TAO NAN SCHOOL 道南学校

SINCERITY & PERSEVERANCE

2025 PRIMARY 5 END-OF-YEAR EXAMINATION

Name : _____ ( )

Class : Primary 5 ( )

Date: 30 October 2025

Time: 8.00 a.m. - 9.45 a.m.

Duration: 1 hour 45 minutes

SCIENCE

BOOKLET A

INSTRUCTIONS TO CANDIDATES

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers on the Optical Answer Sheet (OAS) provided.

Booklet A (30 x 2 marks)

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) and shade your answer on the Optical Answer Sheet.

(60 marks)

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1. The table below shows some information on three different animals, A, B and C. A tick (✓) shows that the animal has the characteristic.

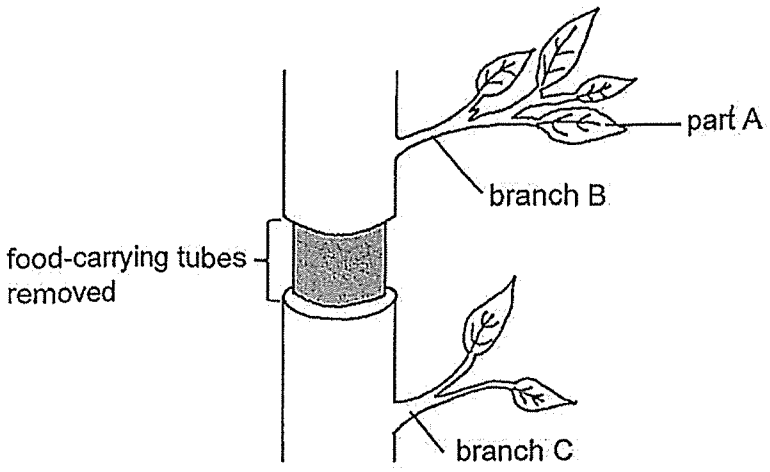
	A	B	C
Has wings	✓		
Has dry and scaly skin as body covering		✓	
Gives birth to young alive			✓
Breathes through lungs	✓	✓	✓

Based on the table above, which of the following correctly identifies the groups the animals belong to?

	A	B	C
(1)	bird	reptile	mammal
(2)	bird	fish	mammal
(3)	reptile	mammal	fish
(4)	mammal	fish	reptile

For questions 2 and 3, refer to the same diagram below.

2.



Which of the following is the function of part A of a plant?

(1) It supports the plant.
(2) It makes food for the plant.
(3) It takes in water for the plant.
(4) It holds the plant firmly to the ground.

3. A farmer removed the food-carrying tubes of the plant. The plant was watered regularly and placed under the Sun.

Which of the statements is/are most likely true of the plant after one week?

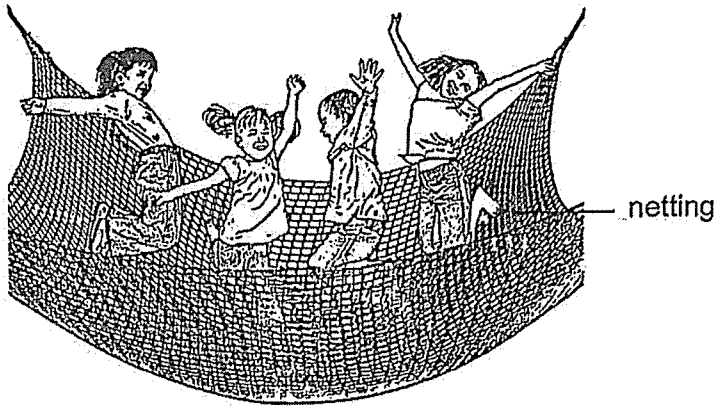
A The leaves on branch C died.

B There was swelling of the stem above and below the cut.

C The leaves on branch B grew slower than those on branch C.

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

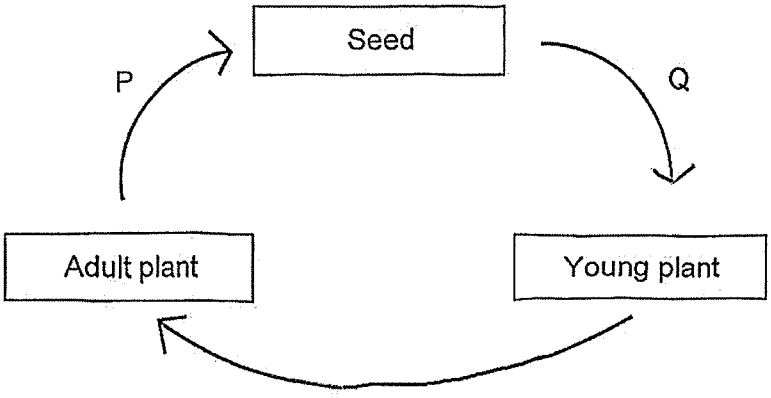
4. Which material is most suitable for making the bouncing net that children can jump on safely as shown?



	Material	Property		
		flexible	strong	allows light to pass through
(1)	A	✓	✓	✓
(2)	B	✓	×	✓
(3)	C	✓	✓	×
(4)	D	×	✓	×

Key
✓ : yes
× : no

5. The diagram below shows the life cycle of a flowering plant.



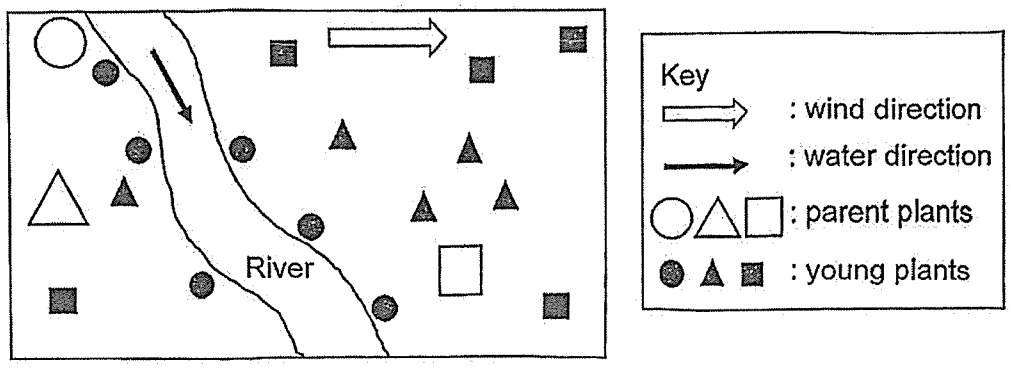
Which of the following processes take place at P and Q?

	P	Q
(1)	Germination, Pollination	Seed Dispersal, Fertilisation
(2)	Pollination, Fertilisation	Germination, Seed Dispersal
(3)	Fertilisation, Seed Dispersal	Pollination, Germination
(4)	Germination	Pollination, Fertilisation, Seed Dispersal

6. The table below shows the characteristics of fruits, X, Y and Z.

Fruits	Characteristics
X	Has a wing-like structure
Y	Has a fibrous husk
Z	Is fleshy and juicy

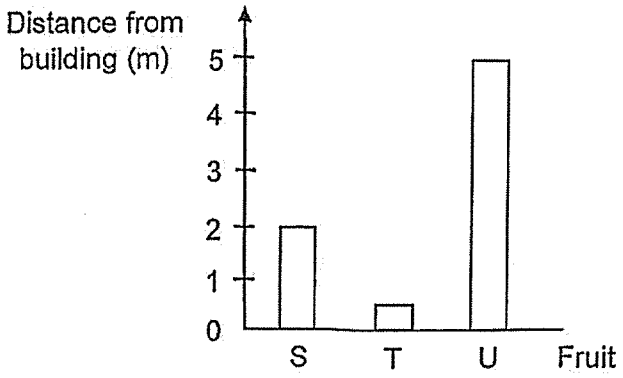
The diagram below shows the dispersal patterns of the fruits, X, Y and Z.



Which of the following correctly matches the dispersal patterns of fruits X, Y and Z?

	○	△	□
(1)	X	Y	Z
(2)	Y	Z	X
(3)	Z	X	Y
(4)	Y	X	Z

7. Three different fruits, S, T and U, were dropped from the top of a building at the same time. The distance each fruit landed away from the building was measured. The results are as shown.



Which of the statements can be concluded from the results of the experiment?

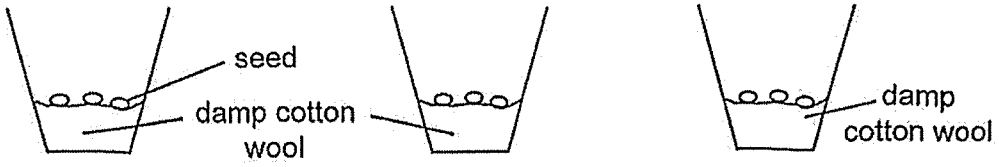
A Fruit S has less mass than fruit U.

B Fruit T has the largest wing-like structure.

C Fruit U is the lightest and the smallest.

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

8. Study the set-ups, A, B and C shown below. The seeds were watered daily but placed in different locations.



A: near the window B: in the freezer C: in a dark cupboard

In which set-up(s) would the seeds most likely germinate?

(1) A only
(2) B only
(3) A and C only
(4) A, B and C

9. The table below shows a comparison of the plant and human reproductive systems that have similar functions.

Reproductive system	
Plant	**Human**
U	testes
ovary	**V**

What could U and V be?

	U	V
(1)	anther	ovule
(2)	stigma	ovary
(3)	anther	ovary
(4)	stigma	ovule

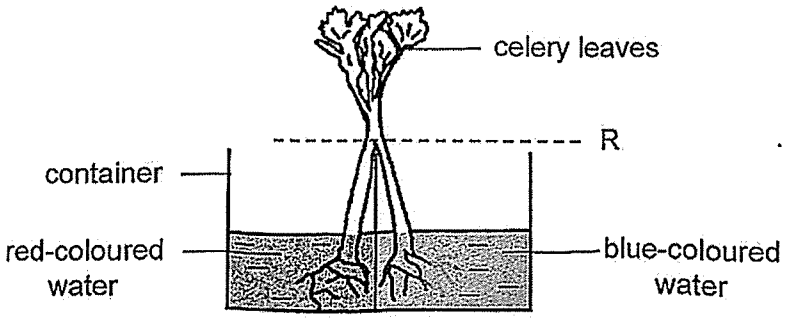
10. The table below shows some characteristics of Amanda and her family.

	Detached earlobes	Short hair	Brown eyes
Amanda	✓	✓	✓
Sister	✓	X	✓
Father	X	✓	✓
Mother	✓	✓	X

Based on the information in the table, which statement is most likely true?

(1) Amanda inherited 2 characteristics from her father.
(2) Amanda inherited her detached earlobes trait from her mother and sister.
(3) Amanda's mother passed down her characteristic of short hair to Amanda.
(4) Amanda's father passed down his characteristic of brown eyes to Amanda.

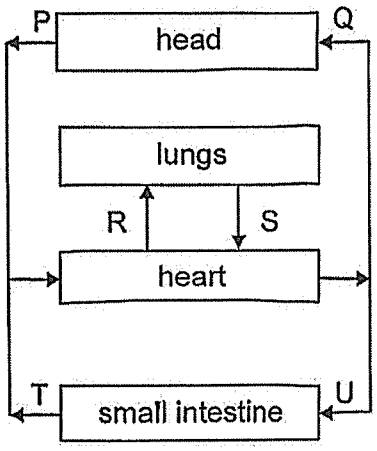
11. A celery plant was placed into a container as shown below. The lower part of the stem was split into two at R.



Which of the following is a correct observation after one day?

(1) The leaves remained green.
(2) All the leaves turned purple.
(3) The part of the stem above cut R turned purple.
(4) Some leaves turned red while some leaves turned blue.

12. The diagram shows the direction of blood flow in certain parts of the body a few hours after a meal.



Which statement(s) is/are correct?

A Blood in P has less oxygen than blood in Q.

B Blood in R has less carbon dioxide than blood in S.

C Blood in T has less digested food than blood in U.

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

13. The diagram below shows a boy blowing into a balloon.

Compare the gases in the surrounding and in the balloon. Which statement is correct?

(1) There is less oxygen in the surrounding than in the balloon.
(2) There is less water vapour in the surrounding than in the balloon.
(3) There is more carbon dioxide in the surrounding than in the balloon.
(4) There is no change in the percentage of gases in the surrounding and in the balloon.

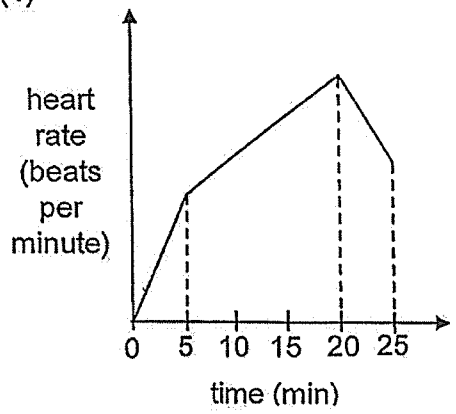
14. Which part is involved in the exchange of gases in a plant, fish and human?

	Plant	Fish	Human
(1)	leaves	mouth	lungs
(2)	leaves	gills	nose
(3)	tiny openings	gills	lungs
(4)	tiny openings	mouth	nose

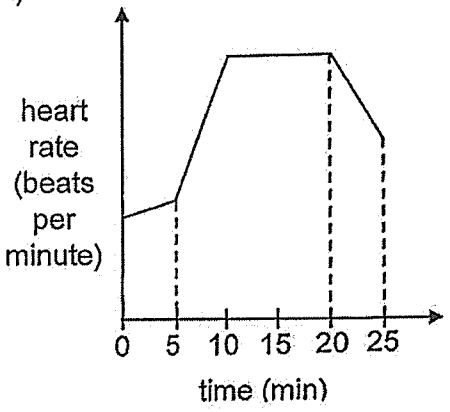
15. Alvin walked for 5 minutes to the park. At the park, he cycled for 15 minutes before resting for 5 minutes.

Which of the following correctly shows his heart rate?

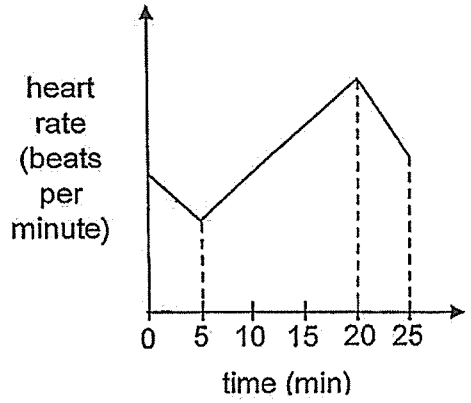
(1)



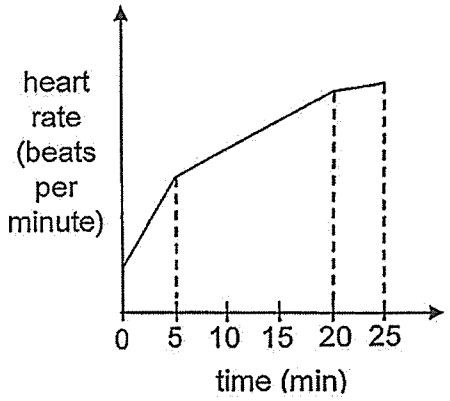
(2)



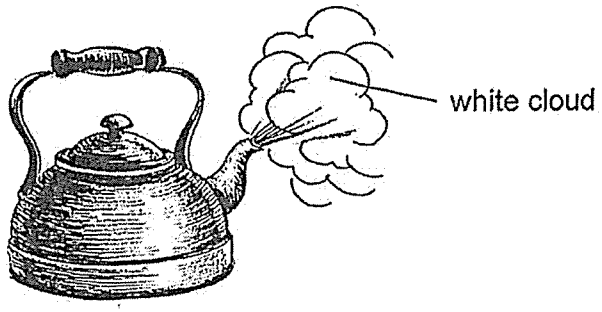
(3)



(4)



16. The diagram shows a kettle of boiling water.



What is the "white cloud" that can be seen?

(1) steam

(2) smoke

(3) water vapour

(4) water droplets

17. Substance A is a liquid at 21°C and a gas at 92°C.

Which of the following are possible freezing and boiling points of substance A?

	Freezing Point (°C)	Boiling Point (°C)
(1)	0	100
(2)	6	80
(3)	26	161
(4)	41	182

18. Which one of the following statements about boiling and melting is **incorrect**?

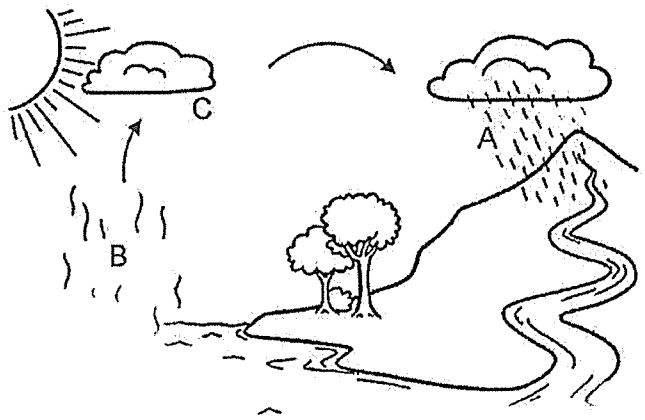
(1) Both processes involve a change of state.

(2) Both processes occur at a fixed temperature.

(3) The boiling point is always higher than the melting point.

(4) One process involves heat gain and the other process involves heat loss.

19. The diagram below represents the water cycle. A, B and C are processes that occur in the water cycle.



Which of the following about the processes in the water cycle is correct?

	Process	Heat Flow
(1)	A	Heat loss
(2)	B	Heat gain
(3)	B and C	Heat gain
(4)	C and A	No heat gain or heat loss

20. Which of the following definitely helps to conserve water?

A repair a leaking tap

B use a mug when brushing teeth

C take a longer shower

D use the water hose when watering the plants

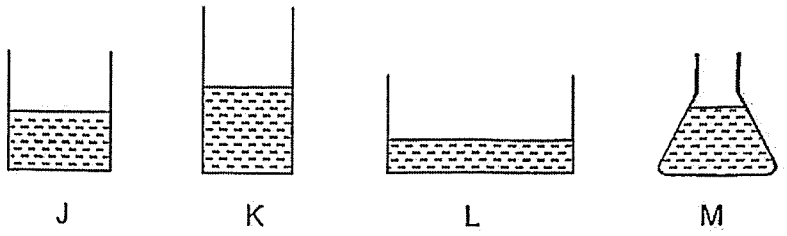
(1) A and B only

(2) A and C only

(3) B and C only

(4) C and D only

21. Below are four containers with the same amount of water. They are left near an open window for a few hours.



Arrange the containers from the least volume to the most volume of water left after a few hours.

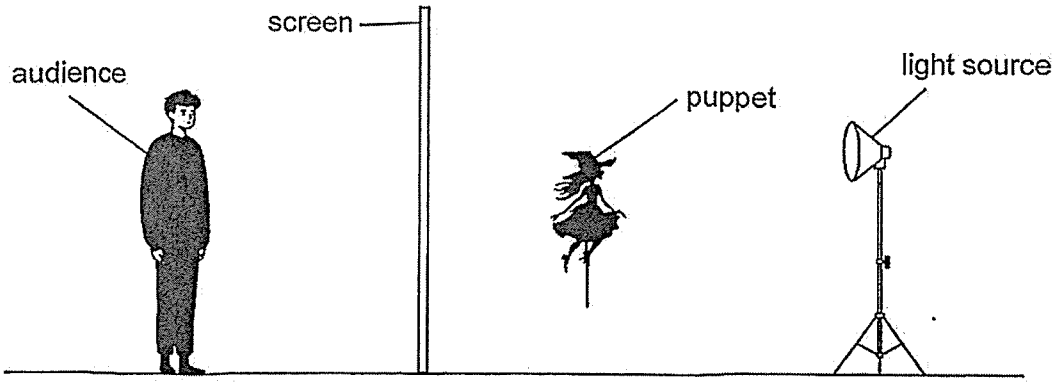
(1) J, L, K, M

(2) M, K, J, L

(3) L, J, K, M

(4) K, J, M, L

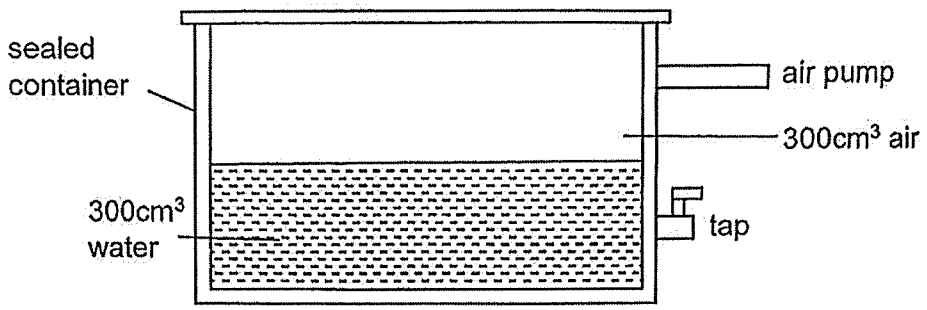
22. Jerry arranged the set-up below to perform a puppet show.



Which of the following explains how the shadows are formed so that the audience can enjoy the shadow puppet show?

	puppet	screen
(1)	allows no light to pass through	allows some light to pass through
(2)	allows most light to pass through	allows no light to pass through
(3)	allows no light to pass through	allows most light to pass through
(4)	allows some light to pass through	allows no light to pass through

23. A container holds 300 cm^3 of air and 300 cm^3 of water as shown below. A volume of 100 cm^3 of air was removed from the container through the air pump while 150 cm^3 of water was removed through the tap.



What was the final volume of the air in the container?

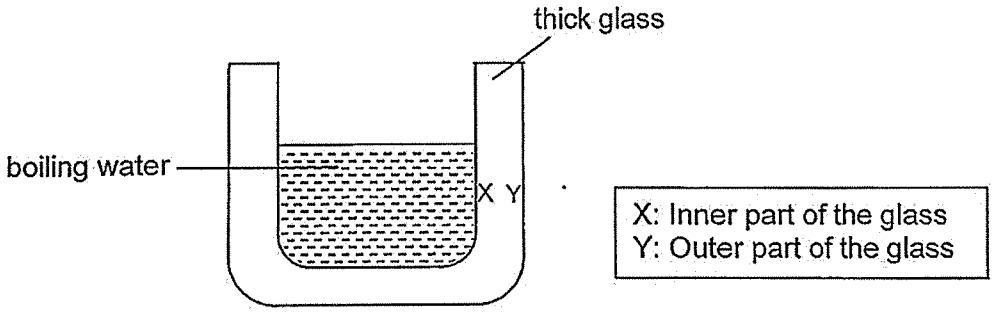
(1) 150 cm^3

(2) 200 cm^3

(3) 300 cm^3

(4) 450 cm^3

24. When boiling water was poured into a thick glass cup that was just taken out of the freezer, the walls of the glass cracked.



What would be the best explanation why the glass cracked?

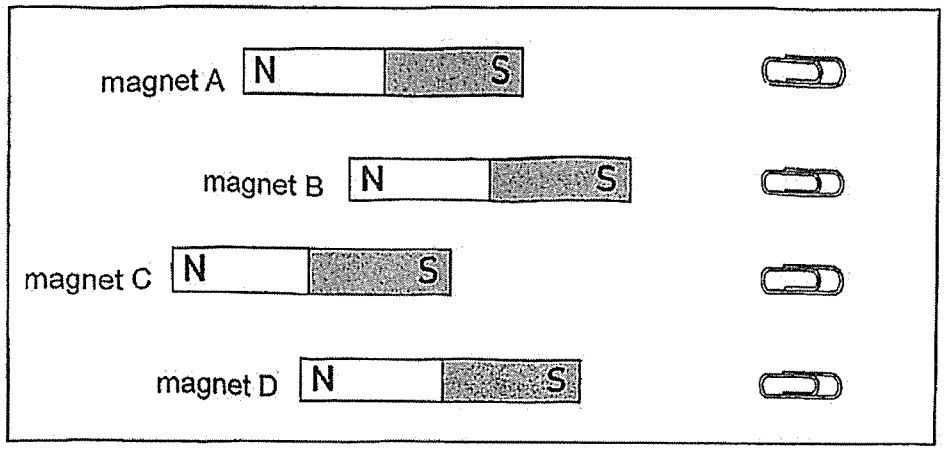
(1) X gained heat but Y did not.

(2) X gained heat but Y lost heat.

(3) X lost more heat than Y and contracted faster.

(4) X gained more heat than Y and expanded faster.

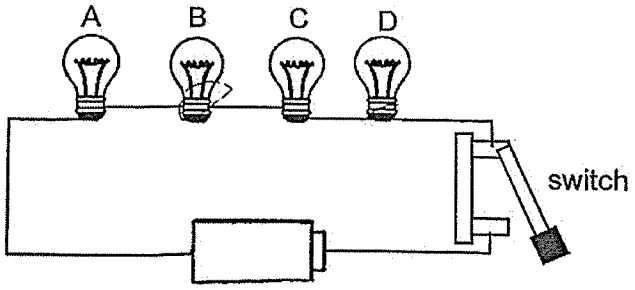
25. The diagram below shows the positions at which each magnet A, B, C and D started to attract the paper clip.



Which magnet was the strongest?

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

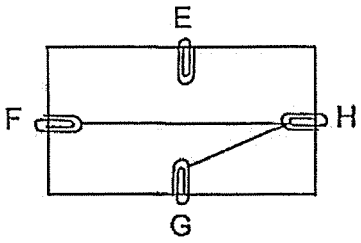
26. Billy set up the circuit below.



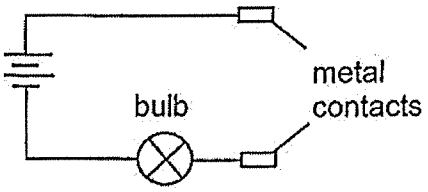
Which bulb(s) will light up when the switch is closed?

(1) A and C only
(2) B and D only
(3) A, B and C only
(4) None will light up.

27. Study the circuit card below. The card is tested with the circuit tester.



Circuit card

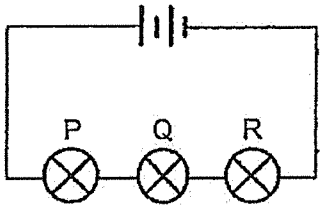


Circuit tester

The results are shown in the table below. Which set of results is **incorrect**?

	Clips tested	Bulb
(1)	E and F	Does not light up
(2)	F and G	Does not light up
(3)	E and G	Does not light up
(4)	F and H	Lights up

28. Sanjay set up the circuit as shown below.



Which of the following should Sanjay do to increase the brightness of bulb Q?

A Remove bulb R.

B Remove one battery.

C Add one more battery.

D Rearrange all the bulbs to be in parallel to one another.

(1) A and C only

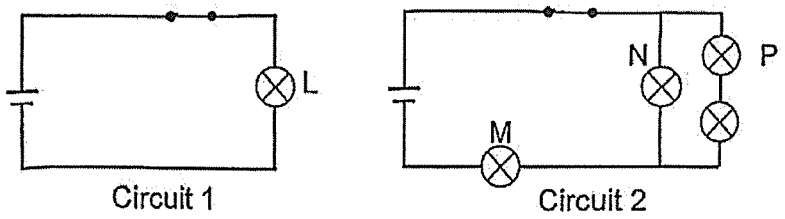
(2) B and D only

(3) A, C and D only

(4) A, B and D only

For questions 29 and 30, refer to the same diagram below.

Two circuits are set up as shown below. All bulbs are identical and the components are in working condition.



29. From the above two circuits, which bulb in Circuit 2 will have the same brightness as bulb L in Circuit 1?

(1) Bulb M
(2) Bulb N
(3) Bulb P
(4) None of the bulbs in Circuit 2

30. What will happen when bulb P is removed?

(1) Only bulb M will light up.
(2) Only bulb N will light up.
(3) Bulbs M and N will light up.
(4) None of the bulbs will light up.

End of Booklet A

TAO NAN SCHOOL 道南学校
SINCERITY & PERSEVERANCE

2025 PRIMARY 5 END-OF-YEAR EXAMINATION

Name : _____ ( )

Class : Primary 5 ( )

Date: 30 October 2025

Time: 8.00 a.m. - 9.45 a.m.

Duration: 1 hour 45 minutes

SCIENCE

BOOKLET B

INSTRUCTIONS TO CANDIDATES

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Use a dark blue or black ballpoint pen to write your answers in the space provided for each question.
6. Do not use correction fluid/tape or highlighters.

Booklet A	60
Booklet B	40
Total	100

Booklet B (40 marks)

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

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

(40 marks)

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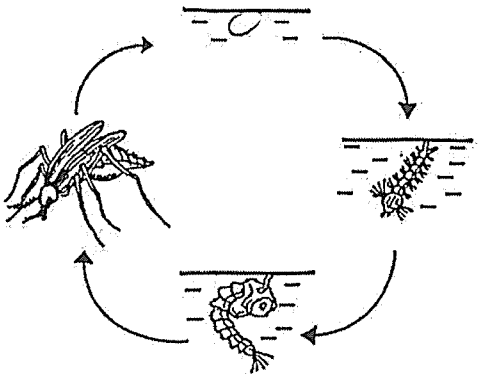
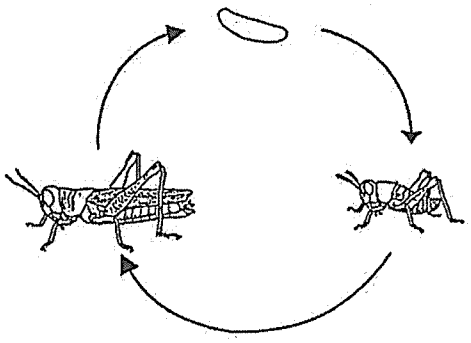
31. The diagrams below show the life cycles of a mosquito and a grasshopper.



life cycle of a mosquito



life cycle of a grasshopper

(a) Based on the diagrams above, state two differences between the life cycles of the mosquito and the grasshopper. [2]

Difference 1:

_____

_____

Difference 2:

_____

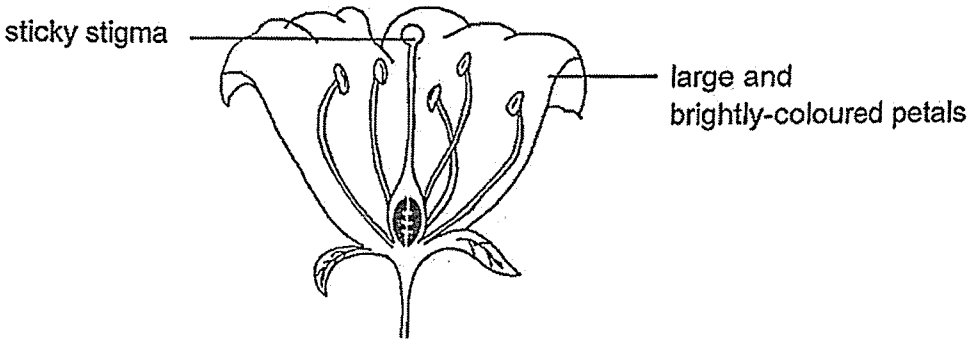
_____

(b) Name another animal that has the same number of stages as the life cycle of the mosquito. [1]

_____

Score	/ 3

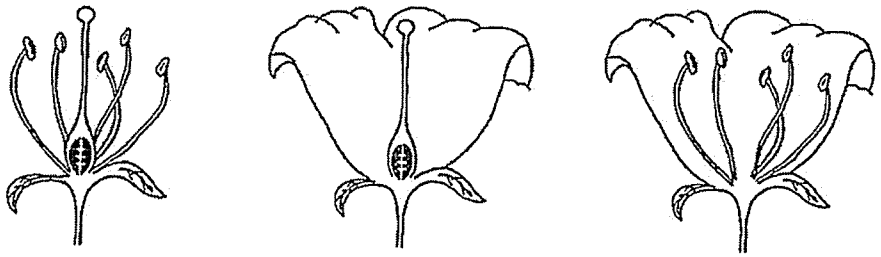
32. The diagram below shows a flower that Jenny found in her garden.



(a) What is pollination? [1]

(b) Based on the diagram above, what is the likely method of pollination of this flower? Explain your answer. [1]

Jenny removed a certain part of the flower from each of the three flowers, K, L and M, as shown below.

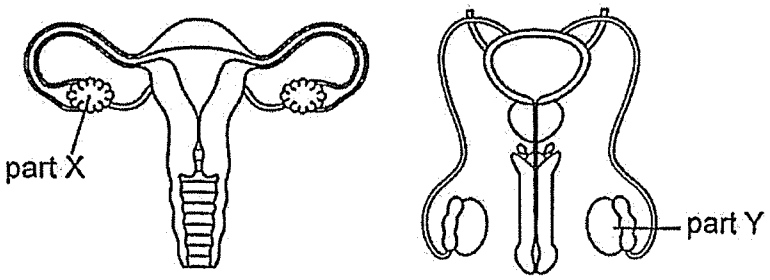


K L M

(c) After some time, which flower(s) can develop into fruits? Explain why. [2]

Score / 4

33. The diagrams show the female and male human reproductive systems.



(a) Based on the diagram above, identify the parts of the systems. [1]

X: _____

Y: _____

(b) State what fertilisation is. [1]

_____

_____

(c) Due to health reasons, an adult male needs to have part Y removed. Will he still be able to have an offspring? Explain why. [1]

_____

_____

Score	/ 3

34. Timmy was hiking up a mountain. He wanted to find out how his breathing rate at rest was affected when he went higher up the mountain.

He recorded his data in the table below.

(a) Complete the table below by writing down a possible reading of Timmy's breathing rate at rest in the box. [1]

Height above sea level (m)	Oxygen level (%)	Breathing rate at rest (breaths per minute)
1500	17	16
2000	16	20
2500	15	
3000	14	24

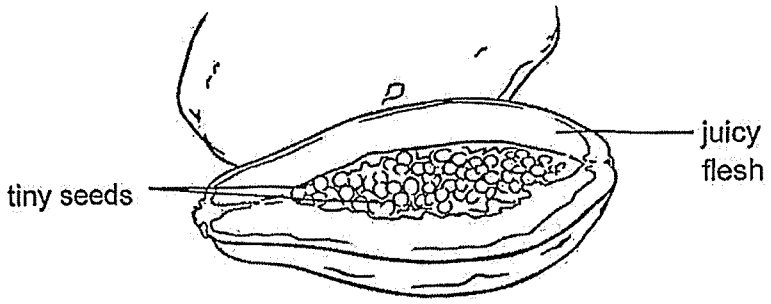
(b) What could Timmy conclude about how his breathing rate at rest was affected by the height above sea level? [1]

(c) Based on the data from the table above, explain your answer in (b). [2]

(d) State how sitting for 30 minutes before measuring his breathing rate at each height helped to make the investigation a fair test. [1]

Score	5

35. The diagram below shows a fruit.



(a) State an advantage of this fruit having many seeds. [1]

_____

_____

(b) Describe how the seeds of this fruit can be dispersed over a wide area. [2]

_____

_____

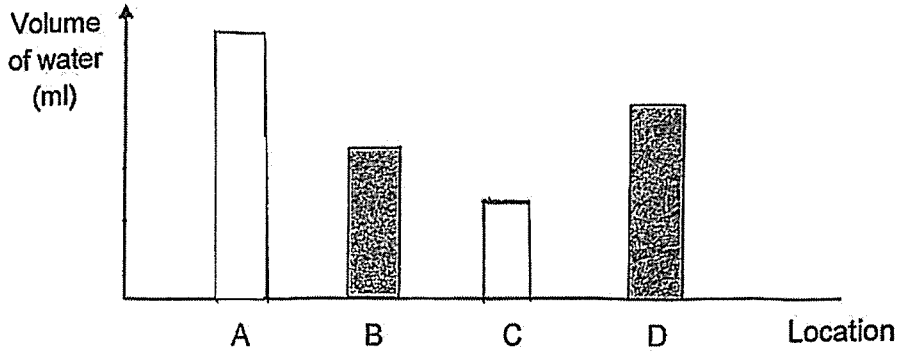
_____

Score 3

36. Four identical containers, filled with the same volume of water, were left in four different locations, A, B, C and D, for 2 hours.

Location	A	B	C	D
Conditions at the location	Cloudy	Cloudy	Sunny	Sunny
	No wind	Windy	Windy	No wind

(a) Complete the bar graph below to show the volume of water remaining in containers A and C after 2 hours. [1]



(b) What is the aim of this experiment? [1]

_____

_____

(c) Based on part (a), in which of the four locations above will wet clothes dry the fastest? Explain why. [2]

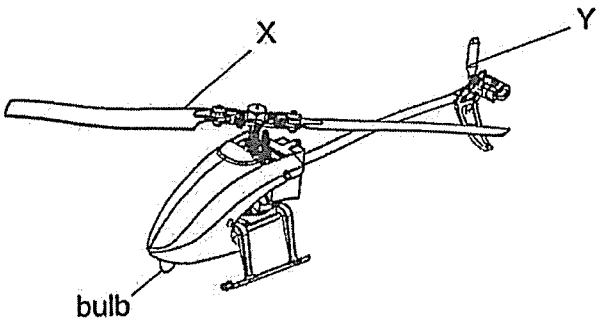
_____

_____

_____

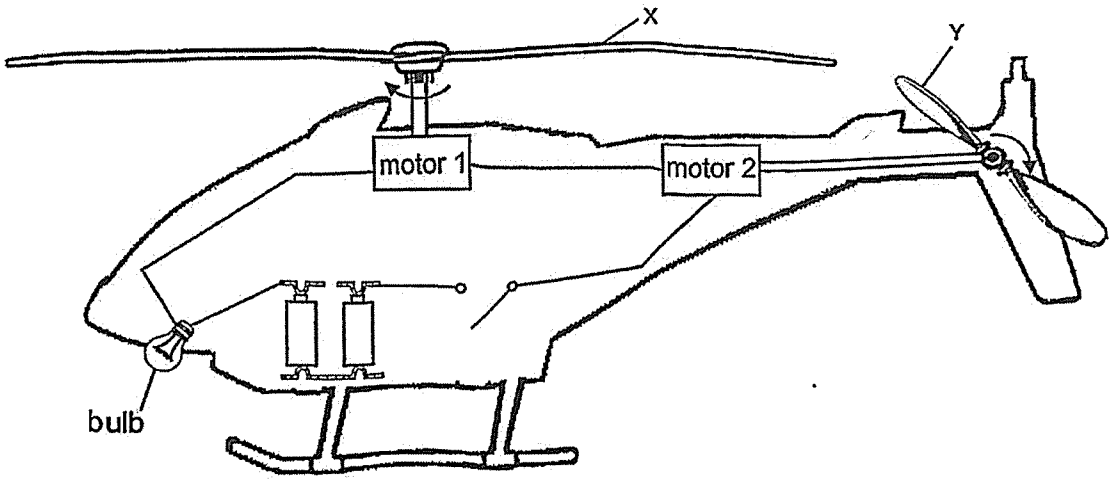
Score	/ 4

37. The diagram below shows a remote-controlled toy helicopter with two propellers, X and Y, and a bulb.



All components in the circuit are in working condition. When the switch is closed, the bulb should light up while X and Y should spin.

However, when Denny closed the switch, the bulb did not light up and both X and Y did not spin. He took apart the toy and saw the electric circuit in the toy as shown below. He knows that motor 1 turns X while motor 2 turns Y if electricity flows through the circuit.



(a) Based on the diagram above, give a reason why the toy is not working. [1]

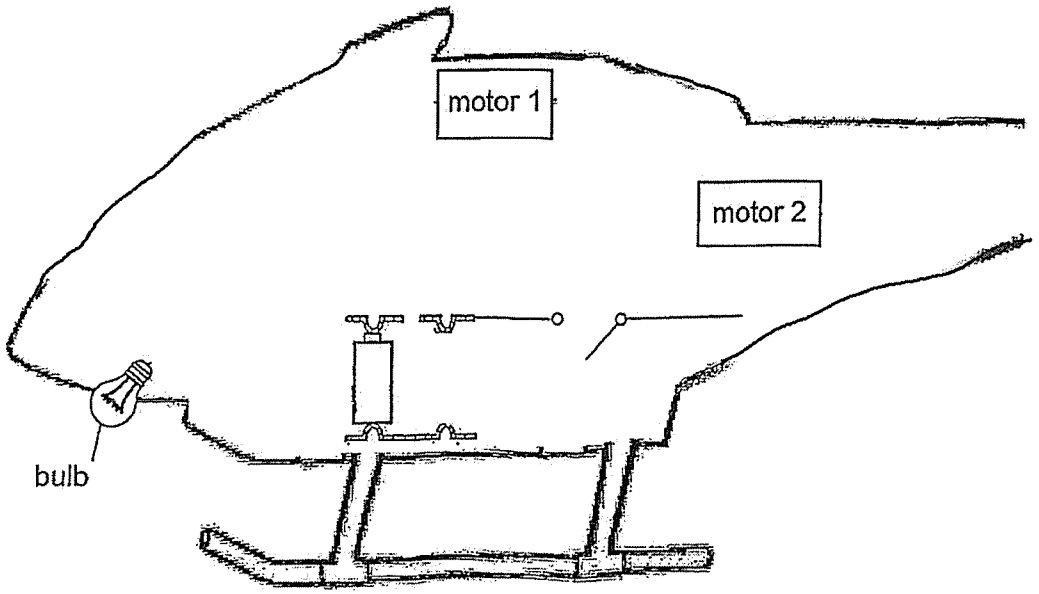
_____

_____

Score / 1

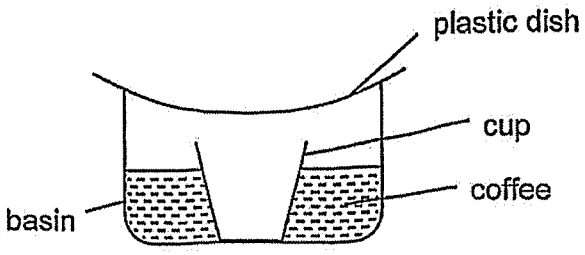
(b) In the diagram below, complete the circuit so that the following conditions are met.

- when the switch is closed, motor 1 will continue to work at the same speed, even if motor 2 is not working.
- The bulb should remain lit at all times when the switch is closed.
- If the bulb is fused, both motor 1 and motor 2 will not work. [3]



Score 3

38. Fred placed a cup into a basin. He poured some coffee into the basin and covered it with a plastic dish. He then placed the basin under the hot sun for a few hours.



After a few hours, Fred found substance F in the cup.

(a) What is substance F? [1]

_____

(b) State the two processes that took place for substance F to be collected in the cup. [1]

_____

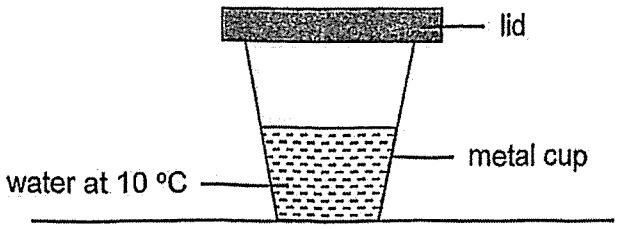
(c) Without changing the plastic dish, suggest a change to the set-up to increase the amount of substance F in the cup within the same duration. [1]

_____

_____

Score 3

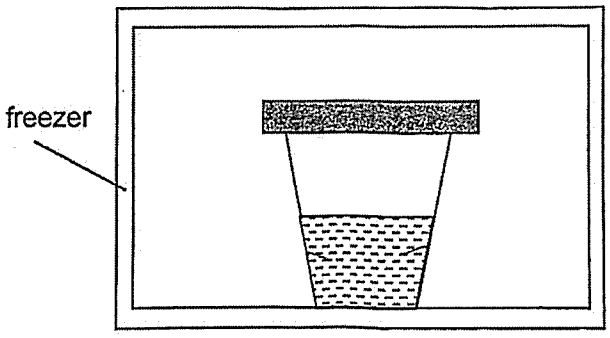
39. A cup of water was placed in a room which was at a temperature of 29°C.



(a) What is the temperature of the water in the cup after a few hours? [1]

_____

(b) The cup was then placed in the freezer where the temperature is below 0°C. In the diagram below, draw using arrows, the direction of heat flow of the water occurring for the first 10 minutes. [1]



(c) What is the state of the water in the cup after a few hours? Explain why. [2]

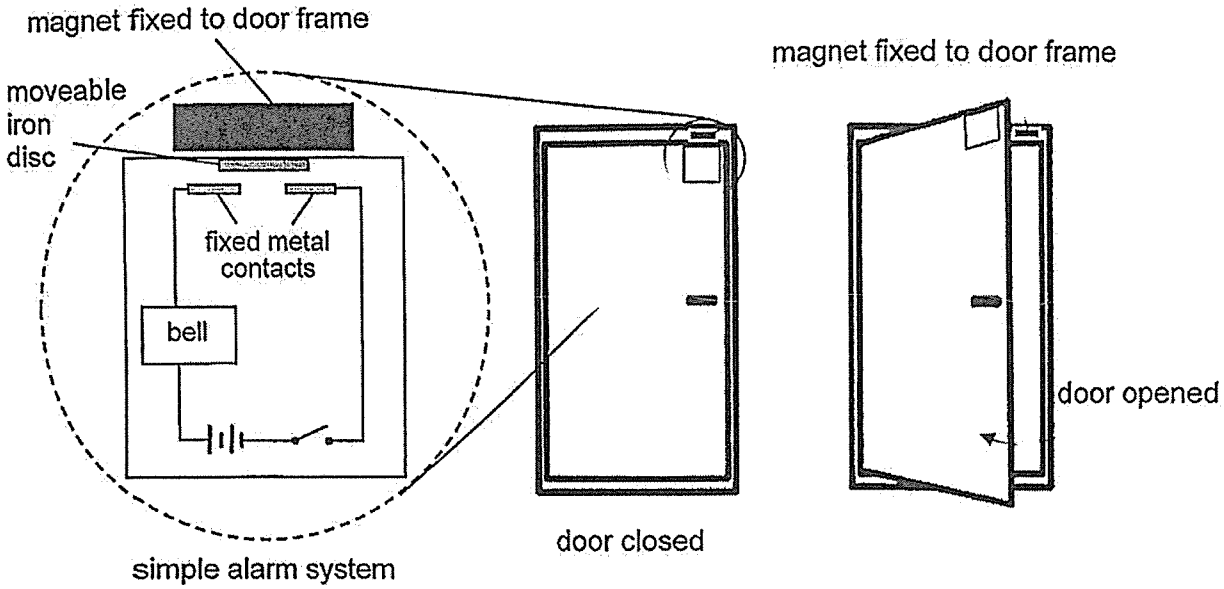
_____

_____

_____

Score 4

40. Gary made a simple alarm system which he installed onto the door and door frame of his office. If the switch is closed, the bell will sound when the door is opened.

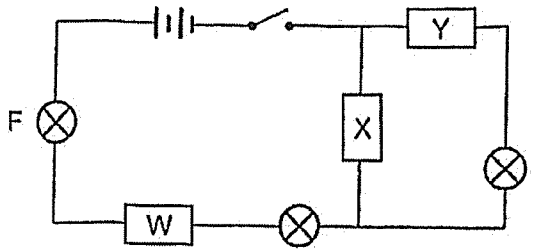


(a) Based on the diagrams above, explain how the alarm system works when a burglar opened the door if the switch is closed earlier on. [2]

(b) Gary wanted to add a bulb to his alarm system. How should Gary connect the bulb to the circuit such that he could be warned by the lit bulb even when the bell is not working? [1]

Score / 3

41. A circuit was set up as shown below, using 3 rods of different materials, W, X and Y. Only one of them is an insulator of electricity. All components of the circuit are in working condition.



(a) When the switch was closed, two bulbs lit up. Complete the table below by writing in rods W, X and Y under the correct group heading. [1]

Conductor of Electricity	Insulator of Electricity

(b) What would happen to the brightness of bulb F if another bulb is added in series to it? Explain why. [2]

_____

_____

(c) If rod W was replaced with a plastic rod, how many bulbs would light up? Explain why. [1]

_____

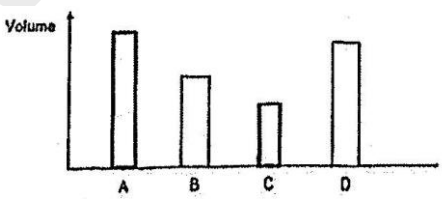
_____

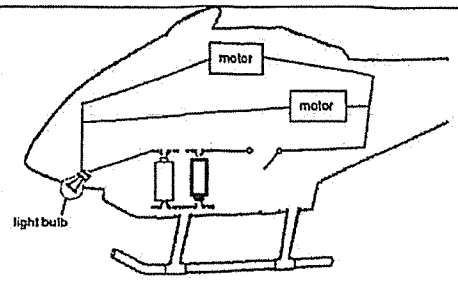
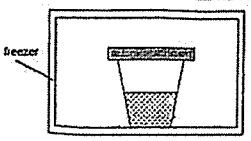
Score	/ 4

End of Paper

SCHOOL : TAO NAN PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : 2025 END OF YEAR EXAMINATION

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

31 (a)	-The grasshopper has a 3-stage life cycle but the mosquito has a 4-stage life cycle. OR-The mosquito has a larval / pupal stage but the grasshopper does not. OR-The young of the grasshopper resembles (looks like) the adult but the young of mosquito does not.
31 (b)	beetle/ moth/ butterfly
32 (a)	Pollination is the process where pollen (grains) are transferred from the anther to the stigma.
32 (b)	Insect-pollinated / Animal-pollinated. The large, brightly coloured petals will attract the pollinators/bees/insects/animals. OR The sticky stigma will trap/capture the pollen grains (that is stuck/attached to the pollinators).
32 (c)	Flower K and L. Both flowers have the presence of the stigma AND the ovary/ovule or female parts. Hence, fertilisation can take place.
33 (a)	X: ovary/ovaries Y: testis/testes
33 (b)	Fertilisation is the process where the egg (female reproductive cell) fuses with the sperm (male reproductive cell).
33 (c)	Yes. There is still one more testis/part Y that can produce/release sperms.
34 (a)	Any number between 20 and 24.
34 (b)	As the height above sea level increases, Timmy's breathing rate increases.
34 (c)	The greater the height above sea level, the oxygen level decreases/drops. Hence, Timmy needs to breathe faster for his body to receive sufficient/more/enough oxygen.
34 (d)	To allow his breathing rate to go back/return to resting rate/normal breathing rate.
35 (a)	To increase the chances of seeds germinating/growing into adult plants.
35 (b)	The animals will eat the flesh of the fruits, and the (indigestible) seeds will be passed out from its droppings as they move/fly/travel.
36 (a)	

Qn	Suggested Answer
36 (b)	To find out how the rate of evaporation (of water) is affected by presence of wind AND the temperature of the surroundings. OR To find out what are the best conditions for rate of evaporation.
36 (c)	C: Location C. E: There is the least volume of water in the container. R: The presence of wind/windy and the higher temperature of the surroundings/sunny increase the rate of evaporation of water from the wet clothes.
37 (a)	One of the batteries is placed wrongly/ in the wrong way.
37 (b)	
38 (a)	(Pure) water
38 (b)	Evaporation and condensation
38 (c)	*(Either have cooler surface to increase condensation or increase the rate of evaporation)* -Place some ice on the plastic dish. OR -Use coffee that is of a higher temperature. OR -Add a flame/heat source below the basin.
39 (a)	29°C/room temperature
39 (b)	
39 (c)	Solid. The (warmer) water in the cup will lose heat to the (surrounding) air in the freezer until it reaches its freezing point/become ice/freezes.
40 (a)	When the door is opened, the magnet (attached to the door frame) will no longer attract the iron disc. The iron disc will (fall and) come into contact with the metal contacts, forming a closed circuit/causing electricity to flow in the circuit and sounding the bell.
40 (b)	He should connect the bulb in parallel to the bell.
41 (a)	Conductor of electricity – W and X Insulator of electricity - Y
41 (b)	Bulb F will become dimmer. Less electricity or electric current is flowing through the bulbs.
41 (c)	None/0. Plastic is an insulator of electricity.