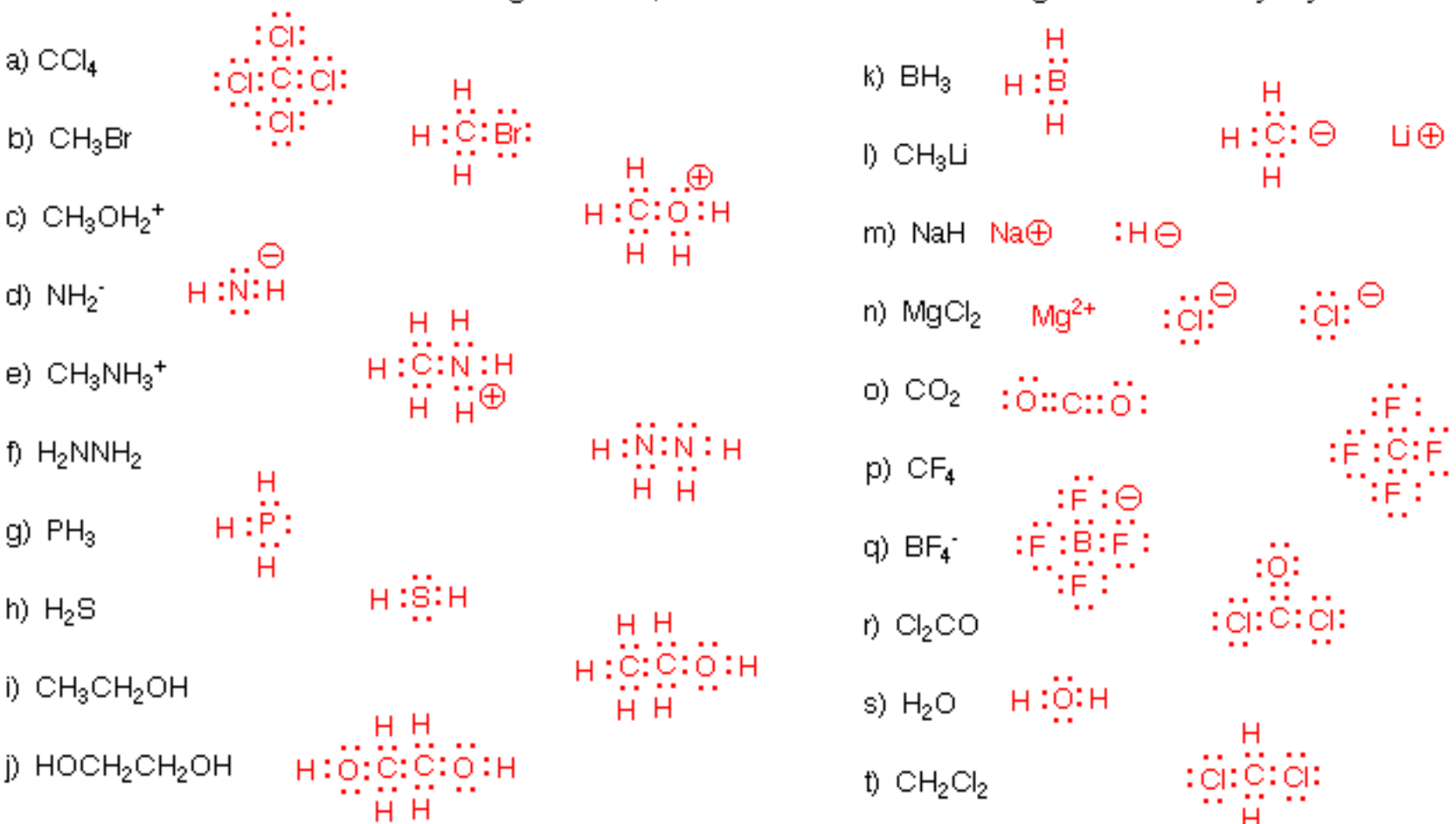


1. What are likely formulas for the following substances?

- a) CCl_7 CCl_4
 b) AlH_7
 c) CH_7Cl_2 AlH_3
 d) SiF_7 CH_2Cl_2
 e) CH_3NH_7 SiF_4
 CH_3NH_2

2. Provide Lewis structures for the following molecules, be sure to show all non-bonding electrons. Identify any atoms bearing formal charges.



3. Which of these substances would you expect to have covalent bonds and which ionic bonds?

- a) CH_4 $\text{b) CH}_2\text{Cl}_2$ c) LiI d) KBr e) MgCl_2 f) Cl_2
 covalent covalent ionic ionic ionic covalent

4. Provide the hybridization for each carbon atom in the following molecules

