

# CHEMISTRY 3A --- WORKSHEET 15

## CHAPTER 14

- For each of the following compounds, state whether the intermolecular forces are primarily hydrogen bonding, permanent dipole, or temporary dipole.
  - $\text{NH}_3$  (ammonia)
  - $\text{HCl}$
  - $\text{CO}$
  
- Determine whether the following compounds are ionic, polar covalent, or nonpolar covalent. For the polar covalent compounds, show which element is positive and which is negative.

|                   |                  |
|-------------------|------------------|
| a. $\text{NF}_3$  | d. $\text{P}_4$  |
| b. $\text{MgH}_2$ | e. $\text{PbS}$  |
| c. $\text{CO}_2$  | f. $\text{OF}_2$ |
  
- Draw a heating/cooling curve for iron, which has a melting point of  $1535^\circ\text{C}$  and a boiling point of  $2750^\circ\text{C}$ .