Acid and Base

Strength.

All “real” acids have Hydrogen ion in them.

The strength of an acid is determined by how quickly Hydronium (H3O) ions are created when the acid is added to water.

The making of these ions are determined by how easily the Hydrogen ion in the acid breaks away from the acid and attaches itself to the water molecule.

Example:

HCl: is considered a strong acid because the H+ ion breaks away from the chlorine ion relatively easily to form a H3O ion.

\*\*Acid strength is often difficult to compare because a lot of times “real” acids can have the same pH and because you can’t physically see the hydrogen ion moving to the oxygen end of the water molecule.

All “real” bases contain Hydroxide (OH).

The strength of a base is determined by how easily the hydroxide breaks away from the positive ion and connects to the hydrogen end of the water molecule.

\*\*When ions break apart and are attracted to opposite ends of a water molecule, this is known as “dissociation”.