

Group # _____

Name _____

Period ____ Date ____/____/____

Lab Ch 7 • Double Replacement

Lab Partners: _____

READ Prelab #1-3 – Must be done before you enter lab

Objectives:

- Execute and observe different types of chemical reactions
- Qualitatively identify products of these chemical reactions
- Write balanced chemical equations for these chemical reactions

Safety:

- Wear safety goggles and aprons at all times when working in the lab.
- Be very careful with solutions, especially acids and silver nitrate.

Pre-Lab: Classification of Chemical Reactions (Must be done before lab)

1. Write the general formula for a double replacement reaction. (Use letters like A, B, C, etc)

2. What is a precipitate reaction?

3. Complete and balance the equation for each reaction that **actually occurred**. If no reaction occurred, then write **“NR” for the products**.

See Data Table for reaction number in box. In the Data Table, the reaction number is listed. Write the reactions in correct order according to Data Table on next page.

Don't forget to balance charges for each chemical before adding coefficients.

Don't forget states of matters - **All reactants are (aq)**. Include (s) or (aq) for the products. Use your solubility rules for help.

Reaction #	Balanced Equation
1	$\text{Ba}(\text{NO}_3)_2 (\text{aq}) + \text{NaOH} (\text{aq}) \rightarrow$
2	

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Procedure:

1. Starting with the solutions on the left side of the data table, add **5 drops** of each solution to a well plate.
2. Moving from left to right, add 5 drops of the chemicals listed to the solutions already in the well plate.
3. Write observations for each reaction in your data table.

Cleaning and Disposal:

1. Clean ALL equipment with LAB Equipment soap & brushes
2. Dry dishes for next lab group and place test tubes upside down on test tube rack.
3. Clean Lab BENCH with small soap bottle and sponge.
4. Wash hands with hand soap.
5. Let me know when you are ready. Do not get unprotected until dismissed.

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Lab Ch 7 • Double Replacement**Data Table:**

For each reaction you perform, make observations - **color, Precipitate (ppt), gas, etc** - in the data table. If no observable reaction occurred write "**NR**".

****The X's are in place so that don't do a reaction for the box.**

	Ba(NO ₃) ₂ (aq)	NaOH _(aq)	KOH _(aq)	AgNO ₃ (aq)	Fe(NO ₃) ₃ (aq)	KI _(aq)	Cu(NO ₃) ₂ (aq)
Ba(NO ₃) ₂ (aq)	X	1	2	3	4	5	6
NaOH _(aq)	X	X	7	8	9	10	11
KOH _(aq)	X	X	X	12	13	14	15
AgNO ₃ (aq)	X	X	X	X	16	17	18
Fe(NO ₃) ₃ (aq)	X	X	X	X	X	19	20
KI _(aq)	X	X	X	X	X	X	21
Cu(NO ₃) ₂ (aq)	X	X	X	X	X	X	X