**Chemical Bonding Worksheet**

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Ionic Bonds

1. Draw a picture and describe to me the process ionization.
2. Explain why ions are either positive or negative?
3. Describe why ions are attracted to one another.
4. Does ionic bonding involve sharing electrons? Explain your answer.
5. Ionic bonds occur between two \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Is an ionic bond strong or weak?

# Covalent Bonds

1. Do covalent bonds involve sharing electrons?
2. Why would two atoms want to share electrons?
3. Covalent bonds occur between two\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Are covalent bonds Strong or weak?

# Polar Molecules

1. Do atoms always share their electrons equally?
2. What happens to a molecule if the electrons between two atoms are not shared equally?
3. When electrons are not shared equally between atoms we call the molecules\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Draw me an example of a molecule with unequal sharing of electrons.

# Hydrogen Bonds

1. Hydrogen bonds occur between two P\_\_\_\_\_\_\_\_\_\_ M\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. What creates a hydrogen bond?
3. When water “sticks” (creates hydrogen bonds) with itself we call this \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. When water “sticks” (creates hydrogen bonds) with other polar molecules we call this \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. Are hydrogen bonds considered strong or weak?