

Chapter 2

COGNITIVE AND LINGUISTIC DEVELOPMENT

CHAPTER OUTLINE	RELEVANT TEST BANK ITEMS
GENERAL PRINCIPLES OF HUMAN DEVELOPMENT The Multiple Layers of Environmental Influence: Bronfenbrenner's Theory	Multiple-Choice 1–5
ROLE OF THE BRAIN IN LEARNING AND DEVELOPMENT	Multiple-Choice 6–11 Essay 92
PIAGET'S THEORY OF COGNITIVE DEVELOPMENT Piaget's Basic Assumptions Piaget's Stages of Cognitive Development Critiquing Piaget's Theory Considering Diversity from the Perspective of Piaget's Theory Contemporary Extensions and Applications of Piaget's Theory	Multiple-Choice 12–49 Essay 93–95
VYGOTSKY'S THEORY OF COGNITIVE DEVELOPMENT Vygotsky's Basic Assumptions Critiquing Vygotsky's Theory Considering Diversity from the Perspective of Vygotsky's Theory Contemporary Extensions and Applications of Vygotsky's Theory	Multiple-Choice 50–73 Essay 96–97
LANGUAGE DEVELOPMENT Theoretical Issues Regarding Linguistic Development Trends in Linguistic Development Diversity in Language Development Second-Language Learning and English Language Learners	Multiple-Choice 74–89 Essay 98
THE BIG PICTURE	Multiple-Choice 90–91 Essay 99
The items in the “Multi-Chapter Questions” chapter of this Test Bank integrate the content of two or more textbook chapters. Within that chapter, the items listed to the right are relevant to Chapter 2.	Multiple-Choice 1–8 Essay 15–18, 34

Multiple-Choice Questions

- 1. Most developmental theorists agree that:
 - a. Development occurs at a smooth, constant rate throughout childhood and early adolescence; it begins to slow down in the high school years.
 - b. Developmental milestones appear in a consistent sequence for most children.
 - c. Physical development occurs in a predictable sequence, but cognitive development does not.
 - d. Cognitive development occurs in a predictable sequence, but physical development does not.
- 2. Which one of the following statements best illustrates a *universal* in development as developmentalists define the term?
 - a. Piaget proposed that formal operational thought is characterized by an ability to think abstractly about a wide variety of topics.
 - b. Contemporary theorists have derived the concept of *cognitive apprenticeship* from Vygotsky's theory of development.
 - c. Young children show similar patterns in their language development regardless of the specific language that they learn.
 - d. Piaget neglected to consider the influence of prior knowledge and experience on children's ability to think logically.
- 3. Which one of the following statements reflects what developmentalists mean by the term *maturity*?
 - a. Developmental changes that are controlled largely by heredity
 - b. Changes related specifically to children's physical development
 - c. Changes related specifically to children's emotional development
 - d. Changes that reflect increasingly appropriate social behavior
- 4. Which one of the following statements best reflects the idea that *multiple layers* of a child's environment affect the child's development in one way or another?
 - a. Typical teaching practices tend to be different at different grade levels; for instance, first-grade teachers tend to engage students in many hands-on practices, whereas high school teachers depend more heavily on short lectures and textbook readings.
 - b. Even if children inherit very "intelligent" genes, they cannot become bright, well-functioning individuals if they don't also have adequate nutrition to support their neurological development during the prenatal period, infancy, and early childhood.
 - c. Parents are certainly important in fostering children's cognitive and social development, but they can be more effective in their parenting if they have the advice and support of friends, neighbors, and community agencies.
 - d. Some parents are warm and nurturing, others are controlling and punitive, and still others are largely uninvolved in their children's upbringing; such differences appear to lead to differences in children's personalities.

- 5. A *sensitive period* in development can best be described as:
 - a. A stage of development in which children display unpredictable (and often inappropriate) emotional responses
 - b. A period during children's cognitive development in which they are highly distractible and so are frequently off-task in the classroom
 - c. An approach to teaching or parenting that takes a child's developmental level into account
 - d. An age range during which environmental conditions are most likely to have an effect on a particular aspect of a child's development
- 6. Which one of the following best describes how neurons transmit messages to one another?
 - a. By stimulating the flow of blood in nearby blood vessels
 - b. By attaching themselves to the same terminal buttons
 - c. By fusing the axon of one with a dendrite of another
 - d. By sending chemical substances across a tiny gap between them
- 7. Which one of the following best describes our current knowledge about the brain and learning?
 - a. We know that learning is often associated with the formation of new synapses.
 - b. We know that the brain reaches adult levels of maturity at puberty, enabling young adolescents to think and learn as effectively as adults do.
 - c. We know that "left-brained" individuals are, on average, more effective learners than "right-brained" individuals.
 - d. We know that the cortices of rapid learners are about 20% larger than the cortices of slow learners.
- 8. In the human brain, a great deal of *synaptic pruning* occurs in early childhood. This pruning appears to be:
 - a. The unfortunate result of home and school environments that provide only limited stimulation
 - b. An adaptive process that allows children to deal more efficiently with typical tasks in their environment
 - c. Due to an imbalance of important nutrients, and especially to low levels of the B vitamins in many children's diets
 - d. The result of the cortex's gradual takeover of responsibility for functions that have previously been controlled by other parts of the brain
- 9. As children grow older, many of their neurons begin to transmit messages more rapidly than they did in the early years of life, thanks to:
 - a. Increasing dominance of one brain hemisphere over the other
 - b. Synaptogenesis
 - c. Myelination
 - d. Greater variety of neurotransmitters

- 10. As Chalonte reads her science textbook, she encounters the word *ecology* for the first time and uses the context to figure out what the word means. Given what we know about how the brain functions, we could reasonably assume that:
 - a. She is thinking primarily in her right hemisphere.
 - b. Many parts of her brain are involved in this task.
 - c. Most of her mental “work” is being done by neurons that have little or no myelin.
 - d. Most of her mental “work” is being done in the occipital lobes, located at the back of her brain.
- 11. According to the textbook, which one of the following conclusions is most warranted from research on *brain development*?
 - a. Classroom experiences can affect students’ cognitive development throughout the elementary and secondary school years.
 - b. It is essential that children begin studying basic mathematics and science before the age of seven.
 - c. The ability to think abstractly depends on the development of many synaptic connections during the first five years of life.
 - d. Children probably won’t master the skills essential to success in the adult world unless they begin developing those skills in the early elementary grades.
- 12. Mr. Remick asks 9-year-old Anne to divide a pitcher of lemonade equally between two glasses, one each for her and her friend Kate. The two glasses are different shapes, with Anne’s being tall and thin and Kate’s being short and wide. After Anne pours the lemonade, Mr. Remick says to her, “Look, the lemonade in your glass is higher than the lemonade in Kate’s glass. Did you give yourself more than you gave Kate?” “No,” Anne replies, “my glass is skinnier.” Mr. Remick continues to ask Anne questions to determine how well she understands that height compensates for width in this situation. Mr. Remick’s strategy can best be described as illustrating:
 - a. Equilibration
 - b. Class inclusion
 - c. Formal operations
 - d. The clinical method
- 13. Which one of the following reflects *class inclusion* as Piaget described it?
 - a. Getting cows and horses confused
 - b. Identifying a shape as a square one day but as a triangle the next
 - c. Realizing that things that are cars can also be vehicles
 - d. Understanding that some behaviors that are perfectly acceptable at home are unacceptable at school
- 14. From Piaget’s perspective, children are:
 - a. Most likely to learn when parents and teachers entice them to do so
 - b. Most likely to learn things that bring about desirable consequences
 - c. More likely to develop cognitively in a formal school setting than at home
 - d. Eager to interact with and make sense of their world

- 15. Five-year-old Becky is playing with blocks, stacking them one on top of another until her towers eventually tumble, and then stacking them again. Which one of the following best reflects Piaget's view of how Becky is probably learning in this situation?
 - a. Because she is probably still in the sensorimotor stage, she will remember what she learns about the blocks only while the blocks are still in front of her.
 - b. She is absorbing information about how the environment behaves (e.g., "objects fall") without consciously thinking about it.
 - c. She is actively thinking about and interpreting the results of her actions.
 - d. Because she builds one tower after another, she is obviously reinforced by watching her towers tumble down.
- 16. Which one of the following statements best describes Piaget's view of how children acquire knowledge about the world?
 - a. Children are naturally disposed to think about their environment in particular ways; in a sense, some basic knowledge about the world is "pre-wired."
 - b. Children actively construct their own view of the world from their experiences with the environment.
 - c. Initially, children unconsciously develop a rather complex but confused view of the world; this view becomes simpler and more straightforward as time goes on.
 - d. Children repeatedly parrot their parents' and teachers' beliefs, eventually adopting these beliefs as their own knowledge.
- 17. In Piaget's theory, a *scheme* can best be described as:
 - a. A mental picture of oneself
 - b. A lifestyle or family pattern
 - c. An organized set of similar thoughts or actions
 - d. A set of motor skills that children acquire during the preschool years
- 18. Louis receives a new soccer ball and begins to dribble it in the same way he dribbles his basketball. His dribbling of the new ball reflects Piaget's concept of:
 - a. Assimilation
 - b. Equilibration
 - c. Accommodation
 - d. Concrete operations
- 19. Which one of the following is the best example of Piaget's concept of *assimilation*?
 - a. A kindergartner uses a white crayon instead of chalk to draw on the blackboard.
 - b. A third grader develops the necessary eye-hand coordination for writing letters.
 - c. A sixth grader moves to a different school and changes styles to fit the fashions.
 - d. An eighth grader is discouraged from using the word *awesome* to describe everything he sees.

- 20. Which one of the following best illustrates Piaget’s concept of *accommodation*?
 - a. After Amanda solves a set of 10 addition problems carelessly and incorrectly, she is given 10 more problems to solve.
 - b. Betsy writes down her definition of a *mollusk*—something she learned word-for-word from her textbook.
 - c. Carol copies what her teacher writes on the chalkboard.
 - d. Donna revises her understanding of what clouds are like when she studies them in science.
- 21. Piaget’s processes of assimilation and accommodation both involve:
 - a. Oral communication skills
 - b. Concrete operational thought
 - c. Relating new information to prior knowledge
 - d. Abstract thought processes such as inductive reasoning
- 22. Which one of the following teachers is *definitely* keeping in mind Piaget’s idea that assimilation and accommodation are both necessary for learning and cognitive development to occur?
 - a. Mr. Ames presents brand new topics every day, expecting the continual novelty to keep students interested and motivated.
 - b. Mr. Baretta shows students how a new topic is similar to the things they already know, but also different in certain ways.
 - c. Ms. Chang makes sure that students have learned one topic very, very well before moving on to another topic.
 - d. Ms. Doherty uses a lot of drill-and-practice exercises, encouraging students to work faster every time.
- 23. Which one of the following best describes Piaget’s notion of *equilibration*?
 - a. A child assimilates without accommodating.
 - b. A child accommodates without assimilating.
 - c. A child doesn’t encounter any new or challenging ideas.
 - d. A child revises existing schemes to incorporate new information.
- 24. According to Piaget, three of the following are essential for cognitive development. Which one is *not*?
 - a. High self-esteem
 - b. Brain maturation
 - c. Social interaction
 - d. Interaction with the physical environment

- 25. Piaget's view of cognitive development can best be described as:
 - a. A gradual and steady progression of intellectual capabilities
 - b. Changes in the brain that enable increasingly rapid learning
 - c. An increasing number of stimulus-response connections over time
 - d. Discrete stages in which distinctly different forms of logical thought emerge
- 26. Mr. Johnson teaches a class of twenty 8-year-old third graders. His goal for the upcoming school year is to help at least 50% of his students reach formal operations. From the perspective of Piaget's theory, we would expect that Mr. Johnson's goal is:
 - a. An easy one to attain
 - b. Almost impossible to attain
 - c. Attainable only if he emphasizes abstract reasoning throughout the school year
 - d. Attainable only if his students have had enriching educational experiences throughout their early lives
- 27. Piaget's sensorimotor stage is characterized by:
 - a. The beginnings of deductive logic
 - b. Inaccurate mental representations of the surrounding world
 - c. Schemes based primarily on perceptions and behaviors
 - d. Rudimentary schemes for dealing with abstract ideas
- 28. Piaget spoke of *egocentrism* in both the thought and speech of the preoperational child. Three of the following are examples of preoperational egocentrism as Piaget defined it. Which one is *not*?
 - a. Justin is constantly grabbing objects and pulling them toward himself.
 - b. Kate cannot understand or answer the question, "How do you think Molly feels?"
 - c. Isabel cannot understand why she must share classroom equipment with others.
 - d. Lois tells a story as if her listeners already know many details they can't possibly know.
- 29. Which one of the following children shows signs that he or she is in Piaget's *preoperational stage* of cognitive development?
 - a. Jenny learns hundreds of new words and phrases in only a few months.
 - b. Jason is able to understand how another boy feels when his bicycle is stolen.
 - c. Joslyn thinks that when a stuffed dog disappears under a box, it no longer exists.
 - d. Jimmy is able to reason logically about what it would be like to grow old, yet he cannot envision what it would be like to suddenly turn into a fish.

- 30. Roger is shown two piles of sand and says that each pile has the same amount. However, when one pile is flattened with a shovel, he now claims emphatically that the flattened pile has less sand. Based on this information, Roger is probably in Piaget's _____ stage of development.
 - a. concrete operations
 - b. sensorimotor
 - c. formal operations
 - d. preoperational
- 31. Marcy is given her choice of two identical chocolate bars, one of which has been broken into four pieces. Marcy chooses the broken candy bar, believing that it has more candy. From the perspective of Piaget's theory, Marcy is showing a lack of _____, indicating that she has not yet completed the transition to the _____ stage of development.
 - a. proportional reasoning; concrete operations
 - b. proportional reasoning; formal operations
 - c. conservation; concrete operations
 - d. conservation; formal operations
- 32. Imagine you are a third-grade teacher. Considering Piaget's theory of cognitive development, you should expect most or all of your students to exhibit _____ thinking.
 - a. preoperational
 - b. formal operational
 - c. sensorimotor
 - d. concrete operational
- 33. Which one of the following is associated with Piaget's *concrete operations* stage?
 - a. Reasoning about hypothetical ideas
 - b. Awareness that other people's thoughts might differ from one's own
 - c. Separation and control of variables
 - d. An inability to classify objects as belonging to more than one category
- 34. Which one of the following would Piaget be *least* likely to advocate for elementary school children?
 - a. Discussions with classmates
 - b. Field trips to hands-on science museums
 - c. Laboratory-type experiences with concrete objects
 - d. Lectures that describe simple abstract scientific concepts

- 35. The following four junior high school science teachers are teaching the concept *molecule* to their students. In each classroom, some of the students have acquired formal operational reasoning abilities, whereas others think in a concrete operational manner. In which classroom are the *concrete operational* students most likely to have difficulty understanding?
 - a. Mr. Armani lets students touch and manipulate concrete models of various molecules.
 - b. Mr. Bendetti lets students look at the same concrete models that Mr. Armani has used.
 - c. Mr. Carmen verbally describes how different elements are made up of different numbers of neutrons, protons, and electrons.
 - d. Mr. Davidson has students role-play being neutrons, protons, and electrons. The “neutron” and “proton” students huddle together in the middle of the room, and the “electrons” move around them.
- 36. One thing that children in Piaget’s formal operations stage can do, but children in the concrete operations stage *cannot* do, is:
 - a. Distinguish between their own feelings and those of others
 - b. Consider someone else’s perspective on an issue
 - c. Recognize that amount of liquid stays the same even when it’s poured into a differently shaped container
 - d. Reason logically about strictly hypothetical situations
- 37. Considering Piaget’s theory of cognitive development, we would expect a student in the concrete operational stage to have the *greatest difficulty* with which one of the following questions?
 - a. An apple pie is cut into 4 pieces. A blueberry pie of the same size is cut into 12 pieces. How many pieces of blueberry pie do you need to have the same amount as 3 pieces of the apple pie?
 - b. In what way are an apple and a blueberry alike?
 - c. If we have one row of blueberries arranged like so: o o o o o o and another row of blueberries arranged like so: o o o o o o then does one row have more blueberries than the other?
 - d. If you have 8 Macintosh apples and 2 Jonathan apples, then do you have more Macintoshes or more apples?
- 38. Carl can correctly answer a question such as, “If all flegs are blats, and if all blats are dulms, are all flegs also dulms?” From Piaget’s perspective, Carl must be in which one of the following stages of cognitive development?
 - a. Preoperational
 - b. Formal operational
 - c. Sensorimotor
 - d. Concrete operational

- 39. Olivia understands why $\frac{3}{5}$ and $\frac{9}{15}$ are equivalent fractions. Based on this information, from Piaget's perspective Olivia is probably in the _____ stage of development.
 - a. concrete operations
 - b. preoperational
 - c. sensorimotor
 - d. formal operations
- 40. From Piaget's perspective, why might it be wise to postpone the teaching of complex fractions until middle school or high school?
 - a. Younger students don't know their math facts well enough.
 - b. Younger students cannot learn complex equations.
 - c. Younger students haven't acquired conservation.
 - d. Younger students haven't acquired proportional reasoning.
- 41. Which one of the following statements reflects a concern about the *separation and control of variables*?
 - a. "How do you think I should make amends with Martha? If I tell her I'm sorry, she might think I'm lying."
 - b. "I'm catching more tadpoles today, but I don't know if it's because I'm using a larger container to catch them or because I'm working in a different part of the frog pond."
 - c. "I have two tests to study for tonight—science and Spanish. I'll study one subject before dinner and the other one after dinner so I don't get them confused."
 - d. "I'm trying to learn how to do a lay-up shot. Can you show me all the things I should do, going one step at a time?"
- 42. Piaget claimed that an adolescent's overly optimistic idealism about how one might easily improve the world is due to _____ during the formal operations stage.
 - a. egocentrism
 - b. incomplete brain maturation
 - c. an incompletely developed ability to think abstractly
 - d. an inability to separate and control variables
- 43. James says, "If everyone would just agree to get along with everyone else, then we wouldn't have any more wars." From Piaget's perspective, James is probably in the _____ stage of development.
 - a. concrete operations
 - b. sensorimotor
 - c. formal operations
 - d. preoperational

- 44. Choose the statement below that most accurately reflects research findings concerning Piaget's theory of cognitive development.
 - a. The order in which various logical thinking capabilities emerge is consistent with the sequence that Piaget proposed.
 - b. Preoperational egocentrism continues to be common even in the upper elementary grades.
 - c. Concrete operational thinking abilities, such as conservation and class inclusion, develop later than Piaget believed.
 - d. Formal operational thinking abilities, such as the ability to think and reason about abstract and hypothetical ideas, begin to emerge in the preschool years.
- 45. Which one of the following conclusions can be derived from research findings regarding Piaget's theory of cognitive development?
 - a. Middle school and secondary school students typically have an easier time thinking logically in the social sciences than they do in the physical and life sciences.
 - b. Students will think more logically about a topic when they have acquired relevant knowledge and experiences related to the topic.
 - c. Many students continue to show signs of preoperational thinking until well into the high school years.
 - d. Students have an easier time understanding fractions and proportions later on if such concepts are first introduced at the same time that division is introduced (e.g., in third grade).
- 46. Three of the following teaching practices are consistent with Piaget's theory of cognitive development. Which one is *not*?
 - a. When Sue leaves out important details as she tries to explain something, her teacher says, "I don't understand what you mean when you say. . . ."
 - b. A second-grade teacher encourages students to speculate about possible explanations as to why kites can fly and then to test each explanation systematically.
 - c. When a high school student claims that people should "Make love, not war," his teacher urges him to consider whether such an approach would have been advisable when the Nazi movement was gaining influence in Europe in the late 1930s and early 1940s.
 - d. When Martin says that two nickels are worth more than one dime because there are two of them and they're bigger, his teacher asks, "How can that be? Two nickels are worth ten cents; one dime is also worth ten cents."

- 47. Which one of the following statements best illustrates a *neo-Piagetian* approach to cognitive development?
 - a. Rather than involving general stages of increasingly advanced reasoning processes, children's cognitive development may involve discrete stages in particular content domains.
 - b. Children's progression through various stages of cognitive development is almost entirely the result of environmental experiences; brain maturation has little to do with their advancements in thinking.
 - c. Children's progression through various stages of cognitive development is almost entirely the result of brain maturation; environmental experiences have little to do with their advancements in thinking.
 - d. Children's acquisition of various cognitive abilities occurs in a gradual, trendlike manner rather than in discrete stages.
- 48. Which one of the following strategies is most likely to help students learn from a discovery learning activity?
 - a. Making sure students always remain in equilibrium
 - b. Providing some structure to guide students' explorations
 - c. Providing an abstract overview of the discovery session ahead of time
 - d. Encouraging students to interpret their observations in ways that confirm their initial expectations
- 49. Which one of the following best illustrates how *sociocognitive conflict* might promote cognitive development?
 - a. Two children work together on a crossword puzzle that includes the week's new spelling words.
 - b. A teenage boy worries that his friends might think he's a nerd if he refuses a can of beer at a party.
 - c. The students in a cooperative learning group debate different ways of solving a difficult math problem.
 - d. Two students help each other prepare for a quiz by giving each other practice test questions.
- 50. Central to Vygotsky's theory of cognitive development is the idea that children increasingly make better sense of their world:
 - a. Through the mental processes of assimilation and accommodation
 - b. By repeatedly encountering both pleasant and unpleasant events in their daily lives
 - c. Through their independent explorations of their physical and social environments
 - d. By interacting with more experienced people who mediate their understandings

- 51. Eight-year-old Julie lives in a rural area where many people are farmers or in some other way make their living through agriculture. After a lengthy summer drought, it begins to rain heavily one day in late July. “Thank goodness!” Julie hears her father exclaim. “Our prayers have finally been answered!” Julie makes a mental note of the cause-and-effect relationship her father has implied. This situation illustrates Vygotsky’s belief that:
 - a. Adults pass along to children the ways in which their culture interprets events.
 - b. Children’s level of potential development is always a bit higher than their actual developmental level.
 - c. Children acquire more knowledge and skills when scaffolding is kept to a minimum.
 - d. Thought and language are distinct processes in the early years of life.
- 52. Which one of the following is the best example of a *cognitive tool*?
 - a. Use of natural lighting in a studio art class
 - b. A jigsaw in a woodworking class
 - c. Use of country-western music in a step-aerobics class
 - d. The concept of π (π) in a geometry class
- 53. Sociocultural theory suggests that with development, children acquire many *cognitive tools* of their culture. Which teacher is most clearly applying this idea?
 - a. Mr. Shaw reminds his students that he will let them go to lunch only after they’ve put away their art supplies.
 - b. Ms. Turiel shows students how to graph their research results so that they can more easily see trends in the data.
 - c. Ms. Norquist smiles to show her approval when students listen quietly and politely during a guest speaker’s visit.
 - d. Mr. Cabot demonstrates how to use a paper cutter safely.
- 54. Vygotsky proposed that thought and language are:
 - a. Closely connected at all stages of life
 - b. Largely independent before age two but closely connected thereafter
 - c. Closely connected early in life but become increasingly independent with age
 - d. Largely independent until the elementary school years and closely connected thereafter

- 55. From Vygotsky's perspective, what important role does *inner speech* play in children's thinking and cognitive development?
 - a. By giving themselves directions about what to do next, children guide themselves through complex tasks.
 - b. By using words mentally as well as orally, children develop more abstract representations of the world.
 - c. By practicing various grammatical structures mentally, children acquire more complex language capabilities.
 - d. By talking to themselves about what they *should* have done or said in a particular situation, children remember the situation more vividly.
- 56. Kiley is having trouble learning the steps involved in using a microscope correctly. If we consider Vygotsky's description of how children help themselves through difficult tasks, we should suggest that Kiley:
 - a. Practice each step separately many times over
 - b. Go through the procedure a few times in slow motion
 - c. Talk herself through the steps
 - d. Learn the reasons why each step is important
- 57. Which one of the following statements best describes Vygotsky's concept of *internalization*?
 - a. As children grow older, they develop an increasing ability to think about events in abstract rather than concrete terms.
 - b. With age, children acquire more sophisticated problem-solving skills, largely because their parents and teachers give them increasingly challenging problems to solve.
 - c. Over time, children acquire greater self-confidence about their ability to deal with the world.
 - d. Through their social interactions with other people, children acquire ways of mentally approaching and thinking about a task.
- 58. Students in a fourth-grade reading group are reading a passage about snakes. Their teacher asks, "Who can think of a good title that summarizes what this passage is about?" After hearing several good suggestions, the teacher says, "The author says that snakes are helpful to farmers. What evidence does she give to support her statement?" If we consider Vygotsky's concept of *internalization*, we might predict that such a discussion will:
 - a. Be more beneficial for students who are working outside their zones of proximal development than for students working inside their ZPDs
 - b. Help students develop a greater interest in learning for its own sake
 - c. Help students develop effective reading comprehension strategies (e.g., summarizing, looking for supporting statements)
 - d. Be confusing and counterproductive for students who are not yet capable of abstract thought

- 59. Vygotsky's concept of *zone of proximal development* refers to:
 - a. The range of tasks children can accomplish only with support
 - b. Children's ability to estimate how much they know
 - c. The range of tasks children can perform by themselves
 - d. The degree of maturation necessary to accomplish complex physical tasks
- 60. Which one of the following students is definitely working in his or her *zone of proximal development*?
 - a. Arnold uses correct grammar and punctuation when he writes short stories.
 - b. Berta is beginning to learn basic woodworking techniques. She has trouble hammering a nail straight into a piece of wood unless her teacher stands beside her, helping her and reminding her of what to do.
 - c. Calvin is playing the clarinet in the band. He finds that he can more easily keep the tempo if he taps the beat with his foot.
 - d. Doreen finds it virtually impossible to solve mathematical word problems, even when her teacher gives her helpful hints.
- 61. Which one of the following statements most accurately describes Lev Vygotsky's view of how cognitive development occurs?
 - a. Children's cognitive growth should be judged on the basis of their actual developmental level, not on the basis of their level of potential development.
 - b. Cognitive development progresses through four distinct stages; each stage is characterized by increasingly complex thought and language.
 - c. Children develop, in part, by working on challenging tasks with the assistance of more competent individuals.
 - d. Language and thought, although closely intertwined in the first few years of life, become increasingly distinct entities over time.
- 62. In Vygotsky's view, opportunities to engage in pretend play (e.g., playing "house" or "doctor") have which one of the following effects?
 - a. They allow children to practice adult behaviors.
 - b. They can help children shed their preoperational egocentrism.
 - c. They are highly enjoyable but have little impact on cognitive development.
 - d. They foster traditional gender stereotypes.

- 63. Three of the following statements are consistent with Vygotsky’s views about the kinds of diversity we are likely to see in students. Which statement is *not* consistent with Vygotsky’s theory?
 - a. Children in any single age-group are apt to have different zones of proximal development.
 - b. Children from some cultures are more concerned about being punctual to appointments than children from certain other cultures are.
 - c. Some children frequently engage in self-talk, whereas other children don’t use it at all.
 - d. Children from different cultures might interpret certain environmental events (e.g., a tornado or hurricane) in distinctly different ways.
- 64. As a high school music teacher plays a recording of Ferde Grofé’s symphony *Grand Canyon Suite* for his class, he asks his students to visualize scenes that Grofé tried to capture with music: a sunrise over the Grand Canyon, a burro ride down a winding trail, a thunderstorm, and so on. From a Vygotskian perspective, this lesson could best be described as:
 - a. Guided participation
 - b. A mediated learning experience
 - c. A lesson at students’ actual developmental level
 - d. A lesson at students’ level of potential development
- 65. Which one of the following is the best example of a *mediated learning experience*?
 - a. Ms. O’Brien insists that students sit quietly at their desks before she dismisses them for lunch.
 - b. Mr. James reflects on the lesson he taught earlier in the day. “I suspect that most of my students still don’t understand the concepts I was trying to teach them,” he thinks.
 - c. Mr. Lucas asks his students to read Chapter 5 in their textbooks over the weekend. “You’ll find that the chapter is more challenging than previous ones,” he says.
 - d. As Ms. Robinson takes a group of children hiking, she gathers leaves from maple, oak, and elm trees and points out the ways in which the leaves from the trees are distinctly different.
- 66. From a Vygotskian perspective, *scaffolding* serves what purpose in instruction?
 - a. It gives students an idea of what they need to do to get good grades.
 - b. It keeps school tasks within students’ actual developmental levels.
 - c. It lets students learn by watching one another.
 - d. It supports students as they perform difficult tasks.

- 67. Three of the following teachers are using *scaffolding* to help their students learn. Which one is *not* necessarily providing scaffolding?
 - a. Ms. Applegate gives her students a structure to follow when they write their first essay.
 - b. Mr. Bernardo teaches students how to swing a softball bat effectively by gently guiding each student through the correct movement a few times.
 - c. Ms. Chen gives her class some hints about how to solve an especially difficult word problem.
 - d. Mr. Donaldson takes his students on a field trip to the local art museum.
- 68. Three of the following are definitely examples of *scaffolding*. Identify the situation in which *no* scaffolding is described.
 - a. Ms. Andrews likes to challenge her students by giving them group research projects. She puts her students in groups of three or four students each, and she gives each student a topic to research. She sends the groups to the school library to find out as much as they can about their topic, and then has each group give a report to the entire class.
 - b. Mr. Bender is teaching a unit on beginning tennis. In the early stages of teaching a correct tennis swing, he uses an automatic ball server that serves balls with consistent speed, height, and direction. He also continually reminds students to “Keep your eye on the ball” and “Hold your arm straight.” Later in the unit he begins to serve the balls himself, varying the speed, height, and direction of the serves. And he begins to taper off his reminders about what to do.
 - c. Ms. Carrera helps students solve math word problems by providing visual illustrations of the elements of the problem and by showing them “models” (i.e., similar problems that have been worked out correctly). As the weeks go by, she provides fewer and fewer visual illustrations and fewer and fewer model problems, until eventually the students can solve the problems without either form of assistance.
 - d. Mr. Donaldson’s students are just beginning to learn how to take notes in class. For the first few weeks Mr. D. begins class by handing out a detailed outline about the topic for the day. By December he is handing out an outline covering only the main points of the day, encouraging students to fill in the blank spaces on the sheet with ideas relative to each point. By May students are writing down main points and relevant details on their own.
- 69. Several parents who are making costumes for an elementary school play ask the young cast members to assist them with such tasks as cutting fabric, pinning pieces together, and sewing simple hems. Using the language of Vygotskian theorists, we can say that the parents are
 - a. Presenting tasks that exceed the students’ zone of proximal development
 - b. Encouraging the separation of thought and language
 - c. Engaging the students in guided participation
 - d. Creating a cognitive apprenticeship