Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write the answers for your questions below. Make sure the questions are numbered and the answers are readable and understandable.

Questions for Lab 1

1. Draw the Lewis structures for both of your compounds. Also draw the line structures. For each central atom give the hybridization, geometric and molecular shapes as well as the bond angles.
2. What are (all) the intermolecular forces involved with each of the molecules?
3. Why should one never put boiling chips into hot liquid? Make sure your answer includes what would happen and WHY it would happen?
4. A student carried out a simple distillation on a compound known to boil at 124°C and reported an observed boiling point of 116-117°C. When the compound was tested by gas chromatography, it was shown that the compound was pure. The thermometer was found to be accurate. What procedural error might the student have made in setting up the distillation apparatus? Why would that cause the difference in boiling point?
5. Why is it not a good idea to use a beaker to collect the distillate?