

Name _____

Date _____

Due Date _____

Mark _____/10

Correct and Hand in Again by _____

Chemistry 11
Experiment 16-D—Precipitation Reactions

Purpose: To observe several precipitation reactions and to write ionic equations for them.

Procedure: Use spot plates to try all the possible combinations of solutions from each set of 6. Your teacher will demonstrate the correct procedure to follow.

Table 1 – Set 1

	Na ₂ SO ₄	K ₂ CrO ₄	BaCl ₂	Ba(NO ₃) ₂	Pb(NO ₃) ₂	AgNO ₃
Na ₂ SO ₄						
K ₂ CrO ₄						
BaCl ₂						
Ba(NO ₃) ₂						
Pb(NO ₃) ₂						
AgNO ₃						

Table 2– Set 3

	NiCl ₂	AgNO ₃	CuCl ₂	Ba(NO ₃) ₂	Na ₂ CO ₃	AlCl ₃
NiCl ₂						
AgNO ₃						
CuCl ₂						
Ba(NO ₃) ₂						
Na ₂ CO ₃						
AlCl ₃						

Write-Up:

1. Choose **one** of the sets. (1 or 3)
2. For that set, circle the precipitates on **one side** of the diagonal:

eg.

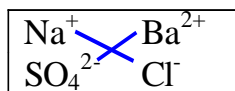
	Na ₂ SO ₄	K ₂ CrO ₄	BaCl ₂	Ba(NO ₃) ₂	Pb(NO ₃) ₂	AgNO ₃
Na ₂ SO ₄		-	ppt	ppt	ppt	ppt
K ₂ CrO ₄	-		ppt	ppt	-	ppt
BaCl ₂	ppt	ppt		-	ppt	ppt
Ba(NO ₃) ₂	ppt	ppt	-		-	-
Pb(NO ₃) ₂	ppt	-	ppt	-		-
AgNO ₃	ppt	ppt	ppt	-	-	

Don't use this example as the correct answer. USE YOUR RESULTS!

3. For each **precipitate** which is circled, write:
 - a) an **ion box**
 - b) a balanced **formula equation**
 - c) a balanced **complete ionic equation**
 - d) a balanced **net-ionic equation**

The combination of Na₂SO₄ and BaCl₂ will be done as an example:

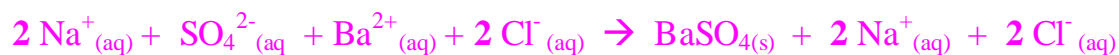
- a) **ion box:**



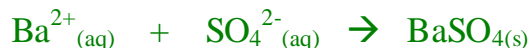
- b) balanced **formula equation:**



- c) balanced **complete ionic equation:**



- d) balanced **net-ionic equation:**



Do the Write-up on your own paper and staple everything together before you hand it in. **Make sure the title page (the back side of this page) is on the front!!**