



Name:

Grade:

Worksheet about 'organic chemistry'

Question 1: Consider the following compounds

CO₂, CaCO₃, CH₄, HCl, H₂, CH₃COOH, HCN, F₂, CH₃Cl, C₂H₆, NaCl, KHCO₃, CO, NO₂, CaC₂

a) classify them into **organic and inorganic compounds**.

Organic compounds	Inorganic compounds

b) Classify those who are organic compounds into **hydrocarbon and non-hydrocarbon**.

Organic compounds	
Hydrocarbon	Non-hydrocarbon

Question 2: In what form of formulas (molecular, structural, condensed structural) the following compounds are written?

- 1) CH≡CH
- 2) CH₄
- 3) CH₃-CH₃



- 4) $\text{CH}_3\text{-COOH}$
- 5) $\text{CH}_2=\text{CH}_2$
- 6) $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-CH}_3$
- 7) C_2H_6

Question 3: Specify whether each of the following hydrocarbon is saturated or unsaturated.

- 1) $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_3$
- 2) $\text{CH}_2=\text{CH}_2$
- 3) $\text{CH}_3\text{-CH}_2\text{-C}\equiv\text{CH}$
- 4) $\text{CH}_3\text{-CH}_2\text{-CH}_3$
- 5) $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}=\text{CH}_2$

Question 4: consider the following experiment

In tube A: Few drops of compound A + bromine water (orange-yellow color)

In tube B: Few drops of Compound B+ bromine water (orange-yellow color)

Result:

- The color of solution in tube A remains orange.
- The color of solution in tube B becomes colorless.

1) Analyze the result.

Developmental Action Without Borders

NABA'A

Reg: 104\AD



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2) Conclude the type of Aliphatic hydrocarbon (Alkane or Alkene) for the compounds A&B? justify?