

Name: \_\_\_\_\_  
Hour: \_\_\_\_\_ Date: \_\_\_\_\_

## Chemistry: *Chapter 6 Study Questions*

1. Describe how covalent and ionic bonds differ with regard to melting point, boiling point, and bond strength.
2. How is bond length related to stability and energy?
3. Describe the relationship between:
  - a) the difference of the electronegativity values of a compound's atoms, and
  - b) the degree of ionic or covalent bonding in the compound.
4. Explain the difference between polar covalent and nonpolar covalent bonds.
5. What are hydrogen bonds?
6. Why would scientists need to determine a compound's empirical formula?
7. How does an empirical formula differ from a molecular formula?
8. Distinguish between a monomer and a polymer, and give 4 examples of polymers.
9. Why are structural formulas useful?
10. What is the most important factor in determining the chemical properties of a molecule?
11. What does VSEPR stand for, and what is the purpose of the theory?
12. State 3 weaknesses of the VSEPR theory.
13. How does a network solid differ from a crystal lattice?
14. Give 2 examples of network solids.
15. What are:   ...organic compounds?                      ...hydrocarbons?                      ...functional groups?
16. List 6 types of molecular models.