



HENRY PARK PRIMARY SCHOOL
2025 END OF YEAR EXAMINATION
STANDARD SCIENCE
PRIMARY FIVE
BOOKLET A

Name: _____ ()

Class: Primary 5 ()

30 QUESTIONS

60 MARKS

TOTAL TIME FOR BOOKLETS A & B: 1 HOUR 45 MINUTES

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 for Booklet A: _____ / 60

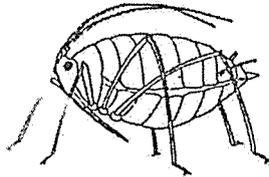
Parent's Signature: _____

Booklet A

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)

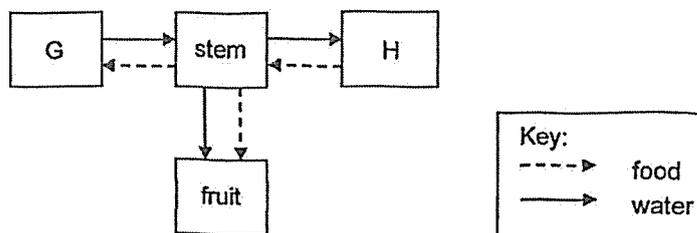
- 1 Fatimah observed the living thing shown below.



Which action helps Fatimah to determine whether the living thing is an insect?

- (1) Count the number of legs it has.
 (2) Measure the length of its feelers.
 (3) Check whether it has a pair of wings.
 (4) Check whether it has 3 stages in its life cycle.

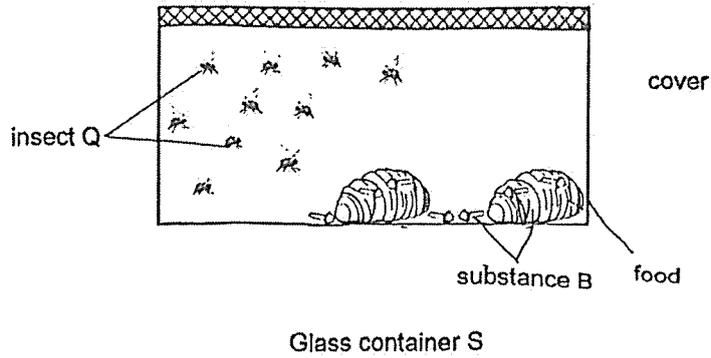
- 2 The diagram shows parts of a plant and movement of food and water in the plant.



Which of the following shows the parts correctly?

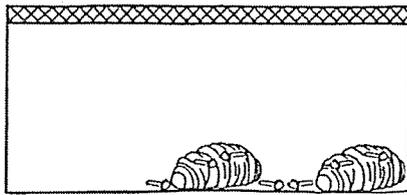
	G	H
(1)	flowers	leaves
(2)	roots	leaves
(3)	leaves	roots
(4)	roots	flowers

- 3 Meena wanted to know if substance B could keep insect Q away from food. She carried out an experiment using two identical glass containers, S and T. She set up container S as shown below.

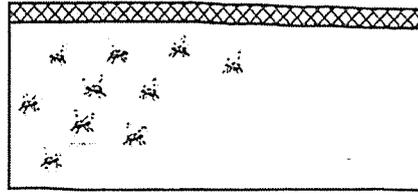


Which diagram shows correctly what must Meena put into glass container T for a fair test?

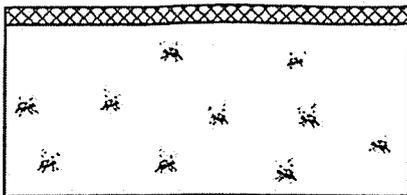
(1)



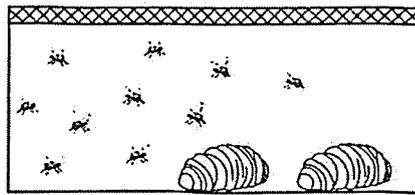
(2)



(3)



(4)



4 Joe described organisms M and N as follows.

- N produces seeds while M does not.
- N makes its own food while M does not.

What could M and N be?

	M	N
(1)	mushroom	bird's nest fern
(2)	bird's nest fern	papaya plant
(3)	papaya plant	bird's nest fern
(4)	mushroom	papaya plant

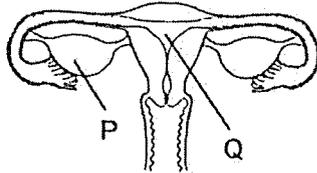
5 Animal J visits flowering plants.



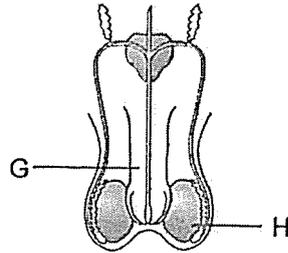
Animal J benefits directly by _____.

- (1) dispersing the seeds
- (2) pollinating the flowers
- (3) feeding on the nectar
- (4) laying eggs on the leaves

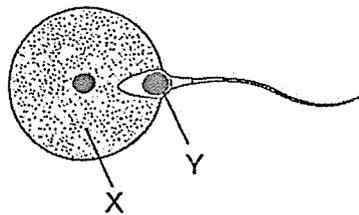
6 The diagrams below show the human reproductive systems and the process of fertilization.



Female Reproductive System



Male Reproductive System

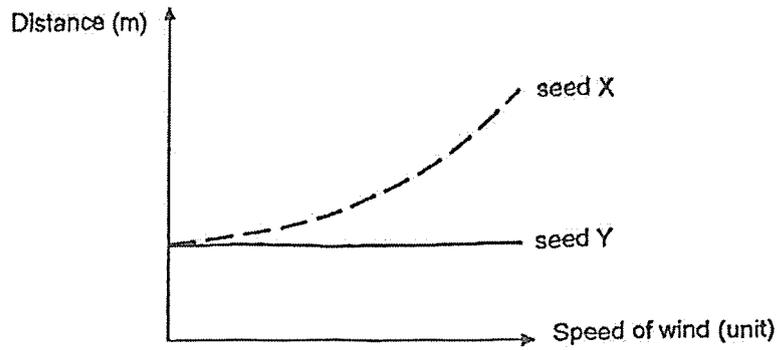


Fertilization

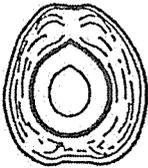
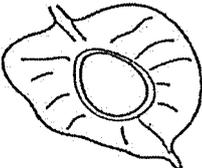
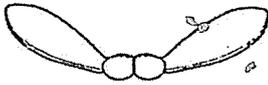
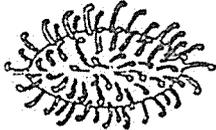
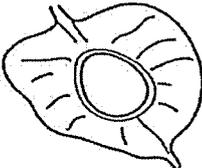
Based on the information given, which of the following is correct?

	X	Y	X is produced in	Y is produced in
(1)	egg	sperm	P	H
(2)	egg	sperm	Q	G
(3)	sperm	egg	P	G
(4)	sperm	egg	Q	H

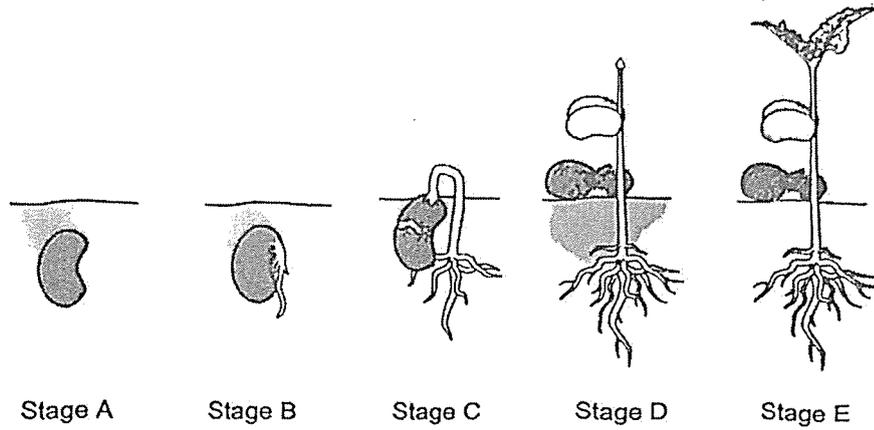
- 7 X and Y are two different types of seeds with different methods of dispersal. The graph below shows how the speed of wind affects the average distance the seeds are dispersed.



Based on the information given, which of the following is likely to be correct?

	Seed X	Seed Y
(1)		
(2)		
(3)		
(4)		

- 8 The diagram below shows the stages of growth in a bean.

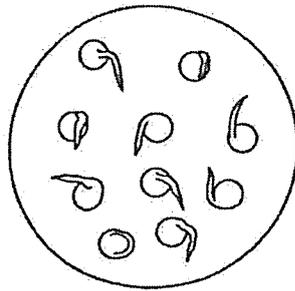


Based on the stages given, which of the following statements are correct?

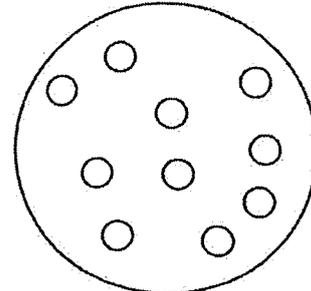
- A Water is required for growth at all stages.
- B Sunlight is required for growth at all stages.
- C Air is not required for growth at stages B and C.
- D Mass of the seed leaves decreases as the young plant grows.

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

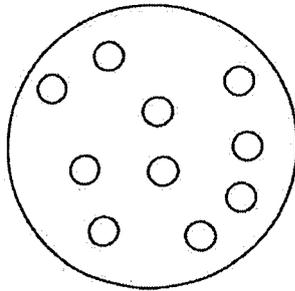
- 9 Sarah placed 10 seeds in four containers, each with different conditions. The number of seeds germinated in each container after 5 days is shown below.



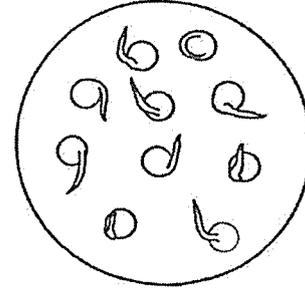
Dark and damp



Dark and dry



Bright and dry

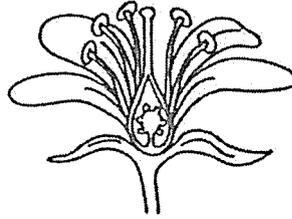


Bright and damp

What can Sarah conclude about germination of seeds from her experiment?

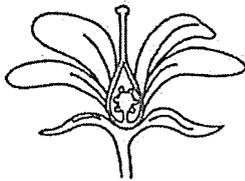
- (1) Seeds need light to germinate.
- (2) Seeds need warmth to germinate.
- (3) Seeds cannot germinate without water.
- (4) Seeds require air, water and food to germinate.

- 10 Leo conducted an experiment on flower Q which he had found in his garden.

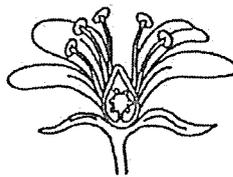


Flower Q

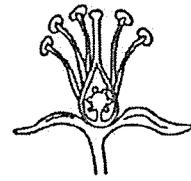
He took another three similar flowers from the same plant and removed some parts from each flower as shown below.



Flower R



Flower S



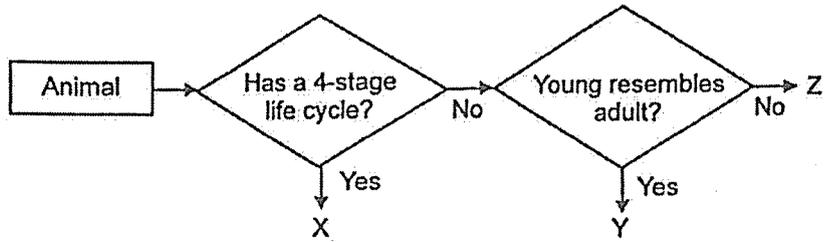
Flower T

Next, he dusted pollens obtained from flower Q onto each of the three flowers. Leo observed the flowers over a few weeks.

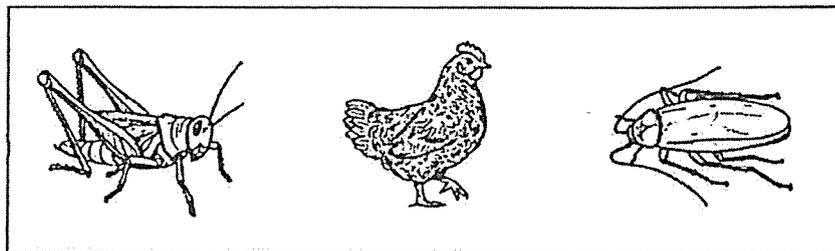
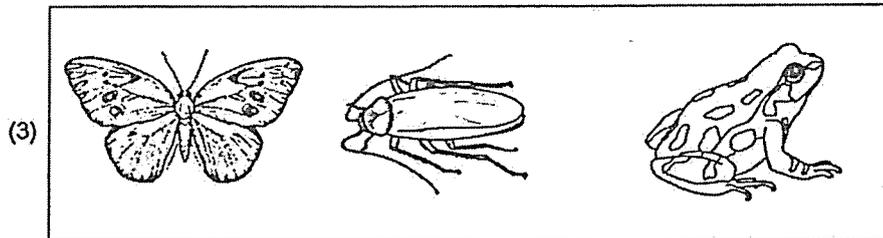
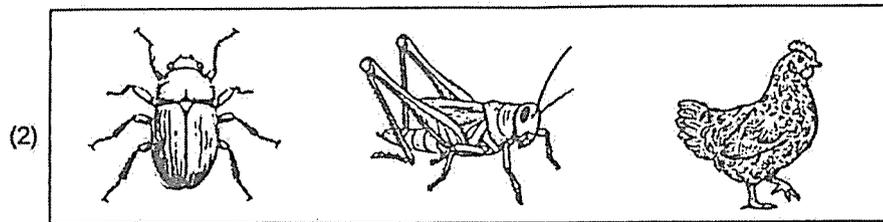
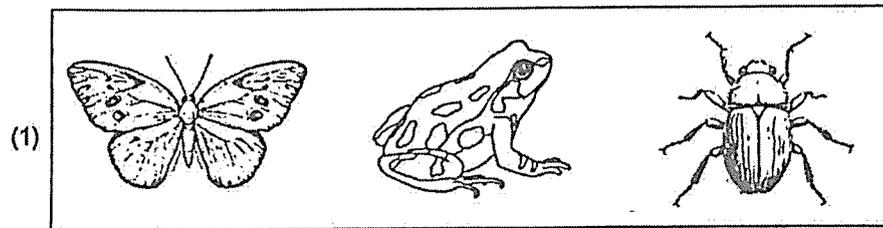
Which of the flower(s) will not develop into fruits?

- (1) R only
- (2) S only
- (3) R and T only
- (4) S and T only

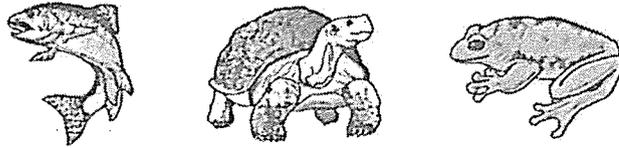
11 Three animals are classified in the classification chart shown below.



Which of the following could be the three animals?

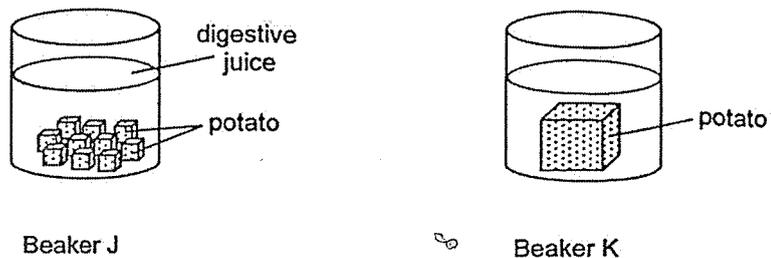


- 12 The diagram shows 3 animals.



Which of the following describes the characteristic the animals have in common?

- (1) lay eggs
 - (2) have lungs
 - (3) live in the water
 - (4) have the same outer covering
- 13 Ming Leng investigated factors that affect how quickly food can be digested. He set up the experiment as shown below. J and K are similar beakers containing the same volume of digestive juices. The mass of potato placed in each beaker is the same.



Based on the above set-ups, which of the following results is likely to be correct?

- (1) The potato in beaker J took a shorter time to digest because it has a smaller exposed surface area.
- (2) The potato in beaker J took a shorter time to digest because it has a larger exposed surface area.
- (3) The potato in beaker K took a shorter time to digest because it has a smaller exposed surface area.
- (4) The potato in beaker K took a shorter time to digest because it has a larger exposed surface area.

- 14 Kate studied the effect of temperature on the growth of bacteria H. She recorded her results in the table below.

Temperature (°C)	Amount of bacteria H (unit)	
	At the start of experiment	At the end of experiment
30	5	130
35	5	265
40	5	115
45	5	60

Based on the results given, which of the following statements about bacteria H are correct?

- A Bacteria H grows the most at 35°C.
 - B Bacteria H grows the least at 45°C.
 - C As temperature increases, bacteria H grows faster.
- (1) A and B only
(2) B and C only
(3) A and C only
(4) A, B and C

Use the following information to answer questions 15 and 16.

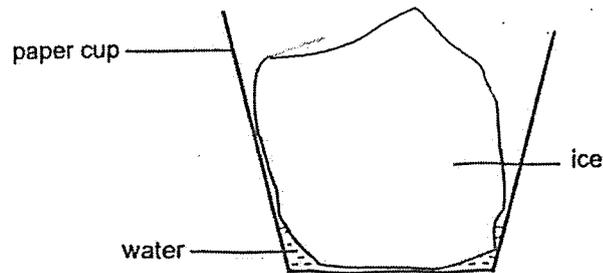
Elroy conducted an experiment to find out how different times of the day affect the number of Insect G visiting his garden.

The table shows the number of Insect G Elroy observed at his garden at different times of the day, from Tuesday to Thursday.

Time of observation	Number of Insect G observed at the garden		
	Tuesday	Wednesday	Thursday
8.00 am	7	10	6
1.00 pm	19	16	17
6.00 pm	8	7	9

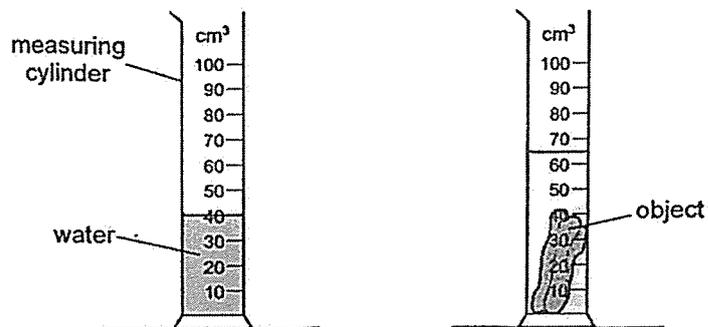
- 15 Which of the following is the best conclusion that can be made based on the information in the above table?
- (1) Insect G are most active during the afternoon.
 - (2) Insect G prefer a cool surrounding to a warm surrounding.
 - (3) The temperature at Elroy's Garden on Thursday was the highest.
 - (4) The time of the day does not affect the number of Insect G observed at Elroy's Garden.
- 16 Which of the following steps will help to improve the reliability of the information Elroy has gathered during his experiment?
- A Count the number of Insect G before and after a rainfall.
 - B Count the number of Insect G at two other gardens in the area.
 - C Count the number of Insect G at his garden for another 2 days.
 - D Count the number of Insect G at his garden at 10 am and 3 pm as well.
- (1) A and B only
 - (2) A and D only
 - (3) B and C only
 - (4) C and D only

- 17 A block of ice was placed in an empty paper cup and left in the class.



What will happen after some time?

- (1) The temperature of the block of ice increases.
 - (2) The temperature of the block of ice decreases.
 - (3) The temperature of the water around the block of ice is 0°C .
 - (4) The temperature of the water around the block of ice is less than 0°C .
- 18 Mary set up an experiment as shown below to find out whether the length of an object will affect its volume.



Which of the following should Mary keep the same to ensure a fair test?

- (1) length of object
- (2) volume of object
- (3) volume of water before adding the object
- (4) final volume of water in the measuring cylinder

19 The table shows the properties of substance W at different temperatures.

Temperature (°C)	Does it take the shape of its container?	Can it be compressed?
42	yes	no
88	yes	yes

Which of the following statements is possible about substance W?

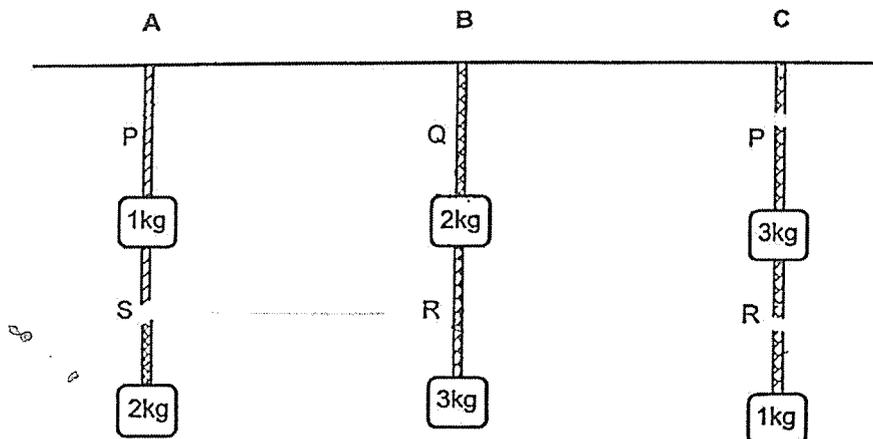
- (1) W boils at 96°C.
- (2) W freezes at 45°C.
- (3) W is in the solid state at 58°C.
- (4) W is in the gaseous state at 74°C.

- 20 Wilma investigated the strength of four ropes, P, Q, R and S using some loads. Each rope was made of a different material. The ropes were of the same length and thickness. The ropes were used to lift different amounts of loads. When the loads were lifted, some ropes broke.

Wilma recorded her observations in the table shown below.

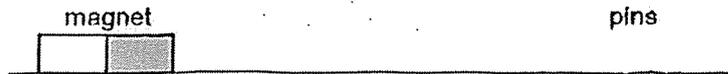
Rope	Observations		
	1kg load attached	3kg load attached	5kg load attached
P	did not break	did not break	broke
Q	did not break	did not break	did not break
R	broke	broke	broke
S	did not break	broke	broke

Based on the information given, which of the following are possible?

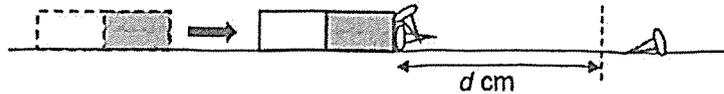


- (1) A and B only
- (2) B and C only
- (3) A and C only
- (4) A, B and C

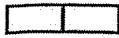
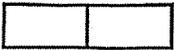
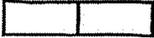
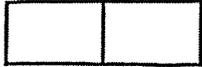
- 21 James conducted an experiment with four bar magnets, E, F, G and H, of different sizes.



He moved the magnet towards the pins and recorded the furthest distance, d , at which each magnet would attract some pins.



His results are shown in the table below.

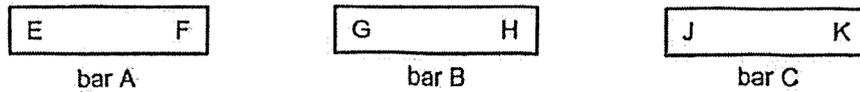
Magnet	d (cm)
 E	6
 F	7
 G	4
 H	5

Based on the results above, what can James infer from his experiment?

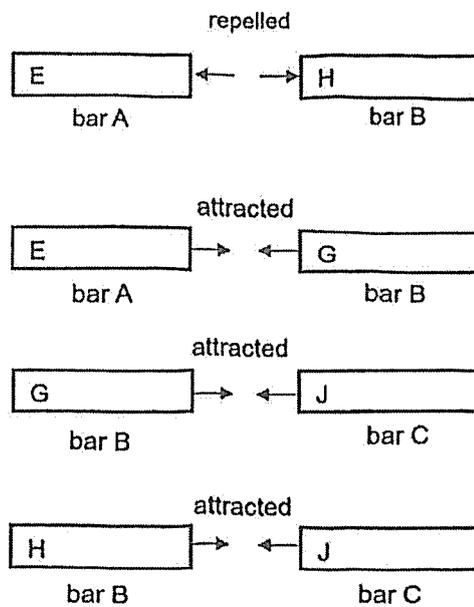
- A Only magnet H can attract pins 5 cm away.
- B Magnet F is stronger than magnet E.
- C The greater the size of the magnet, the stronger the magnet.
- D Magnet H can attract more pins than magnet G when the pins are placed the same distance away from them.

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

22 Jack labelled three bars, A, B and C, as shown in the diagram below.



He then brought the ends of the bars together and made the following observations.



Based on the above observations, which of the following conclusions is not correct?

- (1) Bar A will attract bar C.
- (2) Bars A and B are magnets.
- (3) Bars A, B and C are magnets.
- (4) Bar C is made of a magnetic material.

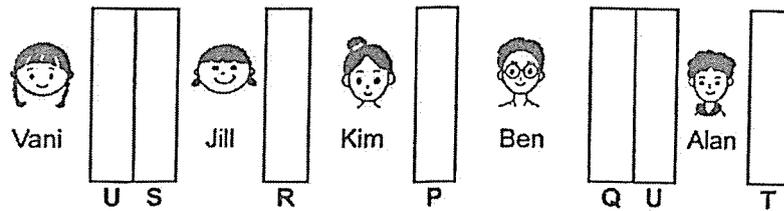
23 A factory makes 6 types of materials, P, Q, R, S, T and U.

The materials are classified in the table below.

Does not allow light to pass through	Allows most light to pass through
P	R
Q	S
T	U

Five children were asked to stand behind the walls made of the six different materials as shown in the diagram below.

The children were asked to test the transparency of the materials.

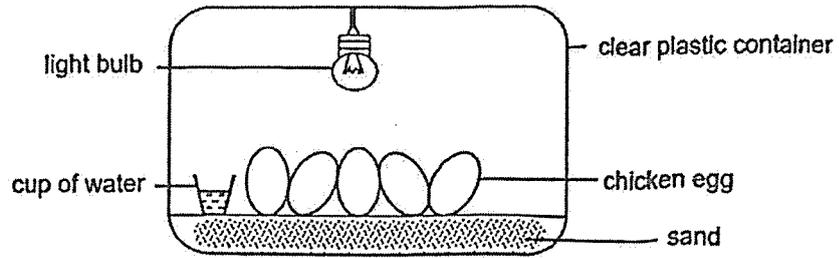


Based on the information given, which of the following statements are correct?

- A Alan can see Ben.
- B Kim can see Vani.
- C Vani cannot see Ben.
- D Jill cannot see Kim.

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

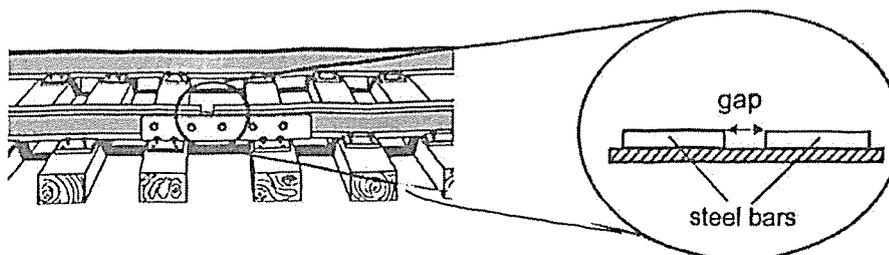
24 Stephen made a device to hatch some fertilised chicken eggs.



Which of the following correctly shows the path of light that allowed Stephen to see the chicken eggs in the container?

- (1)
- (2)
- (3)
-

- 25 The train track is made of long steel bars with small gaps as shown below. The gaps were smaller on a hot day.



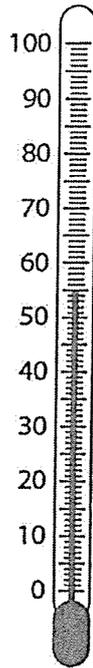
Gap between the steel bars

Larger view of the gap

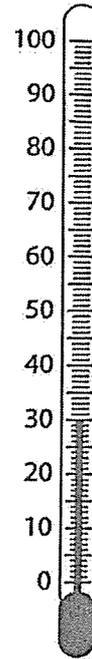
What is the reason for leaving gaps between the steel bars?

- (1) To reduce the weight on the track.
- (2) To make the track easier to install.
- (3) To prevent the track from getting rusty.
- (4) To allow the track to expand without causing damage.

26 The diagrams show the temperature of water before and after cooling.



Before cooling

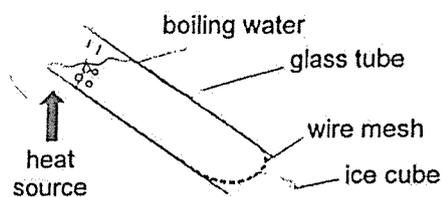


After cooling

By how much did the temperature of the water drop after cooling?

- (1) 25°C
- (2) 30°C
- (3) 50°C
- (4) 55°C

- 27 Marcus set up an experiment as shown below. The ice cube was trapped by a wire mesh at the bottom of a glass tube containing water. The water was heated near the top.

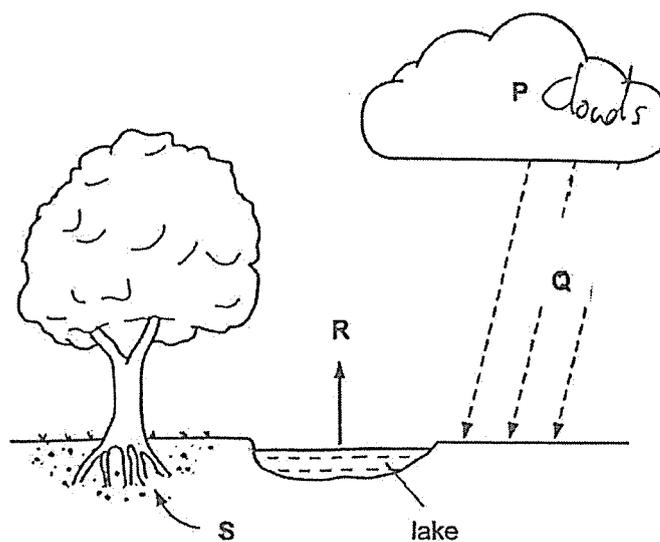


After some time, the water near the top started to boil. However, the ice cube did not melt.

Which statement best explains why the ice cube did not melt?

- (1) Water is a poor conductor of heat.
- (2) Heat was used up to boil the water near the top.
- (3) Heat travelled from the lower place to the higher place
- (4) Melting point of ice is higher than the boiling point of water.

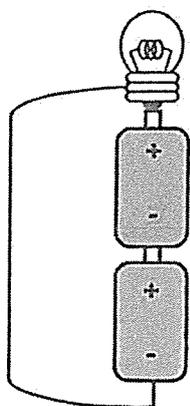
28. The diagram shows the water cycle.



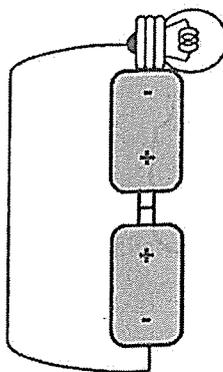
In which of the following is water found in liquid state?

- (1) Q and S only
- (2) R, Q and S only
- (3) P, R and S only
- (4) P, Q and S only

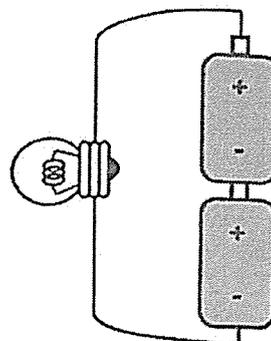
- 29 Study the electrical circuits, F, G and H, below carefully. Identical bulbs and batteries in working condition were used to set up the circuits.



Circuit F



Circuit G

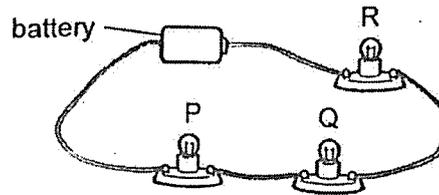


Circuit H

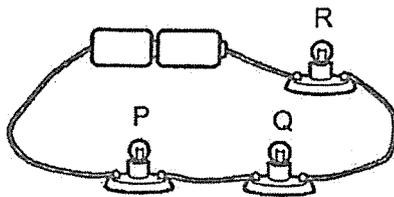
In which of the circuits will the bulb not light up?

- (1) F and G only
- (2) G and H only
- (3) F and H only
- (4) F, G and H

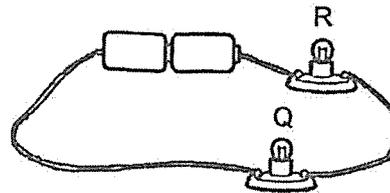
- 30 John set up a circuit as shown below.



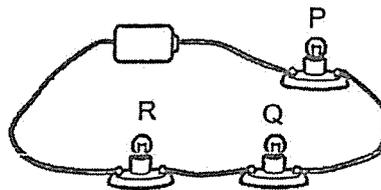
John made changes to the circuit using the same bulbs and identical batteries.



Circuit X



Circuit Y



Circuit Z

In which of the following circuit(s) will the changes cause bulb Q to be brighter?

- (1) X and Y only
- (2) X and Z only
- (3) Y and Z only
- (4) X, Y and Z

End of Booklet A



HENRY PARK PRIMARY SCHOOL
2025 END OF YEAR EXAMINATION
STANDARD SCIENCE
PRIMARY FIVE
BOOKLET B

Name: _____ ()

Class: Primary 5 ()

11 QUESTIONS

40 MARKS

TOTAL TIME FOR BOOKLETS A & B: 1 HOUR 45 MINUTES

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.

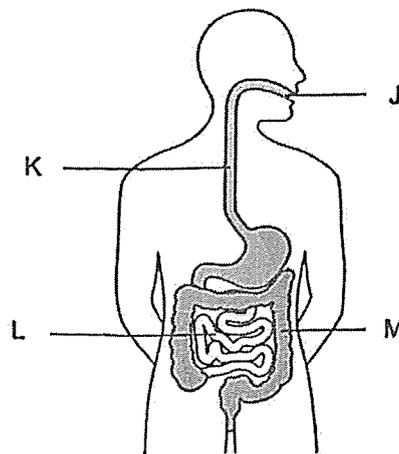
Marks for Booklet B: _____ / 40

Booklet B

Write your answers to questions 31 to 41 in the spaces given.
The number of marks available is shown in the [] at the end of each question or part question.

(40 marks)

31 The diagram shows the human digestive system.

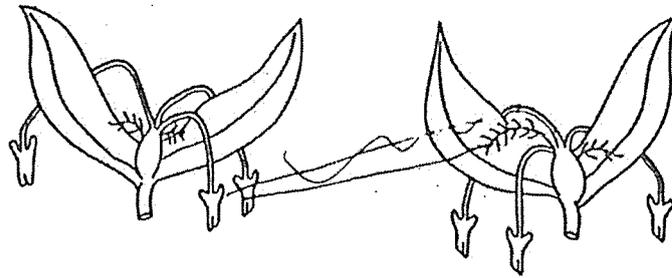


(a) State correctly where, J, K, L or M, the following take place. [1]

		Write J, K, L or M
(i)	where digestion ends	
(ii)	where water is absorbed from undigested food	

(b) State what digestion is. [1]

32 The diagram shows two flowers from the same plant.



(a) Draw an arrow on the diagram above to show how pollination takes place between the flowers. [1]

(b) State how the flowers shown above are pollinated by putting a tick (✓) in the box below. [1]

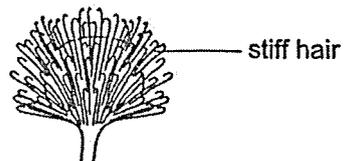
by wind by animal

(c) Explain your answer in part (b). [1]

The diagram below shows fruits G and H from two different types of plants.



Fruit G



Fruit H

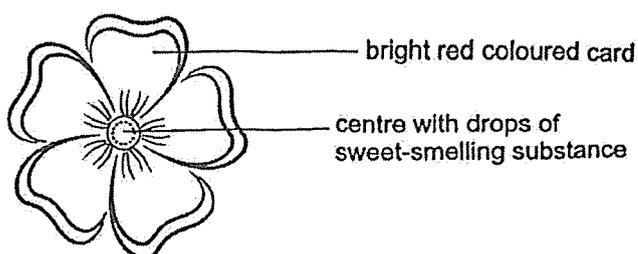
(d) Explain how the hair-like part on each fruit helps the plants grow in new places. [2]

fruit G: _____

fruit H: _____

- 33 Jerome wanted to find out if the intensity of a flower's sweet smell affects the number of insects visiting the flowers. He made flowers with petals of the same size using cards of the same colour.

Then he added different number of drops of sweet-smelling substance to the centre of each flower. The flowers were left in an open field.



The number of insects that visited the flowers over three hours was recorded in the table below.

Number of drops of sweet-smelling substance	Number of insects visiting the flowers		
	1 st hour	2 nd hour	3 rd hour
5	8	6	1
10	9	10	5
15	10	12	8

- (a) Based on the results, what can he conclude about the intensity of the sweet smell of flowers and the number of insects visiting the flowers? [1]

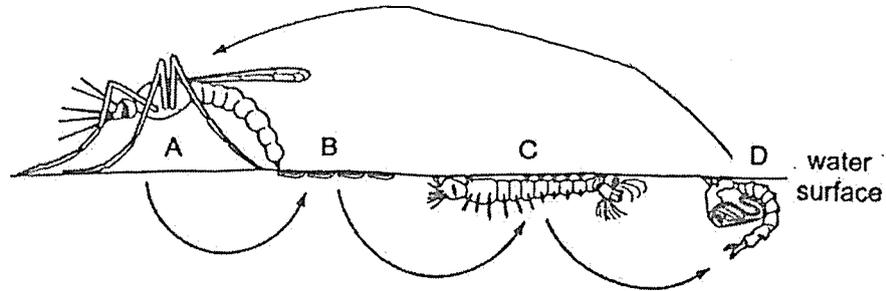
- (b) Why is it an advantage for the plant if the flowers are more sweet-smelling? [1]

- (c) Suggest two changes to be made to the set-up if Jerome wants to find out how the size of the petals affects the number of insects visiting the flowers. [2]

i)

ii)

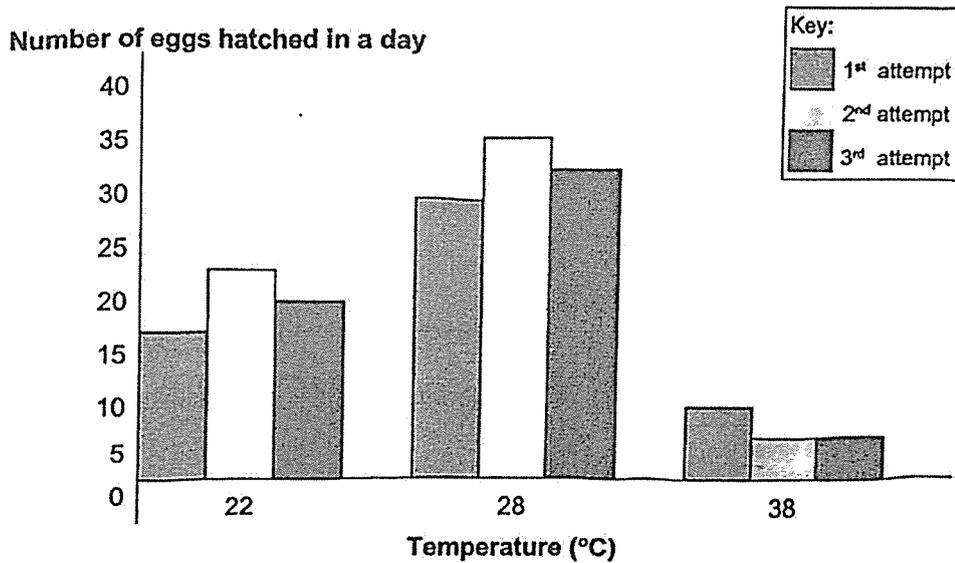
34 A, B, C and D are stages in the life cycle of a mosquito.



(a) Name stage D. [1]

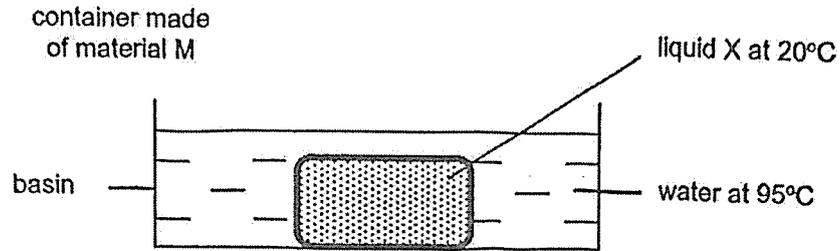
(b) Based on the diagram given, state a similarity between stages C and D. [1]

Jerry wanted to find out about conditions that affect the breeding of mosquitoes. In an experiment, Jerry recorded the number of mosquito eggs that hatched in a day out of 40 eggs at 3 different temperatures. He repeated the experiment two more times. His results are shown below.

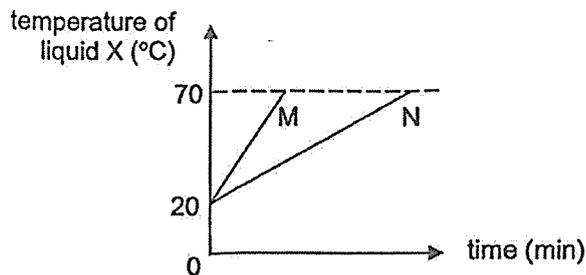


(c) Describe what Jerry could conclude about the effect of changes in temperature on the hatching of mosquito eggs. [2]

35 Aziz conducted an experiment using the set-up shown.



He measured and recorded the changes in the temperature of liquid X. He repeated the experiment using a container made of material N. His results are shown in the graph below.



Aziz wanted to bring hot food and cold drinks for a learning journey. He wanted to keep the food hot and the drinks cold.

- (a) Which material(s) would be more suitable for the containers?
Fill in the blanks given below correctly with letters M or N.

[2]

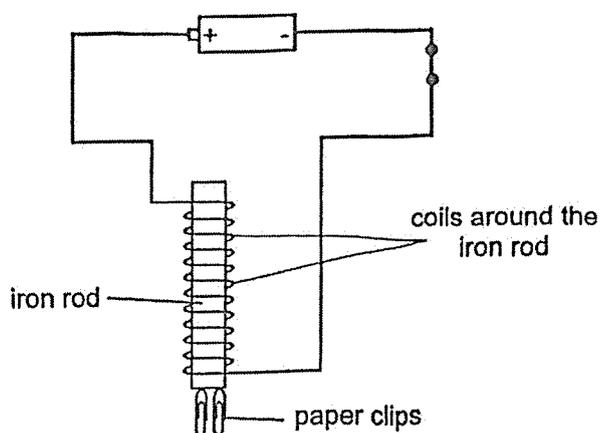
i) hot food – material _____

ii) cold drinks – material _____

- (b) Explain your answers in part (a).

[2]

- 36 Mel wants to find out how the number of coils affect the strength of an electromagnet.



The table shows the variables of two set-ups, X and Y, Mel plans to use.

- (a) Fill in the missing information to make sure that she conducts a fair experiment. [2]

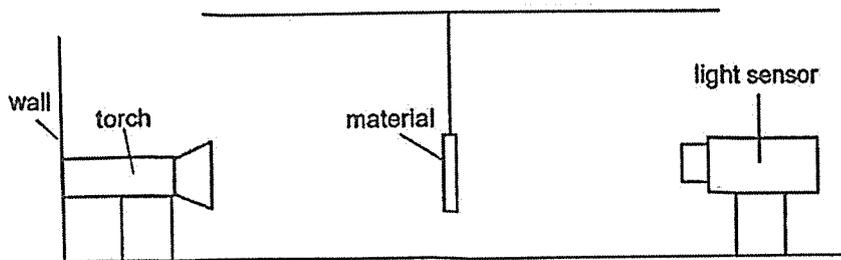
Variable	Set-up X	Set-up Y
material of rod	iron	(i) _____
length of rod	(ii) _____	20 cm
number of batteries used	(iii) _____	1
number of coils of wire around the iron rod	15	(iv) _____

- (b) Suggest another change to the experimental set-up given above so that the electromagnet could attract the paper clips from a further distance. [1]
-

37 (a) State how shadows are formed.

[1]

Jenny is preparing for a puppet show. She was given four different materials P, Q, R and S, to make her puppets. She wanted to find out how much light could pass through the materials and prepared the set-up below.



She placed each material between the torch and the light sensor and recorded the amount of light detected by the sensor. The table below shows her results.

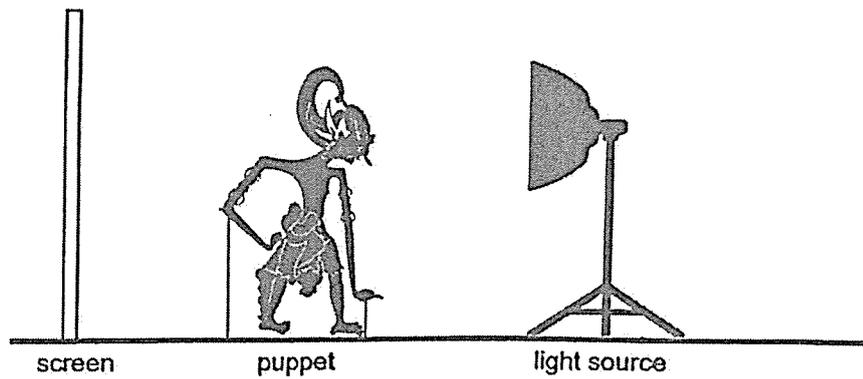
Material	Amount of light detected (units)
P	50
Q	300
R	250
S	150

(b) Based on the table above, which material should she choose to make her puppets so that it will cast the darkest shadows on the screen? Explain your answer.

[1]

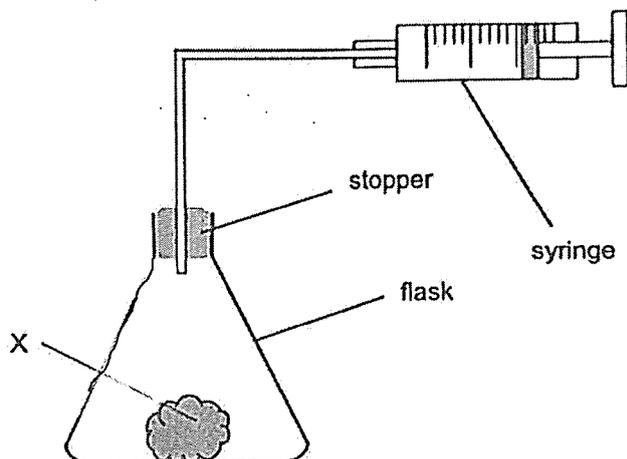
Question 37 continued

After making her puppets, Jenny observed that the size of the shadow changed as she moved the puppet such that it is at different distances from the light source.



- (c) What can Jenny do to increase the size of the shadow cast on the screen by the puppet? [1]

- 38 Indra wanted to find out how the mass of substance X affected the volume of air in the syringe. The diagram below shows her experimental set-up.



The table shows the results recorded.

Mass of X (g)	Volume of gas in the syringe (cm ³)	
	At the start of experiment	At the end of experiment
30	50	47
40	50	43
50	50	39

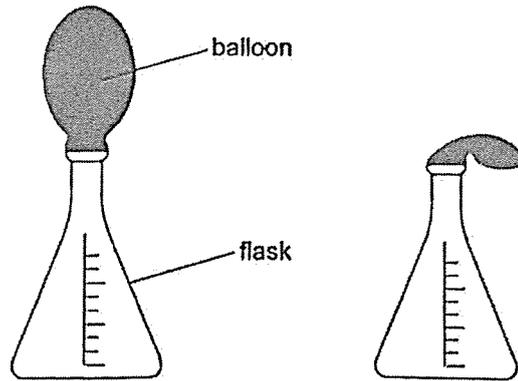
- (a) State how the volume of gas in the syringe changed with the mass of X. [1]

- (b) State the property of substance X that allows it to be measured. [1]

Question 38 continued

Indra conducted another experiment using a balloon and a flask as shown in the diagrams below.

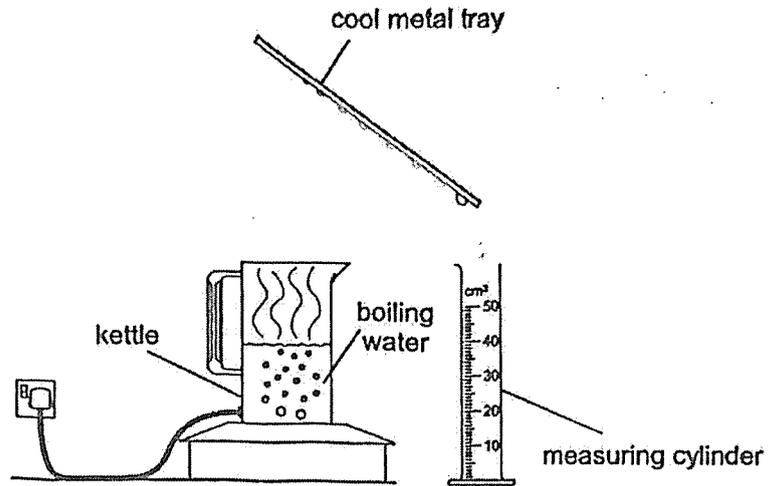
She placed the set-up in a freezer and observed what happened to the balloon.



Set-up in the freezer
At the start of the experiment Set-up in the freezer
At the end of the experiment

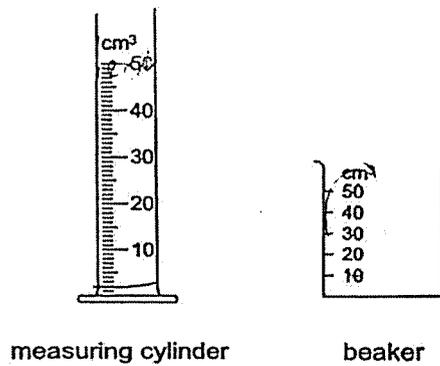
- (c) Based on the diagrams given, explain the change observed in the balloon at the end of the experiment. [1]

- 39 Kyle wanted to find out how similar trays made of different materials would affect the volume of water, collected over 10 minutes, in the experimental set-up shown below.



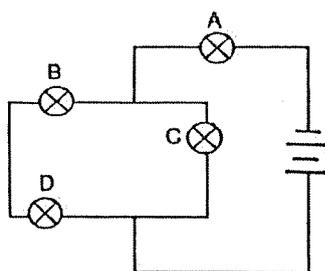
- (a) Explain how water is collected in the measuring cylinder. [2]

The diagram below shows a measuring cylinder and a beaker.

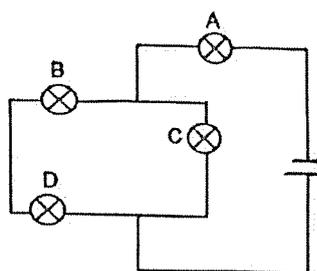


- Kyle used a measuring cylinder instead of a beaker to collect the water.
 (b) Explain how this will help Kyle obtain more accurate results. [1]

- 40 Barry carried out an investigation using the two circuits shown below. The batteries and bulbs are identical and in working condition. He used different number of batteries in each circuit. He measured the brightness of the bulbs in each circuit.



Circuit W



Circuit Z

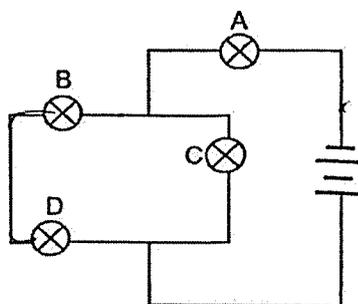
- (a) Based on the information given, write a suitable hypothesis for Barry's investigation.

- (b) Barry wanted to add two switches, S1 and S2, to circuit W.

He wanted to have the following conditions.

- S1 controls all the bulbs
- Only two bulbs will light up when S2 is open

Put a cross (X) in the diagram below where S1 and S2 should be. [1]



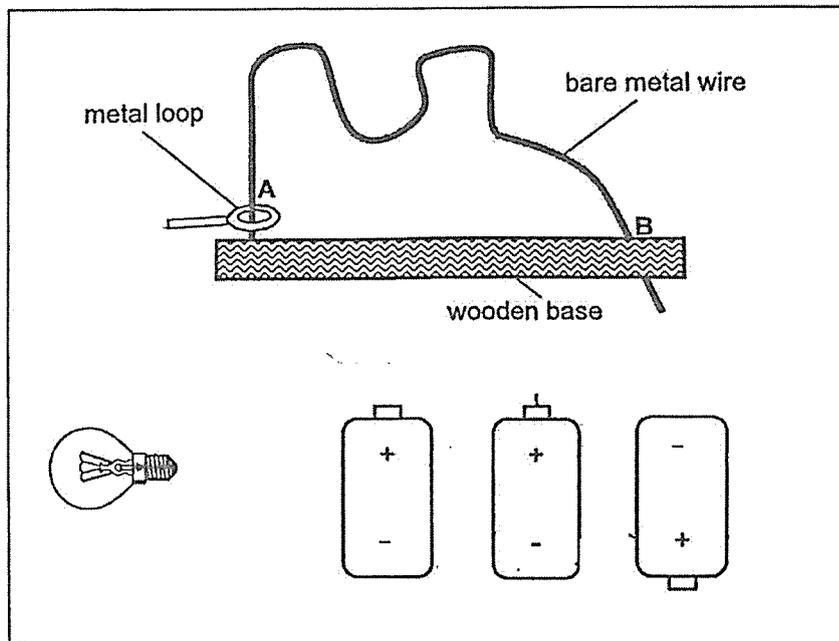
Circuit W

Question 40 continued

- (c) The circuit shown below is a game designed by Barry.
The circuit includes three identical batteries and a bulb.

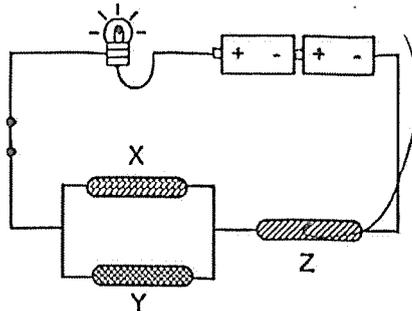
Barry wants to move the metal loop from point A to B without touching the bare metal wire.

When the metal loop touches the bare metal wire, the bulb lights up.



- Complete the circuit shown above so that when the metal loop touches the bare metal wire the bulb lights up. [3]
All components given in the circuit must be connected to form a closed circuit.

- 41 John carried out an investigation to find out whether electricity flows through rods X, Y and Z. The rods were made of different materials. John set up the circuit shown below to test the rods. When the switch was closed, the bulb lit up.



- a) Based on his observation, John concluded that rods X, Y and Z are definitely conductors of electricity.

Is John correct?

Complete the table below by ticking (✓) the correct boxes.

[2]

The following rods <u>definitely</u> conduct electricity.		True	False	Not possible to tell
(i)	Rod X			
(ii)	Rod Y			
(iii)	Rod Z			

- b) Explain your answers to parts (a) (i) and (ii).

[2]

End of Booklet B

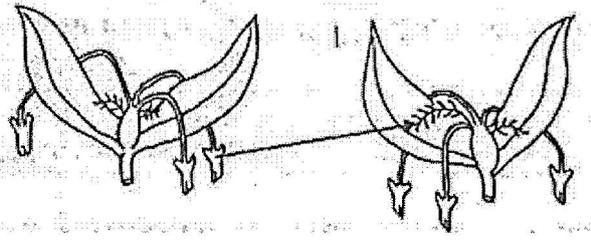
8 . 8

HPPS P5 EOYE 2025 Suggested Answers

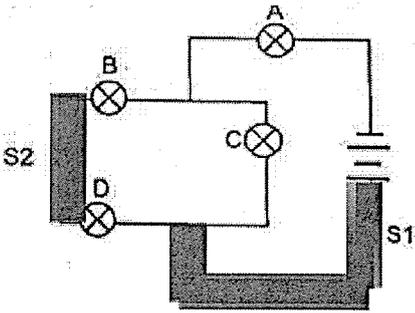
Booklet A

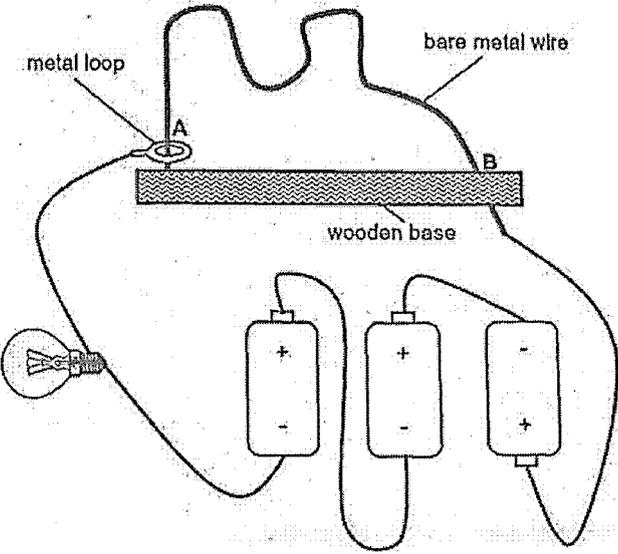
Q1	1	Q11	3	Q21	3
Q2	2	Q12	1	Q22	3
Q3	4	Q13	2	Q23	2
Q4	4	Q14	1	Q24	4
Q5	3	Q15	1	Q25	4
Q6	1	Q16	4	Q26	1
Q7	2	Q17	3	Q27	1
Q8	2	Q18	3	Q28	4
Q9	3	Q19	4	Q29	2
Q10	2	Q20	3	Q30	1

Booklet B

No.	Suggested Answers	Remarks
31a	(i) L (ii) M	
31b	Digestion is the process where food is broken down into simpler substances by digestive juices and absorbed into the bloodstream in the small intestine.	
32a		
32b	By wind	
32c	<p>Any One</p> <p>Anthers hanging out exposed to wind so that the pollen grains are blown away more easily by the wind.</p> <p>Large feathery stigma exposed to wind to catch pollen grains/pollens more easily.</p>	

32d	Fruit G - Fine hair helps seed/fruit to float in the wind/air longer Fruit H - Stiff hair clings onto the animals' fur when the animal walks passed and drops further away from the parent plant.		
33a	As the intensity of the sweet smell increases, the number of insects visiting the flowers increases.		
33b	Any One More flowers could be pollinated. There is a higher chance of pollination.		
33c	(i) Change the petal (coloured) cards to different sizes. (ii) Keep the number of drops of sweet-smelling substance the same.		
34a	Pupa		
34b	Any One Both the young live in water Both the young breathe through breathing tubes.		
34c	1st Marking Point: As the temperature increases from 22°C to 28°C, the number of eggs hatched in a day increases. 2nd Marking Point: As the temperature increases from 28°C to 38°C, the number of eggs hatched in a day decreases.		
35a	(i) N, (ii) N		
35b	Evidence:	Time taken for liquid X in container N to reach 70°C is longer.	
	Reason:	N is a poorer conductor of heat than M.	
36a	(i) iron (ii) 20 cm (iii) 1 (iv) Less than 15 or more than 15		
36b	Any two Increase the number of coils of wire around the iron rod. Add more batteries (connected in series) to the circuit Use batteries of a higher voltage.		

37a	Shadows are formed/casted when the path of light is blocked by an opaque object.		
37b	Claim:	P	Do Not Accept Least transparent
	Evidence:	The least amount of light passes through.	
37c	More the puppet closer to the light source.		
38a	As the mass of X increases, the volume of the gas decreases.		
38b	X has mass.		
38c	1st Marking Point: Air inside the flask/balloon loses heat to the surrounding air		
	2nd Marking Point: Air contracts/Air decreases in volume.		
39a	The water gained heat from the heat source and boiled to become steam. The steam rises and comes into contact with the cooler underside surface of the metal tray, loses heat and condenses to become water. The water then dripped into the measuring cylinder.		
39b	The measuring cylinder has more markings for measuring the same given volume of water.		
40a	If the number of batteries added to the circuit (in series) increases, then the brightness of the bulbs increases.		
40b	 <p>Draw and label S1 and S2 along the thick lines.</p>		

40c	 <p>The diagram shows a circuit with three cells connected in series. The positive terminal of the first cell is on the left, and the negative terminal of the last cell is on the right. A light bulb is connected in series with the cells. A metal loop is connected to the positive terminal of the first cell and is positioned over a wooden base. The wooden base has a gap between points A and B. A bare metal wire is connected to the negative terminal of the last cell and is also positioned over the wooden base. The metal loop and the bare metal wire are connected to each other, completing the circuit.</p>	
41a	<p>X - Not possible to tell Y - Not possible to tell Z - True</p>	
41b	<p>1st Marking Point: Rods X and Y are arranged in parallel.</p> <p>2nd Marking Point: Electric current could flow through either rod X or Y.</p>	