1. The text defines cognition as:
   A) silent speech.
   B) all mental activity.
   C) mental activity associated with processing, understanding, and communicating information.
   D) logical reasoning.
   E) problem solving.

2. Dr. Mendoza is studying the mental strategies people use when solving problems. Dr. Mendoza is clearly a(n):
   A) cognitive psychologist.
   B) experimental psychologist.
   C) organizational psychologist.
   D) developmental psychologist.

3. A mental grouping of similar things, events, or people is called a(n):
   A) prototype.
   B) concept.
   C) algorithm.
   D) heuristic.
   E) mental set.

4. When forming a concept, people often develop a best example, or ________, of a category.
   A) denoter
   B) heuristic
   C) prototype
   D) algorithm

5. Complete the following analogy: Rose is to flower as:
   A) concept is to prototype.
   B) prototype is to concept.
   C) concept is to hierarchy.
   D) hierarchy is to concept.
6. The basic units of cognition are:
   A) phonemes.
   B) concepts.
   C) prototypes.
   D) morphemes.

7. If you want to be absolutely certain that you will find the solution to a problem you know is solvable, you should use:
   A) a heuristic.
   B) an algorithm.
   C) insight.
   D) trial and error.

8. A dessert recipe that gives you the ingredients, their amounts, and the steps to follow is an example of a(n):
   A) prototype.
   B) algorithm.
   C) heuristic.
   D) mental set.

9. Which of the following is an example of the use of heuristics?
   A) trying every possible letter ordering when unscrambling a word
   B) considering each possible move when playing chess
   C) using the formula “area = length \times width” to find the area of a rectangle
   D) playing chess using a defensive strategy that has often been successful for you

10. Experts in a field prefer heuristics to algorithms because heuristics:
    A) guarantee solutions to problems.
    B) prevent mental sets.
    C) often save time.
    D) prevent fixation.
    E) do all of the above.
11. Boris the chess master selects his next move by considering moves that would threaten his opponent's queen. His opponent, a chess-playing computer, selects its next move by considering all possible moves. Boris is using a(n) ________ and the computer is using a(n) ________.
A) algorithm; heuristic
B) prototype; mental set
C) mental set; prototype
D) heuristic; algorithm

12. During a televised political debate, the Republican and Democratic candidates each argued that the results of a recent public opinion poll supported their party's platform regarding sexual harassment. Because both candidates saw the information as supporting their belief, it is clear that both were victims of:
A) functional fixedness.
B) mental set.
C) belief bias.
D) confirmation bias.

13. Confirmation bias refers to the tendency to:
A) allow preexisting beliefs to distort logical reasoning.
B) cling to one's initial conceptions after the basis on which they were formed has been discredited.
C) search randomly through alternative solutions when problem solving.
D) look for information that is consistent with one's beliefs.

14. A common problem in everyday reasoning is our tendency to:
A) accept as logical those conclusions that agree with our own opinions.
B) accept as logical those conclusions that disagree with our own opinions.
C) underestimate the accuracy of our knowledge.
D) accept as logical conclusions that involve unfamiliar concepts.

15. Mental set and functional fixedness are two types of:
A) algorithms.
B) heuristics.
C) fixation.
D) insight.
16. Failing to see that an article of clothing can be inflated as a life preserver is an example of:
   A) belief bias.
   B) the availability heuristic.
   C) the representativeness heuristic.
   D) functional fixedness.

17. Failing to solve a problem that requires using an object in an unusual way illustrates the phenomenon of:
   A) mental set.
   B) functional fixedness.
   C) framing.
   D) belief perseverance.
   E) overconfidence.

18. Marilyn was asked to solve a series of five math problems. The first four problems could only be solved by a particular sequence of operations. The fifth problem could also be solved following this sequence; however, a much simpler solution was possible. Marilyn did not realize this simpler solution and solved the problem in the way she had solved the first four. Her problem-solving strategy was hampered by:
   A) functional fixedness.
   B) the overconfidence phenomenon.
   C) mental set.
   D) her lack of a prototype for the solution.

19. Rudy is 6 feet 6 inches tall, weighs 210 pounds, and is very muscular. If you think that Rudy is more likely to be a basketball player than a computer programmer, you are a victim of:
   A) belief bias.
   B) the availability heuristic.
   C) mental set.
   D) functional fixedness.
   E) the representativeness heuristic.

20. You hear that one of the Smith children is an outstanding Little League player and immediately conclude it's their one son rather than any of their four daughters. You reached your quite possibly erroneous conclusion as the result of:
   A) the confirmation bias.
   B) the availability heuristic.
   C) the representativeness heuristic.
   D) belief perseverance.
21. Representativeness and availability are examples of:
   A) mental sets.
   B) belief bias.
   C) algorithms.
   D) fixation.
   E) heuristics.

22. Airline reservations typically decline after a highly publicized airplane crash because people overestimate the incidence of such disasters. In such instances, people's decisions are being influenced by:
   A) belief bias.
   B) the availability heuristic.
   C) the representativeness heuristic.
   D) functional fixedness.

23. Your stand on an issue such as the use of nuclear power for electricity involves personal judgment. In such a case, one memorable occurrence can weigh more heavily than a bookful of data, thus illustrating:
   A) belief perseverance.
   B) confirmation bias.
   C) the representativeness heuristic.
   D) the availability heuristic.
   E) belief bias.

24. Assume that Congress is considering revising its approach to welfare and to this end is hearing a range of testimony. A member of Congress who uses the availability heuristic would be most likely to:
   A) want to experiment with numerous possible approaches to see which of these seems to work best.
   B) want to cling to approaches to welfare that seem to have had some success in the past.
   C) refuse to be budged from his or her beliefs despite persuasive testimony to the contrary.
   D) base his or her ideas on the most vivid, memorable testimony given, even though many of the statistics presented run counter to this testimony.

25. Most people tend to:
   A) accurately estimate the accuracy of their knowledge and judgments.
   B) underestimate the accuracy of their knowledge and judgments.
   C) overestimate the accuracy of their knowledge and judgments.
   D) lack confidence in their decision-making strategies.
26. In relation to ground beef, consumers respond more positively to an ad describing it as “75 percent lean” than to one referring to its “25 percent fat” content. This is an example of:
   A) the framing effect.
   B) confirmation bias.
   C) mental set.
   D) overconfidence.

27. Which of the following illustrates belief perseverance?
   A) Your belief remains intact even in the face of evidence to the contrary.
   B) You refuse to listen to arguments counter to your beliefs.
   C) You tend to become flustered and angered when your beliefs are refuted.
   D) You tend to search for information that supports your beliefs.
   E) Your beliefs tend to distort logical reasoning.

28. Which of the following describes artificial intelligence?
   A) the science of low-temperature phenomena
   B) the study of animal behavior in its natural habitat
   C) the study of control processes in electronic and biological systems
   D) the science that explores human thought by attempting to model it on the computer
   E) the best example of a category

29. Because of their lightning speed, computers can retrieve and manipulate stored data faster than people can, but the human brain beats the computer hands down when it comes to:
   A) using heuristics.
   B) following algorithms.
   C) serial processing.
   D) simultaneous processing.

30. Neural network computers:
   A) can be programmed to mimic excitatory and inhibitory neural messages.
   B) have a greater capacity than conventional computers to learn from experience.
   C) are not limited to serial processing.
   D) can do all of the above.
   E) can do none of the above.
31. Phonemes are the basic units of ________ in language.
   A) sound
   B) meaning
   C) grammar
   D) semantics
   E) syntax

32. The English language has approximately ________ phonemes.
   A) 25
   B) 30
   C) 40
   D) 45
   E) 50

33. The word “predates” contains ________ phonemes and ________ morphemes.
   A) 7; 3
   B) 3; 7
   C) 7; 2
   D) 3; 2

34. Complete the following: -ed is to sh as ________ is to ________.
   A) phoneme; morpheme
   B) morpheme; phoneme
   C) grammar; syntax
   D) syntax; grammar

35. The rules most directly involved in permitting a person to derive meaning from words and sentences are rules of:
   A) syntax.
   B) grammar.
   C) phonemic structure.
   D) semantics.

36. The sentence “Blue jeans wear false smiles” has correct ________ but incorrect ________.
   A) morphemes; phonemes
   B) phonemes; morphemes
   C) semantics; syntax
   D) syntax; semantics
37. Syntax refers to the:
A) sounds in a word.
B) rules for grouping words into sentences.
C) rules by which meaning is derived from sentences.
D) overall rules of a language.

38. A listener hearing a recording of Japanese, Spanish, and North American children babbling would:
A) not be able to tell them apart.
B) be able to tell them apart if they were older than 6 months.
C) be able to tell them apart if they were older than 8 to 10 months.
D) be able to tell them apart at any age.

39. Which of the following is not true of babbling?
A) It is imitation of adult speech.
B) It is the same in all cultures.
C) It typically occurs from about age 4 months to 1 year.
D) Babbling increasingly comes to resemble a particular language.
E) Deaf babies babble with gestures.

40. One reason an English-speaking adult may have difficulty pronouncing Russian words is that:
A) the vocal tracts of English- and Russian-speaking people develop differently in response to the demands of the two languages.
B) although English and Russian have very similar morphemes, their phonemic inventories are very different.
C) although English and Russian have very similar phonemes, their morphemic inventories are very different.
D) after the babbling stage, a child who hears only English stops uttering other phonemes.

41. The child who says “Milk gone” is engaging in ________. This type of utterance demonstrates that children are actively experimenting with the rules of ________.
A) babbling; syntax
B) telegraphic speech; syntax
C) babbling; semantics
D) telegraphic speech; semantics
42. Telegraphic speech is typical of the _______ stage.
   A) babbling
   B) one-word
   C) two-word
   D) three-word

43. Children first demonstrate a rudimentary understanding of syntax during the _______ stage.
   A) babbling
   B) one-word
   C) two-word
   D) three-word

44. Skinner and other behaviorists have argued that language development is the result of:
   A) imitation.
   B) reinforcement.
   C) association.
   D) all of the above.

45. Which of the following utterances is an example of overgeneralization of a grammatical rule?
   A) “We goed to the store.”
   B) “Ball pretty.”
   C) “The sky is crying.”
   D) “We eat ‘paghetti.”

46. Which of the following is not cited by Chomsky as evidence that language acquisition cannot be explained by learning alone?
   A) Children master the complicated rules of grammar with ease.
   B) Children create sentences they have never heard.
   C) Children make the kinds of mistakes that suggest they are attempting to apply rules of grammar.
   D) Children raised in isolation from language spontaneously begin speaking words.

47. Which of the following best describes Chomsky's view of language development?
   A) Language is an entirely learned ability.
   B) Language is an innate ability.
   C) Humans have a biological predisposition to acquire language.
   D) There are no cultural influences on the development of language.
48. The study in which people who immigrated to the United States at various ages were compared in terms of their ability to understand English grammar found that:
   A) age of arrival had no effect on mastery of grammar.
   B) those who immigrated as children understood grammar as well as native speakers.
   C) those who immigrated as adults understood grammar as well as native speakers.
   D) whether or not English was spoken in the home was the most important factor in mastering the rules of grammar.

49. Deaf children who are not exposed to sign language until they are teenagers:
   A) are unable to master the basic words of sign language.
   B) learn the basic words but not how to order them.
   C) are unable to master either the basic words or syntax of sign language.
   D) never become as fluent as those who learned to sign at a younger age.

50. According to the text, language acquisition is best described as:
   A) the result of conditioning and reinforcement.
   B) a biological process of maturation.
   C) an interaction between biology and experience.
   D) a mystery of which researchers have no real understanding.

51. In preparing her class presentation, “Updating Chomsky's Understanding of Language Development,” Britney's outline includes all of the following evidence except that:
   A) computer neural networks programmed to learn to form the past tense of irregular verbs can learn to do so, even without “inborn” linguistic rules.
   B) infants rapidly learn to detect subtle differences between simple sequences of syllables.
   C) infants can recognize color differences even before they can name different colors.
   D) children isolated from language during the first seven years of life never fully develop language.

52. Whorf's linguistic determination hypothesis states that:
   A) language is primarily a learned ability.
   B) language is partially an innate ability.
   C) the size of a person's vocabulary reflects his or her intelligence.
   D) our language shapes our thinking.
53. The linguistic determinism hypothesis is challenged by the finding that:
   A) chimps can learn to communicate spontaneously by using sign language.
   B) people with no word for a certain color can still perceive that color accurately.
   C) the Eskimo language contains a number of words for snow, whereas English has only one.
   D) infants' babbling contains many phonemes that do not occur in their own language and that they therefore cannot have heard.

54. Several studies have indicated that the generic pronoun “he”:
   A) tends for children and adults alike to trigger images of both males and females.
   B) tends for adults to trigger images of both males and females, but for children to trigger images of males.
   C) tends for both children and adults to trigger images of males but not females.
   D) for both children and adults triggers images of females about one-fourth of the time it is used.

55. Which of the following is true regarding the relationship between thinking and language?
   A) “Real” thinking requires the use of language.
   B) People sometimes think in images rather than in words.
   C) A thought that cannot be expressed in a particular language cannot occur to speakers of that language.
   D) All of the above are true.

56. Regarding the relationship between thinking and language, which of the following most accurately reflects the position taken in the text?
   A) Language determines everything about our thinking.
   B) Language determines the way we think.
   C) Thinking without language is not possible.
   D) Thinking affects our language, which then affects our thought.

57. The chimpanzee Sultan used a short stick to pull a longer stick that was out of reach into his cage. He then used the longer stick to reach a piece of fruit. Researchers hypothesized that Sultan's discovery of the solution to his problem was the result of:
   A) trial and error.
   B) heuristics.
   C) functional fixedness.
   D) mental set.
   E) insight.
58. Researchers who are convinced that animals can think point to evidence that:
   A) monkeys demonstrate the ability to “count” by learning to touch pictures of objects in ascending numerical order.
   B) chimpanzees regularly use branches, stones, and other objects as tools in their natural habitats.
   C) chimps invent grooming and courtship customs and pass them on to their peers.
   D) all of the above occur.

59. Researchers who believe that some primates possess a rudimentary theory of mind point to evidence that:
   A) chimpanzees have been observed using mirrors to inspect themselves.
   B) vervet monkeys have different alarm calls for different predators.
   C) orangutans in the wild frequently use stones as tools.
   D) honeybees communicate the direction and distance of a food source by performing an intricate dance.
   E) all of the above occur.

60. Biologist Karl von Frisch shared the Nobel prize for his discovery that honeybees communicate with each other by:
   A) varying the acoustic pitch of their buzzing noises.
   B) secreting chemical odors called pheromones.
   C) performing an intricate dance.
   D) leading other worker bees on lengthy flights to find nectar.

61. Researchers taught the chimpanzee Washoe and the gorilla Koko to communicate by using:
   A) various sounds.
   B) plastic symbols of various shapes and colors.
   C) sign language.
   D) all of the above.

62. Which of the following has been argued by critics of ape language research?
   A) Ape language is merely imitation of the trainer's behavior.
   B) There is little evidence that apes can equal even a 3-year-old's ability to order words with proper syntax.
   C) By seeing what they wish to see, trainers attribute greater linguistic ability to apes than actually exists.
   D) All of the above have been argued.
63. Many psychologists are skeptical of claims that chimpanzees can acquire language because the chimps have not shown the ability to:

A) use symbols meaningfully.
B) acquire speech.
C) acquire even a limited vocabulary.
D) use syntax in communicating.
Answer Key

1. C
2. A
3. B
4. C
5. B
6. B
7. B
8. B
9. D
10. C
11. D
12. D
13. D
14. A
15. C
16. D
17. B
18. C
19. E
20. C
21. E
22. B
23. D
24. D
25. C
26. A
27. A
28. D
29. D
30. D
31. A
32. C
33. A
34. B
35. D
36. D
37. B
38. A
39. A
40. D
41. B
42. C
43. C
44. D
45. A
46. D
47. C
48. B
49. D
50. C
51. C
52. D
53. B
54. C
55. B
56. D
57. E
58. D
59. A
60. C
61. C
62. D
63. D