Name _____ Date _____

Imaginary Marine Ecosystem Analysis

Answer the questions below for your imaginary ecosystem.

1. What is the underwater climate of your marine ecosystem? Describe the water temperature, salinity, movement, depth, and color. Include how much sunlight it receives throughout the day and whether it is connected to a freshwater source.

   _____

   _____

2. List three abiotic components of your ecosystem.

   _____

   _____

3. List three biotic components of your ecosystem.

   _____

   _____

4. Based on the abiotic conditions and organisms within your ecosystem, where in the world ocean is your marine ecosystem likely to be found? Explain.

   _____

   _____

5. List three specific organisms and describe how they are adapted to surviving and thriving within your ecosystem.

   _____

   _____

6. Of the species that you invented, which one is most sensitive to extinction? Why?

   _____

   _____

7. What would happen to your food web if all of the primary consumers became extinct? Explain and give examples.

   _____

   _____

8. What would happen if all of the decomposers were removed? Explain and give examples.

   _____

   _____

Imaginary Marine Ecosystem Analysis, continued

9. What are two ways that humans could impact your ecosystem?

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_____

10. If global warming were greatly accelerated, how would the organisms living within your marine ecosystem be affected? List two ways that your ecosystem's abiotic conditions would be affected. Describe how those abiotic changes would affect two different organisms in your ecosystem.

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_____

11. How do ecological and symbiotic relationships shape your imaginary marine ecosystem? Why is it important to understand these relationships?

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