Chapter 9:

Memory



AP Psychology

Mrs. Wilson

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| Assignment | Due Date |
| Read 349-353 |  |
| Read 353-361 |  |
| Read 361-370 |  |
| Read 370-375 |  |
| Read 375-381 |  |
| Read 382-390 |  |
| Read 391-392 |  |

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period \_\_\_\_\_

**Cognition (8–10%)**

**Incorporates material in chapters on Memory and Thinking and Language. Bold indicates concepts from Chapter 8: Memory**

In this unit students learn how humans convert sensory input into kinds of information. They examine how humans learn, remember, and retrieve information. This part of the course also addresses problem solving, language, and creativity.

AP students in psychology should be able to do the following:

1. Compare and contrast various cognitive processes:
   1. effortful versus automatic processing;
   2. deep versus shallow processing;
   3. focused versus divided attention.
2. **Describe and differentiate psychological and physiological systems of memory** 
   1. **Short-term memory**
   2. **Long-term memory**
   3. **Implicit memory**
   4. **Explicit memory**
   5. **Long-term potentiation**
   6. **Stress hormones and impact on memory**
   7. **Role of hippocampus and cerebellum in memory formation**
   8. **Moods and memory**
3. **Thoroughly explain effective encoding, storage, and retrieval (use pictures in your explanation).**
4. **Discuss construction of memories (include an example of each).**
   1. **Misinformation and imagination effect**
   2. **Source amnesia**
   3. **Eyewitness testimony**
   4. **Repression**
5. **Describe strategies for memory improvement.**
6. Explain how the following factors converge to facilitate acquisition, development, and use of language.
   1. Biological factors,
   2. Cognitive factors,
   3. and cultural factors
7. Identify problem-solving strategies as well as factors that influence their effectiveness.
8. List the characteristics of creative thought and creative thinkers.
9. Make a chart to identify the major figures in the psychology of cognition using the following columns (Who, What, When, Where and Why)
   1. **Noam Chomsky,**
   2. **Hermann Ebbinghaus,**
   3. Wolfgang Köhler,
   4. **Elizabeth Loftus,**
   5. George A. Miller

Key Terms and Figures

**Terms**

1. Memory
2. Encoding
3. Storage
4. Retrieval
5. Sensory Memory
6. Short Term Memory
7. Long Term Memory
8. Working Memory
9. Automatic Processing
10. Effortful Processing
11. Rehearsal
12. Spacing Effect
13. Serial Position
14. Visual Encoding
15. Acoustic Encoding
16. Semantic Encoding
17. Imagery
18. Mnemonics
19. Chunking
20. Iconic Memory
21. Echoic Memory
22. Long Term Potentation
23. Flashbulb Memory
24. Amnesia
25. Implicit Memory
26. Explicit Memory
27. Hippocampus
28. Recall
29. Recognition
30. Relearning
31. Priming
32. Déjà vu
33. Mood-Congruent Memory
34. Proactive Interference
35. Retroactive Interference
36. Repression
37. Misinformation Effect
38. Source Amnesia

**Names**

1. Noam Chomsky
2. Hermann Ebbinghaus
3. Elizabeth Loftus

KEY TERMS DUE AT TEST

**FACT OR FALSEHOOD**

T F 1. Memory storage is never automatic; it always takes effort.

T F 2. When people go around a circle saying their names, their poorest memories are for what was

said by the person just before them.

T F 3. Memory aids (for example, those that use imagery and devices for organization) are no more

useful than simple rehearsal of information.

T F 4. Only a few people have any type of photographic memory.

T F 5. Although our capacity for storing information is large, we are still limited in the number of

permanent memories we can form.

T F 6. Our experiences are etched on our brain, just as the grooves on a tape receive and retain

recorded messages.

T F 7. When people learn something while intoxicated, they recall it best when they are again

intoxicated.

T F 8. The hour before sleep is a good time to commit information to memory.

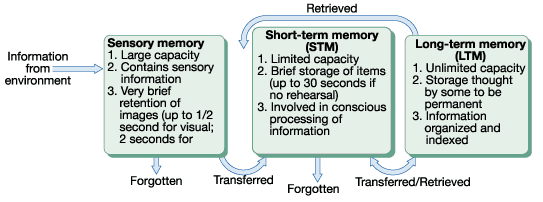
T F 9. How confident eyewitnesses are about what they saw is an important predictor of their

accuracy.

T F 10. Children typically will repress any memory of having seen one of their parents being murdered.

Remembering the Seven Dwarfs

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What are Memories?

* Hippocampus
* ACH & Serotonin
* Frontal Lobe
* Amygdala

Brain Based

ENCODING

Primacy

Recency

Antero-grade

Retro-grade

Psychogenic

Proactive

Retroactive

Interference

* Cues
  + Mood/State Dep.
  + Context

Amnesia

Serial position

Forget

Retrieval Failure

RETRIEVAL

Remember

Retrieval Success

* Explicit/declarative
* Implicit/Non-declarative

LTM

Hard Drive

STORAGE

STM

Temporary Files

Sensory system

* Iconic-Eidetic
* Echoic
* Haptic
* Decays in 1-2 sec.
* Episodic (flashbulb)
* Semantic
* Procedural
* Deeply Processed
* Visual Retention
* Auditory Imprint
* Tactile/Kinesthetic
* Shallow Processing
* 7±2 Chunk – 20-30 sec