

# 農業科技與糧食安全

## Practice Worksheet

### A. Vocabulary - Write the English word

Write the correct English word for each Chinese meaning.

1. 農業 (n.) \_\_\_\_\_
2. 農業科技 (n.) \_\_\_\_\_
3. 精準農業 (n.) \_\_\_\_\_
4. 垂直農場 (n.) \_\_\_\_\_
5. 水耕栽培 (n.) \_\_\_\_\_
6. 氣耕栽培 (n.) \_\_\_\_\_
7. 魚菜共生 (n.) \_\_\_\_\_
8. 溫室 (n.) \_\_\_\_\_
9. 灌溉 (n.) \_\_\_\_\_
10. 滴灌 (n.) \_\_\_\_\_
11. 輪作 (n.) \_\_\_\_\_
12. 單一作物栽培 (n.) \_\_\_\_\_
13. 多元種植 (n.) \_\_\_\_\_
14. 有機農業 (n.) \_\_\_\_\_
15. 永續農業 (n.) \_\_\_\_\_

### B. Grammar - Choose the correct answer

1. \_\_\_\_\_ farming grows crops in stacked indoor layers.  
(A) Vertical (B) Subsistence  
(C) Commercial (D) Monoculture
2. \_\_\_\_\_ grows plants in nutrient-rich water without soil.  
(A) Hydroponics (B) Aeroponics  
(C) Aquaponics (D) Organic farming
3. \_\_\_\_\_ rotation helps maintain soil fertility and reduce pests.  
(A) Crop (B) Field  
(C) Season (D) Plant



4. \_\_\_\_\_ is the editing of genes to create improved crop varieties.  
(A) Gene editing (B) Composting  
(C) Irrigation (D) Harvesting
5. \_\_\_\_\_ agriculture uses GPS and sensors to optimize farming.  
(A) Precision (B) Subsistence  
(C) Traditional (D) Organic
6. \_\_\_\_\_ is a sustainable alternative to traditional animal protein.  
(A) Lab-grown meat (B) Fossil fuel  
(C) Solar energy (D) Battery storage
7. \_\_\_\_\_ causes harmful algal blooms in waterways.  
(A) Eutrophication (B) Desertification  
(C) Salinization (D) Deforestation
8. \_\_\_\_\_ land is suitable for growing crops.  
(A) Arable (B) Barren  
(C) Toxic (D) Volcanic
9. \_\_\_\_\_ decline threatens global food production.  
(A) Pollinator (B) Population  
(C) Temperature (D) Altitude
10. The \_\_\_\_\_ chain maintains product temperature during transportation.  
(A) cold (B) food  
(C) supply (D) value

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

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1. 垂直農場的優勢是什麼？  
(A) Vertical farms grow crops indoors efficiently  
(B) All farming must use outdoor fields  
(C) Vertical farming wastes more water  
(D) LED lights damage crops
2. 基因改造作物的爭議是什麼？  
(A) Climate change threatens food production  
(B) Food production is improving everywhere  
(C) Weather has no effect on farming  
(D) Droughts help crop growth
3. 精準農業如何運作？  
(A) Gene editing creates more resilient crops  
(B) CRISPR is only used in medicine  
(C) Edited crops are less productive  
(D) Gene editing has been banned globally
4. 糧食浪費的規模有多大？  
(A) A third of global food is wasted annually  
(B) Food waste has been eliminated  
(C) Only ten percent of food is wasted  
(D) Food waste has no environmental impact



5. 水產養殖面臨什麼挑戰?

- (A) Lab-grown meat may reduce farming impact
- (B) Lab meat is impossible to produce
- (C) Traditional farming has no environmental impact
- (D) Cell-based meat is already mainstream

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

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1. What challenge does global food security face?

- (A) Feeding 10 billion people sustainably
- (B) Producing less food
- (C) Reducing population
- (D) Eliminating all technology

2. What does precision agriculture use?

- (A) Only manual labor
- (B) Sensors, drones, and AI
- (C) Traditional plows only
- (D) Chemical pesticides only

3. What can CRISPR help develop?

- (A) Climate-resilient crops
- (B) Faster tractors
- (C) Better pesticides
- (D) Larger greenhouses

4. According to the passage, is technology alone sufficient?

- (A) Yes, technology solves everything
- (B) No, other measures are also needed
- (C) Technology is irrelevant
- (D) Only traditional methods work

5. Which is NOT mentioned as a needed action?

- (A) Reducing food waste
- (B) Improving distribution
- (C) Ensuring equitable access
- (D) Building more factories

