

1. Organic chemistry is commonly defined as
  - a. The study of compounds made only by living cells.
  - b. The study of carbon compounds.
  - c. The study of vital forces.
  - d. The study of natural compounds.
  - e. The study of hydrocarbons.
2. Which of the following hydrocarbons has a double bond in its carbon skeleton?
  - a.  $C_2H_6$
  - b.  $C_3H_6$
  - c.  $C_4H_{10}$
  - d.  $C_5H_{12}$
  - e.  $C_6H_{14}$
3. What is the empirical formula for the  $\alpha$ -methylbutane?
  - a.  $C_4H_{10}$
  - b.  $C_3H_8$
  - c.  $C_4H_8$
4. Choose the term that correctly describes the relationship between these two ring structures:
 
  - a. Structural isomers.
  - b. Geometric isomers.
  - c. Enantiomers.
  - d. None.
5. How many alpha carbons do we see in the first structure than the second structure respectively? (first number - 2<sup>nd</sup>)
  - a. 1,1
  - b. 2,2
  - c. 3,3
  - d. 5,5
  - e. 6,6
6. What is the non-cyclic isoprenoid carbon (range of a molecule called)?
  - a. Structural isomers.
  - b. Geometric isomers.
  - c. Enantiomers.
  - d. None.
7. A cyclic compound can be classified as being cis or trans across a double bond. (These two forms are called)
  - a. Structural isomers.