Name _____ Date _____ Class _____

Chapter 7

STUDY GUIDE

7.2 NOMENCLATURE

Match the terms listed with their descriptions. Write the correct letters on the lines provided.

___ 1. binary compounds
___ 2. hydrocarbons
___ 3. sulfur hexafluoride
___ 4. aluminum arsenate
___ 5. baking soda
___ 6. *meth-*
___ 7. copper(II) oxide
___ 8. common acids
___ 9. cyclopentane
___ 10. nitrogen

a. example of a binary compound formed from a metallic element with variable oxidation states
b. indicates one carbon atom
c. organic compounds composed solely of H and C
d. forms five different binary compounds with oxygen
e. common name of sodium hydrogen carbonate
f. has five carbon atoms linked in a ring
g. compounds that contain only two elements
h. common name of a compound containing six fluorine atoms
i. have names that do not normally follow the rules for naming compounds
j. demonstrates the rule that the name of a polyatomic ion does not end in *-ide*

11. Complete the table by filling in the missing names.

Compound formula	Name
KCl	
$ZnCO_3$	
C_4H_{10}	
$FeCl_3$	
N_2O_3	

Complete the sentence or answer the question.

12. What is the difference between a molecular formula and an empirical formula?

_____

_____

13. The formulas for ionic compounds are almost all _____ formulas.

14. The molecular formula of a compound is always a whole-number multiple of the _____ formula.

15. What is the empirical formula of the compound N_2O_4?

_____

16. How would you use symbols to designate three formula units of zinc sulfide?

_____