Cary Institute of Ecosystem Studies — Changing Hudson Project

Name_____ **Date**_____

Questions for DO Reading

Please read the article "Dissolved Oxygen" in order to answer the following questions:

1. Where does the oxygen come from that aquatic organisms need?
   _____
2. What are two ways that dissolved oxygen enters the water?
   _____ _____
3. How is oxygen used in the water (consumed)?
   _____
4. What does BOD stand for?
   _____
5. Give three examples of how DO levels can change due to human interaction with the aquatic ecosystem.
   _____

   _____

   _____
6. Explain 2 ways nature may affect the DO levels in an aquatic ecosystem.
   _____

   _____
7. What invasive species in the Hudson River negatively affects DO levels?
   _____
8. What does anoxic mean?

   _____
9. What levels of dissolved oxygen are "very good" for most aquatic organisms?
   _____
10. Describe two ways we can measure DO levels.

    _____

    _____

11. You just received a sample of water from one of your assistants and you must determine the percent saturation level. You also must determine what type of life will this sample support. You know the sample was taken at a temperature of 9˚ C and the DO level was measured at 10 mg/L. What is the percent saturation? What type of life can survive in this water?

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12. You have received two samples of water, one which was collected from a stream that was very warm (30 C), and another from a very cold stream (5 C). Without knowing anything else, which sample of water would you expect has higher levels of DO?

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13. Explain the daily cycle of dissolved oxygen levels in an aquatic ecosystem.

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