Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ UGA myID \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Draw the Lewis structure for each molecule. Identify the electron and molecular geometry for each molecule.
* Use the “Model” part of the simulation (<https://phet.colorado.edu/sims/html/molecule-shapes/latest/molecule-shapes_all.html>) to build each molecule. Confirm that your shapes are correct, then use the 3-D model to determine if the bonds and molecules are polar or not.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Compound** | **Lewis structure** | **Electron Geometry** | **Molecular Geometry** | **Are the bonds polar?** | **Is the molecule polar?** |
| CS2 |  |  |  |  |  |
| OF2 |  |  |  |  |  |
| SiHCl3 |  |  |  |  |  |
| BH2I |  |  |  |  |  |
| NF3 |  |  |  |  |  |
| PCl5 |  |  |  |  |  |
| SeBr6 |  |  |  |  |  |