pH:

Measures the acidity or basicity of water on a scale from 0 to 14:

most acidic — 0 — lots more H^+ than OH^-

safe = 3-9

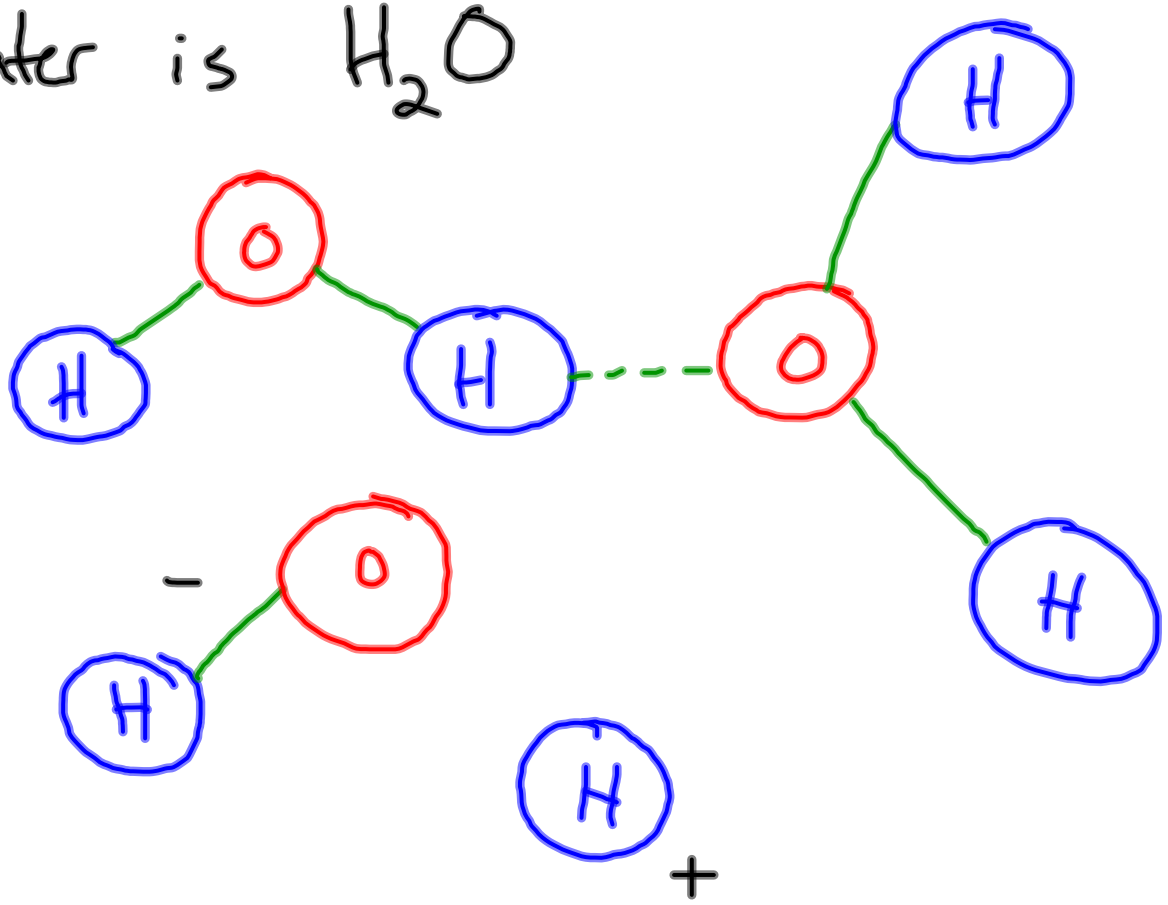
neutral — 7 — the same amount of H^+ and OH^-

most basic — 14 — lots more OH^- than H^+

How many hydrogen ions (H^+) are there compared to hydroxide ions? (OH^-)

pH is important because it measures chemicals that react with other things

Water is H_2O



Anything else added to water can cause an abundance of either H^+ or OH^-.

Most water found in nature is somewhere between 5-8 in pH.

When there are too many H^+ ions (too acidic) or too many OH^- ions (too basic) unwanted chemical reactions might occur.

$pH < 3$ can be dangerous

$pH > 9$ can be dangerous

H^+ & OH^- are chemically reactive

- H^+ and OH^- can eat through other substances when they're not in balance.

- pH levels can also affect how quickly certain chemical reactions take place

pH sensor is much more complicated and sensitive than temperature sensor.

1. Make sure sensors are clean and stored properly
2. Sensors will need to be calibrated we to tell the computer two known pH's.
3. We need to add a little salt to the water we test.