

Name _____

Data Table 1 — Anion Testing

	Cl ⁻ anion	I ⁻ anion	SO ₄ ²⁻ anion	CO ₃ ²⁻ anion	Unknown _____	Unknown _____
6. <i>a.</i> AgNO ₃ <i>b.</i> HNO ₃ <i>c.</i> NH ₄ OH	1	2	3	4	5	6
7. <i>a.</i> Ba(NO ₃) ₂ <i>b.</i> HNO ₃	B					
8. HNO ₃	C					
Space for a repeat test (if necessary)	D					

Record detailed observations inside the circles on the table. Record all colors that form. Record whether any gases evolve. If any solid precipitates form, use the abbreviation PPT. If no reaction at all occurs, use the abbreviation NR.

Data Table 2 — Cation Testing

	Li ⁺ cation	Na ⁺ cation	K ⁺ cation	Ag ⁺ cation	Ba ²⁺ cation	Fe ³⁺ cation
16. Color of Solution	1	2	3	4	5	6
17. KSCN	B					
20. Flame test color	C					
Unknown testing	D					

Record detailed observations inside the circles on the table. Record all colors that form. Record whether any gases evolve. If any solid precipitates form, use the abbreviation PPT. If no reaction at all occurs, use the abbreviation NR.

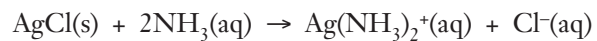
Conclusions/Questions

Answer the following questions in the space provided. Use additional paper, if necessary.

1. Write the net ionic equation for each reaction that occurred in Parts I and II. Include the well identification (A1) as shown in the example below.

Part I. Anion Testing

Well A1 $\text{Ag}^+(\text{aq}) + \text{Cl}^-(\text{aq}) \rightarrow \text{AgCl (white ppt)}$



2. Unknown Letter: _____

a. What cation is present in your unknown? _____

Describe the test(s) that allowed you to determine the cation identity.

b. What anion is present in your unknown? _____

Describe the test(s) that allowed you to determine the anion identity.

c. Write the name and formula for your unknown salt.