RED SWASTIKA SCHOOL

SCIENCE
2025 END OF YEAR EXAMINATION
PRIMARY 5

Name : _____ ( )

Class : Primary 5/ _____

Date : 24 October 2025

BOOKLET A

Total time for Booklets A & B: 1h 45 min

Booklet A: 30 questions (60 marks)

Note:

1. Do not open the booklet until you are told to do so.
2. Read carefully the instructions given at the beginning of each part of the booklet.
3. Do not waste time. If the question is too difficult for you, go on to the next question.
4. Check your answers thoroughly and make sure you attempt every question.
5. In this booklet, you should have the following:
   a. Page 1 to Page 23
   b. Questions 1 to 30

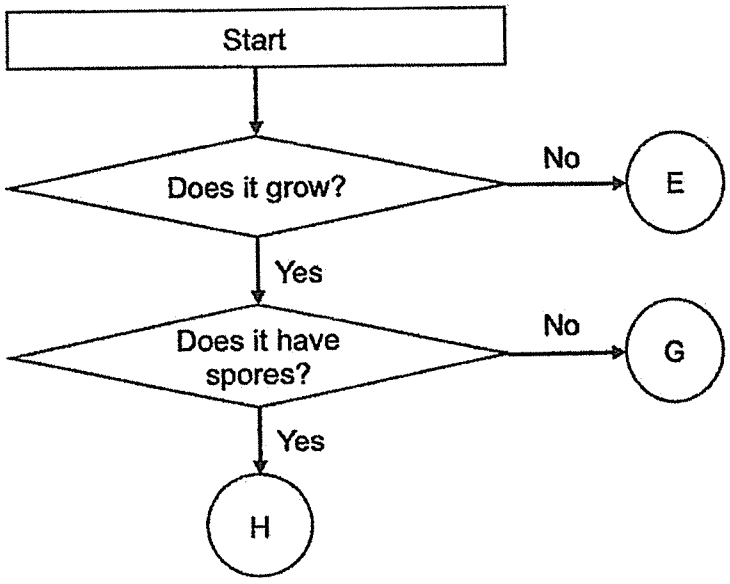
For Questions 1 to 30, choose the most suitable answer and shade its number in the OAS provided.

1 Bob wrote four statements about living things.

A All living things reproduce.
B All living things respond to changes.
C All living things can make their own food.
D All living things need air, food and water to survive.

Which statement(s) is/are correct?
(1) D only
(2) A and B only
(3) A, B and D only
(4) A, B, C and D

2 Study the flow chart below.



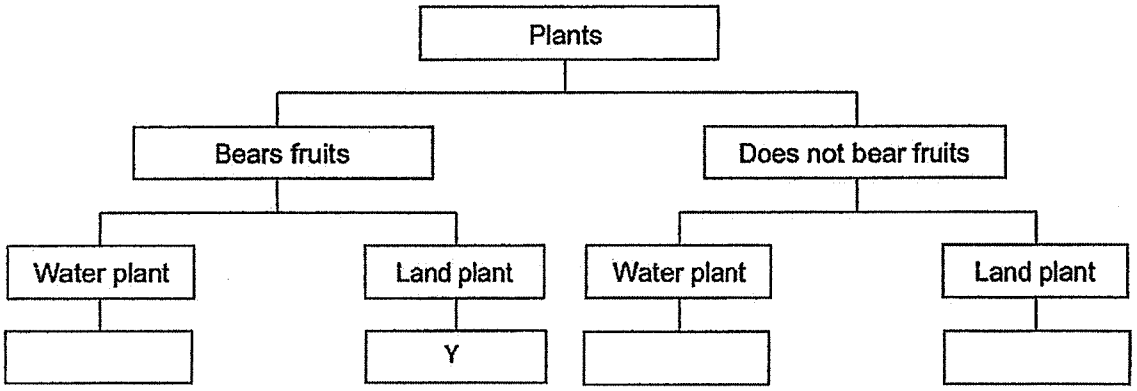
Which statement is correct?

(1) G is a fern.
(2) E is a living thing.
(3) H is a flowering plant.
(4) G reproduces by seeds.

3 The following table gives information on four plants, J, K, L and M, based on two characteristics. A tick (✓) shows that the characteristic is present.

Characteristics	Plant			
	J	K	L	M
Have flowers	✓	X	✓	X
Grows on land	X	✓	✓	X

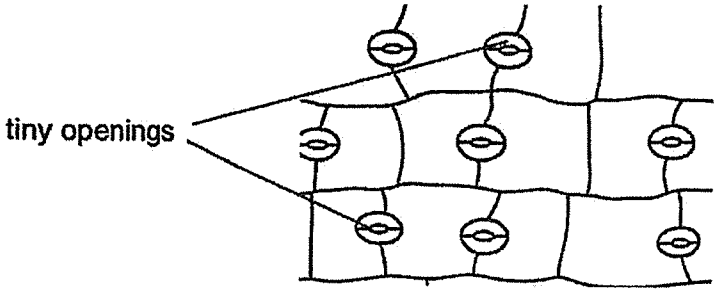
From the information in the table above, the plants are classified as shown below.



Which plant, J, K, L or M, can be classified as Y?

(1) J
(2) K
(3) L
(4) M

4 The diagram below shows part of a leaf of a plant when viewed under a microscope.



Fairuz made three statements about the tiny openings.

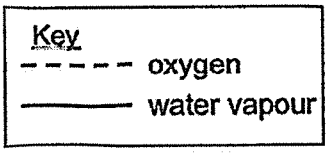
A They absorb water for the plant.
B They release carbon dioxide only.
C They allow the leaf to take in food.

Which of the following statement(s) about the tiny openings is/are correct?

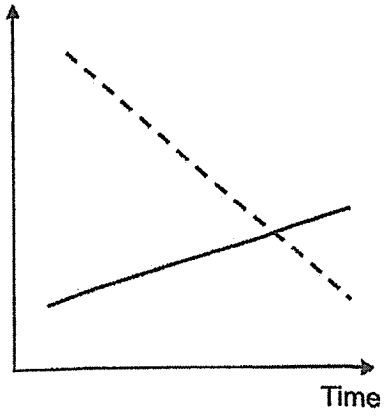
(1) A only
(2) B and C only
(3) All of the above
(4) None of the above

5 A group of students were trapped in a lift. After one hour, they felt very uncomfortable as the types of gases in the air in the lift had changed.

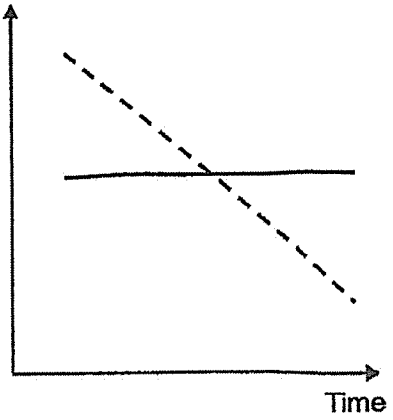
Which of the following graphs shows correctly the change in the amount of the types of gases in the air after being trapped in the lift for one hour?



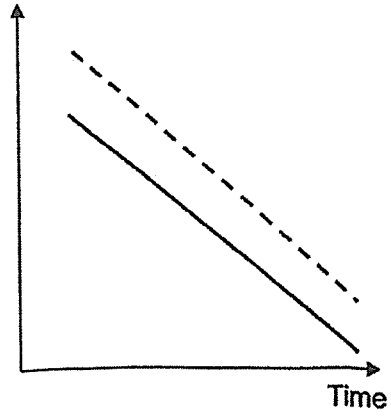
(1)



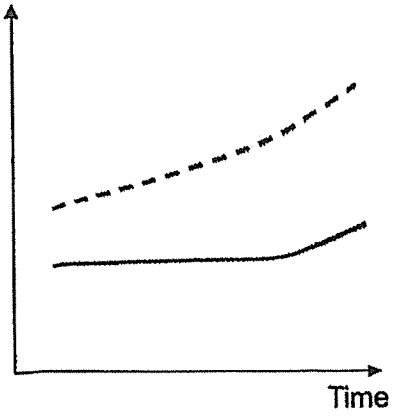
(3)



(2)



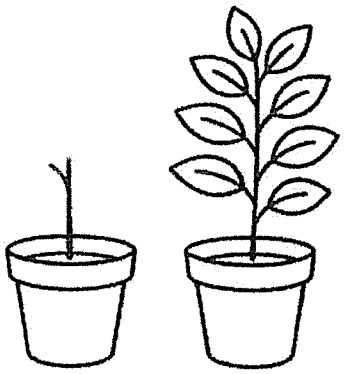
(4)



6 Which statement about cells is **not** correct?

(1) Cell is a basic unit of life.
(2) An egg cell is produced in the testis.
(3) Humans are made up of multiple cells.
(4) The male reproductive cell in flowers is produced in the anther.

7 Jamie placed 2 identical pots of plant, J and H, in her school garden. She removed all the leaves from plant J as shown below.



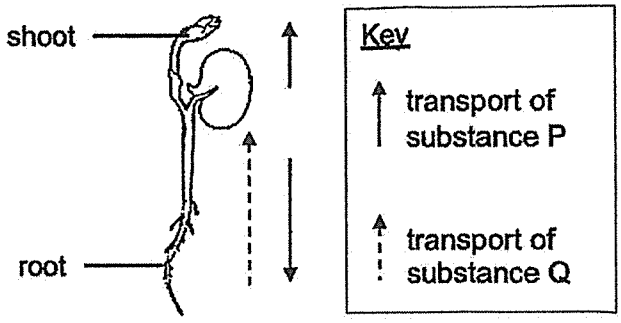
Plant J Plant H

She watered them daily. After a week, one plant died while the other remained healthy and alive.

Which plant died and why?

	Plant that died	Reason
(1)	J	The plant could not absorb enough water from the soil.
(2)	J	The plant do not have leaves to trap sunlight to make food.
(3)	H	The plant could not transport water to the leaves.
(4)	H	The root of the plant stopped growing because of the sunlight.

8 The diagram below shows a seedling. The arrows show the transportation of substances P and Q inside the seedling.



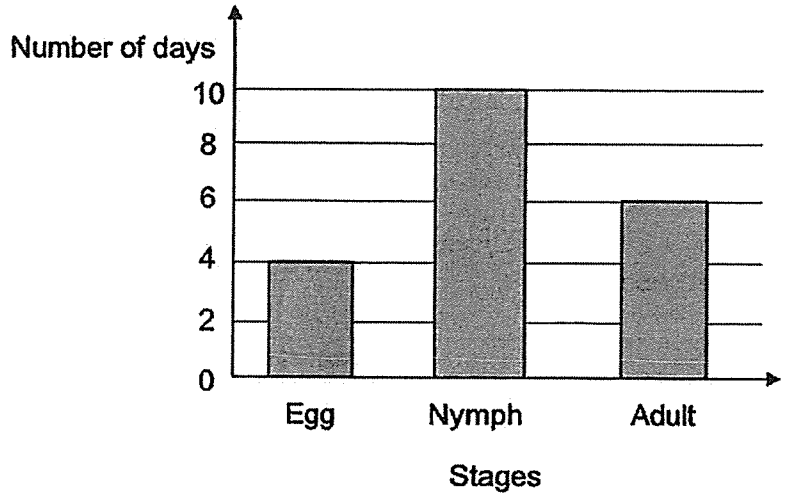
Based on the diagram, which of the following is correct?

	Substance P	Substance Q
(1)	food	water
(2)	water	food
(3)	food	food
(4)	water	water

9 Which of the following is similar in the sexual reproduction of humans and flowering plants?

(1) Both involve fertilisation of the ovule.
(2) Both involve pollination and fertilisation.
(3) Both male reproductive cells are called pollen.
(4) Both involve the fusion of male and female reproductive cells.

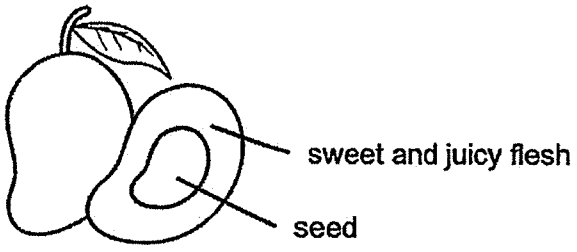
10 The graph below shows the number of days in each stage of the life cycle of an insect.



Based on the graph, which of the following statements about the insect is true?

(1) The insect lives for 10 days.
(2) The insect is in the adult stage for 6 days.
(3) There are 2 stages in the life cycle of the insect.
(4) It takes 12 days for the insect to become an adult.

11 The diagram below shows some mango fruits. One of the fruits was cut in half.



Which of the following statements is correct?

(1) The fruit is dispersed by wind.
(2) The plant reproduces by spores.
(3) The flesh is formed from the ovary of the flower.
(4) The seed is formed from many ovules of the flower.

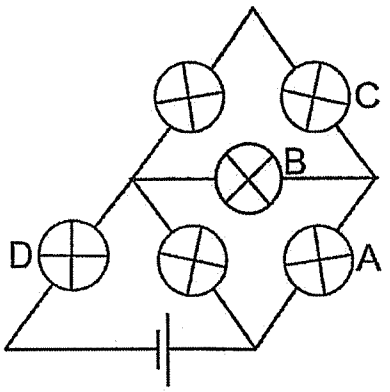
12 Moira performed an experiment using two flowers from the same plant.
He removed one part from flower Y and one part from flower Z.
After some time, he recorded which flower could form a fruit.

flower	presence of fruit
Y	yes
Z	no

Which of the following correctly shows the part of each flower that has been removed?

	Part removed	
	Flower Y	Flower Z
(1)	petal	ovary
(2)	anther	petal
(3)	ovary	stigma
(4)	stigma	anther

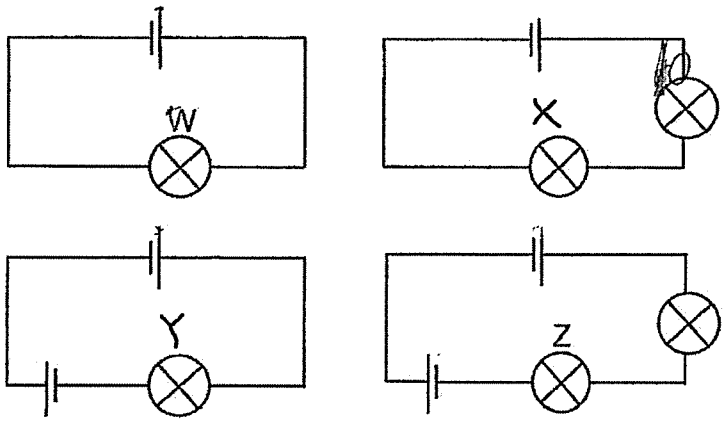
13 Study the circuit.



When one bulb was blown, the other bulbs did not light up.
Which bulb was blown?

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

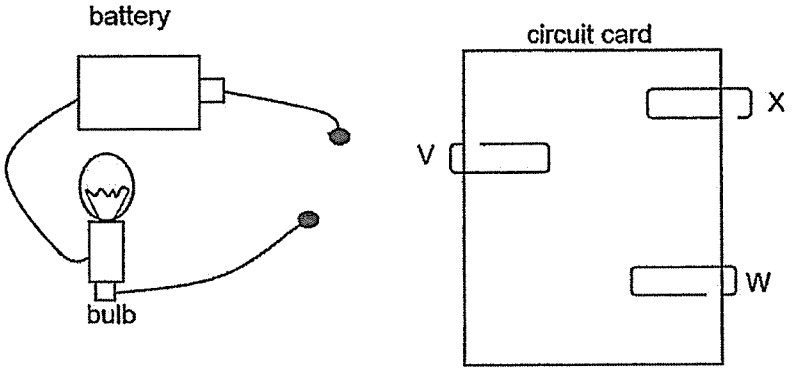
14 In the four circuits, all the bulbs and batteries are new and identical.



Which of the following two bulbs have the same brightness?

(1) W and Y
(2) W and Z
(3) X and Y
(4) X and Z

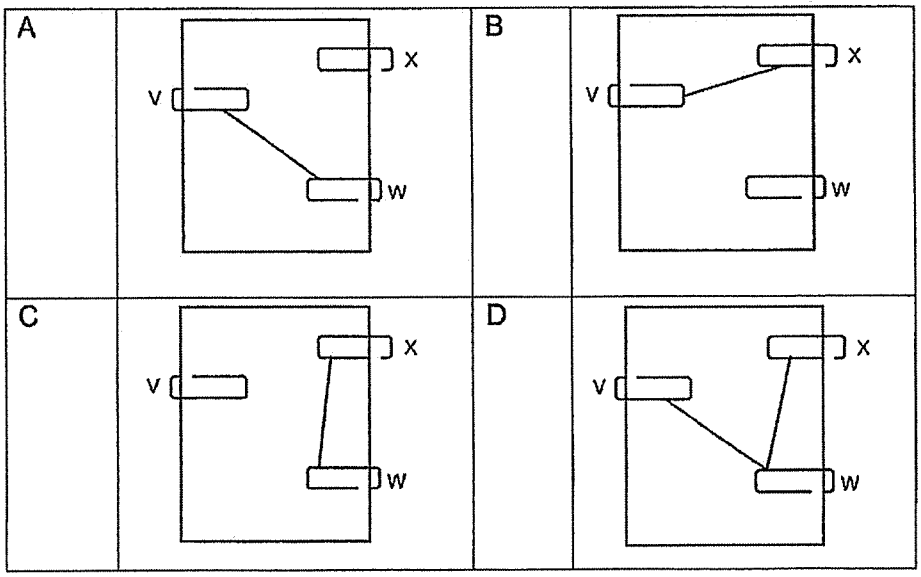
15 The diagram shows a circuit tester and the top view of a circuit card with three steel clips, V, W, and X. The steel clips are connected with wires on the underside of the circuit card.



The table shows the results when the circuit tester is connected to two of the steel clips.

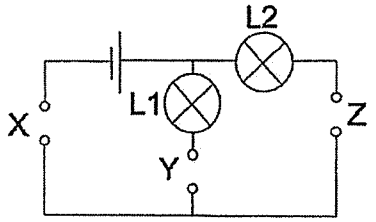
Circuit tester is connected to			
V	**W**	**X**	**Does the bulb light up?**
√	√		No
√		√	Yes
	√	√	No

Which of the following is/are possible on the underside of the circuit card?



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

16 Alex had three rods, S, T and U, made of different materials. He placed them in various positions, X, Y and Z, as shown in the circuit below.



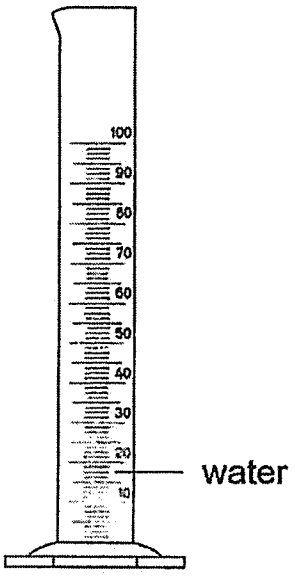
The table below shows the results of his experiment. A tick (✓) in the box indicates that the light bulbs L1 and L2 were lit.

Position where rod was placed			Light bulbs	
X	Y	Z	L1	L2
S	T	U	✓	
U	S	T		
T	U	S		✓

Which of the statements is true?

(1) Rod T is an electrical insulator.
(2) Only rod S is an electrical conductor.
(3) Rods S and T are electrical conductors.
(4) Rods T and U are electrical conductors.

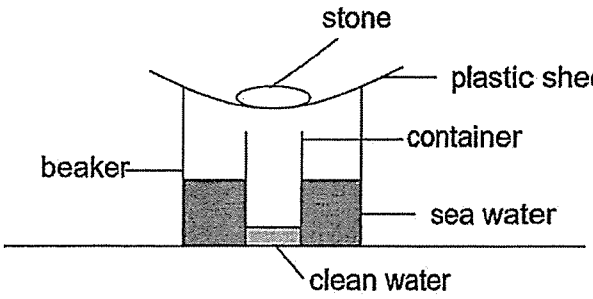
17 The volume of an object can be measured using a measuring cylinder. The object is first placed into the water. Then the change in the water level is observed.



Which object cannot have its volume measured using the above method?

(1) dried leaf
(2) metal ring
(3) small stone
(4) button magnet

18 Sally used the set-up below to collect clean water from sea water.

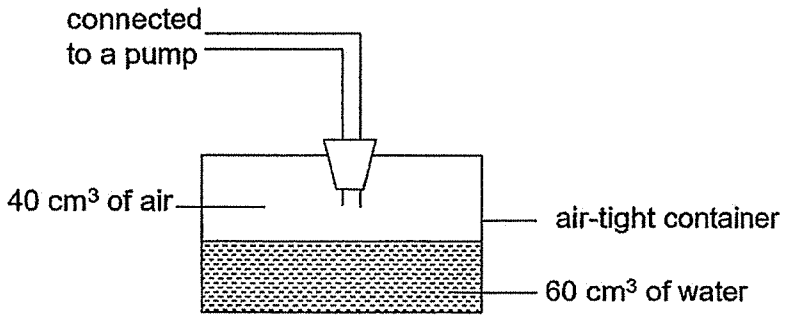


Which of the following will help her to increase the amount of clean water she can collect?

A Add ice cubes to the plastic sheet.
B Use a bigger piece of plastic sheet.
C Using sea water that is at a higher temperature.
D Replace the container with another container that is wider.

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

19 Study the set-up. The volume of the container is 100 cm^3.



Using the pump, another 20 cm^3 of water and 15 cm^3 of air are added into the container. What is the final amount of air in the container?

(1) 15 cm^3
(2) 20 cm^3
(3) 55 cm^3
(4) 80 cm^3

20 The freezing points and boiling points of four substances, A, B, C and D, are as shown.

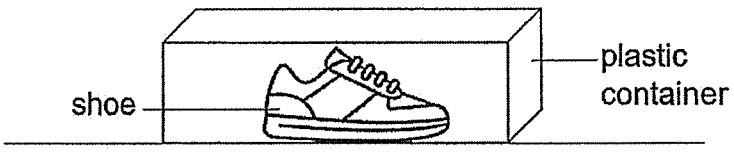
Substance	Freezing point (°C)	Boiling point (°C)
A	below 0	40
B	35	60
C	8	20
D	15	200

Mary has a closed container of volume 80 cm^3. She stored 100 cm^3 of a substance in the container at 28 °C.

Which substance did she store in the container?

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

21 Mingxin was able to see his shoe inside a plastic container.

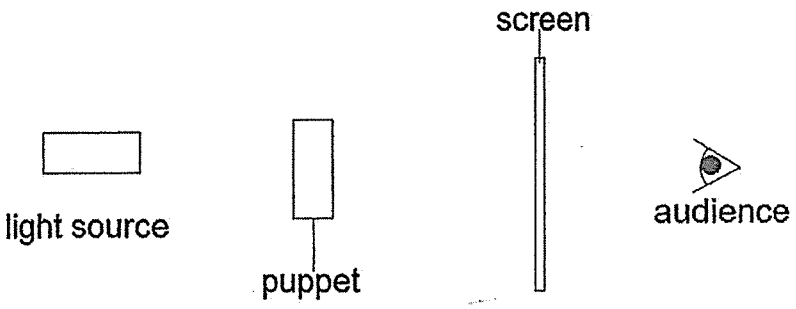


Which of the following explains why he was able to see the shoe?

A There is light falling onto the shoe.
B The shoe reflects light into Mingxin's eyes.
C Light from Mingxin's eyes falls onto the shoe.
D The plastic container allows light to pass through.

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

22 Study the diagram.

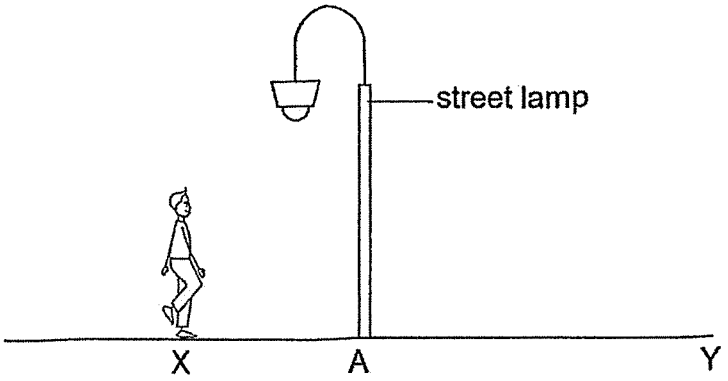


Which action will cause the shadow on the screen to be bigger?

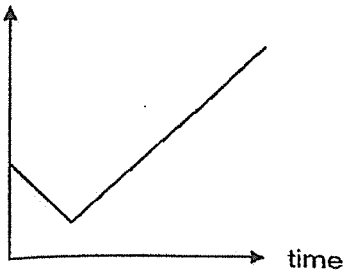
A Move the screen further from the puppet.
B Move the puppet closer to the light source.
C Move the audience further from the screen.
D Move the light source further away from the puppet.

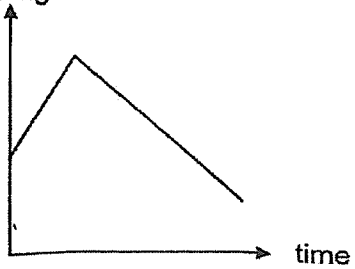
(1) A and B only
(2) A and C only
(3) B and C only
(4) A, B and D only

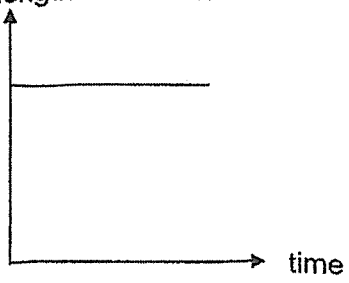
23 A man was walking down a street from X to Y. There was a street lamp at position A.

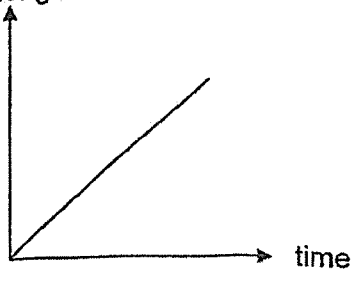


Which graph shows how the length of his shadow changed during this time?

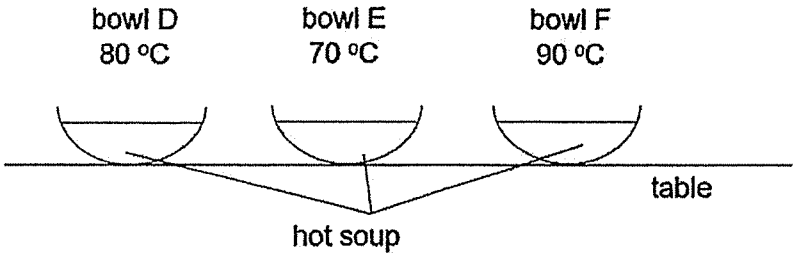
(1)


(2)


(3)


(4)


24 Three similar bowls, D, E and F, each containing the same amount of hot soup are placed on the table in the same room.

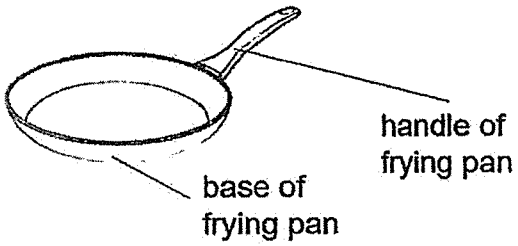


Which statements are correct?

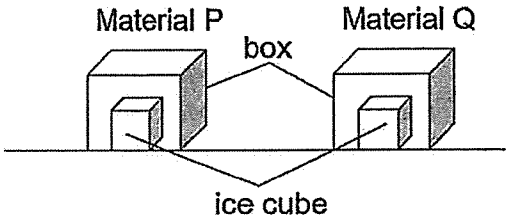
A The hot soup in bowl E has the highest temperature.
B The hot soup in bowl F has the most amount of heat.
C The hot soup in the three bowls has the same amount of heat.
D The hot soup in the three bowls will lose heat to the surroundings.

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

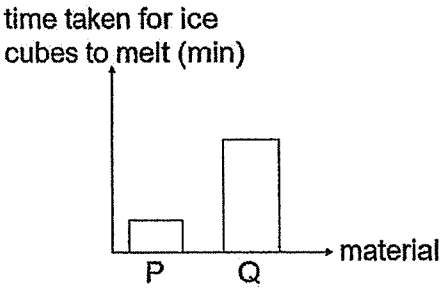
25 A company wanted to select materials to make the handle and the base of a frying pan.



The worker in the company covered two ice cubes with two boxes made of different materials. He measured and recorded the time taken for the ice cubes to melt.



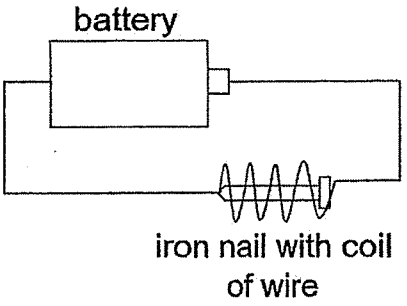
The results are shown in the graph below.



Which material should the company select for the handle and the base of a frying pan?

	Handle of frying pan	Base of frying pan
(1)	P	P
(2)	P	Q
(3)	Q	Q
(4)	Q	P

26 The diagram shows an electromagnet.

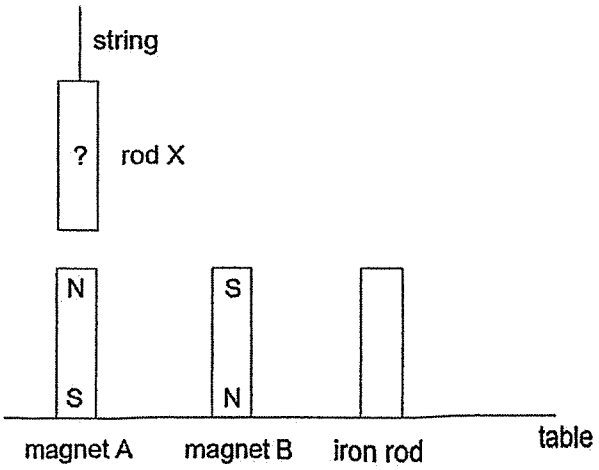


Which of the following will increase the strength of the electromagnet?

A Increase the length of the wire.
B Increase the number of batteries.
C Change the direction of the battery.
D Increase the number of coils of wire around the iron nail.

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

27 Carrie placed two magnets and one iron rod in the positions shown below. She tied rod X to a string and brought it near magnets A, B and the iron rod and observed what happened. She repeated the experiment for rod Y.

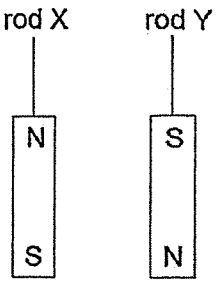


She recorded her observations in the table below. A tick (✓) indicates that there was attraction between the two objects.

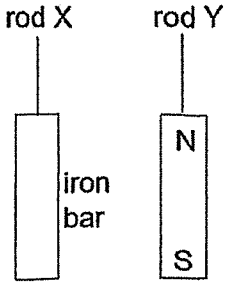
Rod	Magnet A	Magnet B	Iron rod
X			
Y			

Which of the following shows the bars for rods X and Y?

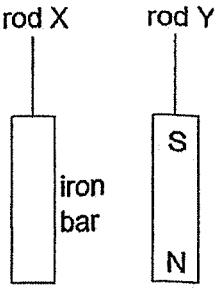
(1)



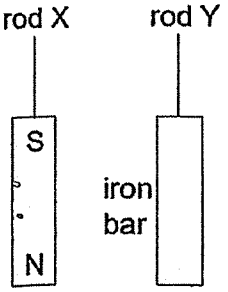
(2)



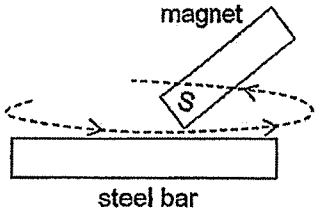
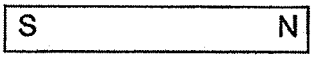
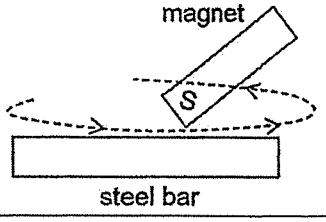
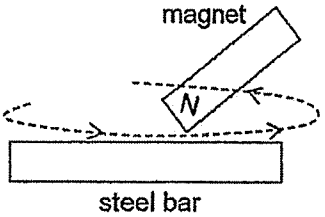
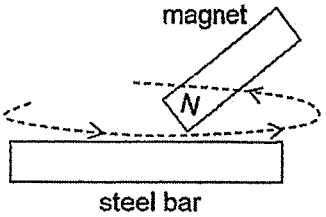
(3)



(4)



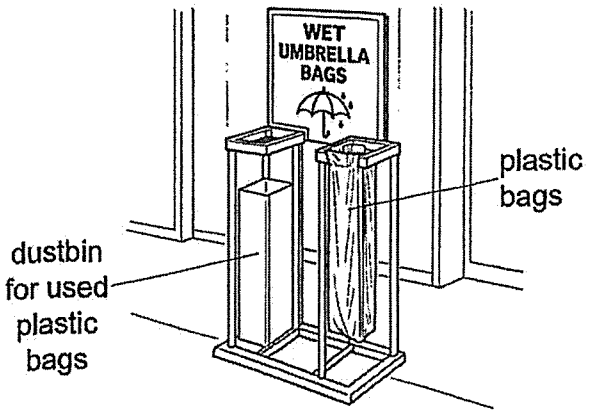
28 Guoling conducted an experiment using a bar magnet to magnetise a steel bar and made the following conclusion, "The poles of magnetized steel bar will change if I use the opposite pole of the magnet to stroke steel bar."

	Setup	Outcome
A		 magnetised steel bar
B		 magnetised steel bar
C		 magnetised steel bar
D		 magnetised steel bar

Which pairs of diagrams support her conclusion?

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

29 Plastic bags for wet umbrellas are often provided at the entrances of shopping malls to keep the floor dry on rainy days.

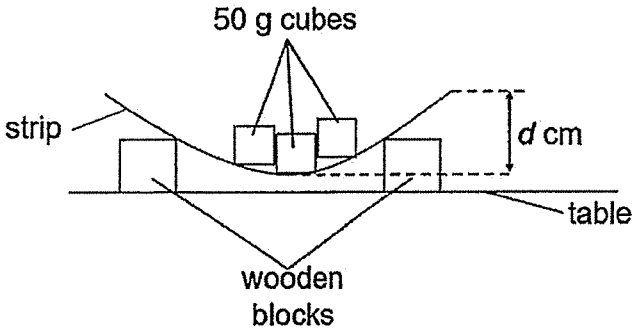


Which two of the following are the most important properties that these plastic bags must have?

(1) light and waterproof
(2) light and transparent
(3) flexible and waterproof
(4) flexible and transparent

30 Faiz set up an experiment as shown below to investigate a property of three strips, L, M and N, made of different materials.

He added 50 g cubes onto each strip until *d* was 3 cm.



Based on his results, he concluded that strip N was the most flexible and strip L was the least flexible.

Which of the following results did he observe in order to arrive at his conclusion?

	Number of 50 g cubes added		
	L	**M**	**N**
(1)	3	5	8
(2)	3	8	5
(3)	5	8	3
(4)	8	5	3

RED SWASTIKA SCHOOL

RED SWASTIKA SCHOOL

SCIENCE
2025 END OF YEAR EXAMINATION
PRIMARY 5

Name : _____ ( )

Class : Primary 5/ _____

Date : 24 October 2025

BOOKLET B

10 Questions
40 Marks

In this booklet, you should have the following:
a. Page 24 to Page 34
b. Questions 31 to 40

MARKS

	OBTAINED	POSSIBLE
BOOKLET A		60
BOOKLET B		40
TOTAL		100

Parent's Signature : _____

Answer all the questions in the spaces provided.

31 An individual who suffers from asthma would feel shortness of breath as less oxygen enters the lungs when breathing in. While having this illness, Maya realised that her heartbeat was faster.

Maya measured the amount of oxygen in the air she breathed in and out.

(a) Would the amount of oxygen in the exhaled air increase, decrease or remain the same as inhaled air? (1m)

_____

(b) Explain why Maya's heartbeat was faster when she has an asthma attack. (2m)

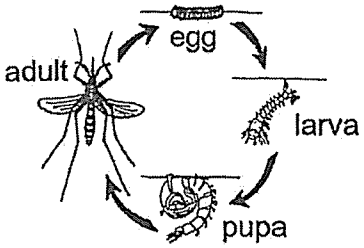
_____

_____

_____

3

32 Jane kept some mosquitoes at different temperatures of water. She observed the time taken for each stage of development in the mosquito's life cycle at the different temperatures.



She recorded her results in the table below.

Stage in life cycle	Duration of stage at different temperature of water (days)			
	20°C	25°C	30°C	35°C
Egg	3	3	2	2
Larva	8	7		6
Pupa	4	3	3	2

(a) Based on the information given above, state the relationship between the length of time taken for a mosquito to develop into an adult and the temperature of water. (1m)

_____

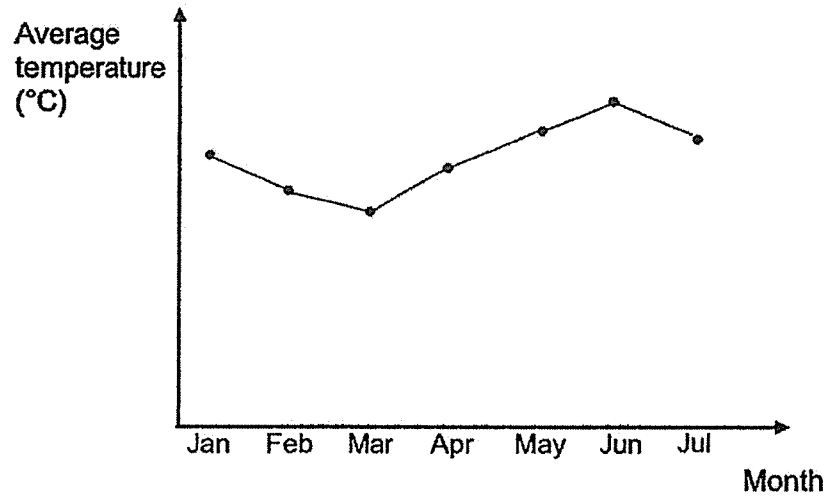
_____

(b) Based on the information above, at which temperature of water will the mosquito take the longest time to develop into an adult? (1m)

_____

2

The graph below shows the temperature recorded at Country X from January to July.



(c) Based on the information given in the table and graph above, in which month will the number of adult mosquitoes most likely be the highest? Explain your answer. (2m)

_____

_____

Female mosquitoes bite and spread dengue fever but not male mosquitoes. When a male mosquito carrying bacteria Y mates with a female mosquito, the eggs laid by the female mosquito will not hatch.

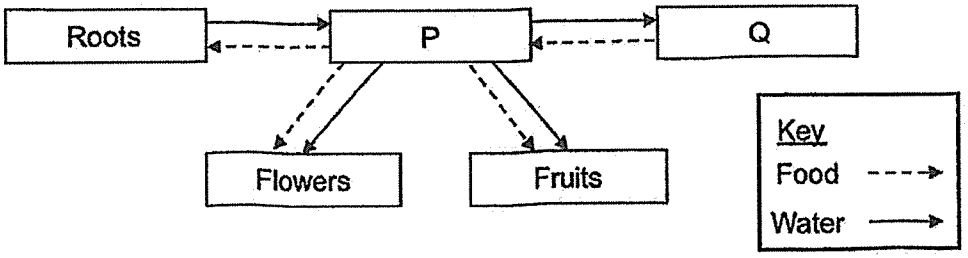
(d) Some male mosquitoes carrying bacteria Y were released into Country X. The number of dengue cases decreased after the release of these male mosquitoes. Explain why. (2m)

_____

_____

4

33 The diagram below shows how substances are transported in a plant. P and Q represent different parts of the plant. The arrows represent the movement of food and water.

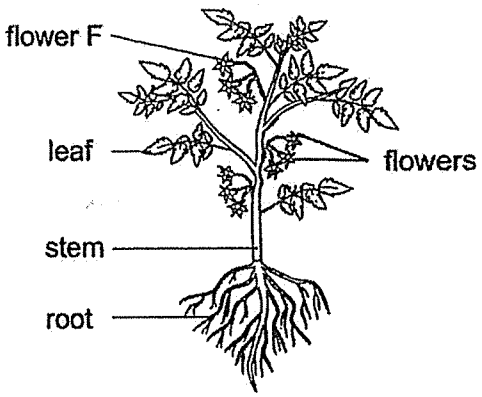


(a) Identify parts P and Q. (2m)

P _____

Q _____

The diagram below shows a tomato plant.



Kylie decided to remove all flowers from the plant except flower F. After a few days, she realised that flower F became bigger.

(b) Explain why flower F became bigger. (2m)

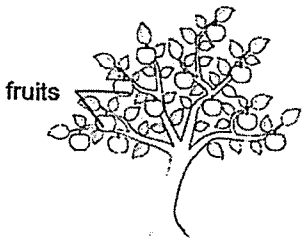
_____

_____

_____

4

34 The diagram below shows plant Z.



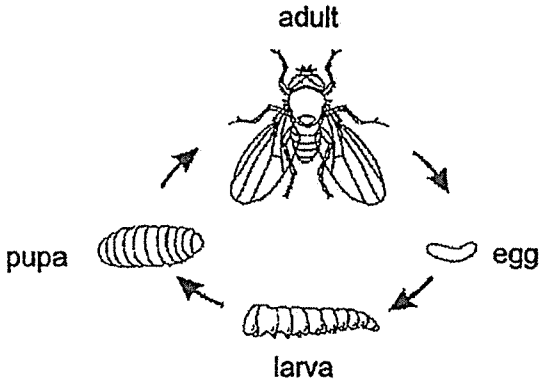
(a) Name the process where pollen grains is transferred from an anther to a stigma of a flower. (1m)

_____

(b) Describe the process of fertilisation. (1m)

_____

Study the diagram shown. The larva of organism A is often found eating the flowers of plant Z. Organism A is a pest and harms the flowers of plant Z.



Life cycle of organism A

During the year, there was an increase in the number of eggs laid by organism A.

(ci) What will happen to the number of fruits produced by plant Z? (1m)

_____

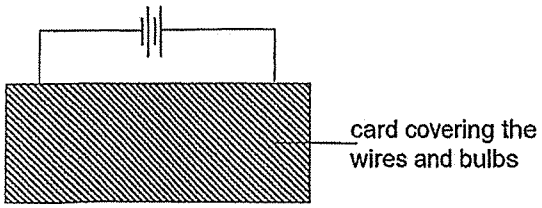
(cii) Explain your answer in part (i). (2m)

_____

_____

5

35 Kenneth constructed a circuit with identical batteries and four bulbs P, Q, R and S. He covered the wires connecting the bulbs with a card as shown.



All the bulbs lit up. He then replaced one bulb from the circuit each time with an eraser and observed the rest of the bulbs.

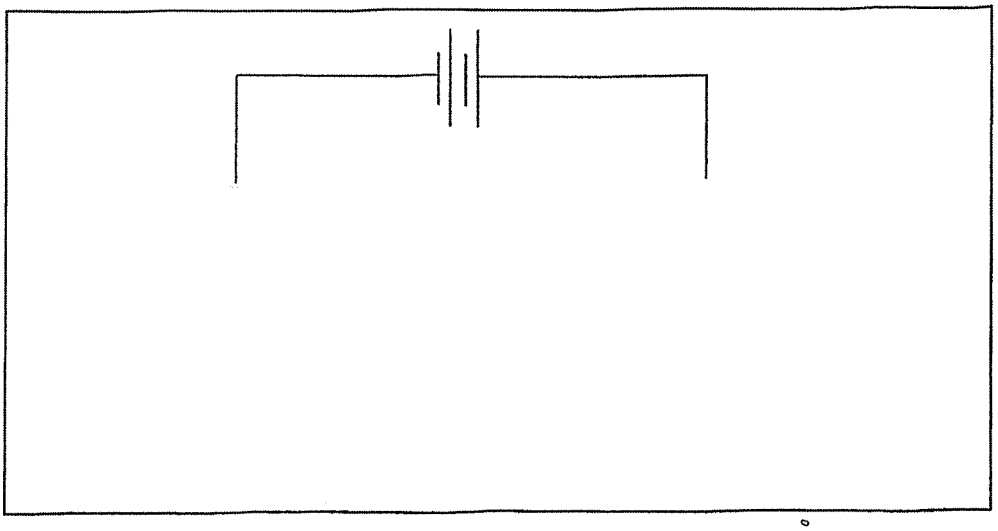
His observations are shown below.

Bulb replaced by eraser	Bulb(s) lit
P	None
Q	P, R and S
R	P, Q and S
S	None

(a) Explain why the bulbs lit up in the circuit. (1m)

_____

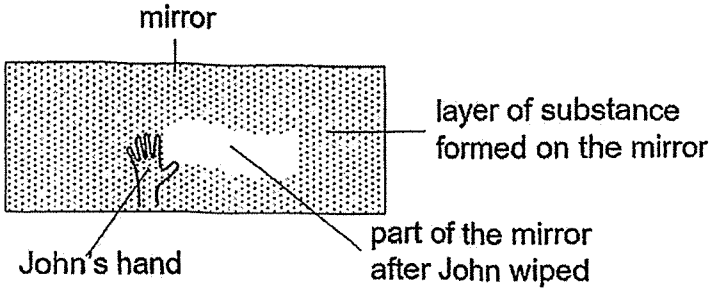
(b) Complete the circuit diagram using wires to show how the four bulbs are connected. (2m)



(c) Give an advantage of using a switch in an electrical circuit. (1m)

_____

36 After John took a warm shower, he noticed a layer of substance formed on the mirror in the bathroom, causing the mirror to be fogged. The substance was removed after John wiped his hand on the mirror.



John opened his bathroom door and he noticed that the layer of substance disappeared after a short while.

(a) Name the process that caused the layer of substance on the mirror to disappear after John opened his bathroom door. (1m)

_____

(b) Explain how the layer of substance formed on the mirror during John's warm shower. (2m)

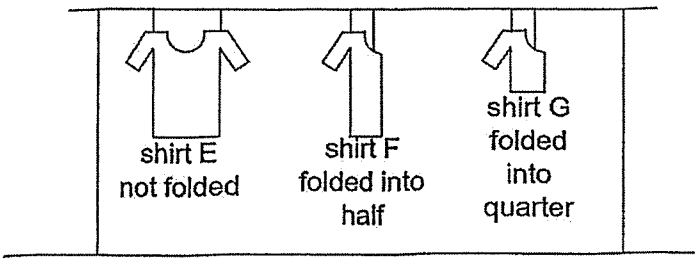
_____

_____

_____

3

37 Eva conducted an experiment using three identical shirts, E, F and G, with a mass of 100 g each. She soaked the shirts in water and the mass of each shirt was 200 g after being soaked in water. She then hung the shirts to dry in her house as shown below.



She measured the mass of the shirts after two hours. Her results are recorded in a table below.

	Shirt		
	E	**F**	**G**
Mass (g)	?	150	190

(a) State a possible mass of shirt E after three hours. (1m)

_____

(b) Eva repeated the experiment above without shirt G. She wanted to investigate how temperature of the surrounding affects how quickly the shirts E and F will take to dry.

What are two changes she needs to make to the current setup after shirt G is removed? (2m)

Change 1: _____

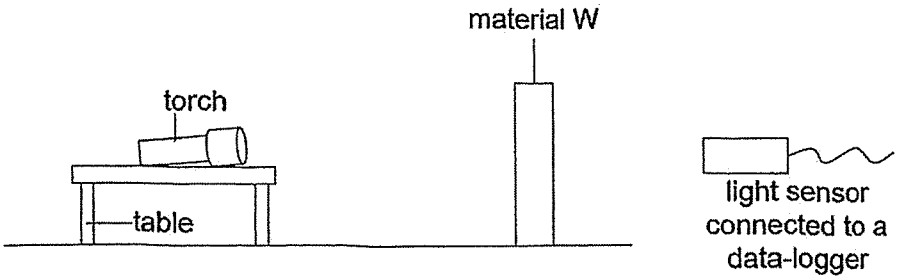
_____

Change 2: _____

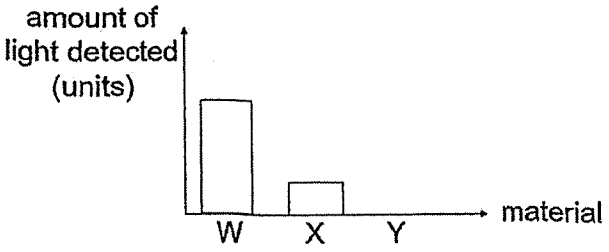
_____

3

38 The experiment was set up in a dark room as shown.



Light from the torch was shone onto material W and the amount of light detected by the light sensor was measured. The experiment was repeated with different materials, X and Y, and the readings on the light sensor were recorded in a graph below.



(a) Explain why there was a shadow formed when an object was placed between the torch and material W. (1m)

_____

(b) Which material is the most suitable to be used to make the lenses of a pair of sunglasses. Explain your answer. (1m)

_____

_____

2

39 The table below shows how the length of a tile made of material V changes with temperature of the surrounding.

Temperature of the surrounding (°C)	28	30	32	34
Length of tile (mm)	6	8	10	12

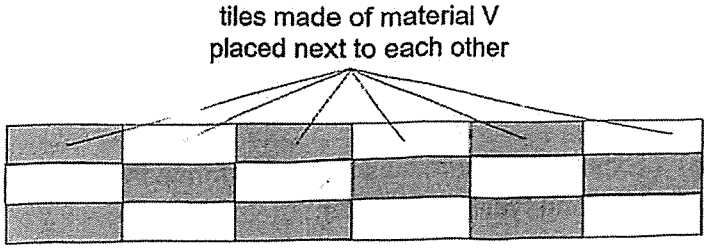
(a) State the relationship between the length of the tile and the temperature of the surrounding. (1m)

_____

(b) State the increase in the length of the tile as the temperature of the surrounding increases from 28 °C to 34 °C. (1m)

_____

Aisha built a model of a pavement at night. She pasted the tiles next to each other onto the pavement as shown.



pavement covered with tiles

The next day, she placed the model in the sun and found that the tiles cracked.The model was not disturbed by any person or animal.

(c) Explain why the tiles cracked in the day. (2m)

_____

_____

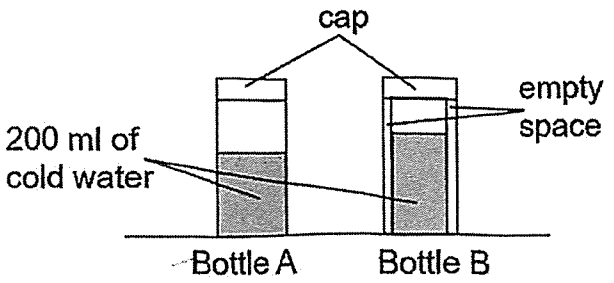
_____

(d) Using the same type of tiles, suggest how Aisha can rebuild the model at the same place so that the tiles will not crack. (1m)

_____

5

40 Tim poured cold water into two bottles, A and B. Both bottles are made of material T. The bottles are left in the kitchen which has a temperature of 30 °C. The diagram below shows how the inside of each bottle looks like.



He measured and recorded the temperature of the water in each bottle after 30 minutes.

(a) Which bottle can keep the water colder? Explain your answer. (2m)

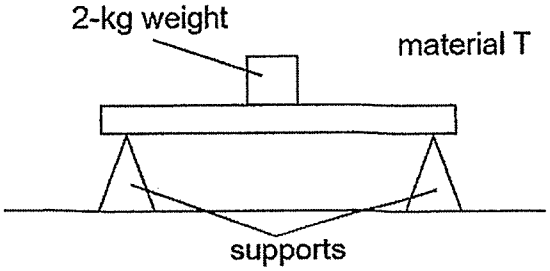
_____

_____

(b) Tim opened the cap of the bottles and left them on his kitchen table. State the temperature of the water in both bottles after five hours. (1m)

Bottle A: _____ °C Bottle B: _____ °C

Tim did an experiment using material T with the setup shown below. He added 2 kg weights to material T until it broke.



(c) What property of material T is Tim testing for? (1m)

_____

(d) Besides the property that Tim tested for in (c), name one other property material T must have. (1m)

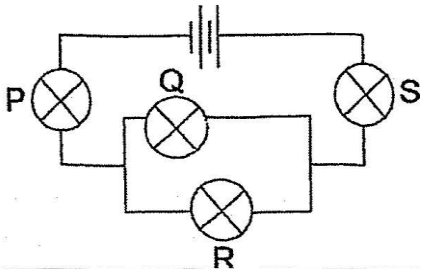
_____

5

SCHOOL : RED SWASTIKA SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : 2025 END OF YEAR EXAMINATION

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

31a	Decrease
31b	There is less oxygen absorbed by Maya's lungs when she breathes in. Thus, less oxygen enters the bloodstream. The heart needs to pump **faster** to transport **more** blood containing oxygen around the body.
32a	As the temperature increases, the length of time for a mosquito to develop into an adult **decreases**.
32b	20°C
32c	June. The temperature is the **highest**. Hence, the mosquitoes will take the **shortest** time to develop into adults.
32d	**Less** eggs were hatched which resulted in less pupa to develop into less adults.
33a	P: Stem / stems Q: Leaf / leaves
33b	The food made in the leaves cannot be transported to the flowers. Thus, food will be transported to **other** parts of the plant like the flowers and accumulates there. Thus, making the flowers bigger.
34a	
34b	Plant fertilisation is when the male cell from a pollen grain joins the female cell inside the ovule.

34ci	Decrease
34cii	More eggs will develop into **more** adults. More adults will damage more flowers and thus, **less** flowers develop into less fruits.
35a	There was a **closed** circuit and current could flow through the bulbs.
35b	
35c	It allows electricity to be controlled independently.
36a	Evaporation
36b	The warmer water vapour **lost** heat and condensed into water droplets on the mirror surface.
37a	100 g ≤ mass of A < 150 g
37b	Change: Unfold shirt F / Fold shirt E into half Change: Move shirt E / F to another location at different a temperature
38a	The object blocked the light from the torch and caused a shadow to be formed.
38b	Material X. The lenses of a sunglass needs to **allow** some light. Material X is able to block some light.
39a	As the temperature increases, the length of the tile **increases**.
39b	6 mm
39c	There was no **space** in between the tiles to allow for the expansion, causing the tiles to crack.
39d	Leave **gaps** in between the tiles to allow room for expansion.
40a	Bottle B. There is a layer of **air** between the bottle and the water. Air is a poor conductor of heat. The cold water will gain heat **slower** from the surroundings.
40b	Bottle A: 30°C
40c	Strength
40d	Waterproof