

# RIPPLE ENGLISH

## ACTIVE LEARNING PROGRAM

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Workbook for:  
“Chinese Classics and Neuroscience”

問題は解きっぱなしにしないで！

英語資格試験の学習は、**解いた後の復習をしなければほとんど効果はありません。**

答え合わせをしておしまいせず、**テキストの音読練習やリスニング、多読学習などのインプット学習を何度も反復して記憶に定着させましょう。**ホームページからダウンロードできる音読練習用のテキストをぜひご活用ください。

また、数日置いてから再度解き直すのも効果的です。答えを記憶してしまっているかもしれませんが、回答の根拠をなぞりながら繰り返し解くことで有効な復習になります！



## Chinese Classics and Neuroscience

- Classics are not just old. If you look up the word “classic” in the dictionary, you will learn that it means a work being sorted or classified as of the highest quality. In ancient times, paper was expensive and the printing presses didn’t exist. Therefore, leaving books to the next generation took far more effort and resources compared to today. The fact that we can still read classics written around 2,000 years ago means that every single generation up to this day has classified them as valuable enough to be **transcribed**. China has long been a cultural teacher to other Asian countries. Ancient Chinese philosophers had deep insights into society and human nature without the help of science, and their ideas were put into simple and beautiful words. And now, finally, science has corroborated the insights of past great thinkers. What does the latest science say about the ancient wisdoms in Chinese classics?
  - In ancient times, people believed in supernatural entities above the clouds that punished and rewarded them. However, Xunzi, a philosopher of Confucianism in the late Warring States period, explicitly denied the existence of gods. For example, Xunzi argued that praying for rain never brought about rain, and human actions had nothing to do with the actual weather. He said that when it rains, it will happen even if you don’t pray for rain. However, he added that praying for rain is effective, not because it has any effect on nature, but because it affects people.
  - Recent psychological studies have proven that Xunzi was right. When people are in a crisis and have done everything realistically within their power, they are most likely to resort to prayers, rituals, donations to gods, consulting oracles, or performing magic. All of these measures are scientifically ineffective at producing the desired result. However, by preserving the fiction, they can convince themselves that they aren’t helpless, and haven’t given up. As a result, they at least feel that they are in charge and will therefore be less anxious, and able to go on to make their best effort. Xunzi implied that a wise king has to be clear that gods are fictional. However, the king also has to understand that the masses want to feel at ease by believing in supernatural beings. Gods and Heaven surely don’t exist, but completely denying them is also irrational.
- The word “transcribe” in the passage is closest in meaning to
    - translate
    - transform
    - copy
    - arrange
  - According to paragraph 1, which of the following is true?
    - Ancient philosophers had greater insight than modern scientists.
    - Modern scientists are refuting what ancient philosophers told.
    - Some scientific discoveries support ideas from past philosophers.
    - We should not be deceived by simple and beautiful words in classics.
  - According to paragraph 2, Xunzi found praying for rain effective because
    - otherwise the heaven would punish people.
    - it has influence on people’s mind.
    - it could possibly bring rain.
    - when it rains, it will happen.
  - According to paragraph 3, which of the following is NOT true?
    - A wise king himself should not be deceived by fictions.
    - Ordinary people should realize that rituals and prayers are scientifically ineffective.
    - People in a crisis want to believe that things are under their control.
    - Fictions have the power to motivate people to try their best under difficult circumstances.

4. “The principled person does not look around for good fortune, and heaven rewards contentment for that lack of concern. On the other hand, heaven gives misfortune to those **obsessed** with avoiding it.” The latest findings from Evolutionary Psychology has brought to light new comprehension regarding this quote from "Vegetable Root Discourse," which was written in the Ming dynasty.
5. From an evolutionary point of view, happiness is only about encouraging survival and reproduction, and our physiological system is not programmed to keep us happy all the time. For example, evolution provided pleasant sensations during sexual activity to encourage humans to reproduce. At the same time, evolution also programmed these pleasant feelings to quickly subside. If the happiness were to last forever, the very happy individuals would not bother to look for another breeding opportunities and their genes would not be inherited to the next generation.
6. If we go after these pleasant sensations as our main source of happiness, they disappear as soon as you get them, and you have to start all over again. The root of suffering could be this never-ending pursuit of happiness, which causes us to be in a constant state of tension, restlessness, and dissatisfaction. Even when feeling joy, one can still be plagued with the fear of losing it. Endless pursuit of happiness makes us exhausted and discontented and, as "Vegetable Root Discourse" indicates, **only those who are indifferent to happiness can truly be happy.**

- (5) The word “obsessed” in the passage is closest in meaning to
- A. upset
  - B. unfortunate
  - C. confused
  - D. preoccupied
- (6) According to paragraph 5, what is NOT true about happiness?
- A. It doesn’t continue for a long period of time.
  - B. The longer they feel happiness, the more likely they survive.
  - C. It is designed to shortly disappear.
  - D. It is about driving animals to survive and produce offsprings.
- (7) Which of the following text best expresses the reason for the highlighted sentence?
- Only those who are indifferent to happiness can truly be happy.**
- A. Constantly chasing happiness rather makes you exhausted and dissatisfied.
  - B. Happiness is not different from pleasant sensations.
  - C. Caring too much about unhappiness rather drives you to be unhappy.
  - D. The writer of “Vegetable Root Discourse” had great understanding of human nature.

7. Xunzi is famous for claiming that human nature is evil. Unlike his preceding philosophers, Xunzi argued that people are not inherently good, and one's goodness is the fruit of his or her learning and efforts. He believed that staying moral required overcoming our innate evilness, and his view perfectly coincides with the latest findings from neuroscience.
8. The brain evolves by adding new parts on top of the older parts. The newest part of our brain is the neocortex, the organ of intelligence. Almost all the intellectual and rational capabilities are provided by the neocortex, and it is this organ that reads and listens to this very sentence. On the other hand, the older parts of the brain still control our bodily functions and emotions. No matter how smart and sophisticated we are, breathing, eating, sex, and reflex reactions are still critical to our survival and reproduction.
9. The neocortex is in an unfair position because it does not connect directly to muscles. When the neocortex wants to move the body, it sends a signal to the old brain, asking the old brain to move the muscles. For example, although breathing is a function of the brain stem that requires no thought or input from the neocortex, the neocortex can temporarily control breathing, as when you consciously decide to hold your breath. However, if the brain stem detects that you need more oxygen, it will ignore the neocortex and take back control. Similarly, the old brain sometimes makes us violent, greedy, and selfish even when the neocortex wants us to be nice and moral.
10. Everyone harbors this tendency to some degree because evolution discovered that it is occasionally helpful for propagating genes. **Biologically speaking, our inherent nature is bad**, and we need to make an effort to stay good. We have to cultivate our empathy and give more strength to our rational self through learning and experience, just as Xunzi argued.

- (8) According to paragraph 8, which of the following is true?
- A. The neocortex is in charge of every thoughts and behaviors.
  - B. Breathing occurs under the supervision of the neocortex.
  - C. You cannot read this sentence without your neocortex.
  - D. The old brain has control over every function of your body and mind.
- (9) According to paragraph 9, which of the following is NOT true?
- A. We can temporarily stop breathing when the neocortex send a signal to the old brain.
  - B. The rational part of the brain is not directly connected to the muscles.
  - C. The old brain sometimes ignore the neocortex.
  - D. The neocortex has to watch over the old brain, which is always evil.
- (10) Which of the following text best expresses the reason for the highlighted sentence?

**Biologically speaking, our inherent nature is bad.**

- A. The rational part of the brain has no control of the muscles.
- B. Everyone can be violent, greedy, and selfish at any time.
- C. The brain can be subdivided into two parts.
- D. Evolution found no value in goodness.

11. You have probably heard the story “The Butterfly Dream” by Zhuangzi, a Chinese philosopher who lived around 4th century BC. One day, Zhuangzi dreamt that he was a butterfly, a butterfly flitting and fluttering about, happy with himself and doing as he pleased. He didn't know that he was Zhuangzi. Suddenly, he woke up and there he was, solidly and unmistakably Zhuangzi. However, he could not tell if he was Zhuangzi who had dreamt that he was a butterfly, or a butterfly dreaming that he was Zhuangzi.
12. What does this fable tell us? A neuroscientist may take it as exposition of how unreliable our perception is. The latest findings from neuroscience have shown that the world we think we see is not the real world, but merely a simulation of the real world in our brain. We perceive only our model of the world, and not the world itself. For example, when you see a tree, you are not actually perceiving the “real” tree but a three-dimensional image of the object that your brain creates. The brain gets inputs from its sensors such as the eyes, processes those inputs, and then activate neurons to form a model. As such, When we comprehend the world out there, we're not really comprehending the world out there but rather are constructing it within our brains. Similarly, when you think that you are a human being lying on a bed, your brain creates a three-dimensional model of your room and bed, and then locates yourself on the bed. If the brain were to accidentally construct a model of a flower garden and locates you above the flowers, you might perhaps identify yourself as a butterfly instead. Zhuangzi must have intuitively realized that his perceived reality was just a created illusion in his brain. He somehow knew that he had no way to see whether the model in his brain was actually reflecting the objective reality.

- (11) Which of the following best describes the essence of “The Butterfly Dream”?
- A. Zhuangzi realized that he was actually a butterfly dreaming that he was a human being.
  - B. Zhuangzi was so happy with the dream that he did not want to wake up.
  - C. Zhuangzi didn't care whether he was a human or a butterfly.
  - D. Zhuangzi got confused about his identity.
- (12) According to paragraph 12, which of the following is NOT true?
- A. It is impossible to verify that your perception accurately reflects the reality.
  - B. When you find a tree, the tree actually doesn't exist.
  - C. We perceive the world by creating a model of the world in our brain.
  - D. How we perceive the reality depends on the image our brain creates.

- (1) C
- (2) C
- (3) B
- (4) B
- (5) D
- (6) B
- (7) A
- (8) C
- (9) D
- (10) A
- (11) D
- (12) B

(1) 文中の“transcribe”と意味が最も近いのは

- A. translate (翻訳する)
- B. transform (変形する)
- C. copy (筆写する)**
- D. arrange (整える)

(2) 1段落の内容に合致するのは

- A. Ancient philosophers had greater insight than modern scientists. (古代の哲学者たちは現代の科学者より深い洞察力を持っていた)
- B. Modern scientists are refuting what ancient philosophers told. (現代の科学者は古代の哲学者たちの言論に反駁している)
- C. Some scientific discoveries support ideas from past philosophers. (科学的な発見の中には、過去の哲学者たちのアイデアを支持・立証するものもある)**
- D. We should not be deceived by simple and beautiful words in classics. (古典の中のシンプルで美しい言葉に騙されてはいけない)

(3) 2段落によると、荀子が雨乞いを有効だと考えた理由は

- According to paragraph 2, Xunzi found praying for rain effective because
- A. otherwise the heaven would punish people. (さもないと天が人々を罰するから)
  - B. it has influence on people’s mind. (人々の心に与える影響があるから)**
  - C. it could possibly bring rain. (もしかしたら雨をもたらしてくれるかもしれないから)
  - D. when it rains, it will happen. (雨が降るときは降るから)

(4) 3段落の内容と合致しないのは

- A. A wise king himself should not be deceived by fictions. (賢い君主自身は虚構に騙されてはならない)

**B. Ordinary people should realize that rituals and prayers are scientifically ineffective. (一般の人々は、儀式や祈りが科学的に効果がないことを理解しなければならない)**

C. People in a crisis want to believe that things are under their control. (危機に際して人々は事態をコントロールできていると信じたくなる)

D. Fictions have the power to motivate people to try their best under difficult circumstances. (虚構には、困難な状況において人々に最善を尽くすよう動機づける力がある)

(5) 文中の“obsessed”に意味が最も近いのは

- A. upset (動転した、取り乱した)
- B. unfortunate (不運な)
- C. confused (混乱した)
- D. preoccupied (没頭して、心を奪われて)**

(6) 5段落によると、幸せについて正しくないのは

- A. It doesn’t continue for a long period of time. (長時間は続かない)
- B. The longer they feel happiness, the more likely they survive. (幸せを長く感じられるほど、生き残りやすくなる)**
- C. It is designed to shortly disappear. (すぐに消えるように設計されている)
- D. It is about driving animals to survive and produce offsprings. (生存と繁殖を駆り立てるためのものである)

(7) 下線部の理由をもっとも良く説明している文章は

“Only those who are indifferent to happiness can truly be happy.”

- A. Constantly chasing happiness rather makes you exhausted and dissatisfied. (常に幸福を追い続けることはむしろ我々を疲れさせ、不満の種になる)**
- B. Happiness is not different from pleasant sensations. (幸福は快感と別ではない)
- C. Caring too much about unhappiness rather drives you to be unhappy. (不幸について考えすぎることでむしろ不幸になるように駆り立てられる)
- D. The writer of “Vegetable Root Discourse” had great understanding of human nature. (菜根譚の著者は人間心理についてのすぐれた理解を持っていた)

(8) 8段落の内容に合致するのは

- A. The neocortex is in charge of every thoughts and behaviors. (新皮質はあらゆる思考や行動を司っている)
- B. Breathing occurs under the supervision of the neocortex. (呼吸は新皮質の管理のもとに起きている)

**C. You cannot read this sentence without your neocortex.** (新皮質なしにこの文章を読んで理解することはできない)

D. The old brain has control over every function of your body and mind. (古い脳は体と精神のすべての機能を管理している)

(9) 9段落の内容に合致しないのは

A. We can temporarily stop breathing when the neocortex send a signal to the old brain. (新皮質が古い脳に信号を送ることで一時的に呼吸を止めることができる)

B. The rational part of the brain is not directly connected to the muscles. (脳の理性的な部位は筋肉に直接つながってはいない)

C. The old brain sometimes ignore the neocortex. (古い脳はときどき新皮質を無視する)

**D. The neocortex has to watch over the old brain, which is always evil.** (つねに邪悪な古い脳を新皮質が監視していなければならない)

本文では「古い脳はときとして邪悪になることがある」と言いしており、つねにはない。

(10) 次の下線部の理由をもっともよく説明しているのは

Biologically speaking, our inherent nature is bad.

**A. The rational part of the brain has no control of the muscles.** (脳の理性的な部位は筋肉を制御していない)

B. Everyone can be violent, greedy, and selfish at any time. (あらゆる人がどんなときでも暴力的で、欲深く、わがままになる可能性がある)

C. The brain can be subdivided into two parts. (脳は2つの部位に分かれている)

D. Evolution found no value in goodness. (進化は善良さにまったく価値を見いださなかった)

(11) 『胡蝶の夢』のエッセンスをもっともよく説明しているのは

A. Zhuangzi realized that he was actually a butterfly dreaming that he was a human being. (荘子は、彼は実は人になる夢を見ていた蝶々であったことに気づいた)

B. Zhuangzi was so happy with the dream that he did not want to wake up. (夢があまりにも幸せだったので荘子は夢から覚めたくなかった)

C. Zhuangzi didn't care whether he was a human or a butterfly. (荘子にとって、自分が人間か蝶々はどうでもよかった)

**D. Zhuangzi got confused about his identity.** (荘子は自分自身のアイデンティティが何かについて混乱した)

自分が人であるか蝶であるか分からなくなった、という内容を言い換えているDが正解。

(12) 12段落の内容に合致しないのは

A. It is impossible to verify that your perception accurately reflects the reality. (自分の知覚が現実を正確に反映してくれているかどうかを検証する術はない)

**B. When you find a tree, the tree actually doesn't exist.** (木を発見したとき、そこに実は木は存在していない)

C. We perceive the world by creating a model of the world in our brain. (我々は脳内に世界のモデルをつくることで世界を知覚している)

D. How we perceive the reality depends on the image our brain creates. (我々が世界をどのように知覚するかは、我々の脳がどのようなイメージを結ぶのかによって決まる)

B:本文では、木を実際に直接観察しているわけではないとは述べているが、木が実在しないとは言っていない。