Name: _____   Section: _____

those solutions, you can make mixtures with the other solutions in which one of the components is known. From the results obtained with those mixtures and the information in the matrix, you can identify other solutions. These can be used to identify still others, until the entire set of ten is finally identified.

Pre-lab Questions

1. Fill in the matrix below to show how various solutions react, as described in the procedure.

HCl	H₂SO₄	NaOH	NH₄OH	Al(NO₃)₃	AgNO₃	Ca(NO₃)₂	Cu(NO₃)₂	Ni(NO₃)₂	SnCl₄	
										HCl
										H₂SO₄
										NaOH
										NH₄OH
										Al(NO₃)₃
										AgNO₃
										Ca(NO₃)₂
										Cu(NO₃)₂
										Ni(NO₃)₂
										SnCl₄
										NOTES

Name: _____   Section: _____

2. Which solutions should you expect to identify by simple observations?

3. Outline the procedure you will follow in identifying the remaining solutions. Be specific about what to look for and what conclusions you expect to draw from your observations.

Name: _____   Section: _____

QUALITATIVE ANALYSIS Report Sheet

Final Identifications:

No. 1 _____   No. 6 _____

No. 2 _____   No. 7 _____

No. 3 _____   No. 8 _____

No. 4 _____   No. 9 _____

No. 5 _____   No. 10 _____

Use the next few pages to write balanced MOLECULAR, IONIC, and NET-IONIC equations for TEN of the reactions that occurred during this laboratory experiment. Make sure to include the physical states of all the products. These equations must be turned in along with this report sheet to receive full credit upon conclusion of the lab.

1. Molecular:

    Ionic:

    Net-ionic:

2. Molecular:

    Ionic:

    Net-ionic:

3. Molecular:

    Ionic:

    Net-ionic:

4. Molecular:

    Ionic:

    Net-ionic:

Name: _____   Section: _____

5. Molecular:

    Ionic:

    Net-ionic:

6. Molecular:

    Ionic:

    Net-ionic:

7. Molecular:

    Ionic:

    Net-ionic:

8. Molecular:

    Ionic:

    Net-ionic:

9. Molecular:

    Ionic:

    Net-ionic:

10. Molecular:

    Ionic:

    Net-ionic: