

Observations for Experiment 15

Place an "X" on the label that properly describes each compound below:

	Non-Electrolyte	Strong Electrolyte	Weak Electrolyte
1. Tap water			
2. Deionized water			
3. Sugar solution			
4. NaCl solution			
5a. Pure (glacial) acetic acid			
5b. Diluted acetic acid			
5c. Twice diluted acetic acid			
6a. 1 M acetic acid			
6b. 1 M HCl			
6c. 1 M NH ₄ OH			
6d. 1 M NaOH			
7a. NaNO ₃			
7b. NaBr			
7c. Ni(NO ₃) ₂			
7d. CuSO ₄			
7e. NH ₄ Cl			

1. In 5a. to 5c., what happens to the glacial acetic acid as it is diluted? How does this explain the changes in light intensity?
2. In the final demonstrate, write a balanced chemical reaction (with states) for the mixing of aqueous solutions of barium hydroxide and sulfuric acid.
3. What type of reaction is this? Hint: More than 1 term may apply
4. Explain why the light becomes dimmer as two strong electrolytes are mixed with each other.
5. Why does the light come back on after more of the electrolyte is added?