



5. Lake water

Opponent:

Team Romania - Limitless

Reporter:

Team Kazakhstan - RFMS

Task of the problem

A drop of water from a natural pond may contain bacteria, archaea, algae, fungi, protozoa, and other organisms.

Perform observations to identify as many species of living organisms as possible.

**What are the chances that another drop contains a different
Identification of bacteria selection of species?**

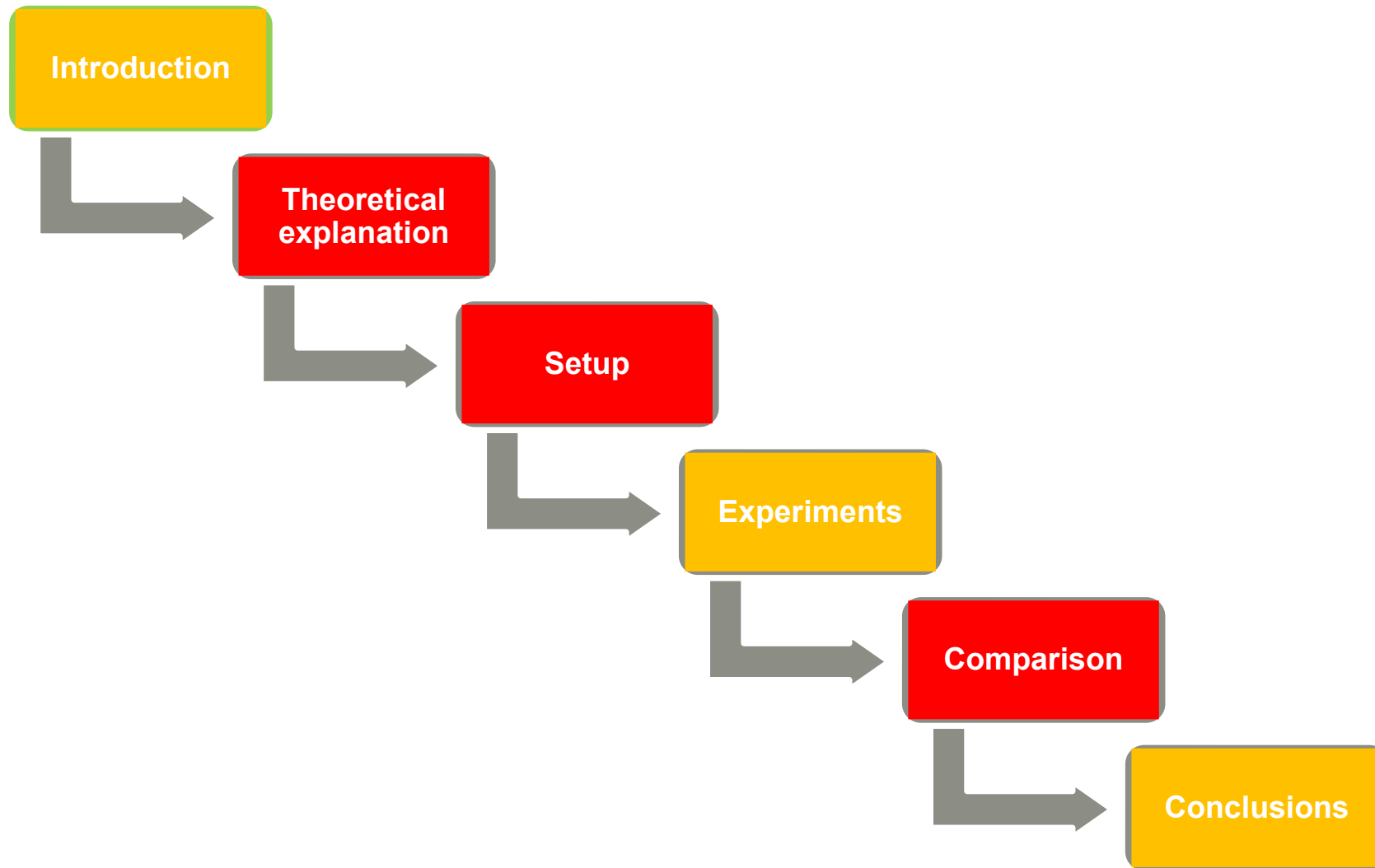
- **Theoretical information**

Setup was poorly presented, photos of bacterias were presented

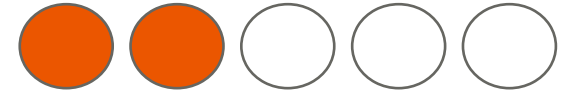
- **Experimental**

- **Relevant parameters**

Outline of the reporter



Theoretical part



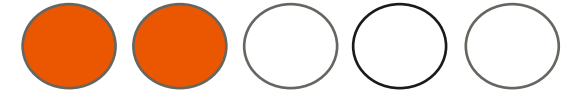
Strong points

- Presented the way of identification of bacteria
- Categories of bacterias were partially presented

Weak points

- Only identification of bacteria was presented
- Lack of biological explanation of bacteria
- Didn't present factors about an ecosystem and what can affect it
- Didn't present taxonomy (classification of bacteria)
- Preferences of each bacteria could be relevant
- Environmental conditions for different bacterias is missing

Experimental part



Strong points

- Good clarification of the type of species that were identified
- Visual aids taken with the microscope helped the identification of bacteria

Weak points

- The sample bottle isn't sterilized (isn't presented)
- Samples taken only from 1 pond
- Lack of experimental setup proper conditions
- Properties of the lake aren't presented (natural/artificial)
- Properties of the samples aren't presented (depth, number)
- Didn't categorize the bacterias
- Is the probability you discovered from sufficient samples?

Discussion topics

- The sample bottle was not sterilized, making other bacteria to appear.
- Samples were taken just from one pond.
- Properties of samples weren't presented.
- How did you achieve that probability. ($\frac{2}{3}$)
- How were your samples transported, so you could avoid appearance of new bacteria, that aren't from the lake.