# Open Chemistry Online – Post Quiz #14 (OpenStax Ch: 7.6, 8.1-8.3)

1. Draw lewis diagrams of the following two molecules (showing all bonds and lone pairs) and state their geometry: CO2, H2O

1. One of the molecules above is polar, while the other is non-polar. Indicate which molecule is polar, and explain why.
2. Diagram

   Description automatically generatedThe diagram below shows the amino acid **serine.** Clearly label the orbital hybridization of **all non-H atoms** in serine***. Lone pairs are not shown, but do exist. serine has a charge of 0.***
3. The lewis structure below is Bromine Pentafluoride. State the **molecular geometry** of this molecule and provide **the orbital hybridization of all atoms.**

