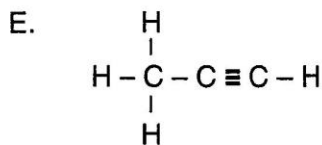
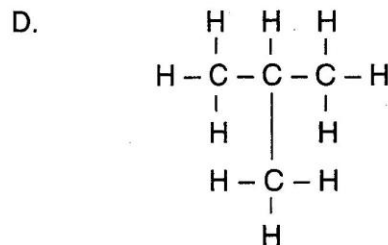
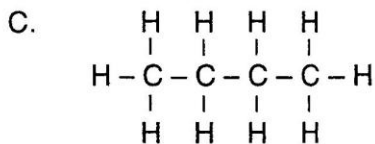
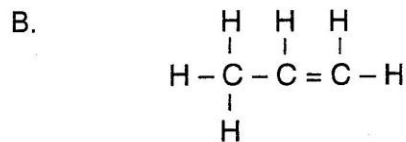
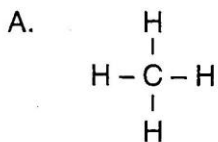


# Simple Organic Compounds

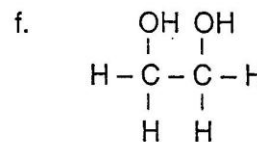
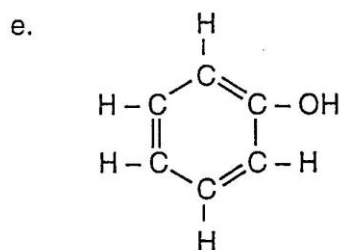
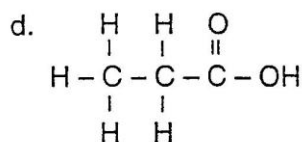
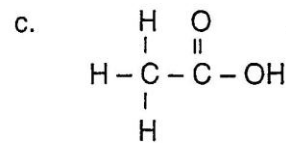
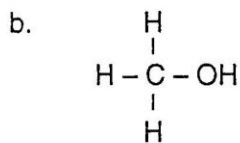
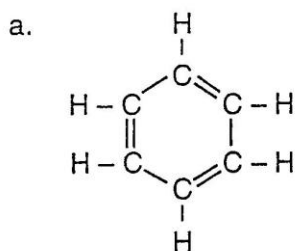
Name \_\_\_\_\_ Per \_\_\_\_\_

Use the structural formulas below to answer the questions.



1. What is the chemical formula for the compound shown in Figure A? \_\_\_\_\_
2. What is the chemical formula for Figure C? \_\_\_\_\_
3. Which compounds are unsaturated hydrocarbons? \_\_\_\_\_
4. Which compounds are saturated hydrocarbons? \_\_\_\_\_
5. In Figure B, what is represented by the symbol = ? \_\_\_\_\_
6. In Figure E, what is represented by the symbol  $\equiv$  ? \_\_\_\_\_
7. What is the chemical formula for Figure D? \_\_\_\_\_
8. Which two structural formulas represent isomers of the same compound? \_\_\_\_\_
9. What kind of hydrocarbons have saturated single bonds (like C)? \_\_\_\_\_
10. What kind of hydrocarbons have unsaturated double bonds (like B)? \_\_\_\_\_
11. What kind of hydrocarbons have unsaturated triple bonds (like E)? \_\_\_\_\_
12. What kind of organic compound is shown in all the formulas? \_\_\_\_\_

13. Identify the following compounds that are aromatic compounds. If the compound is aromatic, place a plus (+) in the space provided. If the compound is not aromatic, place a (-) in the space provided.



a. \_\_\_\_\_

c. \_\_\_\_\_

e. \_\_\_\_\_

b. \_\_\_\_\_

d. \_\_\_\_\_

f. \_\_\_\_\_

Use the diagrams above to answer the following questions.

14. What is the formula for the compound in Figure B? \_\_\_\_\_

15. Which compounds are substituted hydrocarbons? \_\_\_\_\_

16. Which of the compounds are organic acids? \_\_\_\_\_

17. How are the structures of the organic acids similar? \_\_\_\_\_

18. Which of the substituted hydrocarbons are alcohols? \_\_\_\_\_

19. What do the structures of alcohols have in common? \_\_\_\_\_

20. Which compound has the formula  $C_2H_4(OH)_2$ ? \_\_\_\_\_

21. Describe the structural shape of benzene. \_\_\_\_\_

22. What is the formula for benzene? \_\_\_\_\_