Title: Forces between molecules

Instructions: You should have the following: vinegar, ammonia, olive oil, salt, baking soda

1. Ionic materials.
   a. Sketch the arrangement of ions in a salt. What forces hold these network solids together? Explain the difference between polar molecules and ionically bound material.
   
   b. Do salt and baking soda dissolve in water? Would they dissolve in a non-polar liquid? Why? What determines if an ionic substance dissolves? (Identify the forces involved and compare their sizes.)

2. Covalent molecules: Pictures of acetic acid, ammonia, and oleic acid (olive oil) are shown below. Sketch your own pictures of oxygen, nitrogen and carbon dioxide. Circle the most electronegative end of each molecule or indicate that the molecule is not polar.

3. Determine which dissolve in water. (Air is a mix of nitrogen, oxygen and carbon dioxide. What happens if you use a straw to bubble a mix of gasses through the water?) Explain why each is or is not soluble using your understanding of the forces involved.

I personally participated in the activity and wrote the response in my own words:
Signature:____________________