Teacher:_____ Period: _____ Date: _____ Grade:___ Your Initials: ___ ___ ___

2012-2013 Biodiversity Assessment Form A

1. You have two identical bags and fill them with the same amount and type of leaves.

You put the identical bags in two different areas of a stream. After several weeks, one set of leaves has almost disappeared and the bag is full of organisms. The other set of leaves is still mostly whole and the bag has few organisms in it.

What are some ways the two different areas of the stream could be different?_____

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How might these differences explain why the leaf packs in one area have more organisms than the leaf packs in another area? _____

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2. Choose a species of organism that you know about that lives in a stream. What species did you choose? _____

Describe everything you know about this organism's niche._____

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3. A glacier is melting and as a result, a new stream is being formed. Initially the stream has almost no living things in it, but over the next 10 years, more and more living things will be found in the stream.

a. Imagine you work for the U.S. Fish and Wildlife Service and you need to predict what SPECIFIC living things will be found in the stream in 10 years.

How would you predict what organisms would be in the stream in 10 years? DON'T make a list of organisms. Tell us how you would make your predictions. Be as detailed as you can in your answer.

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b. What are some *interactions (relationships) with other living things* that could affect if an insect can survive and reproduce on the newly formed stream?_____

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Pick one specific interaction that you provided and describe how that would work.

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c. What are some *environmental (abiotic) factors* that could affect if an insect could survive and reproduce on the newly formed stream? _____

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Teacher:_____ Period: _____ Date: _____ Grade:___ Your Initials: ___ ___ ___

Pick one specific factor that you provided and describe how that would work.

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4. A property owner cuts down the maple trees beside a stream and removes them.

Would taking away the maple trees affect the bacteria in the stream? ☐ Yes ☐ Maybe ☐ No

Explain your reasoning._____

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Would taking away the maple trees affect insects in the stream? ☐ Yes ☐ Maybe ☐ No

Explain your reasoning._____

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Would taking away the maple trees affect the algae in the stream? ☐ Yes ☐ Maybe ☐ No

Explain your reasoning._____

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Would taking away the maple trees affect the fish in the stream? ☐ Yes ☐ Maybe ☐ No

Explain your reasoning._____

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