

TAP WATER TESTING



Objectives

1. To determine the pH, hardness, and level of chlorine in tap water from home (students should each have their own).
2. To determine why different households may have tap water with different properties.
3. To determine the effects of pH and hardness on water quality and plumbing.
4. To understand the steps in water treatment/water purification and the importance of chlorination.

Hypotheses

This is an experiment that tests the quality of water that the students bring from home. The students can hypothesize about what results they will see when testing the three different parameters based on their observations at home, and they may also go home afterwards and observe their plumbing fixtures based on the results gained in class.

Circle the word that best describes your hypothesis and fill in the blank to complete the sentence:

1. I believe I have (*acidic / netural / basic*) water because _____, so the test for pH will reveal a (*low / neutral / high*) pH.

2. I believe my water has (*no chlorine / just the right amount of chlorine / a lot of chlorine—similar to what is found in a hot tub or swimming pool*) because _____, so the test for chlorination will be similar to example (*neither / one / two*).

3. I believe I have (*hard/soft*) water because _____, so the hardness test will be (*blue / pink*) and it will take (*many drops / few drops*) of soap to bubble.