### Chapter 1: The Science of Psychology

- 1. Psychology is the scientific study of behavior and mental processes.
- 2. Specialty areas within developmental psychology are known as lifespan psychology, child psychology, and adolescent psychology.
- 3. A group of psychologists study the changing needs of assembly-line workers as they age. These psychologists are most likely to be lifespan psychologists.
- 4. A group of psychologists study the differences among individuals in such traits as anxiety, sociability, self-esteem, the need for achievement, and aggressiveness. They are most likely personality psychologists.
- 5. Psychologists who study what causes some people to be more flexible, creative, and better team players when working with others are personality psychologists.
- 6. Before psychology was a formal discipline, it was a branch of the general field of philosophy.
- 7. The first psychology laboratory was opened in 1879.
- 8. Wundt was the first psychologist to analyze dreams.
- 9. A famous psychologist with his theoretical perspective is known as Titchener structuralism.
- 10. One of structuralism's most important proponents was Titchener.
- 11. The idea that consciousness is a continuous flow is central to functionalism.
- 12. William James is noted for founding the functionalist school of psychology.
- 13. The best known of psychology's pioneers is Sigmund Freud.
- 14. The most controversial of psychology's pioneers is Sigmund Freud.
- 15. B. F. Skinner is associated with behaviorism.
- 16. The school of thought that dominated academic psychology in the United States from the 1930s well into the 1960s was behaviorism.
- 17. Gestalt psychologists were most interested in perception.
- 18. Abraham Maslow is most closely associated with humanistic psychology.
- 19. Cognitive psychologists are concerned with the scientific study of mental processes.
- 20. The field of psychology that focuses on subjective well-being, self-determination, the relationship between emotions such as happiness and physical health, and the factors that allow individuals, communities, and societies to flourish, is positive psychology.

# Chapter 2: The Biological Basis of Behavior

- 1. The smallest unit in the nervous system is the neuron.
- 2. The smallest part of the nervous system is a neuron.
- 3. The short fibers which extend from the neuron, allowing it to receive messages from other neurons are dendrites.
- 4. The part of the neuron that carries outgoing messages either to another neuron or to a muscle or gland is the axon.
- 5. Axons in the spinal cord can reach a length of up to 3 feet.
- 6. Each neuron has one axon.
- 7. Neurons typically have one axon and many dendrites.
- 8. A group of axons bundled together is called a nerve.
- 9. There are approximately 100 billion neurons in the brain of an average human being.
- 10. A nerve is a group of axons bundled together.
- 11. Within a neuron, information always flows from dendrite to cell body to axon.
- 12. The white, fatty covering that surrounds some axons is the myelin sheath.
- 13. The term "white matter" refers to myelinated axons.
- 14. The term "gray matter" refers to unmyelinated axons.
- 15. The myelin sheath increases the speed of neural messages.
- 16. Neurons that carry messages from the spinal cord or the brain to the muscles and glands are called motor neurons.
- 17. Neurons that carry messages from one neuron to another are called association neurons.
- 18. Electrically charged particles found both inside and outside the neuron are ions.
- 19. During its resting state, the electrical charge inside the neuron is negative compared to the electrical charge outside the neuron.
- 20. When a neuron is polarized, the electrical charge inside is negative relative to the outside.

### Chapter 3: Sensation, Perception, and Conscious Experience

- 1. Sleep driving is a rare side effect of some prescription sleep medications.
- 2. Sensation is the process of receiving sensory data from the environment and translating it to the brain.
- 3. The components in the sense organs that respond to one type of energy are receptor cells.
- 4. The intensity at which the presence of a stimulus can be detected 50 percent of the time is called the absolute threshold.
- 5. The process by which our senses adjust to varying levels of stimulation to allow them to operate as sensitively as possible without becoming overloaded is called adaptation.
- 6. The difference threshold is defined as the stimulus level at which a change in a sensory signal is detected 50 percent of the time.
- 7. The smallest amount of a change in something's weight that we can detect is about 2 percent.
- 8. Regarding sensitivity to changes in stimuli, we are most sensitive to changes in sound.
- 9. When something occurs below our level of awareness, it is said to occur subliminally.
- 10. In a recent study of the effects of subliminal perception, when volunteers were given a tape labeled "Improve Memory," objective tests detected no measurable change.
- 11. Independent scientific studies have found that outside the laboratory, subliminal messages have no significant effects on behavior.
- 12. Light moves through the eye in the following sequence: cornea, pupil, lens, and retina.
- 13. The retina contains the receptor cells responsible for vision.
- 14. The rods and cones in the retina are receptor cells.
- 15. The idea that the eye contains separate receptors for red, green, and blue is known as the trichromatic theory.
- 16. A dichromat is either red-green or yellow-blue color blind.
- 17. The physical stimuli for the sense of hearing are called sound waves.
- 18. The number of cycles per second in a sound wave is known as its frequency.
- 19. Hue is to vision as pitch is to hearing.
- 20. Decibels are used to measure loudness.

## **Chapter 4: Learning and Memory**

- 1. An epistemic game is one in which the player is immersed in a virtual world.
- 2. Video games simulate operant conditioning.
- 3. Learning is a process by which experience results in relatively permanent behavior change or potential behavior change.
- 4. The process of learning to transfer a response from a natural stimulus to another, previously neutral stimulus, is called classical conditioning.
- 5. A stimulus that invariably causes an organism to respond in a certain way is an unconditioned stimulus.
- 6. Rachel has found that when she opens the cupboard door to get the cat food, the cats come running to the kitchen. Rachel knows that this is classical conditioning and that the unconditioned stimulus is the cat food and the conditioned stimulus is the cupboard door opening.
- 7. One of the best known examples of classical conditioning was the Little Albert study, conducted by Watson.
- 8. Classical conditioning has been demonstrated in virtually every form of animal.
- 9. A kind of therapy closely related to classical conditioning that is designed to gradually reduce anxiety about a particular object or situation is known as desensitization therapy.
- 10. Desensitization therapy is based primarily on the principles of classical conditioning.
- 11. The person most closely associated with the development of desensitization therapy is Joseph Wolpe.
- 12. The process by which some stimuli, such as snakes, serve readily as conditioned stimuli for certain responses, such as fear in humans, is called preparedness.
- 13. The psychologist most closely associated with the concept of preparedness is Seligman.
- 14. An example of a behavior that is learned through operant conditioning is cleaning up your room to get your parents' approval.
- 15. Operant conditioning operates on the principle that behaviors occur more often when they are reinforced.
- 16. Reinforcing successive approximations to a desired behavior is known as shaping.
- 17. A child is scolded for using his fingers instead of his fork to eat some spaghetti. The scolding stops when he picks up his fork. Stopping the scolding is an example of negative reinforcement.
- 18. In higher-order conditioning, we pair a neutral stimulus with a conditioned stimulus.
- 19. Conditioning based on previous learning in which the conditioned stimulus serves as an unconditioned stimulus for further learning is called higher-order conditioning.
- 20. Any event whose presence decreases the likelihood that ongoing behavior will recur is punishment.

# **Chapter 5: Cognition and Mental Abilities**

- 1. Cognition is not a synonym for emotion.
- 2. Language is a unique human ability.
- 3. Morphemes are the smallest meaningful units in a language.
- 4. Semantics describes how we assign meaning to the morphemes we use.
- 5. An image is a mental representation of a sensory experience.
- 6. We do not need to form a new concept for every new experience.
- 7. Most concepts are not simple and clear cut.
- 8. The first step in solving a problem is called problem representation.
- 9. Divergent thinking is necessary for creative problem solving.
- 10. Multiple-choice questions are not best answered by divergent thinking.
- 11. In some cases, the solution to a problem may be as simple as retrieving information from memory.
- 12. Means-end analysis is not very similar to working backward in that it is always forward looking.
- 13. In the absence of full and accurate information, we often make decisions based upon availability.
- 14. The idea that real world functioning is a crucial part of intelligence is central to Sternberg's triarchic theory.
- 15. A person with average intelligence should get an IQ score of about 100.
- 16. The individual intelligence test most given to adults is not the Stanford-Binet test.
- 17. IQ is not the same thing as intelligence.
- 18. People with high IQs do not tend to enter high-status occupations.
- 19. In most cases, the causes of mental retardation are unknown.
- 20. Giftedness does not appear to be caused by early environmental stimulation of the occipital lobes of the cortex.