PEI CHUN PUBLIC SCHOOL

PRIMARY 5

TERM 3 WEIGHTED ASSESSMENT 2025

SCIENCE

Time: 40 min

Name: _____ ( )

Class: Primary 5 /( ) _____

Date: 1 August 2025

Science Teacher: _____

Parent's Signature: _____

SECTION A	/18
SECTION B	/12
TOTAL	/30

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.

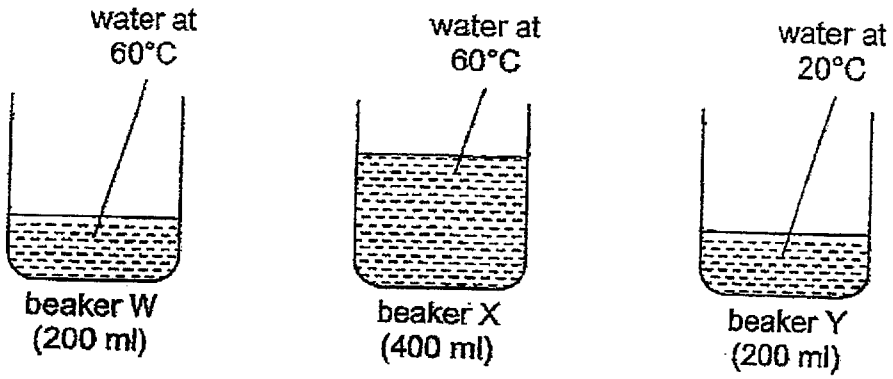
This booklet consists of **10** printed pages including the cover page.

Downloaded from SingaKids.com

Downloaded from SingaKids.com

Section A (9 × 2 marks)
For each question from 1 to 9, four options are given. One of them is the correct answer. Make a choice (1, 2, 3 or 4) and write your answer in the brackets provided.

1 Jane poured different volumes of water at different temperatures into three identical beakers, W, X and Y, as shown below.

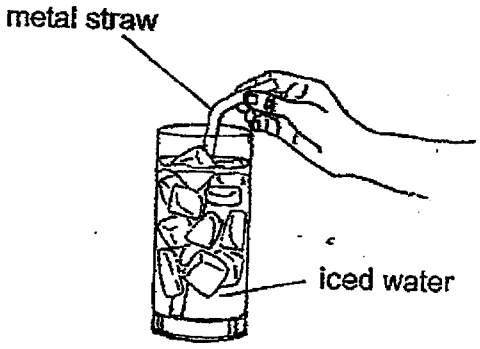


Which of the following statements is true?

(1) The water in beakers W and X have the same amount of heat.
(2) The water in beakers W and Y have the same amount of heat.
(3) The water in beaker W has less heat than the water in beaker X.
(4) The water in beaker W has less heat than the water in beaker Y.

( )

2 Luke was holding a metal straw dipped in a glass of iced water. After some time, he felt that the metal straw was cold.



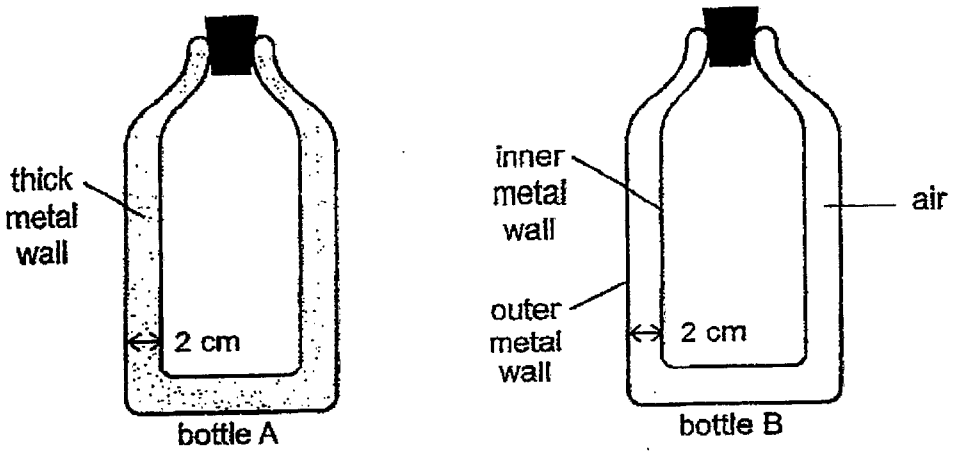
Which of the following correctly explains why Luke felt that the metal straw was cold?

(1) The straw lost heat to the water and to her fingers.
(2) The straw gained heat from the water and from her fingers.
(3) The straw lost heat to the water and gained heat from her fingers.
(4) The straw gained heat from the water and lost heat to her fingers.

( )

Downloaded from SingaKids.com

3 Keith has two metal bottles, A and B, made of the same type of metal. Bottle A has a thick metal wall while bottle B has air in between the two metal walls.



Keith wants to keep his fruit juice cold in a bottle.

Which of the following shows the correct choice of bottle and the reason?

	Bottle	Reason
(1)	A	Metal is a good conductor of heat and the juice will gain less heat from the surroundings.
(2)	B	Air is a poor conductor of heat and the juice will gain less heat from the surroundings.
(3)	A	Metal is a good conductor of heat and the juice will lose more heat to the surroundings.
(4)	B	Air is a poor conductor of heat and the juice will lose less heat to the surroundings.

( )

4 The table below shows the melting and boiling points of substances P and Q.

Substance	Melting point (°C)	Boiling Point (°C)
P	8	80
Q	60	350

Which of the following shows the correct states of substances P and Q at 30 °C?

	P	Q
(1)	solid	liquid
(2)	liquid	liquid
(3)	gas	solid
(4)	liquid	solid

( )

Downloaded from SingaKids.com

5 Siti wanted to find out how the temperature of water affects the rate of evaporation.

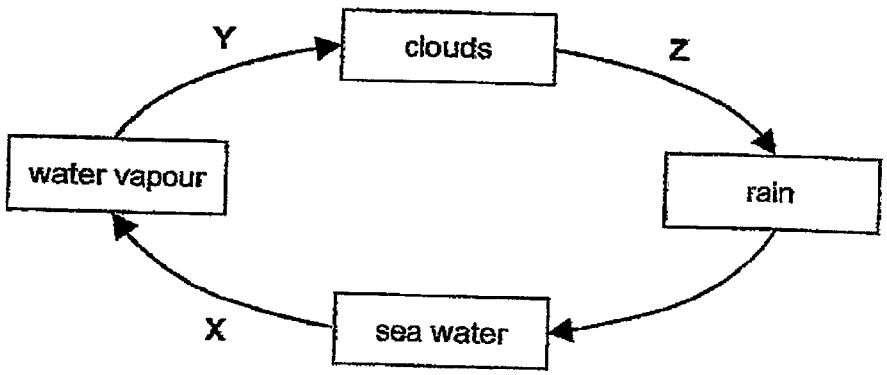
Set-up	Exposed surface area of container (cm^2)	Temperature of water (°C)	Presence of wind
A	100	30	present
B	200	30	present
C	100	60	absent
D	200	60	present

Which two set-ups should Siti use for her investigation?

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

( )

6 The diagram below shows the water cycle.



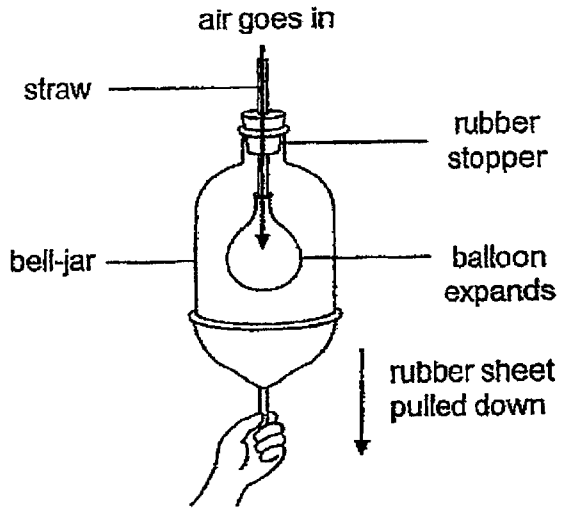
Which of the following correctly shows where condensation and evaporation occur?

	Condensation	Evaporation
(1)	Y	X
(2)	Z	Y
(3)	X and Y	Z
(4)	Y and Z	X

( )

Downloaded from SingaKids.com

7 The diagram below shows a model of the human respiratory system. When the rubber sheet is pulled down, air enters the balloon and the balloon expands.

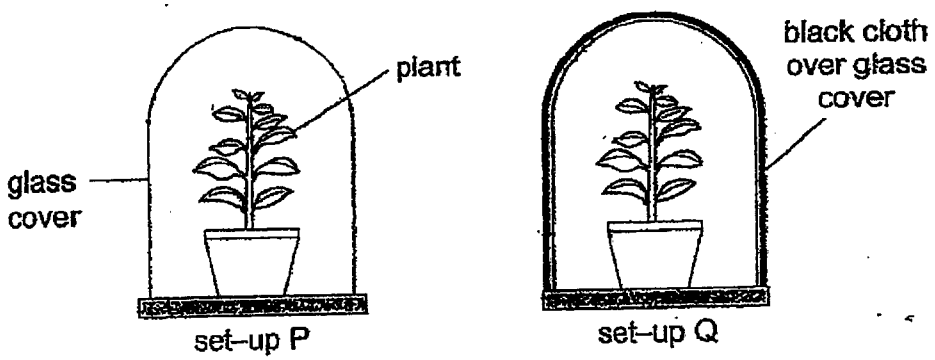


Which parts do the balloon and straw represent?

	Balloon	Straw
(1)	lung	gullet
(2)	lung	windpipe
(3)	heart	gullet
(4)	heart	windpipe

( )

8 Aylssa prepared two similar set-ups, P and Q, as shown in the diagram. She watered both pots of plant with the same amount of water and placed them in the sun for a few hours.



Which of the following correctly shows the change in the amount of oxygen in both set-ups?

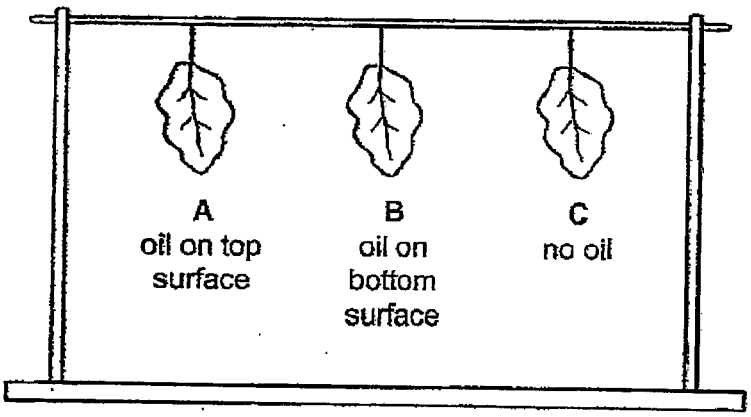
	Set-up P	Set-up Q
(1)	decrease	increase
(2)	increase	remain the same
(3)	decrease	remain the same
(4)	increase	decrease

( )

Downloaded from SingaKids.com

9 Junjie set up an experiment using three similar leaves, A, B and C. These leaves have more tiny openings on their bottom surfaces than on their top surfaces. Leaves lose water through these tiny openings.

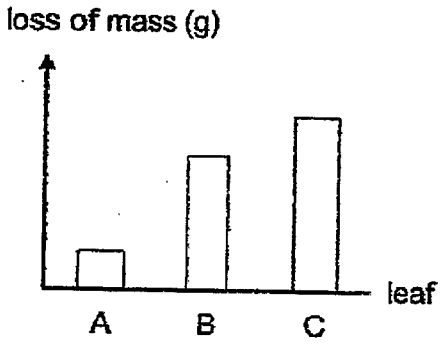
He coated some surfaces of the leaves with oil that did not drip. Each leaf was weighed and then hung in an open area as shown below.



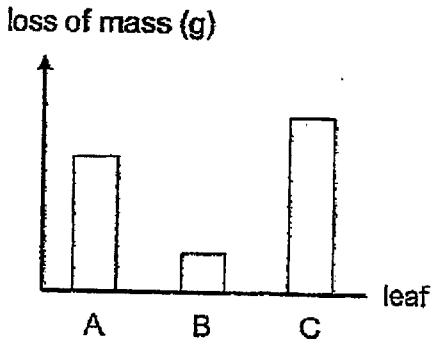
After five hours, each leaf was weighed again and the loss of mass was recorded.

Which one of the following shows the loss of mass for A, B and C?

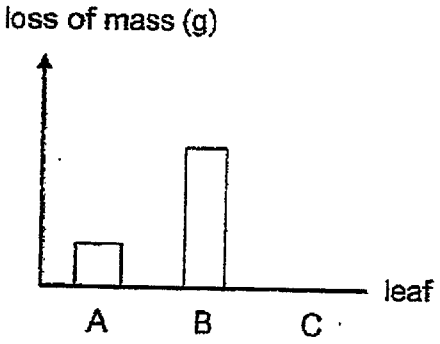
(1)



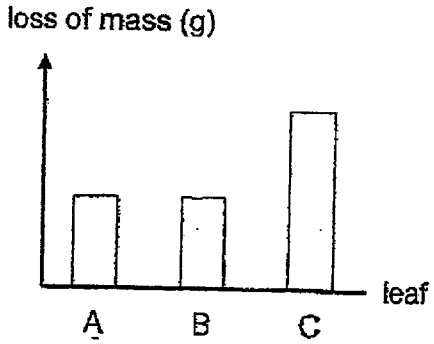
(2)



(3)



(4)



( )

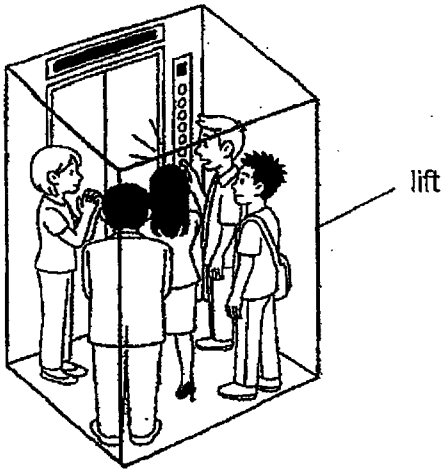
End of Section A

Downloaded from SingaKids.com

Section B (12 marks)

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.

10 Five people were trapped in a small lift for 15 minutes. There was very little fresh air entering the lift.

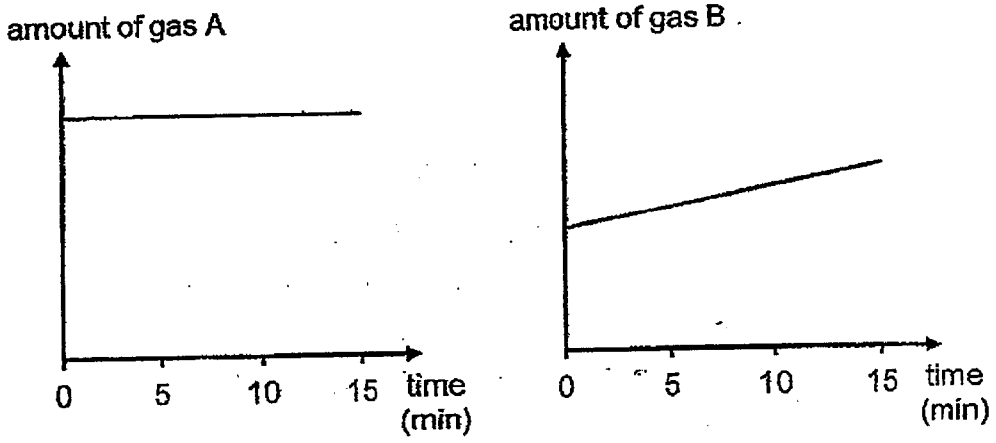


(a) The amount of carbon dioxide in the lift increased after some time. Explain why. [1]

_____

_____

(b) The graphs below show the changes in the amounts of two gases (other than carbon dioxide) in the lift.



Name the two gases. [2]

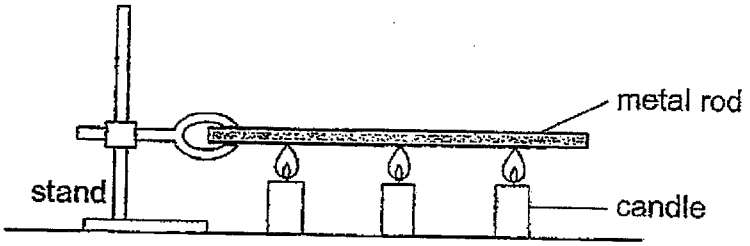
gas A: _____

gas B: _____

SCORE	

Downloaded from SingaKids.com

11 Thad conducted an experiment to compare the effect of heating different metals. He heated three rods made of metals K, L and M for 20 minutes.



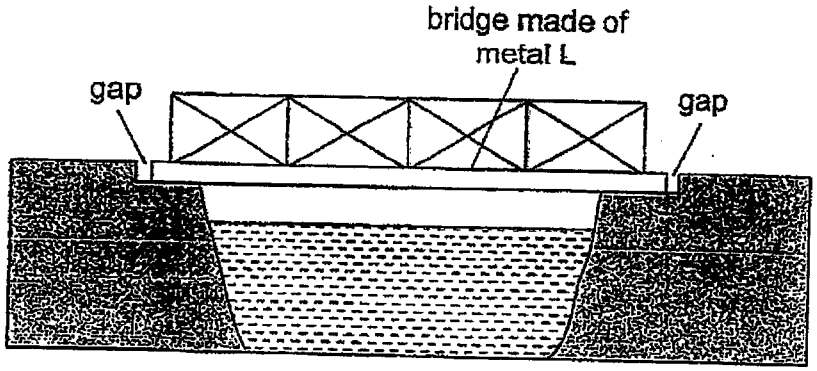
He measured the lengths of the three rods before and after the heating. His results are shown below.

Metal	Length before heating (mm)	Length after heating (mm)
K	150	157
L	150	160
M	150	152

(a) Other than the length of the rod before heating, state one other variable of the rods that should be kept the same so that the experiment was a fair test. [1]

(b) State how the mass of the rods would be affected by the heating. [1]

(c) A bridge made of metal L has gaps at its ends to prevent it from bending on a hot day.



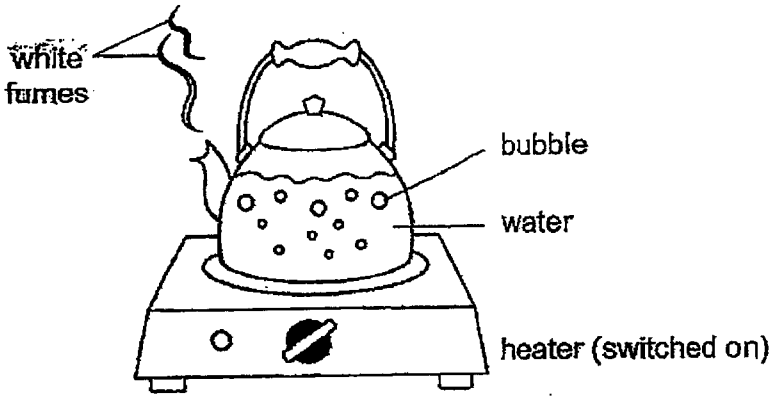
Explain how having the gaps can prevent the bridge from bending. [1]

SCORE

Downloaded from SingaKids.com

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

(b) Ravi heated some water in a glass pot. After a while, he observed bubbles in the water and white fumes as shown.



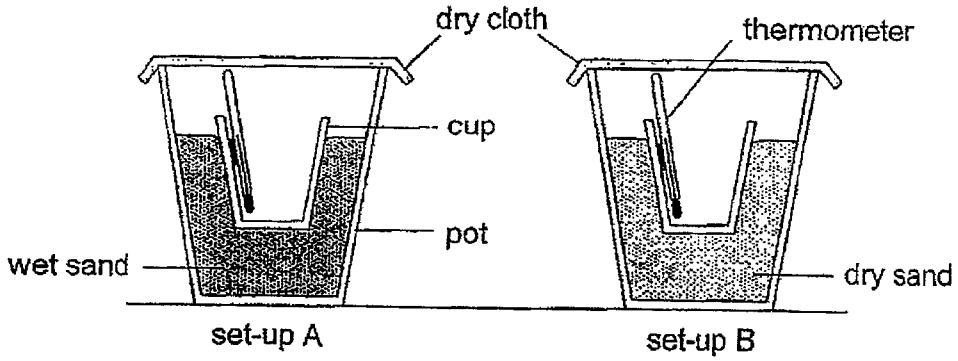
Explain how the white fumes were formed. [2]

(c) Identify the state of water of the white fumes. [1]

SCORE

Downloaded from SingaKids.com

13 Caili set up the experiment using two identical cups and two identical pots as shown below. She filled both pots with the same amount of sand and added water to the sand in set-up A.

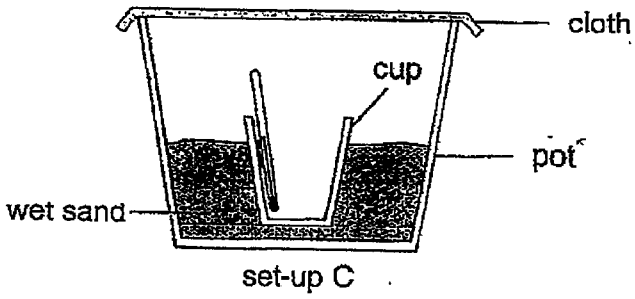


She placed both set-ups in a hot and dry place. She recorded the temperature of the air inside each set-up. Her results are shown below.

Time (min)	Temperature in set-up (°C)	
	Set-up A	Set-up B
0	30	30
10	28	30
20	27	30

(a) Suggest how the water in the wet sand helped in lowering the temperature of the air in set-up A. [1]

(b) Caili repeated her experiment with a larger pot, using the same amount of sand and water as in set-up A.



She observed that the temperature of the air in set-up C was lower than that in set-up A after 20 minutes. Explain her observation. [1]

End of Section B

SCORE

Downloaded from SingaKids.com

Downloaded from SingaKids.com

YEAR : 2025
LEVEL : PRIMARY 5
SCHOOL : PEI CHUN SCHOOL
SUBJECT : SCIENCE
TERM : WEIGHTED ASSESSMENT 3

(BOOKLET A)

Q1	3	Q2	3	Q3	2	Q4	4	Q5	3
Q6	1	Q7	2	Q8	4	Q9	2		

Downloaded from SingaKids.com

Downloaded from SingaKids.com

Pei Chun Public School
Primary 5 Science
Term 3 Weighted Assessment 2025
Corrections

Name: _____ ( ) Class: Primary 5 / ( )

10 a)	*Concept: Living things respire and produce carbon dioxide.* *During respiration, living things use oxygen to release the energy stored in digested food and carbon dioxide is produced. Thus, living things take in oxygen and give out carbon dioxide during respiration.* ** The air we breathe out contains gases that were breathed in but not absorbed by our body, such as nitrogen and carbon dioxide.* The people in the lift ___respired___ took in oxygen and produce energy ___produce___ carbon dioxide. The carbon dioxide was breathed out.
b)	*Concepts: - The amount of nitrogen remains the same in inhaled and exhaled air as nitrogen is not absorbed or produced by our body.* *- The air is moistened when it passes through the respiratory system.* Gas A: ___Nittogen___ (amount of gas A remained the same) Gas B: ___water vapour___ (amount of gas B increased)
11 a)	*Aim of experiment: To compare the effect of heating different metals* *Changed variable: Types of metal* *Measured variable: Difference in the length of the rods before and after heating* **Variable of the rod = property of the rod* Thickness / diameter / radius/ width of the rods
b)	*Concept: The mass of an object is the amount of matter in the object.* **An object gains heat and expands (increase in volume). The amount of matter in the object does not change.* When an object is heated, its mass ___does not___ change. The mass of an object is ___not changed___ by heating.
c)	*Concept: When an object gains heat, it expands.* The bridge would ___gain___ heat from the Sun and ___expand___ on a hot day. The gaps allow the bridge to ___expand___ without bending.

Downloaded from SingaKids.com

12 a) *You need to give a definition of the process. It should be general, not just about water.*

Boiling is the process in which a liquid ___gains___ heat and becomes a ___gas___ at a ___fixed temperclture___.

b) *Concepts:* - *When water boils,* ***bubbles*** *of steam are produced vigorously in the water.*
- *When a gas loses heat, it condenses into a liquid.*
- *White fumes are tiny water droplets formed in the air.*

Use the ST3P structure for checking.

Notes: - ***When water boils, it becomes steam.*** *(at the boiling point)*
- *When water evaporates, it becomes water vapour. (below boiling point)*
- ***Boiling and evaporation are two different processes.***

The water in the glass pot ___boiled___ and became ___hot steam___. The hot ___steam___ came into contact with the cooler ___surrounding air___, ___lost___ heat and ___condensed___ into tiny water droplets in the air.

c) *Concepts:* - *White fumes are tiny water droplets formed in the air.*
- *Matter exists in three states: solid, liquid and gas.*

The water droplets are in ___liquid___ state. solid, liquid, gas

13 a) *Concepts:* - *When an object loses heat, its temperature decreases.*
- *Water gains heat and evaporates. (evaporative cooling)*

Observation 1: The temperature of the air in set-up A decreased.
Inference 1: The air in the set-up A lost heat.

Observation 2: The sand in set-up A was wet.
Inference 2: The water in the wet sand could gain heat for evaporation.

The ___water___ in the wet sand in set-up A ___dained___ heat from the ___air___ in set-up A and ___evaporation___.

b) *Concept: As the exposed surface area of water increases, the rate of evaporation increases.*

The water in the wet sand in set-up C had a ___greater___ ___exposed___ surface area, so the water in it evaporated ___faster___. Thus, the air in set-up C lost <u>more</u> heat and cooled down more.

3
END

Downloaded from SingaKids.com