Cognitive Development in the Preschool Years

During Piaget’s preoperational stage of cognitive development, \_\_\_\_\_\_\_\_\_\_\_ thought grows as mental reasoning emerges.

a. symbolic c. sensory-based

b. concrete d. conservative

If you put a cat mask on a dog, a preschooler will tell you that this dog is now a cat. This is an example of which one of the limitations of the preoperational stage of cognitive development?

a. egocentric thinking c. reversibility

b. centration d. the ability to conserve

The primitive reasoning that preschoolers use to explore and draw conclusions about their world is known as

a. egocentric thinking. c. intuitive thinking.

b. centration. d. the ability to conserve.

Mishka was able to construct a model car with the help of his dad. His dad helped him to organize the pieces of the model and then showed him how to connect the first two pieces. Soon Mishka was working more and more independently. This process is an example of Vygotsky’s concept of

a. apprenticeship c. private speech

b. the zone of proximal development d. scaffolding

Piaget’s cognitive theory stresses the \_\_\_\_\_\_\_\_\_\_\_ changes that occur in each stage, while the information processing approach views cognitive development as more \_\_\_\_\_\_\_\_\_\_\_.

a. quantitative; qualitative c. social; cultural

b. qualitative; quantitative d. cultural; social

Preschool children build their vocabularies at a rapid rate that requires that after the briefest encounter they can associate the word and its meaning. This process is known as

a. rapid words. c. fast linguistics.

b. fast mapping. d. quick vocabulary.

As Corey entered the large playroom at a school he repeated over and over, “There are lots of toys here,” as if he were reassuring himself as he encountered this new environment. Talking to himself, Corey is demonstrating \_\_\_\_\_\_\_\_\_\_\_.

a. private speech c. intuitive speech

b. social speech d. imaginary speech

Longitudinal research on economic standing and language development found a positive correlation between affluence and time interacting (talking) with children. This means that

a. the more affluence the less time parents talked with their children.

b. the more affluence the more time parents talked with their children.

c. affluence causes greater language development.

d. poverty causes inferior language development.

The key to assuring effective, positive childcare is to enroll the child in a \_\_\_\_\_\_\_\_\_\_\_ program.

a. private academic c. high quality

b. public diverse d. European model

Which of the following is *most likely* to have the greatest influence on preschool children in the United States?

a. using a computer c. playing a video game

b. listening to music d. watching television

Quick Quiz Answers

**Answer:** a **Page(s):** 220

**Rationale:** During the preoperational stage, children’s use of symbolic thinking grows as mental reasoning emerges. Symbolic function, a qualitative change in their thinking, is the foundation of further cognitive advances.

**Answer:** b **Page(s):** 221 **Rationale:** Centration, one of the limitations of the preoperational stage of cognitive development, is the process of concentrating on one limited aspect of a stimulus and ignoring other aspects.

**Answer:** c **Page(s):** 223

**Rationale:** Preoperational children use intuitive thought, a primitive reasoning, to explore and draw conclusions about the world.

**Answer:** d **Page(s):** 229

**Rationale:** Scaffolding is the support for learning and problem solving that encourages independence and growth. Mishka’s dad provides that type of support so that Mishka can eventually work independent of his direct assistance.

**Answer:** b **Page(s):** 230

**Rationale:** Piaget’s stage theory emphasizes the qualitative changes as cognitive development progresses, while the information processing approach views cognitive development as a quantitative process.

**Answer:** b **Page(s):** 231

**Rationale:** The enormous leap in the number of words that preschoolers use is accomplished through a process known as fast mapping in which the child acquires a word and its meaning after just a brief encounter.

**Answer:** a **Page(s):** 233

**Rationale:** Corey is demonstrating private speech, which is a spoken language not intended for others. Private speech helps children guide their behavior, try out new ideas, and even calm themselves in unfamiliar settings.

**Answer:** b **Page(s):** 233-234

**Rationale:** The longitudinal study that examined the relationship between affluence and language development found a positive correlation, which means that the more affluence, the more parents talked with their children. Neither c nor d can be correct because both answers infer cause and effect, something that the study did not demonstrate.

**Answer:** c **Page(s):** 237

**Rationale:** While there are numerous types and models of childcare and preschool opportunities, consistently the most effective programs are described as high quality. This description implies a number of characteristics that address staff training, ratio of staff and child, developmentally appropriate activities, rich language, sensitivity to the emotional needs of the children, and meeting health and safety requirements.

**Answer:** d **Page(s):** 239-242

**Rationale:** While it is reported that young children are actively involved in these types of activities, it is assumed that watching television would have the most influence (positive and negative) since young children are exposed to television for substantial periods of time.

Chapter 9

Cognitive Development in the Preschool Years

Multiple Choice Questions

1. During the preoperational stage, children’s use of \_\_\_\_\_\_\_\_\_\_\_ thinking grows, mental reasoning emerges, and the use of concepts increases.

a. concrete c. symbolic

b. formal d. sensory

**Answer:** c **Page(s):** 220 **Type:** Factual

**Rationale:** The preschool years fit into one single stage of cognitive development—the preoperational stage—during which children’s use of symbolic thinking grows, mental reasoning emerges, and the use of concepts increases.

* 1. The preoperational stage lasts from

a. birth to 2 years. c. 7 years to 11 years.

b. 2 years to 7 years. d. 11 years to adulthood.

**Answer:** b **Page(s):** 220 **Type:** Factual

**Rationale:** The preoperational stage lasts from the age of 2 years to around 7 years.

* 1. Three-year-old Sam gets a lot of satisfaction out of scolding Gill, his pretend friend and imaginary playmate. Sam is in Piaget’s \_\_\_\_\_\_\_\_\_\_\_ stage of cognitive development.

a. sensorimotor c. concrete operational

b. preoperational d. formal operational

**Answer:** b **Page(s):** 220

**Rationale:** During the preoperational stage, children’s use of symbolic thinking grows, mental reasoning emerges, and the use of concepts increases. These are all consistent with the description of Sam’s activity.

* 1. According to Piaget, a key aspect of preoperational thought is \_\_\_\_\_\_\_\_\_\_\_,the ability to use a mental symbol, a word, or an object to stand for or represent something that is not physically present.

a. operational function c. concrete function

b. symbolic function d. formal function

**Answer:** b **Page(s):** 220

**Rationale:** According to Piaget, symbolic function is the ability to use a mental symbol, a word, or an object to represent something that is not physically present.

* 1. \_\_\_\_\_\_\_\_\_\_\_ is at the heart of one of the major advances that occurs in the preoperational period: the increasingly sophisticated use of language.

a. Operational function c. Concrete function

b. Symbolic function d. Formal function

**Answer:** b  **Page(s):** 220

**Rationale:** Symbolic function is critical to the increasingly sophisticated use of language. The use of symbolic thought, such as the development of an imaginary friend, allows preschoolers to represent actions symbolically, which is evidence of language sophistication.

* 1. According to Piaget, the preoperational stage lasts from ages \_\_\_\_\_\_\_\_\_\_\_ during which children’s use of symbolic thinking grows, mental reasoning emerges, and the use of concepts increases.

a. 1 ½ to 3 ½ c. 5 to 9

b. 2 to 7 d. 6 to 10

**Answer:** b **Page(s):** 220

**Rationale:** The preoperational stage lasts from the age of 2 years to around 7 years.

* 1. Two-year-old May Lin loves to play with her doll. She gives her doll a bottle, burps her, and changes her diaper just like her mother does for her baby brother. May Lin is quite satisfied to mother her doll and leave the care of her brother to her mother. According to Piaget, May Lin’s ability to use a doll as a representation of a real baby illustrates that she is capable of

a. operation. c. symbolic function.

b. scheme. d. concept.

**Answer:** c **Page(s):** 220

**Rationale:** May Lin is demonstrating symbolic function, the ability to use an object (the doll) to represent something that is not physically present (her baby brother).

* 1. Two-year-old Luis does a great imitation of a train engineer. Luis plays for hours with his toy train set. Luis’s train sounds are so realistic that sometimes his parents think that there is a real train going by their house. According to Piaget, Luis’s ability to use a toy train set to represent a real train illustrates that he is capable of

a. operation. c. symbolic function.

b. scheme. d. concept.

**Answer:** c **Page(s):** 220

**Rationale:** Luis is using the toy train to represent a real train, evidence of symbolic function.

* 1. One the greatest developments of the preoperational stage is the child’s growing use of \_\_\_\_\_\_\_\_\_\_\_ to represent the past, present, and future.

a. language c. concepts

b. mental imagery d. schemes

**Answer:** a **Page(s):** 221

**Rationale:** Through language, children can imagine future possibilities.

* 1. According to Piaget, the relation between language and thought is that language

a. proceeds independently of cognitive development.

b. helps to advance cognitive development.

c. does nothing for cognitive development.

d. grows out of cognitive advances.

**Answer:** d **Page(s):** 221

**Rationale:** According to Piaget, language grows out of cognitive advances. He argues that improvements during the earlier sensorimotor period are necessary for language development and continuing growth in cognitive ability during the preoperational period. This provides the foundation for language ability.

Three-year-old Devin believes that when he puts on his Spiderman costume he becomes Spiderman. One day dressed as Spiderman, Devin leaped into the air from his dresser. This stunt landed him in the hospital with a concussion. According to Piaget, Devin is focusing on only one aspect of a problem and ignoring other key aspects of the problem, which results in

a. centration. c. symbolic function.

b. operation. d. mental imagery.

**Answer:** a **Page(s):** 221

**Rationale:** Centration is the process of concentrating on one limited aspect of a stimulus and ignoring other aspects. In this example, Devin is concentrating on the costume alone, believing this makes him Spiderman.

* 1. Three-year-old Dempsey insists that when his brother, Cortland, puts on his werewolf costume he actually becomes a werewolf. Dempsey is focusing on only one superficial aspect—the look of the costume. This illustrates

a. centration. c. symbolic function.

b. operation. d. mental imagery.

**Answer:** a **Page(s):** 221

**Rationale:** Centration is the process of concentrating on one limited aspect of a stimulus and ignoring other aspects. In this example, Dempsey is concentrating on the costume alone, believing that this costume makes Cortland a werewolf.

* 1. Ten-year-old Stephanie knows that she can easily trick her 4-year-old brother, Aaron, into accepting fewer pieces of candy. All she has to do is spread the pieces of candy out into two rows. The first row contains 10 pieces of candy spaced closely together and the second row contains 8 pieces of candy spaced far apart. Aaron always chooses the row that contains the 8 pieces of candy. Aaron reasons that it looks like it has more, so it must be so. He does this even though he knows that 10 is greater than 8. According to Piaget, Aaron’s problem stems from

a. centration. c. symbolic function.

b. operation. d. mental imagery.

**Answer:** a **Page(s):** 221

**Rationale:** Stephanie understands that her brother will rely on centration, the process of concentrating on one limited aspect of a stimulus and ignoring other aspects. In this example, Aaron concentrates only on the length of the candy row, not the actual number of pieces of candy.

* 1. The knowledge that quantity is unrelated to the arrangement and physical appearance of objects is known as

a. centration. c. symbolic function.

b. conservation. d. transformation.

**Answer:** b **Page(s):** 221

**Rationale:** Conservation is the knowledge that quantity is unrelated to the arrangement and physical appearance of objects.

* 1. Twelve-year-old Anjali loves to tease her little brother, Neel. Her favorite trick is to pour apple juice into a short wide-mouthed glass and then pour it into a tall narrow glass. Neel invariably believes that Anjali has magically made more juice. Neel’s problem stems from a lack of

a. schemes. c. symbolic function.

b. conservation. d. transformation.

**Answer:** b **Page(s):** 221-222

**Rationale:** Conservation is the knowledge that quantity is unrelated to the arrangement and physical appearance of objects.

* 1. Most 4-year-olds respond that there is more apple juice in the tall, thin glass than there was in the short, broad one. In fact, if the juice is poured back into the shorter glass, they are quick to say that there is now less juice than there was in the taller glass. This is an example of

a. adaptation. c. conservation.

b. accommodation. d. transformation.

**Answer:** c **Page(s):** 221-222

**Rationale:** Conservation is the knowledge that quantity is unrelated to the arrangement and physical appearance of objects.

* 1. The process in which one state is changed into another is called

a. schemes. c. transformation.

b. conservation. d. symbolic function.

**Answer:** c **Page(s):** 223 **Type:** Factual

**Rationale:** Transformation is the process in which one state is changed into another.

* 1. Ms. Alaniz is an art teacher. She often has children draw objects that change from one state to another. For instance, she will hold up a pencil and let it drop to the floor. The children are to draw what they saw. She finds that the kindergartners draw only two scenes, the pencil in an upright position and the pencil lying on the floor. This example illustrates that kindergartners lack

a. schemes. c. transformation.

b. conservation. d. symbolic function.

**Answer:** c **Page(s):** 223

**Rationale:** Transformation is the process in which one state is changed into another.

* 1. Thinking that does not take into account the viewpoints of others is known as

a. conservation. c. symbolic function.

b. transformation. d. egocentrism.

**Answer:** d **Page(s):** 223 **Type:** Factual

**Rationale:** Egocentric thought is thinking that does not take the viewpoints of others into account.

* 1. Four-year-old Sarah was excitedly telling her best friend Dori about her visit to the dentist. In the middle of the conversation, Dori piped out with, “You know what, I’m going to have face painting at my birthday party.” Dori’s comment is an example of

a. conservation. c. symbolic function.

b. transformation. d. egocentrism.

**Answer:** d **Page(s):** 223

**Rationale:** Egocentric thought is thinking that does not take the viewpoints of others into account. In this example Dori is not listening or attending to Sarah’s story; she interrupts with a totally self-centered observation.

* 1. Thinking that reflects preschooler’s use of primitive reasoning and their avid acquisition of knowledge about the world is called

a. intuitive thought. c. symbolic function.

b. egocentric thought. d. transformation.

**Answer:** a **Page(s):** 223 **Type:** Factual

**Rationale:** Intuitive thought is thinking that reflects preschoolers’ use of primitive reasoning and their avid acquisition of knowledge about the world.

* 1. By the end of the preoperational stage, preschoolers begin to understand the notion of \_\_\_\_\_\_\_\_\_\_\_*,* the idea that actions, events, and outcomes are related to one another in fixed patterns.

a. egocentric thought c. functionality

b. intuitive thought d. symbolic thought

**Answer:** c **Page(s):** 223-224

**Rationale:** Functionality is the idea that actions, events, and outcomes are related to one another in fixed patterns.

* 1. Six-year-old Roman is an expert bike rider. He loves to share his expertise with anyone who will listen to him. Roman’s favorite line is “If you wanna go really, really, really speedy fast, you hafta push real hard on the pedals.” Roman’s understanding that the pedals on the bicycle in some way control the speed of the bicycle illustrates

a. intuitive thought. c. identity.

b. functionality. d. conservation.

**Answer:** a **Page(s):** 223-224

**Rationale:** Intuitive thought is thinking that reflects preschoolers’ use of primitive reasoning and their avid acquisition of knowledge about the world.

* 1. Madeline, a preschooler, has just learned how to use the buttons on the remote control to change the channels on the television. Madeline loves to give demonstrations. She says, “First you pick up the remote and you make it look at the television and push a button…See, that’s how it works!” This is an example of

a. egocentric thought. c. identity.

b. functionality. d. conservation.

**Answer:** b **Page(s):** 224

**Rationale:** Intuitive thought is thinking that reflects preschoolers’ use of primitive reasoning and their avid acquisition of knowledge about the world. Although unable to explain the relationship, Madeline is happy to share her knowledge.

* 1. A child who figures out that turning a switch on will make the fan move is demonstrating

a. egocentric thought. c. identity.

b. functionality. d. conservation.

**Answer:** b **Page(s):** 224

**Rationale:** Intuitive thought is thinking that reflects preschoolers’ use of primitive reasoning and their avid acquisition of knowledge about the world.

* 1. \_\_\_\_\_\_\_\_\_\_\_,amemory of particular events from one’s own life, achieves little accuracy until after 3 years of age. Accuracy then increases gradually and slowly throughout the preschool years.

a. Autobiographical memory c. Conservation memory

b. Retrospective memory d. Assimilation memory

**Answer:** a **Page(s):** 225 **Type:** Factual

**Rationale:** Autobiographical memory is memory of particular events from one’s own life.

Three-year-old Arya handed his mother three bananas. She asked him if he would like to eat a banana. His response was, “Yes, I want to make it two.” Contrary to Piaget, Arya seems to have a clear understanding of

a. numbers. c. relationships.

b. objects. d. identity.

**Answer:** a **Page(s):** 225

**Rationale:** One of the criticisms of Piaget’s theory of cognitive development is that children acquire a better understanding of numbers earlier than anticipated.

* 1. Daniel understands the difference between rows of two and three toy animals, regardless of the animals’ spacing. This suggests that Daniel knows how to count. Further, contrary to Piaget, Daniel knows about

a. relationships. c. geocentricism.

b. conservation. d. symbolic thought.

**Answer:** b **Page(s):** 224

**Rationale:** Conservation is the knowledge that quantity is unrelated to the arrangement and physical appearance of others. In this example. Daniel has conservation and can understand the comparison of two numbers (two and three).

* 1. Children are more capable at an earlier age than Piaget’s account would lead us to believe. Piaget underestimated children’s cognitive abilities because he

a. used language that the children could readily understand.

b. designed tasks that children found fun and inviting.

c. tended to concentrate on children’s deficiencies instead of their competencies.

d. made careful observations of children’s behavior.

**Answer:** c **Page(s):** 224

**Rationale:** In particular, during the preoperational stage of cognitive development, Piaget talks about the things that children are not able to do. Over time we have discovered that children are able to do more and at an earlier age.

* 1. According to Vygotsky, the level at which a child can almost, but not fully, comprehend or perform a task on her or his own is known as the

a. zone of individual development. c. zone of partnership development.

b. zone of exact development. d. zone of proximal development.

**Answer:** d **Page(s):** 228-229 **Type:** Factual

**Rationale:** The zone of proximal development is the level, according to Vygotsky, at which a child can almost, but not fully, comprehend or perform a task without assistance.

* 1. According to Vygotsky, the support for learning and problem solving that encourages independence and growth is known as

a. assisted learning. c. assisted discovery.

b. the zone of independent development. d. scaffolding.

**Answer:** d **Page(s):** 229 **Type:** Factual

**Rationale:** Scaffolding is the support for learning and problem solving that encourages independence and growth.

Language blooms so rapidly between the late 2s and the mid-3s that researchers have yet to understand the exact pattern. What is clear is that sentence length increases at a steady pace, and the ways in which children at this age combine words and phrases to form sentences, known as \_\_\_\_\_\_\_\_\_\_\_, doubles each month.

a. syntax c. meaningfulness

b. phraseology d. conservation

**Answer:** a **Page(s):** 231

**Rationale:** Syntax is the combining of words and phrases to form meaningful sentences.

* 1. The combining of words and phrases to form sentences is known as

a. phrasing. c. grammar.

b. syntax. d. pragmatics.

**Answer:** b **Page(s):** 231

**Rationale:** Syntax is the combining of words and phrases to form meaningful sentences.

* 1. By age 6, the average child has a vocabulary of around \_\_\_\_\_\_\_\_\_\_\_ words.

a. 5,000 c. 12,000

b. 9,000 d. 14,000

**Answer:** d **Page(s):** 231 **Type:** Factual

**Rationale:** There are enormous leaps in vocabulary during the preschool years. By age 6, children have a vocabulary of around 14,000 words.

* 1. Preschoolers acquire vocabulary at a rate of nearly one new word every 2 hours, 24 hours a day. They manage this feat through a process known as \_\_\_\_\_\_\_\_\_\_\_, in which new words are associated with their meaning after only a brief encounter.

a. rapid speech c. speech mapping

b. fast mapping d. conservation

**Answer:** b **Page(s):** 231

**Rationale:** Fast mapping is the process in which new words are associated with their meaning after only a brief encounter.

* 1. The ways preschoolers combine words and phrases to form sentences, known as syntax, \_\_\_\_\_\_\_\_\_\_\_ each month.

a. remains stable c. doubles

b. shows a slight increase d. triples

**Answer:** c **Page(s):** 231 **Type:** Factual

**Rationale:** Sentence length increases at a steady pace, and the ways in which preschool children combine words and phrases to form sentences, known as syntax, double each month.

* 1. By the time a child is 3, the combinations of words and phrases is in the

a. hundreds. c. tens of thousands.

b. thousands. d. hundred thousands.

**Answer:** b **Page(s):** 231

**Rationale:** By the time a preschooler is 3 years old, the various combinations reach into the thousands.

By age 6 the average child has a vocabulary of around \_\_\_\_\_\_\_\_\_\_\_ words.

a. 1,000 c. 14,000

b. 4,000 d. 24,000

**Answer:** c **Page(s):** 231 **Type:** Factual

**Rationale:** Vocabulary increases significantly during the preschool years; by age 6, the average child has a vocabulary of around 14,000 words.

* 1. The process in which new words are associated with their meaning after only a brief encounter is known as

a. grammar. c. fast mapping.

b. syntax. d. pragmatics.

**Answer:** c **Page(s):** 231 **Type:** Factual

**Rationale:** Fast mapping is the process in which new words are associated with their meaning after only a brief encounter.

* 1. The system of rules that determine how our thoughts can be expressed is known as

a. grammar. c. fast mapping.

b. syntax. d. pragmatics.

**Answer:** a **Page(s):** 232 **Type:** Factual

**Rationale:** Grammar is the system of rules that determine how thoughts can be expressed.

* 1. Vygotsky suggested that \_\_\_\_\_\_\_\_\_\_\_ speech is used as a guide to behavior and thought.

a. public c. private

b. practice d. pretend

**Answer:** c **Page(s):** 233 **Type:** Factual

**Rationale:** Private speech, speech by children that is spoken and directed to themselves, performs an important function. Vygotsky suggested that private speech is used as a guide to behavior and thought.

* 1. “Be careful!” Kara whispered to herself as she crossed the small footbridge. Kara was engaged in \_\_\_\_\_\_\_\_\_\_\_ speech, speech spoken and directed to herself.

a. public c. private

b. practice d. pretend

**Answer:** c **Page(s):** 233

**Rationale:** Private speech, speech by children that is spoken and directed to themselves, performs an important function. Here Kara uses private speech to reflect on a difficulty she perceives in crossing the footbridge.

* 1. Four-year-old Regis is learning to tie his own shoes. To help keep him on task, he talks to himself. For instance, he says, “First you make a knot. Then you make a loop.” Regis’ use of self talk is called

a. private speech. c. egocentric speech.

b. social speech. d. self talk.

**Answer:** a **Page(s):** 233 **Type:** Applied

**Rationale:** Private speech is spoken language that is not intended for others and is commonly used by children during the preschool years.

* 1. Private speech may be a way for children to practice the practical skills required in conversation, also known as \_\_\_\_\_\_\_\_\_\_\_, which is the aspect of language relating to communicating effectively and appropriately with others.

a. practicing c. pretend

b. pragmatics d. practical

**Answer:** b **Page(s):** 233 **Type:** Factual

**Rationale:** Pragmatics is the aspect of language relating to communicating effectively and appropriately with others.

* 1. According to Vygotsky, private speech

a. is egocentric. c. serves no useful purpose.

b. guides behavior and thought. d. helps a child learn the rules of grammar.

**Answer:** b **Page(s):** 220

**Rationale:** Vygotsky viewed private speech as playing an important role in guiding behavior and thought.

* 1. Through the development of pragmatic abilities, children learn conversational strategies including

a. turn-taking. c. verb tense.

b. using adjectives. d. grammatical structure.

**Answer:** a **Page(s):** 233

**Rationale:** The development of pragmatic abilities permits children to understand the basics of conversations, including turn-taking, sticking to a topic, and what should and should not be said, according to the conventions of society.

* 1. \_\_\_\_\_\_\_\_\_\_\_ is speech directed toward another person and meant to be understood by that person.

a. Private speech c. Social speech

b. Practice speech d. Special speech

**Answer:** c **Page(s):** 233 **Type:** Factual

**Rationale:** Social speech is speech that is directed toward another person and is meant to be understood by that person.

Preschoolers are correct in their use of grammar \_\_\_\_\_\_\_\_\_\_\_ of the time.

a. 60% c. 80%

b. 70% d. 90%

**Answer:** d **Page(s):** 233

**Rationale:** While preschoolers may still make frequent mistakes of one sort or another, 3 year olds follow the principles of grammar most of the time and are correct in their grammatical constructions more than 90% of the time.

* 1. The aspect of language relating to communicating effectively and appropriately with others is

a. grammar. c. fast mapping.

b. syntax. d. pragmatics.

**Answer:** d **Page(s):** 233 **Type:** Factual

**Rationale:** Pragmatics is the aspect of language relating to communicating effectively and appropriately with others.

* 1. According to Hart and Risley,

a. the greater the affluence of the parents, the more they spoke to their children.

b. parents classified as professionals spent almost twice as much time interacting with their children as parents who received welfare assistance.

c. by the age of 4, children in families that received welfare assistance were likely to have been exposed to some 13 million fewer words than those in families classified as professionals.

d. all of these answers.

**Answer:** d **Page(s):** 233-234 **Type:** Factual

**Rationale:** Hart and Risley conducted a series of studies on the language used over a 2-year period by a group of parents of varying levels of affluence as they interacted with their children. Some of their major findings included: 1) the greater the affluence of the parents, the more speech between parent and child. 2) In a typical hour, parents classified as professionals spent almost twice as much time interacting with their children as parents who received welfare assistance. 3) By the age of 4, children in families that received welfare assistance were likely to have been exposed to some 13 million fewer words than those in families classified as professional.

* 1. In the United States, almost \_\_\_\_\_\_\_\_\_\_\_ of children are enrolled in some type of childcare arrangement outside of the home, which either explicitly or implicitly teaches skills that enhance intellectual and social abilities.

a. 25% c. 50%

b. 33% d. 75%

**Answer:** d **Page(s):** 235

**Rationale:** Almost three fourths (75%) of children in the United States are enrolled in some form of care outside the home, much of which is designed either explicitly or implicitly to teach skills that enhance intellectual as well as social abilities.

* 1. A school where children are provided with a carefully designed set of materials and activities to choose from, with the option of moving from one to another is called

a. day-care preschool. c. Montessori preschool

b. family-care preschool. d. practical preschool.

**Answer:** c  **Page(s):** 236 **Type:** Factual

**Rationale:** Montessori preschools use a carefully designed set of materials to create an environment that fosters sensory, motor, and language development through play. Children are provided with a variety of activities to choose from, with the option of moving from one to another.

* 1. Margarita takes her son Alejandro to a neighborhood home where he is cared for while she is working. This child-care arrangement is known as

a. day care. c. Montessori preschool.

b. family child care. d. Reggio Emilia preschool.

**Answer:** b  **Page(s):** 236

**Rationale:** Family childcare centers are small operations that operate in individual homes. The centers may be unlicensed and quality of care is uneven.

Asha takes her son Raj to a preschool center where the curriculum emphasizes the joint participation of children and teachers. She is impressed that the center builds the curriculum based on the interests of the children. This program is known as

a. day care. c. Montessori preschool.

b. family child care. d. Reggio Emilia preschool.

**Answer:** d  **Page(s):** 236

**Rationale:** Reggio Emilia, developed in Italy, has children participate in a negotiated curriculum, and emphasizes the joint participation of children and teachers. The curriculum builds on the interests of children, promoting their cognitive development through the integration of the arts and participation in weeklong projects.

* 1. Almost half of the states in the United States fund this type of childcare for pre-kindergarten programs, often aimed specifically at disadvantaged children.

a. day care c. school child care

b. family child care d. community group homes

**Answer:** c  **Page(s):** 236

**Rationale:** School child care is provided by some local school systems in the United States. Almost half the states in the United States fund pre-kindergarten programs, often aimed at disadvantaged children.

* 1. According to your text, the major characteristics of high quality day-care are

a. the care providers carefully watch and limit food intake to prevent obesity.

b. the child-care providers use infant-directed speech.

c. the language environment is rich, with a great deal of conversation.

d. strict and clear boundaries so that children learn to speak only when asked a question.

**Answer:** c **Page(s):** 237

**Rationale:** Major characteristics of high quality child care include the following characteristics: 1) well trained providers; 2) appropriate overall size and ratio of providers and children; 3) planned and coordinated curriculum; 4) rich language environment; 5) sensitivity to needs of children; 6) age appropriate; and 7) basic health and safety standards are enforced.

* 1. Research has shown that high quality child-care programs offer many benefits; when considering academic readiness, they are particularly beneficial for children that

a. are from middle income families.

b. would have stayed home with their mother.

c. are from low income families.

d. come from stable, affluent families.

**Answer:** c **Page(s):** 237

**Rationale:** While high quality childcare programs may benefit many children, when you consider cognitive development, they are particularly beneficial for children from lower income families.

* 1. Which of the following countries has no coordinated national policy on preschool education?

a. Sweden c. Belgium

b. United States d. Russia

**Answer:** b **Page(s):** 238

**Rationale:** In Belgium, access to preschool is a legal right. Sweden provides childcare for preschoolers whose parents want it and Russia has an extensive system of state-run yasli-sads, nursery schools, and kindergartens. Of these choices, only the United States does not have a coordinated national policy on preschool.

Cultural differences in attitudes toward preschool include which of the following?

a. Parents in China tend to see preschools primarily as a way of giving children a good start academically.

b. Japanese parents view preschools primarily as a way of giving children the opportunity to be independent.

c. American parents regard the primary purpose of preschools as babysitting service.

d. Parents in most cultures view preschool as imperative to help children learn to obey authority.

**Answer:** a **Page(s):** 238

**Rationale:** Preschools vary around the world for a number of reasons, including the cultural influence on the expectations for preschool programs. In China, parents tend to view the preschool experience as a way of giving children a good academic start, while Japanese parents tend to view preschool as an opportunity for children to practice group membership. In the United States, parents report that they look at the preschool experience as a way to encourage independence and self-reliance in children.

* 1. The Head Start program, begun in the 1960s, was designed to promote future academic success, and has a focus on which of the following?

a. children’s physical health c. getting children into elite private schools

b. ethics and values d. improving the parents’ standard of living

**Answer:** a **Page(s):** 238-239

**Rationale:** Head Start, which began in the 1960s to prepare children from low-income families for future academic success stresses children’s physical health, self-confidence, social responsibility, and social and emotional development.

* 1. Children that attend Head Start are benefited in which of the following ways?

a. Immediate intellectual gains.

b. Better access to college education.

c. They are less likely to be placed in gifted classrooms.

d. They are more likely to obtain professional jobs.

**Answer:** a **Page(s):** 238-239

**Rationale:** The success of Head Start has been measured in a number of ways. Children who attended Head Start have shown benefits including immediate IQ gains, better preparation for future schooling (as compared with those who did not attend), better future school adjustment than peers, and they are less likely to be in special education classes or retained in a grade.

David Elkind’s research on pushing children in the United States to progress suggests that it is in the child’s interest to present education based on typical development and the unique characteristics of a given child. This educational practice is known as

a. hurried child. c. developmentally appropriate.

b. normative based. d. best practice.

**Answer:** c **Page(s):** 239

**Rationale:** Developmentally appropriate educational practice is education that is based on both typical development and the unique characteristics of a given child.

* 1. \_\_\_\_\_\_\_\_\_\_\_ is/are one of the most potent and widespread stimuli to which children in the United States are exposed.

a. The Internet c. Music

b. Video games d. Television

**Answer:** d **Page(s):** 239-240

**Rationale:** Television is one of the most potent and widespread stimuli to which U.S. children are exposed. The average preschooler watches more than 21 hours of television per week.

* 1. The most popular educational program for children in the United States is probably \_\_\_\_\_\_\_\_\_\_\_.

a. *Barney and Friends* c. *Dora the Explorer*

b. *Sesame Street* d. *Blue’s Clues*

**Answer:** b **Page(s):** 241

**Rationale:** Almost half of all preschoolers in the United States watch *Sesame Street* and it is broadcast in almost 100 different countries and in 13 foreign languages. The characters of *Sesame Street* have become a part of the popular culture worldwide.

* 1. Critics of *Sesame Street* have suggested that the quick-paced format of the show may

a. encourage aggressive behaviors.

b. discourage prosocial behaviors.

c. make children less receptive to traditional education.

d. discourage children from learning a second language.

**Answer:** c **Page(s):** 241-242

**Rationale:** While some critics of *Sesame Street* suggest that the frenzied pace of the show may make children less receptive to traditional education, there is no evidence of any decline in enjoyment of traditional educational experiences. In fact, recent findings suggest positive outcomes for viewers.

True/False Questions

* 1. During the preoperational stage, children’s use of symbolic thinking grows.

Answer: True Page(s): 220 Type: Conceptual

* 1. According to Piaget, the term “operations” refers to motor development.

Answer: False Page(s): 220

* 1. A preschooler, who is able to understand the mental symbol of the word car, is capable of symbolic function.

Answer: True Page(s): 220

* 1. The preoperational period takes place between 2 and 7 years of age.

Chapter Section: Intellectual Development

Answer: True Page(s): 220 Type: Factual

* 1. According to Piaget, cognitive advances grow out of the increased capacity for language.

Chapter Section: Intellectual Development

Answer: False Page(s): 221

* 1. Centration is the process of focusing on multiple aspects of a stimulus.

Answer: False Page(s): 221

* 1. During the preoperational period, visual image dominates, when children attempt to problem solve.

Answer: True Page(s): 221

* 1. Conservation is defined as the knowledge that quantity is unrelated to the arrangement and physical appearance of objects.

Chapter Section: Intellectual Development

Answer: True Page(s): 221 Type: Factual

* 1. According to Piaget, most preschoolers have an incomplete understanding of transformation.

Answer: True Page(s): 222-223 Type: Factual

* 1. Erin is a 4-year-old girl whom often talks about herself in the presence of others. This illustrates the concept of egocentrism.

Answer: True Page(s): 223 Type: Applied

* 1. According to Piaget, egocentric thought is thinking that does not take in the viewpoints or accounts of others.

Answer: True Page(s): 223 Type: Factual

* 1. Preschool children displaying egocentric behavior are intentionally rude and selfish.

Answer: False Page(s): 223

* 1. 5-year-old Sam continuously is asking his mother “Why?” and also acts as if he is an expert on particular topics. Sam is displaying intuitive thought.

Answer: True Page(s): 223 Type: Applied

* 1. Scaffolding is the support for learning and problem solving that encourages independence and growth.

Answer: True Page(s): 229 Type: Factual

* 1. A child is sounding out a word. Her teacher assists the child by providing clues and framing the task at hand. This is an example of scaffolding.

Answer: True Page(s): 229 Type: Applied

Short Answer Questions

* 1. What are the highlights of Piaget’s preoperational period?

Page(s): 220-224

Answer: A good answer would include the following key points:

* The preoperational period encompasses the ages of 2–7 years.
* During this period, children’s use of symbolic thinking grows, mental reasoning emerges, and the use of concepts increases.
* There are some limitations to this period as well. Limitations include egocentric thought, inability to conserve, centration, and incomplete understanding of transformation.
* Intuitive thought also emerges. This refers to children’s use of primitive reasoning and their avid acquisition of knowledge about the world, as well as their curiosity.
	1. 4-year-old Nick is shown two drinking glasses of different shapes. One is short and wide, the other tall and thin. A teacher fills both glasses with the same amount of water, and asks Nick if the glasses have the same amount of water. Nick states the tall glass has more. Explain why Nick responds this way referring to Piaget’s theory of cognitive development.

Page(s): 221

Answer: A good answer would include the following key points:

* Nick is fooled by appearance due to the concept of centration. He focuses only on a limited aspect of the stimulus (the length of the glasses) and does not take into account the width.
* This leads to an error in judgment, and he is unable to understand the concept of conservation.
* Conservation is the knowledge that quantity is unrelated to the arrangement and physical appearance of objects.
* Nick also has difficulty following the sequence of transformations that accompany the appearance of a situation.
	1. Provide an overview of egocentric thought and how it manifests in children’s behavior and thought.

Page(s): 221-223 Type: Applied

Answer: A good answer would include the following key points:

* Egocentric thought is thinking that does not take the viewpoints of others into account. Preschoolers do not understand that others have different perspectives from their own.
* Egocentric thought takes two forms: the lack of awareness that others see things from a different physical perspective, and their failure to realize that others may hold different thoughts, feelings and points of view.
* As a result, children lack concern over their behavior and are unable to understand its impact on others.
* Egocentric children may talk to themselves and ignore others.
* They believe if they can’t see others, such as in a game of hide and seek, then others cannot see them.
	1. Identify three limitations of the child’s thinking during the preoperational period, according to Piaget.

Page(s): 221-223

Answer: A good answer would include the following key points:

* Egocentric thought: thinking that does not take into account the viewpoints of others.
* Lack of understanding of conservation problems. Conservation is the knowledge that quantity is unrelated to the arrangement and physical appearance of objects.
* Centration: children during this period focus only on a limited aspect of a stimulus, ignoring other aspects.
	1. Evaluate Piaget’s approach to cognitive development.

Chapter Section: Intellectual Development

Page(s): 224 Type: Applied

Answer: A good answer would include the following key points:

* Piaget’s theory provides a detailed portrait of preschooler’s cognitive abilities.
* The broad outlines of his theory provide a useful way of thinking about preschooler’s cognitive advances.
* However, he may have underestimated preschoolers’ capabilities in regard to the understanding of numbers and conservation.
* Additionally, he focused on children’s deficiencies in thinking, by focusing his observations on the lack of logical thought, during this period.
	1. Describe the terms, zone of proximal development and scaffolding, using Vygotsky’s theory of cognitive development.

Page(s): 228-229

Answer: A good answer would include the following key points:

* According to Vygotsky, the zone of proximal development is the level at which a child can almost, but not fully, comprehend or perform a task without assistance.
* The assistance or support is called scaffolding. Scaffolding is the support for learning and problem solving that encourages independence and growth.
	1. How would you evaluate Vygotsky’s contributions to the understanding of cognitive development?

Page(s): 230 Type: Applied

Answer: A good answer would include the following key points:

* Vygotsky’s view of the importance of cultural and societal influences in learning has become increasingly influential.
* His theory has been backed up with research on the importance of social interactions in promoting cognitive development.
* His theory is also consistent with cross-cultural research that finds evidence that cognitive development is shaped by cultural factors.
* His theory has been criticized for lack of precision in his conceptualization of cognitive growth.
* He was also largely silent on the processes of attention and memory.
	1. Contrast social speech to private speech.

Page(s): 233

Answer: A good answer would include the following key points:

* Private speech is spoken language that is not intended for others and is commonly used by children during the preschool years.
* Private speech can be used as a guide to behavior and thought.
* Private speech also allows for children to practice practical skills required for language.
* Social speech is speech directed toward another person and is meant to be understood by that person.
* Through the use of social speech, children begin to adapt their speech to others, through pragmatics.
	1. What is the effect of poverty on language development?

Page(s): 233-234

Answer: A good answer would include the following key points:

* The type of language a child is exposed to is associated with performance on intelligence tests. The greater the number and variety of words children heard, the better their performance on intelligence tests.
* By age 4, children living in poverty were likely to have been exposed to some 13 million fewer words than those children raised in families classified as professionals.
* By age 5, children living in poverty tend to have lower IQ scores and perform less well on other measurements of cognitive development than children raised in affluent homes.
* Poverty has negative effects on parents, thus limiting their psychological support to their children.
	1. Identify three types of early education options.

Page(s): 235-236 Type: Factual

Answer: A good answer would include the following key points:

* Child-care centers typically provide care for children all day while their parents work.
* Preschools are designed to provide intellectual and social experiences for children. They tend to be more limited in their schedules than child-care centers, typically providing care for 3-5 hours per day.
* School child care is provided by some local school systems in the United States.

Essay Questions

* 1. Describe the major contributions and limitations of the preoperational period.

**Page(s):** 220-224

**Answer:** A good answer would include the following key points:

* Period of both stability and change
* Symbolic thinking grows
* Symbolic function
* Substantial increase in language
* Mental reasoning emerges, emergence of intuitive thought
* Use of concepts increases
* Not yet capable of operations
* Centration
* Conservation
* Transformation
* Egocentrism
	1. Compare and contrast Piaget’s and Vygotsky’s view of cognitive development during the preschool years.

**Page(s):** 220-224, 228-230

**Answer:** A good answer would include the following key points:

* Piaget’s theory is a comprehensive stage approach model that claims universality
* Piaget viewed cognitive development as a result of child’s acting on the environment
* Piaget viewed children’s individual performance—the little scientists—working by themselves to develop an independent understanding of the world
* Piaget’s theory is based on observations that provide a detailed portrait
* More recent research suggests that Piaget systematically underestimated children’s abilities
* It has been suggested that Piaget’s focus on deficiencies has biased his findings
* Vygotsky viewed cognitive development as a result of social interactions
* Vygotsky viewed the social and cultural world as a source of cognitive development
* Social expectations and cultural values influence cognitive development
* Vygotsky viewed children as apprentices, in that they use others to gain an understanding of the world
	1. Describe how preschoolers understand numbers. How does this compare to Piaget’s assumptions about what preschoolers are able to understand?

**Page(s):** 225

**Answer:** A good answer would include the following key points:

* Piaget underestimated the abilities for children to understand numbers.
* Children count and do so fairly consistently.
* Preschoolers follow a number of principles.
	+ - Assign a single number to each item in a group.
		- Even when they misname numbers they understand that the last number they say is the “total”
		- Preschoolers are also able to carry out simple addition and subtraction by counting
		- Preschoolers can compare different quantities quite successfully
	1. If you were to give advice to a judge about maximizing the reliability of the eyewitness testimony of a preschooler, what would you suggest?

**Page(s):** 226-227

**Answer:** A good answer would include the following key points:

* Based on research from forensic developmental psychology, children’s memories are susceptible to suggestions of adults asking questions
* Preschoolers are more prone to make inaccurate inferences about the intentions of others
* Preschoolers are less able to draw appropriate conclusions based on their knowledge of a situation
* Error rates for memories are heightened when the same question is asked repeatedly
* Mistakes are more common in response to suggestible questions
* The amount of time between the event and the questioning should be minimized
* More specific questions are answered more accurately than more generalized questions
* Questioning a child in an environment that is less intimidating is preferable
	1. How does culture support cognitive development?

**Page(s):** 228

**Answer:** A good answer would include the following key points:

* Culture and society shape the nature of specific cognitive advances
* Cultural–Societal institutions (i.e., preschool programs) provide opportunities for cognitive development
* Cultural values and societal priorities will influence cognitive advances
* Appropriate toys indicate priorities and values
* Gender expectations are influenced by culture and society
	1. Define and provide examples of scaffolding and the zone of proximal development.

**Page(s):** 228-229

**Answer:** A good answer would include the following key points:

* Zone of proximal development is the level at which a child can almost, but not fully, comprehend or perform a task without assistance.
* Examples are many but should include a child attempting something that is at a level where the child can almost complete the task independently.
* ZPD is that level that requires some assistance from an expert.
* Scaffolding is support for learning and problem solving that encourages independence and growth.
* Examples are many but should include a child attempting to solve a problem with the guidance of an expert.
* The expert frames the problem with supportive clues that are appropriate to the child’s current level.
	1. How do children’s linguistic abilities develop in the preschool years, and what is the importance of early linguistic development?

**Page(s):** 231-233

**Answer:** A good answer would include the following key points:

* Advances in sentence length
* Increase in vocabulary
* Syntax
* Use of plurals and possessives
* Shift from private to social speech
	1. In what ways might children use private speech? What functions does it serve?

**Page(s):** 233

**Answer:** A good answer would include the following key points:

* Private speech, speech that is spoken and directed to the person speaking, serves multiple purposes for children including
* As a guide for behavior and thought, i.e., trying out new ideas, calming oneself
* Social functions, such as problem solving and reflecting on a situation
	1. Explain the significance of developmentally appropriate education?

**Page(s):** 239

**Answer:** A good answer would include the following key points:

* Developmentally appropriate educational practice is education based on both typical development and the unique characteristics of a given child.
* Research on cognitive development emphasizes the importance on stimuli that is at an appropriate level; too much or too little hinders cognitive development.
* Developmentally appropriate activities allow the child to be challenged without the frustration of unrealistic expectations.
	1. How do television and computers influence children’s cognition?

**Page(s):** 239-242

**Answer:** A good answer would include the following key points:

* Initially the amount of time spent in front of television and computers needs to be considered, monitored, and limited.
* Preschoolers have limits to their understanding of television
* Limits to their ability to separate fantasy and reality
* Unable to separate programming and commercial messages
* Unable to make inferences and understand the intentions of characters
* Inconsistent standards of programming for young children (not to mention children’s exposure to programming intended for much older children and/or adults!)

**Virtual Child Questions**

* 1. According to Piaget, your child is now in the preoperational stage of cognitive development. What have you noticed about the changes in your child’s thinking in comparison to the sensorimotor period? Is thought still grounded in motor activity? Or perhaps you have observed your child’s capacity for symbolic function. Has your child become better at representing events internally and grown less dependent on the use of direct sensorimotor behavior? Describe these changes.
	2. Now think about some of the limitations Piaget describes in this period. What limitations have you observed? Does your child now think logically or do you observe your child using intuitive or primitive reasoning? Specifically, think about Piaget’s constructs of centration, conservation, and egocentric thought. Identify some scenarios where you have observed these limitations in your child’s thinking.
	3. Read over Piaget’s concept of centration on pages 221 and 222 of your text. Have you observed areas in your child’s life where he/she has focused on only a limited aspect of a situation? Explain.
	4. According to your text, by age 6 the average child has a vocabulary of over 14,000 words. Think about your own child’s vocabulary and how his/her language has developed over the past few years. Has sentence length increased, as well as understanding of plurals and possessives? Describe. What role did fast mapping play in the acquisition of language? In addition, have you noticed a change in the amount of social speech versus private speech? Describe.