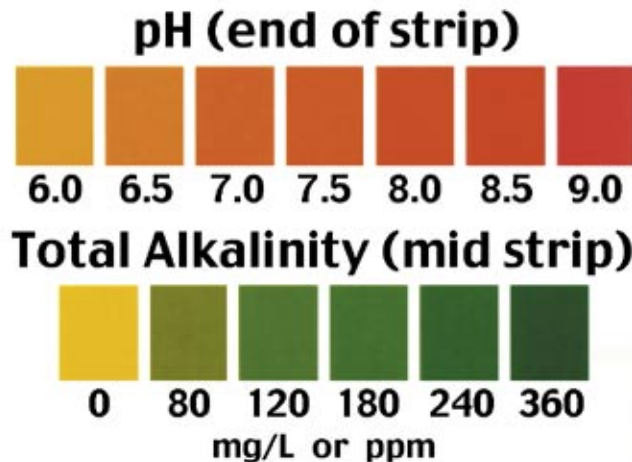




Drinking Water Fountain Sciencefaircenter.com Study Kit

Each water sample is tested for this Set of parameters:
**Alkalinity, pH, Water Hardness,
Free Chlorine, Total Chlorine, plus Bacteria
(6 tests per Set)**

Log onto
www.sciencefaircenter.com
for help.



pH and TOTAL ALKALINITY

Colorimetric test strips.

pH and Total Alkalinity are two of the most fundamental parameters in drinking water testing as well as a great variety of other applications of water usage. Alkalinity indicates the buffering capacity of natural waters. A water is buffered if the pH does not change greatly by addition of acids or bases.

The most effective buffering action is within the pH range of water from 6.0 to about 8.5. The productivities of water can be correlated with pH, alkalinity and the buffering system.

The color charts for these tests read pH levels and Total Alkalinity in mg/L or ppm.

The test reports levels of:

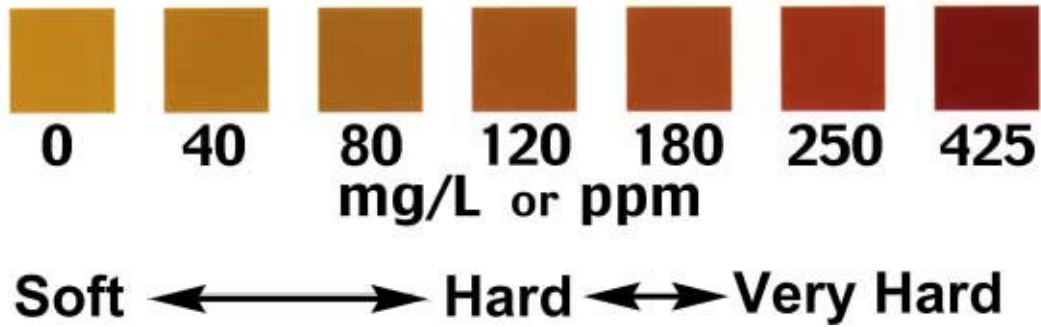
pH levels of 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0

Total Alkalinity 0, 80, 120, 180, 240, 360 mg/L or ppm.

Both tests are on the same test strip.

Results are obtained from this test in 25 seconds.

Total Hardness (As CaCO₃)



TOTAL HARDNESS

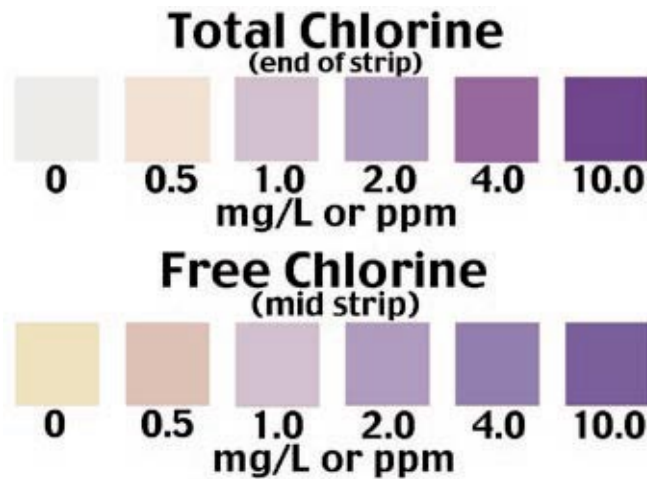
Colorimetric test strips.

Testing for hardness in tap water is very common and is very quick and easy with these test strips. Hardness in water is usually composed of calcium and magnesium.

The color chart for this test allows you to read total hardness in mg/L or ppm.

This test reports calcium hardness concentrations in water at 0, 40, 80, 120, 180, 250, 425, 1000 mg/L or ppm.

Results are obtained from this test in 3 seconds.



TOTAL and FREE CHLORINE

Colorimetric test strips.

Total and Free Chlorine test strips are used for testing drinking water from a city water treatment system. This dual test is a convenient way of monitoring Total and Free Chlorine.

This test has been calibrated around EPA drinking water standards. Free Chlorine levels of 4.0 mg/L or greater exceeds Maximum Contaminant Level (MCL) as recommended by EPA.

The test reports mg/L or ppm of:

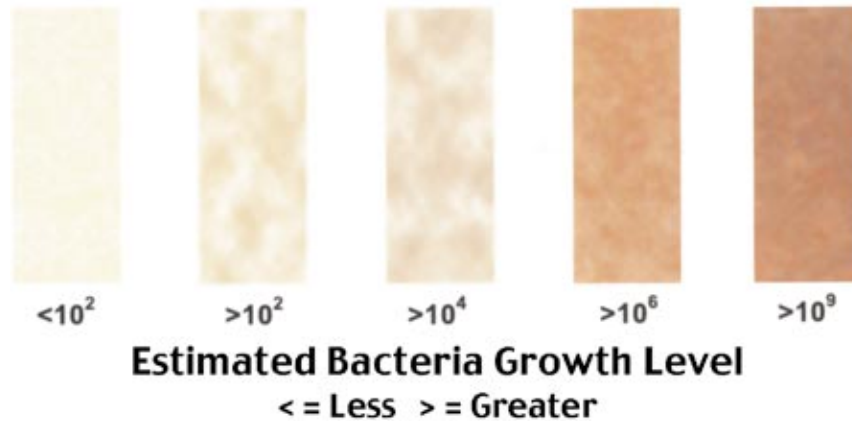
Total Chlorine 0.0, 0.5, 1.0, 2.0, 4.0, 10.0

Free Chlorine 0.0, 0.5, 1.0, 2.0, 4.0, 10.0

Results are obtained from this test in 30 seconds.

Bacteria Growth Check

fastidious aerobic bacteria in water



BACTERIA GROWTH CHECK

Colorimetric Test Strips

Bacteria Growth Check is a test strip that detects any fastidious (active) bacteria. This test could be used in a variety of applications, however it is not specific for any particular type of bacteria.

You can dip these strips in water or swab surfaces with them. The Bacteria test procedure then requires you to return the test strip into a clear plastic bag for incubation. After 24 to 48 hours of room temperature incubation, any fastidious bacteria on the test pad will multiply and turn the test pad pink to red. The darker and more consistent the test pad, the more bacteria that are present.

Bacteria Growth Check tests only a small water sample and requires a significant quantity of bacteria to show a change on the test pad.