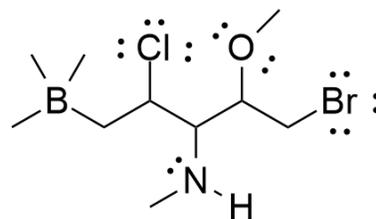
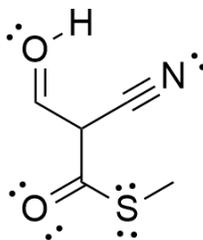
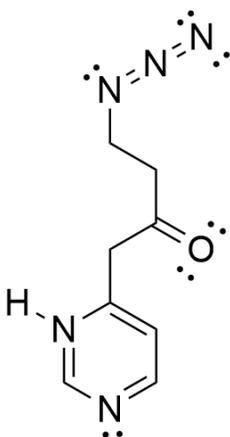
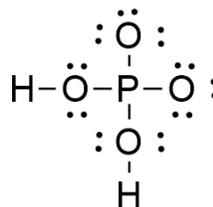
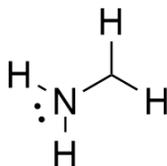
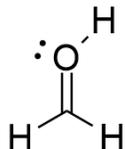


Formal Charges

1. Draw the Lewis Structure for the ammonium ion (NH_4^+). Calculate the formal charge on each atom in the molecule. How does the formal charge on nitrogen compare with the formal charge on nitrogen in the nitrate ion (NO_3^-)?
2. Draw the Lewis Structure for the acetate ion (CH_3COO^-). Calculate the formal charge on each atom in the molecule.
3. Draw the Lewis Structure for methane. Calculate the formal charge on each atom in the molecule.
4. Draw the Lewis Structure for the ozone molecule (O_3). Calculate the formal charge on each atom in the molecule.
5. Draw the Lewis Structure for the carbonate ion (CO_3^{2-}). Calculate the formal charge on each atom in the polyatomic ion.

6.

In each of the structures below, indicate the formal charge on each atom. Atoms which have no formal charge can either be marked "0" or left blank.



Assign formal charges to the indicated atoms in the following molecules.

