Name _____Date_____Class _____

Chem 06-16 CHAPTER 6 REVIEW Section 6-5 Chemical Bonding

Chemical Bonding

SHORT ANSWER Answer the following questions in the space provided.

1. Identify the major assumption of the VSEPR theory, which is used to predict the shape of atoms.

   _____

   _____

2. In water, two hydrogen atoms are bonded to one oxygen atom. Why isn't water a linear molecule?

   _____

   _____

3. What orbitals combine together to form sp^3 hybrid orbitals around a carbon atom?

   _____

   _____

4. What two factors determine whether or not a molecule is polar?

   _____

   _____

5. Arrange the following types of attractions in order of increasing strength, with 1 being the weakest and 4 the strongest.

   _____ hydrogen bonding

   _____ ionic

   _____ dipole-dipole

   _____ London dispersion

6. How are dipole-dipole attractions, London dispersion forces, and hydrogen bonding similar?

   _____

   _____

   _____

   _____

SECTION 5 continued

7. Complete the following table:

Formula	Lewis structure	Geometry	Polar
H_2S			
CCl_4			
BF_3			
H_2O			
PCl_5			
BeF_2			
SF_6			