

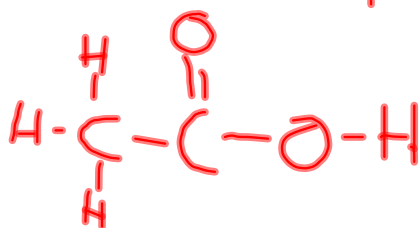
Acids

form H^+ (H_3O^+ or hydronium) in water
 proton donors
 electron pair acceptors
 react with metals
 taste sour
 pH < 7
 have nonmetal anhydrides
 formulas usually start with "H" or
 or end with "COOH" (organic)

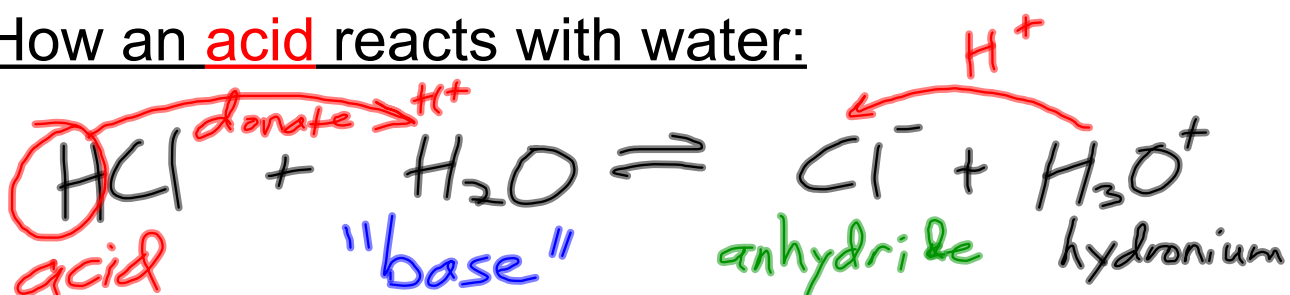


Bases

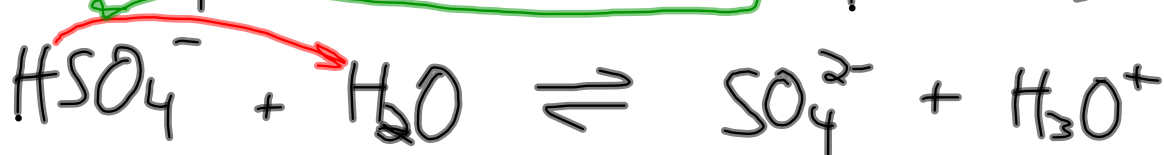
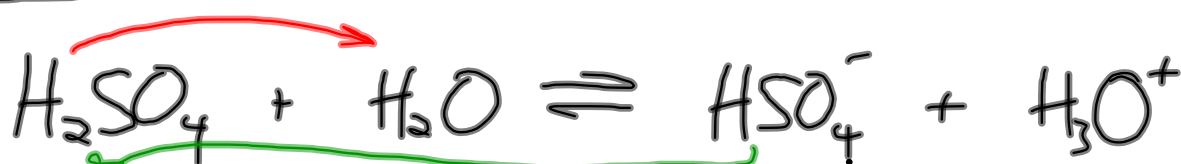
form OH^- in water
 proton acceptors
 electron pair donors
 don't react with metals
 taste bitter
 pH > 7
 have metal anhydrides
 formulas usually end with "OH"
 feel slippery



How an **acid** reacts with water:

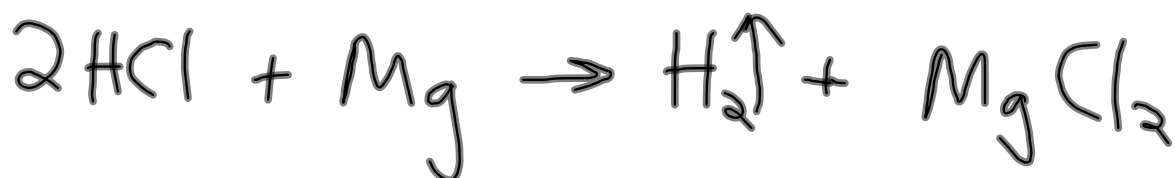
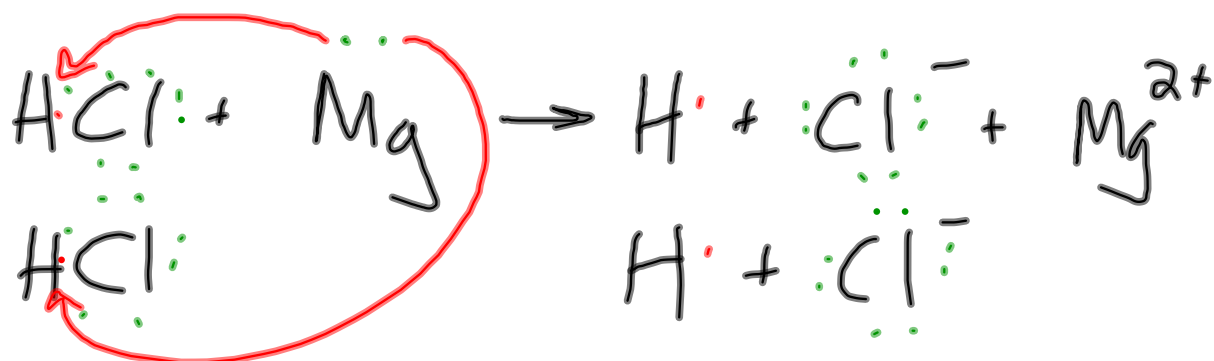


sulfuric acid is "diprotic":

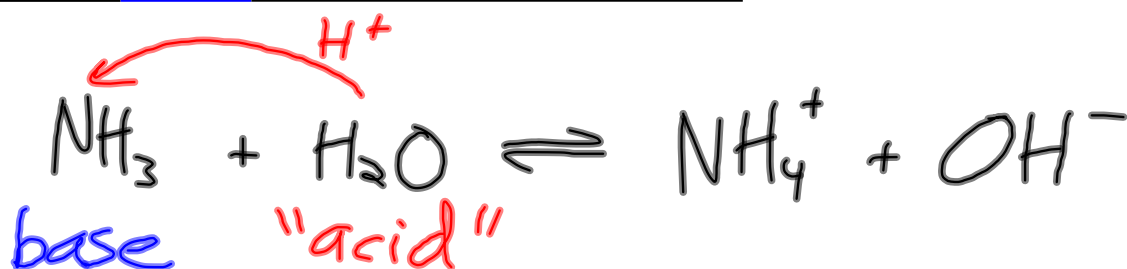


H₃PO₄ - triprotic

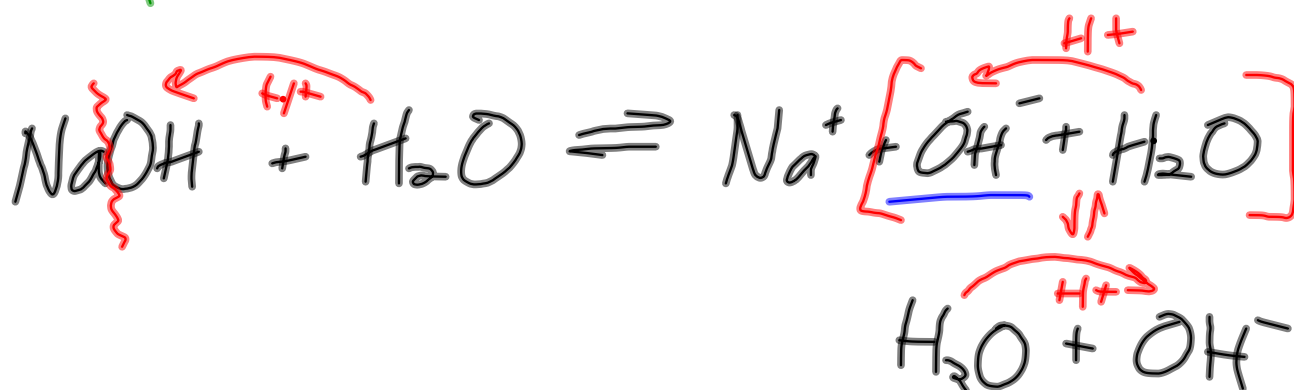
How an acid reacts with a metal:



How a base reacts with water:



amphoteric - can act as an acid or base



How an **acid** reacts with a **base**: (neutralization)

