

20.3 Pollution

Name: _____ Class: _____ Date: _____

Total: 8 marks

KEY WORDS eutrophication 富营养化 • fish 鱼类 • methane 甲烷 • plastics 塑料 • climate change 气候变化

Objective

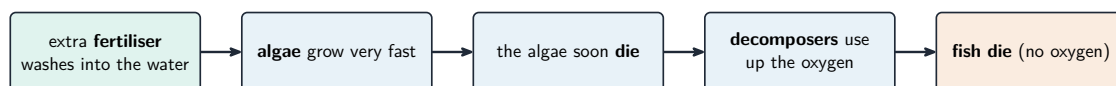
Build the skills to answer exam questions on **pollution** 污染 — water pollution and **eutrophication** 富营养化, plastics, and the **greenhouse effect** 温室效应.

You must be able to:

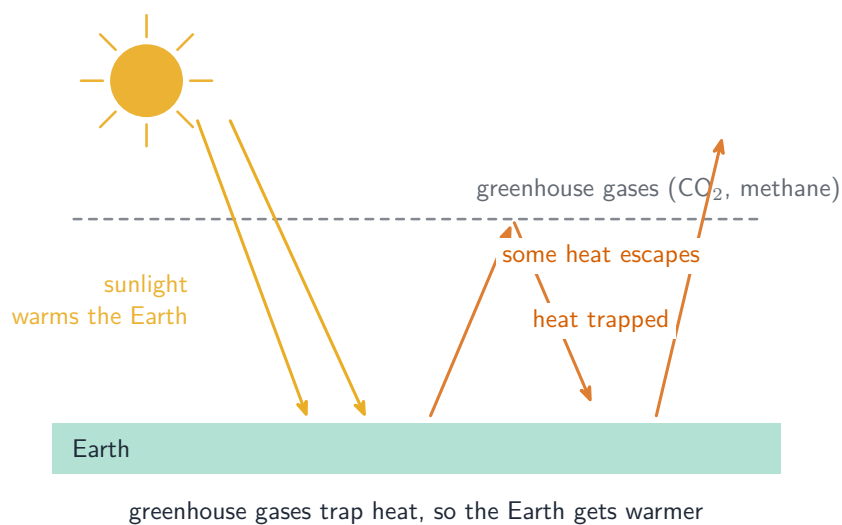
- describe the steps of eutrophication
- describe the problems caused by non-biodegradable plastics
- explain how greenhouse gases cause climate change

1 Worked examples

■ Eutrophication and the greenhouse effect



Eutrophication: extra fertiliser makes algae bloom, then the water loses oxygen and fish die



Greenhouse gases (CO₂, methane) trap heat → climate change

2 Practice

2.1 Name two greenhouse gases.

[2]

2.2 State one problem caused by non-biodegradable plastics.

[1]

3 Exam-style questions

3.1 In eutrophication, the fish die because:

[1]

- A the water becomes too cold
- B decomposers use up the dissolved oxygen
- C the algae eat the fish
- D there is too much oxygen

3.2 Excess fertiliser runs into a river.

(a) Describe the steps of eutrophication that follow.

[4]

Solutions

2.1 carbon dioxide; methane.

2.2 they build up and harm wildlife (animals eat them or get trapped).

3.1 B. Decomposers use up the dissolved oxygen, so the fish die.

3.2 (a) fertiliser adds nitrate ions to the water; algae grow very fast then die; decomposers break them down and use up oxygen in respiration; the dissolved oxygen falls, so fish and other organisms die.