Name: _____

Date: _____

"Ecosystems"
Summative Assessment

1. Observe the eco-column. Name three specific living organisms and three specific non-living materials in the eco-column. Place them on the T-chart below.

Living Organisms	Non-Living Materials
1.	1.
2.	2.
3.	3.

2. Name two basic needs that organisms must have to survive. Explain how the organisms in the eco-column are **interdependent**.

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3. Name **three** environmental factors that could affect the growth and reproduction of the guppies in an eco-column. Tell how each factor might affect the guppies.

Environmental Factor	How this factor could affect the growth and reproduction of the guppies
1.	1.
2.	2.
3.	3.

4. What is the source of energy for all ecosystems?

_____

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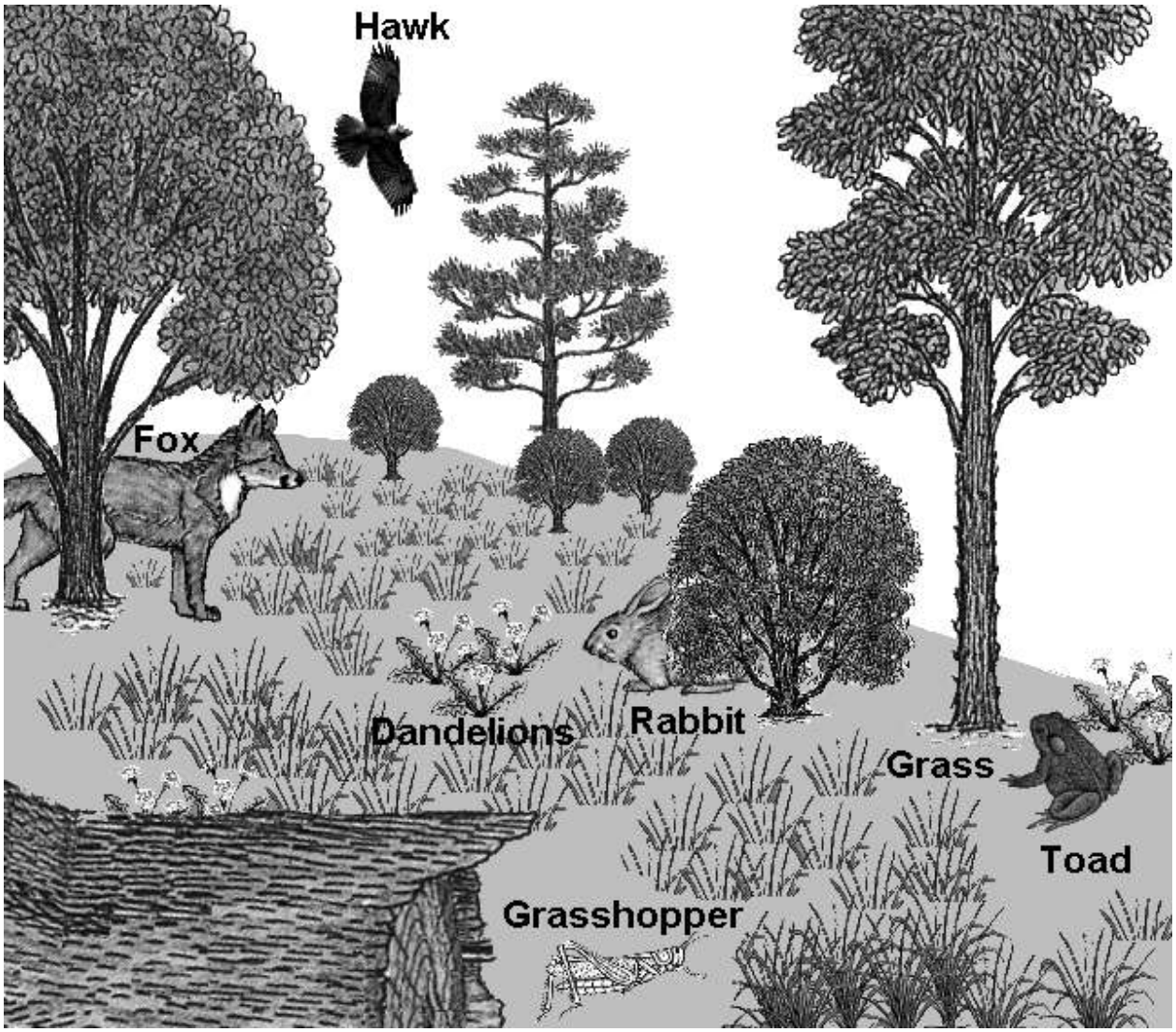
_____

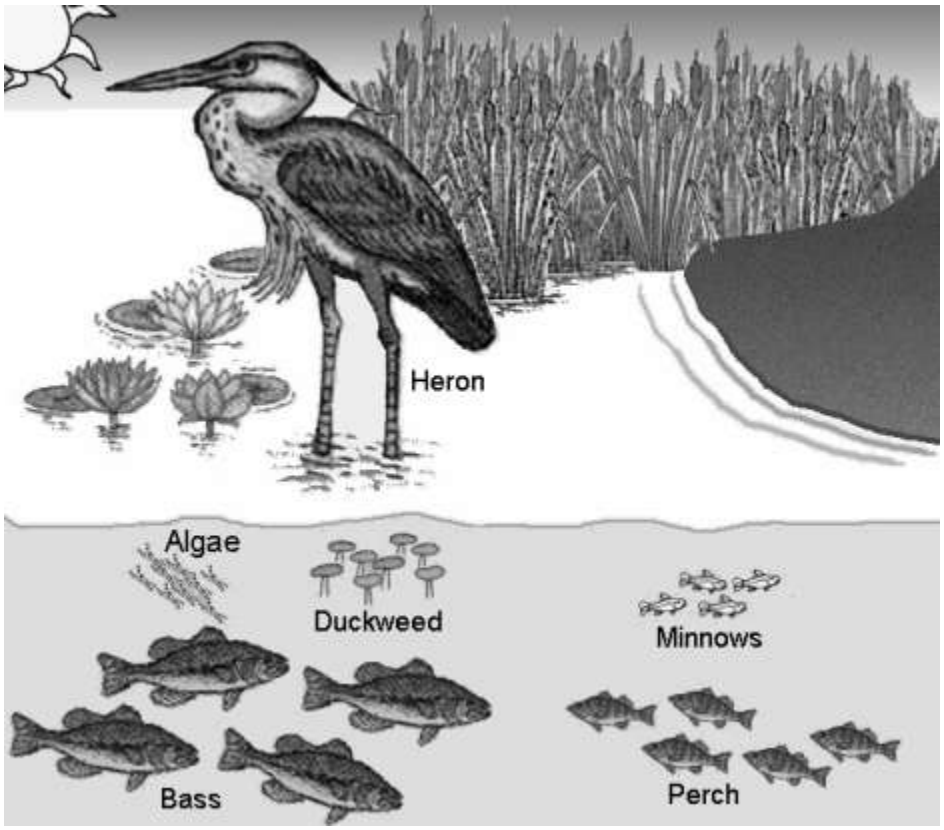
Woodland Ecosystem



5. Complete a simple food chain using organisms found in the picture. Be sure to include the energy source.

_____→_____→_____→_____

Wetland Ecosystem



6. Look at the picture of the "Wetland Ecosystem." If all the large-mouth bass disappear, describe how the number of perch and minnows in the food chain may be affected. Explain why this will happen.

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7a. Use the data from the graphs on page 6 to determine the health of the Delmarva River. Write **two conclusions** that are supported by the data.

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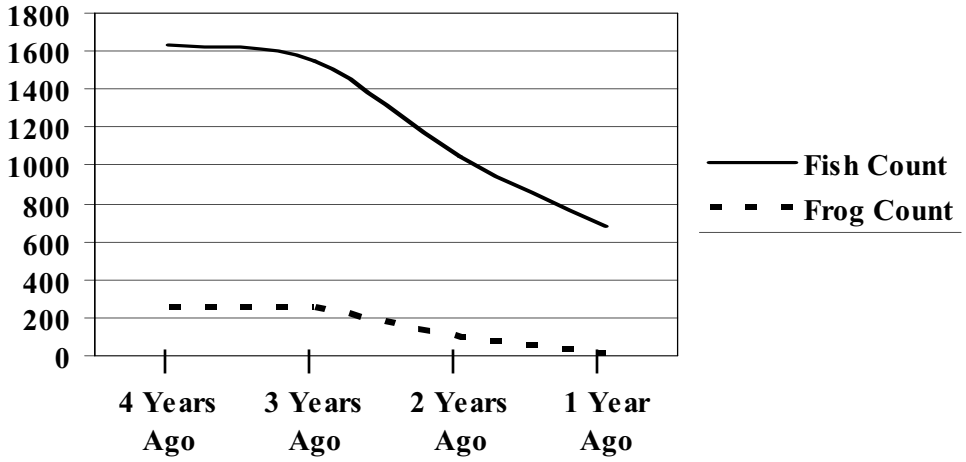
7b. What are **three** possible causes for the change in data over the four-year period? What steps can be made to improve the health of the Delmarva River?

Possible causes for change in data over four years: 1. 2. 3.
Steps to improve the health of the Delmarva River: 1. 2. 3.

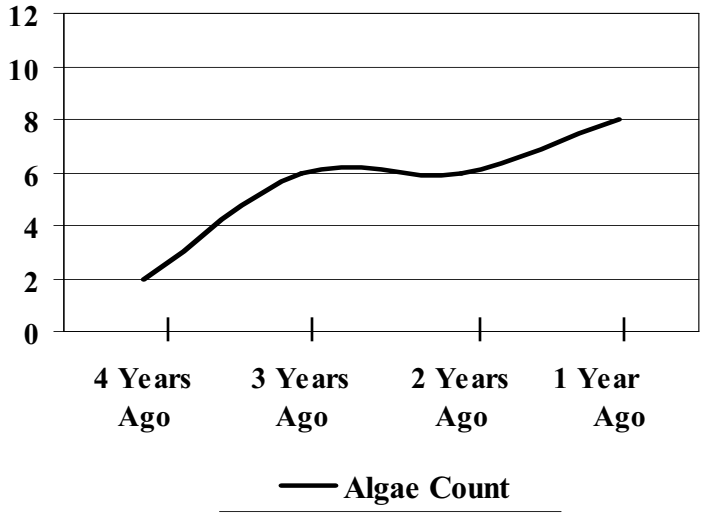
Name: _____

Delmarva River Data Sheet

Delmarva River Fish and Frog Count



Delmarva River Algae Count



Algae Growth Scale

Low Algae Level	0 – 3
Medium Algae Level	4 – 9
High Algae Level	10 – 12