METHODIST GIRLS' SCHOOL

Founded in 1887

Weighted Assessment 2 2025
PRIMARY 5
SCIENCE

Total Time: 40 minutes

INSTRUCTIONS TO CANDIDATES
Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.

Name: _____ ( )

Class: Primary 5._____

Date: _____

Parent's Signature: _____

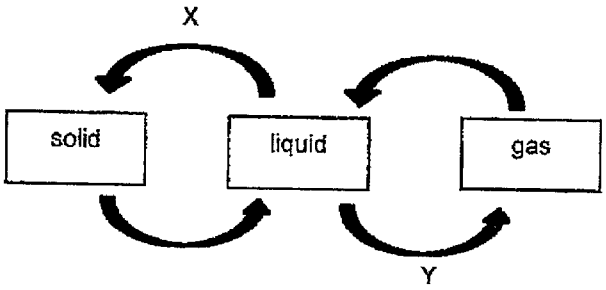
Section A	18
Section B	12
Total	

This booklet consists of 10 printed pages including this page.

For each question from 1 to 9, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Write your answer in the bracket provided.

[18 marks]

1 The diagram shows the change of state of water.

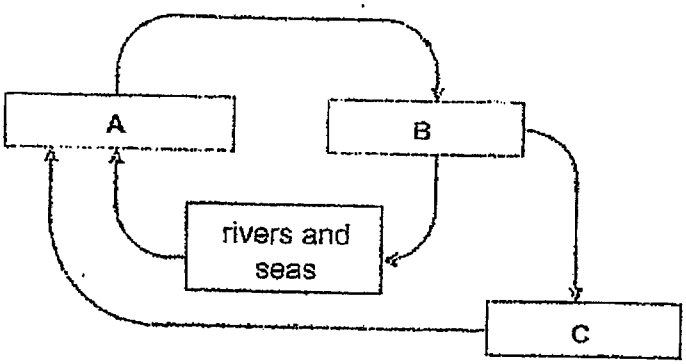


Which of the following correctly represents the process X and heat flow at Y?

	Process of X	Heat flow at Y
(1)	Freezing	Heat gain
(2)	Freezing	Heat loss
(3)	Melting	Heat gain
(4)	Melting	Heat loss

( )

2 Study the water cycle below.



Which of the following is correct?

	A	B	C
(1)	Water Vapour	Clouds	Trees
(2)	Water Vapour	Trees	Clouds
(3)	Clouds	Water Vapour	Trees
(4)	Trees	Water Vapour	Clouds

( )

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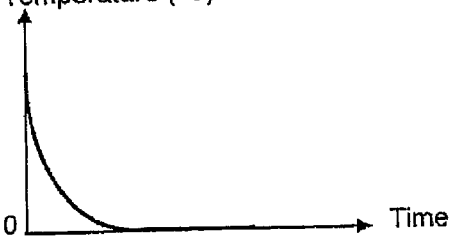
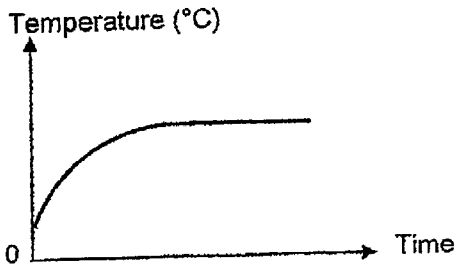
3 Mary placed a cup of tap water in the refrigerator which was set at 5°C. She measured the change in temperature of tap water and plotted a graph.

Which of the following is the graph she plotted?

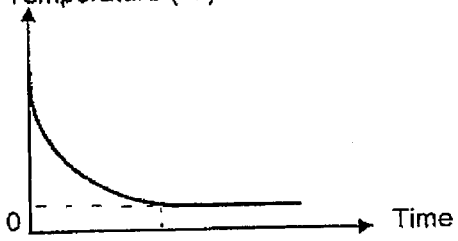
(1)



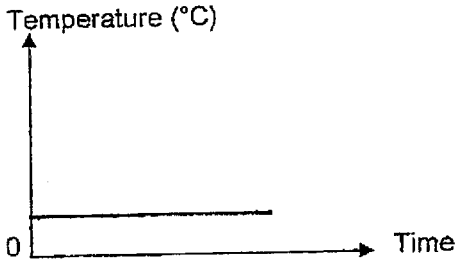
(2)



(3)

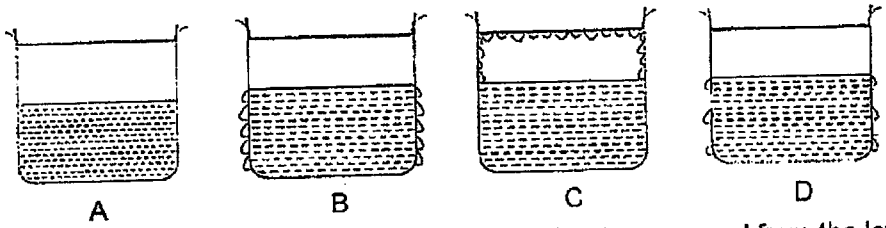


(4)



( )

4 Hui Hui poured an equal amount of water into the beakers. However, the temperature of water was different. Water droplets were formed as shown below.



Which one of the following shows the beakers of water arranged from the lowest to the highest temperature?

	Temperature of water (°C) **Lowest → Highest**
(1)	A, B, D, C
(2)	B. D. A, C
(3)	B. D. C, A
(4)	C, A, D, B

( )

(Go on to the next page)

5 The table shows the state of three substances, P, Q and R, at different temperatures.

	State of substance at		
Substance	10 °C	30 °C	50 °C
P	liquid	liquid	liquid
Q	solid	solid	liquid
R	solid	solid	solid

Which statement can be concluded?

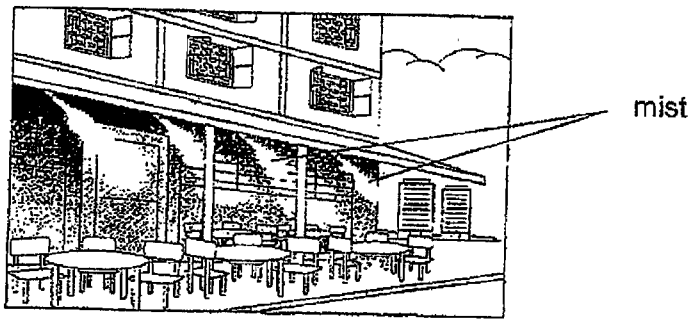
(1) P has a boiling point of 50 °C.

(2) Q has a melting point of 50 °C.

(3) R has a higher freezing point than Q.

(4) Q is in both solid and liquid state at 40 °C. ( )

6 In some buildings, water mist systems are used to cool the surrounding air.



Which of the following explains how mist can cool the surrounding air?

(1) Water vapour loses heat and condenses into mist.

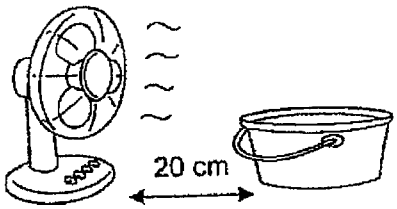
(2) Tiny water droplets lose heat to the surrounding air.

(3) Warm surrounding air loses heat to the water droplets.

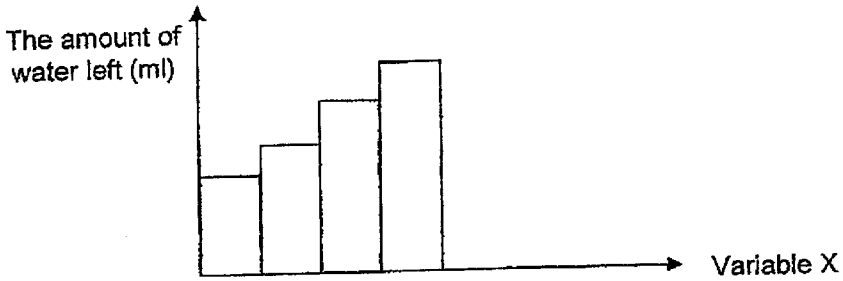
(4) Warm surrounding air gains heat from the water droplets.

( )

7 Jean conducted an experiment on rate of evaporation using the set-up below. She measured the amount of water left in the bucket after some time.



Jean repeated the experiment by increasing variable X and keeping all other variables the same. Her results are shown below.



What could variable X be?

(1) speed of the fan

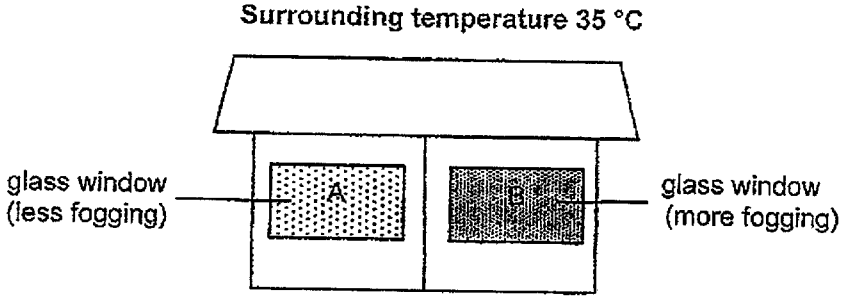
(2) the temperature of water

(3) the temperature of surrounding air

(4) distance between the fan and the bucket ( )

Use the information below to answer Questions **8** and **9**.

The diagram below shows the windows of two bedrooms, A and B, when the air conditioner was switched on.



8 Which of the following explains why the windows of both bedrooms was fogged?

(1) Water droplets were formed inside the bedroom.
(2) Water droplets were formed outside the bedroom.
(3) Mist from the surrounding air evaporated into water vapour.
(4) Water vapour evaporated into mist and condensed on the window.

( )

9 Jerry observed that there was less fogging on window of bedroom A.

Which of the following are the likely causes?

A Water vapour outside bedroom B was warmer.
B The temperature inside bedroom A was higher than B
C The rate of evaporation outside bedroom A was slower than B.
D Water vapour outside bedroom B condensed faster than A.

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

( )

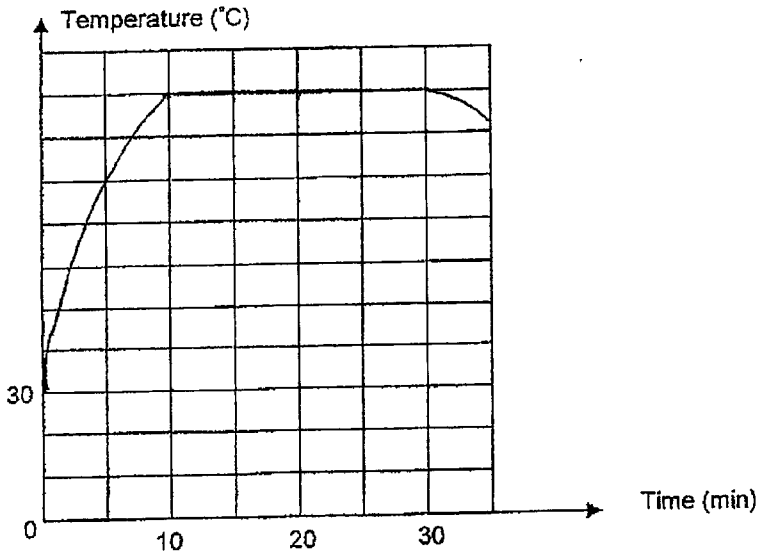
For questions 10 to 13, write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part question.

[12 marks]

10 (a) State what boiling means. [1]

(b) Joshua poured some tap water at 30 °C into a beaker and heated it. The water reached its boiling point after 10 minutes and he continued to boil for another 20 minutes.

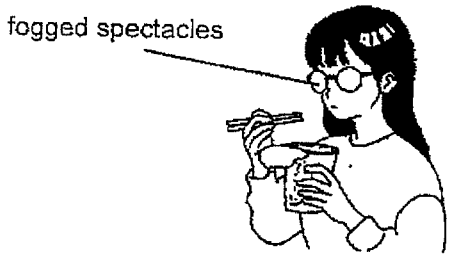
Draw on the following graph based on the information given above. [1]



(c) Without using any thermometer to measure the temperature of water, how would Joshua know that the water was boiling? [1]

3

11 Jane was eating the cup noodles and her spectacles became fogged as shown below.



(a) Explain how the fog was formed on her spectacles. [2]

(b) Her spectacles became clear again after some time. Give a reason. [1]

3

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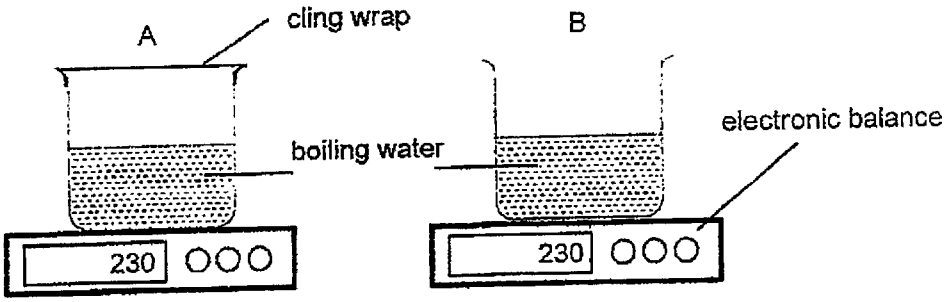
12 Ali poured equal amount of boiling water into beakers A and B. He covered up beaker A with cling wrap and left beaker B open. He then placed them on the electronic balance as shown below. The mass of the beakers with water are measured in grams.



The next day Ali checked and recorded the mass of beakers with water again in the table below.

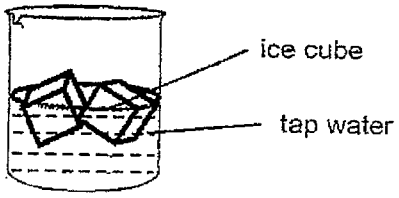
Mass of beaker with water
230 g
210 g

(a) Which would be the likely mass for beaker A with water, 230 g or 210 g? [1]

(b) Explain your answer for (a). [2]

3

13 Ethan added some ice cubes into a glass filled with tap water as shown below.



(a) After a while, the tap water inside the glass became cooler. Explain why. [1]

After jogging, Ethan washed his face and he felt cool. Then he poured water on his body to cool himself and he felt cooler.

(b) Explain why he felt cooler after pouring water on his body. [2]

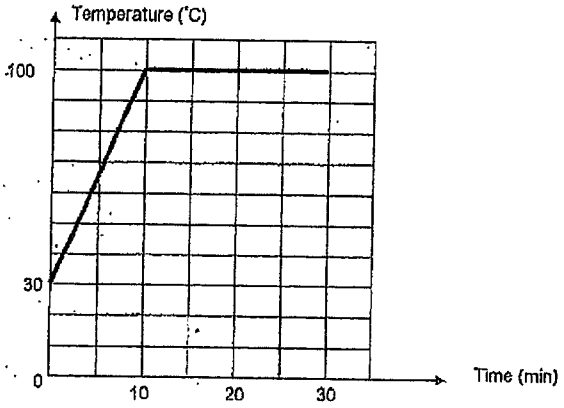
End of Paper

METHODIST GIRLS' SCHOOL (PRIMARY)
SCIENCE WEIGHTED ASSESSMENT 2 2025
PRIMARY 5
SUGGESTED ANSWERS

Section A

1.	1	4.	2	7.	4
2.	1	5.	3	8.	2
3.	3	6.	3	9.	4

Section B

Qn	Suggested Answers
10(a)	Boiling is a process when liquid changes to gaseous state at a fixed temperature.
10(b)	
10(c).	He would observe bubbles formed vigorously throughout the water.
11(a)	Hot water from the cup noodles evaporated into warm water vapour which rose and come into contact with the cooler lenses of the spectacles, lost heat and condensed into water droplets.
11(b)	Water droplets on the lens/spectacles evaporated into water vapour.
12(a)	230 g
12(b)	Water inside the beaker evaporated into water vapour which then rose, came into contact with the cooler cling wrap, loses heat and condensed into water droplets which dripped back into the beaker.
13(a)	Water lost heat to the ice and its temperature decreased.
13(b)	Water spread all over his body and there was a bigger exposed surface area of water compared to face. Water evaporated into water vapour faster and his body lost heat faster to the water.

END