



MARIS STELLA HIGH SCHOOL (PRIMARY)
TERM 1 NON-WEIGHTED ASSESSMENT
P5 SCIENCE

2023

NAME: _____ ()

CLASS: Primary 5 _____

8 questions

20 marks

Total time: 30 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

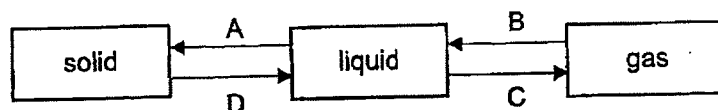
Total: _____ / 20

Parent's Signature: _____

For each question from 1 to 5, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write the number in the brackets provided:

(10 marks)

- 1 Study the diagram below. A, B, C and D represent processes involved in the changes of state of water.



Which one of the following correctly identifies boiling?

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

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- 2 The table shows the melting and boiling points of substances X and Y.

Substance	X	Y
melting point (°C)	210	156
boiling point (°C)	300	340

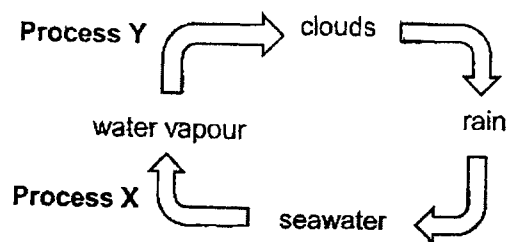
At which temperature are substances X and Y in different states?

- (1) 140°C
- (2) 200°C
- (3) 240°C
- (4) 390°C

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- 3 The diagram below shows the water cycle.

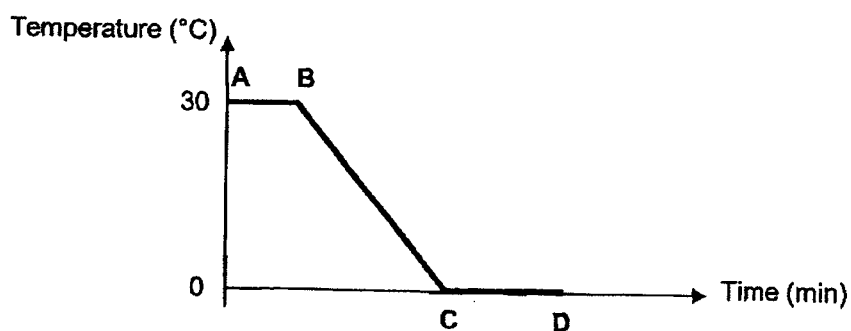


Which of the following is correct about processes X and Y?

	Process X	Heat transfer at Process Y
(1)	evaporation	heat gain
(2)	condensation	heat loss
(3)	condensation	heat gain
(4)	evaporation	heat loss

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- 4 The graph below records the change in the temperature of water in a beaker as it was cooled.



Based on the graph, which of the following statements is correct?

- (1) Water lost heat from C to D.
- (2) Water started to freeze at B.
- (3) Water was only in solid state from C to D.
- (4) Water changed from liquid to solid state from B to C.

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- 5 Three identical containers, P, Q and R, were each filled with an equal amount of water and placed in different conditions. The amount of water left in each container after 8 hours is shown in the table below.

Some information is missing.

Container	Temperature of surrounding ($^{\circ}\text{C}$)	Presence of wind	Amount of water left after 8 hours (cm^3)
P	X	No	500
Q	70	Yes	Y
R	70	No	300

Which of the following could X and Y be?

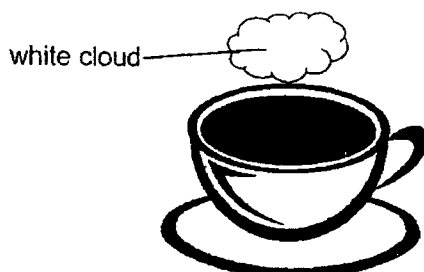
	X	Y
(1)	20	240
(2)	30	320
(3)	70	500
(4)	90	250

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For questions 6 to 8, write your answers in this booklet. The number of marks available is shown in brackets [] at the end of each question or part question. (10 marks)

- 6 Mike made a cup of hot coffee using boiling water. He noticed a 'white cloud' above his cup.



- (a) What state of matter is the 'white cloud' in? [1]

- (b) Explain how the 'white cloud' is formed. [2]

- (c) The 'white cloud' disappeared after a while. Explain why. [1]

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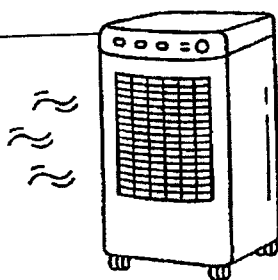
- (a) Timothy was caught in the rain without an umbrella. His body got wet and he felt cold. All of a sudden, a strong wind blew over his wet body and he felt even colder.

Explain why he felt even colder when a strong wind blew.

[2]

- (b) Timothy bought an air cooler which had a compartment for ice to be inserted. As wind blows over the ice, the ice melts.

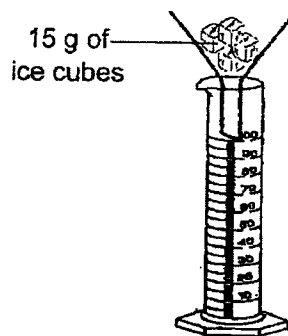
compartment for
ice cubes



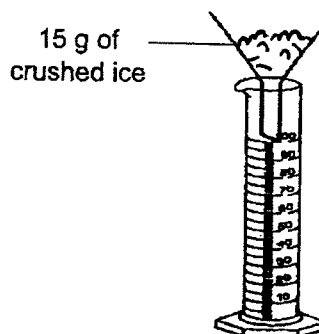
Explain how the melting of ice leads to colder air being blown out by the air cooler.

[1]

- 8 Rebecca wanted to investigate how the surrounding temperature affects the rate of melting of ice using set-ups A and B as shown below.



Set-up A
(placed in an open field on a sunny day)



Set-up B
(placed in a room at 18°C)

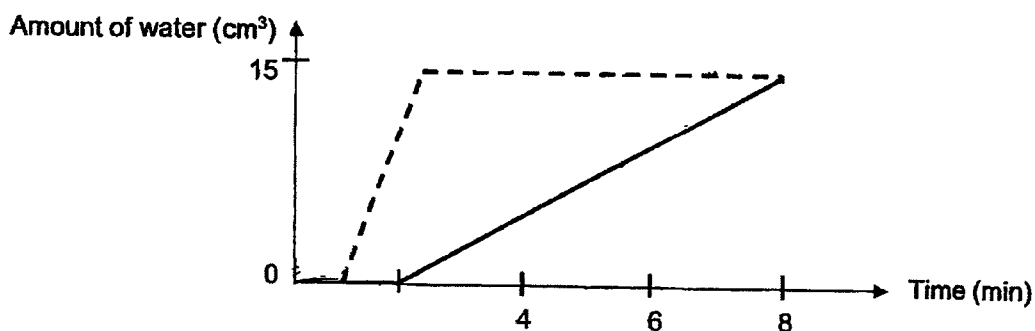
Rebecca's experimental set-up is not fair.

- (a) State a change Rebecca should make to set-up A to ensure a fair test. [1]

- (b) State the factor that Rebecca has kept the same after making the change stated in (a). [1]

After making the necessary change to set-up A to ensure a fair test, Rebecca left set-ups A and B in different locations as indicated in the diagram above.

The two lines in the graph below shows the amount of water collected in each measuring cylinder of the set-ups over 8 minutes.



- (c) Based on Rebecca's experiment, fill in the blanks with A or B to correctly identify which line graph represents set-ups A and B. [1]

line graph - - - - : set-up _____

line graph _____ : set-up _____

End of paper

SCHOOL : MARIS STELLA PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : WA1 (2023)

CONTACT :

Q 1	Q2	Q3	Q4	Q5
3	2	4	1	1

Q6)	<p>a) Liquid</p> <p>b) The warm water vapour in the surrounding above the cup lost heat and condensed on the cooler surrounding air above the cup.</p> <p>c) Water gained heat and evaporated.</p>
Q7)	<p>a) The water from the rain gained more heat from Timothy's body so it could evaporated presence of wind increases rate at evaporation so Timothy felt colder.</p> <p>b) Air lost heat to the ice.</p>
Q8)	<p>a) Crush the ice cups.</p> <p>b) Exposed surface area of ice.</p> <p>c) A</p> <p>B</p>

