**VSEPR and Polarity Quiz Review – Honors Chemistry**

1. For the acetate ion…
2. Draw the Lewis structure:
3. Draw a dipole arrow in the direction of greater partial negative charge. If the ion is nonpolar, write “nonpolar” next to the Lewis structure.
4. Indicate the bond angles around each of the carbon atoms in this ion:
5. Indicate the shapes around each of the carbon atoms.
6. Chloramine (also known as nitrogen trichloride) is the chemical compound responsible for “swimming pool smell.” Given the respective Lewis structures of chloramine and water, is it surprising to you that chloramine has a boiling point 29 degrees less than that of water? Why or why not?
7. The F-B-F bond angle in boron trifluoride is exactly the same as the O-C-H bond angle in formaldehyde (H2CO). Explain why, citing the Lewis structures of each.