

5.3 The Green Revolution

Name: _____ Class: _____ Date: _____

Total: 11 marks

KEY WORDS monoculture 单一栽培 • green revolution 绿色革命 • irrigation 灌溉
• synthetic fertilizers 化肥 • pesticides 农药

Objective

Build the skills to answer exam questions on the **Green Revolution**.

You must be able to:

- describe the **Green Revolution** 绿色革命 and its methods
- state its benefits and costs
- link it to fertilizer, irrigation, and monoculture

1 Worked examples

Study these first. Each one shows the method for a question type used later — follow the steps and you can do the Practice and Exam-style questions yourself.

■ What it was

The **Green Revolution** greatly increased crop yields using **high-yield seeds**, **synthetic fertilizers**, **pesticides**, **irrigation**, and **mechanization**.

■ Benefits

It **fed billions** and reduced famine by producing much more food per area.

■ Costs

- **Soil degradation** and erosion from intensive farming.
- **Water pollution** from fertilizer/pesticide runoff.
- **High energy and water use**.
- Loss of crop diversity through **monoculture** (growing one crop).

■ Monoculture risk

Monoculture raises efficiency but makes crops vulnerable — a single pest or disease can destroy the whole field, and it depletes specific soil nutrients.

2 Practice

Now apply the methods above.

2.1 Name two methods of the Green Revolution. [2]

2.2 State one benefit of the Green Revolution. [1]

2.3 What is monoculture? [1]

3 Exam-style questions

3.1 A drawback of monoculture is that a single pest or disease can [1]

A	B
C	D

A improve the harvest

B destroy the entire crop

C increase diversity

D enrich the soil

3.2 A country adopts Green Revolution farming.

(a) State one benefit and one environmental cost. [2]

(b) Explain why fertilizer use can harm nearby waterways. [2]

3.3 Explain why monoculture increases the risk of crop failure. [2]