


CHEMISTRY

0620 P1

2020 — 2025

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1 - (0620/11_Summer_2020_Q1) 

Nitrogen is heated in a balloon, which expands slightly.

Which statements about the molecules of nitrogen are correct?


- 1 They move further apart.
- 2 They move more quickly.
- 3 They remain the same distance apart.
- 4 Their speed remains unchanged.

A 1 and 2 **B** 1 and 4 **C** 2 and 3 **D** 3 and 4

2 - (0620/11_Summer_2020_Q2) 

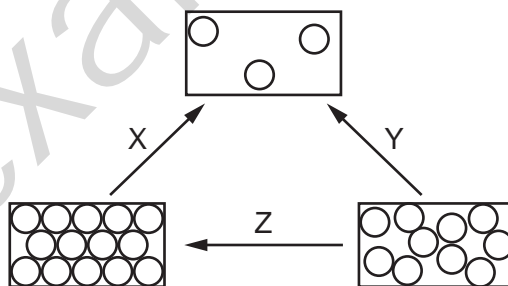
Which piece of apparatus should be used to measure exactly 21.4 cm^3 of water?

- A** 25 cm^3 beaker
- B** 25 cm^3 pipette
- C** 50 cm^3 burette
- D** 50 cm^3 measuring cylinder

3 - (0620/12_Summer_2020_Q1) 


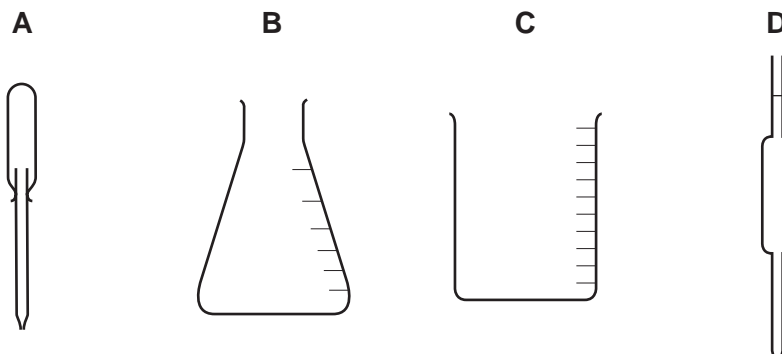
Each rectangle shows the arrangement of particles in each of the three states of matter.

X, Y and Z represent the processes needed to change from one state to another.



What are the processes X, Y and Z?

	X	Y	Z
A	evaporating	subliming	condensing
B	evaporating	subliming	freezing
C	subliming	evaporating	condensing
D	subliming	evaporating	freezing

4 - (0620/12_Summer_2020_Q2) Which piece of apparatus is used to measure 25.0 cm³ of aqueous sodium hydroxide?5 - (0620/13_Summer_2020_Q1) 

Descriptions of the three states of matter are shown.


	particle separation	particle arrangement	type of motion
1	small	random	move past each other at low speed
2	large	random	rapid motion in straight lines
3	small	regular	vibration

Which row is correct?

	1	2	3
A	gas	liquid	solid
B	liquid	solid	gas
C	liquid	gas	solid
D	solid	gas	liquid

6 - (0620/13_Summer_2020_Q2) Which piece of apparatus is used to measure 13.7 cm³ of dilute hydrochloric acid?

- A** balance
- B** burette
- C** conical flask
- D** pipette

7 - (0620/11_Winter_2020_Q1) 

'The movement of a substance **very slowly** from an area of high concentration to an area of low 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

8 - (0620/11_Winter_2020_Q2) 

What happens to the average speed of gas particles when pressure and temperature are increased?

	average speed of particles	
	pressure increases	temperature increases
A	faster	faster
B	unchanged	slower
C	slower	faster
D	unchanged	faster

9 - (0620/11_Winter_2020_Q3) 

Which piece of apparatus can only measure a single fixed volume?

- A 250 cm³ beaker
- B 50 cm³ burette
- C 100 cm³ measuring cylinder
- D 25 cm³ pipette

10 - (0620/12_Winter_2020_Q1) 

'The movement of a substance **very slowly** from an area of high concentration to an area of low 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

1 - A	21 - A	41 - A	61 - A	81 - A
2 - B	22 - B	42 - D	62 - A	82 -
3 - B	23 - A	43 - B	63 - B	83 -
4 - A	24 - B	44 - D	64 - C	84 -
5 - D	25 - C	45 - D	65 - A	85 -
6 - B	26 - A	46 - B	66 - D	86 -
7 - D	27 - B	47 - A	67 - B	87 -
8 - A	28 - A	48 - D	68 - B	88 -
9 - D	29 - C	49 - D	69 - A	89 -
10 - D	30 - A	50 - B	70 - D	90 -
11 - C	31 - C	51 - B	71 - A	91 -
12 - D	32 - B	52 - B	72 - D	92 -
13 - C	33 - B	53 - B	73 - A	93 -
14 - A	34 - A	54 - C	74 - A	94 -
15 - A	35 - D	55 - D	75 - A	95 -
16 - A	36 - B	56 - B	76 - A	96 -
17 - A	37 - C	57 - C	77 - D	97 -
18 - B	38 - C	58 - D	78 - C	98 -
19 - B	39 - D	59 - D	79 - B	99 -
20 - A	40 - B	60 -	80 - A	100 -