



Organic Chemistry Multiple Choice Questions

Set 1

You may use a periodic table to help you answer these questions.

Tick **one** box.

1. Which of these is a finite resource?

- A. biofuel ☐
- B. cotton ☐
- C. crude oil ☐
- D. wood ☐

2. What name is given to molecules which contain only carbon and hydrogen atoms?

- A. carbohydrates ☐
- B. carbonhydrogenates ☐
- C. hydrocarbons ☐
- D. hydrogencarbonates ☐

3. What is the general formula for an alkane?

- A. C_nH_n ☐
- B. C_nH_{2n} ☐
- C. C_nH_{2n+1} ☐
- D. C_nH_{2n+2} ☐

4. Why can fractional distillation be used to separate crude oil?

- A. crude oil does not burn ☐
- B. crude oil only contains a small number of hydrocarbons ☐
- C. each fraction has a different boiling point ☐
- D. some hydrocarbons in crude oil are solids ☐

5. What is the trend in the boiling point of hydrocarbons as the size of the hydrocarbon molecule increases?

- A. the boiling point decreases ☐
- B. the boiling point increases ☐
- C. the boiling point stays the same ☐
- D. there is no clear relationship between the boiling point and the size of the molecule ☐



6. What are the products of the complete combustion of methane?
- A. carbon dioxide and hydrogen ☐
 - B. carbon dioxide and oxygen ☐
 - C. carbon dioxide and water ☐
 - D. carbon dioxide only ☐
7. Which useful products are made from chemicals extracted from crude oil?
- A. lubricants ☐
 - B. polymers ☐
 - C. solvents ☐
 - D. all the above ☐
8. What is the name of the process by which large hydrocarbon molecules are broken down into smaller hydrocarbon molecules?
- A. combustion ☐
 - B. cracking ☐
 - C. fractional distillation ☐
 - D. reduction ☐
9. Which reagent is used to test for the presence of alkenes?
- A. Benedict's reagent ☐
 - B. bromine water ☐
 - C. iodine ☐
 - D. universal indicator ☐
10. What colour change is observed in the test for an alkene?
- A. blue to red ☐
 - B. brown to black ☐
 - C. green to red ☐
 - D. orange to colourless ☐