

Barron's Practice Exam #1 – Answers Explained

1. (D) Myelin is a fatty tissue that surrounds the axons of some neurons and helps speed the movement of the action potential (essentially an electric charge) down the neuron. Neurotransmitters are chemicals that are stored in the terminal buttons and ultimately released into the synapse. Hormones are part of the endocrine system and are not involved in neural transmission.
2. (A) The “c” in the word cat is best described as a phoneme. Phonemes are the smallest units of sound in a language. Morphemes are the smallest units of meaning in a language; the entire word cat is a morpheme as it cannot be broken down into smaller meaningful units. Holphrases are single words that toddlers use to express more complex ideas as they first learn language. A toddler might say “cat,” meaning “look, there’s a cat” or “I’d like to pet that cat.” Like phonemes, syllables are units of sound, but they are often composed of multiple phonemes; for instance, the word cat contains three phonemes but only one syllable. A grapheme is a written symbol for a sound in a language; letters are grapheme but so are the letter combinations that make up multiletter phonemes, for instance, “ph.”
3. (E) When first born, humans’ dominant sense is hearing. In fact, research shows that fetuses are able to hear in the womb. By the age of about 6 months, sight replaces hearing as a typical baby’s dominant sense.
4. (A) Ryan is most likely to be classified as suffering from GAD, generalized anxiety disorder. As described in the question, GAD involves a nearly constant low-level arousal of the autonomic nervous system. Major depressive disorder is a mood disorder rather than an anxiety disorder. Hypochondriasis is a type of somatoform disorder in which sufferers fear that typical body sensations are indicative of medical problems. People who have obsessive-compulsive personality disorder tend to be inflexible and overly concerned with things like neatness, routine, and perfection. PTSD (posttraumatic stress disorder) follows some kind of trauma and is usually marked by anxiety caused by memories, flashbacks, and nightmares having to do with the trauma.
5. (E) The psychoanalytic perspective was popular at the turn of the twentieth century in Western Europe. The neuroscience, evolutionary, and cognitive perspectives had yet to capture most people’s interest, largely because of the lack of technological resources to study people from these perspectives. While the behaviorist perspective was beginning to gain followers in the United States during this time, Western Europeans remained more interested in Freud’s psychoanalytic approach.
6. (C) Pascale would best be classified as a cognitive psychologist due to his interest in children’s processing strategies. Sociocultural psychologists focus on the role of various societal factors in shaping people. Clinical psychologists treat clients or research psychological disorders or therapies. Behaviorists would reject the importance of mentalistic concepts like “processing” strategies. Personality psychologists focus on questions concerning the development of people’s personalities.
7. (E) Cyan’s test would be classified as an aptitude test because it is intended to show a person’s potential to be a good civil rights attorney. A speed test is comprised of many items and is meant to demonstrate how quickly a person can answer questions. An achievement test measures people’s knowledge of a given area. An EQ test would measure emotional intelligence, whereas an IQ test would measure intelligence.
8. (A) The learning process described would best be labeled classical conditioning because Marva’s children have come to associate the sound of a car door slamming and their mother’s screaming. Instrumental learning and operant conditioning are similar in that they involve learning to pair a consequence with a behavior. Observational learning, or modeling, is learning via observation and imitation. Latent learning is learning that is not evidenced until a reward is offered.
9. (B) The fact that the children now cringe when they hear any car door slam is an example of generalization since the children have generalized their response (CR) to the sound of their mother’s car door slamming to the sound of all car doors slamming. Discrimination would be the opposite phenomenon—if the children learned to cringe only to the sound of their mother’s car door and not other car doors. Acquisition in this example is when the children began to cringe to the sound of their mother’s slamming car door. Extinction is the opposite of acquisition—if Marva learned to manage her anger and stop screaming at her children, they would eventually unlearn the cringing response to the sound of her car door. Spontaneous recovery would be if, after extinguishing the cringe response, the children at a later date cringed again upon hearing a slamming car door.
10. (C) Your friend’s comment is a product of hindsight bias, also known as the “I knew it all along” phenomenon. Overconfidence is people’s tendency to believe they have performed better than they have. A theory is a statement that seeks to explain some set of observations and is used to generate hypotheses. A hypothesis is a testable prediction. Response bias refers to any one of a host of factors that cause people to answer questions in ways that do not reflect their actual opinions or beliefs.
11. (C) A low level of glucose in Sam’s bloodstream is most likely to make him want to eat a meal. Low blood sugar levels are an important cue that one is hungry. None of the other choices are tied directly to blood sugar rates.
12. (E) A trait theorist would be most interested in the results of the MMPI. The MMPI (Minnesota Multiphasic Personality Inventory) is a self-report instrument. Trait theorists use such inventories to help describe personality. Psychoanalytic theorists

would not put much stock in people's conscious reports of their own traits since psychoanalysts believe important motivations are largely inaccessible in the patient's unconscious. Humanistic psychologists would prefer a more in-depth interview/conversation with a client in order to understand fully the unique features of each person. Behaviorists are far less interested in what people say than what they do. Finally, biological theorists are more interested in physiological factors than one's self-reported characteristics.

13. (C) Light enters the eye through an opening in the iris. The iris, the colored part of the eye, is a muscle that controls the size of the pupil, the hole through which light enters the eye. After passing through the pupil, the light is refracted by the lens and ultimately lands on the retina at the back of the eye. The blind spot is the part of the retina where the axons of the ganglion cells exit the eye en route to the brain; it is known as the blind spot because there are no photoreceptors there. The fovea is the part of the retina in which you have highest visual acuity due to the lack of summation there.
14. (D) In people, rods, unlike cones, have a lower absolute threshold for light; that is, rods function in conditions of dimmer light than do cones. Rods are located on the periphery of the retina, do not respond to color, and are good at detecting motion. Both rods and cones synapse with bipolar cells.
15. (D) The term group polarization describes the phenomenon of groups taking more extreme positions than the individuals that comprise the group. Social facilitation is the finding that the presence of others improves performance on well-learned tasks. Deindividuation is the loss of self-restraint that occurs in groups under conditions of high arousal and relative anonymity. Groupthink is the tendency of groups to suppress dissent and make bad decisions. Conformity is when one alters one's attitudes or behaviors to go along with a group.
16. (B) The siblings have different circadian rhythms, approximately 24-hour cycles in biological and behavioral processes including those that regulate alertness, body temperature, and heart rate. Sleep cycles are an example of an ultradian rhythm, a cycle that happens multiple times a day. The sleep cycle is approximately 90 minutes long, and we cycle through it several times over the course of a night's sleep. Even though the siblings may differ in terms of their daily activities and personalities, these are unlikely to account for their consistent differences in peak alertness time.
17. (D) The feeding tubes represent a somatic treatment, the discussion of how her beliefs are irrational involves a cognitive approach, and the belief that her early family relationships are important belies a psychoanalytic bent. The combination of these three different perspectives signals that an eclectic approach is being used.
18. (B) Counterconditioning lies at the heart of systematic desensitization. Counterconditioning is a type of classical conditioning that involves replacing one's initial reaction to a stimulus with a new reaction. Systematic desensitization is often used to treat phobias by replacing the fear response to the stimulus with a relaxation response. Flooding is based on extinction. REBT and stress inoculation are cognitive therapies, and token economies make use of operant, as opposed to classical, conditioning principles.
19. (C) Humanistic personality theory is criticized for having an unrealistically optimistic view of human nature. Humanistic psychologists generally believe that all people are innately good and motivated to fulfill their own unique potential, ideas that some critique as overly optimistic. None of the other perspectives listed have quite as positive a view of human nature.
20. (D) Superordinate goals have been found to decrease prejudice, perhaps most notably in Sherif's camp study and Aronson's use of the jigsaw classroom. All the other phenomena help contribute to prejudice. Stereotypes are specific ideas about a group applied to all its members. Scapegoating is the practice of blaming members of a disliked group for one's own misfortunes; it can serve to rationalize one's prejudice. Out-group homogeneity is the belief that members of one's out-groups are essentially all the same, thus facilitating prejudice. Discrimination is acting on one's prejudices; through the process of cognitive dissonance, discrimination may serve to amplify one's prejudices.
21. (D) One of the hallmarks of the experimental method is the ability to control for various confounding variables, while naturalistic observation is a primarily a descriptive method that tried to convey a realistic picture of a phenomenon rather than artificially manipulate and control it. Experiments typically yield quantitative data; naturalistic observation often yields both quantitative and qualitative data. Naturalistic observation involves observation, not surveys; in experiments, the dependent variable measured may or may not be behavioral. While naturalistic observation typically takes place in something we could describe as the field, experiments may take place in either the lab or the field. Finally, both experiments and naturalistic observation may yield statistically significant results.
22. (D) According to humanistic psychologists, psychological disorders are most likely caused by unfilled needs. Humanistic psychologists believe that people are naturally good and that as long as their needs are met, they will develop into healthy individuals. However, if their needs (physical, emotional, etc.) are not met, psychological disturbances may result. Psychologists adhering to the biological perspective would be most likely to name neurochemical imbalances as the cause of psychological disorders. An unhealthy attributional style is a cognitive explanation. The phrase "learned associations" implies a behaviorist perspective, and the phrase "genetic predispositions" suggests an evolutionary approach.

23. (B) A fetus with the genotype XXY will most likely suffer from sterility as an adult. The XXY genotype is known as Klinefelter's syndrome and is one of the few chromosomal abnormalities that does not typically result in a miscarriage. Men with Klinefelter's syndrome are somewhat less likely to be color blind than other men since the trait for color blindness is recessive and carried on the X chromosome; therefore, these men would have to have a copy of the gene on each of the X chromosomes to express it. Depression is not associated with Klinefelter's syndrome, and everyone who has Klinefelter's syndrome is a male due to the presence of the Y chromosome.
24. (E) Most children will develop the ability to clap their hands before any of the other skills listed. Typically, infants learn to clap hands in the second half of their first year. In general, gross motor skills (e.g., clapping) tend to develop before fine motor skills (for example, writing, cutting with a knife, turning pages of a book). Most children do not speak in anything resembling full sentences until they are well over 2 years old.
25. (D) Antonia has a cat. The first time she sees a rabbit, she calls it a cat. Her error results from the process of assimilation. Assimilation, as defined by Piaget, is the ability to take in new information using one's existing schemas. Antonia had a schema for a cat and used it to make sense of a new animal, a rabbit. Accommodation will occur if Antonia is corrected and told that this new animal with longer ears and a shorter tail is a rabbit, and she then creates a new schema for rabbits. Discrimination and generalization are terms used together in discussing learning. Discrimination is when one can tell the difference between a stimulus and similar stimuli, and generalization is when one responds the same way to similar stimuli as one did to the stimulus with which one was originally trained. Habituation is a decrease in response to a repeated stimulus.
26. (C) Divergent thinking is a term closely associated with creativity. Convergent thinking involves looking for a single correct answer or using one prescribed method of problem solving; divergent thinking typically involves more open-ended problems. Hypothesis testing can absolutely have creative elements but is not synonymous with creativity as is divergent thinking. Contextual intelligence is a kind of practical intelligence described by Robert Sternberg. Habituation is a decrease in response to a repeated stimulus. Echoic memory is the auditory portion of sensory memory that lasts a few seconds.
27. (B) The somatic nervous system is part of the peripheral nervous system. The peripheral nervous system is comprised of the somatic (or skeletal) nervous system and the autonomic nervous system and collectively contains all parts of the nervous system outside of the central nervous system. The central nervous system contains the brain and spinal cord. The autonomic nervous system has two parts: the parasympathetic and sympathetic nervous systems.
28. (B) As animals evolved and became more advanced, their brains typically became larger, relative to the size of their bodies. However, the part of the brain that has increased the most in size and a part that is not even present in many animals is the cerebral cortex. This change makes sense given that the cortex is the seat of high-level thought. The pons and reticular formation are both part of the brainstem, an older part of the brain. The forebrain includes the cortex as well as less advanced structures like the hypothalamus.
29. (E) Of the disorders listed, major depressive disorder would respond best to cognitive behavioral therapy. Cognitive behavioral therapy (CBT) is a type of talk therapy in which the clinician tries to reason with the client. Given the disorganized thought and difficulties with oral expression of schizophrenics, they are poor candidates for such an approach. Dissociative identity disorder (DID) might also be difficult to treat from this perspective because cognitive psychologists focus on conscious thought and might be skeptical about the unconscious and the existence of DID. Finally, while CBT might help someone with bipolar disorder while in the depressed phase, it would probably be less effective in dealing with people in the manic phase as they are typically not thinking logically nor receptive to rational arguments.
30. (B) The basilar membrane is found in the inner ear. The basilar membrane is in the cochlea, and the hair cells are embedded in this membrane. The hammer is one of the ossicles in the middle ear. The tympanic membrane, or eardrum, divides the outer and middle ears. The pinna and auditory canal make up the outer ear.
31. (B) An evolutionary psychologist or sociobiologist would assert that a key motivation for people is the desire to spread their genetic material. Cognitive psychologists believe that thoughts are at the core of motivation. Humanistic psychologists assert that people are motivated to fulfill their needs. Psychodynamic psychologists believe unconscious thoughts are important motivators. Behaviorists believe we are motivated by the contingencies of reinforcement to which we have been exposed.
32. (B) Psychodynamic theorists would say that Max is sublimating. Sublimation is a Freudian defense mechanism that involves taking inappropriate emotions (for example, fury) or desires and redirecting them toward more socially acceptable behaviors (for example, artwork). The other choices are all other defense mechanisms. If Max used displacement, he would take his anger out on a less threatening target than Dylan. If Max used rationalization, he might think to himself that he can get a better prom date. If Max repressed his fury, he would basically forget about the event by pushing the memories into his unconscious. Finally, if Max used projection, he might claim that Dylan and/or Suzy were angry with him when, in fact, it is he who is angry.

33. (A) The relationship between arousal and performance is known as the Yerkes–Dodson law and is expressed by a graph that looks like an inverted “U”. As arousal increases, so does performance—up to a point. When arousal becomes too high, performance suffers.
34. (A) Measures of variability (e.g., variance, standard deviation, range) show how spread out a distribution of scores is. The range (the highest score minus the lowest score) is less informative than the variance or standard deviation, which shows the average distance of all scores in a distribution from the mean. The mean, median, and mode are measures of central tendency; their aim is to mark the center of a distribution, not to say how spread out the distribution is.
35. (E) Since Coach Peterson takes away playing time that Jake usually has, the technique described is omission training. An example of positive punishment would have been if the coach had Jake run laps (added something unpleasant). Neither negative reinforcement nor positive reinforcement would have been a good tactic for the coach to use on Jake’s lateness, since, by definition, they would have encouraged Jake to be late again. However, the coach could reinforce Jake’s future appropriate behaviors toward the same end. He could praise Jake when he arrives on time (positive reinforcement) or excuse Jake from the laps run at the end of practice when he is on time (negative reinforcement). Modeling is learning via observation and imitation; the coach could model being on time himself.
36. (D) Gardner, Sternberg, and a host of other contemporary intelligence researchers believe that schools focus too much on traditional subjects and methods. Gardner has proposed that people have multiple abilities that ought to be considered intelligences, including bodily-kinesthetic intelligence, musical intelligence, and interpersonal intelligence. Sternberg believes schools should encourage students’ creative and practical abilities as well as their analytical ones.
37. (B) Delusions of grandeur are most characteristic of paranoid schizophrenia. An example of a delusion of grandeur would be the belief that one was a god or a king. Along with delusions of persecution, delusions of grandeur are amongst the most common symptoms of paranoid schizophrenia.
38. (D) Faye believes that victims of natural disasters are foolish because they didn’t develop better advance detection and warning systems. Faye is manifesting the just-world bias, the belief that because the world is a fair place, good things happen to good people and bad things happen to bad people. The false consensus effect is our tendency to overestimate the number of people whose views are similar to our own. The self-fulfilling prophecy effect is the ability of one person’s expectations to elicit behavioral confirmation in another. Self-serving bias is the tendency to take more credit for good outcomes and less credit for bad outcomes than one deserves. The Barnum effect is people’s willingness to see themselves in vague, stock descriptions.
39. (A) Four-year-old Kate positions herself squarely in front of all the other kids to watch a magician. Piaget would attribute this to Kate’s egocentrism. Piaget would say that Kate does not have the cognitive capacity to realize that she is blocking others’ view; she is only capable of seeing things from her own perspective. Piaget believed infants develop object permanence, the understanding that an object still exists even when no longer in view, toward the end of the first year. According to Piaget, children learn to conserve around age 7, when they enter concrete operations. Conservation is the knowledge that a change in the form of matter does not change the amount of matter that exists. Animism and artificialism are limitations in the thought of the preoperational child. Animism is when one attributes life or consciousness to inanimate objects, and artificialism is the belief that everything has been created by people.
40. (E) Jamie’s printer problems are most clearly a result of mental set. Jamie has a set way of dealing with her printer problems, and it is difficult for her to break out of this set. Belief bias is when one’s preexisting beliefs color one’s logical thought. Experiential intelligence is a term Sternberg uses to denote creativity. Divergent thinking is also associated with creativity. Functional fixedness is the inability to think of a novel use for a familiar object.
41. (B) The brainstem is comprised of the hindbrain and midbrain. The brainstem houses some of the most basic functions of the body and is present in similar form in less complex animals, such as reptiles.
42. (B) The limbic system plays an important role in regulating emotion. The amygdala is part of the limbic system and is vital in terms of regulating emotion. Maintaining balance is associated more with the cerebellum. Monitoring arousal is the job of the reticular activating system, also known as the reticular formation. The thalamus is important in the initial processing of most sensory information, and the prefrontal cortex is the part of the brain most associated with planning for the future.
43. (A) Loftus’s work shows that memory is reconstructed; that is, a memory is not like an exact replica of what happened but rather is built each time a person thinks about it and is therefore affected by all sorts of extraneous information. The serial position effect refers to the tendency to remember the first and last items in a list better than the ones in the middle. While there is a predictable rate at which information is lost from short-term memory, it is not relevant to this question. Similarly, while the cerebellum plays a role in procedural memory, that fact is not the focus of this question. Finally, hindsight bias, the tendency to think you knew an answer all along after hearing it, does not relate directly to this question.

44. (C) Erikson's initiative versus guilt stage is most closely related to Freud's phallic stage. Both occur between the ages of roughly 3 to 5 and are the third stage in their respective theories. Freud's oral stage corresponds to Erikson's trust versus mistrust stage. Freud's anal stage corresponds with Erikson's autonomy versus shame and doubt stage. Freud's concept of latency is akin to Erikson's industry versus inferiority stage. While Freud's final stage is the adult genital stage and it lasts from puberty on, Erikson divided adolescence and adulthood into several stages: identity versus role confusion, intimacy versus isolation, generativity versus stagnation, and ego integrity versus despair.
45. (D) Daniel is most likely to be diagnosed with autism, an impairment of social development. Common symptoms include delayed speech, avoiding eye contact, and a preference for routine. A description of Down syndrome, or trisomy 21, is likely to mention an extra chromosome on the 21st pair and a degree of intellectual impairment. A description of fetal alcohol syndrome would probably include mention of a mother who drank while pregnant and would likely also mention intellectual impairment. The hallmark of mental retardation is intellectual functioning that is significantly below average. Klinefelter's syndrome results from a chromosomal abnormality of the sex chromosomes; boys with Klinefelter's syndrome have an XXY genotype. Signs of Klinefelter's syndrome include small testes, atypical secondary sex development, and infertility.
46. (E) Approximately 95 percent of the population scores between 70 and 130 on the WISC. The WISC has a mean of 100 and a standard deviation of 15, which means that the scores between 70 and 130 represent all the scores within two standard deviations of the mean. By definition, in a normal distribution, about 95 percent of scores fall within two standard deviations of the mean.
47. (B) The school librarian's system of giving students a prize for every five books they read uses a fixed ratio reinforcement schedule. The schedule is fixed (as opposed to variable) because students are rewarded for every five books they read—a fixed or constant number. The schedule is a ratio (as opposed to interval) schedule because what controls the reinforcement is the number of responses the person makes and not the passage of time.
48. (A) The fact that students read more books in the summer but fewer books in the fall is probably due to the overjustification effect, the finding that extrinsic rewards can undermine intrinsic motivation. Students who previously read because they liked to read may have come to think they read for the prizes and not because they liked reading. As a result, when the prizes are withdrawn, they no longer had a reason to read and therefore may have read less.
49. (E) It is impossible to prove a theory. Experiments and other research methods, even when they yield statistically significant results and those results are replicated, can garner support for a theory but not proof. It isn't really even possible to prove a hypothesis because the term proof implies that you are absolutely sure about something and given the role of probability in hypothesis testing, we can never really be 100 percent certain about anything.
50. (B) Lupe's situation with Craig represents an approach-avoidance conflict. She is attracted to certain aspects of Craig but not to others. In an approach-approach conflict, one has to choose between two desirable options—for instance, if Lupe was attracted both to Craig and his brother Greg. In an avoidance-avoidance conflict, one has to choose between two undesirable options; imagine Lupe's parents and Craig and Greg's parents had agreed their children would wed. If Lupe disliked both Craig and Greg but had to marry one of them, she would face an avoidance-avoidance conflict. In a multiple approach-avoidance conflict, one has to choose between several options, each of which has attractive and unattractive features. If Lupe thought Craig was attractive but boring and Greg was interesting but not attractive to her, she would face a multiple approach-avoidance conflict.
51. (D) Ani's belief that her attitudes and behavior play a central role in what happens to her is associated with an internal locus of control. While people with an external locus of control feel fate and luck play a large role in their lives, people with an internal locus of control believe they control their destinies. A strong superego is associated with a being concerned with morals and ethics. People with low self-esteem have negative thoughts about themselves. People with low self-efficacy doubt their ability to get things done. Extraverted people are friendly and outgoing.
52. (C) The fact that people's ears are located on opposite sides of their heads is most adaptive because it helps us identify the origin of a sound. We locate sound by comparing the time it takes a sound wave to reach each ear and the intensity of the sound wave when it hits each ear. Sounds that come from our right reach our right ears more quickly and with greater intensity than sounds that come from the left and vice versa. The location of our ears does not increase the range of frequencies we can hear or help us gauge sound intensity, respond to noises behind us, or figure out what sounds to ignore.
53. (D) Young Tina had never seen the space shuttle until her parents pointed out a picture of it ready to launch. When she next saw a picture of it flying, she had difficulty recognizing it. Tina's problem can best be explained by shape constancy. Shape constancy is a perceptual constancy that we learn from experience. An unfamiliar object looks different from different angles, and we have to learn that it is the same. Until we do, we make errors like Tina's. The autokinetic effect is when a spot of light in a dark room appears to move on its own. Dishabituation refers to an increase in response that occurs to a novel stimulus. Summation refers the way the layers of the retina are set up: multiple rods and cones synapse with one bipolar cell and multiple bipolar cells synapse with a single ganglion cell. Egocentrism is one of the cognitive limitations of the preoperational child, according to Piaget.

54. (D) Sal's conclusion that Petunia is a funny person after their brief meeting is best explained by the fundamental attribution error, the tendency for people to underestimate the role of the situation in explaining the behavior of others. The mere-exposure effect would hold that the more time Sal spent with Petunia, the more he would like her; it says that exposure to a person or thing increases liking. Self-serving bias is the tendency to take more credit for positive outcomes than negative ones. Equipotentiality is a learning principle, the belief that we have an equal opportunity to teach all organisms all things. Cognitive dissonance is the mental tension that arises from holding two contradictory thoughts or when people's thoughts don't mesh with their behavior.
55. (B) Since Edy is giving the cookies out herself and they have her name on them, the act of distributing will increase the student body's familiarity with her. According to the mere-exposure effect, increased exposure increases liking. Foot-in-the-door is a compliance technique that involves getting someone to agree to a small request in order to increase the likelihood they will agree to a larger, subsequent request. Edy's technique utilizes the peripheral route more than the central route; the central route to persuasion would involve Edy explaining why she is the best candidate. Pluralistic ignorance is one explanation for the bystander effect. Deindividuation is a loss of self-restraint under conditions of heightened arousal and relative anonymity.
56. (E) Alyssa is testing the impact of framing; milk that is 1 percent fat is the same as milk that is 99 percent fat free; the only difference is how the milk is framed. Representativeness heuristic is when people judge the likelihood of an event by comparing it to something they believe to be similar and assuming the probabilities of the events will be the same. Confirmation bias is the tendency to pay more attention to information that supports our preexisting beliefs than information that contradicts it. Schemas are cognitive structures that influence how we process information. The mere-exposure effect shows that exposure to something increases our liking for it.
57. (C) Eli, if developing typically and 6 months old, is probably just beginning to sit up. Infants develop in a predictable sequence and a fairly predictable rate: at about one month, most infants can lift their head; by 3 months, most can hold their heads steady; by 6 months, can sit up; by 9 months, most are beginning to try to stand up while holding on to something; and by a year, most infants begin to stand on their own and take a step or two.
58. (A) Harlow's monkey experiment illustrated the importance of physical contact to development. Harlow compared infant monkeys' attachment to a surrogate mother made out of cloth or one made of wire that was attached to a bottle so "she" could feed the baby. He found the infant monkeys preferred the soft "mothers." His study did not involve language or tools. Even though the infant monkeys were separated from their natural parents, the goal was not to study the impact of that separation, and the study also did not look at the heritability of shyness.
59. (B) The onset of schizophrenia is typically in one's early 20s. Paranoid schizophrenia sometimes develops a bit later, closer to the early 30s.
60. (E) In correlating the two sets of results, Jupiter is measuring the test's reliability. This type of reliability is known as test-retest reliability. Since perfectionism should not change over the course of the month, a low correlation would indicate that the test was not reliable. Outliers are extreme scores, and Jupiter does not appear to be looking for them. To standardize the test, Jupiter would have to give it to a standardization sample and then look to assemble a group of questions that yielded a normal distribution of scores. Nothing in the question suggests Jupiter believes the mean level of perfectionism should have changed, and the correlation will not necessarily show whether it has. Finally, even though Jupiter's work will show whether or not the test is reliable, it will not show whether or not it is valid. Validity is a measure of accuracy—in this case, whether the test actually measures perfectionism.
61. (B) Bandura showed that people learn by observing and then imitating others, a phenomenon known as modeling. Instrumental learning, named by Thorndike, is when people or animals learn that their behaviors are instrumental in bringing about specific consequences. The copycat effect is a term made up to sound like it fits the behavior described but not, in fact, used to do so. Thanatos is the name Freud gave to the supposed death instinct that drives people to commit aggressive and destructive acts. Sublimation is a Freudian defense mechanism in which people take the energy from impulses they view as unacceptable and redirect them toward more socially acceptable pursuits.
62. (C) The technique Coach Perry is using is called shaping. Shaping is defined as rewarding successive approximations of a desired behavior. Coach Perry would love 5-year-old Lana to be able to stop his hardest kick, but he knows that in order to reach that goal he must begin by letting her stop slow-moving balls. The law of effect is Thorndike's pronouncement that pleasant consequences will increase the likelihood of a behavior and unpleasant consequences will decrease the likelihood of a behavior. The partial reinforcement effect is the finding that partial reinforcement schedules are more resistant to extinction than continuous reinforcement. Second-order conditioning is when, in classical conditioning, you use something that was initially a CS as a US to condition a new CS. A token economy is a method of promoting desired behaviors by rewarding such behaviors with tokens, redeemable at a future time for any of a range of items.
63. (C) A p value of .05 or less indicates that a difference is statistically significant. p stands for probability, and a p value gives the probability that the result occurred by chance. To compute the p value in this case, Matt will have to use both the standard

deviation and the mean, but neither of those alone will tell him whether or not the difference is significant. Given the type of data with which Matt is working, he would have to run a t test rather than a chi square test or a Pearson correlation to find a p value.

64. (B) Matt's research design is best classified as an ex-post facto study. In an ex-post facto study, what the researcher conceives of as the independent variable has already been predetermined. Student gender is predetermined; Matt cannot randomly assign students to be either girls or boys; hence, the study is an ex-post facto study. Random assignment of participants is required in an experiment. A case study looks closely at only one or a small group of people. Naturalistic observation uses unobtrusive observation rather than a survey. A content analysis studies the coverage of various topics in a communications medium (e.g., television, textbooks).
65. (D) The population in Matt's study is the Northeastern High School student body. The population is defined as anyone who could have been in the study. Since Matt took a random sample of the whole student body, they all had a chance to be in the study. The group of 100 students who actually took the survey is known as the sample. American students, high school students in Maine, and high school students throughout the world are all groups that Matt might be interested in, and they might be closer to what you think of when you think of the word population, but they are not the population in this study because no one who was not attending Northeastern High School had the chance to be in Matt's study.
66. (A) The part of the brain thought to play the most important role in the Cannon-Bard theory of emotion was the thalamus. These psychologists thought the thalamus received information from the environment and simultaneously sent signals to the cortex and autonomic nervous system.
67. (A) Selye's general adaptation syndrome explains how the body deals with stressors. It has three stages: alarm, resistance, and exhaustion. After working so hard to deal with the stress of finals, Conrad reached what Selye termed exhaustion and succumbed to illness. The Yerkes-Dodson law explains the relationship between arousal and performance. The law of effect explains the relationship between the consequences of an action and repetition of that action. Cognitive dissonance theory proposes that we are motivated to maintain consistent attitudes. The James-Lange theory of emotion states that specific physiological changes in the body are indicative of specific emotions.
68. (C) Learned helplessness is most likely to be linked to an external locus of control. Learned helplessness is when exposure to circumstances one cannot control leads one to believe that one cannot control later events that are, in fact, within one's control. Similarly, someone with an external locus of control believes that factors such as luck and fate determine what happens to them as opposed to internal factors like effort or skill. The Barnum effect is that people believe vague, stock personality descriptions describe them. Self-serving bias is the tendency to take more credit for positive outcomes as opposed to negative ones. You have unconditional positive regard when someone accepts you regardless of your faults; humanistic theorist Carl Rogers thought it essential for a person to be psychologically healthy. An Oedipal complex is the Freudian idea that boys are in love with their mothers.
69. (C) Jung's collective unconscious contains archetypes, which are universal thought forms he believed were passed down through the species. Fictional finalisms and feelings of inferiority are terms more closely associated with Alfred Adler, another neo-Freudian. Jung believed complexes and bad memories would be stored in the personal unconscious.
70. (B) The shortest electromagnetic waves humans can see are violet. The acronym Roy G. Biv makes it easy to remember the order of the colors in the visible spectrum. The red waves are the longest followed by orange, yellow, green, blue, indigo, and finally violet.
71. (B) People who are able to be hypnotized easily are likely to score high on the openness dimension of the big five personality traits. Openness means a willingness to try new experiences and a certain lack of cynicism that is probably linked to hypnotic suggestibility. How agreeable (easy to get along with), conscientious (hardworking), emotionally stable (even-keeled), and extraverted (outgoing) a person is are less likely to be related to hypnotic suggestibility.
72. (C) The right hemisphere controls the left side of the body and is important in recognizing faces, doing spatial tasks, and all sorts of creative pursuits. The left hemisphere plays a larger role in speech and language, logical problems, and controlling the right side of the body. Plasticity is the brain's ability to change as the result of experience, and one way it is illustrated is when the functions of a damaged part of a brain are taken over by another part of the brain. Since most of Genna's right hemisphere was damaged and removed, plasticity is shown by her ability to perform functions associated with that hemisphere after the surgery. The only behavior associated with the right hemisphere is moving her left hand.
73. (D) One of the more impressive feats cited by those who believe that animals are capable of true language is that some apes have been able to use words they were taught to express novel concepts. For instance, Washoe, who didn't know the word for refrigerator, was able to describe it as a "cold box." Chomsky speaks of a language acquisition device, but the term does not refer to a physical structure in the brain. Even though primates are able to learn words that result in food rewards, critics of the idea that animals have language say these words are merely the result of operant conditioning and do not evidence true language. There is no doubt that animals including honeybees and dolphins can communicate with one another and with people to some extent;

however, there is much debate over what should be considered “language.” Young apes are much slower to pick up new vocabulary than are young humans.

74. (A) The finding that people who read a job description written only with male pronouns (e.g., he) are more likely to think of an employee as male than people who read a description that uses gender-neutral language (e.g., he or she) is most closely linked to the linguistic relativity hypothesis. The linguistic-relativity or Sapir-Whorf hypothesis holds that language influences thought. Therefore, people who read a job description written using only male pronouns are influenced to think of the person who holds the job in a particular way. Gender schema theory holds that children learn about the gender roles of their culture and that the expectations they develop then guide their behavior. The social role hypothesis is one explanation for hypnosis; specifically, this hypothesis says that hypnotized people play the role that is expected of them and do not actually experience an altered state of consciousness. Modeling, or observational learning, is Bandura’s theory that people learn by watching and imitating others. Ethnocentrism is the tendency to look at things from the perspective of one’s own culture.
75. (D) In the nature versus nurture debate, nature is most closely associated with temperament. Nature refers to things that are innate. Temperament is one’s inborn style of interacting with the world. Most of the other terms—environment, culture, and learning—are associated with nurture. One’s family plays a role in both nature (for example, via genes) and nurture (e.g., via the home environment).
76. (D) If the College Board neglected to put any questions that had to do with neuroscience on the AP Psychology exam one year, the test would lack content validity. A valid test measures what it is supposed to measure. A test with high content validity covers all the areas it is supposed to in the appropriate level of depth. Predictive and concurrent validity are two types of criterion validity. A test with predictive validity provides a measure of how someone will perform on a task in the future, whereas concurrent validity provides a measure of how someone will perform at the present time. Face validity is a shallow type of content validity; if a test is supposed to assess mathematical skill and contains math problems, it has face validity.
77. (C) In Tolman’s latent learning experiment, three groups of rats ran a maze for the same number of trials. The rats in one group were reinforced every time they finished the maze, a second group was never reinforced, and a third group was not reinforced during the first half of the trials but was reinforced during the second half of the trials. Tolman found the third group’s performance initially resembled the performance of the group that was never reinforced but quickly and dramatically improved once a reward was introduced and ultimately looked like the performance of the group that had been reinforced on every trial. Tolman argued that this improvement in performance illustrated that the rats had learned during the first half of the trials even though they did not evidence it until a reward was made available to them; he termed this type of learning latent learning.
78. (C) The scores of the three students who score much differently from the rest of the class are known as outliers or extreme scores. The mode is the most frequently occurring score in a distribution. Even though outliers skew a distribution, they are not called skewers. Variance is a measure of the variability in a distribution as is standard deviation.
79. (D) Positive psychology focuses on the study of subjective well-being, optimism, and happiness. It is a relatively new area of psychology that grew out of the belief that too much of psychology focused on the negative aspects of the human condition (e.g., depression, prejudice aggression). Psychometrics is the study of how to make tests. Human factors psychology melds psychology and engineering in an effort to make machines that are user-friendly. Social psychology is the study of how people interact with one another, and health psychology is an area that looks at how psychological factors impact physical health.
80. (D) After taking AP Psychology and doing well in the class and exam, Donald goes to college. If Donald is interested in psychology and has high achievement motivation, as a first year student, he is most likely to sign up for an upper-level undergraduate course in which he will have to work hard to succeed and will learn new things. His interest in psychology will lead Donald to want to take more psychology classes and learn new things, while his high achievement motivation will lead him to select a class that will be challenging but not overly difficult.
81. (A) Humanistic models of personality reject the idea of determinism (that one’s action and choices have been determined by factors outside of one’s control) and embrace the idea of free will (that people are able to make their own choices). Biological models of personality tend to see human thought and behavior as determined by physiological factors. Evolutionary models view genes as the determining factor over most human behavior. Behaviorists believe one’s history of reinforcement determines their future choices, and psychoanalysts see the thoughts in one’s unconscious as the factor that controls human behavior.
82. (B) Neuroleptics are commonly prescribed to treat schizophrenia, the most common psychotic disorder. L-Dopa is used to treat Parkinson’s disease and would likely have an adverse effect on Vance since it would lead to an increase in dopamine and an excess of dopamine is a hypothesized cause of schizophrenia. Benzodiazepines are commonly used to treat anxiety. SSRIs (serotonin selective reuptake inhibitors) are used to treat major depressive disorder, and lithium is used to treat the manic phase of bipolar disorder.

83. (B) Sperling's partial report technique was designed to test the capacity of sensory memory. Sperling hypothesized that the reason people were only able to report about four items they were exposed to for a split second was not that more items didn't make it into the sensory register but that the memory decayed before the people could report them. He used the partial report technique to expose participants to a matrix of 12 letters (3 rows of 4) and showed that if cued on which line to report immediately after the matrix was removed from view, participants could usually recall the entire row correctly. This technique is not used to test the serial position effect, duration of working memory, difference between STM and LTM, or misinformation effect.
84. (C) Parkinson's disease has been linked to a deficit of dopamine. Major depressive disorder is associated with low levels of both serotonin and norepinephrine. The cause of autism is currently unknown. Similarly, the role of various neurotransmitters in Alzheimer's disease remains debated, but one view holds that shortages of acetylcholine are involved. Schizophrenia is associated with elevated levels of dopamine.
85. (A) Runners in a park were found to pick up their pace when another runner came into view; this finding illustrates the phenomenon of social facilitation since it shows that the presence of others improved performance. Conformity involves a change in attitude or behavior to fit in with a group; if a runner ran faster to keep up with her soccer teammates, conformity could be at work. Deindividuation is a loss of self-restraint under conditions of high arousal and anonymity. Norms are standards of expected behavior, and roles are sets of expected behaviors for different members of an organization.
86. (E) The Rosenhan study of mental institutions showed that confirmation bias, the tendency to pay more attention to information that supports one's views than challenges them, may influence clinicians' views and treatments of mental patients. In this study, a number of people checked themselves into a variety of mental institutions, including small private facilities and large public ones, reporting that they heard voices saying "empty," "hollow," and "thud." The otherwise normal people were admitted and then resumed their normal behavior. The study revealed that it took a long time for any of the hospitals' employees to realize that these patients were not in need of treatment, something that might be partly explained by the fact that the staff members tended to avoid contact with the patients. When the pseudopatients were released from the hospitals, they were diagnosed as schizophrenics in remission, which illustrates the stickiness of labels. The Rosenhan study showed that it can be difficult to discern who is mentally ill and who is well.
87. (B) An American teenager's prototype of a chair is most likely to include four legs and a seat. A prototype is the most typical example of category. Although there are many types of chairs such as the armchair, chairlift, and wheelchair listed in choice D, most chairs we encounter have the features described. We may commonly think of chairs with desks and tables or as a place to keep our pens, pencils, books, and computers. Through classical conditioning, someone may have come to associate certain types of chairs with anxiety.
88. (C) According to Kohlberg, in order to reason at a high moral level, people must be able to take another person's perspective. Kohlberg's theory includes three levels of moral development: preconventional, conventional, and postconventional. One of the hallmarks of postconventional thought is the ability to see things from multiple perspectives. Although we think of generosity as a good thing, it is conceivable that someone in the postconventional stage would decide that generosity, at least in some situations, should be avoided. Kohlberg's theory is not linked to any religious beliefs. Erikson's theory includes the integrity versus despair stage, but this idea is not tied to Kohlberg's theory. One could come to postconventional morality in a number of ways; one does not have to have learned one's moral beliefs from good role models.
89. (B) The incidence of schizophrenia in the population is closest to 1 in 100.
90. (B) Personality and developmental disorders are noted on Axis II of the multiaxial classification system typically used by psychologists. Axis I is used for the main disorder (for example, schizophrenia, panic disorder, seasonal affective disorder), Axis III denotes medical problems, Axis IV is used for psychosocial stressors, and Axis V gives a general assessment of functioning.
91. (C) About an hour into one's first sleep cycle, people are typically in stage 3 or 4. In these stages, they experience deep, slow-wave sleep, which is marked by the presence of delta waves. Alpha waves indicate drowsiness, beta waves are present when one is awake and alert, and sleep spindles and K complex waves occur mostly in stage 2.
92. (B) Information from the eyes' retinas crosses at the optic chiasm. Each eye sends information to both hemispheres of the brain. Information from the left side of each retina goes to the left hemisphere of the brain, and information from the right side of each retina goes to the right side of the brain. The information is traveling via the optic nerve. The fovea is the part of the retina that has the highest visual acuity. The lateral geniculate nucleus is the part of the thalamus where initial visual processing takes place. The basal ganglia are a group of nuclei that help coordinate different parts of the brain.
93. (D) In studying for the AP Psychology exam, good advice would be to study from multiple sources. Studying from your class notes, homework, old tests, and review book involves a fairly deep level of processing and will result in more elaborative encoding. Short-term memory only lasts about 20–30 seconds, so it's not a place to store information you're going to need hours later. Even though we hope you find our book helpful, reading any one source over and over again is a relatively shallow form of processing, and you

would do better to study from multiple sources. Since what you need to know for the exam is not a long list of items, the serial position effect would not be particularly helpful. Finally, although minimizing interference is a good goal, you will perform better with a good night's sleep, and research shows that interference during sleep is actually minimal.

94. (D) A lesson from Janis's research on groupthink is that it is important for people to voice dissent. Groupthink occurs when dissent in a group is suppressed in order to preserve harmony, and bad decisions result. Classic examples include the Bay of Pigs fiasco and the Challenger explosion. Unanimity, pressure, and homogeneity are all factors that can promote groupthink. Groupthink can occur in groups of any size.
95. (C) Information from the optic nerve is initially processed in the thalamus, in the lateral geniculate nucleus (LGN). From the thalamus, information is sent to the primary visual cortex in the occipital lobe. The hypothalamus, hippocampus, and cerebellum are not thought to play a large role in the early processing of visual information.
96. (B) Cognitive psychologists would be most likely to support Schachter's two-factor theory of emotion. This theory holds that emotion results from the cognitive appraisal of a general physiological arousal. Social facilitation is the finding that people perform well-learned tasks better in the presence of others. The other three theories listed, while theories of emotion, do not give cognition a prominent role. Cannon-Bard's thalamic theory posits that the thalamus receives information from the environment and simultaneously sends signals to the cortex and autonomic nervous system. The James-Lange theory suggests that every emotion is associated with a unique physiological set of responses that tells us what emotion we feel. The opponent process theory of emotion states that the experience of an emotion triggers is followed by the experience of its opposite.
97. (D) Odette has several classic symptoms of major depressive disorder—loss of appetite, disrupted sleep, and a loss of interest in her usual activities. Although Odette is at an age when many people sadly begin to suffer from Alzheimer's, she is not experiencing the rapid degeneration in memory and cognitive function associated with that disease. Since her problems began about a year ago, they do not seem to be associated with winter, and she is unlikely to be diagnosed with seasonal affective disorder. There is no indication that she is engaging in the binge-purge cycle associated with bulimia nor is there evidence that Odette evinces the major symptom of antisocial personality disorder, a disregard for and carelessness toward others.
98. (C) One cause of the deinstitutionalization of many psychiatric patients in the mid-1900s was the creation of new medications such as antipsychotic drugs. It was hoped that this movement would save the government money and enable people suffering from mental illness to have more freedom. Unfortunately, once released from the institutions, many people did not stay on their medication regimes, and without adequate systems in place to follow up on these people, many became homeless. Even though methods of psychotherapy may have improved, the former patients no longer had access to it. The deinstitutionalization movement was not the result of a belief that we had institutionalized healthy people.
99. (D) The prefrontal cortex of Phineas Gage's brain was damaged by his accident while laying the railroad track. This part of the brain plays a vital role in judgment and decision making, and the damage helps explain how Gage's personality changed from dependable and even-tempered to irascible and irresponsible. The corpus callosum is the band of neurons that links the brain's two hemispheres. The temporal lobes are located on the sides of the head just above the ears and house the auditory cortex. The medulla oblongata sits atop the spinal cord and helps regulate involuntary activities like heart rate. The midbrain is part of the brainstem and contains the reticular formation, which regulates arousal.
100. (D) Approximately 60 percent of participants in Milgram's obedience experiment thought they delivered the maximum amount of shock possible, a figure far in excess of what psychologists had predicted. Remember, no actual shocks were delivered; the "learner" was a confederate of the experimenter trained to act the part.