# **Answers and Explanations**

- The correct answer is (C). Comparative psychologists look for similarities between species.
- **2. The correct answer is (D).** Industrial and organizational psychologists work with management and staff in the world of business.
- **3. The correct answer is (A).** In naturalistic observation, the researcher tries to be as inconspicuous as possible so as not to influence the situation.
- 4. The correct answer is (C). The only way to determine whether one variable causes another is to do an experiment. In an experiment, one factor (variable) is manipulated while all other variables are held constant. Non-experimental methods yield correlational results only. Researchers cannot make causal statements from correlational results.
- 5. The correct answer is (A). An independent variable is the variable that experimenters change while holding all other variables constant. In this case, some participants got more alcohol and some got less. Hitting pylons is an outcome (dependent variable) of the amount of alcohol consumed. The researchers did not manipulate individual driving ability.
- **6.** The correct answer is **(D)**. Replication involves repeating a study to determine whether the results are supported or whether they occurred due to chance.
- **7. The correct answer is (A).** Psychoanalytic theory assumes that the unconscious plays a major role in human behavior.

- **8.** The correct answer is (E). Watson was an extreme behaviorist.
- **9.** The correct answer is (A). All brain cells transmit messages.
- **10. The correct answer is (C).** The axon terminal button at the end of the neuron (nerve cell) communicates with other neurons by secreting neurotransmitters, which cross the synaptic gap.
- 11. The correct answer is (B). Activity within cells is electrical and operates on the "all-ornone" principle. Chemicals called neurotransmitters communicate information from one neuron to another by drifting across the synaptic gap.
- **12. The correct answer is (C).** The brain and spinal cord make up the central nervous system; all other parts of the body are controlled by the peripheral nervous system.
- **13.** The correct answer is (D). The thalamus determines which messages get sent to the various parts of the brain.
- **14.** The correct answer is (A). The limbic system is the emotional center of the brain.
- **15.** The correct answer is (B). The sympathetic nervous system arouses the body and activates the "fight or flight" response.
- **16.** The correct answer is **(B).** The frontal lobes are responsible for higher thought processes.

- 17. The correct answer is (E). Eye color is determined by the dominant-recessive principle. Whenever a dominant gene is present, it will show up. Both parents have brown eyes, so both have at least one dominant gene. A child will display a recessive trait when he or she receives a recessive gene from both parents. Therefore, in this case, we know that both parents have one gene for brown eyes and one recessive gene for blue eyes, which they each gave to their daughter.
- **18.** The correct answer is **(C)**. The absolute threshold is the minimum amount of stimulus energy required to stimulate a receptor 50 percent of the time.
- **19.** The correct answer is (B). If our eyes did not quiver, we would eventually no longer notice objects in our field of vision because of the principle of sensory adaptation.
- **20.** The correct answer is **(E)**. Rods respond to light; cones respond to color and motion.
- **21.** The correct answer is (A). Taste is our least efficient sense, and much of it depends on smell.
- **22. The correct answer is (B).** The semicircular canals are filled with fluid. Movement of the fluid provides feedback and helps maintain equilibrium.
- **23.** The correct answer is (A). Similarity refers to a tendency to group similar patterns together.
- **24.** The correct answer is (A). Binocular vision supplies information on two characteristics, depth and distance. ("bi" means two, as in "binocular"). True depth perception requires the use of both eyes
- **25.** The correct answer is (B). Recognition is most likely to occur if the contexts are also similar.

- **26.** The correct answer is (D). An EEG is an electroencephalogram. It measures the brain wave activity that can distinguish between each of the stages of sleep.
- **27.** The correct answer is (E). Our most vivid, narrative-like dreams occur during REM sleep, characterized by rapid eye movement and "awake-like" brainwave patterns that will appear on an EEG.
- **28.** The correct answer is (A). Sleep walking occurs during stage 4 sleep.
- **29.** The correct answer is (C). Delirium tremens are a sign of physical withdrawal from alcohol addiction. The "DTs" are marked by agitation, tremors, nightmares, and even hallucinations.
- **30.** The correct answer is (E). Cocaine is a stimulant. Alcohol, heroin, and barbiturates are all depressants. LSD is a hallucinogen.
- **31. The correct answer is (D).** Not everyone can be hypnotized, but for those who can, hypnosis can provide remarkable results. Caution should be exercised about accepting the validity of recovered memories, and hypnosis remains a controversial topic in psychology.
- **32.** The correct answer is (D). Experiental knowledge, which could have its roots in principles of learning such as conditioning and reinforcement, underlies much of our learning.
- **33.** The correct answer is (A). Classical conditioning involves pairing an unconditioned stimulus (meat, in this case) with a previously neutral stimulus (the bell) in order to build up an association between the two stimuli.

- **34.** The correct answer is (B). In classical conditioning, the original, unconditioned response occurs upon presentation of the original, unconditioned stimulus.
- **35.** The correct answer is (E). If the conditioned stimulus (CS) and the unconditional stimulus (UCS) are never presented together, the CS will lose its association to the UCS and will no longer elicit the conditioned response. This is called extinction.
- **36.** The correct answer is (A). The child has learned to tell apart (discriminate) between his parents and his friends.
- **37.** The correct answer is **(D).** Classical conditioning begins with unlearned (reflexive) behavior and pairs it with a new stimulus. In operant conditioning, the (voluntary) behavior comes first, and then it is followed by a reward, a punishment, or by no outcome.
- **38.** The correct answer is (A). Shaping is a technique of gradually changing behavior by reinforcing successive approximations of the behavior moving closer and closer to the target behavior.
- **39.** The correct answer is (A). Learning takes place faster when the behavior is rewarded every time it occurs (continuously). Intermittent reinforcement (partial, random, etc.) is marked by slower learning but greater resistance to extinction. According to Skinner, learning does not take place in the absence of reinforcement.
- **40. The correct answer is (E).** In behavior modification, behavior is changed by altering the rewards and punishments that are maintaining the behavior.

- **41. The correct answer is (C).** Instinctual drift means that species-specific behaviors (instincts) sometime interfere with and over-ride learning. In this case, cats naturally like to investigate and survey their landscape from high places.
- **42.** The correct answer is (B). According to the principle of extinction, when a behavior is no longer followed by reinforcement, the behavior decreases in frequency because it is no longer being maintained by reinforcers.
- **43. The correct answer is (B).** Sensory memory holds current information recently gathered by the senses for only an instant.
- **44. The correct answer is (D).** Rehearsal is the intentional repetition of information in order to improve short-term memory.
- **45. The correct answer is (D).** Recall is a form of remembering that requires the person to bring information out of memory without many retrieval cues.
- **46.** The correct answer is (A). Chunking involves organizing units of information into meaningful groups.
- **47. The correct answer is (E).** Phonemes are the basic sounds, not necessarily meaningful in isolation, that form the building blocks of language.
- **48.** The correct answer is **(C)**. Babies are capable of making all the sounds used in all human languages.
- **49.** The correct answer is **(B).** Mental Age (abilities)/ Chronological age (in years) multiplied by 100.

- **50.** The correct answer is (A). Although identical twins share 100 percent of genes, they are not identical beings. Environment does make a difference. However, identical twins are often reared in environments that are relatively similar in terms of intellectual development. Therefore, it is impossible to say what percent of their progress is the result of genes, and what percent is the result of their environments.
- **51. The correct answer is (D).** Validity answers the question "does the test measure what it originally set out to measure?"
- **52.** The correct answer is (E). All emotions have a physiological basis, cognitive awareness, a sense of goal-directedness, and possible changes in feeling.
- **53.** The correct answer is **(D).** The six basic emotions (happiness, sadness, disgust, surprise, anger, and fear) are universally recognized, suggesting that there is a biological basis for the display of these emotions.
- **54.** The correct answer is **(C).** Homeostasis is a state of equilibrium or balance in any physiological system.
- **55.** The correct answer is (A). Females have high levels of estrogen and males have high levels of androgens (e.g. testosterone.)
- **56.** The correct answer is (E). Excitement is the building up of arousal, plateau is an increase in excitement, orgasm is muscular contractions, and resolution is a return to a normal non-aroused state.
- **57. The correct answer is (A).** The type of parenting with the most typically positive outcomes is one that rewards good performance while admonishing bad performance. This can

- be seen in authoritative parenting, where parents encourage children's independence, but still place limits and controls on their behavior.
- **58.** The correct answer is (A). The correct order from lowest to highest is: physiological needs, safety, love and belonging, esteem, and self-actualization.
- **59. The correct answer is (A).** All humans have 46 chromosomes arranged in 23 pairs. Each pair has one chromosome from the mother and one from the father.
- **60.** The correct answer is **(B).** Examples of teratogens, which originate outside the mother's body, include alcohol, drugs, viruses, infections, and byproducts of cigarettes.
- **61. The correct answer is (C).** Piaget's theory includes the sensorimotor, preoperational, and formal operational stages of children's cognitive development.
- **62. The correct answer is (C).** Conservation is the ability to understand that certain attributes of objects or situations remain the same despite superficial changes in their appearance.
- **63.** The correct answer is **(E).** Secondary sex characteristics include the deepening of the voice in males, the growth of breasts in females, and the growth of body hair in both sexes. They are not essential for reproduction.
- **64.** The correct answer is **(E).** Eating disorders result from a complex interaction of social and psychological factors.
- **65.** The correct answer is **(B).** Adolescents struggle with developing an identity of their own (positive outcome) vs. failing to establish a unique identity (confusion).

- **66.** The correct answer is (A). Alzheimer's disease, a regressive, degenerative disorder, affects 2.5 million Americans over the age of 65; its incidence increases with age.
- **67.** The correct answer is **(E).** Freud developed psychodynamic (or psychoanalytic) theory in the late 1800s.
- **68.** The correct answer is (D). Freud believed that the unconscious mind was largely hidden from awareness and only showed up in disguised fashion in unconscious motivation, defense mechanisms, Freudian slips (parapraxes), and dreams.
- **69.** The correct answer is **(D).** The ego is the executive of the personality. It operates on the reality principle and finds ways to satisfy the demands of both the id and the superego.
- **70.** The correct answer is (B). The defense mechanism of identification protects the ego from unacceptable thoughts by identifying with the same-sex parent and giving up the desire to possess the opposite-sex parent.
- **71. The correct answer is (C).** Adder said that we attempt to overcome feeling of inferiority by striving to be superior (i.e., to self-actualize).
- **72. The correct answer is (E).** According to Carl Rogers, unconditional positive regard means accepting and valuing a person regardless of the person's behavior.
- **73.** The correct answer is (A). Social learning theory was developed by Albert Bandura; it emphasizes observational, or vicarious, learning—also known as modeling.
- **74.** The correct answer is (B). An approachapproach conflict is caused by having to choose between two attractive alternatives.

- **75. The correct answer is (C).** A sense of control is an effective buffer against stress. Social support is also important.
- **76.** The correct answer is (A). Although not all mental disorders are biologically-based, many are, including schizophrenia, bi-polar disorder, some anxiety disorders, and depression in many people. Whether an individual with a biological predisposition actually develops a disorder depends on life experiences and coping skills.
- **77. The correct answer is (A).** Schizophrenics tend to have an excess of dopamine in certain areas of the brain.
- **78.** The correct answer is (C). Being manic is an extreme high, often characterized by behaviors that do not reflect reality. At the end of the manic episode, the person often swings the other way into a severe depression.
- **79. The correct answer is (D).** Anxiety disorders are the most frequently occurring disorders and include generalized anxiety disorder, phobias, PTSD (post-traumatic stress disorder), and obsessive-compulsive disorder. Mood disorders are the second most frequently occurring disorders.
- **80.** The correct answer is (A). Also known as sociopaths or psychopaths, people with antisocial personality disorder have no conscience and no sense of remorse. They view other people opportunistically.
- **81.** The correct answer is (A). Dissociative identity disorder is a newer term for multiple personality disorder.
- **82.** The correct answer is (E). Psychodynamic (Freudian) treatment relies heavily on understanding early life experiences and conflicts, and uncovering the roots of unconscious motivation.

- **83.** The correct answer is (A). Although modern psychodynamic therapists still regard early experience and unconscious conflicts as important, they are more likely to give weight to the patient's social and cultural environment.
- **84.** The correct answer is (D). Empathy consists of trying to see the world the way the client sees it.
- **85.** The correct answer is (A). In aversive conditioning, the therapist attempts to change the client's behavior by pairing an undesirable behavior with an aversive (unpleasant) stimulus to decrease the behavior's frequency.
- **86.** The correct answer is (A). Systematic desensitization consists of constructing a fear hierarchy and gradually having the client progress through the hierarchy while practicing relaxation, which is incompatible with fear.
- **87.** The correct answer is **(B).** Self-help groups are usually led by a para-professional, who has been given minimal training by a mental health professional.
- **88.** The correct answer is (D). De-institutionalization has been a problem because many people who are released without proper supervision forget to take the prescribed drugs and deteriorate back into poor mental health or psychosis. Others are able to control the illness effectively via medication.
- **89.** The correct answer is (A). Electroconvulsive shock is a treatment of last resort for severely depressed people who have not responded to anti-depressants or therapy. Its effectiveness is comparable to drug therapy and psychotherapy.

- **90.** The correct answer is (A). When attitudes are inconsistent with action, it creates tension (cognitive dissonance) and a corresponding drive to reduce that tension, often by changing either the attitudes or the behavior to make them more consistent with one another.
- **91.** The correct answer is **(C)**. A source with low credibility is not very persuasive.
- **92.** The correct answer is (D). Situational or external attributions explain events by assuming they are caused by something in the environment. Dispositional or internal attributions explain events by assuming they are caused by something about the individual.
- 93. The correct answer is (D). A self-fulfilling prophecy is a prediction that comes true not necessarily because it was correct, but more because it was made in the first place. Once people have an expectation about events, they tend to engage in behavior that increases the probability of the event's occurrence.
- **94.** The correct answer is (D). Research has suggested that the Japanese culture tends to place a greater emphasis on the whole of society than on separate individuals.
- **95.** The correct answer is (D). In this famous experiment designed to demonstrate the power of suggestion and the willingness to "obey" and adhere to authority, nearly two thirds of the subjects delivered what they believed to be a maximum shock of 450 volts.
- **96.** The correct answer is (B). Social loafing is most likely when there is no individual accountability of effort and all share equally in the outcome. Loafing is less likely as goals become more compelling.

- **97.** The correct answer is (C). Cognitive factors include, for example, perception of intent, controllability, and magnitude.
- **98.** The correct answer is **(C)**. A normal distribution of scores above and below the mean is also known as a bell-shaped curve.
- **99.** The correct answer is (D). In a normal curve of distribution, most scores will cluster around the mean score, or around the middle of the range.
- **100. The correct answer is (C).** A correlation does not prove causation, but it can establish relation. It is therefore difficult to separate heredity from environment in determining exactly why people are intelligent.