Skill Practice 23

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

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

1. What does it mean to say that a bond is polar?
2. Label each of the following bonds as ionic (I), polar covalent (PC) or nonpolar covalent (NC).

\_\_\_\_\_ Na—Cl \_\_\_\_\_ N—O \_\_\_\_\_ F—F

\_\_\_\_\_ S—O \_\_\_\_\_ H—C \_\_\_\_\_ P—S

\_\_\_\_\_ Mg—F \_\_\_\_\_ P—O \_\_\_\_\_ Br—N

1. For each of the sets of bonds, rank them in order from most polar to least polar.
   1. F—F, S—O, H—C, P—S
   2. H—N, H—O, H—F, H—Cl
   3. C—H, C—O, N—O, S—C
   4. As—S, P—N, N—N, Cl—C
   5. H—F, H—O, Se—Br, Si—Cl