Part A:

1. Hello

Part B: Measuring Salinity in Estuaries

Level 3: Measuring Salinity in Estuaries

2. Question #5 from the activity: Which statement represents a valid conclusion based on the graph? Enter the correct letter and the statement (0.5pts)

C. A rainstorm on Oct 25 may have caused the decrease in salinity on Oct 27

3. What may have caused Delta Smelt to be found outside of their normal range? (0.5pts)

There was a significant amount of rainfall during the times the salinity was higher than 2, and salinity also spiked when ever rainfall increased.

Level 4 - Research Question: Predicting the Return of the Atlantic Sturgeon

4. To get started, use the online Fact Sheet to select an estuary where Atlantic Sturgeon are found. Record the estuary name and location here: (0.5pts)

The location we chose was Chesapeake Bay, MD.

5. Write your research question in the space below. (1pt)

How does dissolved oxygen and temperature change over

6. Complete the table (1pt)

7. Can you identify a time period when the water temperature is within the range for the sturgeon to return? (0.5pts)

8. What is the range of the other water quality parameters during that time period? (0.5pts)

9. Can you identify a time period when all the conditions look right for the sturgeon to return to spawn? (0.5pts)

Table 1: Caption

Location	Water Quality	Range of dates	Notes
OtterPoint Creek	Temp, Salinity	04-12-2019	This was what happened and it should be around 12.

10. Do the same conditions occur around the same time, year after year? (0.5pts)

Level 5: Work as a team to develop your own investigation

11. Read through Level 5 on your own, and then work with your team to develop your research question. State your research question here: (1 pt)

12. State your hypothesis: (1 pt)

13. *Make a Plan:* Make a lis below of the specific data you will need to answer the question (1 pt)

Table 2: Caption

Location	Water Quality Parameter	Range of dates	Notes

14. Other than the data listed above, what other information (if any) will you need to answer your question? (1 pt)

15. Insert figure here (1 pt)

16. *Interpret the data:* What does your data show? Be specific and descriptive. Does the data support your hypothesis? (1 pt)

17. *Draw a Conclusion:* What is the answer to your question? Use evidence and data to support your conclusion. (1 pt)

18. Give a specific example of why it would be biologically relevant to measure **temperature** in an aquatic environment. (1 point)

19. Give a specific example of why it would be biologically relevant to measure **dissolved oxygen** in an aquatic environment. (1 point)

20. Give a specific example of why it would be biologically relevant to measure **carbon dioxide** in an aquatic environment. (1 point)