Acids and bases study guide

To calculate molarity, divide moles of solute by liters of solution

Molarity= moles solute

Liters solution

Acids have H at the beginning of their formula, like HCl, H­­2S, and HNO3

Acids have a pH below 7, turn litmus red, and colorless phenolphthalein

Bases have OH at the ending of their formula like NaOH, LiOH, and Mg(OH)2

Bases have a pH above 7, turn litmus blue, and phenolphthalein turns pink

To balance neutralization reactions, be sure every H+ from acid is “cancelled” --made neutral-- by OH- from base. The best strategy is to cross-multiply and reduce (if needed)

Example:

HCl + Mg(OH)2  🡪

1H+ 2OH-

2HCl + Mg(OH)2  🡪 2H2O + MgCl2

2H+ 2OH- 2H2O