

Title: Precipitation in Double Displacement Reactions

Purpose:

- to observe precipitation reactions by mixing aqueous solutions of cations and anions
- to write and balance complete chemical equations for precipitation reactions

Materials:

Pb(NO ₃) ₂	CaCl ₂
KI	NaCl
NaOH	FeCl ₃
Na ₂ SO ₄	Na ₃ PO ₄
Na ₂ CO ₃	CuSO ₄
AgNO ₃	reaction surface

Procedure:

1. Place 1 drop AgNO₃ in each square in the top row as indicated in chart (below).
2. Add 1 drop of the solution indicated at the top of each column.
3. Repeat with Pb(NO₃)₂ on the second row and CaCl₂ in the third row
4. Record formation and color of precipitates formed
5. Write correctly balanced equations for all squares where a precipitate formed

Results:

- Data chart indicating reactants and products
- Balanced reactions
- Indicate which 2 cations form the most precipitates.

Discussion: [Lab Grading Guidelines](#)

Conclusion: Rank the solutions in order of decreasing activity.

Reflection: Personal statement about what you learned from this activity.

Save a copy of this lab writeup in your folder and in your Virtual Lab NB Folder on the Shared Folder. (You may email this lab writeup to judenuno@mhs-la.org and I will save it in your Virtual Lab NB)

Print out a copy of this lab and tape it into your Lab NB!