

Name: _____ ()

Class: Primary 5 SY / C / G

28 October 2025



SINGAPORE CHINESE GIRLS' SCHOOL
END-OF-YEAR EXAMINATION 2025

**PRIMARY 5
SCIENCE
BOOKLET A**

Total Time for Booklets A and B: 1h 45 min

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. Use a 2B pencil to shade your answers on the Optical Answer Sheet (OAS).

This booklet consists of 21 printed pages.

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PAGE**

For each question from 1 to 30, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet.

[60 marks]

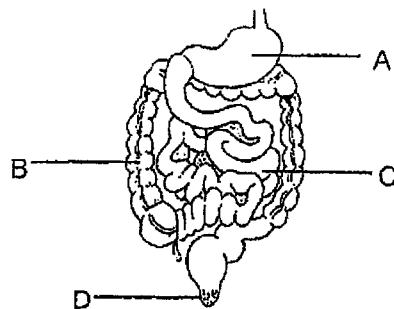
- 1 Some living things are classified into three groups as shown below.

Group X	Group Y	Group Z
peacock	rose	mould
duck	ladder fern	mushroom

Which of the following is correct?

	Group X	Group Y	Group Z
(1)	bacteria	yeast	bird's nest fern
(2)	yeast	bird's nest fern	bacteria
(3)	chicken	apple tree	yeast
(4)	owl	bacteria	apple tree

- 2 The diagram below shows parts of the human digestive system.



Which of the following identifies the function of the organs correctly?

	Absorption of food	Absorption of water
(1)	A	D
(2)	B	C
(3)	A	C
(4)	C	B

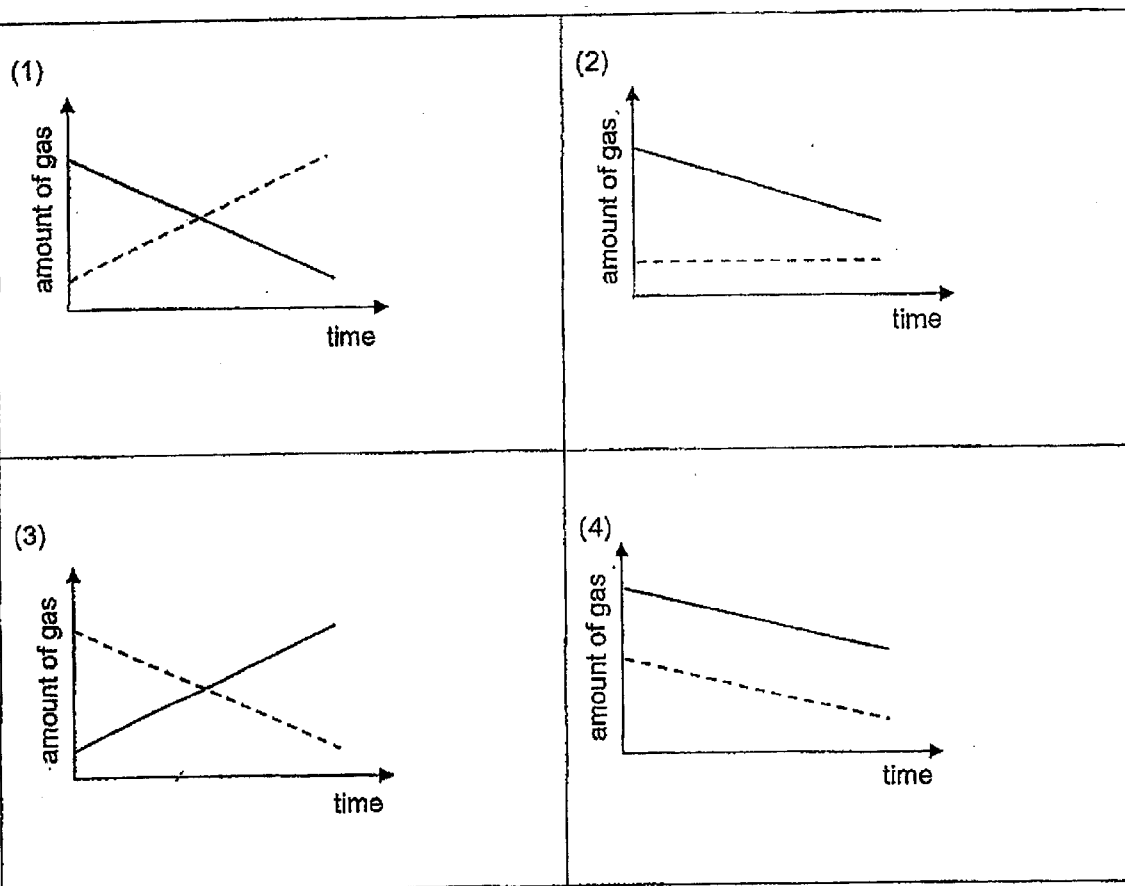
- 3 During a learning journey, the school bus carrying 30 children broke down in the middle of a hot afternoon. The windows were shut, and the air-conditioning had stopped working.

Which of the following graphs shows the change in the amount of water vapour and oxygen in the bus after half an hour?

Key

----- water vapour

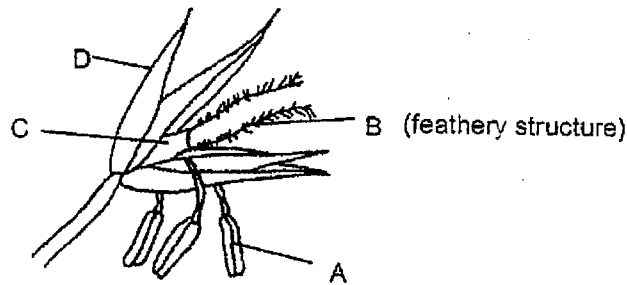
—— oxygen



4 What is the function of the ovary in the human reproductive system?

- (1) It produces eggs.
- (2) It produces sperms.
- (3) It is where fertilisation occurs.
- (4) It is where the fertilised egg develops.

5 Eve conducted an experiment using two wind-pollinated flowers X and Y of the same species growing in a field. The diagram below shows the parts of flower X.



She removed one part of flower X and another part of flower Y. She observed the development of the flowers over a few weeks and recorded her observations below.

	Develops into a fruit?
Flower X	Yes
Flower Y	No

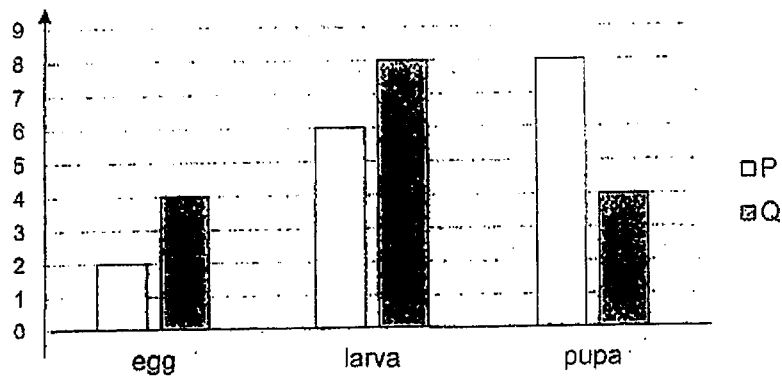
Which of the following shows the parts removed from the two flowers?

	Flower X	Flower Y
(1)	D	A
(2)	B	C
(3)	B	A
(4)	A	C

6 For an adult plant to produce fruits, which process(es) must take place?

- (1) pollination only
- (2) germination only
- (3) pollination and fertilisation
- (4) germination and pollination

- 7 The graph shows the length of time for each stage in the life cycles of organisms P and Q.

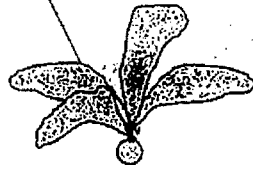


Which statement is correct?

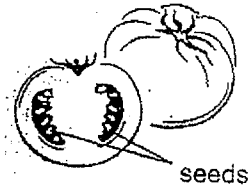
- (1) P was at larva stage for 4 days after the egg was hatched.
- (2) Q took a shorter time to become an adult as compared to P.
- (3) Q spent a total of 4 days longer than P at the egg and larva stage.
- (4) P spent the shortest time in the larva stage in its life cycle as compared to other stages.

- 8 Look at the diagram below.

wing-like structure



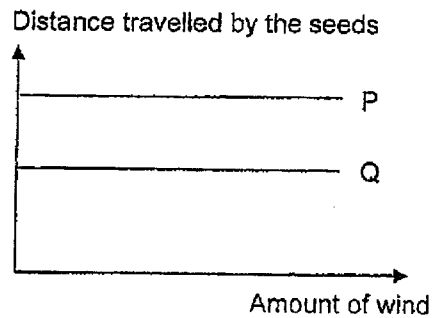
Fruit P



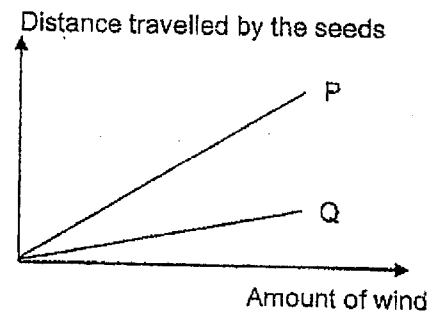
Fruit Q

Which of the following graphs shows the relationship between the distance travelled by seeds P and Q and the amount of wind present?

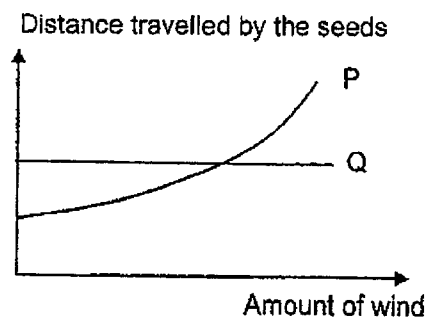
(1)



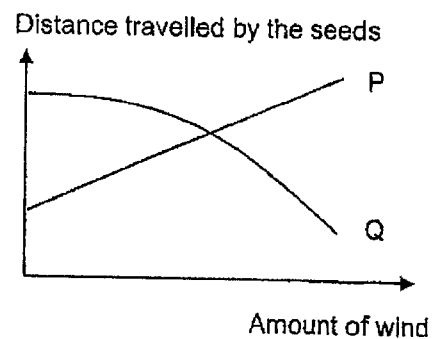
(2)



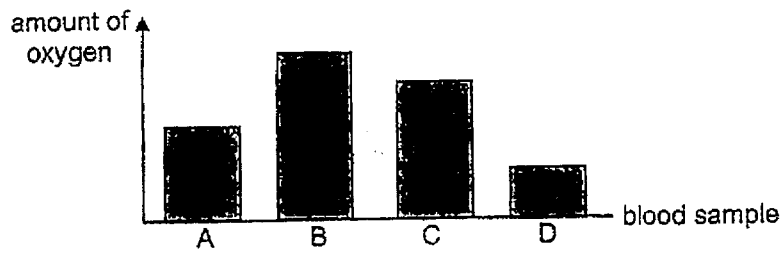
(3)



(4)

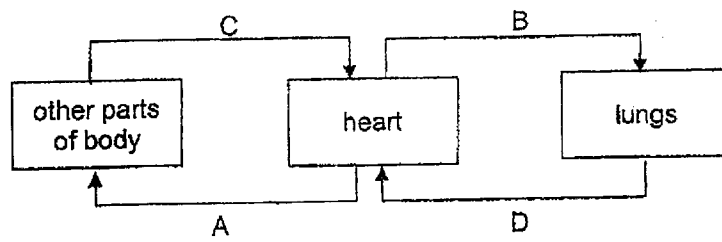


- 9 The graph shows the blood samples drawn from four different blood vessels in the body.

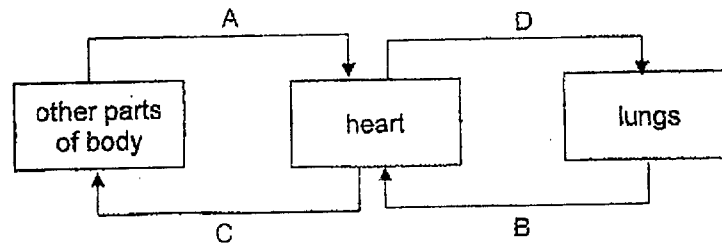


Which of the following diagrams correctly shows where the blood samples were taken?

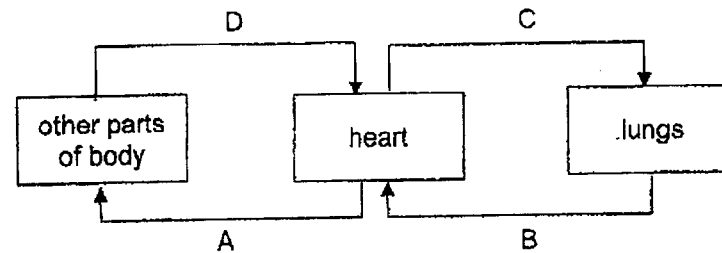
(1)



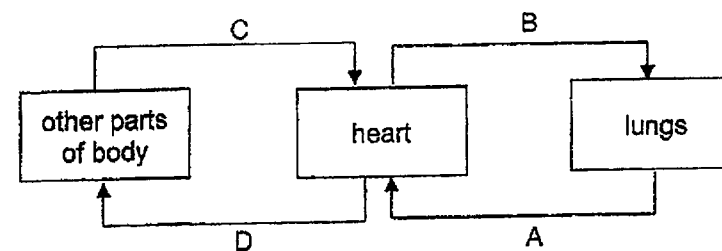
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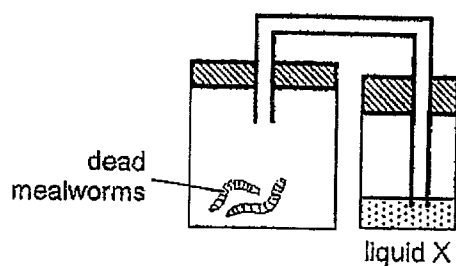
(3)



(4)

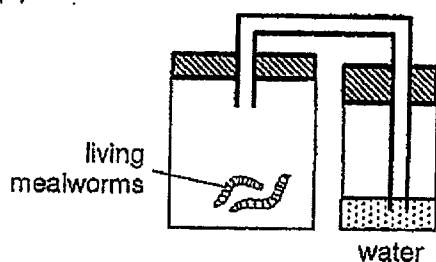


- 10 Kelly wanted to find out if dead mealworms produce carbon dioxide. She placed a few dead mealworms in an empty container and attached it to a container of liquid X using a connected tube. Liquid X turns chalky in the presence of carbon dioxide.

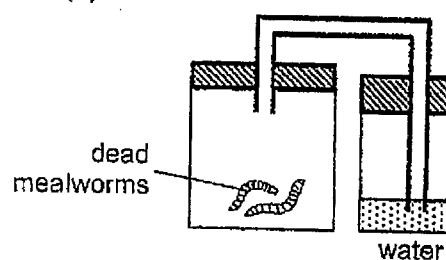


Which of the following set-ups could be used as a control for Kelly's experiment?

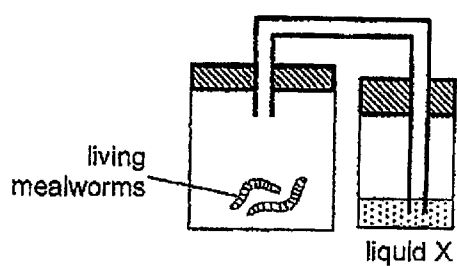
(1)



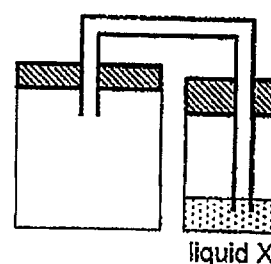
(2)



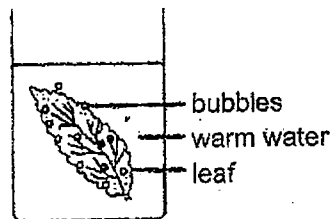
(3)



(4)



- 11 A leaf was plucked from a plant and placed in a beaker of warm water.

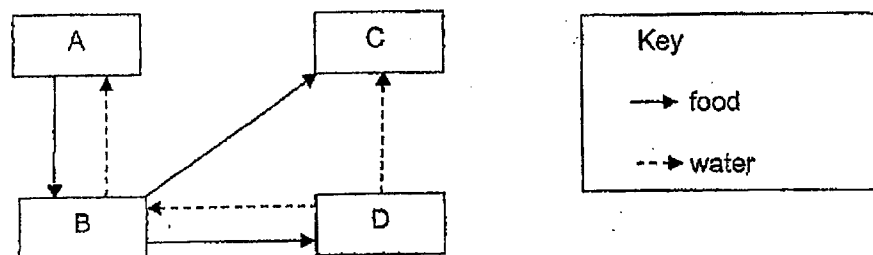


Bubbles were formed on the lower and upper surfaces of the leaf.

Which statement is correct?

- (1) Leaf is breathing and is giving out oxygen as bubbles.
- (2) Air bubbles formed in water and landed on the upper surface of the leaf.
- (3) Air in the leaf is expanding and escaped as bubbles on the surface of the leaf.
- (4) Air entered through the lower surface and escaped from the upper surface of the leaf.

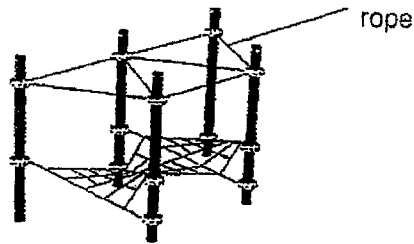
- 12 The diagram shows how water and food flow through different parts A, B, C and D of a plant.



What do A, B and C represent?

	A	B	C
(1)	leaf	stem	root
(2)	leaf	stem	flower
(3)	root	flower	root
(4)	root	leaf	flower

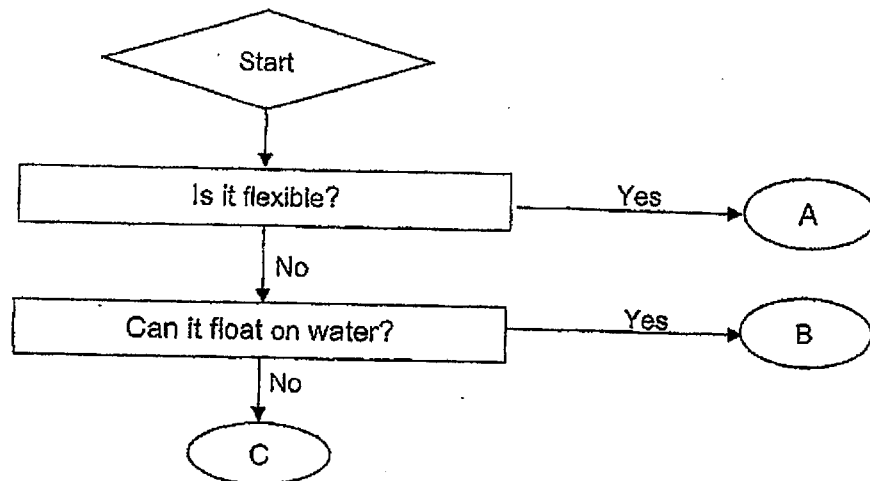
- 13 Many children love to play on the climbing rope structure. The ropes need to be safe for all the children to climb, swing on and support them when they fall.



Which properties of the rope help to ensure the children's safety?

- (1) strong and flexible
- (2) flexible and waterproof
- (3) strong and allows light to pass through
- (4) able to float on water and strong

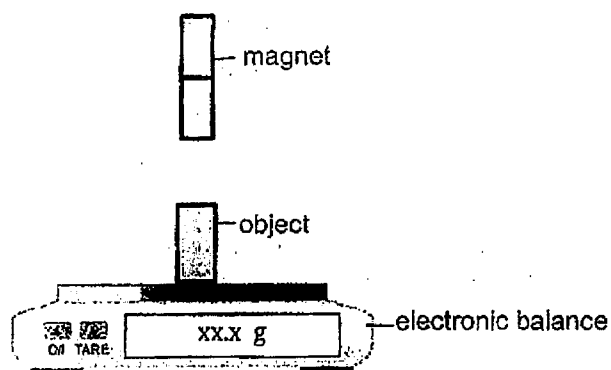
- 14 The flow chart below shows the characteristics of objects A, B and C.



Which of the following could objects A, B and C be?

	A	B	C
(1)	plastic ruler	ping pong ball	coin
(2)	plastic ruler	coin	ping pong ball
(3)	coin	ping pong ball	plastic ruler
(4)	coin	plastic ruler	ping pong ball

- 15 Jamie used the set-up below to identify three different objects A, B and C.



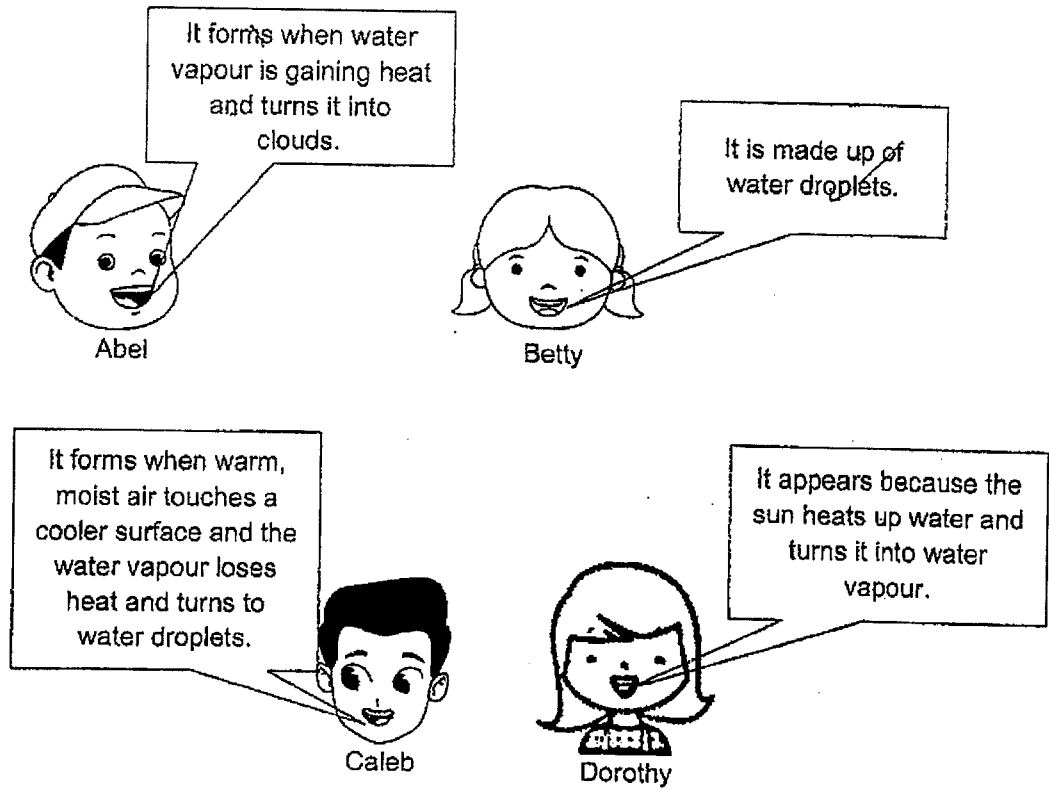
She placed each object on the electronic balance and recorded their masses. She then held a magnet above each of the objects and recorded their masses again. The results are as shown below.

Object	A	B	C
Mass at first (g)	63.2	64.5	20.3
Mass when North pole of magnet is brought near object (g)	65.3	60.8	20.3
Mass when South pole of magnet is brought near object (g)	61.2	60.8	20.3

Based on the results in the table above, which of the following is correct?

	iron bar	magnet	plastic bar
(1)	C	A	B
(2)	A	B	C
(3)	A	C	B
(4)	B	A	C

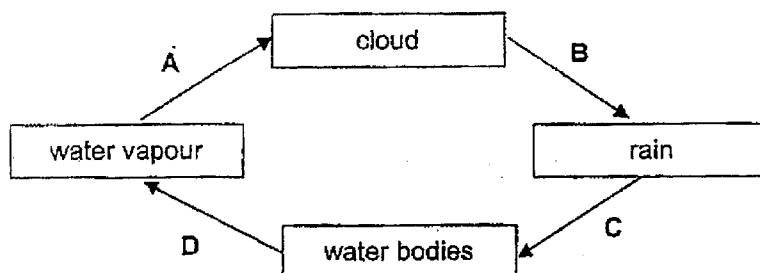
- 16 Early morning at campsite, Betty and her classmates noticed that the grass and flowers were slightly wet, and the surrounding was misty. They could barely see the trees in the distance. They made the following statements about the mist.



Who made the correct statement(s)?

- (1) Abel only
- (2) Caleb only
- (3) Betty and Caleb only
- (4) Caleb and Dorothy only

- 17 The diagram shows the changes in the states of water in the water cycle.



Which of the following do not involve any change in the state of water?

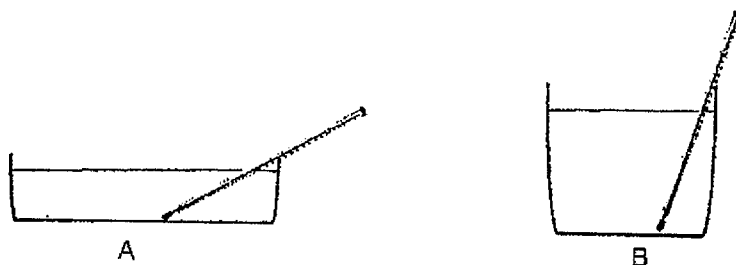
- (1) A and B only
 - (2) B and C only
 - (3) B, C and D only
 - (4) A, C and D only
- 18 Kelly conducted an experiment to find out how different temperature and exposed surface area affect the rate of evaporation. She placed 150 ml of water in different containers and recorded the volume of water left in the containers after two days.

	Experiment			
	W	X	Y	Z
Location	in the shade	under the sun	in the shade	under the sun
Exposed surface area of water (cm ²)	50	120	10	50

What of the following most likely shows the results after two days?

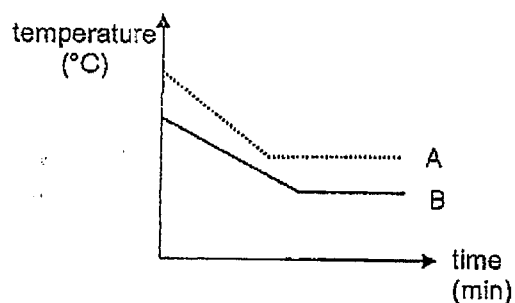
	Volume of water left in the containers (ml)			
	W	X	Y	Z
(1)	50	120	30	80
(2)	80	30	120	50
(3)	120	50	120	50
(4)	80	50	120	50

- 19 Judy poured an equal amount of hot water of the same temperature into the two different containers, A and B. She placed a thermometer in each of the container and recorded the temperature of water over the next 30 minutes.

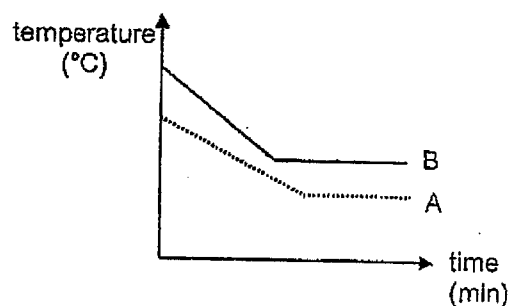


Which graph correctly shows the temperature of water over the next 30 minutes?

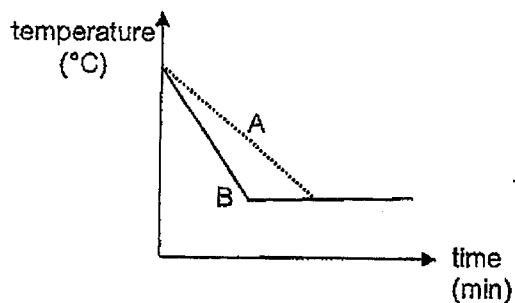
(1)



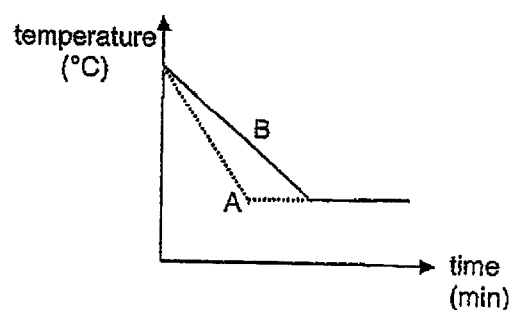
(2)



(3)



(4)



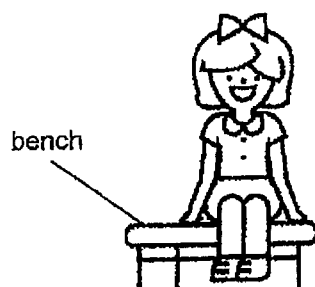
- 20 The table shows the melting and boiling points of two substances, A and B.

Substance	Melting point ($^{\circ}\text{C}$)	Boiling point ($^{\circ}\text{C}$)
A	33	290
B	140	190

Which one of the following shows the correct states of A and B at 120°C ?

	A	B
(1)	solid	gas
(2)	gas	solid
(3)	liquid	gas
(4)	liquid	solid

- 21 In the morning, Sarah sat on the metal bench in the park and she felt cold when she touched the top of the bench. She went on to the next wooden bench and she did not feel as cold as she was on the metal bench.



Which of the following statements most likely explains why?

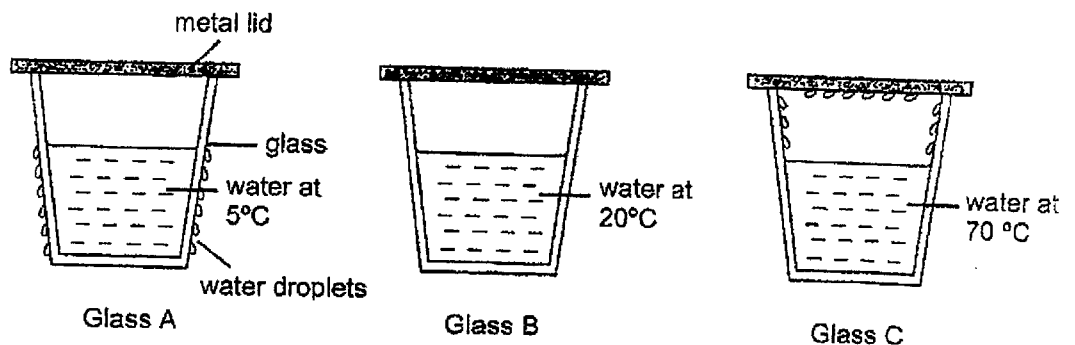
- (1) The wooden bench transfers more heat to Sarah's body.
- (2) The metal bench conducts heat away from Sarah's body faster.
- (3) The wooden bench becomes warmer than the metal bench under the sun.
- (4) The temperature of the metal bench is lower than that of the wooden bench.

- 22 A group of students wants to design a reusable bottle that can keep cold drinks cold for the longest period of time. They filled cups of different materials W, X, Y and Z with the same amount of cold water. The cups were left on a table at room temperature. The students measured the temperature of the water every 5 minutes for 15 minutes as shown below.

Time (min)	Temperature of water ($^{\circ}\text{C}$)			
	W	X	Y	Z
0	6	5	7	8
5	7	9	12	15
10	9	13	17	21
15	10	17	22	28

Based on their results, which is the best material to be used as the reusable bottle?

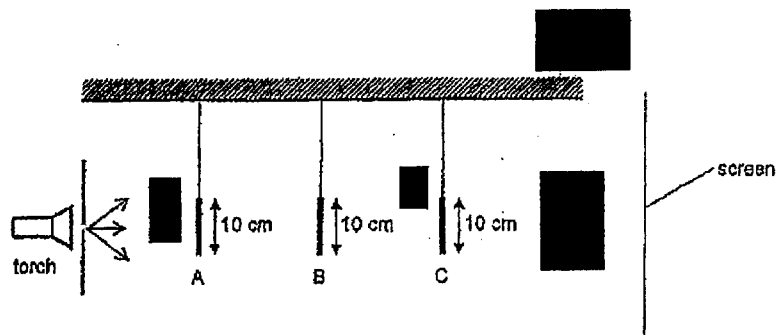
- (1) W
 (2) X
 (3) Y
 (4) Z
- 23 Three identical glasses containing the same volume of water at different temperatures were placed in a room. At the end of 10 minutes, water droplets were seen on the glasses as shown below.



What is the possible temperature of the room?

- (1) 5°C

- 24 The set-up below shows light shining on three wooden objects A, B and C. They are placed at different positions from the torch.



The diagram below shows the shadow of the objects on the screen.

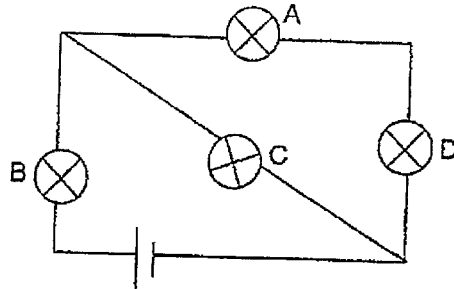


Which of the following correctly represents shapes A, B and C?

	A	B	C
(1)	square frame	triangle	circle
(2)	triangle	square frame	circle
(3)	circle	square frame	triangle
(4)	circle	triangle	square frame

Use the information below to answer Questions 25 and 26.

25 Study the circuit below.



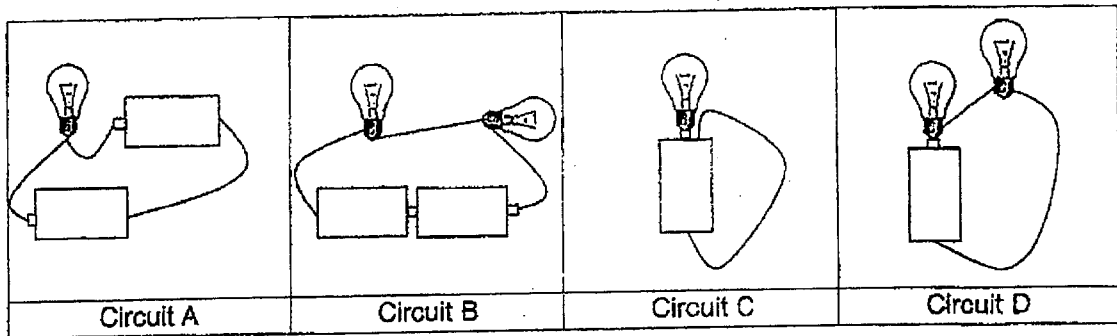
What happens to the brightness of Bulbs A and C when another bulb was added in series with Bulb C?

	Brightness of A	Brightness of C
(1)	decreases	decreases
(2)	decreases	remains the same
(3)	increases	decreases
(4)	remains the same	decreases

26 After one of the bulbs had fused, all the other bulbs did not light up. Which bulb had fused?

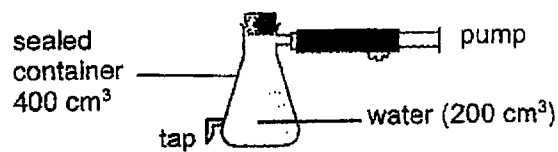
- (1) A
- (2) B
- (3) C
- (4) D

- 27 The diagrams below show four circuits.



In which of the circuits will at least one of the bulbs light up?

- (1) B only
 - (2) A and B only
 - (3) A and C only
 - (4) B and D only
- 28 Jennifer had a sealed conical flask with a volume of 400 cm^3 . There was 200 cm^3 of water in the container.

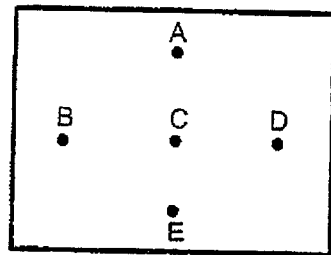


She then removed 50 cm^3 of water and added 100 cm^3 of air.

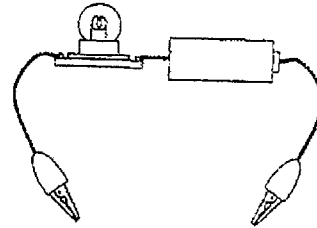
What is the final volume of air in the container?

- (1) 200 cm^3
- (2) 250 cm^3
- (3) 350 cm^3
- (4) 400 cm^3

- 29 The diagram below shows a circuit card where there are some wires connecting different points behind the card.



circuit card

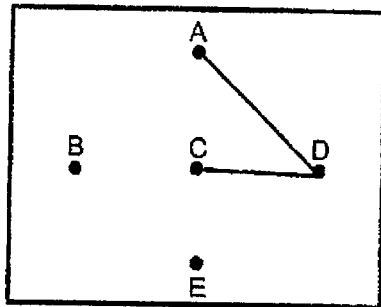


circuit tester

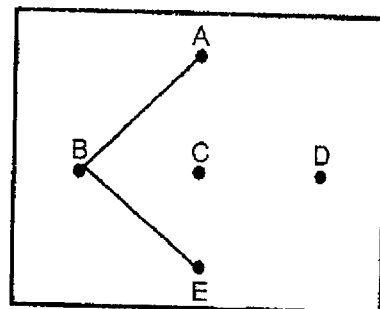
Xin Hui tested the connectivity between the five points and obtained the results as shown in the table.

Points tested	Did the bulb light up?
A and C	Yes
C and D	Yes
A and E	No
B and E	No

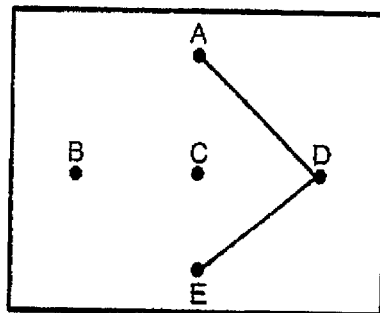
(1)



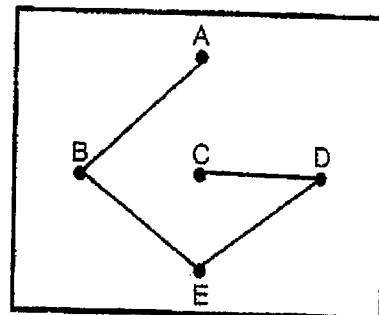
(2)



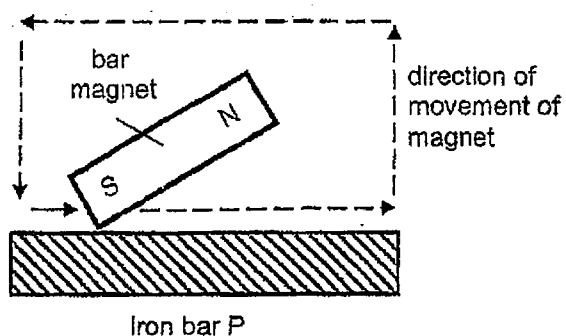
(3)



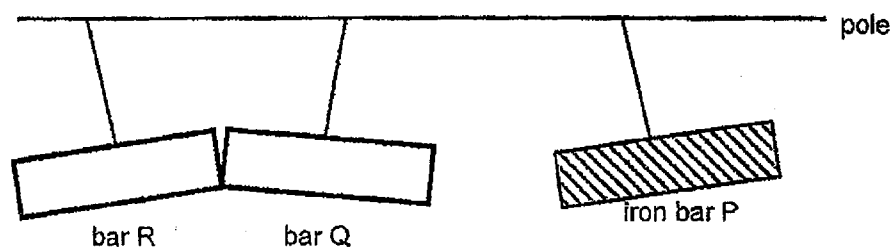
(4)



- 30 An iron bar, P, was magnetised as shown below.



Iron bar P was left to hang freely from a pole with two other bars, R and Q and the following was observed.



Which of the following statements are definitely true?

- A Bar Q and bar R are magnets.
- B The like poles of bar P and bar Q are facing each other.
- C The like poles of bar Q and bar R are facing each other.
- D There is a magnetic attraction between bar Q and bar R.

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

END OF BOOKLET A

Name: _____ ()

Class: Primary 5 SY / C / G

28 October 2025



SINGAPORE CHINESE GIRLS' SCHOOL
END-OF-YEAR EXAMINATION 2025

PRIMARY 5**SCIENCE****BOOKLET B**

Total Time for Booklets A and B: 1h 45 min

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.

	Marks Obtained	Highest Possible Marks
Booklet A		60
Booklet B		40
Total		100

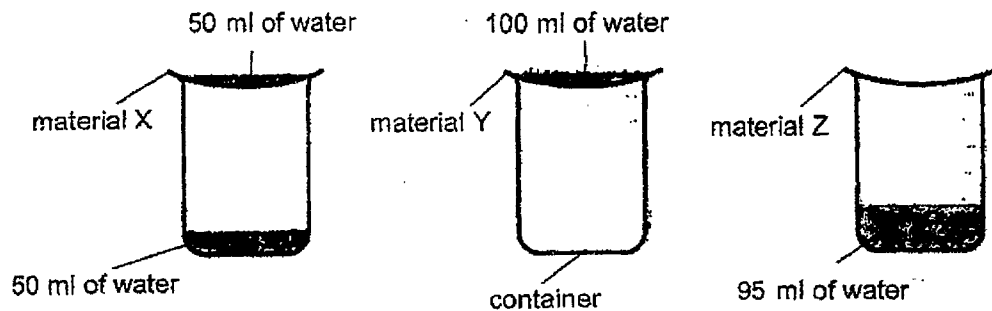
This booklet consists of 13 printed pages.

For questions 31 to 41, write your answers in this booklet.

The number of marks available is shown in brackets [] at the end of each question or part question.

[40 marks]

31. Mary placed three sheets made of different materials, X, Y and Z, over three identical containers. The three sheets had the same thickness. She poured 100 ml of water onto each material. The results of the experiment are shown below.

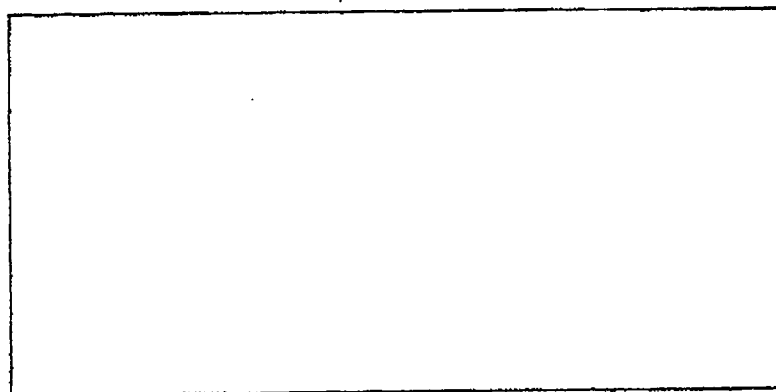


- (a) Based on the results, which material X, Y or Z, is waterproof? [1]

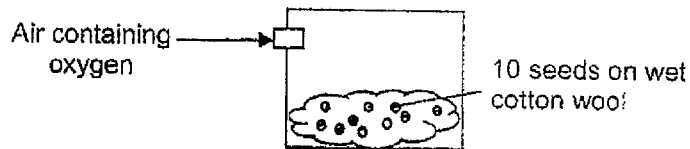
- (b) A gardener used a few pots to plant flowers outdoors. After a heavy rain, he observed water was collected and a few mosquito larvae were found in the pots

Which material X, Y or Z, should the pot be made of in order to reduce the breeding of mosquitoes? Explain your choice. [2]

- (c) Draw the life cycle of a mosquito and label the stages. [1]



- 32 Sally wanted to find out how the amount of oxygen affects the germination of seeds. She placed 10 seeds on a moist cotton wool in a container as shown below. Air containing different amount of oxygen was pumped into the container. She recorded the number of seeds that germinated over a week.



Sally repeated the experiment with different amounts of oxygen and recorded the number of seeds that germinated.

The table below shows the number of seeds germinated at the end of the experiment.

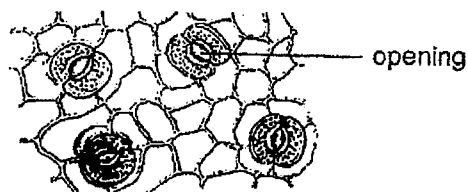
Amount of oxygen (%)	Number of seeds germinated
5	1
10	2
15	5
20	10

- (a) Based on the results, how does the amount of oxygen affect the number of seeds that germinated? [1]

- (b) Explain why 10 seeds were used instead of one seed for the experiment. [1]

- (c) State two variables that must be kept constant for her experiment to be a fair one. [2]

33 The diagram shows the tiny openings on the leaves of plants.



(a) (i) Name a function for these tiny openings. [1]

(ii) Name the structure in the fish and human that have the same function as the tiny openings. [1]

Fish : _____ Human : _____

(b) Jessica used four similar plants, A, B, C and D, of the same mass to conduct an experiment. These leaves have more tiny openings on their bottom surfaces than on their top surfaces. She coated some surfaces of the leaves with oil as shown in the table below.

Leaf	Treatment
A	No oil
B	Oil on bottom surface
C	Oil on top surface
D	Oil on top and bottom surfaces

(i) After a few days, the leaves are weighed. Arrange the leaves A, B, C and D in order of their final mass after the oil was removed, from heaviest to lightest. [1]

(ii) Which leaf lost the most water? Explain your answer. [1]

- 34 The pictures below show how seeds are dispersed from two types of fruit when the fruit walls split.



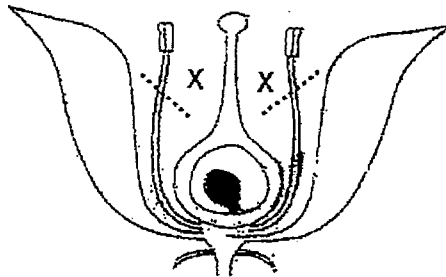
Fruit P



Fruit Q

- (a) Fruit P is able to disperse its seeds further than Fruit Q. Based on your observations of the seeds shown above, explain why. [2]

- (b) A flower was growing in the garden. Grace cut away the parts that are labelled X in the flower below.



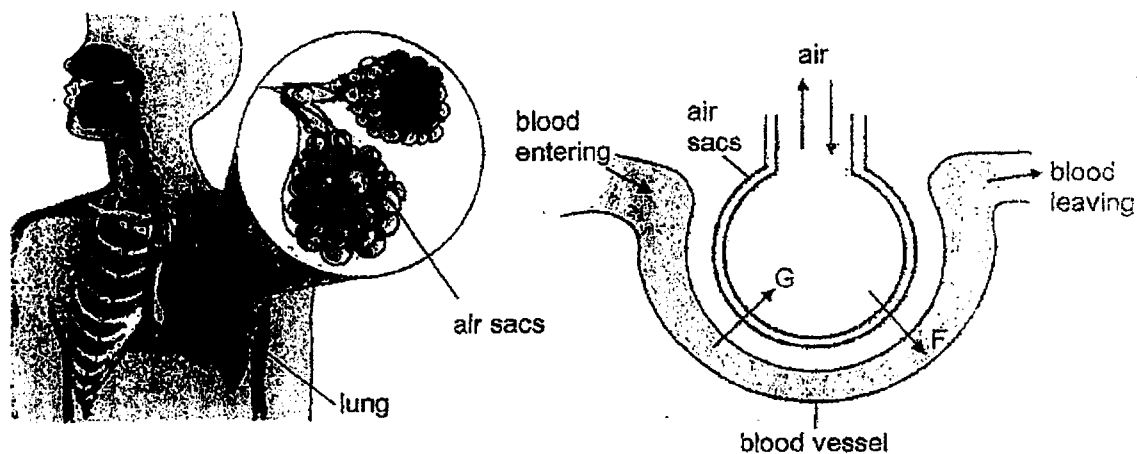
At the end of two weeks, she was surprised to see that a fruit had developed from the flower.

Provide two possibilities how the fruit could have developed after parts X had been cut from the flower. [2]

Possibility 1:

Possibility 2:

- 35 The diagram below shows the gaseous exchange between the lungs and the blood vessels. Lungs contains many tiny air sacs.



- (a) (i) Identify the gases labelled in the diagram.

[1]

gas F	
gas G	

- (ii) Explain why it is necessary to have many tiny air sacs in the lungs.

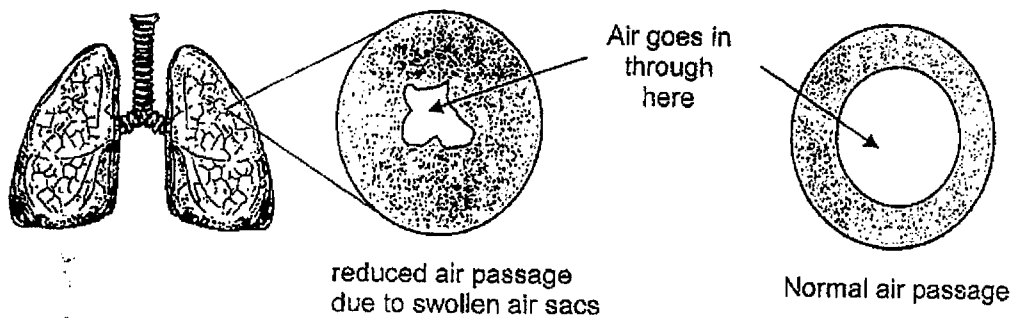
[1]

Question 35 (b) continues next page

- (b) The table below shows the breathing rate and heart rate of two students.

Student	Breathing rate (breaths per min)	Heart rate (beats per min)
A	28	98
B	18	75

The diagram below shows the cross-section of air passage of students, A and B.

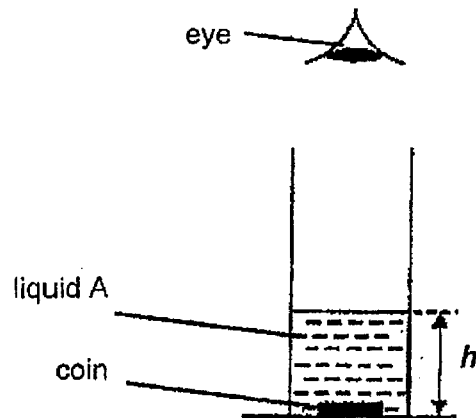


Based on the results above,

- (i) Which student, A or B, has swollen air sacs? Give a reason for your answer. [1]

- (ii) Explain why this student's breathing rate and heart rate in (i) is different from the other student. [2]

- 36 A group of students wanted to compare the clarity of three different liquids. They filled a measuring cylinder with each liquid and slowly dropped a coin in. They measured the maximum depth, h , at which the coin could still be seen clearly from the top. The position of the eye remains the same in the experiment.



They repeated the experiment three times for each liquid and recorded the results as shown in the table below.

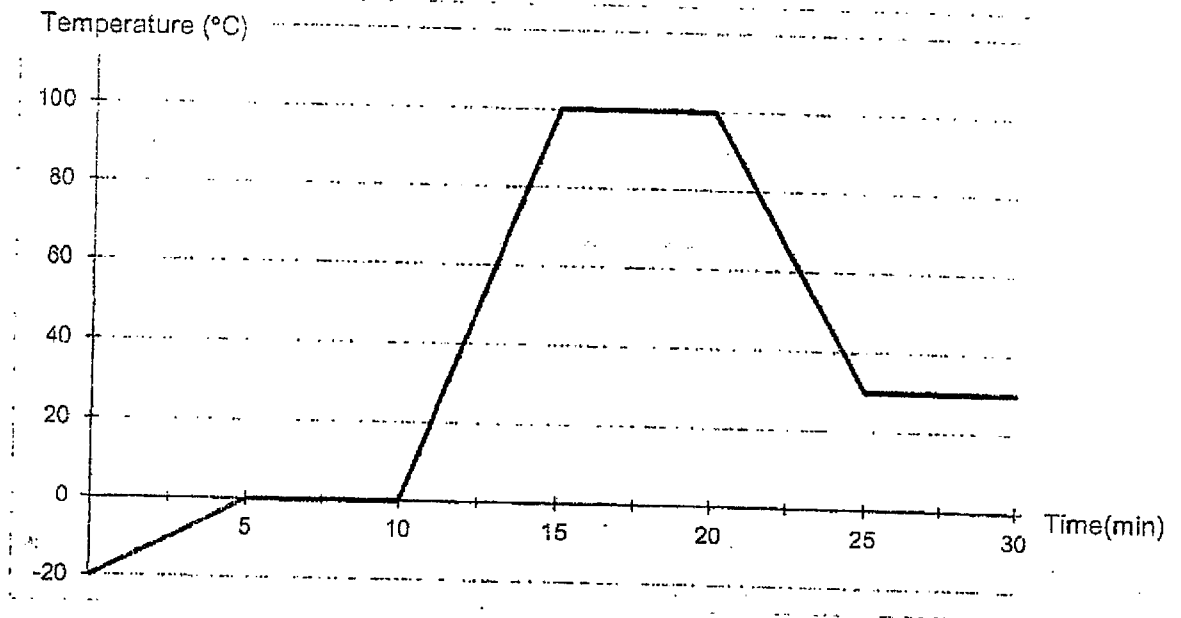
Liquid	Depth, h , at which the coin could not be seen (cm)		
	Trial 1	Trial 2	Trial 3
A	15.0	15.1	14.9
B	3.0	3.8	3.2
C	10.5	10.0	11.0

- (a) Explain how light enables the student to see the coin. [1]

- (b) State one variable that was changed. [1]

- (c) Explain why the results were reliable. [1]

- 37 An experiment was conducted where 200 ml of water in a beaker was heated up until it boiled. Ice cubes were then added. The graph shows the temperature changes observed during the experiment.



- (a) At which minute was the first ice cube added?

[1]

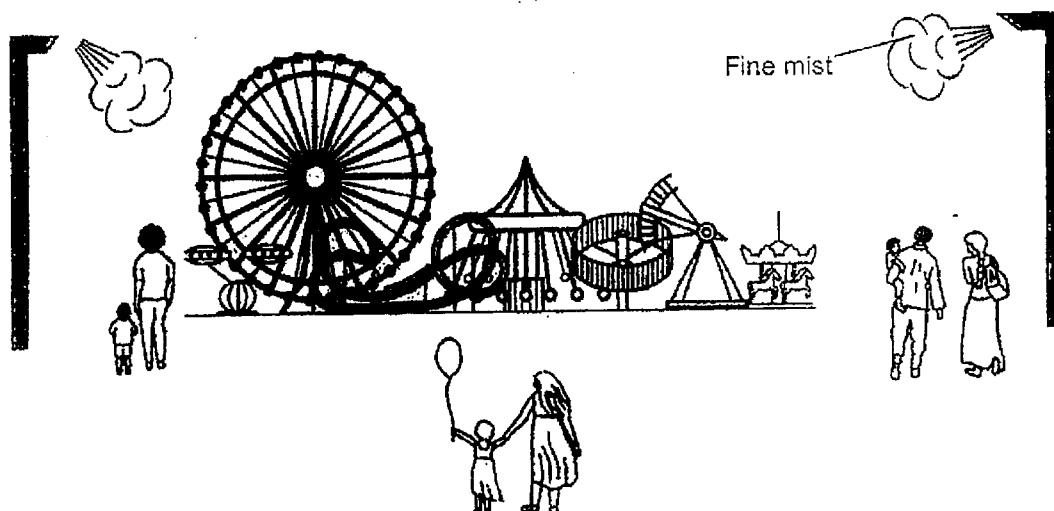
- (b) The student repeated the experiment using 400 ml of water instead of 200 ml but added the same number of ice cubes after the water has boiled.

State if the temperature of the water would decrease more or less within the same period of time. Explain why.

[2]

SCORE	3
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- 38 At an outdoor theme park, a system is installed to spray a fine mist into the air on hot days. Visitors felt cooler when fine mist is sprayed.

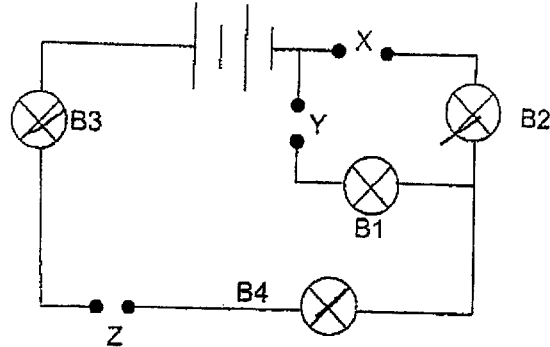


- (a) Explain why the spraying of fine mist into the air makes the visitors feel cooler. [1]

- (b) Explain why fine mist is used instead of larger water droplets. [2]

- (c) Fans are installed near the mist system.
Explain how this helps to keep the visitors even cooler. [1]

- 39 Lenny set up a circuit to find out the electrical conductivity of three rods P, Q and R made of different materials. They were placed at positions X, Y and Z as shown below.



The table below shows the results when the rods are placed at the positions X, Y and Z.

Position of the rods			Did the bulbs light up?			
X	Y	Z	B1	B2	B3	B4
P	R	Q	No	Yes	Yes	Yes

- (a) Based on the results above, put a tick (✓) to indicate whether rods P, Q and R are electrical conductors or insulators.

[2]

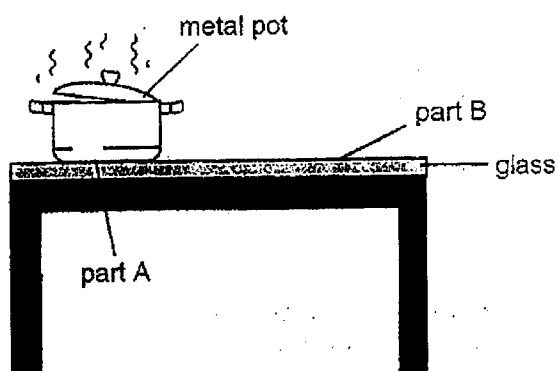
	Electrical conductors	Electrical insulators
P		
Q		
R		

- (b) Lenny rearranged the positions of the rods as shown in the table below. State if the bulbs light up in the table below.

[2]

Position of the rods			Did the bulbs light up? (Yes/ No)			
X	Y	Z	B1	B2	B3	B4
P	Q	R				
Q	R	P				

- 40 A metal pot filled with hot soup was placed directly on the table in a room.



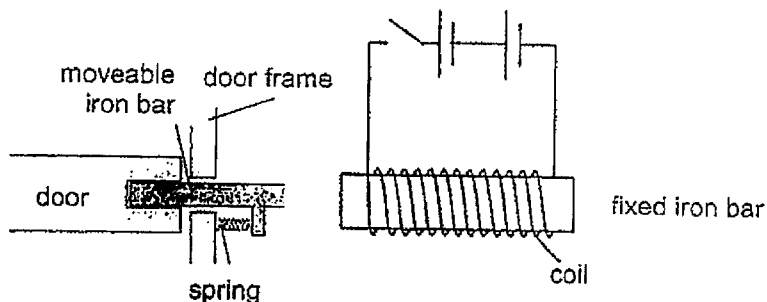
- (a) Explain why part A of the glass is hotter than part B. [1]

- (b) The glass cracked after some time. Explain why the glass cracked. [1]

- (c) To prevent the glass from cracking, the metal pot with hot soup was placed on a wooden mat on the table. Explain why. [1]

SCORE	3
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- 41 An electric door lock at the entrance of a room is as shown below. When a button is pressed, the switch closes and the door unlocks.



When the button is pressed, the door unlocks. Explain how this happens.

[2]

SCORE	2
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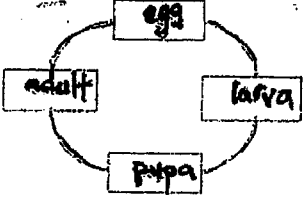
END OF PAPER

YEAR : 2025
 LEVEL : PRIMARY 5
 SCHOOL : SINGAPORE CHINESE GIRLS' PRIMARY SCHOOL
 SUBJECT : SCIENCE
 TERM : END OF YEAR EXAMINATION

(BOOKLET A)

Q1	3	Q2	4	Q3	1	Q4	1	Q5	4
Q6	3	Q7	3	Q8	3	Q9	2	Q10	4
Q11	3	Q12	2	Q13	1	Q14	1	Q15	4
Q16	3	Q17	2	Q18	2	Q19	4	Q20	4
Q21	2	Q22	1	Q23	2	Q24	1	Q25	4
Q26	2	Q27	4	Q28	2	Q29	1	Q30	4

(BOOKLET B)

Q31	a)	Material Y.
	b)	Material Z. Material Z allows most water to pass through / seep through. There is no water for the mosquito to lay eggs / reproduce.
	c)	
Q32	a)	As the amount of oxygen increases, the number of seeds germinated increases.
	b)	To make the results more reliable / increase the reliability of results.
	c)	- The type/number of seeds / size / mass of seeds - Amount/ volume of water / amount of moist cotton wool - Temperature of surrounding air
Q33	a)	(i) Gaseous exchange (ii) Fish: gills Humans: lungs / air sacs
	b)	(i) D, B, C, A (ii) Leaf A. No oil is coated on both sides. The leaf without oil had unblocked stomata so most water lost through them.
Q34	a)	The seeds of Fruit P has wing-like structure / feathery structure. The seeds can be carried by the wind further away from the parent plant.
	b)	By animals/insects. Pollen grains are stuck on their bodies and fall off when they on stigma of flower, allowing fertilization to take place. By wind. Pollen grains from another flower of the same kind is carried by wind and they landed on the stigma of flower, allowing fertilization to take place.

Q35	a)	(i) F: Oxygen G : Carbon dioxide (ii) There will be more surface area in contact with blood for more gaseous exchange / more oxygen absorbed in the blood.																											
	b)	(i) Student A. A's breathing rate is higher. (ii) Student A has to breathe faster to transport more oxygen to the rest of the body.																											
Q36	a)	Light is reflected from the coin into their eyes.																											
	b)	The type of liquid.																											
	c)	The result / reading are consistent / close / similar																											
Q37	a)	20 th min																											
	b)	Temp of water decreases less. A larger volume of water has more heat energy. / More heat needs to be lost to the ice.																											
Q38	a)	The water gains heat from the surrounding air to evaporate.																											
	b)	Fine mist has more surface area in contact with the surrounding air / more exposed surface area, so the rate of evaporation of water is faster.																											
	c)	Wind increases the rate of evaporation of water.																											
Q39	a)	<table><tr><td></td><td>Electrical conductors</td><td>Electrical insulators</td></tr><tr><td>P</td><td>✓</td><td></td></tr><tr><td>Q</td><td>✓</td><td></td></tr><tr><td>R</td><td></td><td>✓</td></tr></table>		Electrical conductors	Electrical insulators	P	✓		Q	✓		R		✓															
		Electrical conductors	Electrical insulators																										
P	✓																												
Q	✓																												
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b)	<table><tr><td colspan="3">Position of the rods</td><td colspan="4">Did the bulbs light up? (Answer Yes/ No)</td></tr><tr><td>X</td><td>Y</td><td>Z</td><td>B1</td><td>B2</td><td>B3</td><td>B4</td></tr><tr><td>P</td><td>Q</td><td>R</td><td>NO</td><td>NO</td><td>NO</td><td>NO</td></tr><tr><td>Q</td><td>R</td><td>P</td><td>NO</td><td>Yes</td><td>Yes</td><td>Yes</td></tr></table>	Position of the rods			Did the bulbs light up? (Answer Yes/ No)				X	Y	Z	B1	B2	B3	B4	P	Q	R	NO	NO	NO	NO	Q	R	P	NO	Yes	Yes	Yes
Position of the rods			Did the bulbs light up? (Answer Yes/ No)																										
X	Y	Z	B1	B2	B3	B4																							
P	Q	R	NO	NO	NO	NO																							
Q	R	P	NO	Yes	Yes	Yes																							
Q40	a)	Part A is in direct contact with the hot pot so Part A gains heat faster / gain more heat than B.																											
	b)	Part A gains more heat and expanded more / faster than Part B, the glass cracked.																											
	c)	The wooden mat is a poor conductor of heat, the heat from the hot pot is conducted to the glass slower so the glass did not crack.																											
Q41		When the switch is closed, it forms a closed circuit. The fixed iron is magnetized becomes an electromagnet and it attracts the moveable iron bar, and the door unlocks.																											

2
END