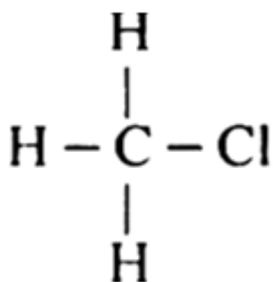
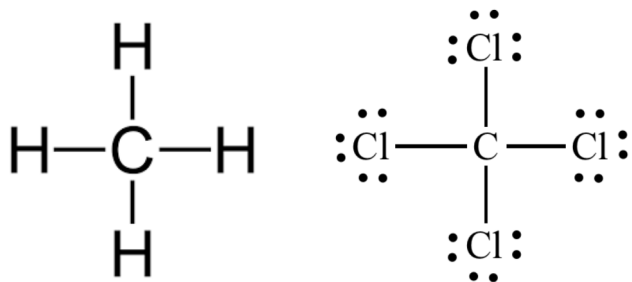


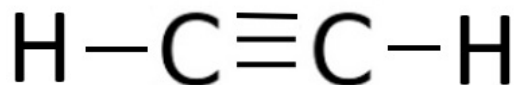
1. Which are polar molecules?
Which have polar bonds?
Which show dipole attractions between molecules?



2. Which of these are polar molecules?
How many pairs of electrons are being shared in N_2 ?
How many electrons are being shared by O_2 ?
How many pairs of electrons are being shared by F_2 ?



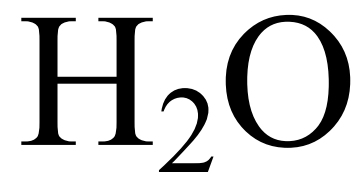
3. Name all of the bonds in C_2H_2 , shown here.
Does this molecule exhibit dipole attraction?
Does it exhibit electron dispersion attraction?



4. Name all of the bonds in each of these substances.
Are these polar or nonpolar or something different?



5. Draw Lewis Dot Diagrams for



6. Draw Lewis Dot Diagrams for



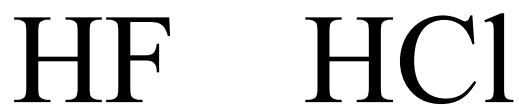
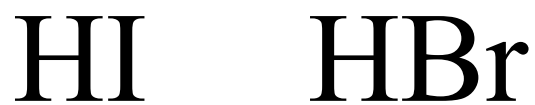
7. Name all of the bonds in



8. Name all of the bonds in



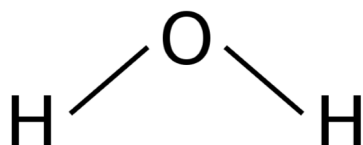
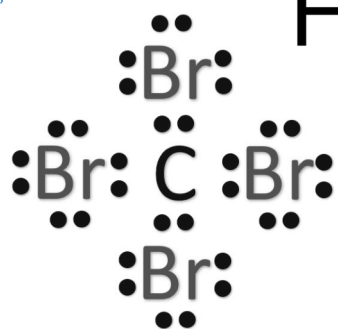
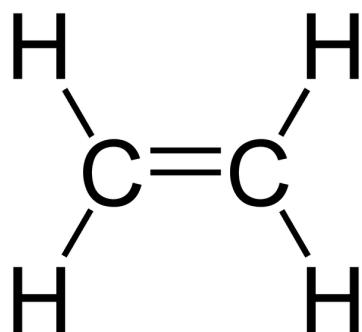
9. Rank from MOST polar to LEAST POLAR bonds



10. Packed cations, awash in a sea of loose valence electrons.
This best describes what sort of bond?

All of the HONClBrIF twins have single nonpolar covalent bonds, except... (write formulas & name bonds)

11. Which have radial symmetry?



12. Which are IONIC?



BONUS

What are the names and the relative oxidation numbers of all the atoms in...

