

能源轉型與核能

Practice Worksheet

A. Vocabulary - Write the English word

Write the correct English word for each Chinese meaning.

1. 能源轉型 (n.) _____
2. 再生能源 (n.) _____
3. 化石燃料 (n.) _____
4. 碳排放 (n.) _____
5. 溫室氣體 (n.) _____
6. 碳足跡 (n.) _____
7. 碳中和 (n.) _____
8. 淨零排放 (adj./n.) _____
9. 去碳化 (n.) _____
10. 太陽能板 (n.) _____
11. 光伏的 (adj.) _____
12. 風力發電機 (n.) _____
13. 水力發電 (n.) _____
14. 地熱的 (adj.) _____
15. 生質能 (n.) _____

B. Grammar - Choose the correct answer

1. _____ energy sources include solar, wind, and hydropower.
(A) Renewable (B) Fossil
(C) Nuclear (D) Thermal
2. Burning fossil fuels releases _____ into the atmosphere.
(A) carbon emissions (B) oxygen
(C) hydrogen (D) nitrogen
3. A nuclear _____ splits heavy atoms to release energy.
(A) fission (B) fusion
(C) reaction (D) combustion

4. _____ storage systems help manage the intermittency of solar power.
- (A) Battery (B) Coal
(C) Nuclear (D) Gas
5. Many countries aim to achieve _____ by 2050.
- (A) net zero emissions (B) maximum production
(C) nuclear dominance (D) complete deforestation
6. _____ waste must be stored safely for thousands of years.
- (A) Radioactive (B) Solar
(C) Wind (D) Biomass
7. A carbon _____ puts a price on greenhouse gas emissions.
- (A) tax (B) offset
(C) footprint (D) neutral
8. Solar and wind are _____ energy sources because their output varies.
- (A) intermittent (B) dispatchable
(C) baseload (D) thermal
9. The cost per _____ of solar energy has dropped dramatically.
- (A) kilowatt-hour (B) megawatt
(C) gigawatt (D) voltage
10. _____ vehicles use sensors and AI to navigate without human drivers.
- (A) Autonomous (B) Hybrid
(C) Diesel (D) Manual

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

1. 到2050年再生能源的目標是什麼？
- (A) Solar energy has become much cheaper
(B) Solar costs have increased
(C) Solar is only viable in deserts
(D) Nuclear is cheaper than solar
2. 核能的爭議是什麼？
- (A) Coal plants will be closed by 2030
(B) New coal plants will be built
(C) Coal will be the primary energy source
(D) The deadline was extended to 2050
3. 碳捕捉技術做什麼？
- (A) Nuclear energy has significant risks
(B) Nuclear energy is risk-free
(C) Radioactive waste is easy to manage
(D) Nuclear plants never malfunction
4. 為什麼風力發電場有爭議？
- (A) Battery storage solves renewable intermittency
(B) Batteries cannot store renewable energy
(C) Solar works only during daytime
(D) Wind energy cannot be stored

5. 儲能的挑戰是什麼？

- (A) Smaller nuclear reactors are being developed
- (B) All nuclear plants are the same size
- (C) Large reactors are being expanded
- (D) Nuclear development has stopped

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

1. What is the main challenge of renewable energy mentioned?

- (A) Intermittency
- (B) High cost
- (C) Pollution
- (D) Lack of technology

2. Why has nuclear energy reemerged in discussion?

- (A) It is the cheapest option
- (B) It provides reliable low-carbon power
- (C) It produces no waste
- (D) It is completely safe

3. What do opponents of nuclear energy cite as risks?

- (A) Low electricity output
- (B) Radioactive waste and accident potential
- (C) Too much carbon emission
- (D) Insufficient uranium supply

4. What does the passage say about advanced reactor designs?

- (A) They are significantly safer
- (B) They are identical to old designs
- (C) They have been abandoned
- (D) They produce more waste

5. What is the overall tone of this passage?

- (A) Strongly pro-nuclear
- (B) Strongly anti-nuclear
- (C) Balanced presentation of trade-offs
- (D) Dismissive of all energy sources

