

You will need your reference materials from discussion.

1. Without looking at your reference materials, list the 5 fundamental shapes that describe the electron geometries for the central atom of a molecule.

2 groups of electrons: _____

3 groups of electrons: _____

4 groups of electrons: _____

5 groups of electrons: _____

6 groups of electrons: _____

2. What are the electron and molecular geometries for the following? (Try not to peek)

3 total groups of electrons, 2 bonding, and one lone pair:

Electron Geometry

Molecular Geometry

4 total groups of electrons, 4 bonding, no lone pairs:

Electron Geometry

Molecular Geometry

4 total groups of electrons, 3 bonding, and one lone pair:

Electron Geometry

Molecular Geometry

5 total groups of electrons, 2 bonding, and three lone pairs:

Electron Geometry

Molecular Geometry

6 total groups of electrons, 4 bonding, and two lone pairs:

Electron Geometry

Molecular Geometry

3. Draw the following molecules and list the Electron Geometry (EG), Molecular Geometry (MG), Central atom Hybridization and Polarity



EG: _____

MG: _____

Hybridization: _____

Polar Nonpolar N/A

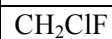


EG: _____

MG: _____

Hybridization: _____

Polar Nonpolar N/A



EG: _____

MG: _____

Hybridization: _____

Polar Nonpolar N/A



EG: _____

MG: _____

Hybridization: _____

Polar Nonpolar N/A



EG: _____

MG: _____

Hybridization: _____

Polar Nonpolar N/A