AI TONG SCHOOL

2019 END-OF-YEAR EXAMINATION
PRIMARY FIVE SCIENCE

(BOOKLET A)

24 OCTOBER 2019

Total time for booklets A and B : 1 h 45 min

INSTRUCTIONS

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Name : _____ ( )

Class : Primary 5 _____

Parent's Signature : _____

Booklet A	56
Booklet B	44
Total	100

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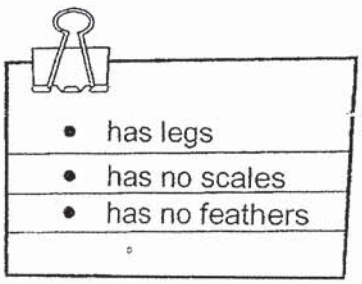
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Section A (28 x 2 marks)

For each question from 1 to 28, four options are given. One of them is the correct answer. Make your choice and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. Ahmad observed a living thing in the garden and recorded the following into his science journal.



Which animal group does the living thing belong to?

(1) fish
(2) birds;
(3) reptiles
(4) amphibians

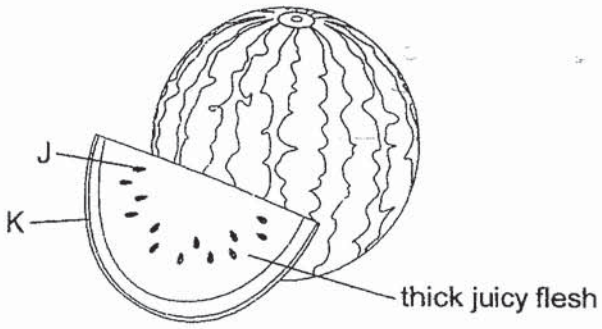
2. In which of the following body systems does the lungs belong to?

(1) digestive system
(2) muscular system
(3) circulatory system
(4) respiratory system

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3. Study the diagram of the fruit below.

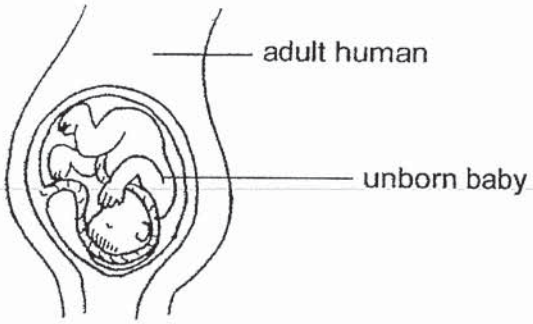


Which of the following statements are correct?

A J and K are formed from a flower.
B The fruit is developed from the ovary.
C K helps to disperse J by being waterproof.

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

4. Study the diagram below.

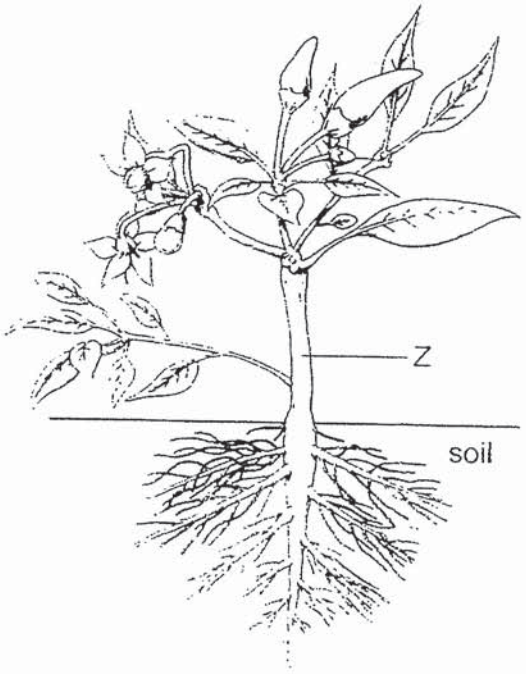


Which of the following statements about the unborn baby is correct?

(1) It does not need food at this stage.
(2) It depends on its mother for nutrients
(3) It is developing inside its mother's stomach.
(4) It gets its genetic information only from its mother.

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5. The diagram below shows a flowering plant.



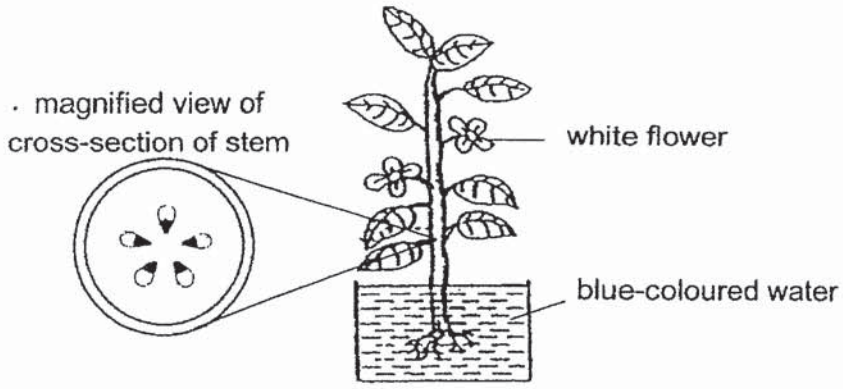
Based on the diagram, which of the following shows the correct direction of movement of food and water at part Z?

	Direction of movement at part Z	
	food	**water**
(1)	downwards only	upwards only
(2)	upwards and downwards	upwards only
(3)	upwards only	downwards only
(4)	upwards and downwards	downwards only

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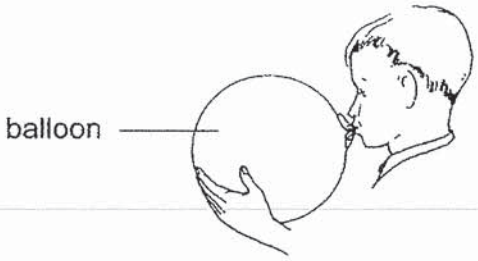
6. Paul carried out an experiment. He placed a plant with white flowers into a beaker of blue-coloured water. After a day, Paul cut a cross-section of the stem as shown below and observed its food-carrying and water-carrying tubes.



What did Paul observe about the plant?

(1) The food-carrying tubes and the white flowers turned blue.
(2) The water-carrying tubes and the white flowers turned blue.
(3) The water-carrying tubes and food-carrying tubes turned blue.
(4) The white flowers, food-carrying tubes and water-carrying tubes turned blue.

7. The diagram below shows a boy blowing air into a balloon.



How are the amounts of carbon dioxide, oxygen and water vapour in the air blown into the balloon different from the surrounding air?

	carbon dioxide	oxygen	water vapour
(1)	less	more	more
(2)	less	more	less
(3)	more	less	more
(4)	more	less	no change

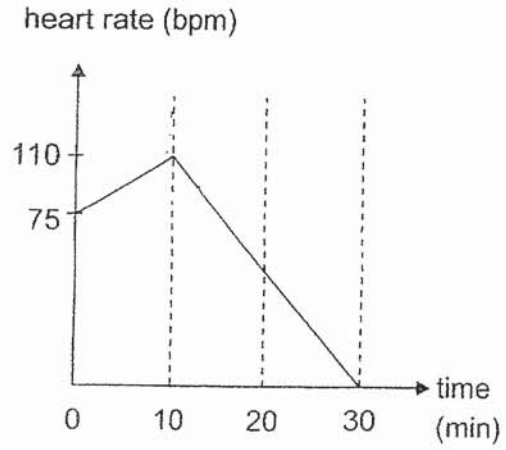
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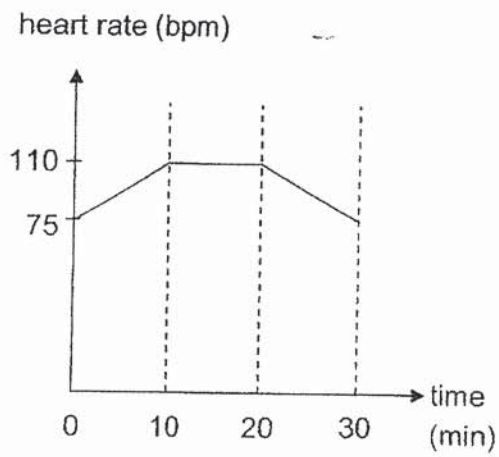
8. James did the following activities one after the other.
First, he jogged for 10 minutes.
Then he sat down and rested for 10 minutes.
Finally, he read a book for another 10 minutes.

Which of the graphs below shows his heart rate over the 30 minutes?

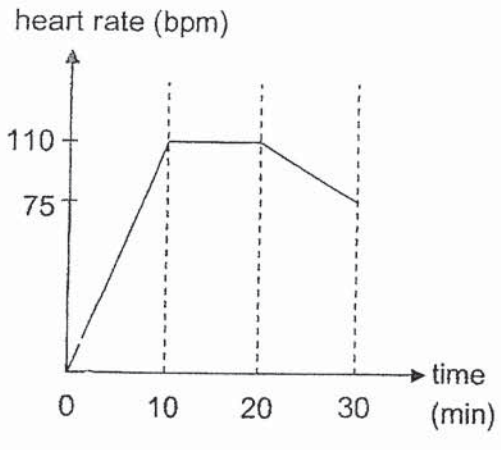
(1)



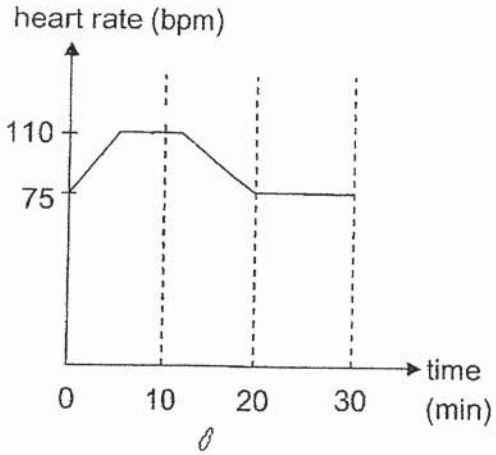
(2)



(3)



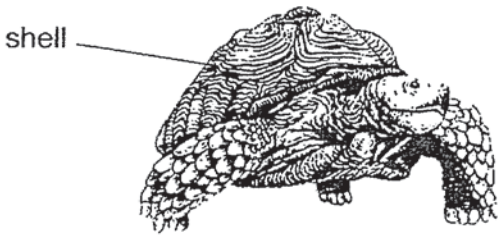
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9. Study the animal below.

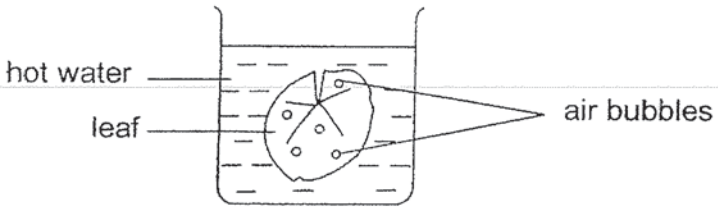


Which of the following statements about the animal are **not** true?

A The cells on its shell have cell wall.
B The cells in the animal have cytoplasm.
C It has cells that carry out different functions .
D The cells of the adult animal is larger than the cells of its young.

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

10. A leaf of a plant was placed in a beaker of hot water.



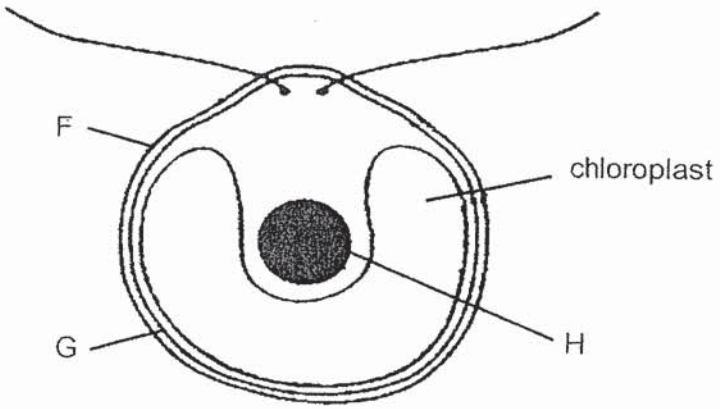
It was observed that air bubbles formed only on the upper surface of the leaf.
Which of the following conclusions is correct?

(1) Air escapes through openings found on both surfaces of the leaf.
(2) The hot water evaporated and formed bubbles on the upper surface.
(3) The leaf has openings on the upper surface but not on the lower surface.
(4) Air enters the lower surface of the leaf and escapes through the upper surface.

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11. Study the diagram of a single-celled organism shown below.

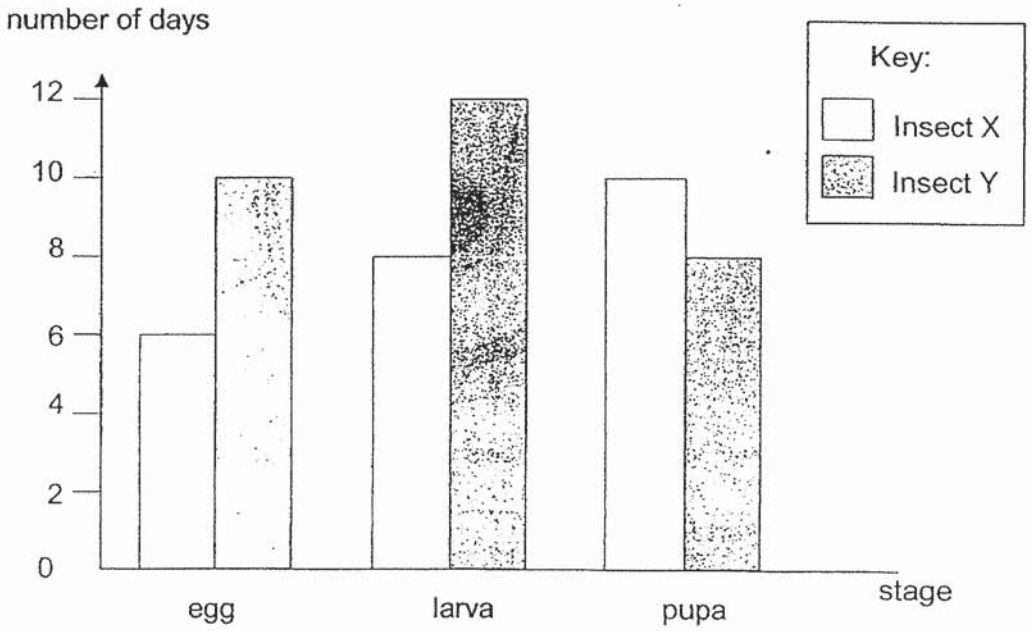


Which of the following correctly shows the functions of the labelled parts?

	Part F	Part G	Part H
(1)	controls the movement of substances in and out of the cell	supports the cell and gives it a regular shape	controls all activities in the cell
(2)	supports the cell and gives it a regular shape	controls all activities in the cell	controls the movement of substances in and out of the cell
(3)	supports the cell and gives it a regular shape	controls the movement of substances in and out of the cell	controls all activities in the cell
(4)	controls all activities in the cell	supports the cell and gives it a regular shape	controls the movement of substances in and out of the cell

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12. The bar graph below shows the number of days each stage of the life cycles of insects X and Y lasts.



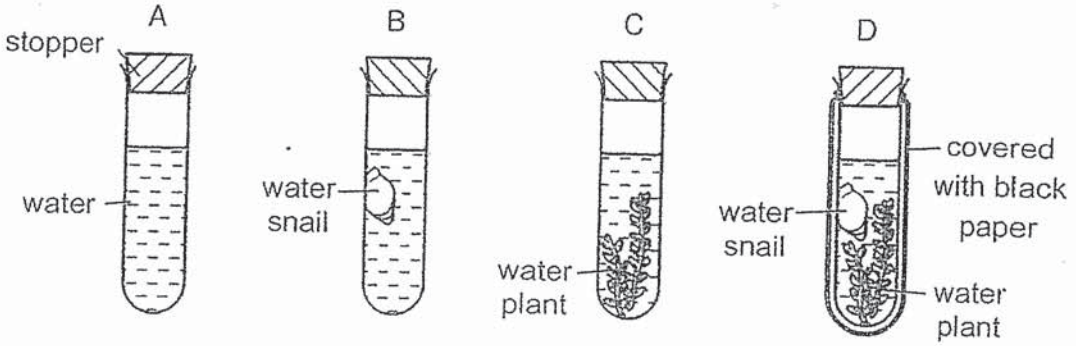
Based on the graph, which of the following is correct?

(1) Insect Y lays more eggs than insect X.
(2) Insects X and Y have a life cycle with three stages.
(3) The egg of insect X takes six days to hatch into a larva.
(4) On the thirteenth day after the egg is laid, insect Y is at its pupa stage.

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13. An experiment was conducted using four identical tubes as shown. All tubes were placed in a brightly-lit room.



After a few hours, a few drops of liquid X was added into each tube. When liquid X was added, the colour of water changed according to the amount of carbon dioxide present as shown below.

Amount of carbon dioxide in water	Less than normal	Normal	More than normal
Colour of water with liquid X	purple	red	yellow

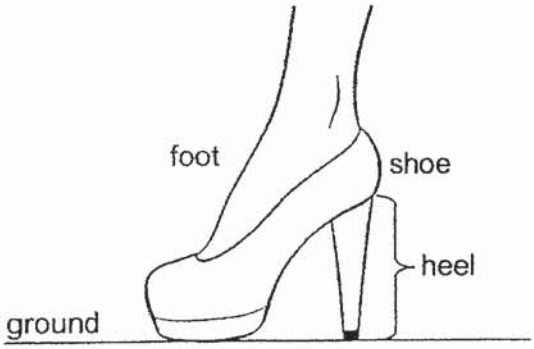
Water in tube A was red. Which of the following is **definitely** true?

(1) Only the water in B turned yellow.
(2) Water in C turned purple as the plant made food.
(3) Water in B turned yellow as the snail took in water.
(4) Only the water snail gives out carbon dioxide, turning water in D yellow.

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14. The diagram below shows a shoe.



Which of the following materials, A, B, C or D, is most suitable for making the heel of the shoe?

	Material	Waterproof	Flexible	Strong
(1)	A	yes	yes	yes
(2)	B	yes	no	yes
(3)	C	yes	no	no
(4)	D	no	yes	no

15. A sheet of material T was placed on top of a piece of paper with words printed on it. It was observed that the words could no longer be seen.

Which of the following explains the observation?

(1) Material T allows some light to pass through.
(2) Material T does not allow light to pass through.
(3) The piece of paper allows some light to pass through.
(4) The piece of paper does not allow light to pass through.

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16. The table below shows the state of four substances, P, Q, R and S, at different temperatures.

Substances	State of substances at		
	40°C	**60°C**	**80°C**
P	solid	solid	solid
Q	solid	liquid	liquid
R	solid	solid	liquid
S	liquid	liquid	gas

Based on the table, which of the following statements is **definitely** correct?

(1) Substance Q freezes at 40°C.
(2) Substance R is a solid at 65°C.
(3) Substance S has the highest boiling point.
(4) Substance P has the highest freezing point.

17. Which of the following does **not** help to conserve water?

(1) Use water directly from a hose to wash a car.
(2) Water plants using water that has been used to wash rice.
(3) Wash dishes in a tub of water instead of under running water
(4) Use water from a mug to rinse your mouth when you brush your teeth.

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18. Simon trapped some gas in a container.
He pulled the piston towards the open end of the container as shown below.

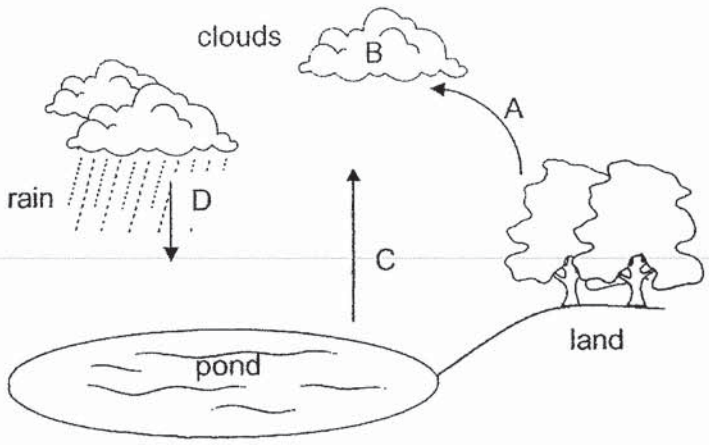


before moving the piston　　after moving the piston

How were the mass and volume of the gas affected by moving the piston?

	Mass	Volume
(1)	remains the same	increases
(2)	remains the same	decreases
(3)	decreases	decreases
(4)	increases	increases

19. The diagram below shows part of a water cycle.

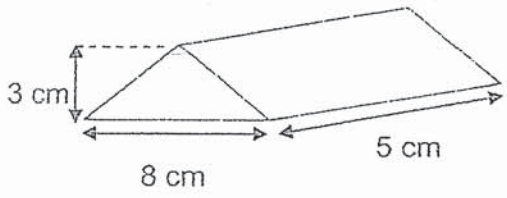


At which stage(s) is/are water present in the gaseous state?

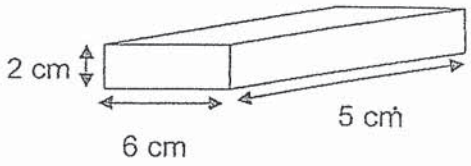
(1) C only
(2) A and C only
(3) A and D only
(4) A, B and C only

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20. Jessie and James each had 60cm^3 of clay. They formed two different shapes and placed them on the table as shown below.



Jessie's clay



James' clay

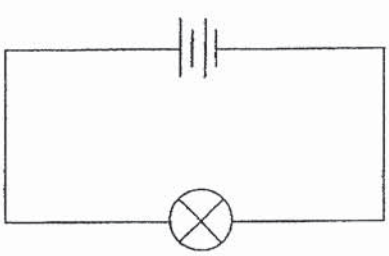
Based on the information above, which of the following is correct?

(1) Clay can be compressed.
(2) Clay has a definite shape.
(3) Jessie's clay is heavier than James' clay.
(4) Jessie had a bigger piece of clay than James.

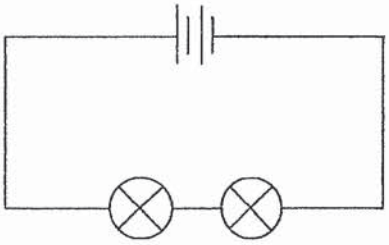
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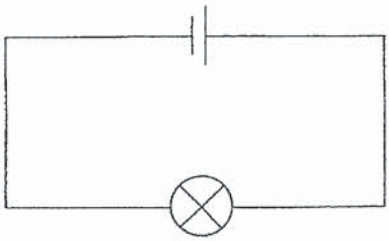
21. Siti set up four circuits, A, B, C and D, as shown below.



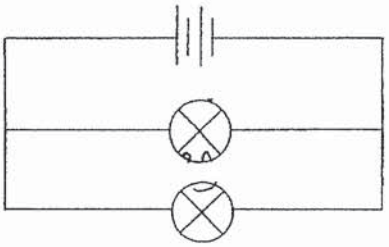
circuit A



circuit B



circuit C



circuit D

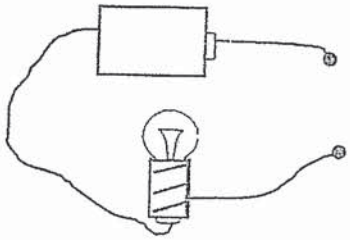
Which of the following circuits should she use for the following experiments?

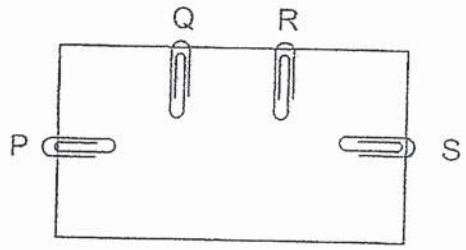
	Aim of experiment	
	To find out if the number of bulbs in a circuit affects the brightness of a bulb	**To find out if the arrangement of bulbs in a circuit affects the brightness of a bulb**
(1)	Set-ups A and D	Set-ups A and C
(2)	Set-ups A and B	Set-ups B and D
(3)	Set-ups B and C	Set-ups A and B
(4)	Set-ups B and D	Set-ups A and D

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22. The diagram below shows a circuit tester and the top view of a circuit card with four paper clips, P, Q, R and S. The paper clips are connected by wires on the underside of the circuit card.



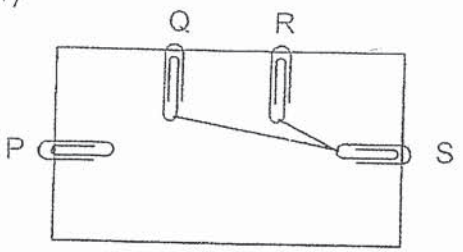


When Jacob connected the circuit tester to various paper clips, he obtained the following results.

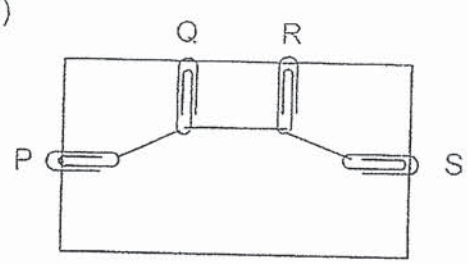
Paper clips connected				Does the bulb light up?
P	Q	R	S	
✓			✓	Yes
	✓	✓		Yes
	✓		✓	No
✓		✓		No

Which of the following connections is possible on the underside of the circuit card?

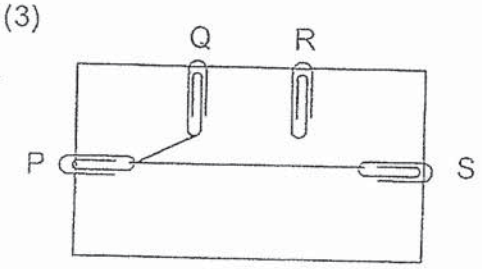
(1)



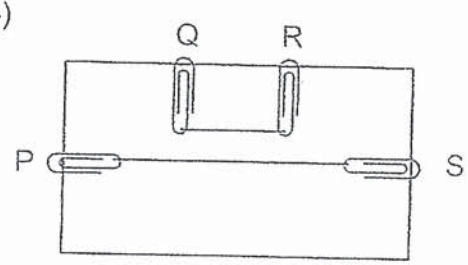
(2)



(3)



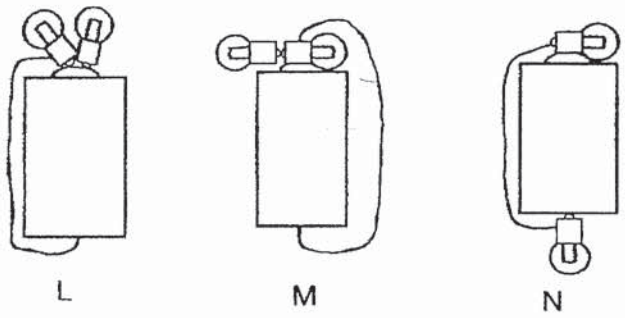
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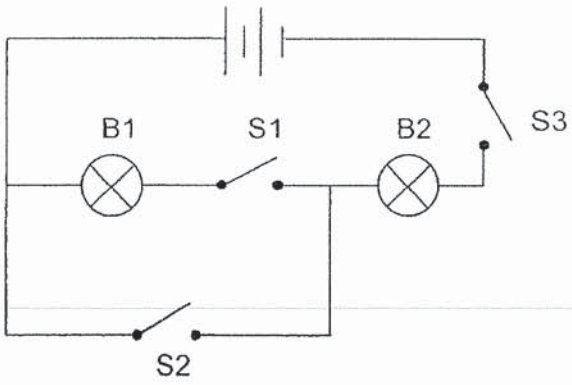
23. The diagram below shows three circuits, L, M and N.



In which of the above circuit(s) will both bulbs light up?

(1) M only
(2) N only
(3) L and N only
(4) M and N only

24. A circuit is set up using two new and identical bulbs, B1 and B2, and three switches, S1, S2 and S3, as shown in the diagram below.



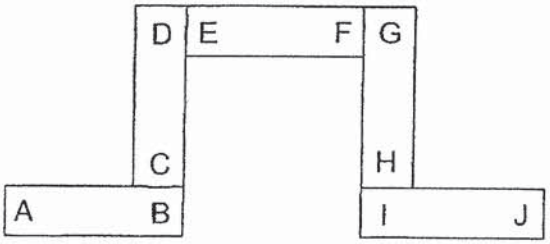
Which of the following is correct?

	S1	S2	S3	B1	B2
(1)	closed	open	open	lighted up	not lighted up
(2)	open	closed	closed	not lighted up	lighted up
(3)	closed	open	closed	lighted up	not lighted up
(4)	open	closed	open	not lighted up	lighted up

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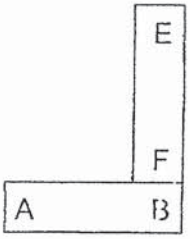
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25. Five bar magnets with their ends marked A to J are arranged as shown below.

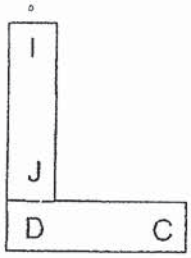


Which of the following diagrams shows a possible arrangement when two of the magnets are brought close together?

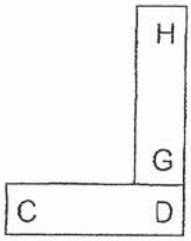
(1)



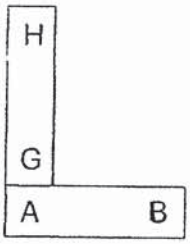
(2)



(3)



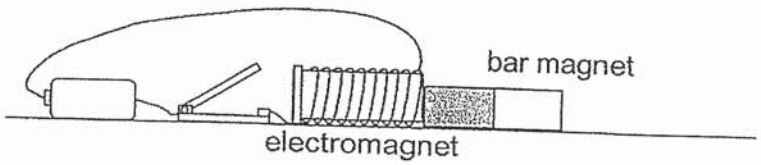
(4)



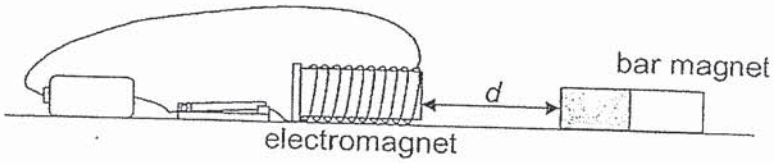
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26. In the set-up below, there are ten coils around the electromagnet and a bar magnet was placed next to it.



When the switch is closed, the bar magnet moves away from the electromagnet. The distance, *d*, between the two magnets is then measured.



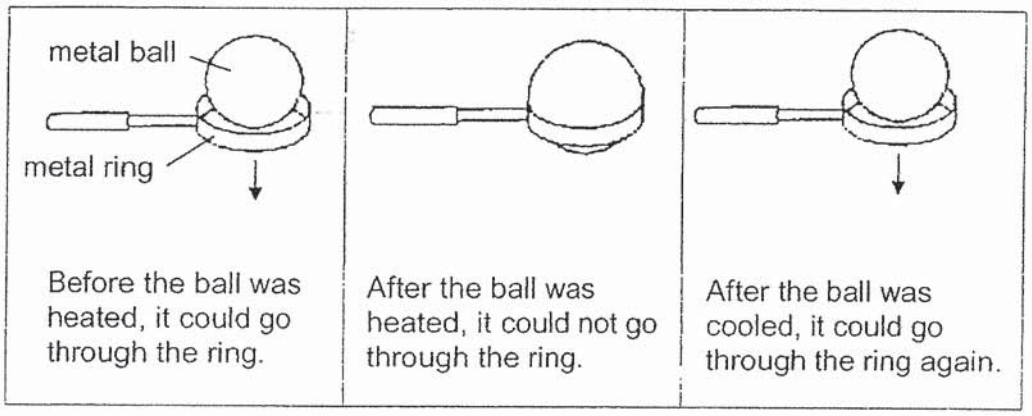
How will the distance, *d*, and the strength of the electromagnet change when there are twenty coils around the electromagnet?

	Distance, *d*	Strength of electromagnet
(1)	increases	increases
(2)	decreases	decreases
(3)	increases	decreases
(4)	decreases	increases

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27. Ahmad wanted to see the effects of heat gain and heat loss on solids. He carried out the following experiment.

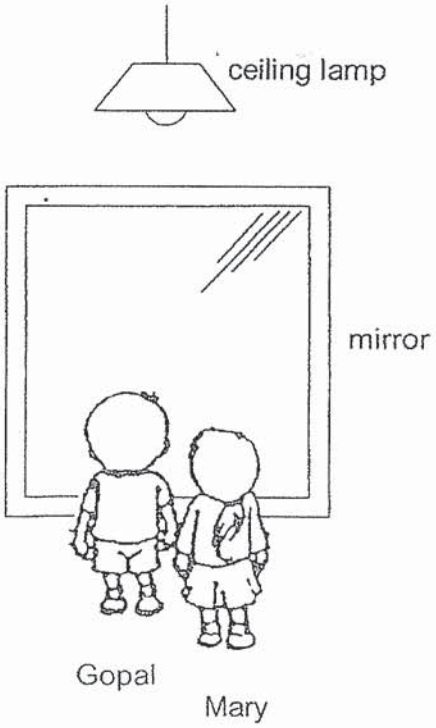


Ahmad made some statements based on the experiment. Which of the following is correct?

(1) At first, the metal ball could go through the ring as it lost heat and became smaller.
(2) After the metal ball was heated. it could not go through the ring as it gained heat and its mass increased.
(3) After the metal ball was heated, it could not go through the ring as it gained heat and its volume increased.
(4) After the metal ball was cooled, it could go through the ring as it gained coldness and became smaller.

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28. Gopal and Mary were standing in front of a mirror in the room. Mary was standing behind Gopal, but Gopal could still see her clearly in the mirror.



Which of the following explains how Gopal was able to see Mary?

(1) Mary reflected light from the lamp into Gopal's eyes.
(2) The mirror gave off light which travelled into Gopal's eyes.
(3) Mary reflected light given off by the mirror into Gopal's eyes.
(4) The light reflected by Mary is reflected by the mirror into Gopal's eyes.

End of Booklet A

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AI TONG SCHOOL

2019 END-OF-YEAR EXAMINATION
PRIMARY FIVE SCIENCE

(BOOKLET B)

24 OCTOBER 2019

Total time for booklets A and B : 1 h 45 min

INSTRUCTIONS

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

Name : _____ ( )

Class : Primary 5 _____

Parent's Signature : _____

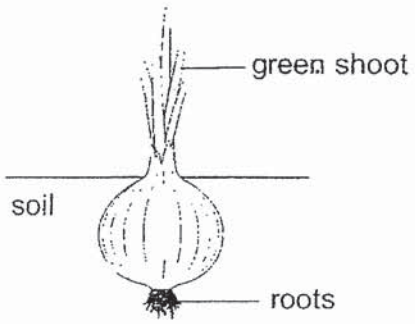
44

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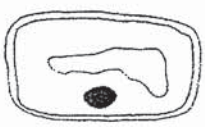
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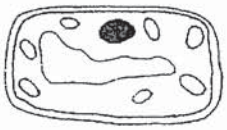
Section B: 44 marks
Read the questions carefully and write down your answers in the spaces provided.

29. The following diagram shows an onion plant with two parts labelled.



The following cells, A and B, are taken from these parts of the onion plant.


cell A


cell B

(a) In the table below, match cells A and B to the respective parts of the onion plant that they are most likely taken from. [1]

	Part of onion plant	Cell
(i)	root	
(ii)	shoot	

(b) Explain your choice for your answer in (a)(i) above. [1]

_____

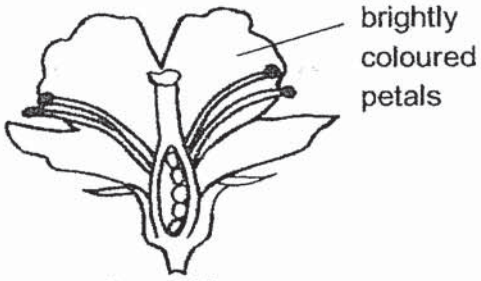
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30. Judy observed flower E and noted that it had brightly coloured petals.



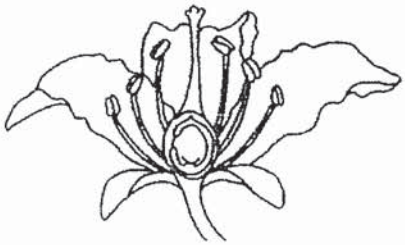
flower E

(a) Suggest how flower E can be pollinated. Give a reason. [1]

_____

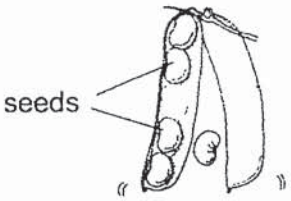
_____

Judy then compared flower E with flower F from a different plant.

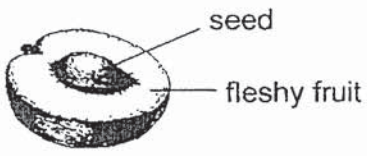


flower F

The two flowers developed into two different fruits, P and Q, as shown below.



fruit P



fruit Q

(b) Based on the diagrams above, which flower, E or F, developed into fruit P? Explain your answer. [2]

_____

_____

_____

Question 30 continues on the next page.

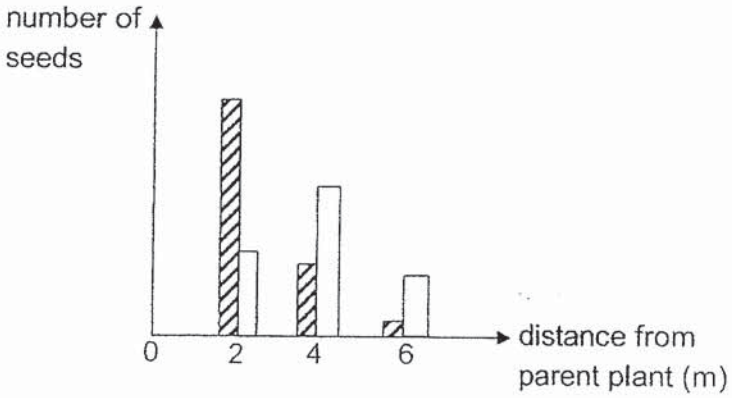
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Question 30 continues.

Judy counted the number of seeds from fruits P and Q that can be found at various distances from their respective parent plants in the garden. The results are shown below.



(c) Based on the results, indicate P or Q in the table below. [1]

Represented by	Fruit
	
	

(d) After some time, Judy noticed that not all of the seeds germinated.
Explain why it is important for plants to produce as many seeds as possible. [1]

_____

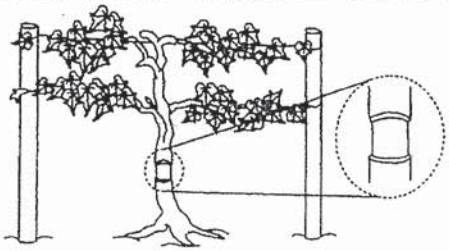
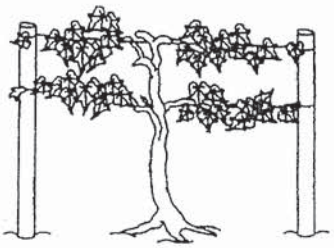
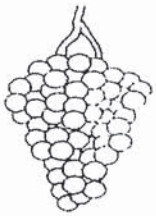
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31. Farmer Ben conducted an experiment using two similar plants, X and Y. He removed an outer ring from the stem of plant X but not plant Y. The food-carrying tubes were removed while the water-carrying tubes remained in the stem.

The table below shows the difference in the stems and fruits of plants X and Y.

	Plant X	Plant Y
Difference between the stems		
Difference between the fruits		

(a) Farmer Ben observed that plant X produced bigger fruits compared to plant Y. Based on the information above, explain why bigger fruits were produced by plant X. [2]

(b) After some time, plant X died.
Give a reason why removing the outer ring of the stem caused it to die. [1]

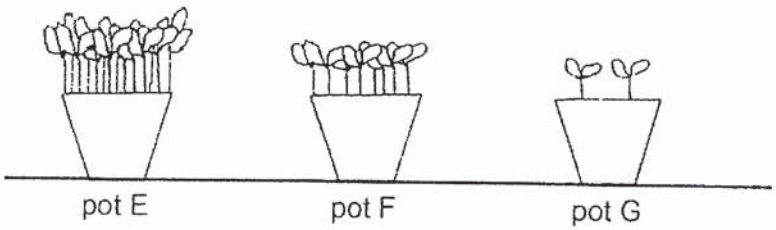
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32. Wei Lun conducted an experiment by placing different number of bean seeds into three identical pots. He placed the pots in his garden and watered each pot with the same amount of water daily.

He observed his plants after two weeks and recorded his findings in the table below.



	Pot E	Pot F	Pot G
Number of plants	14	8	2
Average height of plants after two weeks (cm)	15	12	7

(a) Give a reason why the stems of the bean plants in pot E were the tallest. [1]

_____

_____

(b) Explain why Wei Lun had to water each pot with the same amount of water daily. [1]

_____

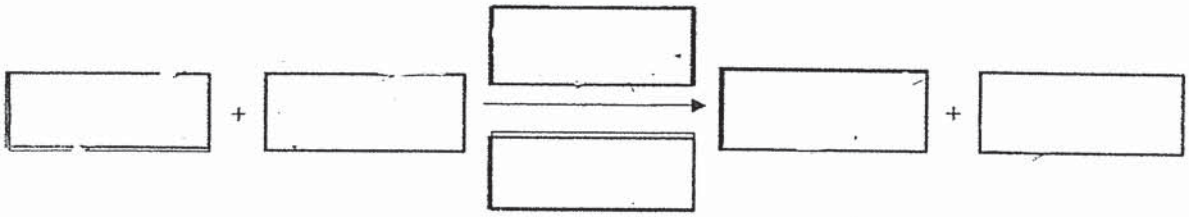
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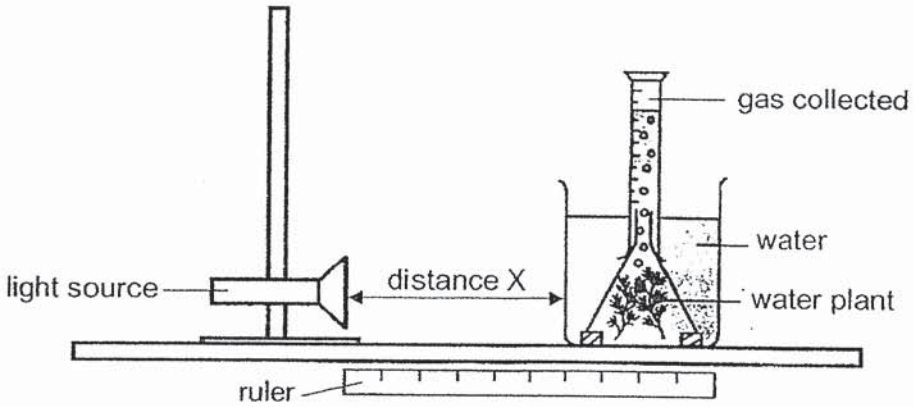
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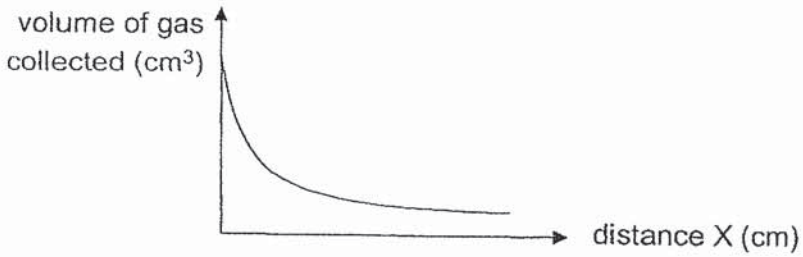
33. (a) State the word equation for photosynthesis in green plants. [1]



Ahmad conducted an experiment on photosynthesis in a dark room using the set-up as shown below.



Ahmad repeated his experiment by changing distance X. He kept all other variables constant. His results are shown below.



(b) Based on the results, state the relationship between distance X and the volume of gas collected. Explain the relationship. [2]

_____

_____

_____

_____

Question 33 continues on the next page.

3

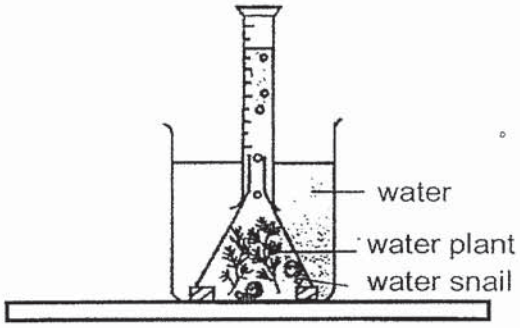
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Question 33 continues.

(c) Give a reason why conducting the experiment in a dark room makes the experiment a fair test. [1]

Ahmad then placed two water snails into his set-up and removed the light source.



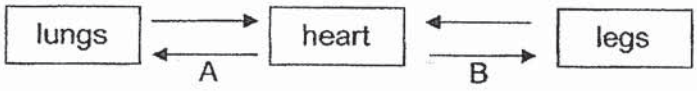
(d) Explain why the water snails died after a few days. [1]

2

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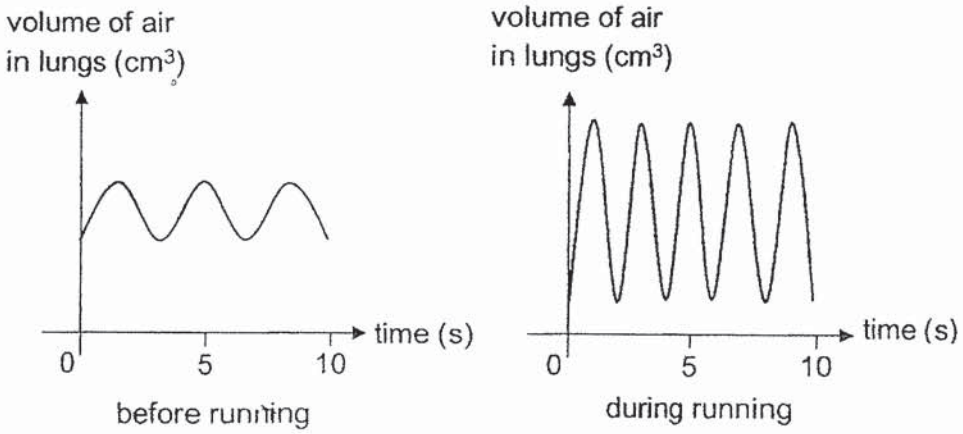
34. The diagram below shows how blood flows in certain parts of the body.



(a) There is more gas X in the blood at B than at A. What is gas X? [1]

_____

The graphs below show the changes in the volume of air in Mr Koh's lungs for a period of ten seconds before he ran and a period of ten seconds during his run.



(b) Explain why Mr Koh needed to breathe in and breathe out more air during his run. [2]

_____

_____

_____

_____

(c) Based on the graphs given, state one other way Mr Koh's breathing had changed during exercise.

[1]

_____

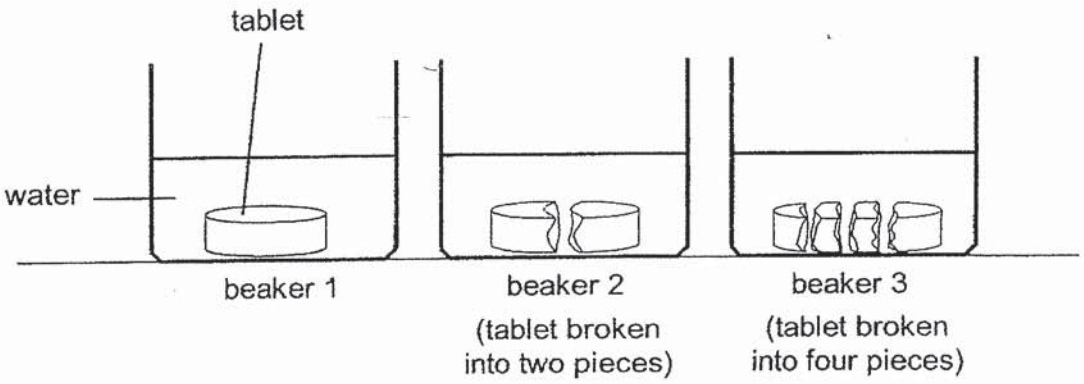
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35. Ramy carried out an experiment as shown below using tablets that dissolve easily in water. He used identical tablets and the same amount of water in each beaker.



He recorded the time taken for the tablet to dissolve completely in the table below.

	Time taken (s)			
	1st reading	2nd reading	3rd reading	Average reading
Beaker 1	11	10	12	11
Beaker 2	6	7	6	6.3
Beaker 3	3	2	4	3

(a) Why did Ramy take more than one reading? [1]

_____

_____

(b) Ramy likes to gobble up his food during mealtimes. Based on the results of his experiment, explain how chewing his food into smaller pieces helps digestion. [1]

_____

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36. Suzy hung three magnets, X, Y and Z, above a tray of identical iron pins. Her observations are shown below in diagram 1.

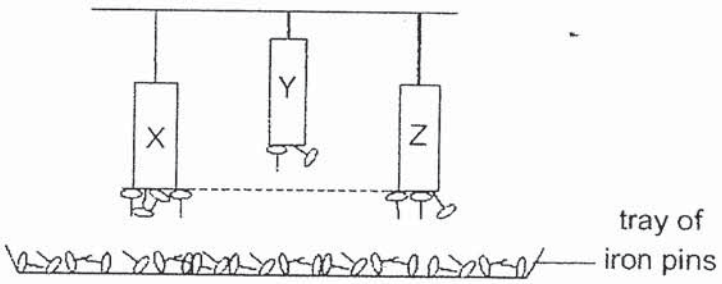
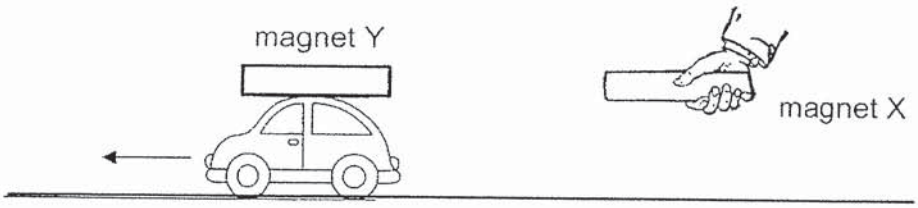


diagram 1

(a) Based on her observations, it is not possible to confirm that magnet Z is stronger than magnet Y. Explain why. [1]

Suzy then fixed magnet Y on a toy car. She held magnet X a distance away from magnet Y. She observed that the toy car moved away from her.



(b) Explain why the toy car moved away from Suzy. [1]

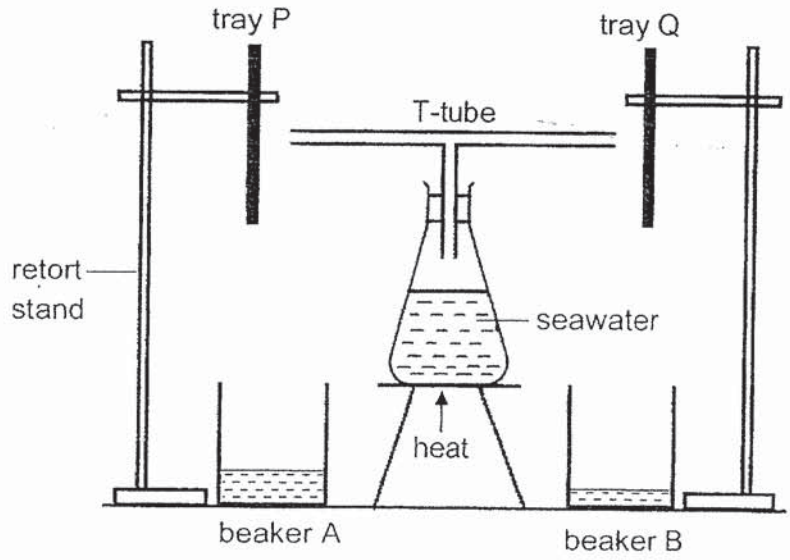
(c) Suzy repeated the experiment by holding magnet Z the same distance away from magnet Y. However, the toy car did not move at all.
Using the results in diagram 1, explain her observation. [2]

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37. Jacob had two identical trays, P and Q. He placed tray P in the freezer for a few hours before setting up the experiment below.

Jacob poured some seawater into a flask and attached a T-tube to it. He then placed the two trays, P and Q, at equal distances from the ends of the T-tube. He heated the seawater until it came to a boil. After a few minutes, he observed that some water was collected in both beakers A and B as shown below.



(a) Based on the experiment, state the process happening on trays P and Q. [1]

(b) Explain why there was more water collected in beaker A than in beaker B. [2]

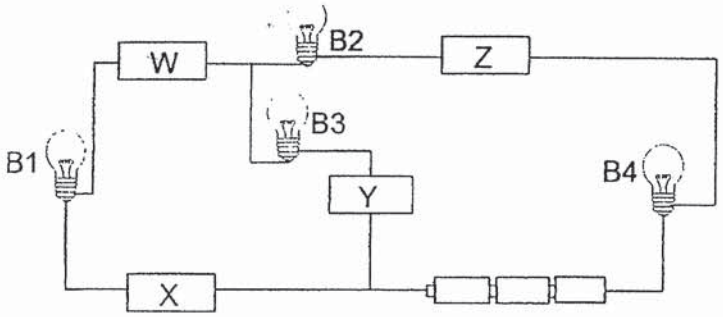
(c) After some time, Jacob observed that the amount of water in each beaker did not increase as quickly as before. Give a reason for his observation. [1]

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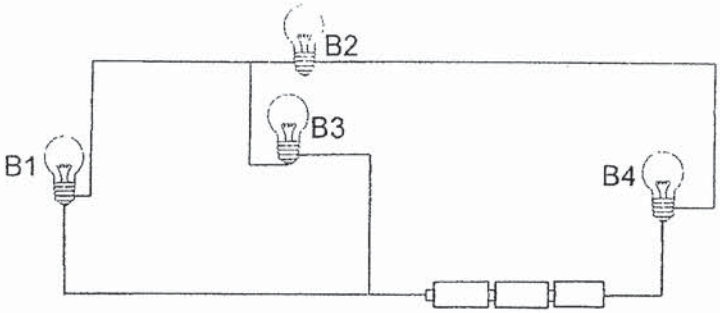
38. Janet set up the circuit shown below using new and identical batteries and bulbs. All bulbs were in working condition. She connected four objects, W, X, Y and Z, to the circuit.



She observed that bulbs B1, B2 and B4 lit up while B3 did not.

(a) What does Janet's observation tell her about objects W, X, Y and Z? [1]

Using only the bulbs and batteries in the above circuit, Janet then set up a new circuit shown below.



(b) Janet noticed that bulb B2 did not light up. State a reason why. [1]

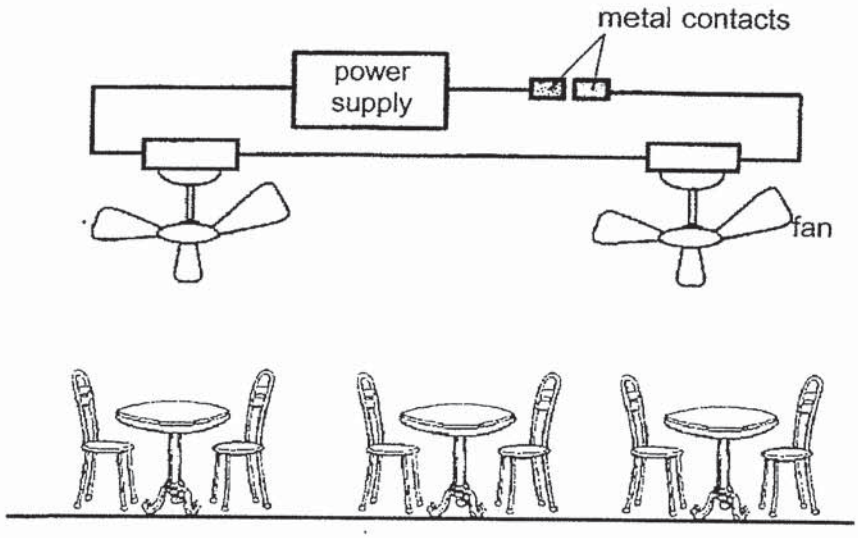
(c) Will bulbs B1, B3 and B4 light up? Explain your answer. [1]

3

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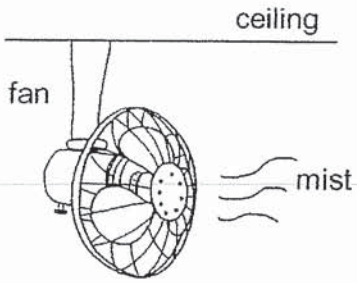
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39. Mr Lim used the set-up as shown below to cool the dining area outside his restaurant.



(a) On a hot day, explain how the metal contacts will enable the fans to be turned on. [2]

Mr Lim decided to replace his fans with those that are able to spray mist as shown below.



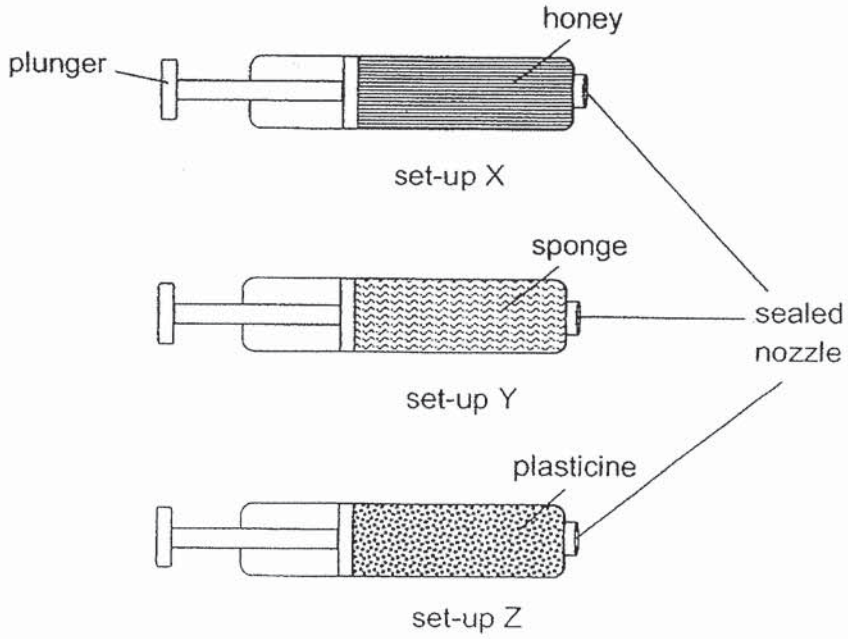
(b) State how the mist helps to keep the surrounding air cooler. [2]

4

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40. Bala filled three identical syringes with different substances as shown below.



Bala sealed the nozzle of each syringe and tried to push the plunger in.

(a) Bala observed that he was able to push the plunger in for set-up Y, but not all the way to the end. Explain his observation. [2]

_____

_____

_____

(b) Bala wrote down observations for set-ups X and Z in the table below.
Put a tick (✓) in the correct boxes. [1]

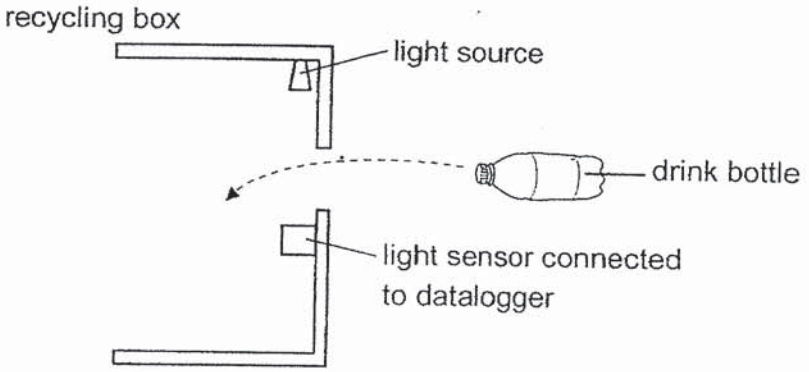
	Observation	True	False
(i)	The plunger could be pushed in for set-up X.		
(ii)	The plunger could not be pushed in for set-up Z.		

3

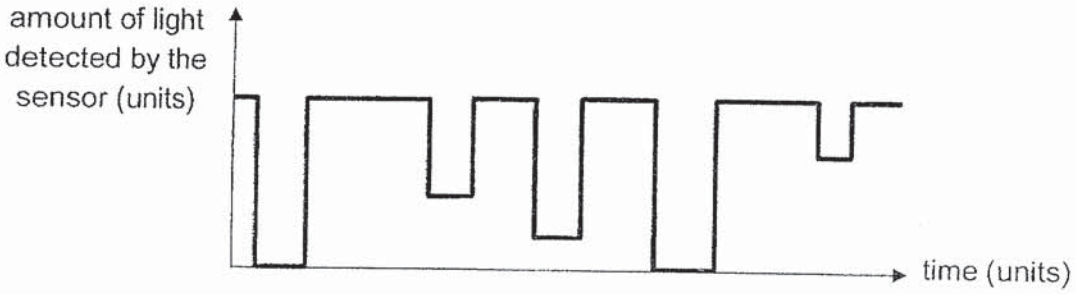
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41. Ming Lee set up a light source and a light sensor to count the number of drink bottles being thrown into a recycling box as shown below.



Drink bottles were thrown in one at a time. The datalogger recorded the following as shown in the graph below.



(a) Explain why the graph shows a decrease in the amount of light detected by the light sensor at certain times. [1]

(b) Based on the above result, how many drink bottles were thrown into the box? [1]

(c) Give a reason why some of the decrease in the amount of light detected by the sensor did not reach zero. [1]

END OF PAPER

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ANSWER KEY

YEAR : 2019

LEVEL : PRIMARY

SCHOOL : AI TONG SCHOOL

SUBJECT : SCIENCE

TERM : END-OF-YEAR EXAMINATIONS

SECTION A

Q1. 4

Q2. 4

Q3. 1

Q4. 2

Q5. 2

Q6. 2

Q7. 3

Q8. 4

Q9. 1

Q10. 3

Q11. 3

Q12. 3

Q13. 2

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Q14. 2

Q15. 2

Q16. 4

Q17. 1

Q18. 1

Q19. 2

Q20. 2

Q21. 2

Q22. 4

Q23. 3

Q24. 2

Q25. 3

Q26. 1

Q27. 3

Q28. 4

SECTION B

Q29.(a)

(i)	root	A
(ii)	shoot	B

(b) The roo[illegible]e onion plant does not need to make food and does not contain chloroplast all A does [illegible]ıtain chloroplast.

Q30.(a) by animal pollination. Animal-pollinated flowers have brightly coloured petals to attract the pollinators and flower E has brightly coloured petals.

(b) flower E. Flower E has more than one ovule but flower F only has one ovule. Ovules develops into seeds after fertiliasation. Since fruit P has many seeds, it must have come from flower E with many ovules.

(c)

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Fruit
P
Q

(d) It is to increase the chances of the seeds germinating and continue the life cycle of the plant to ensure that the species of the plant is not extinct.

Q31. (a) the food made by the leaves would not be able to be transported down the food-carrying tube in plant X and more food will be transported to the fruits as compared to plant Y as the food carrying tube of plant Y is not removed and less food will be transported to the fruits of Y.

(b) Food made by the leaves were unable to be transported ,to the root of the plant, when the roots die it will not be able to take in water from the plant causing it to die.

Q32.(a) there were the most number of plants in pot E so the plants were competing for enough sunlight to make food.

(b) this is to ensure that it is a fair test and the average height of plants after two weeks is solely due to the number of plants and nothing else.

Q33. (a) carbon dioxide , water ,chlorophyll , sunlight , oxygen, sugar(in order)

(b) As distance X increases, the rate of photosynthesis decreases. When distance X increases, the plant receives less light . So the rate of photosynthesis decreases and the amount of oxygen decreases.

(c) It ensures that the volume of gas collected, is solely due to the light from the torch and not any other light source.

(d) without light, the water plant cannot photosynthesis and can only respire, taking in oxygen. The water snail would not be able to receive sufficient oxygen and all die as all living things need oxygen to survive.

Q34. (a)

(b) Runni _ .ires more energy and Mr Koh needs to breathe in more to take in more oxygen so that the heart can pump more oxygen and digested food to all parts of the body to release more energy and breathe out more carbon dioxide.

(c) His breathing rate increased during the exercise.

Q35. (a) he wanted to take the average of the results to check for consistency in the results and ensure that the results are reliable.

(b) It increases the exposed surface area of the food to digestive juices and increases the rate of digestion.

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Q36.(a) Magnet Z is nearer to the tray of iron pins as compared to magnet Y thus attracted more iron pins.

(b) Magnet Y was fixed on the toy car and is facing magnet X so they will repel as their like poles are facing each other.

(c) Magnet Z is weaker than magnet X as it attracted less iron pins than magnet X when they were hung at the same height. So magnet Z is not strong enough to repel magnet Y when it was held at the same distance away.

Q37.(a) condensation

(b) Tray P was a cooler surface than tray Q. so the warm water vapour coming out from the T-tube lost more heat to tray P causing the rate of condensation at P to be faster than Q thus having more water droplets dripped into the beakers.

(c) the trays gained heat from the warm water vapour and temperature difference between the trays and the water vapour decreased , so the rate of condensation will decrease and less water will drop down into the into the beakers.

Q38. (a) only object Y is an insulator of electricity but objects W,X and Z are conductors of electricity.

(b) the metal tip of bulb B2 is not connected to the circuit.

(c) yes. The other three bulbs will still light up because electricity can still pass through as the metal casing of bulb B2 which is a metal conductor.

Q39(a). The metal contacts will gain heat and expand on a hot day. They will come into contact with each other and close the circuit, allowing electricity to flow through the circuit and turning the fans on.

(b) The wind from the fan will blow the mist further and more place to gain heat from the surrounding air and evaporate, keeping the surrounding air cooler.

Q40(a). the plunger cannot be pushed in as there is air in the sponge which can be compre---- the plunger could not be pushed In all the way as the air *still* have to occupy some sp so, the material used to make sponge, will still have to occupy some space.

(b) (i) false

(ii) true

Q41.(a) the drink bottle was blocking light from the light source at certain time.

(b) 5 drink bottles

(c)
some drink bottles were translucent and blocked some light so light could still be detected.

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