

Pearl Soundron
Ions Can't Fly

Water sustains life. Its forms found on Earth—solid, liquid, and gas—serve us in many ways. We drink it to refresh us, breathe it in saunas, and use it to make ice cream. Made up of two hydrogen and one oxygen atoms, it has many attributes—minerals, solubility, pH, and electrolytes. My experiment tested how heat affects just one of these properties—pH. I tested water every 5°C starting at 10°C and ending at 40°C, to discover if, why and in what way water's pH changes when heated. My hypothesis said that the water would become more acidic. To test my hypothesis, I heated distilled chilled water from 10°- 40° C, testing the pH every 5°. I repeated this method 15 times and as I anticipated, the water became more acidic. The findings from this experiment may be easily applied in the real world: in cities, to serve users more neutral water; in the study of climate change, to anticipate climate changes' effect on the oceans; and in astronomy, to discover water on other planets. Students of science can stand in awe of God's complexity with the marvel at the surprising pH difference between hot and cold water.