

5.1 The Tragedy of the Commons

Name: _____ Class: _____ Date: _____

Total: 9 marks

Objective

Build the skills to answer exam questions on the **tragedy of the commons**.

You must be able to:

- explain the **tragedy of the commons** 公地悲剧
- give examples (overfishing, grazing, pollution)
- describe solutions (regulation, privatization, quotas)

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.

■ The idea

The **tragedy of the commons** occurs when a shared resource (open to all, owned by none) is **overused** because each individual benefits from using more, while the cost of depletion is shared by everyone.

■ Why it happens

Each user gains the **full benefit** of taking more, but bears only a **small share** of the harm. So everyone takes as much as they can, and the resource collapses.

■ Examples

Overfishing shared oceans, overgrazing common pasture, polluting shared air/water —all are commons problems.

■ Solutions

- **Regulation** —laws limiting use.
- **Quotas** —caps on how much each can take.
- **Privatization** —giving ownership so the owner protects the resource.
- International agreements for global commons.

2 Practice

Now apply the methods above.

2.1 What is the tragedy of the commons? [1]

2.2 Give one example of a commons problem. [1]

2.3 State one solution. [1]

3 Exam-style questions

3.1 The tragedy of the commons happens because each user gains the full benefit but [1]

- **A** bears the full cost
- **B** shares the cost with everyone
- **C** gains no benefit
- **D** owns the resource

3.2 Fishers all take as many fish as they can from an open ocean.

(a) Explain why this leads to collapse of the fishery. [2]

(b) State one solution that could prevent it. [1]

3.3 Explain how assigning ownership (privatization) can protect a shared resource. [2]

4 Go further

You are now ready for the real exam questions on this subtopic:

- work through the **5.1 The Tragedy of the Commons** lesson on the **Learn** page;

- read the **The Tragedy of the Commons** section of the AP Environmental Science handout on the **Know** page.

Solutions

2.1 A shared, unowned resource is overused because individuals benefit from taking more while the cost is shared.

2.2 Any one: overfishing, overgrazing, air/water pollution.

2.3 Any one: regulation, quotas, privatization.

3.1 B —shares the cost with everyone.

3.2 (a) Each fisher gains fully from catching more but shares the cost of depletion, so all overfish and the stock collapses. (b) Any one: catch quotas, regulation, protected areas.

3.3 An owner bears the full cost of overuse, so they have an incentive to use the resource sustainably to preserve its long-term value.