

# Water

## Question Paper

Level	O Level
Subject	Chemistry
Exam Board	Cambridge International Examinations
Topic	Atmosphere and Environment
Sub-Topic	Water
Booklet	Question Paper

**Time Allowed:** 16 minutes

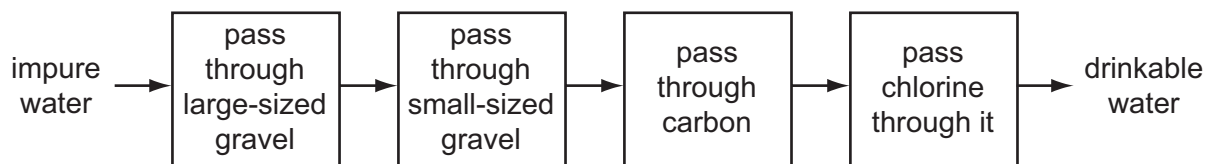
**Score:** /13

**Percentage:** /100

1 Which pollutant causes eutrophication in rivers?

- A acid rain
- B carbon monoxide
- C fertiliser
- D metal compounds

2 The flow chart shows how impure water can be treated to produce drinkable water.



What is **not** removed from the water by this process?

- A clay particles
- B microbes
- C nitrates
- D odours

3 Which of these processes can be used to purify water containing insoluble impurities?

- 1 chlorination
- 2 desalination
- 3 distillation
- 4 filtration

- A 1 and 2      B 2 and 3      C 3 and 4      D 4 only

4 Which method of water purification can be used to obtain drinkable water from seawater?

- A chlorination
- B desalination
- C filtration
- D sedimentation

5 The following stages happen during eutrophication.

- 1 increase in growth of algae
- 2 increase in nitrate concentration
- 3 death of aquatic plants
- 4 decrease in dissolved oxygen

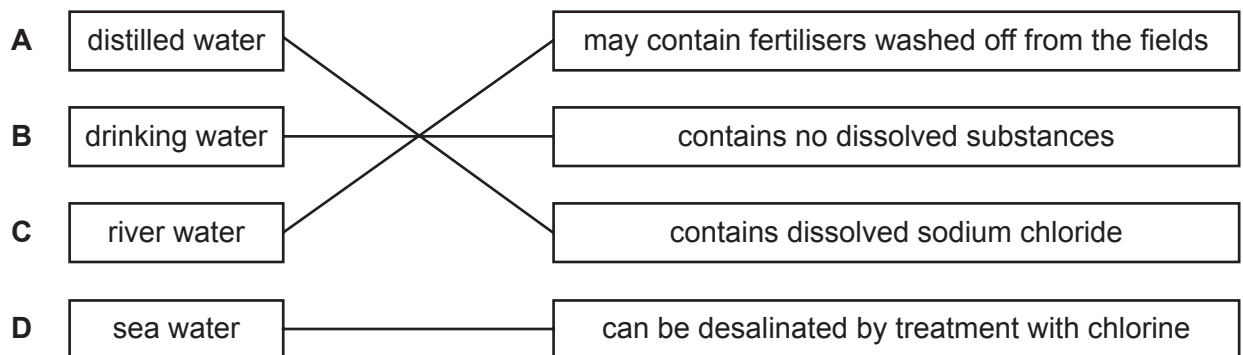
In which order do these stages occur?

- A 1 → 2 → 3 → 4
- B 1 → 2 → 4 → 3
- C 2 → 1 → 3 → 4
- D 2 → 1 → 4 → 3

6 In the purification of water, what is the purpose of carbon?

- A to desalinate
- B to disinfect
- C to remove odours
- D to remove solids

7 Which type of water in the left hand column is linked correctly to a statement in the right hand column?



8 Which gas, present in pond water, decreases in concentration during eutrophication?

- A carbon dioxide
- B methane
- C nitrogen
- D oxygen

9 The table shows pollutants which cause eutrophication, sources of these pollutants and a problem that eutrophication causes.

Which entry in the table is correct?

	pollutant	source	problem
A	nitrates	detergents	oxygen depletion
B	nitrates	fertilisers	excess oxygen
C	phosphates	detergents	oxygen depletion
D	phosphates	fertilisers	excess oxygen

10 Which pollutant increases the growth of algae in rivers and streams?

- A chlorine
- B heavy metal ions
- C nitrate ions
- D sulphur dioxide

11 The water in a lake contains the following dissolved substances.

- mineral salts
- nitrates
- oxygen
- phosphates
- sewage

How many of these substances can cause eutrophication?

- A 1
- B 2
- C 3
- D 4

12 Why is carbon used in the purification of drinking water?

- A** disinfects the water
- B** filters out solids
- C** removes tastes and odours from the water
- D** desalinates the water

13 The water in a lake showed signs of eutrophication.

What could be the cause of this?

- A** increasing the amount of dissolved fertiliser
- B** increasing the amount of dissolved oxygen
- C** decreasing the amount of dissolved mineral salts
- D** decreasing the number of bacteria