VI) Separating Mixtures of Ions by Precipitation

Describe a method to separate Ba²⁺ and Pb²⁺ ions which are in solution together: Chemical separation: we want to add an aniane that will only form a ppt. with one are Ba²⁺ ar Pb²⁺ in order to remove from solution

Nat, Ba²⁺

add K56yyyr

ions kettinsolin.

Nat, Kt

Nat, Ba²⁺

soluble, spectator

Assignment 5: Ion Separation Exercises

1. 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.

3. 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 Na₂CO₃, 1M NaOH, 1M NaCl, 1M Na₂S. What order would you add each to test for each cation?

4. Hebden p. 90 #28, 31, 32

CIT, OHIT

Cow solobility souble

Mg(OH)2(5)

(PPH)

add Culls

Soluble.

Cull (5)

NO3
Cull (5)

NO3-