1. Procedural learning does not require a. an animal that can learn.

b. awareness that learning has occurred. c. any training trials.

d. antecedent stimuli.

*ANSWER:* b

*REFERENCES:* Page 3

*KEYWORDS:* Fact

2. Sarah is interested in behavior accessible to conscious reflection. In terms of learning, she is probably most interested in

a. procedural learning. b. problematic learning. c. declarative learning. d. esoteric learning.

*ANSWER:* c

*REFERENCES:* Page 3

*KEYWORDS:* Concept

3. Which of the following most correctly states Descartes’ position on human and animal behavior?

a. Human behavior is governed by free will; animal behavior is governed by reflexes.

b. A few human and animal behaviors are governed by free will; most are governed by reflexes.

c. Voluntary human behaviors are governed by free will; involuntary human behaviors and all animal behaviors are governed by reflexes.

d. All human and animal behaviors can be explained by reflex mechanisms.

*ANSWER:* c

*REFERENCES:* Page 5

*KEYWORDS:* Concept

4. According to Descartes, what is the difference between human and animal behaviors?

a. Humans can perform voluntary behaviors; animals can perform only involuntary behaviors. b. Humans respond to environmental stimuli; animals only behave reflexively.

c. Human reflexes are voluntary; animal reflexes are involuntary.

d. Human behavior is explainable by natural laws; animal behavior is unpredictable.

*ANSWER:* a

*REFERENCES:* Page 5

*KEYWORDS:* Concept

5. The philosophical tenet that some of the content of the human mind is innate is called a. dualism.

b. nativism.

c. empiricism. d. reflexism.

*ANSWER:* b

*REFERENCES:* Page 5

*KEYWORDS:* Fact

6. Nativist and empiricist philosophies differ in beliefs of

a. the contents, but not the mechanisms, of the human mind.

b. the contents and mechanisms of the human mind only at birth. c. the contents and mechanisms of the human mind.

d. the mechanisms, but not the contents, of the human mind.

*ANSWER:* c

*REFERENCES:* Page 6

*KEYWORDS:* Concept

7. John Locke believed that

a. the human mind was unpredictable and governed by free will.

b. the ideas humans had were acquired directly or indirectly after birth. c. nativism best described human cognition.

d. rules of association did not explain human behavior.

*ANSWER:* b

*REFERENCES:* Page 6

*KEYWORDS:* Fact

8. According to Thomas Hobbes,

a. reflexes were predictable; the mind was not.

b. the mind was predictable; responses to environmental cues were not. c. neither the operations of the mind nor reflexes were predictable.

d. both reflexes and the operations of the mind were predictable.

*ANSWER:* d

*REFERENCES:* Page 6

*KEYWORDS:* Fact

9. The concept of hedonism as the control for voluntary behavior was proposed by which philosopher?

a. Aristotle b. Locke

c. Hobbes d. Brown

*ANSWER:* c

*REFERENCES:* Page 6

*KEYWORDS:* Fact

10. The British empiricists believed that complex ideas are a. sense experiences.

b. present at birth.

c. the product of simple sensations combined by association. d. simple reflex responses.

*ANSWER:* c

*REFERENCES:* Page 6

*KEYWORDS:* Fact

11. Which of the following is not a primary rule of association?

a. contingency b. contiguity

c. similarity d. contrast

*ANSWER:* a

*REFERENCES:* Page 6

*KEYWORDS:* Fact

12. Of the primary rules of association, which has been most prominent in considerations of associations?

a. similarity

b. contingency c. contrast

d. contiguity

*ANSWER:* d

*REFERENCES:* Page 6

*KEYWORDS:* Fact

13. All of the following are true of British empiricists except

a. they believed that ideas were based on associations of simple sensory events. b. they conducted experiments to test the rules of association.

c. they held that the mind was a blank slate at birth.

d. they thought that sense experiences were the basis of knowledge.

*ANSWER:* b

*REFERENCES:* Page 7

*KEYWORDS:* Fact

14. Hermann Ebbinghaus

a. was the first to empirically test the rules of association.

b. demonstrated that separate nerves carry sensory and motor information. c. set forth the secondary rules of association.

d. showed that irritation of a nerve was sufficient to produce a muscle contraction.

*ANSWER:* a

*REFERENCES:* Page 7

*KEYWORDS:* Fact

15. John Swammerdam’s contribution to the study of reflexes was to show that

a. muscle contractions were not produced by an infusion of gas.

b. mechanical irritation of a nerve produced a muscle contraction. c. nerves are hollow tubes.

d. separate nerves are involved in sensory and motor transmission.

*ANSWER:* b

*REFERENCES:* Page 8

*KEYWORDS:* Fact

16. The finding that gas infusions are not the cause of muscle contractions is best attributed to which of the following researchers?

a. René Descartes

b. Charles Bell

c. Francois Magendie d. Francis Glisson

*ANSWER:* d

*REFERENCES:* Page 8

*KEYWORDS:* Fact

17. Sechenov extended Descartes’ theory of reflexes by suggesting that

a. not all reflexes are innate.

b. mechanical stimulation of a nerve was sufficient to produce a motor response. c. reflexes are due to the fixed anatomy of the nervous system.

d. some reflexes could be due to a stimulus releasing a response from inhibition.

*ANSWER:* d

*REFERENCES:* Page 8

*KEYWORDS:* Fact

18. The research of Ivan Pavlov and Hermann Ebbinghaus is similar because both researchers a. were using empirical methods to investigate reflexes.

b. were using empirical methods to study laws of associations. c. extended Descartes’ concept of dualism.

d. were concerned with the study of the mind, not with physiological mechanisms.

*ANSWER:* b

*REFERENCES:* Page 7

Pages 8-9

*KEYWORDS:* Concept

19. Which of the following best characterizes Pavlov’s extension of Descartes’ theory of reflexes?

a. Pavlov demonstrated that new reflexes could develop through a mechanism of association. b. Pavlov demonstrated that reflexes are innate and based on neural anatomy.

c. Pavlov demonstrated that reflexes are due to a stimulus releasing a response from inhibition.

d. Pavlov demonstrated that complex ideas develop from associations between sensory experiences.

*ANSWER:* a

*REFERENCES:* Page 9

*KEYWORDS:* Concept

20. Charles Darwin

a. argued that nonhuman animals had the capacity for curiosity, attention, and aesthetic sensibility. b. provided compelling evidence for various forms of animal intelligence.

c. suggested that physical but not psychological traits are the product of evolution. d. All of these

*ANSWER:* a

*REFERENCES:* Page 10

*KEYWORDS:* Fact

21. Which of the following is not true of the work of Charles Darwin?

a. He argued for a continuity from animals to humans.

b. He attempted to characterize the evolution of psychological traits.

c. He provided compelling evidence for various forms of animal intelligence.

d. He suggested nonhuman animals had the capacity for curiosity, attention, and aesthetic sensibility.

*ANSWER:* c

*REFERENCES:* Page 10

*KEYWORDS:* Fact

22. George Romanes defined animal intelligence as

a. learning to make new adjustments or to modify old ones, in accordance with the results of an animal’s own

individual experience.

b. the ability to solve ever more difficult problems in the environment or laboratory. c. interacting in a meaningful way with members of the same species.

d. interacting in a meaningful way with members of other species.

*ANSWER:* a

*REFERENCES:* Page 11

*KEYWORDS:* Concept

23. What can behavioral studies of learning demonstrate?

a. how the elements of the nervous system change due to associative learning b. the conditions under which information is acquired

c. the features of the reflex arc necessary for learning to occur d. All of these

*ANSWER:* b

*REFERENCES:* Page 12

*KEYWORDS:* Concept

24. Which of the following is necessary when using animal models to study human behavior?

a. One must assume that the animal in question is like humans. b. The animal behavior must be as complex as human behavior.

c. One must identify a relevant similarity between the animal model and the human behavior of interest. d. The animal behavior must be similar to human behavior in most respects.

*ANSWER:* c

*REFERENCES:* Pages 12-13

*KEYWORDS:* Concept

25. Which of the following are rationales for the use of animal models of human behavior?

a. Animal models are cheaper than studies with humans.

b. Animal models permit the investigations to be carried out more simply. c. Animal models allow for circumstances that can be better controlled. d. All of these

*ANSWER:* d

*REFERENCES:* Page 13

*KEYWORDS:* Fact

26. Which of the following is true of the development of new drugs?

a. Usually drug development occurs without the use of animal models.

b. Animal models are only useful when developing drugs that do not affect cognition. c. Animal models cannot address human drug dependency.

d. Drug development is not possible without animal models.

*ANSWER:* d

*REFERENCES:* Page 13

*KEYWORDS:* Fact

27. Behavior changes due to learning

a. can be short lived but must be due to interaction with the environment. b. must be enduring and due to interaction with the environment.

c. must be enduring but must not depend on interaction with the environment. d. must be enduring and due to changes of stimulus conditions.

*ANSWER:* b

*REFERENCES:* Page 14

*KEYWORDS:* Concept

28. Why is learning defined in terms of the mechanisms of behavior rather than by a behavior change itself?

a. Behavior changes are short-lived; changes in the mechanisms are enduring. b. Behavior is due to many factors besides learning.

c. Behavior does not change due to interaction with environmental stimuli. d. Behavior cannot be quantified; mechanisms can be.

*ANSWER:* b

*REFERENCES:* Pages 14-15

*KEYWORDS:* Concept

29. Which of the following would correctly be identified as due to learning?

a. A weight lifter can raise less and less weight as her sets go on. b. After a growth spurt, a child can now climb on the couch.

c. In the spring, male birds are attracted to females, but not in the fall when the females are not receptive. d. None of these

*ANSWER:* d

*REFERENCES:* Page 15

*KEYWORDS:* Concept

30. Which of the following is not a level of analysis of learning?

a. Behavioral

b. Neural system

c. Cellular/Genetic

d. all are levels of analysis of learning

*ANSWER:* d

*REFERENCES:* Page 16

*KEYWORDS:* Fact

31. Bob has designed an experiment in which he trains a mother rat. He is interested in behavior changes in her not yet conceived pups. He is most likely focused on which level of analysis?

a. Behavioral

b. Cellular and genetic c. Neural system

d. A non-scientific level of analysis

*ANSWER:* b

*REFERENCES:* Page 16

*KEYWORDS:* Concept

32. Until depolarization, a neural membrane is relatively impermeable to a. Na + and K +

b. K + and Ca ++ c. Na + and Ca ++ d. Ca ++ only

*ANSWER:* c

*REFERENCES:* Pages 17-19

*KEYWORDS:* Fact

33. Administration of a drug that prevents the movement of Ca ++ ions across the neural membrane into the cell is likely to

a. increase neurotransmitter release.

b. decrease the strength of the action potential. c. decrease neurotransmitter release.

d. increase the strength of the action potential.

*ANSWER:* c

*REFERENCES:* Pages 17-19

*KEYWORDS:* Concept

34. The return of a neuron's interior to a relative negative voltage immediately following the peak of the action potential is due to primarily to movement of

a. Na +. b. Ca ++. c. K +.

d. Cl -.

*ANSWER:* c

*REFERENCES:* Pages 17-19

*KEYWORDS:* Fact

35. Why must learning be studied with experimental instead of observational techniques?

a. Causes can only be inferred, not observed directly. b. Causes are very similar across situations.

c. Observations only provide evidence of prior experiences.

d. Observational studies are only sufficient to document short-term behavior changes.

*ANSWER:* a

*REFERENCES:* Page 20

*KEYWORDS:* Concept

36. What comparison must be made to determine the cause of behavior change in learning experiments?

a. a comparison between data from observational and experimental studies

b. a comparison between behavior before and behavior after learning takes place

c. a comparison between behavior of subjects who have received a training experience and the behavior of others who have not

d. a comparison between human and animal behaviors under similar circumstances

*ANSWER:* c

*REFERENCES:* Page 20

*KEYWORDS:* Concept

37. The general-process approach to learning assumes that a. all animals respond to training in a similar manner.

b. learning phenomena are products of elemental processes that are consistent across situations. c. learning phenomena are products of elemental processes that change across situations.

d. differing species will learn about similar stimuli and responses similarly.

*ANSWER:* b

*REFERENCES:* Pages 21-22

*KEYWORDS:* Fact

38. Which of the following is not true of the general-process approach to learning?

a. Elemental processes are assumed to operate in a similar manner across learning situations. b. Evidence of learning in diverse species provides support for the general-process approach. c. The generality is assumed to exist in the contents and speed of learning.

d. The generality is assumed to exist in elemental laws of association.

*ANSWER:* c

*REFERENCES:* Page 22

*KEYWORDS:* Concept

39. What has contributed to the evidence for the generality of learning phenomena?

a. studies of many different phenomena in humans b. studies of many different phenomena in rats

c. studies of similar forms of learning across species d. studies of similar forms of learning in humans

*ANSWER:* c

*REFERENCES:* Page 23

*KEYWORDS:* Concept

40. Comparisons of the behavior of laboratory-raised rats and the behavior of non-domesticated strains suggest that a. conclusions reached in laboratory experiments must be tempered by the greatly different behavior between

the two strains.

b. the animals behave similarly.

c. laboratory-raised animals behave similarly to the non-domesticated strains only in controlled environments.

d. laboratory-raised animals are not able to survive in non-controlled environments, which limits conclusions from laboratory research.

*ANSWER:* b

*REFERENCES:* Page 24

*KEYWORDS:* Concept

41. Russell and Burch describe "3 Rs" for the use of animals in research. Which of the following is not one of the "Rs." a. replacement

b. refining

c. referencing d. reducing

*ANSWER:* b

*REFERENCES:* Page 25

*KEYWORDS:* Concept

42. The generation of new, previously unknown facts about behavior must come from a. computer modeling.

b. studying live organisms. c. studying live humans.

d. studying live non-humans.

*ANSWER:* b

*REFERENCES:* Page 26

*KEYWORDS:* Concept

43. Describe the contributions to the study of learning made by three of the following individuals: René Descartes, John Locke, Thomas Hobbes, Thomas Brown, Aristotle, Hermann Ebbinghaus, I. M. Sechenov, Ivan Pavlov, Charles Darwin.

*ANSWER:* Answer not provided

44. Briefly describe the two intellectual traditions that were stimulated by Cartesian dualism. How is each tradition represented in contemporary investigations of learning phenomena?

*ANSWER:* Answer not provided

45. Compare the nativist and empiricist positions. How has each contributed to the theoretical underpinnings of the study of learning?

*ANSWER:* Answer not provided

46. Explain how the research of I. M. Sechenov and Ivan Pavlov extended Descartes’ early conceptualization of the

role reflexes have in human behavior.

*ANSWER:* Answer not provided

47. What three primary sources provided the impetus for research of animal learning? Briefly describe how each line of interest influences contemporary research in learning processes.

*ANSWER:* Answer not provided

48. Compare the research of Ivan Pavlov and Hermann Ebbinghaus. What do the two lines of investigation have in common?

*ANSWER:* Answer not provided

49. Why would one use an animal model of human behavior? What contributes to the validity of such studies? What precautions must be heeded while interpreting the data?

*ANSWER:* Answer not provided

50. Describe how the definition of learning dictates what type of science the study of learning must be.

*ANSWER:* Answer not provided

51. Describe the movements of ions across the neural membrane that allows for a neuron to send a signal down its length.

*ANSWER:* Answer not provided

52. Describe what happens when an action potential arrives at a synapse.

*ANSWER:* Answer not provided

53. Why is the learning-performance distinction important to researchers of learning phenomena? Provide three types of behavioral change that are not considered to be learning. Describe how each fails to meet the definition of learning.

*ANSWER:* Answer not provided

54. How might learning be studied at each of the major levels of analysis: behavioral, neural system, and molecular/cellular?

*ANSWER:* Answer not provided

55. What is the general-process approach? What evidence supports adopting such an approach in the study of learning phenomena? Why should caution be used in interpreting this evidence?

*ANSWER:* Answer not provided

56. Describe how historical developments in the study of the mind contributed to the contemporary study of learning.

*ANSWER:* Answer not provided

57. Describe Descartes’ conception of the reflex and how the concept of the reflex has changed since his time.

*ANSWER:* Answer not provided

58. Describe the rationale for using animal models to study human behavior.

*ANSWER:* Answer not provided

59. Describe the definition of learning and how learning is distinguished from other forms of behavior change.

*ANSWER:* Answer not provided

60. Describe the different levels of analysis that can be employed in studies of learning and how they are related.

*ANSWER:* Answer not provided

61. Describe why learning can only be studied by using experimental methods.

*ANSWER:* Answer not provided

62. Describe several alternatives to the use of animals in research and describe their advantages and disadvantages.

*ANSWER:* Answer not provided