**Water Quality**

**Hands-On Labs, Inc. Version Water Quality ES**

**Lab RepoRt assistant**

This document is not meant to be a substitute for a formal laboratory report. The Lab Report Assistant is simply a summary of the experiment’s questions, diagrams if needed, and data tables that should be addressed in a formal lab report. The intent is to facilitate student’s writing of lab reports by providing this information in an editable file which can be sent to an instructor.

**obseRvations**

|  |  |
| --- | --- |
| Water body information | |
| **Source of sample** |  |
| **Date collected** |  |
| **Brief description of sample** |  |

|  |  |  |
| --- | --- | --- |
| Source of Bottled and Tap Water | | |
|  | **Bottled water** | **Tap water** |
| **Source:** |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Test Results | | | |
|  | **Bottled water** | **Tap Water** | **Water body sample** |
| **Phosphate level**  **(ppm and color)** |  |  |  |
| **Nitrate level**  **(ppm and color)** |  |  |  |
| **pH and color** |  |  |  |
| **Coliform**  **(color and + or -)** |  |  |  |

**Questions**

Using the color chart and Tables 1, 2, and 3 rank the three water samples from best (1) to worst (3) for each of the qualities tested. If two or more samples are equivalent, give them the same number.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Phosphates** | **Nitrates** | **pH** | **Fecal Coliform** |
| **Best (1)** |  |  |  |  |
| **Medium (2)** |  |  |  |  |
| **Worst (3)** |  |  |  |  |

Did your water body have phosphate and/or nitrate levels that might put it at risk for eutrophication and subsequent algal blooms? Explain your reasoning.

Of the four aspects of water quality that you tested, which is the least important for determining if water is safe to drink? Why?

If you tested a water sample with a pH of 9, is that water source acidic or basic?

What are three potential ways that water can be contaminated with fecal coliform bacteria?

Conduct research on the Internet to determine at least three ways that we can improve nonpoint sources of water pollution?