

Eutrophication WORKSHEET 1

Time available: 30 minutes

Location: in the classroom

Answer the following questions:

Why do so many plant organisms grow so strongly in rivers, in the sea, but especially in lakes or ponds?

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Can river water be used to irrigate fields or you think it may harm crops and plants?

YES

NO

What causes the disappearance or the reduction of fish?

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Other questions?

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Eutrophication WORKSHEET 2

Time available: 60 minutes / day (3 days)

Location: in the science lab

Observe the organoleptic characteristics (color, odor, transparency) of the samples of water taken. Describe:

Using the microscope, observe the water sample identifying the algae and the bacteria present. Describe:

Using the pH meter, determine the pH of water samples:

pH:

Using the photometer and reagents available, determine the amount of dissolved O₂.

Report the data:

Dissolved O₂:

Using the photometer and the reagents available, determine the nitrates and phosphates present in the water samples. Report the data:



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PHOSPHATES:

NITRATES:

Observe the total number of solids present in water samples:

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Eutrophication WORKSHEET 3

Time available: 30 minutes

Location: in the classroom

What are the components of an ecosystem?

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What are the main fertilizers used in agriculture and what are their characteristics?

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What do "photosynthesis and respiration" consist of?

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What does this mean and which examples can you give of aerobic and anaerobic microorganisms?

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What is the general structure of a water purification plant?

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What fertilizers are used in agriculture and what are their characteristics?

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What do you plan to do if man continues to pollute water without changing his behavior?

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What are the possible solutions to the problem of eutrophication in your opinion?

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