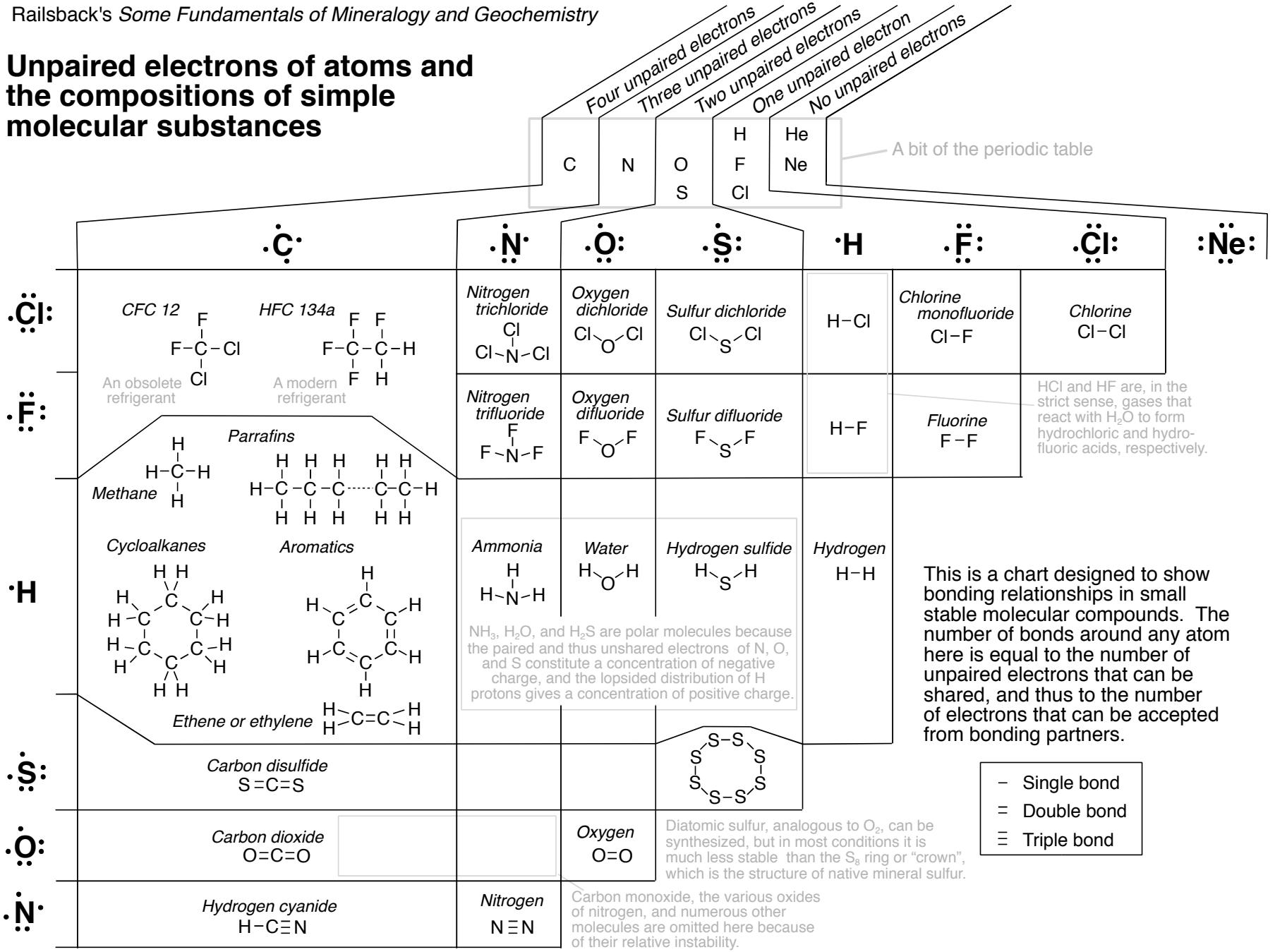Unpaired electrons of atoms and the compositions of simple molecular substances