## Worksheet 1: Line-Angle Notation

Skill-Building Goals: To become comfortable drawing and interpreting line-angle notation drawings.

1. Draw a few Lewis structures based on the following molecular formula and convert them into line-angle notation

1a. $\mathrm{C}_{5} \mathrm{H}_{6}, 1 \mathrm{~b} . \mathrm{CH}_{2} \mathrm{O}, 1 \mathrm{c} . \mathrm{C}_{2} \mathrm{H}_{4}, 1 \mathrm{~d} . \mathrm{CH}_{2} \mathrm{~N}_{2}, 1 \mathrm{e} . \mathrm{C}_{3} \mathrm{H}_{5} \mathrm{~N}, \mathrm{C}_{5} \mathrm{H}_{6} \mathrm{~N}^{+}, \mathrm{C}_{2} \mathrm{H}_{3} \mathrm{O}_{2}{ }^{-}$
2. Draw in all of the carbon, hydrogen, and lone pairs of the following molecules.

3. Show the missing charges on the following molecules

4. Look at the following molecules and find anything wrong with them.






5. (1) Re-draw the following complex molecules in Lewis pair structure. (2) Appreciate why we have line-angle notation. (3) Try to re-draw them in line-angle notation. (4) Try to find mistakes. (5) Correct the mistakes.
A.



D.



