

# Advanced Cognitive Psychology Concepts

Cognitive Psychology · Answer Key · 18 Questions

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**1. According to the Atkinson-Shiffrin model of memory, which component is responsible for holding and manipulating information for short periods?**

- A) Sensory Memory
- B) Long-Term Memory
- C) Working Memory**
- D) Implicit Memory

**2. Which cognitive bias is characterized by the tendency to overestimate the likelihood of events that are more easily recalled, often due to their vividness or recency?**

- A) Confirmation Bias
- B) Anchoring Bias
- C) Availability Heuristic**
- D) Hindsight Bias

**3. The concept of 'chunking' in memory research refers to the process of:**

- A) Rehearsing information repeatedly
- B) Organizing discrete pieces of information into larger, meaningful units**
- C) Associating new information with existing knowledge
- D) Retrieving information from long-term storage

**4. In the field of perception, the 'feature integration theory' proposes that:**

- A) We perceive objects based solely on their salient features
- B) Visual perception is a two-stage process involving pre-attentive and focal attention**
- C) Color perception is determined by the wavelength of light
- D) Depth perception is solely reliant on binocular cues

**5. The 'tip-of-the-tongue' phenomenon, where a person feels they know a word but cannot recall it, is most closely associated with which memory process?**

- A) Encoding failure
- B) Storage decay
- C) Retrieval failure**
- D) Consolidation disruption

**6. Which of the following is a key characteristic of 'procedural memory'?**

- A) It stores factual information and personal experiences
- B) It is easily verbalized and consciously recalled
- C) It involves skills and habits, often performed automatically**
- D) It is fragile and susceptible to rapid forgetting

7. The 'stroop effect' demonstrates interference in reaction time when the name of a color (e.g., 'blue', 'red') is printed in a color that is not denoted by the word (e.g., the word 'blue' printed in red ink). This is often used to study:

**A) Selective attention and inhibition**

- B) Working memory capacity
- C) Long-term potentiation
- D) Implicit learning

8. According to Chomsky's theory of language acquisition, humans possess an innate 'language acquisition device' (LAD), which suggests that:

A) Children learn language solely through imitation

**B) The capacity for language is biologically predisposed**

- C) Grammatical rules are learned entirely from environmental input
- D) Language development is a slow and gradual process from birth

9. Problem-solving strategies like 'means-end analysis' involve:

A) Randomly trying different solutions

**B) Breaking down a problem into smaller, manageable subgoals**

- C) Focusing on the overall outcome without intermediate steps
- D) Using past experiences to solve similar problems

10. The 'illusory correlation' describes the tendency to perceive a relationship between two variables when none exists, or to overestimate the strength of a relationship that does exist. This is often seen in:

**A) Stereotype formation**

- B) Object recognition
- C) Decision-making under uncertainty
- D) Motor skill acquisition

11. In cognitive neuroscience, fMRI (functional Magnetic Resonance Imaging) is a technique primarily used to:

A) Measure the electrical activity of the brain

B) Identify the precise location of brain damage

**C) Detect changes in blood flow, indicating neural activity**

D) Stimulate specific brain regions non-invasively

12. The 'levels of processing' theory of memory suggests that recall is better when information is:

A) Encoded superficially

**B) Encoded at a deeper, semantic level**

- C) Repeated many times without meaning
- D) Learned in a noisy environment

**13. What is the primary function of the prefrontal cortex in cognition?**

- A) Processing visual information
- B) Regulating emotions and social behaviour
- C) Executing higher-level cognitive functions like planning and decision-making**
- D) Consolidating emotional memories

**14. The 'representativeness heuristic' leads individuals to judge the probability of an event based on:**

- A) How easily examples come to mind
- B) How similar it is to a typical case**
- C) The availability of information
- D) Past personal experiences

**15. Kahneman and Tversky's research on 'prospect theory' introduced the concept that people make decisions based on potential gains and losses, often exhibiting:**

- A) Risk-neutrality
- B) Loss aversion**
- C) Utility maximization
- D) Rational choice theory

**16. The 'McGurk effect' is a perceptual phenomenon that demonstrates the strong influence of which sense on auditory perception?**

- A) Smell
- B) Touch
- C) Taste
- D) Vision**

**17. The concept of 'schema' in cognitive psychology refers to:**

- A) A specific memory of an event
- B) A mental framework or concept that helps organize and interpret information**
- C) A novel solution to a problem
- D) A brief, sensory recording of stimuli

**18. Which type of amnesia is characterized by the inability to form new memories after the onset of the amnesia?**

- A) Retrograde Amnesia
- B) Dissociative Amnesia
- C) Anterograde Amnesia**
- D) Transient Global Amnesia