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 structure	Molecular geometry	Polar bonds? (Yes or No)	Molecular Polarity: Polar or Nonpolar
H_2				
H_2O				
CO_2				
NH_3				
BF_3 – this is an exception to the octet rule				

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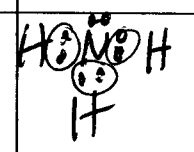
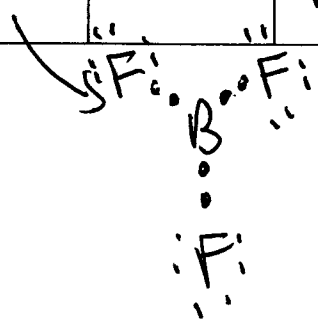
Molecule	Lewis dot structure	Molecular geometry	Polar bonds? (Yes or No)	Molecular Polarity: Polar or Nonpolar
H_2	H⊙H	linear	no	NONP
H_2O	H:O:H	bent (v-shaped)	yes	polar
CO_2		linear	yes	NONP
NH_3		trigonal pyramidal	yes	polar ~~yes~~
BF_3 – this is an exception to the octet rule		trigonal planar	yes	nonpolar