

Name _____

Net Ionics Activity

In this activity, you will perform four precipitation reactions and record your observations. Based on your observations, you will write a balanced molecular equation, a complete ionic equation, and a net ionic equation for each reaction. Additionally, you will create particle diagrams to represent the solution before mixing and after mixing.

Materials:

Well Plate

Lead(II) nitrate solution

Potassium iodide solution

Sodium iodide solution

Silver nitrate solution

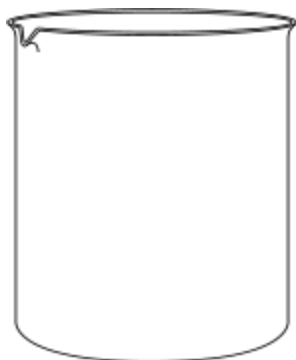
Magnesium sulfate solution

Barium nitrate solution

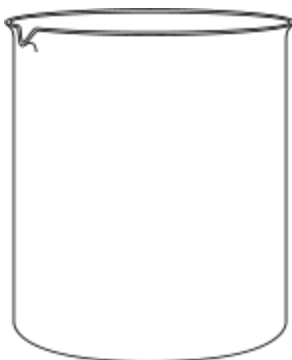
Procedure for Reaction #1

1. Take lead(II) nitrate and potassium iodide and put 5 drops of each solution in one of the wells of the well plate.
2. Record your observations here:
3. Was a physical or chemical change observed? _____
What evidence do you have? _____
4. Write the balanced molecular equation.
5. Write the balanced complete ionic equation.
6. Write the balanced net ionic equation.

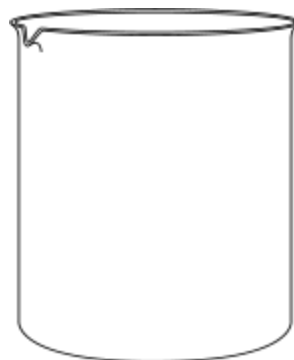
7. Make a particle diagram for before and after the reaction. In the after reaction beaker include water molecules, showing how they orientate themselves.



Lead(II) nitrate(aq)



Potassium iodide(aq)



After the reaction

Procedure for Reaction #2

8. Take sodium iodide and silver nitrate and put 5 drops of each solution in one of the wells of the well plate.
9. Record your observations here:

10. Was a physical or chemical change observed? _____

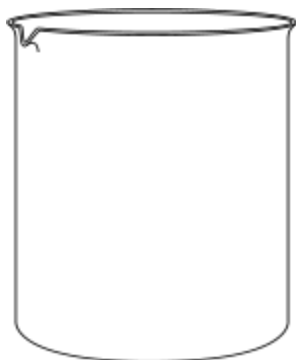
What evidence do you have? _____

11. Write the balanced molecular equation.

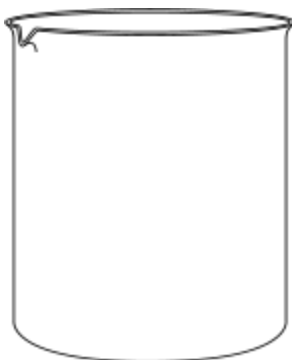
12. Write the balanced complete ionic equation.

13. Write the balanced net ionic equation.

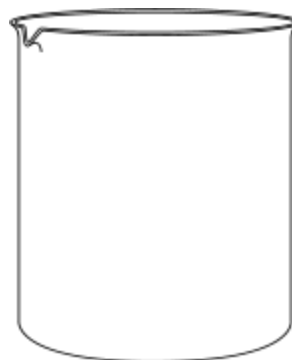
14. Make a particle diagram for before and after the reaction. In the after the reaction beaker include water molecules, showing how they orientate themselves.



Sodium iodide(aq)



Silver nitrate(aq)



After the reaction

Procedure for Reaction #3

15. Take magnesium sulfate and barium nitrate and put 5 drops of each solution in one of the wells of the well plate.

16. Record your observations here:

17. Was a physical or chemical change observed? _____

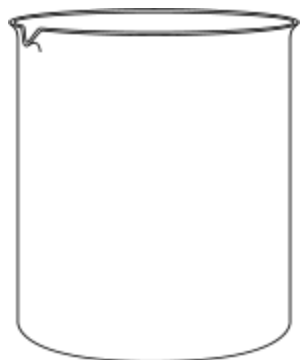
What evidence do you have? _____

18. Write the balanced molecular equation.

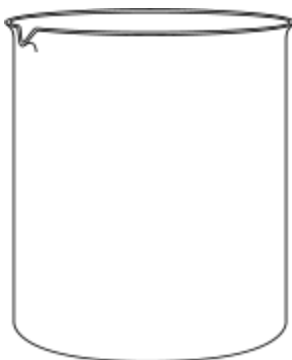
19. Write the balanced complete ionic equation.

20. Write the balanced net ionic equation.

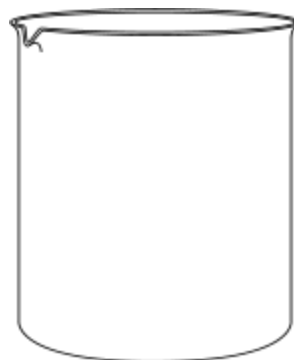
21. Make a particle diagram for before and after the reaction. In the after the reaction beaker include water molecules, showing how they orientate themselves.



Magnesium sulfate(aq)



Barium nitrate(aq)



After the reaction