



STEM for inclusive Schools

WP2 – Activities

Worksheet - Digital Water Quality Monitoring

(Version: *October 2024*)

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Project Title:	STEM for inclusive Schools
Acronym:	STEMinSCH
Reference number:	2023-1-DE02-KA220-000151162
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Worksheet for the Activity:

Digital Water Quality Monitoring

name of the activity

Task description

Time to finish the task: 6 days

Supplies:



pH test strips or a basic pH test kit.
Thermometers to measure water temperature.
Transparent containers for observing turbidity.
Measuring cups or beakers for collecting water samples.
Computers or laptops with basic spreadsheet software (e.g., Excel, Google Sheets).

Method:



Work in groups to collect water samples from local sources (e.g., a stream, pond, or school tap water). Using simple tools, measure pH, temperature, and turbidity. Record and analyze the data using spreadsheets, create visualizations, and present your findings through interactive reports or presentations.

Instructions:



DAY 1:

Discuss in your group:

- What factors affect water quality?
- Why are parameters like pH and turbidity important?
- Use Table 1 to list water sources you plan to analyze and the parameters you will measure.



DAY 2-3:

Visit the assigned water sources and collect samples. Measure the following parameters for each sample:

- pH: Use test strips or a basic kit.
- Temperature: Use a thermometer.
- Turbidity: Observe water clarity using transparent containers.

Record your observations in Table 2.

DAY 4:

Input your recorded data into a spreadsheet.

Create graphs or charts to visualize trends or differences between samples.

DAY 5-6:

Summarize your findings in a report:

- Include graphs, charts, and observations.
- Provide conclusions about water quality and its implications.
- Prepare a presentation to share your results with the class.

Your Group name:



Write the names of your group members in the box:





Table 1:



Planning Your Water Quality Analysis:

Water Source	Parameters to Measure	Notes or Hypotheses



Table 2:



Data Collection:

Water Source	pH Value	Temperature (°C)	Turbidity Observation

Reflection Questions:

1. Which water source had the best overall quality? Why?
2. What surprised you about your results?
3. How do your findings relate to sustainable water management practices?
4. What improvements would you suggest for this activity?