

**Gleitman, Ch. 8, pp. 301-313**

1. Describe and, using examples, distinguish *acquisition*, *storage*, and *retrieval*.
2. Using both descriptions and examples, distinguish *incidental* learning from *intentional* learning.
3. Describe how *working memory*, and the conception of memory based on it, differs from *short-term memory* and the stage theory of memory.
4. Using the pattern of results across *serial positions* in the *free-recall* procedure (e.g., *primacy* and *recency effects* under different conditions), describe the characteristics of working memory and long-term memory and discuss how they work together.
5. What is *recoding*? How does it influence memory capacity?
6. Transfer of information from working to long-term memory appears to be an “active” process. Describe what this means. Your explanation should also elucidate the concepts *maintenance rehearsal*, *depth of processing*, and *memory connectivity*.
7. Discussions of memory invariably invoke the idea of *attention*, a concept that also plays an important role in discussions of perception, consciousness, and thinking. Describe two ways that attention plays an important role in memory.
8. What are *mnemonics*? Illustrate your answer with at least one example.
9. How does *imagery* improve memory?
10. What is meant by the term *memory trace*? How does it depend on memory consolidation?
11. Distinguish *retrograde* and *anterograde amnesia*.

**Zap #2: Brown-Peterson Task**

12. Describe what occurs in the *Brown-Peterson task*.
13. In the Brown-Peterson task, what is the role of the *intervening task* (counting backward by 3s, or making vowel/consonant judgments)? Why was there variation in the time it lasted?
14. What are two possible explanations for why is it harder to recall the trigram correctly when the intervening task is longer?

**Zap #3: Memory Span**

15. Describe the steps of a *memory span* experiment. What does this procedure try to measure?
16. How can *chunking* change memory span? How does this depend on the size of the chunks?
17. Thinking about what they can tell us rather than how they are done, what is similar and what is different about the memory span and the Brown-Peterson procedures?

**Zap #4: Serial Position**

18. Describe the procedures used in a typical *free-recall* experiment designed to study serial position effects.
19. Did you notice any factors other than serial position that influenced your recall of the words in the lists? For example, did you notice relationships between words in a list? As you got further into the experiment, were you ever concerned that you

might be recalling a word from an earlier list rather than the one that you had just seen?

**Gleitman: Ch. 8, pp. 313-317**

20. What can we learn from the *tip-of-the-tongue* effect about how memory is organized and memory retrieval works?
21. What is *context reinstatement*? How is it related to *encoding specificity*? How does our understanding of *retrieval cues* and *retrieval paths* help to explain these phenomena? Give an example.

**Zap #5: Lexical decision**

22. What is the *mental lexicon*? How does it differ from a dictionary? What is its organizational principle?
23. Describe the procedure for and typical results from a *lexical decision task*. How can these results be interpreted in terms of *semantic priming*? What is the hypothesized mechanism that allows us to understand how processing the first word in each pair influences the speed with which the second word is processed?
24. Another factor thought to influence lexical decision times is *word frequency*. Using examples, describe what word frequency is and how it influences lexical decision times.
25. What are *lexically ambiguous* words? Describe how they provide interesting insights into the processing of meaning during sentence processing.

**Zap #6: Sentence verification**

26. Describe the procedure for and typical data from a sentence verification task using sentences describing category membership.
27. Sentence verification times have been used to support two important assertions about how we organize information about concepts and categories in our long-term memory: *hierarchical structure* and the *principle of inheritance*. Using examples describe what is meant by each of these assertions.
28. What is *semantic distance*? What role does it play in a sentence verification task?
29. What is the *typicality effect*? How do typicality effects support the argument that category information is organized in a network rather than a hierarchy?

**Gleitman: Ch. 8, pp. 317-27**

30. What is a *forgetting curve*? How would you expect the amount forgotten in the first hour after learning to compare to the amount of forgetting in the next 24 hours?
31. Discuss how both (a) the simple passage of time and (b) interference from new material each contribute to forgetting.
32. What is a *memory intrusion*? Using examples, describe at least three different ways that memory intrusions can arise.
33. What is a *schema*?
34. Describe the *DRM* paradigm? What does it tell us about the structure of memory?
35. What is the difference between *familiarity* and *recollection*? Describe the evidence that they involve different brain processes.

36. What are two examples of things that can be done to improve memory? What are two examples of techniques that are often thought to improve retrieval but that do not actually work well?

**Zap #7: Recalling Information**

37. The “Recalling Information” zap involves comparing results from a free-recall and a *cued-recall* task. How do tasks of these two types differ in their method? These tasks produce different results; what are the theoretical and practical implications of the difference?
38. What role does cue/encoding specificity play in the results of the “Recalling Information” zap?

**Zap #8: Memory Bias**

39. What role is mood meant to play in this experiment?
40. Describe and discriminate two ways that memory recall can be influenced by mood at time of recall.
41. The Velten Mood Induction Procedure, used at the beginning of this experiment, is commonly used to alter the mood of experimental subjects. How effective did this procedure seem to you?

**Gleitman: Ch. 8, pp. 327-337**

42. Summarize the distinction between *episodic* memory and *semantic* memory. Summarize evidence supporting this distinction.
43. What are *flashbulb* memories? Discuss the evidence for and against making this distinction.
44. Discuss the evidence for and against the argument that memories for traumatic events are somehow special or different.
45. Compare and contrast *explicit* memory and *implicit* memory. How can they be distinguished?
46. Using examples, describe three manifestations of implicit memory.
47. What is *procedural* memory? How does it differ from *declarative* memory?
48. Using at least one example, characterize *priming effects*. What do priming effects suggest about the way that memory works?
49. How could priming be used in political campaigns?
50. You might say that you remember your mother, because you can describe how she looks and predict what she might say or do in different situations. We also might describe the outcome of a classical conditioning procedure by saying “the rat remembers that the tone predicts that it will receive a shock.” Compare and contrast these two invocations of the concept of memory.

**Zap #9: False Memory Task**

51. What was the procedure used in the “False Memory” Zap that leads people to recall as seen words that had not actually been presented in the list?
52. How does this Zap help to illustrate the difference between recall and familiarity?

**Reader: Schacter, pp. 165-176**

53. Schacter describes research by Warrington and Weiskrantz showing that, in some cases, amnesiac subjects improved as much as normal subjects when performing a word completion task that included words that they had previously seen. Why was this result surprising at the time? How might you explain this result?
54. Discuss the link between consciousness and implicit memory made by Schacter.
55. Schacter describes research by Jacoby and Dallas who found that priming was unaffected by depth of processing during the learning phase. Why is this result surprising? What theoretical conclusion does it support?
56. Schacter discusses several ways that implicit memory may play important roles in our everyday lives. Discuss two of these.

**Zap #10: Implicit Learning**

57. Describe an experiment that demonstrates the form of implicit memory known as *procedural learning*.
58. Describe at least two different kinds of information that might be learned in this task.
59. How is this experimental procedure related to real-world tasks such as learning to play a musical instrument?

**60 Minutes Story on Eye Witness Testimony**

60. Describe two aspects of the procedure police used to have Jennifer Thompson identify her assailant that may have led to the misidentification of Ronald Cotton.
61. What are three steps that police can take to reduce the probability of such misidentifications?

**NY Times essay: The Trial That Unleashed Hysteria Over Child Abuse**

62. Clearly public hysteria and unskeptical, sensational press coverage were important factors that contributed to this unfortunate story. From our perspective, the point to be drawn from this story concerns the fragility of childhood memories and the role played by therapist/questioners working at Children's Institute International. What was problematic with the interviews that they did with the children from the pre-school? How might the questioning of their children by parents, following a letter sent out to them by the police, changed what the children "remembered"?