

pH

Primary Importance:

pH is a measure of hydrogen ions and hydroxide ions in water. The concentrations of these ions determine if a substance is acidic or basic. Aquatic organisms are sensitive to pH, especially during reproduction. pH also affects the toxicity of many substances in water that can potentially affect humans and aquatic life.

Problem

Aquatic organisms can be very sensitive to high or low pH, particularly pH values that are less than 6 or greater than 8. The reproductive portion of the growth cycle is especially sensitive. Adult organisms may continue to live, but young will not be produced. Even small fluctuations in pH levels can adversely affect organisms.

Causes

- ❖ Algal blooms may raise pH. In extreme cases, the pH may be above 9.
- ❖ Many industrial processes result in release of acids and bases, thus raising or lowering pH.

Instructions:

These instructions are for use with the HACH Company portable pH meter, Catalog No. 44350-00, Model Pocket Pal Tester. To prolong the life of your pH meter, you must follow the maintenance instructions. Batteries can be replaced with watch batteries #675/AC675E-4.

CHECKLIST

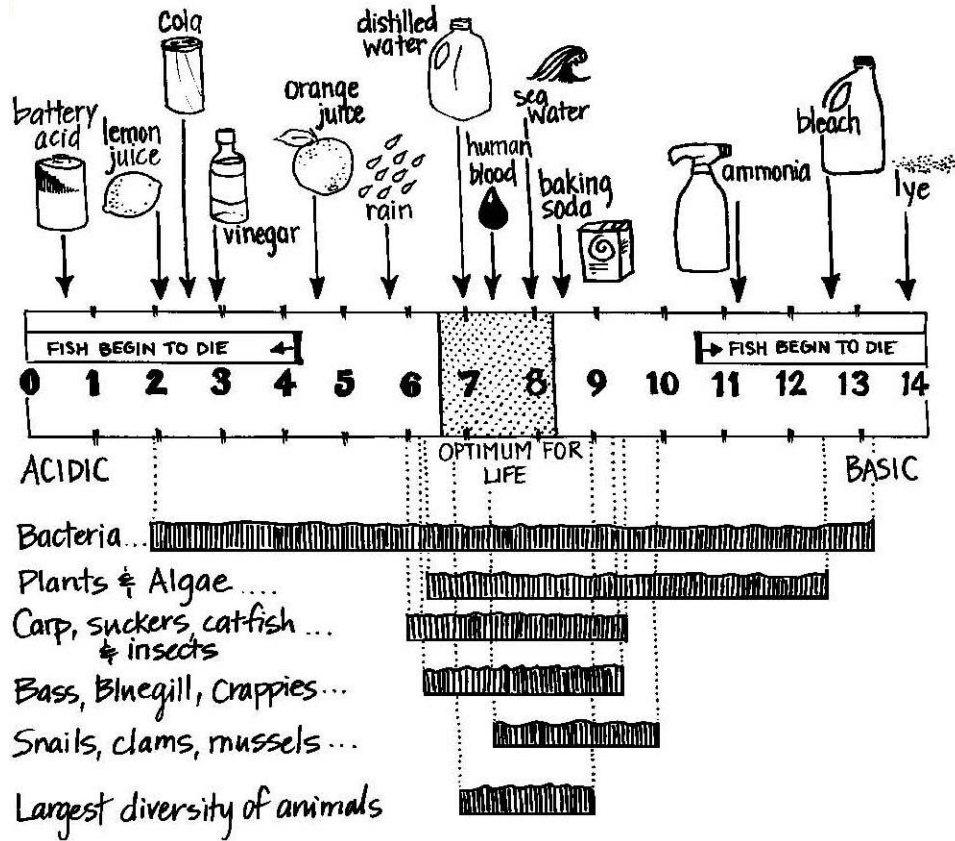
- Blue LaMotte Colorimetric pH Test Kit
- Material Safety Data Sheets
- Testing Instructions
- Data Sheets

For LaMotte pH test kit instructions:

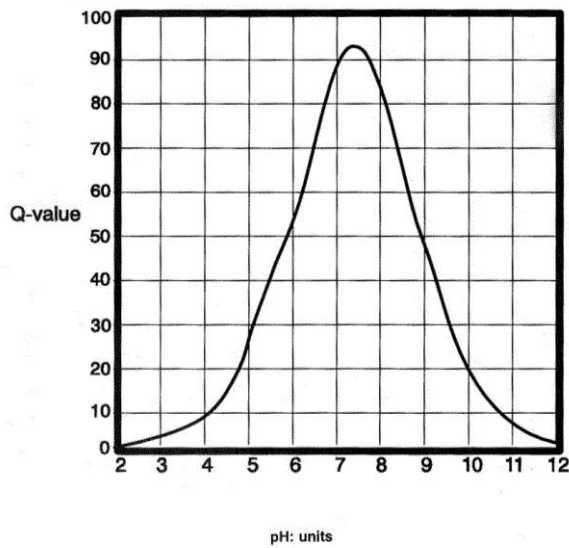
*Please refer to the manual provided in the blue test kit or click the link on the website.

TYPICAL RANGE FOR pH = 6.6 to 8.8

pH scale of Common Substances and Aquatic Organisms



pH Q Values



Note: if pH = 2.0, Q = 0.0; if pH > 12.0, Q = 0.0

pH (units)	Q-Value
<2	0
2	2
3	4
4	8
5	24
6	55
7	90
7.2	92
7.5	93 (max)
7.7	90
8	82
8.5	67
9	47
10	19
11	7
12	2
>12	0