

Name:

Period:

Seat#:

Directions: For each of the following pairs write the name or formula if it is missing, draw the Lewis structure, identify any polarity present with one of the ways you were shown in class, and then if both are polar determine which is most polar and explain your reason. **Don't forget to take into account the 3D molecular geometry of the molecules!**

1)	carbon disulfide	sulfur difluoride
2)	nitrogen trichloride	oxygen dichloride
3)	boron trihydride	ammonia
4)	chlorine	phosphorus trichloride
5)	silicon dioxide	carbon dioxide
6)	methane	CH ₂ Cl ₂
7)	silicon tetrabromide	HCN

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Bonding and Structure – Polarity

8)	nitrogen trifluoride	phosphorus trifluoride
9)	methyl chloride (CHCl_3)	methyl bromide (CHBr_3)
10)	water	hydrogen sulfide (H_2S)
11)	hydrochloric acid (HCl)	hydroiodic acid (HI)
12)	bromoacetylene (C_2HBr)	chloroacetylene (C_2HCl)
13)	methanol (CH_3OH)	diethyl ether [$(\text{CH}_3)_2\text{O}$]
14)	acetone [$(\text{CH}_3)_2\text{CO}$]	propanol ($\text{C}_3\text{H}_8\text{O}$)