RAIN PH EFFECT ON LAKE

                         NAN MOE

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ABSTRACT

The purpose of this experiment was to find out if rain pH effect lake pH. This project will help others by telling us if rain has any affected on lake pH. The rain gauge was the tool that was helping collect this data. The hypothesis is rain pH is affecting lake pH. The data did not support the hypothesis 12 out of 14 days. The rainfall pH is acidic (acidic means lower than 7 on the pH scale). This will impact humans to know more about the environment. The rainfall pH was 5-6, while the lake pH was 7-8. Those are normal ranges for both pH.

KEY WORDS: pH, rain, lake

PROBLEM

The problem is to find out if rain affected lake pH and if lake water is the same pH level as the rain pH.

HYPOTHESIS

My hypothesis is that the rainfall I’m using is somehow affecting our lake. The reason why I think the rainfall is affecting lake is because when the rain falls down from the sky the rain goes into the soil and lake.

MATERIALS

* Rain gauge
* Cups
* Pencil/Pen
* pH scale
* Composition Book
* Yellow piece of Hydrion pH paper
* Sink

PROCEDURES

There are two procedures I did for my project. The first one was at school and the other one was during winter break.

**SCHOOL DAYS PROCEDURES**

1.First thing I did was go outside around 8:51 am - 10:20 am

2.Second thing I did was go into a gate and grab the rain gauge

3.Third thing after getting the rain gauge I check how much rainfall

4.Fourth thing then I grab a cup and split the rainfall in threes

5.Fifth thing I grabbed a yellow piece of pH paper and rip three pieces (there a total of 9 rip pieces at the ended for each rainfall cup)

6.Sixth thing I dip each of the three pieces of paper in the cup and check the rain pH scale and write the data down

7.Seventh thing I dump out the water and throw away the pieces and added the other rainfall

8.Eighth thing I repeated the process each day except for Saturday and Sunday

**WINTER BREAK PROCEDURES**

1.First thing I wake up around 7:00 am and take data at 9:00 am

2.Second thing I go over to the lake with three cups

3.Third thing I go down the lake and dip the three cups in the lake water

4.Fourth thing I rip three pieces of yellow pH paper (9 in total and 3 for each cup)

5.Fifth thing I dip it in the water and check the color of the new color of the yellow piece of paper on the rain pH scale and write it down

6.Sixth thing I repeat the process until 14 days are over

RESULTS

All rainfall is measured in mm, pH were tested three times and averaged.

**DAY 1:**

pH: 5.3

Rain: 18.4

**DAY 2:**

Rain: none

**DAY 3:**

Rain: none

**DAY 4:**

Rain: none

**DAY 5:**

Rain: none

**DAY 6:**

Rain: none

**DAY 7:**

Rain: none

**DAY 8:**

pH: 7.6

Rain: 12

**DAY 9:**

pH: 5

Rain: 5.2

**DAY 10:**

pH: 5

Rain: 3.6

**DAY 11**

pH: 5.3

Rain: 3.2

**DAY 12**

pH: 5.3

Rain: 5.0

**DAY 13**

pH: 5.6

Rain: 11.8

**DAY 14**

Rain: none

CONCLUSION

In the end, the data didn’t support my hypothesis. Most of the data were the same for a normal sign of rain pH and lake pH. The lake pH and rain pH were different. Rain pH were 5-6 and the lake ph were 7-8. In the pH scale shows that 5-6 and 7-8 were a normal pH data. Throughout the period of time collecting data I struggled on the second month to get the lake pH because there was ice in the lake water, but in the end I kicked the ice and got my pants wet.