

CHEM 1100 Resonance structures, Shape, Polarity Practice

1. (3 points) Draw the best Lewis structure for the following compound.

You must show all lone pair electrons. You must place the formal charge on the atoms.



2. (3 points) Draw resonance forms for the following ion:



3. (2 point) What is the name of  $\text{NO}_2^-$  ?

4. (3 points) Draw a correct Lewis structure for the sulfate ion. Show formal charges on each atom.

5. (3 points) Draw three Lewis structures for  $\text{N}_2\text{O}$ . Make N the central atom.

7. (2 points) What is the molecular geometry of ozone,  $\text{O}_3$ ?

8. (2 points) What is the molecular geometry of Carbon tetrachloride?

9. (2 points) What is the molecular geometry of Sulfur hexafluoride?