

APOLLO

Introduction to the particulate nature of matter

HL

Chemistry

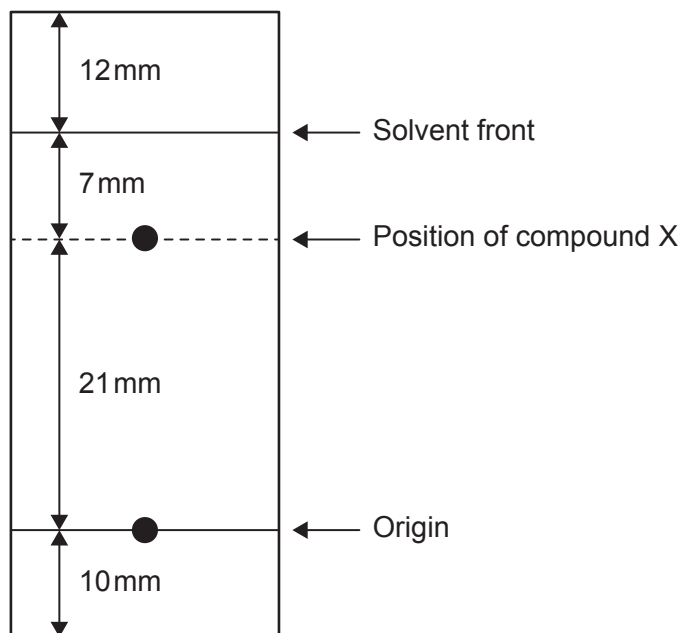
First assessment 2025

4 questions | questions

1. A test tube contains a mixture of liquid hydrocarbons. What is the type of mixture and the best method of separation?

	Type of mixture	Method of separation
A.	homogeneous	distillation
B.	homogeneous	filtration
C.	heterogeneous	distillation
D.	heterogeneous	filtration

8. What is the retardation factor, R_F , of compound X according to this paper chromatogram?



- A. 0.55
- B. 0.75
- C. 0.82
- D. 1.33

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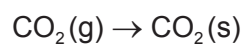
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1. Which methods for separating the given mixtures into their components are correct?

	Mixture	Method
I.	A mixture of solid in a liquid in which solubility of the solid varies with temperature	Crystallization
II.	A mixture of a solid in a liquid in which the solid is not dissolved	Filtration
III.	A mixture of two miscible liquids with different boiling points	Distillation

- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

1. What is the name of this change of state?



- A. Condensation
- B. Deposition
- C. Sublimation
- D. Freezing