

2.6 Malthusian Theory

Name: _____ Class: _____ Date: _____

Total: 10 marks

KEY WORDS malthusian theory 马尔萨斯理论 • neo-malthusians 新马尔萨斯主义者 • exponentially 指数式
• population pyramid 人口金字塔

Objective

Build the skills to answer exam questions on **Malthusian theory** 马尔萨斯理论 and its critics.

You must be able to:

- state Malthus's argument about population and food
- explain the difference between geometric and arithmetic growth in his theory
- summarise how **neo-Malthusians** 新马尔萨斯主义者 update the idea
- give one criticism of Malthus

1 Worked examples

Study these first. Each one shows the method for a task used later.

■ Malthus's argument

Thomas Malthus argued **population grows geometrically** (1, 2, 4, 8...) while **food grows arithmetically** (1, 2, 3, 4...), so population would outrun food and cause famine.

■ Neo-Malthusians

Neo-Malthusians extend the worry to all resources (water, energy, land) and a larger global population, warning of shortages and environmental limits.

■ Criticisms

Critics note Malthus underestimated **technology** — the Green Revolution raised food output hugely — and ignored that development lowers fertility.

2 Practice

2.1 State Malthus's central claim about population and food supply. [2]

2.2 State one reason Malthus's prediction has not come true for the world as a whole.[2]

2.3 A modern writer warns that a growing population will exhaust fresh water and energy.

(a) Which updated theory is this? [1]

(b) State how it differs from Malthus's original focus. [1]

3 Exam-style questions

3.1 Malthus argued that food supply increases [1]

- **A** geometrically
- **B** arithmetically
- **C** exponentially
- **D** not at all

3.2 The strongest evidence against Malthus is the [1]

- **A** population pyramid
- **B** Green Revolution's rise in food output
- **C** sex ratio
- **D** distance decay effect

3.3 Two students debate Malthus.

(a) State one factor Malthus underestimated. [1]

(b) Explain why some still find neo-Malthusian ideas relevant. [1]

Solutions

2.1 population grows faster (geometrically) than food (arithmetically); so population outstrips food, causing famine.

2.2 technology/the Green Revolution raised food output far beyond his estimate; fertility also fell as countries developed.

2.3 (a) neo-Malthusian. (b) it extends the concern from food to all resources/the environment.

3.1 B. food grows arithmetically (1,2,3,4) in his theory.

3.2 B. technology (Green Revolution) massively raised food supply.

3.3 (a) technological progress in agriculture. (b) some resources (water, fossil fuels, arable land) really are finite and under pressure.