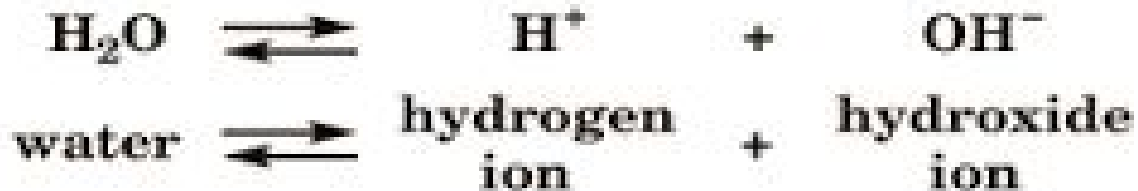
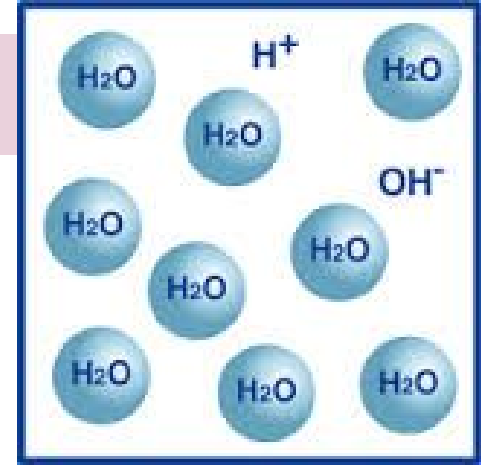


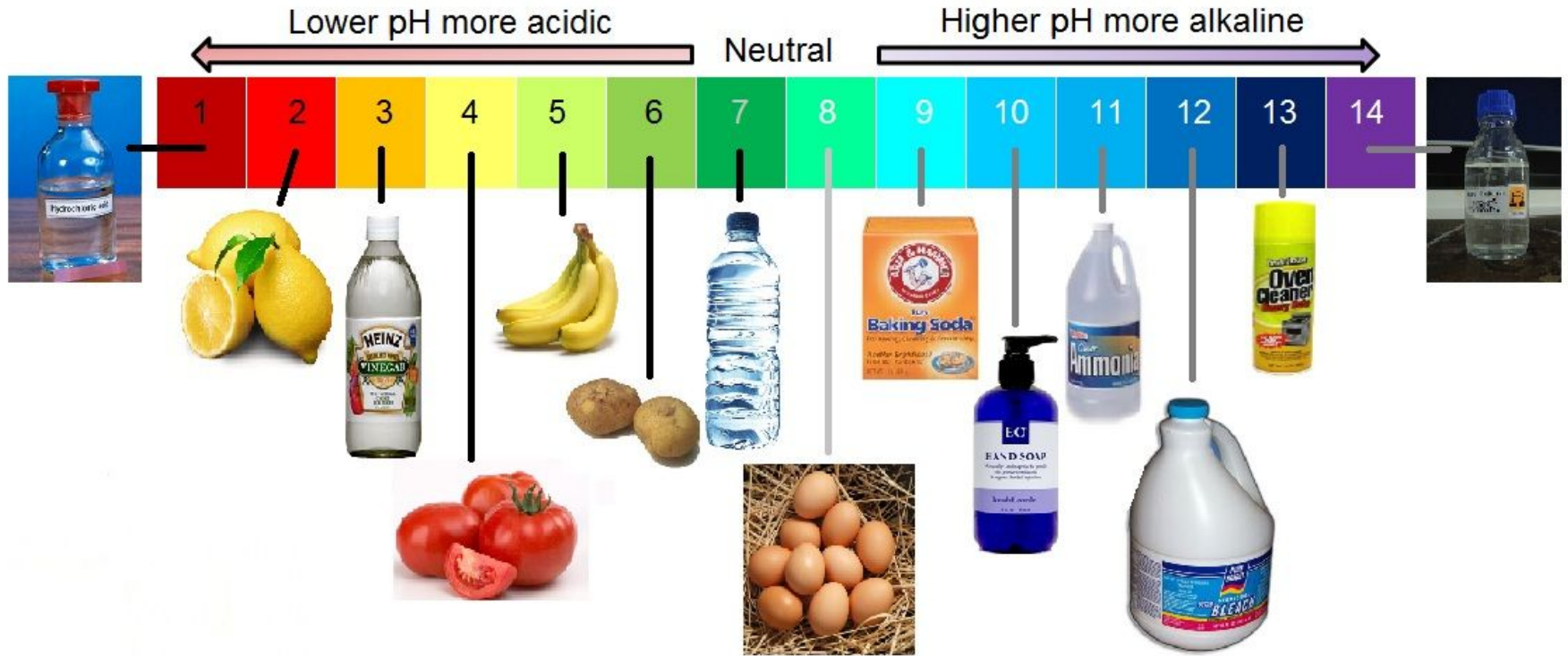
Acids, Bases, and pH

Water molecules can react in a solution to form ions.

Ion: an atom with a net electric charge



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

| | |
|-------|--|
| pH 0 | Battery Acid |
| pH 1 | Stomach Acid |
| pH 2 | Lemon Juice, Vinegar |
| pH 3 | Orange Juice, Soda, Some Dental Rinses |
| pH 4 | Tomato Juice, Beer |
| pH 5 | Black Coffee |
| pH 6 | Saliva, Cow's Milk |
| pH 7 | Pure Water |
| pH 8 | Sea Water, pH-Neutralizing Dental Rinses |
| pH 9 | Baking Soda |
| pH 10 | Antacids |
| pH 11 | Antacids, Dental Treatment Rinses |
| pH 12 | Soapy Water |