

ORGANIC CHEMISTRY Questions 2

- 1 The alkanes are a **homologous series** of hydrocarbons.
- (a) (i) Tick **two** boxes that are correct statements about members of an homologous series. [2]
- | | |
|--|--------------------------|
| They have similar chemical properties | <input type="checkbox"/> |
| They have the same displayed formula | <input type="checkbox"/> |
| They have the same molecular formula | <input type="checkbox"/> |
| They have the same physical properties | <input type="checkbox"/> |
| They have the same relative formula masses | <input type="checkbox"/> |
| They show a gradation in physical properties | <input type="checkbox"/> |

- 2 Draw the full structural formulae (displayed formulae) of the following alkanes: [2]

Pentane	Propane
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- 3 Methane reacts with chlorine in the presence of UV light.
- (a) Write a balanced chemical equation for the reaction: [2]

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- (b) State the names of the products of this reaction. [2]

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- 4 Propane reacts with bromine to form C₃H₇Br and another product.
- (a) Write an equation for the reaction. [2]

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- (b) Two different compounds with the formula C₃H₇Br can be formed in this reaction. Draw the structures and give the names of these two compounds.

Structural Formula

Structural Formula

Name..... Name.....