## **CONCEPT:** ACID BASE EQUILIBRIUM

Ultimately, we can use pKa information to determine the overall direction and favorability of an acid base reaction.

## STEPS: 1. Identify the Lewis acid and base

- Many times charges or a known acid will be present (+)\_\_\_\_\_ (-)\_\_\_\_
- Dissociate ALL spectator ions, these are the cations \_\_\_\_\_, \_\_\_\_ and \_\_\_\_
- If both compounds are *still neutral*, assign the one with the lowest pK<sub>a</sub> as the acid
- 2. Label the conjugate acid and base
- 3. Compare the acidity/pKa of the Lewis Acid to the \_\_\_\_\_\_ to \_\_\_\_\_ to \_\_\_\_\_ to

**EXAMPLE:** Would the following reactions go to the right or the left? Label ALL species. Draw arrows in the correct direction.