

# 神經科學與認知

## Practice Worksheet

### A. Vocabulary - Write the English word

Write the correct English word for each Chinese meaning.

1. 神經科學 (n.) \_\_\_\_\_
2. 神經元 (n.) \_\_\_\_\_
3. 突觸 (n.) \_\_\_\_\_
4. 神經傳導物質 (n.) \_\_\_\_\_
5. 皮質 (n.) \_\_\_\_\_
6. 海馬迴 (n.) \_\_\_\_\_
7. 杏仁核 (n.) \_\_\_\_\_
8. 小腦 (n.) \_\_\_\_\_
9. 半球 (n.) \_\_\_\_\_
10. 額葉 (n.) \_\_\_\_\_
11. 顳葉 (n.) \_\_\_\_\_
12. 頂葉 (n.) \_\_\_\_\_
13. 枕葉 (n.) \_\_\_\_\_
14. 腦幹 (n.) \_\_\_\_\_
15. 神經通路 (n.) \_\_\_\_\_

### B. Grammar - Choose the correct answer

1. The \_\_\_\_\_ is responsible for processing emotions like fear.  
(A) amygdala (B) cerebellum  
(C) cortex (D) brainstem
2. \_\_\_\_\_ allows the brain to adapt and form new connections.  
(A) Neuroplasticity (B) Amnesia  
(C) Insomnia (D) Lateralization
3. \_\_\_\_\_ is a neurotransmitter associated with pleasure and motivation.  
(A) Dopamine (B) Melatonin  
(C) Cortisol (D) Adrenaline



4. \_\_\_\_\_ bias causes people to favor information supporting their beliefs.  
(A) Confirmation (B) Anchoring  
(C) Hindsight (D) Habituation
5. The \_\_\_\_\_ plays a crucial role in forming new memories.  
(A) hippocampus (B) cerebellum  
(C) brainstem (D) amygdala
6. \_\_\_\_\_ sleep is the stage when most dreaming occurs.  
(A) REM (B) Deep  
(C) Light (D) Non-REM
7. \_\_\_\_\_ repetition is an effective technique for long-term memory retention.  
(A) Spaced (B) Random  
(C) Continuous (D) Immediate
8. An \_\_\_\_\_ measures brain electrical activity.  
(A) EEG (B) MRI  
(C) CT scan (D) X-ray
9. \_\_\_\_\_ intelligence involves reasoning with new information.  
(A) Fluid (B) Crystallized  
(C) Emotional (D) Artificial
10. \_\_\_\_\_ is the process of turning short-term memories into long-term ones.  
(A) Consolidation (B) Encoding  
(C) Retrieval (D) Interference

### C. Listening - Go to [learn.chparenting.com](http://learn.chparenting.com) to listen

---

1. 神經可塑性是什麼？  
(A) The hippocampus helps form long-term memories  
(B) Sleep prevents memory formation  
(C) The hippocampus controls motor skills  
(D) Short-term memory is permanent
2. 睡眠對記憶有什麼影響？  
(A) Meditation changes brain structure  
(B) Meditation reduces gray matter  
(C) Meditation has no measurable effect  
(D) Meditation only affects sleep
3. 鏡像神經元做什麼？  
(A) People tend to seek confirming information  
(B) People always evaluate evidence objectively  
(C) Cognitive biases improve decision-making  
(D) Confirmation bias is rare
4. 冥想如何影響大腦？  
(A) Brain-computer interfaces may help paralyzed patients  
(B) Brain surgery can cure paralysis  
(C) Prosthetic limbs work without technology  
(D) Thoughts cannot control devices



5. 大腦什麼時候達到完全成熟?

- (A) The brain can form new connections throughout life
- (B) The brain stops developing after childhood
- (C) Neural connections cannot be repaired
- (D) Neuroplasticity only occurs in children

D. Reading - Go to [learn.chparenting.com](http://learn.chparenting.com) to read the passage

---

1. How much does the human brain weigh approximately?

- (A) 1.4 kilograms
- (B) 2.5 kilograms
- (C) 500 grams
- (D) 3 kilograms

2. How many neurons does the brain contain?

- (A) 1 billion
- (B) 86 billion
- (C) 100 trillion
- (D) 10 million

3. What does neuroplasticity refer to?

- (A) Brain weight changes
- (B) The brain's ability to reorganize
- (C) Neuron destruction
- (D) Memory loss

4. Which is NOT mentioned as harmful to neural pathways?

- (A) Chronic stress
- (B) Sleep deprivation
- (C) Regular exercise
- (D) Substance abuse

5. What is the main idea of this passage?

- (A) The brain is complex and adaptable but also vulnerable
- (B) The brain cannot change after childhood
- (C) Neurons do not communicate with each other
- (D) Sleep is the most important brain function

