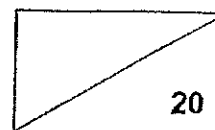


NANYANG PRIMARY SCHOOL
Term 2 Weighted Assessment
Science
Primary 5



Name: _____ () Date: _____

Class: 5 _____

Parent's signature: _____

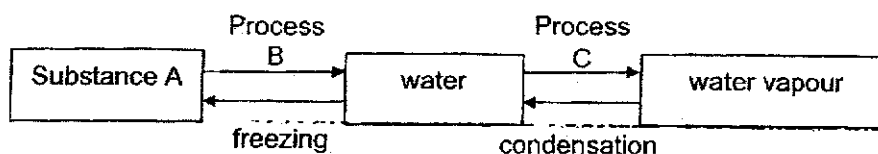
Dear Parent/Guardian,

Please sign the Weighted Assessment paper and have your child/ward return it the next day. Any query should be raised at the same time when returning the paper.

Section A: Multiple Choice Questions (12 marks)

For each question from 1 to 6, four options (1, 2, 3 and 4) are given. One of them is the correct answer. *Indicate your choice in the brackets provided.*

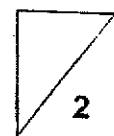
1. The diagram below represents the changes of state of water.



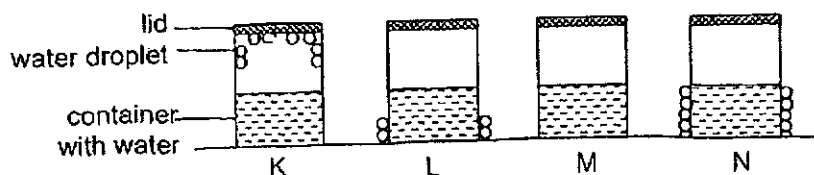
Which of the following correctly describes substance A, process B and process C?

| | Substance A | Process B | Process C |
|-----|-------------|--------------|--------------|
| (1) | steam | evaporation | condensation |
| (2) | ice | boiling | evaporation |
| (3) | ice | melting | boiling |
| (4) | steam | condensation | melting |


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2. Sarah filled four identical clear containers K, L, M and N with the same amount of water at different temperatures. She covered the containers with identical lids. The diagram below shows her observations after a few minutes.

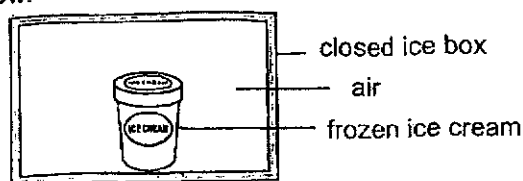


Which of the following correctly shows the temperatures of the water in the containers from the lowest to the highest?

| | Lowest Temperature | | Highest temperature | |
|-----|--|---|---------------------|---|
| |  | | | |
| (1) | K | L | N | M |
| (2) | K | M | L | N |
| (3) | N | M | K | L |
| (4) | N | L | M | K |

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3. A tub of frozen ice cream is placed in the ice box without any water droplets on the surface as shown below.

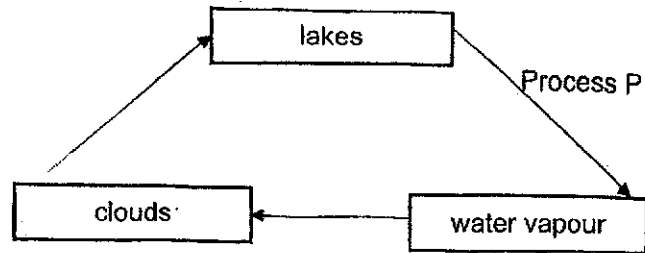


After 10 minutes, what would most likely happen to the temperature of air in the ice box and the presence of water droplets on the ice cream tub?

| | Temperature of air in ice box | Presence of water droplets on ice cream tub |
|-----|-------------------------------|---|
| (1) | decrease | have water droplets |
| (2) | decrease | no water droplets |
| (3) | increase | have water droplets |
| (4) | increase | no water droplets |

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4. The diagram below represents the water cycle.

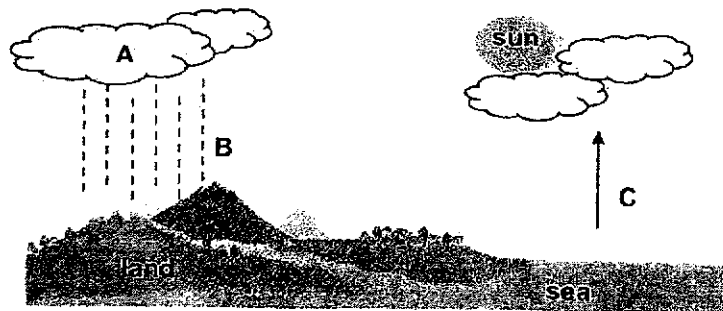


Which of the following describes process P correctly?

| | Process P | Heat transfer |
|-----|--------------|---|
| (1) | evaporation | surrounding air gains heat from the lakes |
| (2) | evaporation | water in the lakes gains heat from the surroundings |
| (3) | condensation | water vapour loses heat to the surroundings |
| (4) | condensation | water droplets loses heat to the surroundings |

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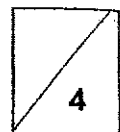
5. The diagram below shows the water cycle.



Which one of the following statements best describes how A is formed?

- (1) Water vapour gained heat to form A.
- (2) Water in the sea evaporated to form A.
- (3) Water in the sea lost heat and condensed to form A.
- (4) Water vapour lost heat to the cooler surrounding air and formed A.

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6. Which of the following actions help in water conservation?

- A Turn off the tap while soaping the body.
- B Pour away stagnant water found in pails.
- C Take cold showers instead of hot showers.
- D Use the water from washing rice to water the plants.

(1) A and B only

(2) A and D only

(3) B and C only

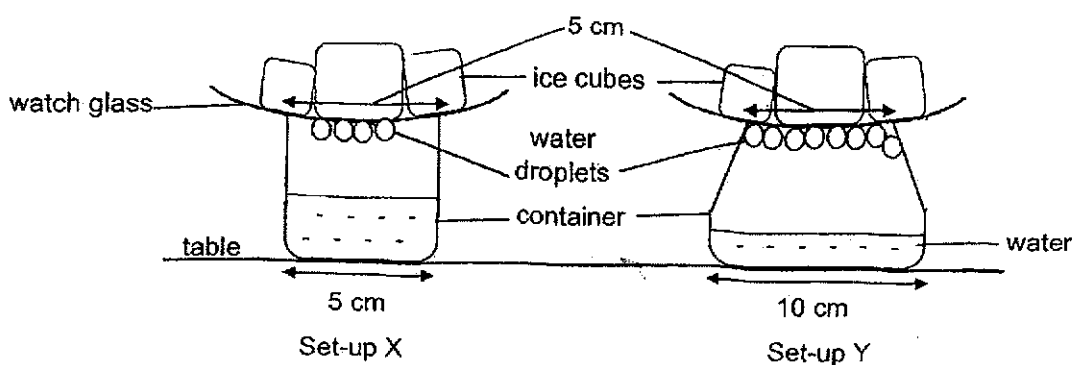
(4) A, B, C and D

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Section B: Open-Ended Questions (8 marks)

For questions 7 and 8, fill in your answers in the spaces provided:

7. Set-ups X and Y were placed on the table as shown in the diagram below. Each set-up contained an equal amount of water at 30°C and an equal amount of ice cubes. The widths of the bases of the containers in set-ups X and Y are 5 cm and 10 cm respectively. The mouths of each container is 5 cm wide.



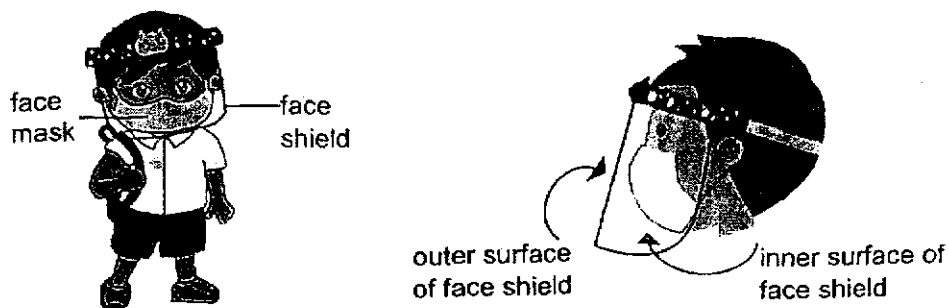
- (a) State the process in the water cycle which will cause the formation of water droplets in the above set-ups. [1]

- (b) Based on the diagram above, state the changed variable in the experiment. [1]

There are more water droplets observed in one of the set-ups.

- (c) Explain why set-up Y has more water droplets observed. [2]

8. Xiaoming wears a face shield and a face mask when he goes to school as shown in the diagram below.



Xiaoming observed that his face shield had some water droplets when he breathed in the classroom.

- (a) Which side of his face shield were the water droplets observed?
Put ONE tick (✓) in the correct box. [1]

☐

outer surface
of face shield

☐

inner surface
of face shield

When Xiaoming entered the air-conditioned library, he observed there were more water droplets forming on his face shield.

- (b) Explain why there were more water droplets observed on Xiaoming's face shield in the library than in the classroom. [2]

- (c) After 5 min, the water droplets disappeared from the face shield.
Explain why this happened. [1]



- End of Paper -



Suggested Answer Key – P5 WA2 2024Section A

| | | | |
|---|---|---|---|
| 1 | 3 | 6 | 2 |
| 2 | 4 | | |
| 3 | 1 | | |
| 4 | 2 | | |
| 5 | 4 | | |

Section B

| Qns No | Answer |
|--------|---|
| 7(a) | Condensation |
| (b) | The widths of the bases of the containers |
| (c) | <p>Data: Container in set-up Y has a wider base than the container in set-up X.</p> <p>Explain: Water in Y has more exposed surface area than X. More water in Y will gain heat and evaporate to form more water vapour. More warmer water vapour will lose heat to the cooler inner surface of the watch glass, and condense to form more water droplets.</p> <p>*must show comparison</p> |
| 8 (a) | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>outer surface of face shield</p> </div> <div style="text-align: center;">  <p>inner surface of face shield</p> </div> </div> |
| (b) | <p>Data: The temperature of the face shield was lower in the library than in the classroom.</p> <p>Explain: More warmer water vapour from Xiaoming's breath lost heat to the cooler inner surface of the face shield, and condensed faster to form more water droplets.</p> <p>*must show comparison</p> |
| (c) | The water droplets gained heat from the warmer surroundings and evaporated to form water vapour. |

