Term 2 WA

SINGAPORE CHINESE GIRLS' SCHOOL
PRIMARY 5 SCIENCE
Term 2 Weighted Assessment
Topics: Water and its States

Name: _____ ( ) Date: _____

Class: Primary 5 SY / C / G / SE / P

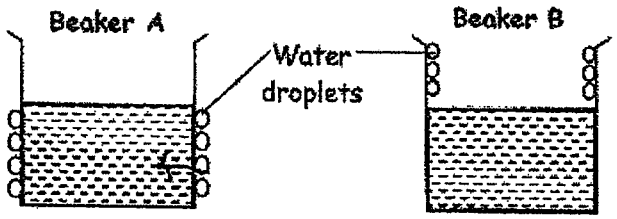
	Total Actual Marks	Total Possible Marks
Section A		14
Section B		11
Total		25

_____
Parent's signature

Section A (14 marks)

For each question from 1 to 7, four options are given. One of them is the correct answer. **Choose the correct answer and write its number in the Answer Sheet on Page 4.**

1. The diagram below shows water droplets that have formed on the surface of a beaker.



Given that the room temperature is 30 °C , which of the following correctly shows the temperature of the water in the beakers?

	Temperature of the water in beaker (°C)	
	A	B
(1)	10	80
(2)	30	30
(3)	10	30
(4)	30	80

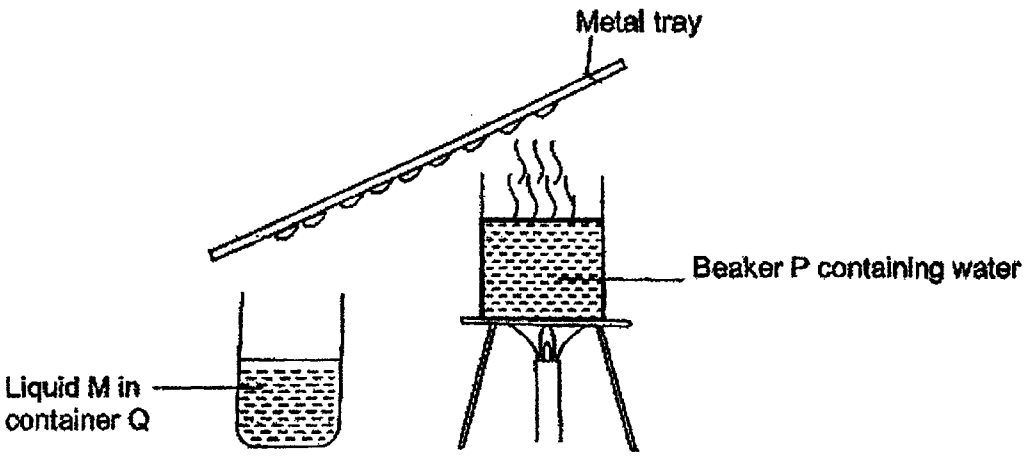
2. Leanne wants to find out whether the temperature of water affects the rate of evaporation of water.

Set-up	P	Q	R	S	T
Volume of water (ml)	400	200	200	400	200
Temperature of water (°C)	30	55	35	30	60
Exposed surface area of water (cm^2)	10	15	10	15	10

Which of the above set-ups should she use in order to conduct a fair-test?

(1) P and S
(2) R and T
(3) Q and S
(4) P and R

3 Abigail set up an experiment as shown below.

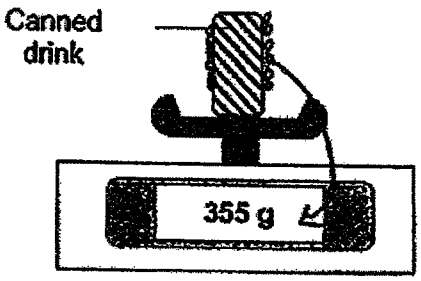


The water in Beaker P was heated for some time. It was noticed that the amount of water droplets forming on the metal tray decreased as time went by. Which one of the following would explain why this happened?

A : Beaker P had become hotter.
B : The rate of evaporation had increased.
C : The rate of condensation had decreased.
D : The metal tray had become hotter.

(1) A and B only
(2) B and C only
(3) B and D only
(4) C and D only

4. Pamela took a cold canned drink from the refrigerator and placed it on a weighing scale. It has a mass of 355g.

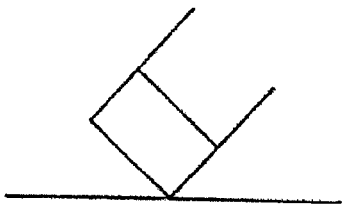


She left it on the weighing scale at room temperature and recorded the mass of the canned drink 10 minutes later.

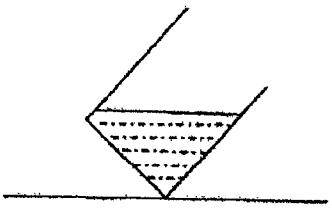
Which of the following shows the most likely mass of the canned drink when she measured it 10 minutes after removing it from the refrigerator?

(1) 350g
(2) 353g
(3) 355g
(4) 358g

5. Tammy took substance X out from the freezer and left it at room temperature before heating it to 80°C. The diagram below shows what she observed at 5°C and at 80°C.



100ml of substance X at 5°C

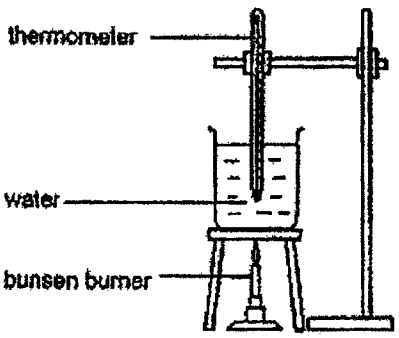


100ml of substance X at 80°C

Based on Tammy's observations, which of the following is possible?

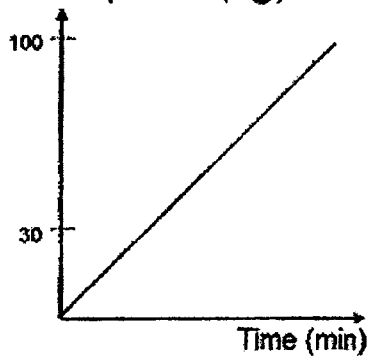
	Freezing point of X (°C)	Boiling point of X (°C)
(1)	10	110
(2)	3	100
(3)	15	65
(4)	0	65

6. Ms Tan heated some water in a beaker and measured the change in the temperature of the water using a thermometer. When the water boiled, she turned off the flame and continued to measure its temperature until the water cooled to room temperature.

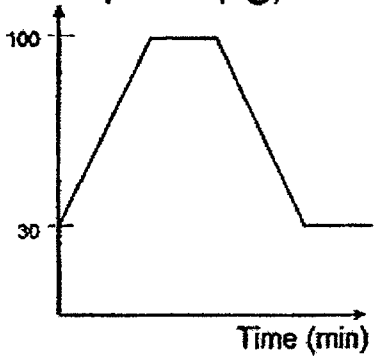


Which of the following graphs shows the results that Ms Tan would most likely observe?

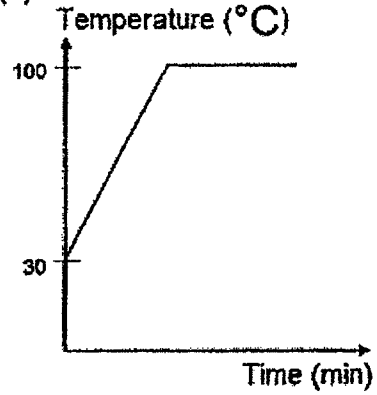
(1)



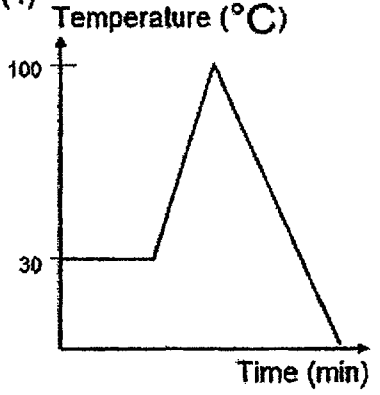
(3)



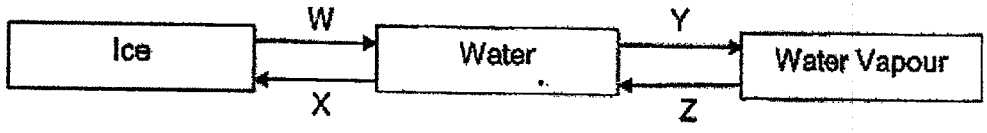
(2)



(4)



7. The diagram below shows the three states of water.
W, X, Y and Z represent four different processes.



Which of the following correctly indicates whether heat is gained or lost during processes W, X, Y and Z?

	W	X	Y	Z
(1)	Heat is gained	Heat is lost	Heat is gained	Heat is lost
(2)	Heat is lost	Heat is gained	Heat is gained	Heat is lost
(3)	Heat is gained	Heat is lost	Heat is lost	Heat is gained
(4)	Heat is lost	Heat is gained	Heat is lost	Heat is gained

Term 2 WA

SINGAPORE CHINESE GIRLS' SCHOOL
PRIMARY 5 SCIENCE
Term 2 Weighted Assessment
Topics: Water and Its States and Water Cycle

Name: _____( )

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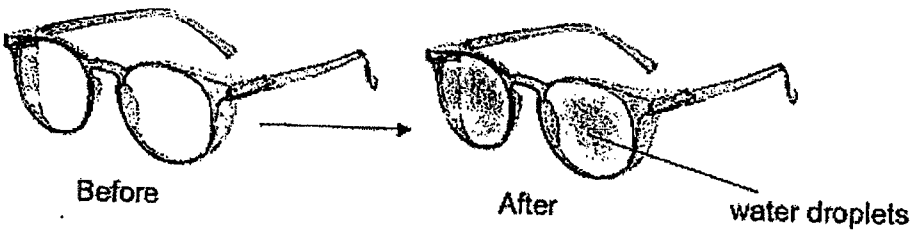
Answer Sheet for Section A

1.	( )	4.	( )	7.	( )
2.	( )	5.	( )		
3.	( )	6.	( )		

Section B (11 marks)

For Questions 8 to 11, write your answers in the space provided.

8. The diagram below shows what happens to Claire's spectacles after she exits from an air-conditioned room.



Explain how the water droplets formed on Claire's spectacles. (2m)

_____

_____

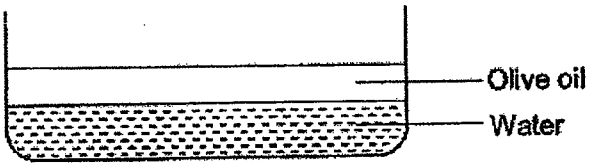
_____

9a) What is freezing? (1m)

_____

_____

b) Mavis has a pot of water with a layer of olive oil as shown in the diagram below.



The table below shows the melting points of olive oil and water.

	Olive oil	Water
Melting Point (°C)	21	0

i) Based on the melting points of olive oil and water, suggest a temperature the mixture should be cooled to in order to separate both substances. (1m)

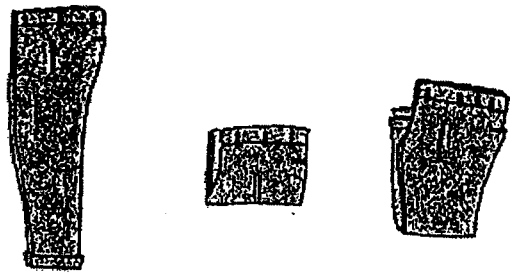
_____

ii) Explain your answer in (bi) (1m)

_____

_____

10. At 12 noon, Pamela conducted an experiment by putting three identical pairs of wet pants, A, B and C, in an open area. The initial mass of the soaked pants was recorded. The mass of each pair of pants was recorded again at 8pm.



Pants A Pants B Pants C

a) State the variable that was changed in this experiment. (1m)

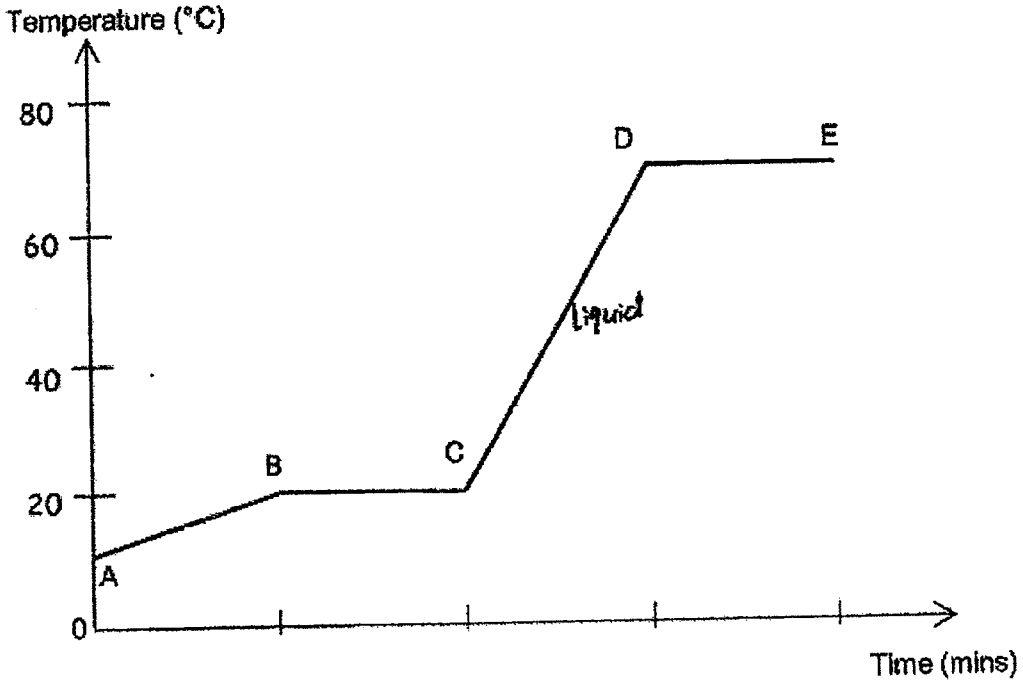
b) The results of the experiment are shown in the table below.

	Mass of pants at 12pm (g)	Mass of pants at 8pm (g)
A	600	260
B	600	465
C	600	370

i) Explain why Pants B weighed the heaviest at the end. (1m)

ii) In order to make this a fair test, state one variable that is kept constant by placing the pants in the same location. (1m)

11. The graph below shows the temperature changes of Substance X when it is heated. Substance X was a solid when heating started.



a) Circle the part(s) of the graph which represent(s) a change in state of substance X. (1m)

AB **BC** **CD** **DE**

b) What is the state of substance X at 50 °C? (1m)

_____

c) State the process that is taking place along the line BC. (1m)

_____

End of Paper

SCHOOL : SCGS PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : 2022 WA2

SECTION A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7
1	2	4	4	1	3	1

SECTION B

Q8)	The warmer water vapour from the surrounding air touched the cooler surface of the lens lost heat and condensed.
Q9)	a) When a liquid loses heat and changes to a solid. b) i) 15°c ii) The water can change to liquid while the olive oil would be freezed.
Q10)	a) How many times she folded each of the pants. b) i) B has least exposed surface area so least amount of water evaporated / slowest rate of evaporation. ii) The temperature would be the same.
Q11)	a) AB (BC) CD (DE) b) Liquid c) Melting