

**Carbon Chemistry ▪ 8.2 Review and Reinforce****Carbon Compounds****Understanding Main Ideas**

Answer the following questions on a separate sheet of paper.

1. What kinds of carbon chains are shown in Figures 1 through 3?

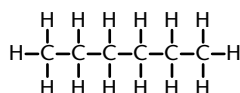


Figure 1

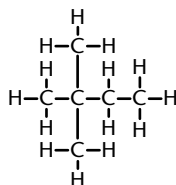


Figure 2

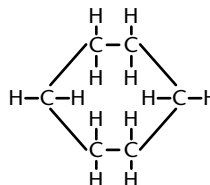


Figure 3

2. Write the chemical formulas for the three compounds shown above.
3. The compounds in Figure 1 and Figure 2 have the same number of carbon and hydrogen atoms. This fact makes them what type of compounds?

**Building Vocabulary**

Match each term with its definition by writing the letter of the correct definition in the right column on the line beside the term in the left column.

- |                                  |  |
|----------------------------------|--|
| _____ 4. substituted hydrocarbon | a. a compound that contains carbon   |
| _____ 5. organic compound        | b. —OH   |
| _____ 6. ester                   | c. very large molecule made of many smaller molecules bonded together                    |
| _____ 7. polymer                 | d. a substituted hydrocarbon with one or more hydroxyl groups                            |
| _____ 8. hydroxyl group          | e. a compound containing only the elements carbon and hydrogen                           |
| _____ 9. structural formula      | f. —COOH   |
| _____ 10. hydrocarbon            | g. a molecule with an atom of another element in place of hydrogen                       |
| _____ 11. alcohol                | h. the compound that results when an alcohol and an organic acid are chemically combined |
| _____ 12. carboxyl group         | i. shows the kind, number, and arrangement of atoms of a molecule                        |
| _____ 13. monomer                | j. the smaller molecules that make up a polymer  |
| _____ 14. organic acid           | k. a substituted hydrocarbon with one or more carboxyl groups                            |