Wacky waters

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INTRODUCTION

- I am testing different bodies of water and seeing the difference between them.
- I chose this because I wanted to know more about the water we drink and the water around us.
- I think it my project is interesting because I wanted to see how clean our water is and how it changes over time.

BACKGROUND INFORMATION

- Testing the transparency can help see how dirty the water is and how hard it is the see through it.
- When testing the PH you are trying to see how acidic the water is and 7 is the neutral base.
- When testing the dissolved oxygen of water you are testing to see how much oxygen is in the water. A 6.5-8 is

RESEARCH QUESTION

What body of water is the cleanest?

HYPOTHESIS

I think the pond water will be the dirtiest because it is never drained and it has a lot of algae and leaves in it.

EXPERIMENTAL DESIGN

- Independent variable: The weather over time
- Dependent variable: Results of the water
- Constant factors: The location of where I tested it
- Did you repeat the experiment? Yes, 2 times

MATERIALS

- Transparency tube tester
- PH strips
- Water thermometer
- Dissolved, oxygen tester
- Bucket to hold the water

METHODS

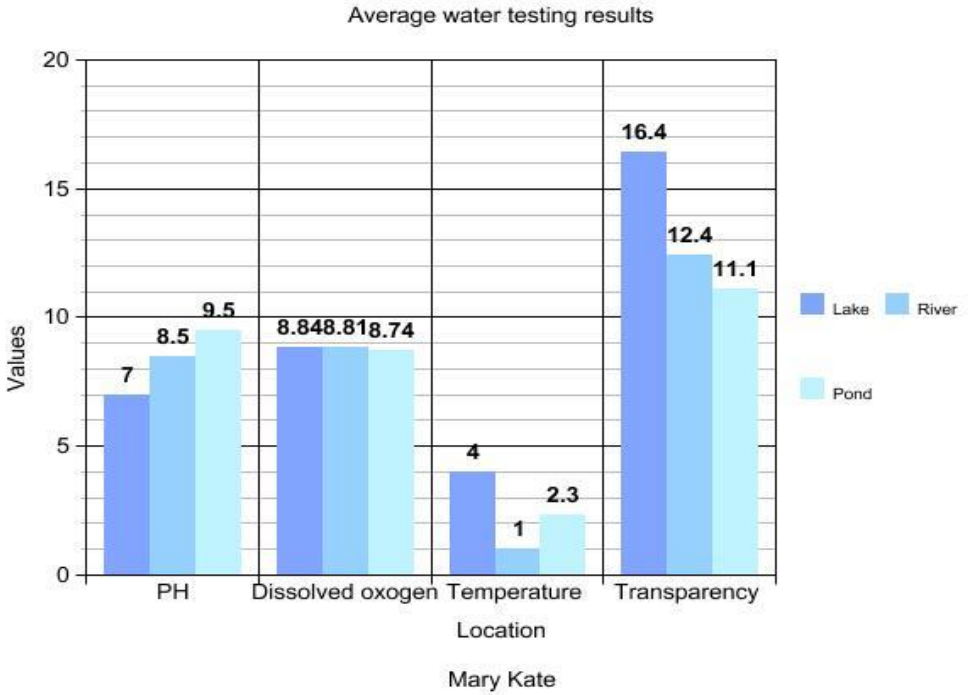
1. I collected the water in a bucket, and immediately took the temperature
2. Then I took the pH level and the dissolved oxygen
3. Next I did the transparency tester
4. Lastly, I dumped the water back where originally came from

Test 1

Test 2

	Lake Erie	Maumee river	Pond		
PH	6	8	9		
Dissolved oxygen	8.97	8.79	8.55		
Temperature	5 C	2 c	3.7		
Transparency	29.7	15.0	16.9		
PH	8	9	10		
Dissolved oxygen	8.72	8.79	8.93		
Temperature	3 c	0 c	1 c		
Transparency	3.2	9.8	5.3		

Graph to the show the average water testing results



PHOTOGRAPHS & IMAGES

DISCUSSION

- I encountered that it was really hard to break through the ice on all three of the waters I tested. I was also surprised by how the river was colder than the pond in my backyard.
- I learned that you should not just judge the water based off of how it looks, but you have to test it to know how clean it actually is.
- I thought it was really fun to get to know more about the waters around me and how clean they were but I thought it was really difficult to test the waters.

CONCLUSION

My hypothesis was not supported by my research.

I thought that the pond water would be the dirtiest and the coldest of all the waters. It was the dirtiest unsurprisingly, but it was not the coldest. This was very surprising because it was the smallest body of water, so I thought that would make it the coldest.

FURTHER RESEARCH

If I did this Experiment again I would test it earlier in the year so then I would not have break through the ice and it would not be as cold.

I would also want to focus more on the temperatures and maybe take them twice a week so I could see where they changed and then try to figure out why they changed.

I would bring better materials to break through the ice so then it would have been easier to collect the water.

REFERENCES

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