

Name:

Period:

Seat#:

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:

| | | |
|----|----------------------|---------------------------------|
| 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 |

Dougherty Valley HS Chemistry
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 ($\text{C}_3\text{H}_8\text{O}$) |