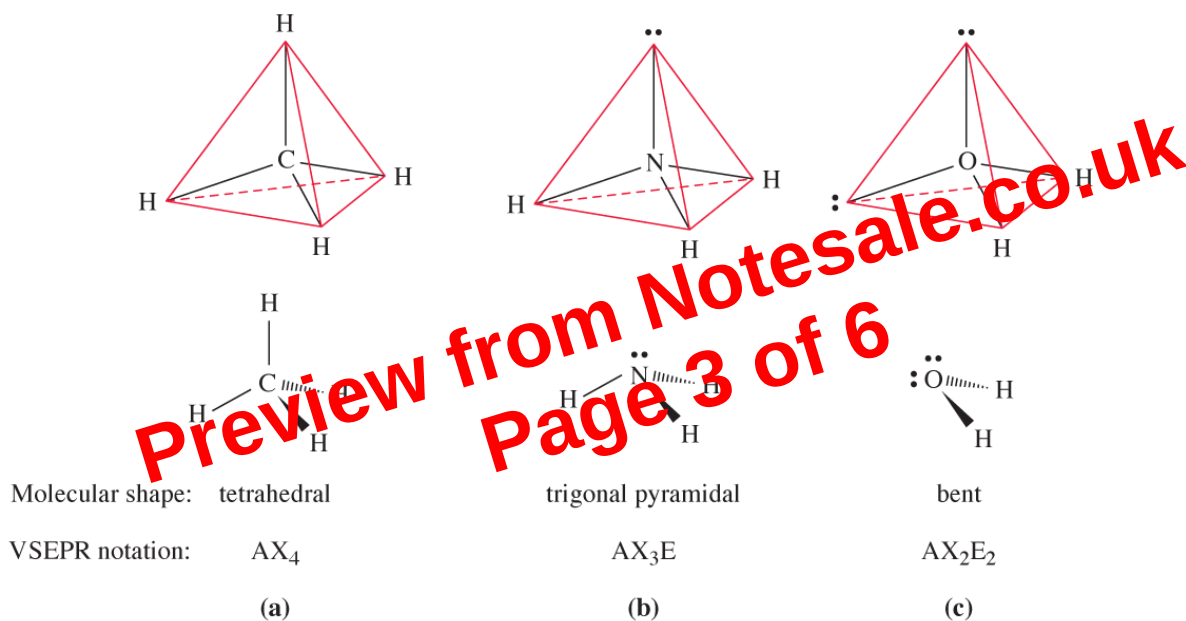




Octahedral (8 faces)

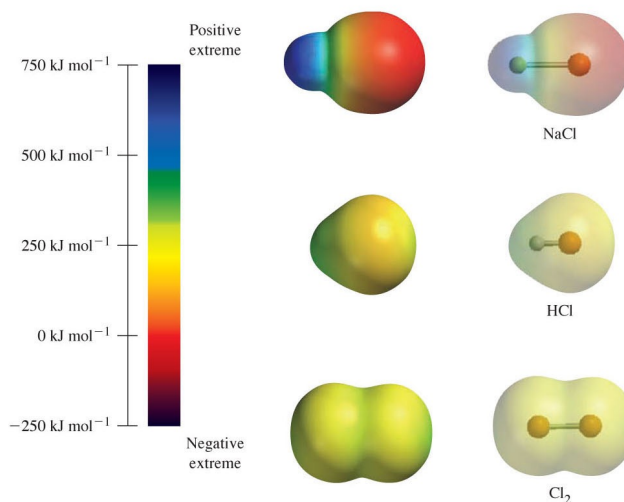
Molecular geometry: based off the electronic geometry



▲ FIGURE 10-11

Molecular shapes based on tetrahedral electron-group geometry of CH_4 , NH_3 , and H_2O

Polarity: $NaCl$ is ionic so you see a complete transfer of electrons. Hal and Cl_2 are covalent so you see a sharing of electrons. HCl is polar covalent and Cl_2 is non polar covalent.



◀ FIGURE 10-5
The electrostatic potential maps for sodium chloride, hydrogen chloride, and chlorine