

IGCSE Chemistry

Paper 2

Unsolved Topical

Past Papers with Marking Schemes

All Variants

2014-2021

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PREFACE

Excellence in learning cannot be claimed without application of concepts in a dexterous way. In this regard one of the logical approach is to start in chunks; like chapter wise learning and applying the concept on exam based questions.

This booklet provides an opportunity to candidates to practice topic wise questions from previous years to the latest. Extensive working of Team MS Books has tried to take this booklet to perfection by collaborating with top of the line teachers.

We have added answer key / marks scheme at the end of each topic for the candidate to compare the his/her answer to the best.

MS Books strives to maintain actual spacing between consecutive questions and within options as per CAIE format which gives students a more realistic feel of attempting question.

Review, feedback and contribution in this booklet by various competent teachers of a subject belonging to renowned school chains make it most valuable resource and tool for both teachers and students.

With all belief in strength of this resource material I can confidently claim that it is worth in achieving brilliance.

Our sincere thanks and gratification to **Mr. Kamal Ahmad** who took out special time to help compile and manage this booklet. We would also like to appreciate chemistry faculty for reviewing and indorsing it.

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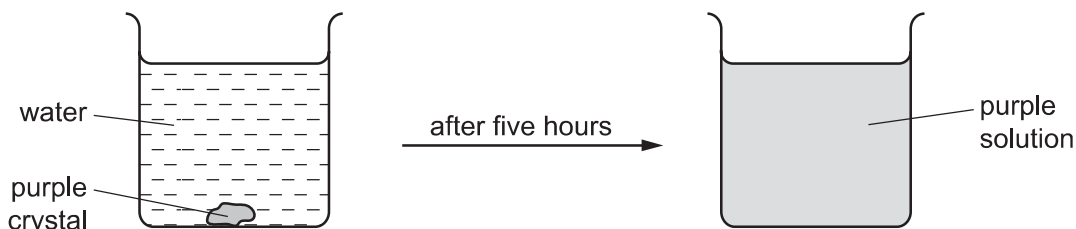
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STATES OF MATTER

Q1/11/M/J/14

1 The diagram shows the result of dropping a purple crystal into water.

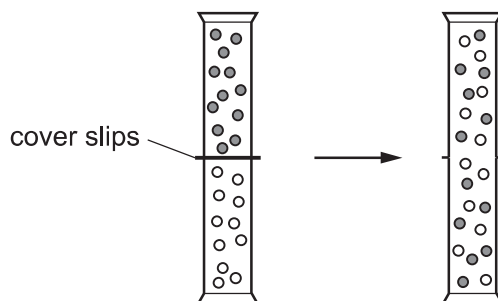


Which processes take place in this experiment?

	chemical reaction	diffusing	dissolving
A	✓	✓	✓
B	✓	x	✓
C	x	x	✓
D	x	✓	✓

Q1/12/M/J/14

2 Two gas jars each contain a different gas. The gas jars are connected and the cover slips are removed. The diagram shows what happens to the particles of the gases.



Which process has occurred?

- A** chemical reaction **B** condensation **C** diffusion **D** evaporation

Q2/12/O/N/14

3 Which statement is an example of diffusion?

- A** A kitchen towel soaks up some spilt milk.
- B** Ice cream melts in a warm room.
- C** Pollen from flowers is blown by the wind.
- D** The smell of cooking spreads through a house.

Q1/13/O/N/14

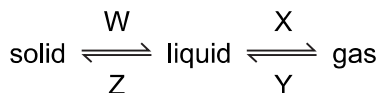
4 A few drops of perfume were spilt on the floor. A few minutes later the perfume could be smelt a few metres away.

Which two processes had taken place?

- A** distillation and condensation
- B** distillation and diffusion
- C** evaporation and condensation
- D** evaporation and diffusion

Q1/11/M/J/15

5 The changes that occur when a substance changes state are shown below.



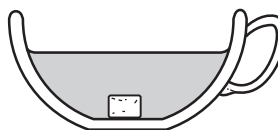
Which process, W, X, Y or Z, is occurring in the following four situations?

- 1 Butter melts on a warm day.
- 2 Water condenses on a cold surface.
- 3 The volume of liquid ethanol in an open beaker reduces.
- 4 Ice forms inside a freezer.

	1	2	3	4
A	W	X	Y	Z
B	W	Y	X	Z
C	X	Y	Z	W
D	X	Z	Y	W

Q1/12/M/J/15

6 The diagram shows a sugar lump in a cup of tea.

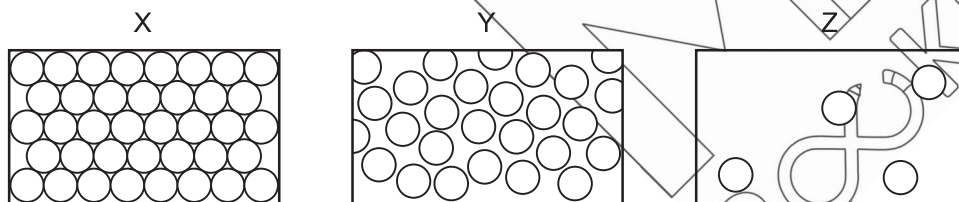


Which two processes must happen to spread the sugar evenly in the tea?

	first process	second process
A	diffusion	dissolving
B	dissolving	diffusion
C	dissolving	melting
D	melting	diffusion

Q1/11/O/N/15

7 Diagrams X, Y and Z represent the three states of matter.



Which change occurs during boiling?

- A** X to Y **B** Y to Z **C** Z to X **D** Z to Y

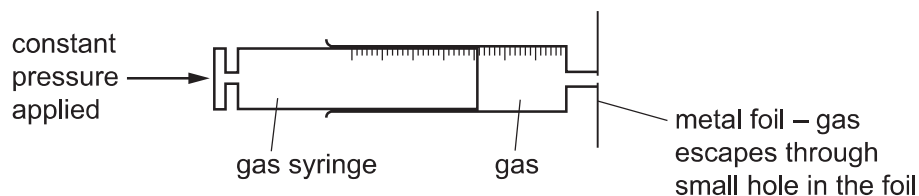
Q1/12/O/N/15

8 Which change of state takes place during evaporation?

- A gas to liquid B liquid to gas C liquid to solid D solid to gas

Q1/21/M/J/16

9 The rate of diffusion of two gases, methane, CH_4 , and ethene, C_2H_4 , is measured using the apparatus shown.



Which gas diffuses faster and why?

	gas that diffuses faster	reason
A	ethene	Ethene molecules are heavier and so move faster.
B	ethene	Ethene molecules have a double bond which makes them more reactive.
C	methane	Methane molecules are lighter and so move faster.
D	methane	Methane molecules are smaller so they can get out of the small hole more easily.

Q1/22/M/J/16

10 The particles of a substance gain energy and change from a regular ordered structure to a disordered structure with large distances between the particles.

Which change of state is described?

- A boiling B evaporation C melting D sublimation

Q1/21/O/N/16

11 'Particles moving **very slowly** from an area of higher concentration to an area of lower concentration.'

Which process is being described?

- A a liquid being frozen
 B a solid melting
 C a substance diffusing through a liquid
 D a substance diffusing through the air

MS
BOOKS

ANSWER KEYS

Sr #	Key	Sr #	Key
1.	D	21.	D
2.	C	22.	C
3.	D	23.	B
4.	D	24.	B
5.	B	25.	D
6.	B	26.	B
7.	B	27.	D
8.	B	28.	B
9.	C	29.	A
10.	D	30.	B
11.	C		
12.	D		
13.	D		
14.	C		
15.	A		
16.	C		
17.	B		
18.	A		
19.	B		
20.	D		

