

Cognitive Psychology: Pioneers and Discoveries

Cognitive Psychology · Answer Key · 19 Questions

1. Who is often credited with pioneering the study of attention as a selective process, introducing the 'filter model'?

- A) Ulric Neisser
- B) Donald Broadbent**
- C) George Miller
- D) Noam Chomsky

2. What seminal paper, published in 1956, is considered a foundational work for cognitive psychology and introduced the concept of 'the magical number seven, plus or minus two'?

- A) The Organization of Behavior
- B) A Study of Thinking
- C) The Magical Number Seven, Plus or Minus Two: Some Limits of Our Capacity for Processing Information**
- D) Syntactic Structures

3. Which psychologist is renowned for developing the 'information processing' metaphor for the mind, comparing cognitive processes to computer operations?

- A) Albert Bandura
- B) Aaron Beck
- C) Jerome Bruner
- D) Ulric Neisser**

4. The concept of 'chunking' in memory, a strategy for improving recall by grouping information, was extensively explored by which influential cognitive psychologist?

- A) Hermann Ebbinghaus
- B) George Miller**
- C) Endel Tulving
- D) B.F. Skinner

5. Who is credited with formulating the first comprehensive theory of memory, including concepts like the forgetting curve and the Ebbinghaus-Hermann effect?

- A) Frederic Bartlett
- B) Hermann Ebbinghaus**
- C) Endel Tulving
- D) Alan Baddeley

6. The development of the 'stages of cognitive development' theory, a landmark in developmental psychology that significantly influenced cognitive psychology, is attributed to which researcher?

A) Lev Vygotsky

B) Jean Piaget

C) Lawrence Kohlberg

D) Howard Gardner

7. Which invention, first demonstrated in the early 20th century, provided a crucial tool for studying reaction times and basic cognitive processes?

A) The Electroencephalogram (EEG)

B) The Tachistoscope

C) The Magnetic Resonance Imaging (MRI) scanner

D) The Computer

8. Who introduced the concept of 'schemas' to explain how prior knowledge influences perception and memory, particularly in their studies on 'The Remembering'?

A) Elizabeth Loftus

B) Frederic Bartlett

C) Jerome Bruner

D) Daniel Kahneman

9. The influential work on language acquisition and the concept of 'universal grammar' by which linguist had a profound impact on cognitive psychology?

A) B.F. Skinner

B) Noam Chomsky

C) William James

D) George Armitage Miller

10. What was one of the earliest experimental methods used to study visual perception and attention, involving rapid presentation of stimuli?

A) Introspection

B) Behaviorism

C) Tachistoscopic presentation

D) Psychoanalysis

11. Which psychologist is widely recognized for their work on problem-solving and insight learning, often associated with experiments involving chimpanzees?

A) Edward Thorndike

B) Wolfgang Köhler

C) Ivan Pavlov

D) John B. Watson

12. The 'levels of processing' model of memory, which proposed that deeper semantic processing leads to better recall, was developed by which researchers?

- A) Craik and Lockhart**
- B) Baddeley and Hitch
- C) Atkinson and Shiffrin
- D) Sperling and Watt

13. Who is often credited with initiating the 'cognitive revolution' by challenging the dominance of behaviorism and advocating for the study of internal mental processes?

- A) Sigmund Freud
- B) William James
- C) George Miller**
- D) Kurt Lewin

14. The concept of 'working memory,' a multi-component system for temporary storage and manipulation of information, was notably proposed by which researchers?

- A) Endel Tulving and John Schacter
- B) Alan Baddeley and Graham Hitch**
- C) Benton Underwood and James Jones
- D) Richard Shiffrin and Richard Atkinson

15. What early research technique involved having participants report their conscious experiences in response to stimuli, a precursor to modern cognitive introspection?

- A) Case studies
- B) Naturalistic observation
- C) Systematic introspection**
- D) Surveys

16. The 'divisible attention' metaphor, suggesting attention can be split among tasks, was an early development in the study of attention, building upon earlier filter models. Who is associated with this concept?

- A) Anne Treisman
- B) Donald Broadbent
- C) Daniel Kahneman**
- D) Nilli Lavie

17. The experimental paradigm of 'priming,' where exposure to one stimulus influences the response to a subsequent stimulus, was a significant development in studying implicit memory. Who did early foundational work in this area?

- A) Endel Tulving
- B) Benton Underwood**
- C) Elizabeth Loftus
- D) Larry Jacoby

18. Which psychologist's research on eyewitness testimony and the misinformation effect highlighted the reconstructive nature of memory and its susceptibility to distortion?

- A) Frederic Bartlett
- B) Elizabeth Loftus**
- C) George Miller
- D) Daniel Schacter

19. The development of 'connectionism' or 'neural networks' as a computational model for cognitive processes, offering an alternative to traditional information processing, was a major theoretical shift. Which of these is a key figure in its early development?

- A) Noam Chomsky
- B) Jerome Bruner
- C) Geoffrey Hinton**
- D) Donald Broadbent