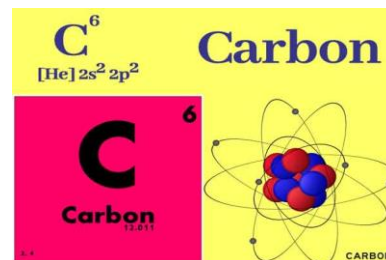


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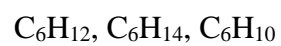
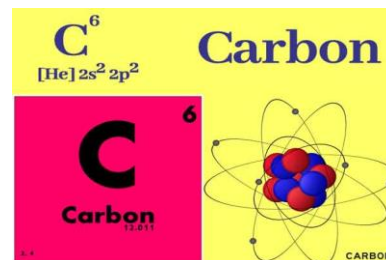
Lesson 28: Carbon and Its Compounds

Worksheet-28



1. Name the element whose one of the allotropic forms is buckminsterfullerene.
2. In addition to some propane and ethane, LPG cylinders contain mainly two isomers of another alkane. Name the two isomers and write their condensed structural formulae.
3. Name the black substance of pencil. Will the current flow through the electrical circuit when we use the sharpened ends of the pencil to complete the circuit?
4. How does graphite act as a lubricant?
5. Write the electron-dot structures for: (i) ethane, (ii) ethene, and (iii) ethyne.
6. Give the IUPAC name of the following compound:
 C_2H_6
7. Write the names of any two isomers represented by the molecular formula C_5H_{12} .
8. A neutral organic compound is warmed with some ethanoic acid and a little of cone. H_2SO_4 . Vapors having sweet smell (fruity smell) are evolved. What type of functional group is present in this organic compound? The structural formula of an ester is:
9. An organic acid X is a liquid, which often freezes during winter time in cold countries, having the molecular formula $C_2H_4O_2$. On warming it with methanol in the presence of a few drops of concentrated sulphuric acid, a compound Y with a sweet smell is formed.
 - (a) Identify X and Y. Also write their formulae showing the functional group present in them.
 - (b) Write a chemical equation for the reaction involved.
10. Which of the following hydrocarbons can decolorize bromine water and which cannot?
Why?

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