

**Gleitman, Ch. 7, pp. 259-278**

1. What is learning? Summarize the *learning theory* perspective on learning.
2. Using examples, describe *habituation* and *dishabituation*.
3. Why might habituation be important both for us to function and other animals to survive? How can it be used as a research tool?
4. What is the important difference between habituation and classical conditioning when both are considered abstractly?
5. Who was Pavlov? Summarize his contribution to psychology.
6. What is meant by the terms: US, UR, CS, and CR? How are they related in classical conditioning? Be prepared to identify their referents in sample classical conditioning situations.
7. Describe the curve that represents the acquisition of a conditioned response.
8. Describe examples where the effects of classical conditioning are evident in our daily lives.
9. What is *second-order conditioning*? Give an example. What is its significance?
10. What is *extinction*? How does the time course of reconditioning or the phenomenon of *spontaneous recovery* suggest that extinction differs from forgetting? How does this help us understand why *exposure therapy* often fails?
11. Describe *generalization* and *discrimination*. How are they related, and how do they differ? Be sure to discuss *inhibitor* stimuli.
12. Describe how the timing of the CS and US influences the effectiveness of classical conditioning. What does this tell us about how the CS functions?
13. Discriminate the concepts *contingency* and *contiguity* in the context of classical conditioning. Describe research demonstrating which of the two is more important.
14. Imagine two different procedures. In both, the animal hears 40 presentations of a tone and receives 20 electric shocks. In the first procedure, these stimuli are presented randomly-and so there's no contingency, no relationship, between hearing the tone and receiving a shock. In the second procedure, the stimuli are arranged so that half of the tones are followed by shock and half are not, and shocks are never presented without a tone preceding them. How will the animal exposed to each of these procedures react? Which procedure would the animal "prefer"? Why? How can we know this preference? How do these procedures help us to understand the distinction between *fear* and *anxiety*?
15. What is the role of surprise in the effectiveness of a CS? How do studies of the *blocking effect* help make this clear?
16. Using an example, discuss the relationship between the CR and the UR. From this perspective discuss the concepts of *homeostasis* and *compensatory responses*.

**(Optional Reading) Norton Reader: Watson & Rayner, pp. 117-128**

17. Compare the summary of the research with Little Albert presented in the text with the description provided by Watson and Rayner. Did reading an elaborated description of this research change your view of it in any way?

**Zap #1: Classical Conditioning**

18. Describe how to produce each of the following four phenomena: classical conditioning, extinction, second-order conditioning, and blocking. What pattern of data indicates that each phenomenon has been produced?
19. What would you expect to happen if a heroin addict sees a syringe but does not receive the expected injection?

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20. Describe, at an abstract level, what distinguishes instrumental conditioning from classical conditioning.
21. What role did Darwin's theory of evolution play in the development of instrumental conditioning? What contribution did Edward L Thorndike make? Why did he believe that his trained cats did not "understand" the solution to the puzzle box? What role did his *law of effect* play in this development?
22. Who is B. F. Skinner and what were his major theoretical and methodological contributions to the development of instrumental conditioning? Describe how the Skinner box is used to study instrumental conditioning.
23. Define the terms *operant* and *reinforcer*.
24. How are generalization and discrimination similar for classical and instrumental conditioning? How are the roles of the  $S^+/CS^+$  and  $S^-/CS^-$  different in classical and instrumental conditioning? How can discrimination training be used with complex stimuli?
25. What is shaping? Give an example of how it can be used to train an animal (or a person).
26. What is the difference between a *primary* and a *conditioned* reinforcer? Give an example in which information can be a reinforcer. Explain why the possibility of using information as a reinforcer complicates the concept of "reinforcement."
27. What is *behavioral contrast*? How does this help explain the effectiveness of a reinforcer?
28. What is meant by *intrinsic* reinforcement? Provide an example to illustrate how both the concepts of intrinsic reinforcement and behavioral contrast can explain the same phenomenon.
29. What is *partial* reinforcement? Describe and discuss two situations: one in which a fixed-ratio schedule would be appropriate and one in which a variable-ratio schedule would be appropriate.
30. Who is Edward C. Tolman? Describe his alternative view of learning. Using an example, explain how *latent learning* supports his position.
31. Discuss the role of contingency or control in instrumental conditioning. How does this concept help us understand *learned helplessness*? How do experiments supporting the existence of the joy of mastery and learned helplessness demonstrate the importance of contingency in instrumental conditioning?

**Gleitman: Ch. 7, pp. 289-298**

32. What is *observational learning*? Give an example in humans. Although observational learning was once thought to be unique to humans, discuss how *vicarious conditioning* demonstrates that this is not correct.

33. Describe Bandura's bobo doll study. How might this help explain the effects of violence in the media?
34. The general principles of learning (i.e., classical and instrumental conditioning) were once thought to be largely species independent. Describe evidence contradicting this position and discuss how it might be modified.
35. Discuss the hypothesis that it should be possible to pair any CS with any US. Illustrate your discussion using *taste aversion* (as an example of *prepared learning*) and *one-trial learning*. How can these ideas be extended to instrumental conditioning?
36. Discuss both the similarities and differences in the neural mechanisms of learning across species and CS-US pairings.
37. What is *neural plasticity*? Explain how it is related to *presynaptic facilitation* and *long-term potentiation*.