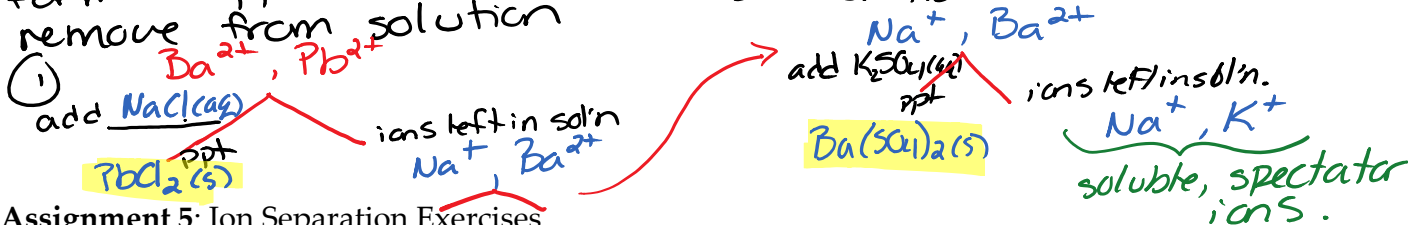


VI) Separating Mixtures of Ions by Precipitation

Describe a method to separate Ba^{2+} and Pb^{2+} ions which are in solution together: *Chemical separation: we want to add an anion \ominus that will only form a ppt. with one of Ba^{2+} or Pb^{2+} in order to remove from solution*



Assignment 5: Ion Separation Exercises

- Describe a method to separate Cl^- and OH^- that are in solution together. 2. A solution is known to contain Mg^{2+} , Ca^{2+} , and Pb^{2+} . Describe a method to separate the cations.
- You have a solution known to contain any or all of Cu^+ , Ca^{2+} , Fe^{3+} , and Sr^{2+} . You have the following 'test' solutions available: 1M Na_2CO_3 , 1M $NaOH$, 1M $NaCl$, 1M Na_2S . What order would you add each to test for each cation?
- Hebden p. 90 #28, 31, 32

