科學與研究
Practice Worksheet

A. Vocabulary - Write the English word

Write the correct English word for each Chinese meaning.

1. 假說 (n.)

2. 實驗 (n.)

3. 理論 (n.)

4. 研究 (n.)

5. 實驗室 (n.)

6. 發現 (n.)

7. 發明 (n.)

8. 創新 (n.)

9. 現象 (n.)

10. 物種 (n.)

11. 分子 (n.)

12. 原子 (n.)

13. 細胞 (n.)

14. 基因 (n.)

15. 去氧核醣核酸 (n.)

B. Grammar - Choose the correct answer

1. The samples _____ analyzed using advanced equipment.
    (A) are   (B) were
    (C) have   (D) did

2. _____ is estimated that the universe is 13.8 billion years old.
    (A) There   (B) It
    (C) This   (D) That

3. Scientists use microscopes _____ observe tiny structures.
    (A) for   (B) to
    (C) with   (D) by

4. _____ experiments confirmed the theory.

    (A) Much   (B) Little

    (C) Several   (D) A little

5. The _____ led to a new treatment for the disease.

    (A) breakthrough   (B) variable

    (C) specimen   (D) equation

6. The clinical trial showed that the vaccine was highly _____.

    (A) renewable   (B) artificial

    (C) effective   (D) theoretical

7. Other laboratories tried to _____ the results.

    (A) simulate   (B) replicate

    (C) manipulate   (D) synthesize

8. Solar and wind power are _____ energy sources.

    (A) nuclear   (B) chemical

    (C) renewable   (D) artificial

9. The _____ allowed scientists to see objects at the molecular level.

    (A) telescope   (B) microscope

    (C) formula   (D) equation

10. The research paper was accepted after _____ review.

    (A) clinical   (B) peer

    (C) theoretical   (D) genetic

C. Listening - Go to learn.chparenting.com to listen

1. 研究團隊在開發五分鐘即可充電的新型電池方面取得了突破。

    (A) They invented a slow-charging battery.

    (B) They developed a fast-charging battery.

    (C) They stopped battery research.

    (D) They recycled old batteries.

2. 據NASA稱，韋伯太空望遠鏡拍攝到了超過130億年的星系影像。

    (A) The telescope is 13 billion years old.

    (B) The telescope captured images of very old galaxies.

    (C) NASA launched a new satellite.

    (D) The telescope was destroyed.

3. CRISPR基因編輯技術讓科學家能精確修改活體生物的DNA序列。

    (A) CRISPR destroys all DNA.

    (B) CRISPR allows precise DNA modification.

    (C) CRISPR is a type of microscope.

    (D) CRISPR is only used in plants.

4. 臨床試驗顯示新疫苗在預防疾病方面有95%的效果。

    (A) The vaccine is 50% effective.

    (B) The vaccine is 95% effective.

    (C) The vaccine failed completely.

    (D) The trial was cancelled.

5. 太陽能和風能等再生能源現佔全球發電量的30%。

    (A) Renewables produce 10% of electricity.
    (B) Renewables produce 30% of electricity.
    (C) Renewables are not used anymore.
    (D) Only solar energy counts as renewable.

D. Reading - Go to learn.chparenting.com to read the passage

1. How does AI help in medicine?

    (A) It replaces all doctors
    (B) It can detect diseases in medical images
    (C) It only helps with surgery
    (D) It is not used in medicine

2. What could previously take years in drug discovery?

    (A) Clinical trials
    (B) Screening potential compounds
    (C) Manufacturing medicine
    (D) Training doctors

3. What concern is raised about AI in science?

    (A) It's too slow
    (B) It's too expensive
    (C) Potential bias in AI models
    (D) It can't process data

4. What do most scientists agree about AI?

    (A) It should replace humans
    (B) It's not useful
    (C) It should complement human judgment
    (D) It should only be used in astronomy

5. What can machine learning algorithms do with large datasets?

    (A) Delete the data
    (B) Identify patterns humans might miss
    (C) Create false data
    (D) Only store the data