

Name: _____

Date: _____

Class: _____

IB Environmental Systems and Societies

4.4 Water Pollution

Significant ideas:

Water pollution, both groundwater and surface water, is a major global problem the effects of which influence human and other biological systems.



Types of water pollution

1. Define water pollution.

2. Give **three** examples of *natural* pollution sources.

3. Outline what is meant by the term *anthropogenic pollutant*.

4. Pollutants may be organic or inorganic. Give three examples of each and state their possible effects.

Pollutant Type	Example	Effect
Organic		
Inorganic		

5. List **three** sources of freshwater pollution and **three** sources of marine pollution.

Freshwater pollution	Marine Pollution



Measuring water pollution

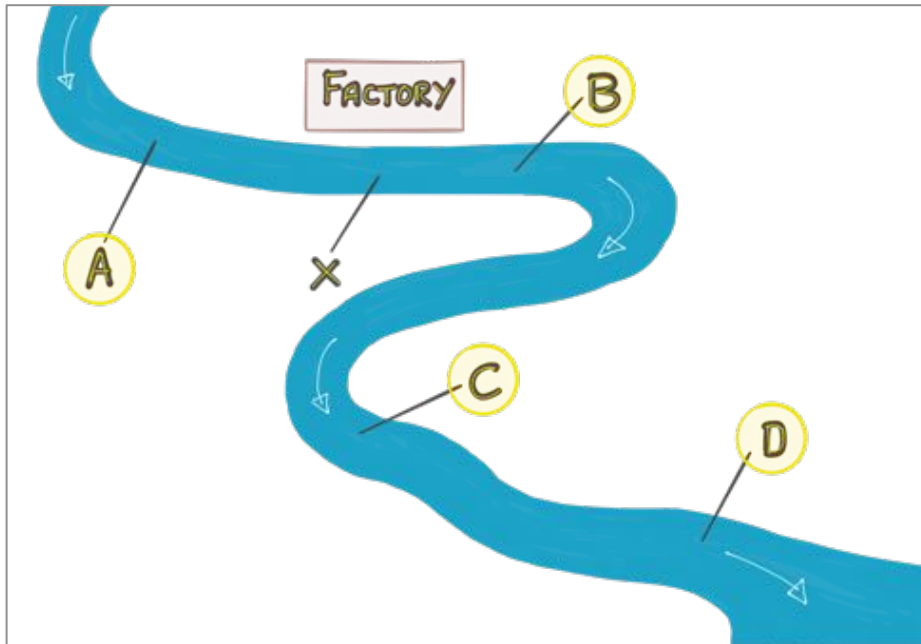
1. Describe what is meant by the term *Biochemical Oxygen Demand (BOD)*.

2. Describe what is meant by the term *biotic index*.

3. a) Outline how *indicator species* can be used to assess pollution levels in water.



b) The diagram below represents a river. There is a point-source of **organic** pollution from a factory at point X. Using examples of organisms, and the phrase “pollution (in)tolerant organism”, **compare** and **explain** the distribution of freshwater invertebrates you may expect to find at each site A, B, C and D.



Eutrophication

With the help of a diagram, describe the process of eutrophication. Include each of the following

- *Addition of fertilisers*
- *Plant/algae growth*
- *Sunlight blocked*
- *Decomposition*
- *Oxygen depletion*
- *Death of organisms*



Lined writing area with 25 horizontal lines.

