

Introduction to Natural Science, Winter 2007
Chemistry Workshop – Week 7

1. Draw Lewis dot structures for the following. When appropriate draw all possible resonance and non-equivalent structures and determine the most probable structure using formal charges.

- CO_2
- XeO_4
- SO_4^{2-}
- BeCl_2
- NO_3^-
- N_3^-
- N_2O

2. Determine the molecular geometry and bond angles of the following, using the VSEPR model.

- HCN
- PH_3
- CHCl_3
- NH_4^+
- H_2CO
- SeF_2
- O_2
- SO_3^{2-}
- POCl_3
- ClO_2^-
- NO_2^-
- SCN^-
- ClF_5
- XeF_4
- SeF_6