

Name _____

Date _____

Evolution and Pollution in the Hudson River

Part A

Read the following first sentences of news articles. Then choose one to read, circle the number, and obtain the article from your teacher.

1. Scientists have discovered a strange fish that lives in a soup of some of industry's worst pollutants.
2. Bottom-feeding fish in the Hudson River have developed a gene that renders them immune to the toxic effects of PCBs, researchers say.
3. An unpretentious little fish that has learned how to thrive in one of the most polluted rivers in North America has scientists wondering if foul water is driving its evolution and, ironically, whether genetic changes that seem to be taking place might jeopardize its ability to survive in cleaner water.
4. IT IS not often that biologists have a chance to watch natural selection in action.
5. Some fish in New York's Hudson River have become resistant to several of the waterway's more toxic pollutants.

While reading your article, do the following:

- Circle any words that are new to you.
- Draw a box around phrases or sentences that you don't understand.

Then answer the questions below:

1. Why did you choose this article to read?

2. What did you *like* and what did you *dislike* about this article?

Likes:

Dislikes:

3. Which section(s) did you find easiest and most difficult to understand? Why do you think these were easier/more difficult?

Easiest:

More difficult:

4. List the things you learned about in the article regarding:

a) the toxic effects the chemical has on the fish and/or other organisms (specify):

b) how the fish evolved resistance to the chemicals:

c) potential consequences that this adaptation may have on the fish and/or other organisms:

5. What do you want to know more about that the article *didn't* mention?

6. Why do you think this author wrote this story? What did they want to communicate to their audience?

7. Describe the tone the author takes. Is it peppy, inquisitive, informative, hopeful, pessimistic...?

8. After reading this article, are you more, less, or equally confident that the following statement is true? Why?

“We don't need to spend money on the environment. Animals will evolve to handle whatever comes their way.”

Part B

After discussing your responses with your group, choose another article to read. Write “#2” at the top of it. While reading, you should:

- Circle any words that are new to you
- Draw a box around sentences or phrases you don't understand

- Underline new information that tells you more about the story

Then answer the following questions:

1. Why did you choose this article to read?
2. Did you like this article more or less than the previous article? Why?
3. Did you find this article easier or more difficult to read? Why?
4. What additional things did you learn about in the article regarding:
 - a) the toxic effects the chemical has on the fish and/or other organisms (specify):
 - b) how the fish evolved resistance to the chemicals:
 - c) potential consequences that this adaptation may have on the fish and/or other organisms:
5. Why do you think this author wrote this story? What did they want to communicate to their audience?

Part C

Read “Toxic river means rapid evolution for one fish species.”

- Circle any words that are new to you.
- Draw a box around sentences or phrases you don’t understand.
- Put a star by new information that tells you more about the story.

Then answer the following questions.

1. Who do you think this article was written for? (i.e. Who is the author’s target audience?)
2. What new information did you learn from this article regarding:

a) the toxic effects the chemical has on the fish and/or other organisms (specify):

b) how the fish evolved resistance to the chemicals:

c) potential consequences that this adaptation may have on the fish and/or other organisms:

3. Look back at the sections you didn't understand from the previous two articles. Which ones, if any, did this article help clarify? What was it about this article that made those sections easier to understand?

4. Why do you think this author wrote this story? What did they want to communicate to their audience?

5. Which of the three articles you read do you trust the most to have accurate information? Why?

6. Where do you think the authors of each the three articles got their information?

7. After reading this article, are you more, less, or equally confident that the following statement is true? Why?

“We don't need to spend money on the environment. Animals will evolve to handle whatever comes their way.”

8. What are some of the challenges that these authors faced when writing about a scientific topic? How did they meet these challenges? Do you think they did a good job?