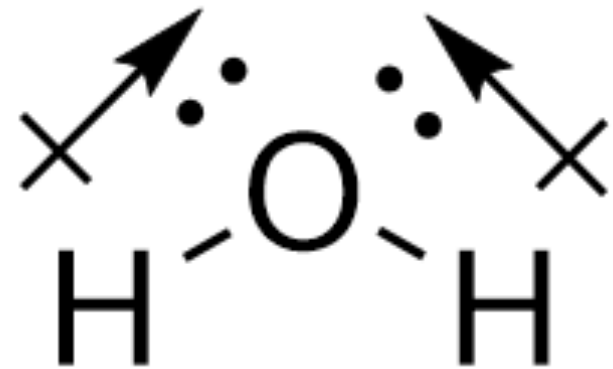
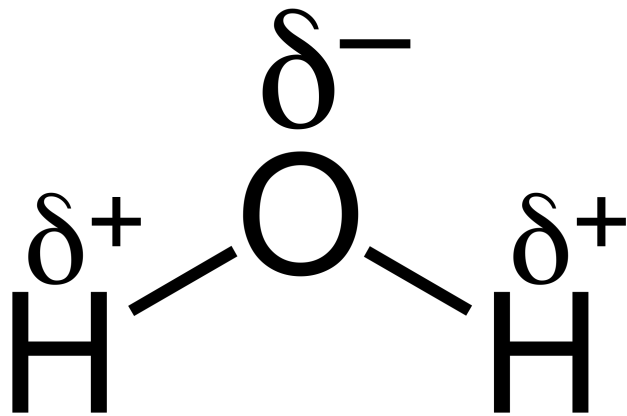


# Molecular Polarity

Polar molecules have an *uneven charge distribution* (“dipole” or “dipole moment”) due to the arrangement of atoms or electrons (“*asymmetrical*”).

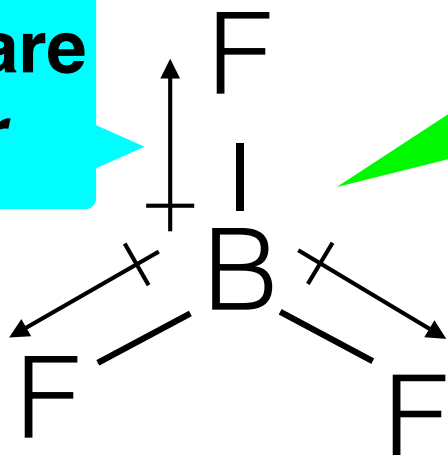


**Draw this diagram!**

# Molecular Polarity

Nonpolar molecules are *symmetrical* with all bond polarities canceling each other (no dipole).

**These bonds are *polar***



**This molecule is *nonpolar***

**Draw this diagram!**

\*Note: Nonpolar molecules *can* have polar bonds.

Is the molecule polar?

First check symmetry, then ask:

1. Are there lone pairs of e<sup>-</sup> on the central atom?
2. Is the central atom bonded to different elements?

If yes to either question,  
then the molecule is **polar**.