

UNIT 7 – COGNITION (MEMORY, THINKING, LANGUAGE)

PERCENT ON AP EXAM – 8-10%

TERMS YOU MUST KNOW

Long Term Memory
Working Memory
Semantic Memory
Episodic Memory
Chunking
Implicit Memory
Proactive Interference
Retroactive Interference
Procedural Memory
Anterograde Amnesia
Encoding
Explicit Memory
Retrograde Amnesia
Sensory Memory
Flashbulb Memory
Memory
Mnemonic Devices
Retrieval
Elaborative Rehearsal
Storage
Serial Position Effect
Priming
Recognition
Declarative Memory
Primacy Effect
Heuristic
Algorithms
Functional Fixedness
Prototypes
Concepts
Morpheme
Phoneme
Syntax
Insight
Availability Heuristic
Mental Set
Representativeness Heuristic
Language
Semantics
Confirmation Bias

IMPORTANT PEOPLE

- Noam Chomsky – language is inborn
- Hermann Ebbinghaus – forgetting curve
- Elizabeth Loftus – misinformation effect
- George Sperling – 7 + or - 2
- Benjamin Whorf – one's language and grammar patterns shape one's view of reality (no past tense words)

CONFUSING PAIRS

- Primacy Effect (first items remembered) v. Recency Effect (last items remembered)
- Proactive Interference (loss of the new info) v. Retroactive Interference (loss of the old info)
- Implicit Memory (non-declarative; skills) v. Explicit Memory (declarative, facts)
- Recall Memory (no cues) v. Recognition Memory (some hints, priming)
- Algorithms (step-by-step, computer) v. Heuristics (rule-of-thumb, simple efficient rules, how we make decisions, come to judgement, or solve problems)
- Representative Heuristics (schema, prototypes) v. Availability Heuristics (based on available info)
- Phonemes (basic sound units) v. Morphemes (basic units of meaning)

TERMS STUDENTS MAKE MISTAKES ON

- Retroactive Interference – new info makes you lose old info
- Chunking – grouping
- Observation – Most Critical to learning
- Flashbulb Memory – Release Stress Hormones, so memory is seared into brain
- Framing – wording of a question can affect answer / results
- Semantics – understanding the meaning of a word
- Mnemonic Device – memory aid
- HM – Hippocampus Removed
- Episodic Memory – Like an episode of TV, played back in mind
- Algorithm – Like Computer, step by step process
- Recall – need to pull from memory
- Recognition – pull from a list, primed
- Proactive Interference – old info makes you lose new info
- Length of different types of Memories – Sensory - .3-3 seconds, Working Memory – 10-20 seconds, Long Term – forever
- Critical Thinking is associated with Divergent Thinking
- Misinformation Effect – impairment in memory for the past that arises after exposure to misleading information
- Sapir-Whorf Hypothesis – language deals with your thought processes
- Availability Heuristic – mental shortcut that relies on immediate examples
- Representative Heuristic – making judgments about the probability of an event under uncertainty (schema or prototype)
- Syntax – grammar
- Phoneme – smallest unit of recognized sound
- Prototype – schema
- Confirmation Bias – tendency to search for or interpret information in a way that confirms one's preconceptions
- Cortex – Long Term Memories stored
- Spacing Effect – learn better when we space studying out over time
- Primacy-Recency Effect – remember first and last things

Unit 7: Cognition ~ Study Guide

MEMORY

ENCODING

Rehearsal
Visual, acoustic & semantic
(meaningful) encoding
Mnemonic device
Chunking
Iconic vs. echoic
Effortful vs. automatic
processing
Spacing effect
Serial position effect

STORAGE

Capacity of STM

RETRIEVAL

Flashbulb memory
Explicit & implicit memories
Rosy retrospection
Recognition vs. recall
Mood-congruent
Priming
Method of loci
Memory construction
Misinformation effect
Context effects
Déjà vu
Retrieval cues
False memories (Loftus)

FORGETTING

Encoding failure
Amnesia
Repression
Retroactive & proactive interference
Ebbinghaus' forgetting curve

NEUROLOGICAL BASIS OF MEMORY

Long-term potentiation
Alcohol's effect on memory
Epinephrine's effect on memory
Hippocampus
Synaptic changes as result of learning

LANGUAGE

Skinner's language acquisition theory
Chomsky's language acquisition theory
Whorf's linguistic relativity hypothesis
Critical period
Babbling period
One-word stage

Two-word stage
Semantics
Syntax
Morphemes
Phonemes
Lexicon
Overgeneralization