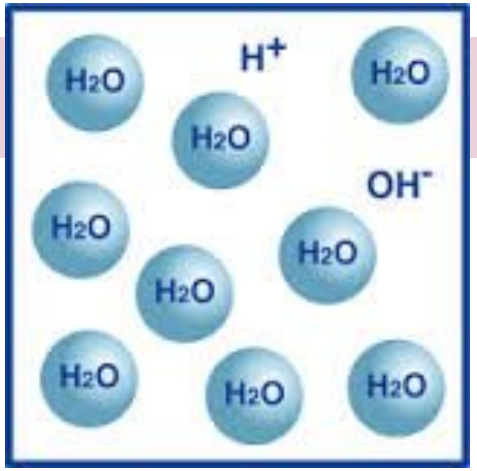
Acids, Bases, and pH



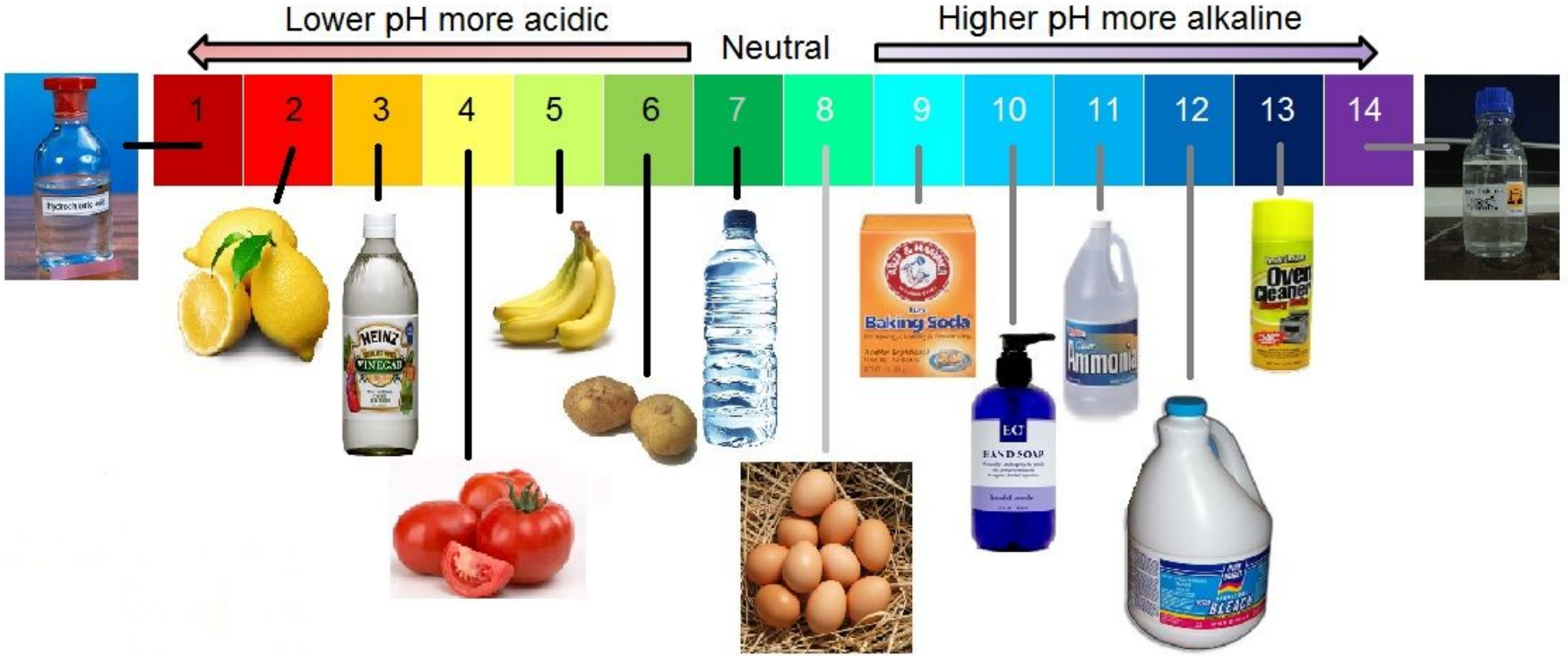
Water molecules can react in a solution to form ions.

Ion: an atom with a net electric charge

$$H_2O \rightleftharpoons H^+ + OH^-$$

water ⇌ hydrogen ion + hydroxide ion

The **pH scale** is used to indicate the concentration of H□ ions in a solution.



Acid: pH 0 (very acidic) ⟶ pH 6 (slightly acidic)

- Higher concentrations of H+ ions

Neutral: pH of 7

Alkaline (Base):

pH 8 (somewhat basic) ⟶ pH 12 (very basic)

- Higher concentrations of -OH ions