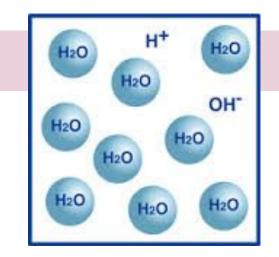
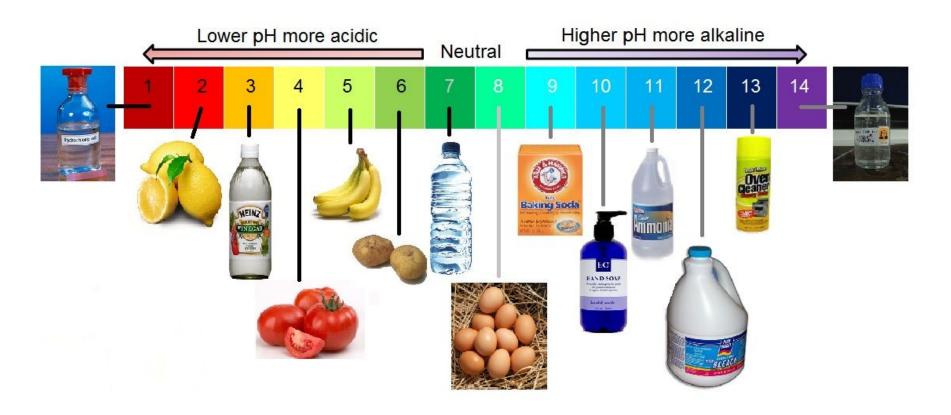
## Acids, Bases, and pH

Water molecules can react in a solution to form ions.

<u>lon</u>: an atom with a net electric charge



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



**Acid**: pH 0 (very acidic)  $\longrightarrow$  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

pH0

pH 1

pH 6

8 Hq

pH 10

pH 11

pH 12

**Battery Acid** 

Stomach Acid

pH 2 Lemon Juice, Vinegar

Orange Juice, Soda, Some Dental Rinses

Sea Water, pH-Neutralizing Dental Rinses

Tomato Juice, Beer

pH 5 Black Coffee

pH 7 **Pure Water** 

pH9 **Baking Soda** 

**Antacids** 

Saliva, Cow's Milk

Antacids, Dental Treatment Rinses

Soapy Water