Study Questions for Chapter 7

~ List three key ideas in the definition of *learning* and discuss the relationship between learning and *behaviorism*.

~ Describe *classical conditioning*. In doing so, identify the *unconditioned stimulus (US), unconditioned response (UR), conditioned stimulus (CS),* and *conditioned response (CR)* in Pavlov's experiments and other preparations, including drug overdoses.

~ Compare the *acquisition, second-order conditioning, extinction,* and *spontaneous recovery* of a classically conditioned response.

~ Discuss how stimulus *generalization* and stimulus *discrimination* occur in classical conditioning.

~ Describe the events surrounding the experience of *Little Albert,* noting in particular how this case appeared to bolster the behaviorist view of conditioned emotional responses.

~ Identify the cognitive elements of classical conditioning, with focus on the principles identified in the *Rescorla-Wagner model*.

~ Distinguish between *delay* and *trace conditioning,* and discuss how these procedures can shed light on the role of consciousness in classical conditioning.

~ Identify the neural elements of classical conditioning, with a focus on the involvement of the cerebellum, hippocampus, and amygdala.

~ Identify the evolutionary elements of classical conditioning, especially conditioned food aversions and preferences and the concept of *biological preparedness*.

~ Define *operant conditioning* and distinguish between a classically conditioned response and an operant response.

~ Describe Thorndike's puzzle box and state the *Law of Effect*.

~ Discuss the methodological and theoretical contributions of B. F. Skinner to the study of *reinforcement* and *punishment,* including how reinforcement can produce *superstitious behavior*.

~ Define and give an example of *positive reinforcement, negative reinforcement, positive punishment,* and *negative punishment*.

~ Describe types of *primary* and *secondary* reinforcers and punishers; also distinguish between *extrinsic* and *intrinsic* reinforcers, and describe the *overjustification effect*.

~ Discuss the role of context in operant conditioning by describing the *three-term contingency* and noting the roles of *discrimination* and *generalization* in the *stimulus control* of behavior.

~ Describe how an operant response is extinguished and contrast *operant extinction* with extinction of a classically conditioned response.

~ Explain how schedules of reinforcement affect learning; include examples of *fixed interval, fixed ratio, variable interval,* and *variable ratio schedules*.

~ Explain how the *shaping* of successive approximations to a desired behavior can eventually produce that behavior.

~ Identify the cognitive elements of operant conditioning, especially the concepts of *latent learning* and *cognitive maps* identified by Edward Chace Tolman.

~ Identify the neural elements of operant conditioning, with a focus on the involvement of structures in the "pleasure center" of the brain.

~ Identify the evolutionary elements of operant conditioning, especially the "misbehavior" of organisms that was first identified by Marion and Kellar Breland.

~ Explain how *observational learning* can occur in humans, noting especially Bandura's research on learning aggressive responses, and how observational learning can spread via a *diffusion chain*.

~ Describe several studies demonstrating observational learning in animals.

~ Identify the neural elements of observational learning, with a focus on *mirror neurons*.

~ Define *implicit learning* and describe a simple form of implicit learning, *habituation*.

~ Describe how cognitive and neural approaches to the study of implicit learning have yielded characteristics of implicit learning that distinguish it from explicit learning.