## Worksheet 10.2: Acid-Base Hydrolysis

Write a **balanced** equation for the dissociation (ionization) of the following **acids** in water (For those acids that are strong use a single arrow,  $\rightarrow$ , and for those that are weak you need to use a double arrow,  $\leftrightarrow$ )

- a)  $HClO_4 \rightarrow H^+ + ClO_4^-$
- b) H2SO4 -> 2H+ + SO4-2 or H+ + 1+SO4-
- c) HC2H3O2 + + + C2H3O2
- d) H2S ( 2H+ + S-2 or H+ + HS-
- e) HCl \_> H+ + Cl
- f)  $HNO_3 \rightarrow H^+ + NU_3^-$
- 6. Write an equation for the dissociation (ionization) of the following bases in water. (For those acids that are strong use a single arrow,  $\rightarrow$ , and for those that are weak you need to use a double arrow,  $\leftrightarrow$ )
  - a) NaOH

- b) Ca(OH)<sub>2</sub>
- (a) +2[6H-]
- d) KOH -> K+ OH-
- e) LiOH -> Lit + OH-
- f)  $NH_3 + HOH \rightarrow NH_4 + OH^-$