## General Chemistry

Mr. MacGillivray
Quiz \#15:
Molecular Geometry and Polarity
Draw Lewis dot structures for the following molecules. Indicate the geometry of the molecule. Tell whether or not the molecule has polar bonds. Finally, indicate whether the molecule itself is polar or nonpolar.

| Molecule | Lewis dot <br> structure | Molecular <br> geometry | Polar <br> bonds? <br> (Yes or <br> No) | Molecular <br> Polarity: Polar or <br> Nonpolar |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{H}_{2}$ |  |  |  |  |
| $\mathrm{H}_{2} \mathrm{O}$ |  |  |  |  |
| $\mathrm{CO}_{2}$ |  |  |  |  |
| $\mathrm{NH}_{3}$ |  |  |  |  |
| $\mathrm{BF}_{3}-$ this is an <br> exception to the <br> octet rule |  |  |  |  |

