

# Polar Practice

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Hour: \_\_\_\_\_

1. What does it mean to say that a bond is polar?

One of the atoms involved in the bond has a greater electronegativity than the other atom and therefore it has a partial negative charge.

2. Label each of the following bonds as ionic (I), polar covalent (PC) or nonpolar covalent (NC).

I Na—ClNC N—ONC F—FPC S—ONC H—CNC P—SI Mg—FPC P—OPC Br—N

3. For each of the sets of bonds, rank them in order from most polar to least polar.

A) F—F, S—O, H—C, P—S  
S—O, P—S, H—C, F—F

B) H—N, H—O, H—F, H—Cl  
H—F, H—O, H—N, H—Cl

C) C—H, C—O, N—O, S—C  
C—O, N—O, C—H, S—C

D) As—S, P—N, N—N, Cl—C  
P—N, Cl—C, As—S, N—N

E) H—F, H—O, Se—Br, Si—Cl  
H—F, H—O, Si—Cl, Se—Br