

Chapter 1--Introduction: Learning to Change

Student: _____

1. The author of your text evidently believes that _____.
 - A. change is a good thing
 - B. behavior is best accounted for by nature
 - C. adaptation occurs slowly
 - D. learning is a way of adapting to change
2. Variation and natural selection are the foundations of _____.
 - A. genetics
 - B. evolution
 - C. learning
 - D. adaptation
3. Darwin's theory of evolution has been around for about _____.
 - A. 50 years
 - B. 75 years
 - C. 150 years
 - D. 200 years
4. Chapter 1 includes a box called *The Face of Change*. One point the essay makes is that _____.
 - A. many changes in our lives are imperceptible
 - B. change means progress
 - C. faces are recognizable even though they change
 - D. learning means changing
5. *The role of natural selection in the beaks of finches* was the subject of research by _____.
 - A. Peter and Rosemary Grant
 - B. Harry and Margaret Harlow
 - C. Lee Cronk
 - D. Richard Dawkins
6. The gollypod, a fictitious aquatic animal, breaks out in a cold sweat whenever exposed to the sun. This reaction is most likely _____.
 - A. a reflex
 - B. a fixed action pattern
 - C. a general behavior trait
 - D. the result of learning

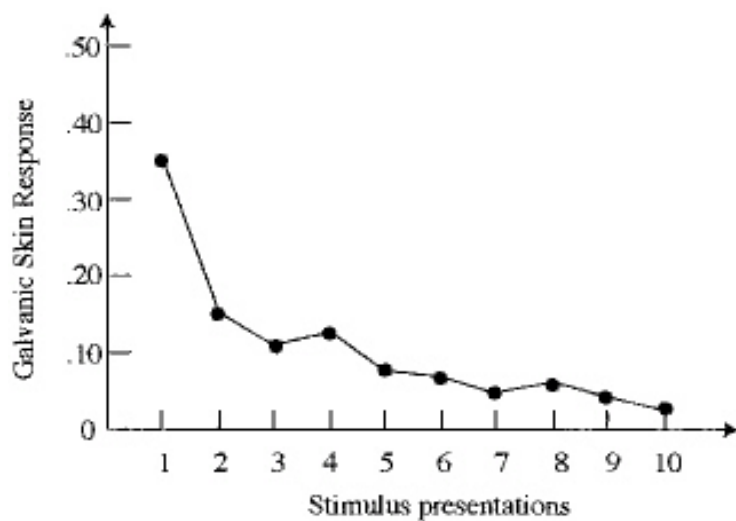
7. Teenagerus Americanus, a two-legged ape indigenous to North America, breaks out in a cold sweat whenever exposed to elevator music. This reaction is most likely ____.
- A. a reflex
 - B. a fixed action pattern
 - C. a general behavior trait
 - D. learned behavior
8. The tendency of some animals to hoard food is probably an example of ____.
- A. a reflex
 - B. a fixed action pattern
 - C. a general behavior trait
 - D. learned behavior
9. The quotation, "Change is the only constant," is attributed to ____.
- A. Buckminster Fuller
 - B. Virgil
 - C. Lucretius
 - D. Einstein
10. Modal action patterns are induced by events called ____.
- A. genes
 - B. stimuli
 - C. releasers
 - D. reflexes
11. The chief advantage of learning over natural selection as a means of adapting to change is that learning ____.
- A. is faster
 - B. is more enduring
 - C. is less enduring
 - D. does not affect all members of a species
12. The experiments of Harlow and Harlow demonstrated that how monkeys are reared ____.
- A. has little effect on their behavior later in life
 - B. can have a profound effect on their behavior later in life
 - C. has no effect on adult sexual activity
 - D. can improve their mental health

13. The phenomenon that is nearly the opposite of habituation is ____.
- A. dehabituation
 - B. inhabitation
 - C. stabilization
 - D. sensitization
14. The person who demonstrated that the marching of tropical army ants is not intelligent behavior is ____.
- A. Schneirla
 - B. Schneider
 - C. Schneidman
 - D. Schneirman
15. The list of alleged human fixed action patterns ____.
- A. has gotten shorter in recent years
 - B. has gotten longer in recent years
 - C. has remained about the same over the years
 - D. is longer for pre-industrialized peoples than for those living in industrialized nations
16. One person who raised doubts about the incest taboo is ____.
- A. Grant
 - B. Freud
 - C. Wilson
 - D. McDougall
17. In her study of baboons, Shirley Strum found that the most successful males were ____.
- A. offspring of dominant females
 - B. bigger than other males
 - C. less aggressive than other males
 - D. the youngest
18. The brown-headed cowbird deposits its eggs in the nests of other birds. This is most likely a ____.
- A. reflex
 - B. modal action pattern
 - C. general behavior trait
 - D. learned behavior
19. Natural selection is often ____.
- A. ahead of the times
 - B. behind the times
 - C. up with the times
 - D. under the times

20. Learning is an evolved ____.
- A. selectivity
 - B. modifiability
 - C. biology
 - D. karma
21. According to David Buss, the work of Gregor Mendel ____.
- A. required mathematical skills Darwin lacked
 - B. had little or no influence on Darwin's thinking
 - C. is irrelevant to evolution
 - D. was done 40 years after Darwin's death
22. Behavior is anything an animal or person does that can be ____.
- A. seen
 - B. described
 - C. attributed to physical events
 - D. measured
23. Natural selection is illustrated by changes in the coloration of the Peppered Moth resulting from ____.
- A. industrial pollution
 - B. drought
 - C. loss of habitat
 - D. long term changes in the hydraulic cycle
24. Most mutations ____.
- A. are not helpful to survival
 - B. contribute to survival in important ways
 - C. cause monsterism
 - D. occur in one-celled organisms
25. Keltner and Anderson suggest that ____ may protect us from injury by appeasing others we have offended.
- A. crying
 - B. sighing
 - C. yawning
 - D. blushing
26. A reflex is ____.
- A. any very simple behavior
 - B. a simple response to a simple event
 - C. a relationship between an event and a simple response
 - D. a purely physiological phenomenon

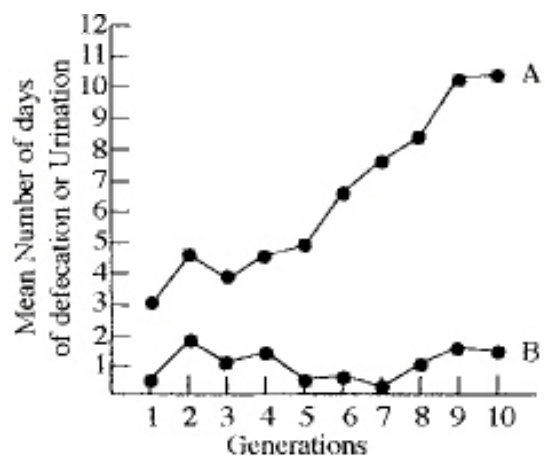
27. There is evidence that the rate of ____ in fetuses is correlated with intellectual development after birth.
- A. mutagenesis
 - B. sensitization
 - C. habituation
 - D. FAPs
28. The rooting of pigs (for worms, larvae, and truffles) is an example of a
- A. MAP
 - B. reflex
 - C. general behavior trait
 - D. learned behavior
29. The color ____ is a releaser for aggression in the male stickleback.
- A. green
 - B. blue
 - C. yellow
 - D. red
30. Learning is
- A. a change in behavior.
 - B. an improvement in performance.
 - C. the acquisition of new behavior.
 - D. a cognitive change that may be reflected in changes in behavior.
31. Experience refers to ____.
- A. mental states
 - B. our surroundings
 - C. events that affect behavior
 - D. things we live through
32. An ____ is something an organism tries to escape or avoid.
- A. aversive
 - B. adversive
 - C. adhesive
 - D. adenoid

33. The figure below most likely illustrates ____.



- A. habituation
- B. sensitization
- C. a FAP
- D. insurgence

34. The best title for the figure below is ____.



- A. diet and heredity
- B. fearfulness and heredity
- C. addiction and heredity
- D. aggressiveness and heredity

35. In the fox-breeding experiment, researchers selectively mated foxes that displayed ____ behavior.
- A. aggressive
 - B. intelligent
 - C. dog-like
 - D. habituated
36. Lee Cronk wrote an article on how evolved behavior can prove nonadaptive when the environment changes. The article was called ____.
- A. Old Dogs, Old Tricks
 - B. The Once and Future King
 - C. Murder Most Fowl
 - D. History Recalled
37. ____ poked fun at the human tendency to see itself as the crowning achievement of evolution.
- A. Charles Darwin
 - B. Gregor Mendel
 - C. Bertrand Russell
 - D. Alexander Pope
38. Zing Yang Kuo found that 86% of kittens that saw their mothers kill rats later killed rats themselves. He also found that ____ of kittens that never saw their mothers kill rats later killed rats themselves.
- A. 87%
 - B. 73%
 - C. 65%
 - D. 45%
39. Hart and Risley did a longitudinal study of the influence of the home verbal environment on children from different socioeconomic backgrounds. They found that ____.
- A. children whose parents talked to them a lot later scored lower on IQ tests
 - B. children whose parents talked to them a lot later scored higher on IQ tests
 - C. the amount of parental talk was unrelated to later IQ scores
 - D. the influence of parental language depended on parental income.
40. ____ refers to modal action patterns as complex reflexes.
- A. Gregor Mendel
 - B. Charles Darwin
 - C. Zing Yang Kuo
 - D. Howard Rachlin

41. Steven says that he was very nervous when he first attended college classes, but now he feels quite relaxed. Steven's loss of anxiety is most likely an example of ____.
- A. learning
 - B. disease
 - C. maturation
 - D. fatigue
42. Your text defines behavior as anything an organism does that can be ____.
- A. measured
 - B. tested
 - C. inferred
 - D. accounted for
43. A thumbtack stuck in a bulletin board several feet away is less likely to affect your behavior than a thumbtack placed on the chair on which you are sitting. Even though both examples involve a thumbtack, the second is more likely to qualify as a ____.
- A. stimulus
 - B. contiguous relation
 - C. contingency
 - D. response
44. Natural selection helps the individual adapt to changes in its environment.
- True False
45. Reflexes are generally less variable than modal action patterns.
- True False
46. All reflexes contribute to survival.
- True False
47. Darwin believed that there were no human instincts.
- True False
48. Research on the sexual orientation of sisters of lesbian women demonstrated that homosexuality is an inherited characteristic.
- True False
49. A major problem with natural selection as an adaptive mechanism is that it is slow.
- True False

50. Natural selection helps the species to adapt to change, not the individual.

True False

51. The evolution of most species is now complete.

True False

52. Probably the reason the world seems relatively stable is that we don't live long enough to see many drastic changes.

True False

53. As far as the study of learning is concerned, experience refers primarily to events that take place inside the person.

True False

54. Your text views learning as a change in the brain that is represented in behavior.

True False

55. Learning always involves the acquisition of new behaviors.

True False

56. It is sometimes difficult to say whether an event is behavior or physiology.

True False

57. The word stimulus always refers to events in an organisms surroundings.

True False

58. Darwin founded his theory of evolution on the work of Gregor Mendel.

True False

59. Repeated exposure to a stimulus that evokes a reflex response results in _____.

60. The dispute over the relative importance of genetics and learning is often called the _____ debate.

61. The chief limitation of natural selection as a means of adapting to change is that _____.
- _____
62. _____, like natural selection, is a biological mechanism for adapting to change.
- _____
63. Learning is a/an _____ in _____ due to _____.
- _____
64. A stimulus is an environmental event that is capable of affecting _____.
- _____
65. The brown-headed cowbird puts its eggs in other birds' nests. This is an example of a/an _____.
- _____
66. Explain the role of mutations in evolution.
- _____
67. Why is natural selection helpful to species, but not to individuals?

68. How are reflexes, modal action patterns, and general behavior traits alike? How are they different?
69. The phrase "survival of the fittest" is often interpreted to mean that natural selection is the result of a kind of combat. What would be a more accurate interpretation of the phrase?
70. What was Bertrand Russell's point when he noted that it is philosophers, not protozoans, who assure us that humans are superior to other animals.

Chapter 1--Introduction: Learning to Change **Key**

1. D
2. B
3. C
4. A
5. A
6. A
7. D
8. C
9. C
10. C
11. A
12. B
13. D
14. A
15. A
16. B
17. C
18. B
19. B
20. B
21. B
22. D
23. A
24. A
25. D
26. C
27. C
28. A
29. D
30. A

31. C
32. A
33. A
34. B
35. C
36. A
37. C
38. D
39. B
40. D
41. A
42. A
43. A
44. FALSE
45. TRUE
46. FALSE
47. FALSE
48. FALSE
49. TRUE
50. TRUE
51. FALSE
52. TRUE
53. FALSE
54. FALSE
55. FALSE
56. TRUE
57. FALSE
58. FALSE
59. habituation
60. nature-nurture
61. it is slow *or* takes place over generations *or* helps the species but not the individual; associate
62. Learning
63. change; behavior; experience
64. behavior

65. modal action pattern *or* fixed action pattern *or* instinct

66. The answer should indicate that mutations provide new variations which, if adaptive, will be selected.

67. This point is covered in the query on p. 22 of the text. Students should note that natural selection produces changes across generations, not within a given individual.

68. This question appears as item 13 in the list of review questions. Answers should note that all three are "hard wired" or "programmed" into the genes, and differ chiefly in the degree to which they vary and in the degree to which they are elicited by specific environmental events. For example, reflexes are less variable than inherited behavior traits, with fixed action patterns falling between the two.

69. This question is hinted at in review question number 4 about the field mouse. The "fittest" individuals are those most likely to produce young that survive and reproduce. Survival of the fittest does not mean survival of the strongest or most savage, but those most likely to produce offspring that reach reproductive age.

70. This question refers to the box on page 29. Russell was suggesting that judgment about the superiority of a particular species must necessarily be made from the biased perspective of the species making the judgment. Through the eyes of a baboon, the baboon might be the highest form of animal life.