DEUTSCH-POLNISCHER AUSTAUSCH

German-Polish Exchange

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9. Klasse

9th grade

Lehrer: Thomiczny, Axel,
Uebeler-Wehowsky, Anja

Kreutzmann, Steffen

teacher: Thomiczny, Axel

Uebeler-Wehowsky, Anja

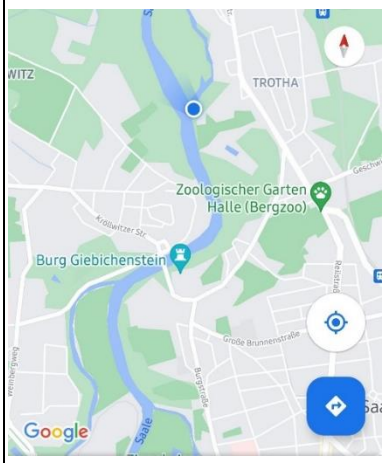
Kreutzmann, Steffen

Content

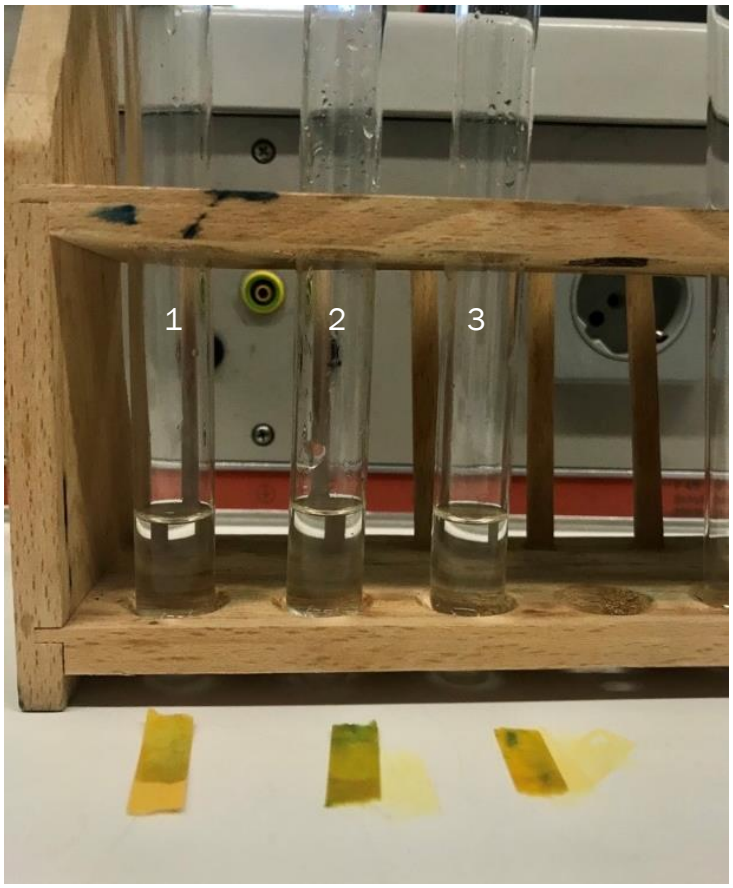
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REPORT OF EXPERIMENT GERMAN-POLISH EXCHANGE

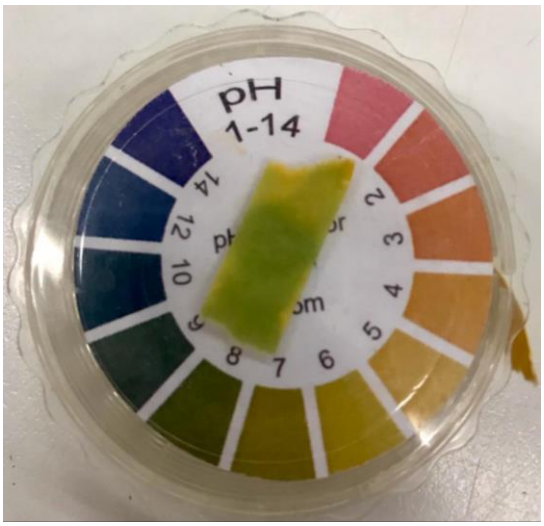
Locations of water sampling

before	In	behind
Böllberg-Wörmlitz	Würfel grassland	Forstwerderisland
		
		
We have taken the water samples from the locations, because we can get there the easiest. In addition, we have taken the 3 locations because we want to compare the water samples from before Halle/S. in Halle/S. and behind Halle/S., whether the city Halle/S. has an influence on the water of the Saale.		

Identifying the pH value



1)before Halle S.
2)In Halle S.
3)behind Halle S.



Procedure:

- Fill three different water samples into three test tubes.
- Place drops of water on unit test strips with pipette
- Compare the result with the pH value scale.

Notification:

Discoloration from unit test strip from yellow to green.

Result:

All three samples have pH value 6

Chloride Ion Proof

Procedure:

- fill water samples into test tubes
- Add nitric acid to the samples
- Add silver nitrate solution to the samples

Notification:

A white milky precipitate forms in all three test tubes.

Results:

The precipitate proves that chloride ions are actually present in the samples.

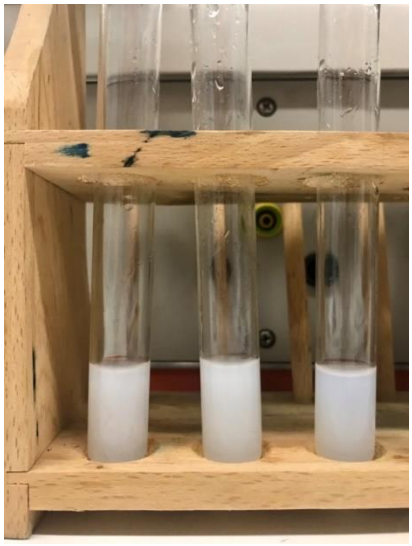
Explanation:

Silver ions react with chloride ions, to form the almost insoluble white silver chloride.

Before (without precipitation)



After (with precipitation)



Sulfate Ion Proof

Procedure:

- fill water samples into test tubes
- Add hydrochloric acid to the samples
- Mix barium chloride solution
- Add barium chloride solution to the samples

Notification:

When barium chloride solution was added, a white precipitate formed in the test tubes.

Explanation:

The barium ions combine with the sulfate ions to form the almost insoluble, white barium sulfate. Acidifying the solution with dilute hydrochloric acid prevents the formation of barium carbonate, which is also poorly soluble.

Results:

The precipitate proves that sulfate ions are present in the samples.

Before (without precipitation)



After (with precipitation)

