## Definitions – Myers 6<sup>th</sup> edition

Absolute threshold - the minimum stimulation needed to detect a particular stimulus 50 percent of the time.

accommodation the process by which the eye's lens changes shape to focus the image of near objects on the retina.

accommodation--adapting one's current understandings (schemas) to incorporate new information.

acetylcholine (Ach)--a neurotransmitter that, among its functions, triggers muscle contraction.

achievement motivation a desire for significant accomplishment: for mastery of things, people, or ideas; for attaining a high standard

achievement test a test designed to assess what a person has learned.

acoustic encoding the encoding of sound, especially the sound of words.

acquisition in classical conditioning, the initial stage of learning; the phase associating a neutral stimulus with an unconditioned stimulus so that the neutral stimulus comes to elicit a conditioned response.

action potential--a neural impulse; a brief electrical charge that travels down an axon. The action potential is generated by the movement of positively charged atoms in and out of channels in the axon's membrane.

active listening empathic listening in which the listener echoes, restates, and clarifies. A feature of Rogers' client-centered therapy

acuity the sharpness of vision.

adaptation-level phenomenon our tendency to form judgments (of sounds, of lights, of income) relative to a "neutral" level defined by our prior experience.

adolescence the transition period from childhood to a dulthood, extending from puberty to independence  $\ \,$ 

adrenal glands--a pair of endocrine glands just above the kidneys. The adrenals secrete the hormones epinephrine (adrenaline) and norepinephrine (noradrenaline), which help to arouse the body in times of stress.

aerobic exercise sustained exercise that increases heart and lung fitness; may also alleviate depression and anxiety.

aggression any physical or verbal behavior intended to hurt or destroy.

algorithm a methodical, logical rule or procedure that guarantees solving a particular problem. Contrasts with the usually speedier-but also more error-prone - use of *heuristics*. alpha waves the relatively slow brain waves of a relaxed, awake state.

altruism unselfish regard for the welfare of others.

Alzheimer's disease a progressive and irreversible brain disorder characterized by gradual deterioration of memory, reasoning, language, and, finally, physical functioning. amnesia the loss of memory.

amphetamines drugs that stimulate neural activity, causing speeded-up body functions and associated energy and mood changes.

amygdala--two almond-shaped neural clusters that are components of the limbic system and are linked to emotion.

anorexia nervosa an eating disorder in which a normal weight person (usually an adolescent female) diets and becomes significantly (15 percent or more) underweight yet, still feeling fat, continues to starve.

antisocial personality disorder a personality disorder in which the person (usually a man) exhibits a lack( of conscience for wrongdoing, even toward friends and family members. May be aggressive and ruthless or a clever con artist.

anxiety disorders psychological disorders characterized by distressing, persistent anxiety or maladaptive behaviors that reduce anxiety

aphasia--impairment of language, usually caused by left-hemisphere damage either to Broca's area (impairing speaking) or to Wernicke's area (impairing understanding). applied research--scientific study that aims to solve practical problems.

aptitude test a test designed to predict a person's future performance; *aptitude* is the capacity to learn.

artificial intelligence (Al) the science of designing and programming computer systems to do intelligent things and to simulate human thought processes such as intuitive reasoning, learning, and understanding language. Includes practical applications (chess playing, assimilation--interpreting one's new experience in terms of one's existing schemas. association areas--areas of the cerebral cortex that are not involved in primary motor or sensory functions; rather, they are involved in higher mental functions such as learning, remembering, thinking, and speaking.

associative learning learning that certain events (a response and its consequences in operant conditioning) occur together

associative learning learning that certain events (two stimuli in classical conditioning) occur together.

attachment--an emotional tie with another person; shown in young children by their seeking closeness to the caregiver and showing distress on separation.

attitude a belief and feeling that predisposes one to respond in a particular way to objects, people, and events.

attribution theory the theory that we tend to give a causal explanation for someone's behavior, often by crediting either the situation or the person's disposition. audition the sense of hearing.

automatic processing unconscious encoding of incidental information, such as space, time, and frequency, and of well-learned information, such as word meanings.

autonomic nervous system--the part of the peripheral nervous system that controls the glands and the muscles of the internal organs (such as the heart). Its sympathetic division arouses; its parasympathetic division calms.

availability heuristic estimating the likelihood of events based on their availability in memory; if instances come readily to mind (perhaps because of their vividness), we presume such events are common.

aversive conditioning a type of counter conditioning that associates an unpleasant state (such as nausea) with an unwanted behavior (such as drinking alcohol).

axon--the extension of a neuron, ending in branching terminal fibers, through which messages are sent to other neurons or to muscles or glands.

babbling stage beginning at 3 to 4 months, the stage of speech development in which the infant spontaneously utters various sounds at first unrelated to the household language.

barbiturates drugs that depress the activity of the central nervous system, reducing anxiety but impairing memory and judgment.

basal metabolic rate the body's resting rate of energy expenditure.

basic research--pure science that aims to increase the scientific knowledge base basic trust--according to Erik Erikson, a sense that the world is predictable and trustworthy; said to be formed during infancy by appropriate experiences with responsive caregivers.

behavior genetics--the study of the relative power and limits of genetic and environmental influences on behavior.

behavior therapy that applies learning principles to the elimination of unwanted behaviors.

behavioral medicine an interdisciplinary field that integrates behavioral and medical knowledge and applies that knowledge to health and disease.

behaviorism the view that psychology (1) should be an objective science that (2) studies behavior without reference to mental processes. Most research psychologists today agree with (1) but not with (2).

belief bias the tendency for one's preexisting beliefs to distort logical reasoning, sometimes by making invalid conclusions seem valid, or valid conclusions seem invalid.

belief perseverance clinging to one's initial conceptions after the basis on which they were formed has been discredited.

binocular cues depth cues, such as retinal disparity and convergence, that depend on the use of two eyes.

biofeedback a system for electronically recording, amplifying, and feeding back information regarding a subtle physiological state, such as blood pressure or muscle tension.

biological psychology--a branch of psychology concerned with the links between biology and behavior (Some biological psychologists call themselves *behavioral neuroscientists*, *neuropsychologists behavior geneticists*, *physiological psychologists*, or *biopsychologists*.) biological rhythms periodic physiological fluctuations.

bio-social-medical perspective a contemporary perspective which assumes that biological, psychological, and sociocultural factors combine and interact to produce psychological disorders.

bipolar disorder a mood disorder in which the person alternates between the hopelessness and lethargy of depression and the overexcited state of mania.

blind spot the point at which the optic nerve leaves the eye, creating a "blind" spot because no receptor cells are located there.

bottom-up processing analysis that begins with the sense receptors and works up to the brain's integration of sensory information.

brainstem--the oldest part and central core of the brain, beginning where the spinal cord swells as it enters the skull; the brainstem is responsible for automatic survival functions. Broca's area--an area of the frontal lobe, usually in the left hemisphere, that directs the muscle movements involved in speech.

bulimia nervosa an eating disorder characterized by episodes of overeating, usually of highly caloric foods, followed by vomiting, laxative use, fasting, or excessive exercise burnout physical, emotional, and mental exhaustion brought on by persistent job related stress

bystander effect the tendency for any given bystander to be less likely to give aid if other bystanders are present.

Cannon-Bard theory the theory that an emotion-arousing stimulus simultaneously triggers (i) physiological responses and (2) the subjective experience of emotion.

case study--an observation technique in which one person is studied in depth in the hope of revealing universal principles.

catharsis emotional release In psychology, the catharsis hypothesis maintains that "releasing" aggressive energy (through action or fantasy) relieves aggressive urges. central nervous system (CNS)--the brain and spinal cord.

cerebellum]--the "little brain" attached to the rear of the brainstem; it helps coordinate voluntary movement and balance.

cerebral cortex--the intricate fabric of interconnected neural cells that covers the cerebral hemispheres; the body's ultimate control and information-processing center chromosomes--threadlike structures made of DNA molecules that contain the genes. chunking organizing items into familiar, manageable units; often occurs automatically. circadian rhythm the biological clock; regular bodily rhythms (for example, of temperature and wakefulness) that occur on a 24-hour cycle.

classical conditioning a type of learning in which an organism comes to associate stimuli. A neutral stimulus that signals an unconditioned stimulus (UCS) begins to produce a response that anticipates and prepares for the unconditioned stimulus. (also called *Pavlovian conditioning.*)

client-centered therapy a humanistic therapy developed by Carl Rogers, in which the therapist uses techniques such as active listening within a genuine, accepting, empathic environment to facilitate clients' growth. (Also called *person-centered therapy.)* clinical psychology--a branch of psychology that studies, assesses, and treats people with psychological disorders.

cochlea [KOHK-lee-uh] a coiled, bony, fluid-filled tube in the inner ear through which sound waves trigger nerve impulses.

cognition the mental activities associated with thinking, knowing, and remembering. cognition--all the mental activities associated with thin king, knowing, and remembering. cognitive behavior therapy a popular integrated therapy that combines cognitive therapy (changing self-defeating thinking) with behavior therapy (changing behavior). cognitive map a mental~ representation of the layout of one's environment For example, after exploring a maze, rats act as if they have teamed a cognitive map of it cognitive therapy therapy that teaches people new, more adaptive ways of thinking and acting; based on the assumption that thoughts intervene between events and our emotional reactions.

cognitive-dissonance theory the theory that we act to reduce the discomfort (dissonance) we feel when two of our thoughts (cognitions) are inconsistent, For example, when our awareness of our attitudes and of our actions clash, we can reduce the resulting dissonance by changing our attitudes.

collective Unconscious Carl Jung's concept of a shared, inherited reservoir of memory traces from our species' history

collectivism giving priority to the goals of one's group (often one's extended family or worl( group) and defining one's identity accordingly.

color constancy perceiving familiar objects as having consistent color, even if changing illumination alters the wavelengths reflected by the object.

companionate love the deep affectionate attachment we feel for those with whom our lives are intertwined.

concept a mental grouping of similar objects, events, ideas, or people.

concrete operational stage--in Piaget's theory the stage of cognitive development (from about 6 or 7 to 11 years of age) during which children gain the mental operations that enable them to think logically about concrete events.

conditioned reinforcer (or *secondary* reinforcer) a stimulus that gains its reinforcing power through its association with a primary reinforcer.

conditioned response (CR) in classical conditioning, the learned response to a previously neutral conditioned stimulus (CS).

conditioned stimulus (CS) in classical conditioning, an originally irrelevant stimulus that, after association with an unconditioned stimulus (UCS), comes to trigger a conditioned response.

conduction hearing loss hearing loss caused by damage to the mechanical system that conducts sound waves to the cochlea.

cones receptor cells that are concentrated near the center of the retina and that function in daylight or in well-lit conditions. The cones detect fine detail and give rise to color sensations.

confirmation bias a tendency to search for information that confirms one's preconceptions. conflict a perceived incompatibility of actions, goals, or ideas.

conformity adjusting one's behavior or thinking to coincide with a group standard.

consciousness our awareness of ourselves and our environments

conservation--the principle (which Piaget believed to be a part of concrete operational reasoning) that properties such as mass, volume, and number remain the same despite changes in the forms of objects.

content validity the extent to which a test samples the behavior that is of interest (such as a driving test that samples driving tasks).

continuous reinforcement reinforcing the desired response every time it occurs. control condition--the condition of an experiment that contrasts with the experimental condition and serves as a comparison for evaluating the effect of the treatment. convergence a binocular cue for perceiving depth; the extent to which the eyes converge inward when looking at an object.

coronary heart disease the clogging of the vessels that nourish the heart muscle; the leading cause of death in the United States.

corpus callosum--the large band of neural fibers connecting the two brain hemispheres and carrying messages between them.

correlation coefficient--a statistical measure of the extent to which two factors vary together, and thus of how well either factor predicts the other

counter conditioning a behavior therapy procedure that conditions new responses to stimuli that trigger unwanted behaviors; based on classical conditioning. Includes *systematic desensitization* and *aversive conditioning*.

creativity the ability to produce novel and valuable ideas.

criterion the behavior (such as college grades) that a test (such as the SAT) is designed to predict; thus, the measure used in defining whether the test has predictive validity.

critical period--an optimal period shortly after birth when an organism's exposure to certain stimuli or experiences produces proper development.

critical thinking--thinking that does not blindly accept arguments and conclusions. Rather, it examines assumptions, discerns hidden values, evaluates evidence, and assesses conclusions.

cross-sectional study a study in which people of different ages are compared with one another.

crystallized intelligence one's accumulated knowledge and verbal skills; tends to increase with age

CT (computed tomography)--scan a series of x-ray photographs taken from different angles and combined by computer into a composite representation of a slice through the body. Also called *CATscan*.

culture the enduring behaviors, ideas, attitudes, and traditions shared by a large group of people and transmitted from one generation to the next.

defense mechanism In psychoanalytic theory the ego's protective methods of reducing anxiety by unconsciously distorting reality.

deindividuation the loss of self-awareness and self-restraint occurring in group situations that foster arousal and anonymity.

deja vu that eerie sense that "1've experienced this before." Cues from the current situation may subconsciously trigger retrieval of an earlier experience.

delta waves the large, slow brain waves associated with deep sleep.

delusions false beliefs, often of persecution or grandeur, that may accompany psychotic disorders.

dendrite--the bushy, branching extensions of a neuron that receive messages and conduct impulses toward the cell body.

dependent variable--the experimental factor-in psychology, the behavior or mental process-that is being measured; the variable that may change in response to manipulations of the independent variable.

depressants drugs (such as alcohol, barbiturates, and opiates) that reduce neural activity and slow body functions.

depth perception the ability to see objects in three dimensions although the images that strike the retina are two-dimensional; allows us to judge distance.

developmental psychology a branch of psychology that studies physical, cognitive, and social change throughout the life span.

difference threshold the minimum difference that a person can detect between two stimuli. We experience the difference threshold as a just noticeable difference.

discrimination in classical conditioning, the learned ability to distinguish between a conditioned stimulus and other stimuli that do not signal an unconditioned stimulus. displacement defense mechanism that shifts sexual or aggressive impulses toward a more acceptable or less threatening object or person, as when redirecting anger toward a safer outlet.

dissociation a split in consciousness, which allows some thoughts and behaviors to occur simultaneously with others.

dissociative disorders disorders in which conscious awareness becomes separated (dissociated) from previous memories, thoughts, and feelings.

dissociative identity disorder a rare dissociative disorder in which a person exhibits two or more distinct and alternating personalities. Also called *multiple personality disorder*.

DNA (deoxyribonucleic acid)--a complex molecule containing the genetic information that makes up the chromosomes. (A DNA molecule has two strands-forming a "double helix"-held together by bonds between pairs of neucleotides.

double-blind--procedure an experimental procedure in which both the research participants and the research staff are ignorant (blind) about whether the research participants have received the treatment or a placebo. Commonly used in drug-evaluation studies.

Down syndrome a condition of retardation and associated physical disorders caused by an extra chromosome in one's genetic makeup.

dream a sequence of images, emotions, and thoughts passing through a sleeping person's mind. Dreams are notable for their hallucinatory imagery, discontinuities, and incongruities, and for the dreamer's delusional acceptance of the content and later difficulties remembering it.

drive-reduction theory the idea that a physiological need creates an aroused tension state (a drive) that motivates an organism to satisfy the need.

DSM-IV the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (Fourth *Edition*), a widely used system for classifying psychological disorders. dualism the presumption that mind and body are two distinct entities that interact. echoic memory momentary sensory memory of auditory stimuli; if attention is elsewhere, sounds and words can still be recalled within 3 or 4 seconds.

eclectic approach an approach to psychotherapy that, depending on the client's problems, uses techniques from various forms of therapy.

effortful processing encoding that requires attention and conscious effort.

ego the largely conscious, "executive" part of personality that, according to Freud, mediates among the demands of the id, superego, and reality. The ego operates on the *reality principle*, satisfying the id's desires in ways that will realistically bring pleasure rather than pain.

egocentrism--in Piaget's theory the inability of the preoperational child to take another's point of view.

electroencephalogram (EEG)--an amplified recording of the waves of electrical activity that sweep across the brain's surface. These waves are measured by electrodes placed on the scalp.

embryo the developing human organism from about 2 weeks after fertilization through the second month.

emotion a response of the whole organism, involving (1) physiological arousal, (2) expressive behaviors, and (3) conscious experience.

emotional intelligence the ability to perceive, express, understand, and regulate emotions. empirically derived test a test (such as the MM P1) developed by testing a pool of items and then selecting those that discriminate between groups.

encoding the processing of information into the memory system-for example, by extracting meaning.

endocrine system--the body's "slow" chemical communication system; a set of glands that secrete hormones into the bloodstream.

endorphins--natural, opiate like neurotransmitters linked to pain control and to pleasure.

environment--every nongenetic influence, from prenatal nutrition to the people and things around us.

equity a condition in which people receive from a relationship in proportion to what they give to it.

estrogen a sex hormone, secreted in greater amounts by females than by males. In nonhuman female mammals, estrogen levels peak during ovulation, promoting sexual receptivity.

etectroconvulsive therapy (ECT) a biomedical therapy for severely depressed patients in which a brief electric current is sent through the brain of an anesthetized patient. evolutionary psychology--the study of the evolution of behavior and the mind, using principles of natural selection Natural selection is presumed to have favored genes that predisposed behavior tendencies and information processing systems that solved adaptive problems faced by our ancestors, thus contributing to the survival and spread of their genes.

experiment--a research method in which an investigator manipulates one or more factors (independent variables) to observe the effect on some behavior or mental process (the dependent variable). By random assignment of participants the experimenter controls other relevant factors.

experimental condition--the condition of an experiment that exposes participants to the treatment, that is, to one version of the independent variable.

explicit memory memory of facts and experiences that one can consciously know and "declare." (Also called *declarative memory*.)

external locus of control the perception that chance or outside forces beyond one's personal control determine one's fate.

extinction the diminishing of a conditioned response; in classical conditioning this occurs when an unconditioned stimulus (UCS) does not follow a conditioned stimulus (CS).

Extrasensory perception ESP the controversial claim that perception can occur apart from sensory input. Said to include *telepathy*, *clairvoyance*, and *precognition*.

extrinsic motivation a desire to perform a behavior due to promised rewards or threats of punishment.

factor analysis a statistical procedure that identifies clusters of related items (called *factors*) on a test; used to identify different dimensions of performance that underlie one's total score.

false consensus effect--the tendency to overestimate the extent to which others share our beliefs and behaviors.

family therapy therapy that treats the family as a system. Views an individual's unwanted behaviors as influenced by or directed at other family members; attempts to guide family members toward positive relationships and improved communication.

fantasy-prone personality someone who imagines and recalls experiences with lifelike vividness and who spends considerable time fantasizing.

farsightedness a condition in which faraway objects are seen more clearly than near objects because the image of near objects is focused behind the retina.

feature detectors nerve cells in the brain that respond to specific features of the stimulus, such as shape, angle, or movement

feel-good, do-good phenomenon people's tendency to be helpful when already in a good mood.

fetal alcohol syndrome (FAS) physical and cognitive abnormalities in children caused by a pregnant woman's heavy drinking In severe cases, symptoms include noticeable facial misproportions.

fetus the developing human organism from 9 weeks after conception to birth.

figure-ground the organization of the visual field into objects (the *figures*) that stand out from their surroundings (the *ground*).

fixation according to Freud, a lingering focus of pleasure-seeking energies at an earlier psychosexual stage, where conflicts were unresolved.

fixation the inability to see a problem from a new perspective; an impediment to problem solving.

fixed-interval schedule in operant conditioning, a schedule of reinforcement that reinforces a response only after a specified time has elapsed.

fixed-ratio schedule in operant conditioning, a schedule of reinforcement that reinforces a response only after a specified number of responses.

flashbulb memory a clear memory of an emotionally significant moment or event. fluid intelligence one's ability to reason speedily and abstractly; tends to decrease during late adulthood

foot-in-the-door phenomenon the tendency for people who have first agreed to a small request to comply later with a larger request.

formal operational stage--in Piaget's theory the stage of cognitive development (normally beginning about age 12 during which people begin to think logically about abstract concepts.

fovea the central focal point in the retina, around which the eye's cones cluster framing the way an issue is posed; how an issue is framed can significant~ affect decisions and judgments

fraternal twins--twins who develop from separate eggs. They are genetically no closer than brothers and sisters, but they share a fetal environment.

free association in psychoanalysis, a method of exploring the unconscious in which the person relaxes and says whatever comes to mind, no matter how trivial or embarrassing. frequency the number of complete wavelengths that pass a point in a given time (for example, per second).

frequency theory in hearing, the theory that the rate of nerve impulses traveling up the auditory nerve matches the frequency of a tone, thus enabling us to sense its pitch.

frontal lobes--the portion of the cerebral cortex lying just behind the forehead; involved in speaking and muscle movements and in making plans and judgments.

frustration-aggression principle the principle that frustration--the blocking of an attempt to achieve some goal creates anger, which can generate aggression.

functional fixedness the tendency to think of things only in terms of their usual functions; an impediment to problem solving.

fundamental attribution error the tendency for observers, when analyzing another's behavior, to underestimate the impact of the situation and to overestimate the impact of personal disposition.

gate-control theory that the spinal cord contains a neurological "gate" that blocks pain signals or allows them to pass on to the brain The "gate" is opened by the activity of pain signals traveling up small nerve fibers and is closed by activity in larger fibers or by information coming from the brain.

gender identity--one's sense of being male or female.

gender role--a set of expected behaviors for males and for females.

gender schema theory--the theory that children learn from their cultures a concept of what it means to be male and female and that they adjust their behavior accordingly.

gender--in psychology, the characteristics, whether biologically or socially influenced, by which people define male and female

gender-typing--the acquisition of a traditional masculine or feminine role.

general adaptation syndrome (GAS) Selye's concept of the body's adaptive response to stress in three stages-alarm, resistance, exhaustion.

general intelligence (g) a general intelligence factor that Spearman and others believed underlies specific mental abilities and is therefore measured by every task on an intelligence test.

generalization the tendency, once a response has been conditioned, for stimuli similar to the conditioned stimulus to elicit similar responses.

generalized anxiety disorder an anxiety disorder in which a person is continually tense, apprehensive, and in a state of autonomic nervous system arousal.

genes--the biochemical units of heredity that make up the chromosomes; a segment of DNA capable of synthesizing a protein.

genome--the complete instructions for making an organism, consisting of all the genetic material in its chromosomes. The human genome has 3 billion weakly bonded pairs of nucleotides organized as coiled chains of DNA.

gestalt an organized whole. Gestalt psychologists emphasize our tendency to integrate pieces of information into meaningful wholes.

glial cells--cells in the nervous system that are not neurons but that support, nourish, and protect neurons.

glucose the form of sugar that circulates in the blood and provides the major source of energy for body tissues When its level is low, we feel hunger

grammar a system of rules in a language that enables us to communicate with and understand others.

GRIT Graduated and Reciprocated Initiatives in Tension Reduction - a strategy designed to decrease international tensions.

group polarization the enhancement of a group's prevailing attitudes through discussion within the group.

grouping the perceptual tendency to organize stimuli into coherent groups.

groupthink the mode of thinking that occurs when the desire for harmony in a decision-making group overrides a realistic appraisal of alternatives.

habituation--decreasing responsiveness with repeated stimulation. As infants gain familiarity with repeated exposure to a visual stimulus, their interest wanes and they look away sooner.

hallucinations false sensory experiences, such as seeing something in the absence of an external visual stimulus.

hallucinogens psychedelic ("mindmanifesting") drugs, such as LSD, that distort perceptions and evoke sensory images in the absence of sensory input.

health psychology a sub field of psychology that provides psychology's contribution to behavioral medicine.

heritability--the proportion of variation among individuals that we can attribute to genes. The heritability of a trait may vary depending on the range of populations and environments studied.

heuristic a rule-of-thumb strategy that often allows us to make judgments and solve problems efficiently; usually speedier but also more error-prone than *algorithms*. hidden observer Hilgard's term describing a hypnotized subject's awareness of experiences, such as pa that go unreported during hypnosis

hierarchy of needs Maslow's pyramid of human needs, beginning at the base with physiological needs that must first be satisfied before higher-level safety needs and then psychological needs become active.

hindsight bias--the tendency to believe, after learning an outcome, that one would have foreseen it (also known as the *I knew-it-all-along phenomenon*).

hippocampus a neural center located in the limbic system that helps process explicit memories for storage

homeostasis a tendency to maintain a balanced or constant internal state; the regulation of any aspect of body chemistry, such as blood glucose, around a particular level.

hormones--chemical messengers, mostly those manufactured by the endocrine glands, that are produced in one tissue and affect another.

hue the dimension of color that is determined by the wavelength of light; what we know as the color names *blue, green,* and so forth.

hypnosis a social interaction in which one person (the hypnotist) suggests to another (the subject) that certain perceptions, feelings, thoughts, or behaviors will spontaneously occur hypothalamus--neural structure lying below (hypo) the thalamus; it directs several maintenance activities (eating, drinking, body temperature), helps govern the endocrine system via the pituitary gland, and is linked to emotion.

hypothesis--a testable prediction, often implied by a theory.

iconic memory a momentary sensory memory of visual stimuli; a photographic or picture-image memory tasting no more than a few tenths of a second.

id contains a reservoir of unconscious psychic energy that, according to Freud, strives to satisfy basic sexual and aggressive drives. The id operates on the pleasure principle, demanding immediate gratification.

identical twins--twins who develop from a single fertilized egg that splits in two, creating two genetically identical organisms.

identification the process by which, according to Freud, children incorporate their parents' values into their developing superegos.

identity one's sense of self; according to Erikson, the adolescent's task is to solidify a sense of self by testing and integrating various roles.

illusory correlation--the perception of a relationship where none exists.

imagery mental pictures; a powerful aid to effortful processing, especially when combined with semantic encoding.

implicit memory retention without conscious recollection (of skills and dispositions). (Also called *procedural memory.*)

imprinting--the process by which certain animals form attachments during a critical period very early in life.

incentive a positive or negative environmental stimulus that motivates behavior

independent Variable--the experimental factor that is manipulated; the variable whose effect is being studied.

individualism giving priority to one's own goals over group goals, and defining one's identity in terms of personal attributes rather than group identifications.

industrial robots, expert systems) and efforts to model human thinking inspired by our current understanding of how the brain works.

industrial/organizational psychology a sub field of psychology that studies and advises on workplace behavior Industrial/organizational (I/O) psychologists help organizations select and train employees, boost morale and productivity, and design products and assess responses to them.

informational social influence inftuence resulting from one's willingness to accept others' opinions about reality.

ingroup "us" -people with whom one shares a common identity.

ingroup bias the tendency to favor one's own group.

inner ear the innermost part of the ear, containing the cochlea, semicircular canals, and vestibular sacs.

insight a sudden and often novel realization of the solution to a problem; it contrasts with strategy-based solutions.

insomnia recurring problems in fatling or staying asleep.

instinct a complex behavior that is rigidly patterned throughout a species and is unlearned. intelligence mental quality consisting of the ability to learn from experience, solve problems, and use knowledge to adapt to new situations.

intelligence quotient (IQ) defined originally as the ratio of mental age (ma) to chronological age (ca) multiplied by 100 [thus, IQ (ma/ca) < 100] On contemporary intelligence tests, the average performance for a given age is assigned a score of 100.

intelligence test a method for assessing an individual's mental aptitudes and comparing them with those of others, using numerical scores.

intensity the amount of energy in a light or sound wave, which we perceive as brightness or loudness, as determined by the wave's amplitude.

interaction--the effect of one factor (such as environment) depends on another factor (such as heredity).

internal locus of control the perception that one controls one's own fate.

interneurons--central nervous system neurons that internally communicate and intervene between the sensory inputs and motor outputs.

interpretation in psychoanalysis, the analyst's noting supposed dream meanings, resistances, and other significant behaviors in order to promote insight.

intimacy in Erikson's theory, the ability to form close, loving relationships; a primary developmental task in late adolescence and early adulthood.

intrinsic motivation a desire to perform a behavior for its own sake and to be effective. iris a ring of muscle tissue that forms the colored portion of the eye around the pupil and controls the size of the pupil opening.

James-Lange theory the theory that our experience of emotion is our awareness of our physiological responses to emotion-arousing stimuli.

just-world phenomenon the tendency of people to believe the world is just and that people therefore get what they deserve and deserve what they get.

kinesthesis the system for sensing the position and movement of individual body parts.

language our spoken, written, or gestured words and the ways we combine them to communicate meaning.

latent content according to Freud, the underlying meaning of a dream (as distinct from its manifest content). Freud believed that a dream's latent content functions as a safety valve. latent learning learning that occurs but is not apparent until there is an incentive to demonstrate it.

law of effect Thorndike's principle that behaviors followed by favorable consequences become more likely and that behaviors followed by unfavorable consequences become less likely.

learned helplessness the hopelessness and passive resignation an animal or human learns when unable to avoid repeated aversive events.

learning a relatively permanent change in an organism's behavior due to experience. learning a relatively permanent change in an organism's behavior due to experience. learning a relatively permanent change in an organism's behavior due to experience. lens the transparent structure behind the pupil that changes shape to focus images on the retina.

lesion--tissue destruction. A brain lesion is a naturally or experimentally caused destruction of brain tissue.

limbic system--a doughnut-shaped system of neural structures at the border of the brainstem and cerebral hemispheres; associated with emotions such as fear and aggression and drives such as those for food and sex. Includes the hippocampus, amygdala, and hypothalamus.

linguistic relativity Whorf's hypothesis that language determines the way we think. Lithium a chemical that provides an effective drug therapy for the mood swings of bipolar (manic-depressive) disorders.

Lobotomy a now-rare psychosurgical procedure once used to calm uncontrollably emotional or violent patients. The procedure cut the nerves that connect the frontal lobes to the emotion-controlling centers of the inner brain.

longitudinal study research in which the same people are restudied and retested over a long period.

long-term potentiation (LTP) an increase in a synapse's firing potential after brief, rapid stimulation. Believed to be a neural basis for learning and memory

LSD a powerful hallucinogenic drug; also known as *acid* (*lysergic acid diethylamide*). lymphocytes the two types of white blood cells that are part of the body's immune system: B *lymphocytes* form in the bone marrow and release antibodies that fight bacterial infections; *T lymphocytes* form in the thymus and, among other duties, attack cancer cells, viruses, and foreign substances.

major depressive disorder a mood disorder in which a person, for no apparent reason, experiences two or more weeks of depressed moods, feelings of worthlessness, and diminished interest or pleasure in most activities.

manic episode a mood disorder marked by a hyperactive, wildly optimistic state. manifest content according to Freud, the remembered story line of a dream (as distinct from its latent content).

maturation--biological growth processes that enable orderly changes in behavior, relatively uninfluenced by experience

mean--the arithmetic average of a distribution, obtained by adding the scores and then dividing by the number of scores.

median--the middle score in a distribution; half the scores are above it and half are below it.

medical model the concept that diseases have physical causes that can be diagnosed, treated, and, in most cases, cured. When applied to psychological disorders, the medical model assumes that these "mental" illnesses can be diagnosed on the basis of their symptoms and cured through therapy, which may include treatment in a psychiatric hospital.

medulla--the base of the brainstem; controls heartbeat and breathing.

memes self replicating ideas, fashions, and innovations passed from person to person menarche the first menstrual period.

menopause the time of natural cessation of menstruation; also refers to the biological changes a woman experiences as her ability to reproduce declines

mental age a measure of intelligence test performance devised by Binet; the chronological age that most typically corresponds to a given level of performance. Thus, a child who does as welt as the average 8-year-old is said to have a mental age of 8.

mental retardation a condition of limited mental ability, indicated by an intelligence score below 70 and difficulty in adapting to the demands of life; varies from mild to profound. mental set a tendency to approach a problem in a particular way, especially a way that has been successful in the past but may or may not be helpful in solving a new problem. mere exposure effect the phenomenon that repeated exposure to novel stimuli increases liking of them.

meta-analysis a procedure for statistically combining the results of many different research studies.

middle ear the chamber between the eardrum and cochlea containing three tiny bones (hammer, anvil, and stirrup) that concentrate the vibrations of the eardrum on the cochlea's oval window.

Minnesota Multiphasic Personality Inventory (MMPI) the most widely researched and clinically used of all personality tests. Originally developed to identify emotional disorders (still considered its most appropriate use), this test is now used for many other screening purposes.

misinformation effect incorporating misleading information into ones memory of an event mnemonics memory aids, especially those techniques that use vivid imagery and organizational devices.

modeling the process of observing and imitating a specific behavior.

mode--the most frequently occurring score in a distribution.

molecular genetics--the subfield of biology that studies the molecular structure and function of genes.

monism the presumption that mind and body are different aspects of the same thing. monocular cues distance cues, such as linear perspective and overlap, available to either eye alone.

mood disorders psychological disorders~ characterized by emotional extremes See *major depressive disorder; manic episode,* and *bipolar disorder* 

mood-congruent memory the tendency to recall experiences that are consistent with one's current good or bad mood.

morpheme in a language, the smallest unit that carries meaning; may be a word ora part of a word (such as a prefix).

motivation a need or desire that energizes and directs behavior

motor cortex--an area at the rear of the frontal lobes that controls voluntary movements. motor neurons--the neurons that carry outgoing information from the central nervous system to the muscles and glands.

MRI (magnetic resonance imaging)--a technique that uses magnetic fields and radio waves to produce computer generated images that distinguish among different types of soft tissue; allows us to see structures within the brain.

mutations--random errors in gene replication that lead to a change in the sequence of *nucleotides;* the source of all genetic diversity.

myelin sheath--a layer of fatty tissue segmentally encasing the fibers of many neurons; enables vastly greater transmission speed of neural impulses as the impulse hops from one node to the next.

narcolepsy a sleep disorder characterized by uncontrollable sleep attacks. The sufferer may lapse directly into REM sleep, often at inopportune times.

natural selection--the principle that, among the range of inherited trait variations, those contributing to reproduction and survival will most likely be passed on to succeeding generations.

natural selection--the principle that, among the range of inherited trait variations, those contributing to reproduction and survival will most likely be passed on to succeeding generations.

naturalistic observation--observing and recording behavior in naturally occurring situations without trying to manipulate and control the situation.

nature-nurture--issue the long standing controversy over the relative contributions that genes and experience make to the development of psychological traits and behaviors. near-death experience an altered state of consciousness reported after a close brush with death (such as through cardiac arrest); often similar to drug-induced hallucinations. nearsightedness a condition in which nearby objects are seen more clearly than distant objects because the lens focuses the image of distant objects in front of the retina. nerves--neural "cables" containing many axons. These bundled axons, which are part of the peripheral nervous system, connect the central nervous system with muscles, glands, and sense organs.

nervous system--the body's speedy, electrochemical communication system, consisting of all the nerve cells of the peripheral and central nervous systems.

neural networks--interconnected neural cells. With experience, networks can learn, as feedback strengthens or inhibits connections that produce certain results. Computer simulations of neural networks show analogous learning.

neuron--a nerve cell; the basic building block of the nervous system.

neurotic disorder a psychological disorder that is usually distressing but that allows one to think rationally and function socially. Freud saw the neurotic disorders as ways of dealing with anxiety.

neurotransmitters--chemical messengers that traverse the synaptic gaps between neurons. When released by the sending neuron, neurotransmitters travel across the synapse and bind to receptor sites on the receiving neuron, thereby influencing whether it will generate a neural impulse.

night terrors a sleep disorder characterized by high arousal and an appearance of being terrified; unlike nightmares, night terrors occur during Stage 4 sleep, within 2 or 3 hours of falling asleep, and are seldom remembered.

normal curve the symmetrical bell-shaped curve that describes the distribution of many physical and psychological attributes. Most scores fall near the average, and fewer and fewer scores lie near the extremes.

norm--an understood rule for accepted and expected behavior. Norms prescribe "proper" behavior.

normative social influence- influence resulting from a person's desire to gain approval or avoid disapproval.

object permanence--the awareness that things continue to exist even when not perceived. observational learning [earning by observing others.

obsessive-compulsive disorder an anxiety disorder characterized by unwanted repetitive thoughts (obsessions) and/or actions (compulsions).

occipital lobes--the portion of the cerebral cortex lying at the back of the head; includes the visual areas, which receive visual information from the opposite visual field.

Oedipus (ED-uh-puss) complex according to Freud, a boy's sexual desires toward his mother and feelings of jealousy and hatred for the rival father.

one-word stage the stage in speech development, from about age 1 to 2, during which a child speaks mostly in single words.

operant behavior- behavior that operates on the environment, producing consequences. operant chamber ("Skinner box") a chamber containing a bar or key that an animal can manipulate to obtain a food or water reinforcer, with attached devices to record the animal's rate of bar pressing or key pecking. Used in operant conditioning research. operant conditioning a type of learning in which behavior is strengthened if followed by reinforcement or diminished if followed by punishment

operational definition--a statement of the procedures (operations) used to define research variables. For example, *intelligence* may be operationally defined as what an intelligence test measures.

opiates opium and its derivatives, such as morphine and heroin; they depress neural activity, temporarily lessening pain and anxiety.

opponent-process theory- the theory that opposing retinal processes (red-green, yellow-blue, white-black) enable color vision. For example, some cells are stimulated by green and inhibited by red; others are stimulated by red and inhibited by green.

optic nerve the nerve that carries neural impulses from the eye to the brain.

outgroup "them" -those perceived as different or apart from one's ingroup.

overconfidence the tendency to be more confident than correct-to overestimate the accuracy of one's beliefs and judgments

over-justification effect the effect of promising a reward for doing what one already likes to do. The person may now see the reward, rather than intrinsic interest, as the motivation for performing the task.

panic disorder an anxiety disorder marked by a minutes-long episode of intense dread in which a person experiences terror and accompanying chest pain, choking, or other frightening sensations.

parallel processing the processing of several aspects of a problem simultaneously; the brain's natural mode of information processing for many functions, including vision.

Contrasts with the step-by-step (serial) processing of most computers and of conscious problem solving.

parapsychology the study of paranormal phenomena, including ESP and psychokinesis. parasympathetic nervous system--the division of the autonomic nervous system that calms the body conserving its energy

parietal lobes--the portion of the cerebral cortex lying at the top of the head and toward the rear; includes the sensory cortex.

partial (intermittent) reinforcement reinforcing a response only part of the time; results in slower acquisition of a response but much greater resistance to extinction than does continuous reinforcement,

passionate love an aroused state of intense positive absorption in another, usually present at the beginning of a love relationship.

perception the process of organizing and interpreting sensory information, enabling us to recognize meaningful objects and events.

perceptual adaptation in vision, the ability to adjust to an artificially displaced or even inverted visual field.

perceptual constancy perceiving objects as unchanging (having consistent lightness, color, shape, and size) even as illumination and retinal images change.

perceptual set a mental predisposition to perceive one thing and not another

peripheral nervous system (PNS)--the sensory and motor neurons that connect the central nervous system (CN S) to the rest of the body.

personal control our sense of controlling our environment rather than feeling helpless. personal space--the buffer zone we like to maintain around our bodies.

personality an Individual's characteristic pattern of thinking, feeling, and acting. personality disorders psychological disorders characterized by inflexible and enduring behavior patterns that impair social functioning.

personality inventory a questionnaire (often with true-false or agree-disagree items) on which people respond to items designed to gauge a wide range of feelings and behaviors; used to assess selected personality traits.

PET (positron emission tomography)--scan a visual display of brain activity that detects where a radioactive form of glucose goes while the brain performs a given task.

phi phenomenon an Illusion of movement created when two or more adjacent lights blink on and off in succession.

phobia an anxiety disorder marked by a persistent, irrational fear and avoidance of a specific object or situation.

phoneme in **a** spoken language, the smallest distinctive sound unit.

physical dependence a physiological need for a drug, marked by unpleasant withdrawal symptoms when the drug is discontinued.

pitch a tone's highness or lowness; depends on frequency.

pituitary gland--the endocrine system's most influential gland. Under the influence of the hypothalamus, the pituitary regulates growth and controls other endocrine glands. place theory in hearing, the theory that links the pitch we hear with the place where the cochlea's membrane is stimulated.

placebo effect--any effect on behavior caused by a placebo.

placebo--an inert substance or condition that may be administered instead of a presumed active agent, such as a drug, to see if it triggers the effects believed to characterize the active agent.

plasticity--the brain's capacity for modification, as evident in brain reorganization following damage (especially in children) and in experiments on the effects of experience on brain development.

polygraph a machine, commonly used in attempts to detect lies, that measures several of the physiological responses accompanying emotion (such as perspiration, heart rate, blood pressure, and breathing changes).

population--all the cases in a group, from which samples may be drawn for a study. positive psychology the scientific study of optimal human functioning; aims to discover and promote conditions that enable individuals and communities to thrive.

posthypnotic amnesia supposed inability to recall what one experienced during hypnosis; induced by the hypnotist's suggestion.

posthypnotic suggestion a suggestion, made during a hypnosis session, to be carried out after the subject is no longer hypnotized; used by some clinicians to help control undesired symptoms and behaviors.

preconscious information that is not conscious but is retrievable into conscious awareness. predictive validity the success with which a test predicts the behavior it is designed to predict; it is assessed by computing the correlation between test scores and the criterion behavior (also called *criterion-related validity.*)

prejudice an unjustifiable (and usually negative) attitude toward a group and its members. Prejudice generally involves stereotyped beliefs, negative feelings, and a predisposition to discriminatory action.

preoperational stage--in Piaget's theory, the stage (from about **2** to 6 or 7 years of age) during which a child learns to use language but does not yet comprehend the mental operations of concrete logic.

primary reinforcer an innately reinforcing stimulus, such as one that satisfies a biological need.

primary sex characteristics the body structures (ovaries, testes, and external genitalia) that make sexual reproduction possible.

priming the activation, often unconsciously of particular associations in memory. proactive interference the disruptive effect of prior  $\sim$ earning on the recall of new information

projection defense mechanism by which people disguise their own threatening impulses by attributing them to others.

projective test a personality test, such as the Rorschach or TAT, that provides ambiguous stimuli designed to trigger projection of one's inner dynamics.

prosocial behavior positive, constructive, helpfu1 behavior The opposite of antisocial behavior

prototype a mental image or best example of a category. Matching new items to the prototype provides a quick and easy method for including items in a category (as when comparing feathered creatures to a prototypical bird, such as a robin).

psychiatry--a branch of medicine dealing with psychological disorders; practiced by physicians who sometimes provide medical (for example, drug) treatments as well as psychological therapy.

psychoactive drug a chemical substance that alters perceptions and mood psychoanalysis Freud's theory of personality that attributes our thoughts and actions to unconscious motives and conflicts; the techniques used in treating psychological disorders by seeking to expose and interpret unconscious tensions.

psychoanalysis Sigmund Freud's therapeutic technique. Freud believed the patient's free associations, resistances, dreams, and transferences-and the therapist's interpretations of them - released previously repressed feelings, allowing the patient to gain self insight. psychological dependence a psychological need to use a drug, such as to relieve negative emotions.

psychological disorder a "harmful dysfunction" in which behavior is judged to be atypical, disturbing, maladaptive, and unjustifiable.

psychology-- the science of behavior and mental processes

psychopharmacology the study of the effects of drugs on mind and behavior psychophysics the study of relationships between the physical characteristics of stimuli, such as their intensity, and our psychological experience of them.

psychophysiological illness literally, "mind-body" illness; any stress-related physical illness, such as hypertension and some headaches. Note: This is distinct from *hypochondriasis*-misinterpreting normal physical sensations as symptoms of a disease. psychosexual stages the childhood stages of development (oral, anal, phallic, latency, genital) during which, according to Freud, the id's pleasure-seeking energies focus on distinct erogenous zones.

psychosurgery surgery that removes or destroys brain tissue in an effort to change behavior.

psychotherapy an emotionally charged, confiding interaction between a trained therapist and someone who suffers from psychological difficulties.

psychotic disorder a psychological disorder in which a person loses contact with reality, experiencing irrational ideas and distorted perceptions.

puberty the period of sexual maturation, during which a person becomes capable of reproducing.

punishment an event that *decreases* the behavior that it follows.

pupil the adjustable opening in the center of the eye through which light enters. random assignment--assigning participants to experimental and control conditions by chance, thus minimizing preexisting differences between those assigned to the different

random sample--a sample that fairly represents a population because each member has an equal chance of inclusion.

range--the difference between the highest and lowest scores in a distribution.

rationalization defense mechanism that offers self-justifying explanations in place of the real, more threatening, unconscious reasons for one's actions.

reaction formation defense mechanism by which the ego unconsciously switches unacceptable impulses into their opposites. Thus, people may express feelings that are the opposite of their anxiety-arousing unconscious feelings.

recall a measure of memory in which the person must retrieve information learned earlier, as on a fill-in-the-blank test.

reciprocal determinism the Interacting influences between personality and environmental factors.

recognition a measure of memory in which the person need only identify items previously learned, as on a multiple-choice test.

reflex--a simple, automatic, inborn response to a sensory stimulus, such as the knee-jerk response.

refractory period a resting period after orgasm, during which a man cannot achieve another orgasm.

regression defense mechanism in which an individual faced with anxiety retreats to a more infantile psychosexual stage, where some psychic energy remains fixated.

regression toward the mean the tendency for extremes of unusual scores to fall back (regress) toward the average

rehearsal the conscious repetition of information, either to maintain it in consciousness or to encode it for storage.

reinforcer in operant conditioning, any event that *strengthens* the behavior it follows. relative deprivation the perception that one is worse off relative to those with whom one compares oneself.

relearning a memory measure that assesses the amount of time saved when learning material for a second time.

reliability the extent to which a test yields consistent results, as assessed by the consistency of scores on two halves of the test, on alternate forms of the test, or on retesting.

REM rebound the tendency for REM sleep to increase following REM sleep deprivation (created by repeated awakenings during REM sleep).

REM sleep rapid eye movement sleep, a recurring steep stage during which vivid dreams commonly occur. Also known as *paradoxical sleep* because the muscles are relaxed (except for minor twitches) but other body systems are active.

replication--repeating the essence of a research study, usually with different participants in different situations, to see whether the basic finding generalizes to other participants and circumstances.

representativeness heuristic a rule of thumb for judging the likelihood of things in terms of how well they seem to represent, or match, particular prototypes; may lead one to ignore other relevant information.

repression in psychoanalytic theory the basic defense mechanism that banishes anxiety-arousing thoughts, feelings, and memories from consciousness.

repression in psychoanalytic theory, the basic defense mechanism that banishes anxiety-arousing thoughts, feelings, and memories from consciousness.

resistance in psychoanalysis, the blocking from consciousness of anxiety laden material. respondent behavior behavior that occurs as an automatic response to some stimulus; Skinner's term for behavior learned through classical conditioning

reticular formation--a nerve network in the brainstem that plays an important role in controlling arousal.

retina the light-sensitive inner surface of the eye, containing the receptor rods and cones plus layers of neurons that begin the processing of visual information.

retinal disparity a binocular cue for perceiving depth: The greater the disparity (difference) between the two images the retina receives of an object, the closer the object is to the viewer.

retrieval the process of getting information out of memory storage.

retroactive interference the disruptive effect of new learning on the recall of old information.

rods retinal receptors that detect black, white, and gray; necessary for peripheral and twilight vision, when cones don't respond.

role--a set of expectations (norms) about a social position, defining how those in the position ought to behave.

rooting reflex a baby's tendency when touched on the cheek, to open the mouth and search for the nipple.

Rorschach inkblot test the most widely used projective test, a set of 10 inkblots, designed by Hermann Rorschach; seeks to identify people's inner feelings by analyzing their interpretations of the blots.

savant syndrome a condition in which a person otherwise limited in mental ability has an exceptional specific skill, such as in computation or drawing.

scapegoat theory the theory that prejudice provides an outlet for anger by providing someone to blame.

scatter plot--a graphed cluster of dots, each of which represents the values of two variables.

The slope of the points suggests the direction of the relationship between the two variables. The amount of scatter suggests the strength of the correlation (little scatter indicates high correlation). (Also called a *scattergram* or *scatter diagram*).

schema--a concept or framework that organizes and interprets information

schizophrenia a group of seven disorders characterized by disorganized and delusional thinking, disturbed perceptions, and inappropriate emotions and actions.

secondary sex characteristics nonreproductive sexual characteristics, such as female breasts and hips, male voice quality, and body hair.

selective attention the focusing of conscious awareness on a particular stimulus, as in the cocktail party effect.

self-actualization according to Maslow, the ultimate psychological need that arises after basic physical and psychological needs are met and self-esteem is achieved; the motivation to fulfill one's potential.

self-concept all our thoughts and feelings about ourselves, in answer to the question, "Who am I?"

self-concept--a sense of one's identity and personal worth.

self-disclosure revealing intimate aspects of oneself to others.

self-esteem one's feelings of high or low self-worth.

self-fulfilling prophecy occurs when one person's belief about others leads one to act in ways that induce the others to appear to confirm the belief.

self-serving bias a readiness to perceive oneself favorably.

semantic encoding the encoding of meaning, including the meaning of words.

semantics the set of rules by which we derive meaning from morphemes, words, and sentences in a given language; also, the study of meaning.

sensation the process by which our sensory receptors and nervous system receive and represent stimulus energies from our environment.

sensorimotor stage--in Piaget's theory, the stage (from birth to about **2** years of age) during which infants know the world mostly in terms of their sensory impressions and motor activities.

sensorineural hearing loss hearing loss caused by damage to the cochlea's receptor cells or to the auditory nerves; also called *nerve deafness*.

sensory adaptation diminished sensitivity as a consequence of constant stimulation. sensory cortex--the area of the front of the parietal lobes that registers and processes body sensations.

sensory interaction the principle that one sense may influence another, as when the smell of food influences its taste

sensory memory the immediate, initial recording of sensory information in the memory system.

sensory neurons--neurons that carry incoming information from the sense receptors to the central nervous system.

serial position effect our tendency to recall best the last and first items in a list. set point the point at which an individual's "weight thermostat" is supposedly set. When the body falls below this weight, an increase in hunger and a lowered metabolic rate may act to restore the lost weight.

sexual disorder~ a problem that consistently impairs sexual arousal or functioning sexual orientation an enduring sexual attraction toward members of either one's own gender (homosexual orientation) or the other gender (heterosexual orientation). sexual response cycle the four stages of sexual responding described by Masters and Johnson-excitement plateau orgasm and resolution

shaping an operant conditioning procedure in which reinforcers guide behavior toward closer and closer approximations of a desired goal.

short-term memory activated memory that holds a few items briefl~ such as the seven digits of a phone number while dialing, before the information is stored or forgotten. signal detection theory predicts how and when we detect the presence of a faint stimulus ("signal") amid background stimulation ("noise"). Assumes that there is no single absolute threshold and that detection depends partly on a person's experience, expectations, motivation, and level of fatigue.

sleep apnea a sleep disorder characterized by temporary cessations of breathing during sleep and consequent momentary reawakenings.

sleep periodic, natural, reversible loss of consciousness- as distinct from unconsciousness resulting from a coma, general anesthesia, or hibernation

social clock the culturally preferred timing of social events such as marriage, parenthood, and retirement

social exchange theory the theory that our social behavior is an exchange process, the aim of which is to maximize benefits and minimize costs.

social facilitation improved performance of tasks in the presence of others; occurs with simple or well-learned tasks but not with tasks that are difficult or not yet mastered social leadership group-oriented leadership that builds teamwork, mediates conflict, and offers support.

social learning theory--the theory that we learn social behavior by observing and imitating and by being rewarded or punished.

social loafing the tendency for people in a group to exert less effort when pooling their efforts toward attaining a common goal than when individually accountable. social psychology the scientific study of how we think about, influence, and relate to one another.

social trap a situation in which the conflicting parties, by each rationally pursuing their self-interest, become caught in mutually destructive behavior.

somatic nervous system--the division of the peripheral nervous system that controls the body's skeletal muscles. Also called the *skeletal nervous system*.

spacing effect the tendency for distributed study or practice to yield better long-term retention than is achieved through massed study or practice.

split brain--a condition in which the two hemispheres of the brain are isolated by cutting the connecting fibers (mainly those of the corpus callosum) between them.

spontaneous recovery the reappearance, after a rest period, of an extinguished conditioned response.

standard deviation--a computed measure of how much scores vary around the mean score. standardization defining meaningful scores by comparison with the performance of a pretested "standardization group."

Stanford-Binet the widely used American revision (by Terman at Stanford University) of Binet's original intelligence test.

statistical significance--a statistical criterion for rejecting the assumption of no differences in a particular study.

stereotype a generalized (sometimes accurate but often overgeneralized) belief about a group of people.

stimulants drugs (such as caffeine, nicotine, and the more powerful amphetamines and cocaine) that excite neural activity and speed up body functions.

storage the retention of encoded information over time.

stranger anxiety--the fear of strangers that infants commonly display, beginning by about 8 months of age.

stress the process by which we perceive and respond to certain events, catted *stressors*, that we appraise as threatening or challenging

subjective well-being self-perceived happiness or satisfaction with life. Used along with measures of objective well-being (for example, physical and economic indicators) to evaluate people's quality of life.

sublimation in psychoanalytic theory, the defense mechanism by which people rechannel their unacceptable impulses into socially approved activities.

subliminal below one's absolute threshold for conscious awareness.

superego the part of personality that, according to Freud, represents internalized ideals and provides standards for judgment (the conscience) and for future aspirations.

superordinate goals shared goals that override differences among people and require their cooperation.

survey--a technique for ascertaining the self-reported attitudes or behaviors of people, usually by questioning a representative, random sample of them.

sympathetic nervous system--the division of the autonomic nervous system that arouses the body, mobilizing its energy in stressful situations.

synapse--the junction between the axon tip of the sending neuron and the dendrite or cell body of the receiving neuron. The tiny gap at this junction is called the *synaptic gap* or *cleft*. syntax the rules for combining words into grammatically sensible sentences in a given language.

systematic desensitization a type of counter conditioning that associates a pleasant relaxed state with gradually increasing anxiety triggering stimuli. Commonly used to treat phobias.

task leadership goal-oriented leadership that sets standards, organizes work, and focuses attention on goats.

telegraphic speech early speech stage in which the child speaks like a telegram- "go car" - using mostly nouns and verbs and omitting "auxiliary" words.

temperament--a person's characteristic emotional reactivity and intensity.

temporal lobes--the portion of the cerebral cortex lying roughly above the ears; includes the auditory areas, each of which receives auditory information primarily from the opposite ear.

teratogens agents, such as chemicals and viruses, that can reach the embryo or fetus during prenatal development and cause harm.

testosterone the most important of the male sex hormones. Both males and females have it, but the additional testosterone in males stimulates the growth of the male sex organs in the fetus and the development of the male sex characteristics during puberty.

testosterone--the most important of the male sex hormones. Both males and females have it, but the additional testosterone in males stimulates the growth of the male sex organs in the fetus and the development of the male sex characteristics during puberty.

thalamus--the brain's sensory switchboard, located on top of the brainstem; it directs messages to the sensory receiving areas in the cortex and transmits replies to the cerebellum and medulla.

THC the major active ingredient in marijuana; triggers a variety of effects, including mild hallucinations.

the storage and retrieval of information.

Thematic Apperception Test (TAT) a projective test in which people express their inner feelings and interests through the stories they make up about ambiguous scenes. theory of mind--people's ideas about their own and others' mental states about their feelings, perceptions, and thoughts and the behavior these might predict Theory X assumes that workers are basically lazy, error-prone, and extrinsically motivated

by money and, thus, should be directed from above.

Theory Y assumes that, given challenge and freedom, workers are motivated to achieve self-esteem and to demonstrate their competence and creativity.

theory--an explanation using an integrated set of principles that organizes and predicts observations.

threshold--the level of stimulation required to trigger a neural impulse.

token economy an operant conditioning procedure that rewards desired behavior A patient exchanges a token of some sort, earned for exhibiting the desired behavior, for various privileges or treats.

tolerance the diminishing effect with regular use of the same dose of a drug, requiring the user to take larger and larger doses before experiencing the drug's effect tong-term memory the relatively permanent and limitless storehouse of the memory system.

top-down processing information processing guided by higher-level mental processes, as when we construct perceptions drawing on our experience and expectations.

trait a characteristic pattern of behavior or a disposition to fee[ and act, as assessed by se~freport inventories and peer reports

transduction conversion of one form of energy into another. In sensation, the transforming of stimulus energies into neural impulses.

transference In psychoanalysis, the patient's transfer to the analyst of emotions linked with other relationships (such as love or hatred for a parent).

two-factor theory Schachter's theory that to experience emotion one must (1) be physically aroused and (2) cognitively abet the arousal

two-word stage beginning about age 2, the stage in speech development during which a child speaks mostly two-word statements.

Type A Friedman and Rosenman's term for competitive, hard-driving, impatient, verbally aggressive, and anger-prone people.

Type B Friedman and Rosenman's term for easygoing, relaxed people.

unconditional positive regard according to Rogers, an attitude of total acceptance toward another person.

unconditioned response (UCR) In classical conditioning, the unlearned, naturally occurring response to the unconditioned stimulus (UCS), such as salivation when food is in the mouth.

unconditioned stimulus (UCS) in classical conditioning, a stimulus that unconditionally-naturally and automatically-triggers a response.

unconscious according to Freud, a reservoir of mostly unacceptable thoughts, wishes, feelings, and memories. According to contemporary psychologists, information processing of which we are unaware.

validity the extent to which a test measures or predicts what it is supposed to. (See also *content validity* and *predictive validity*.)

variable-interval schedule in operant conditioning, a schedule of reinforcement that reinforces a response at unpredictable time intervals.

variable-ratio schedule in operant conditioning, a schedule of reinforcement that reinforces a response after an unpredictable number of responses.

vestibular sense the sense of body movement and position, including the sense of balance. visual capture the tendency for vision to dominate the other senses.

visual cliff a laboratory device for testing depth perception in infants and young animals. visual encoding the encoding of picture images.

wavelength the distance from the peak of one tight or sound wave to the peak of the next. Electromagnetic wavelengths vary from the short blips of cosmic rays to the long pulses of radio transmission.

Weber's Law the principle that, to perceive their difference, two stimuli must differ by a constant minimum percentage (rather than a constant amount).

Wechsler Adult Intelligence Scale (WAIS) the WAIS is the most widely used intelligence test; it contains verbal and performance (nonverbal) subtests.

Wernicke's area--a brain area involved in language comprehension and expression; usually in the left temporal lobe.

withdrawal the discomfort and distress that follow discontinuing the use of an addictive drug

working memory is a similar concept that focuses more on the processing of briefly stored information.

X chromosome--the sex chromosome found in both men and women. Females have two X chromosomes; males have one. An X chromosome from each parent produces a female. Y chromosome--the sex chromosome found only in males. When paired with an X sex chromosome from the mother, it produces a male child.

Young-Helmholtz Trichromatic (threecolor) Theory the theory that the retina contains three different color receptors-one most sensitive to red, one to green, one to blue-which when stimulated in combination can produce the perception of any colon zygote the fertilized egg; it enters a 2-week period of rapid cell division and develops into an embryo.