2. Draw structures (Lewis, condensed or skeletal) of the following:

a) a three-membered ring with a nitrogen in it
   ![Structure](structure1.png)

b) an all carbon compound with three double bonds
   ![Structure](structure2.png)

c) $C_5H_5^+$
   ![Structure](structure3.png)

d) $C_3H_4$
   ![Structure](structure4.png)

2. Write Lewis structures of the two best resonance contributors for the following. Use lines for a pair of bonding electrons. Show lone pairs and formal charges.

Sulfuric acid
   ![Structure](structure5.png)

2. Write the product(s) of the following reaction shown by the electron-pushing arrow. Don’t forget formal charges if needed. Put in the lone pairs.

   ![Structure](structure6.png)

2. Draw four isomers for the formula $C_3H_7N$. Use Lewis, condensed or skeletal structures.

   ![Structure](structure7.png)

2. Give the hybridization of the indicated atoms for a and b and the angles for c and d.

   a) ![Structure](structure8.png) $sp^3$
   b) ![Structure](structure9.png) $sp$
   c) What is the C-C-F angle in a? 109.5°
   d) What is the C-C-C angle in b? 180°