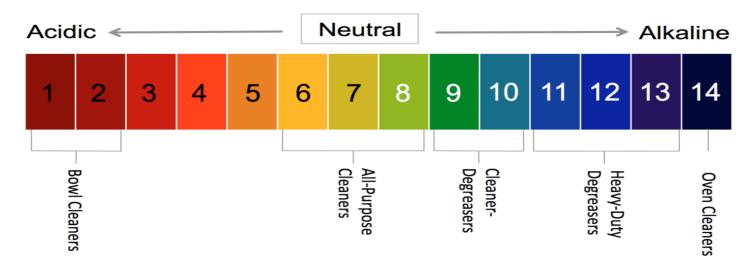
## What is this thing called pH?



The pH of a solution measures the hydrogen ion concentration in that solution. A low pH corresponds to high hydrogen ion concentration and a high pH corresponds to a low hydrogen ion concentration.

For ease of understanding we can view the pH scale as a range of 0 to 14.

- a pH of 7 is neutral
- a pH less than 7 is acidic
- a pH greater than 7 is alkaline or basic

Each whole pH value **below 7** is ten times more acidic than the next higher value. For example, a pH of 4 is ten times more acidic than a pH of 5 and 100 times (10 times 10) more acidic than a pH of 6. The closer to pH 0 you go, the more strongly acidic a solution is.

The same holds true for pH values **above 7**, each of which is ten times more alkaline than the next lower whole value. For example, a pH of 10 is ten times more alkaline than a pH of 9.

When chemicals are mixed with water, the mixture can become either acidic or alkaline. Acidic and alkaline are two extremes that describe chemicals. Mixing acids and alkalines can even out their extreme effects.

Similarly, hot and cold are two extremes that describe temperature. Mixing hot and cold water can even out the water temperature.

A substance that is neither acidic nor alkaline (basic) is neutral. Pure water is neutral, with a pH of 7.0.

Vinegar and lemon juice are acidic substances, while laundry detergents and ammonia are basic.