Be sure to show all work, use the correct number of significant figures, circle final answers and use correct units in all problems.

1. Give the number of core and valence electrons in the following elements: Li, Te, and Ga. (6 pts)

2. Write Lewis Dot structures for the following molecules: BeI₂, CBr₂Cl₂, and AsI₃. (6 pts)

3. Draw and name the electron-pair geometry and molecular shape for AlF3 and AlF4. (4 pts)

4. Determine the formal charge on each atom in the molecule ClF_2^{-1} . (4 pts)