COMPARE PEOPLE NOT ONLY OF DIFFERENT AGES BUT ALSO OF DIFFERENT ERAS, EDUCATION LEVELS, FAMILY SIZE, AND AFFLUENCE, IT IS NOT SUPRISING THAT SUCH STUDIES REVEAL COGNITIVE DECLINE WITH AGE. IN CONTRAST, LONGITUDINAL STUDIES TEST ONE GROUP OVER A SPAN OF YEARS. HOWEVER, BECAUSE THOSE WHO SURVIVE TO THE END OF LONGITUDINAL STUDIES MAY BE THE BRIGHTEST AND HEALTHIEST, THESE STUDIES MAY UNDERESTIMATE THE AVERAGE DECLINE IN INTELLIGENCE. RESEARCH IS ALSO COMPLICATED BY THE FACT THAT CERTAIN TESTS MEASURE ONLY ONE TYPE OF INTELLIGENCE. TESTS THAT MEASURE FLUID INTELLIGENCE REVEAL DECLINE WITH AGE; TESTS THAT MEASURE CRYSTALLIZED INTELLIGENCE REVEAL JUST THE OPPOSITE.**

1. The accumulation of stored information that comes with education and experience is called \_\_\_\_**CRYSTALIZED**\_\_\_\_\_ intelligence, which tends to \_\_\_\_**INCREASE**\_\_\_\_ with age.
2. The ability to reason abstractly is referred to as \_\_\_\_\_**FLUID**\_\_\_\_\_\_\_ intelligence, which tends to \_\_\_\_\_\_**DECREASE**\_\_\_\_\_ with age.

**OBJECTIVE 29: Explain why the path of adult development need not be tightly linked to one’s chronological age.**

1. Contrary to popular opinion, job and marital dissatisfaction do not surge during the forties, thus suggesting that a midlife \_\_**TRANSITION (CRISIS)**\_\_\_\_ need not occur.
2. The term used to refer to the culturally preferred timing for leaving home, getting a job, marrying, and so on is the \_\_\_\_**SOCIAL**\_\_\_\_\_\_ \_\_\_\_**CLOCK**\_\_\_\_.
3. Today, the timing of such life events is becoming \_\_\_\_**LESS**\_\_\_\_\_\_\_\_ (more/less) predictable. More important than age are \_\_\_**LIFE**\_\_\_\_\_\_ \_\_\_**EVENTS**\_\_\_\_ and chance encounters.

**OBJECTIVE 30: Discuss the importance of love, marriage, and children in adulthood, and comment on the contribution of one’s work to feelings of self-satisfaction.**

1. According to Erikson, the two basic tasks of adulthood are achieving \_\_**INTIMACY**\_\_\_\_\_\_\_ and \_\_\_**GENERATIVITY**\_\_\_\_. According to Freud, the healthy adult is one who can \_\_\_**LOVE**\_\_\_\_\_\_\_ and \_\_\_\_\_\_**WORK**\_\_\_\_\_.
2. Human societies have nearly always included a relatively \_\_\_**MONOGAMOUS**\_\_\_\_\_ bond. Marriage bonds are usually lasting when couples marry after age \_\_\_\_\_\_\_**20**\_\_\_\_\_\_\_\_ and are \_\_\_\_\_**WELL**\_\_\_\_\_\_\_ \_\_\_\_**EDUCATED**\_\_\_\_.
3. Marriages today are \_\_**TWICE**\_\_\_\_\_\_\_\_ (half/twice) as likely to end in divorce as they were in the 1960s. couples who live together before marrying have a \_\_\_**HIGHER**\_\_\_\_\_\_ (higher/lower) divorce rate than those who do not.
4. Of those who divorce, \_\_\_\_\_**75**\_\_\_\_\_\_\_ percent eventually remarry. Marriage is a predictor of \_\_\_**HAPPINESS**\_\_\_, \_\_\_\_**SEXUAL**\_\_\_\_\_ \_\_**SATISFACTION**\_\_\_\_, \_\_\_\_**HEALTH**\_\_\_\_\_\_\_, and \_\_\_\_**INCOME**\_\_\_\_\_. Lesbian couples report \_\_\_**GREATER**\_\_\_\_\_\_\_ (greater/less) well-being than those who are alone.
5. As children begin to absorb time and energy, satisfaction with the marriage itself \_\_\_**DECREASES**\_\_\_\_\_ (increases/decreases). This is particularly true among \_\_\_**EMPLOYED**\_\_\_\_\_ women, who shoulder most of the burden.
6. For most couples, the children’s leaving home produces a(n) \_\_\_**INCREASE**\_\_\_ (increase/decrease) in marital satisfaction.
7. Research studies of women who are or are not employed have found that a woman’s satisfaction in life depends on the \_\_\_\_**QUALITY**\_\_\_\_\_\_ of her experience in her life’s role.

**OBJECTIVE 31: Describe trends in people’s life satisfaction across the life span.**

1. From early adulthood to midlife, people typically experience a strengthening sense of \_\_\_\_**IDENTITY**\_\_\_\_\_\_, \_\_**CONFIDENCE**\_\_\_, and \_\_**SELF-ESTEEM**\_\_.
2. According to studies, older people \_\_\_\_\_\_\_**DO**\_\_\_\_\_\_\_ (do/do not) report as much happiness and satisfaction with life as younger people do. In addition, their feelings \_\_\_\_\_\_\_**DO**\_\_\_\_\_\_\_\_ (do/do not) mellow.
3. As we age, the brain area called the \_\_\_\_**AMYGDALA**\_\_\_\_\_ shows \_\_\_\_\_**DECREASED**\_\_\_ (increased/decreased) activity in response to negative events.

**OBJECTIVE 32: Describe the range of reactions to the death of a loved one.**

1. Grief over a loved one’s death is especially severe when it comes \_\_**SUDDENLY AND BEFORE ITS EXPECTED TIME ON THE SOCIAL CLOCK**\_\_\_\_.
2. Reactions to a loved one’s death \_\_\_\_\_\_**DO**\_\_\_\_\_\_\_ (do/do not) vary according to cultural norms. Those who express the strongest grief immediately \_\_\_\_\_\_**DO NOT**\_\_\_\_\_\_ (do/do not) purge their grief more quickly.
3. Terminally ill and bereaved people \_\_\_\_**DO NOT**\_\_\_\_\_ (do/do not) go through predictable stages.
4. According to Erikson, the final task of adulthood is to achieve a sense of \_\_\_**INTEGRITY**\_\_.

**REFLECTIONS ON TWO MAJOR DEVELOPMENTAL ISSUES**

**OBJECTIVE 33: Summarize current views on continuity versus stages and stability versus change in lifelong development.**

1. Stage theories that have been considered include the theory of cognitive development proposed by \_\_\_\_**PIAGET**\_\_\_\_, the theory of moral development proposed by \_\_\_\_**KOHLBERG**\_\_\_\_, and the theory of psychosocial development proposed by \_\_\_\_**ERIKSON**\_\_\_\_\_\_.
2. Although research casts doubt on the idea that life proceeds through age-linked \_\_\_**STAGES**\_\_\_\_\_\_\_\_, there are spurts of \_\_\_\_**BRAIN**\_\_\_\_\_\_ growth during childhood and puberty that correspond roughly to the stages proposed by \_\_\_\_**PIAGET**\_\_\_\_\_\_\_\_.
3. The first two years of life \_\_\_\_**DO NOT**\_\_\_\_\_\_ (do/do not) provide a good basis for predicting a person’s eventual traits.
4. Research on the consistency of personality shows that some traits, such as those related to \_\_\_**TEMPERAMENT**\_\_\_, are more stable than others, such as social attitudes.