RIVER VALLEY PRIMARY SCHOOL
2019 PRELIMINARY EXAMINATION
PRIMARY 6

STANDARD SCIENCE

(BOOKLET A)

Name : _____ ( ) Date : 27 August (Tue)

Class : P6 _____ Time: 1 hour 45 min

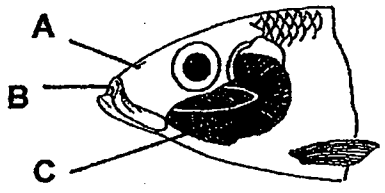
INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the space above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For Section A, shade your answers for questions 1 to 28 on the Optical Answer Sheet (OAS).
6. For Section B, write your answers for questions 29 to 40 in the space provided.
7. The total marks for Booklet A is 56 marks.

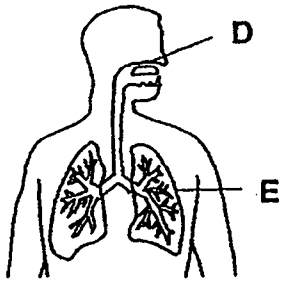
Section A (56 marks)

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

1. The diagrams below show the respiratory systems of two organisms.



Organism X



Organism Y

Which parts of organisms X and Y allow the exchange of gases to take place?

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

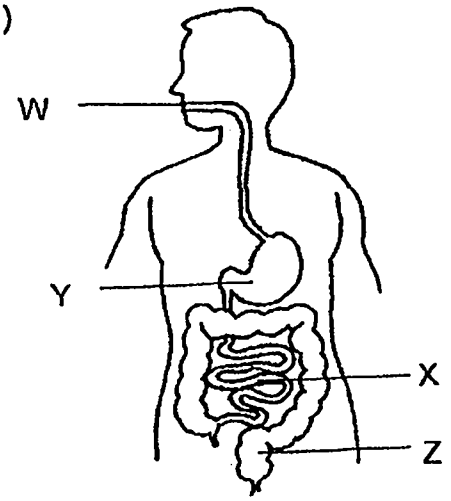
2. Study the table below.

Function	Parts of the digestive system			
	W	X	Y	Z
Food enters the bloodstream				√
Food is mixed with digestive juices	√		√	√
Water is removed from food		√		

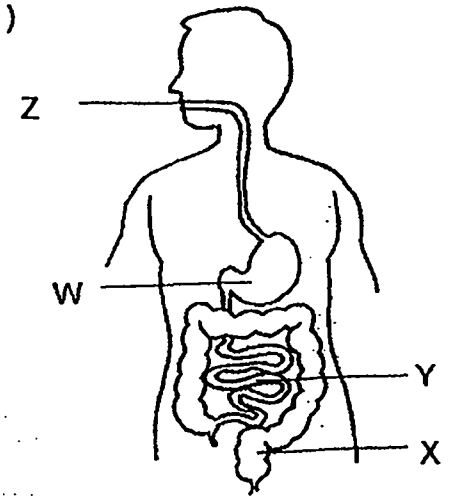
Key
√ : present

Which of the following correctly shows the parts labelled W, X, Y and Z?

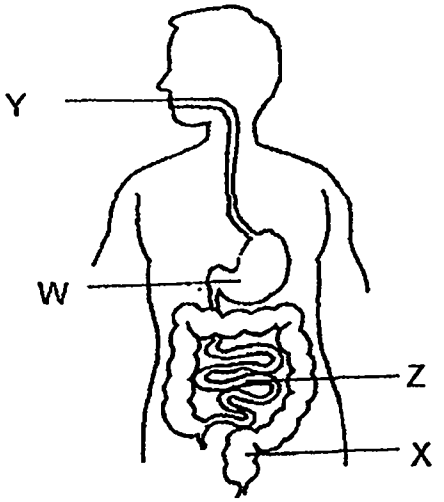
(1)



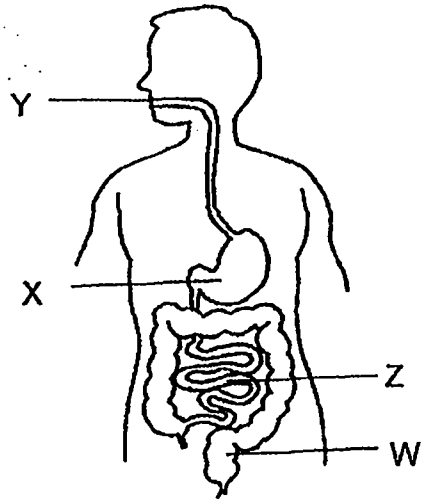
(2)



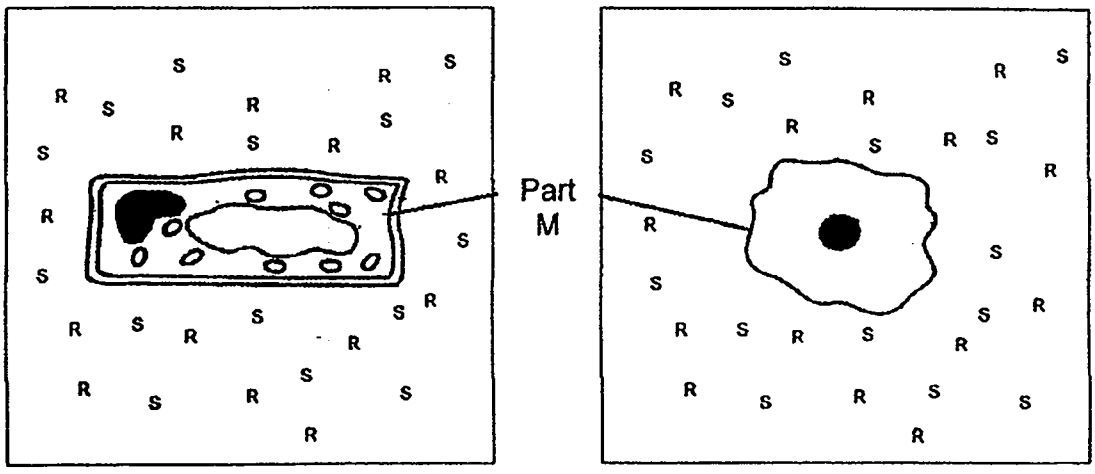
(3)



(4)

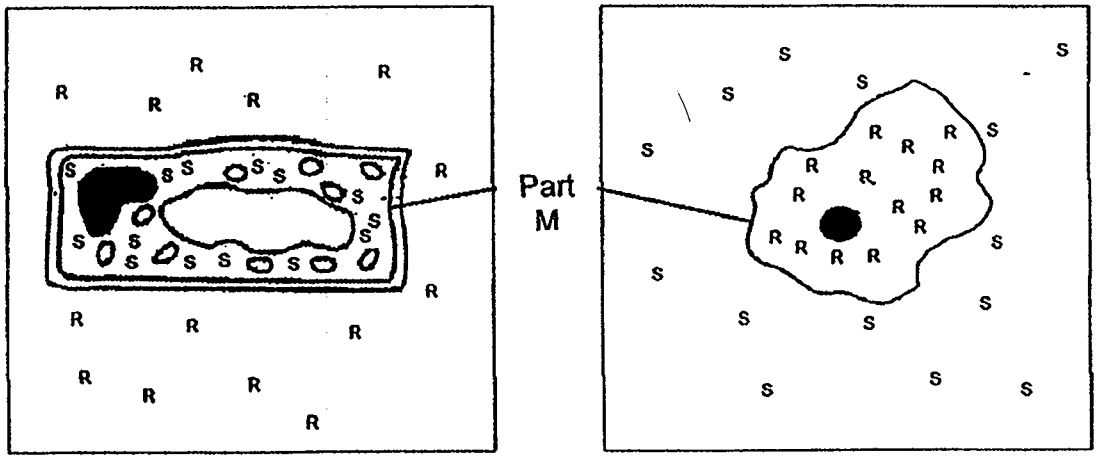


3. Jason placed two cells, X and Y, into separate containers. Each container contains equal amounts of substances R and S.



Cell X Cell Y

The diagram below shows what happened to the two cells after an hour.



Cell X Cell Y

What can Jason conclude about Part M?

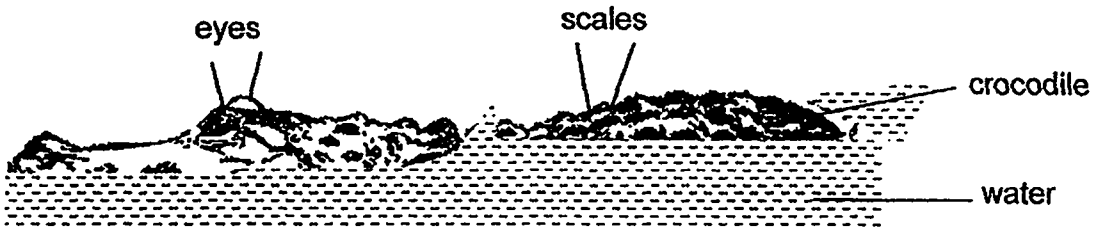
(1) It gives the cell a shape.

(2) It controls all activities in the cell.

(3) It controls the type of substances that leave the cell.

(4) It controls the type of substances that enter the cell.

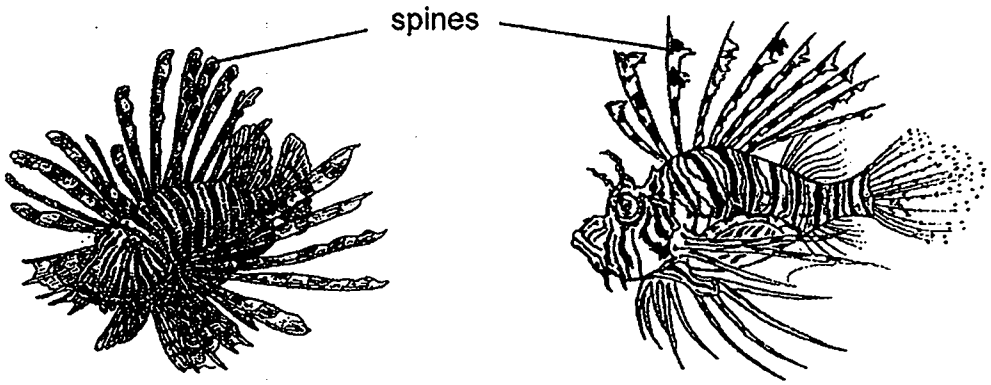
4. The picture below shows a crocodile that is in the water, waiting to catch its prey.



Which of the following correctly describes the crocodile's behavioural and structural adaptations in catching its prey?

	Behavioural Adaptation	Structural Adaptation
(1)	Scales as outer covering	Staying still in the water
(2)	Staying still in the water	Eyes on top of its head
(3)	Eyes on top of its head	Scales as outer covering
(4)	Staying still in the water	Scales as outer covering

5. Observe Fish X and Fish Y as shown below. Fish X is non-poisonous and Fish Y is poisonous. Fish Y has poisonous spines on its back. Predators avoid Fish X as they mistake them for Fish Y.



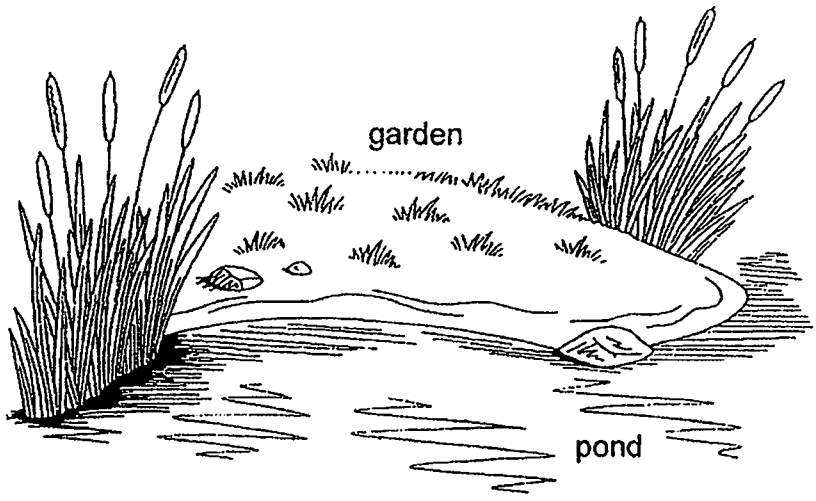
Fish X (non-poisonous) Fish Y (poisonous)

Which of the following statements describe Fish X and Fish Y?

A: The spines on Fish X warn predators to stay away.
B: Fish X and Fish Y hunt for the same type of animal for food.
C: The spines on Fish Y allows it to move faster in the water.
D: The spines on Fish X and Fish Y are a form of structural adaptation.

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

6. Meiling built a pond beside a garden.



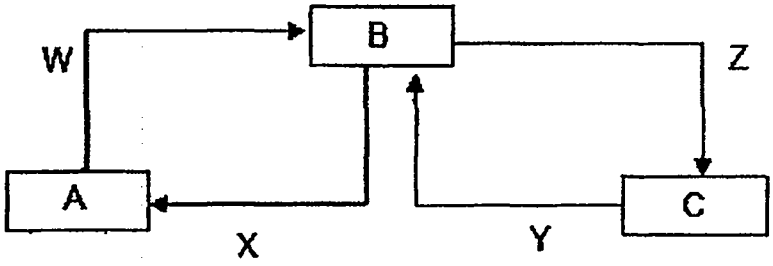
She observed three types of animals - frog, mosquito and butterfly living in the garden. The number of days needed for their eggs to hatch is shown below.

Characteristic	frog	mosquito	butterfly
Number of days needed for eggs to hatch	6	2	4

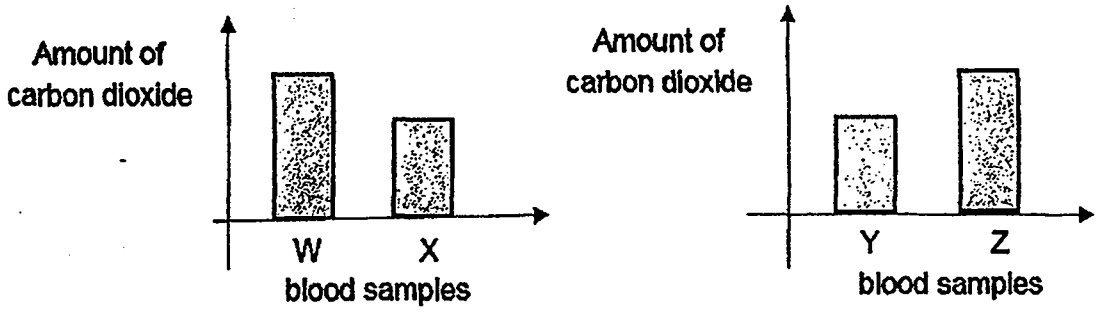
On Day 5, what would Daniel most likely find in the pond?

(1) Mosquito eggs and frog larvae
(2) Mosquito larvae and frog eggs
(3) Mosquito eggs, frog larvae and butterfly eggs
(4) Mosquito larvae, frog eggs and butterfly larvae

7. The diagram shows the direction of blood flow in parts of the human circulatory system.



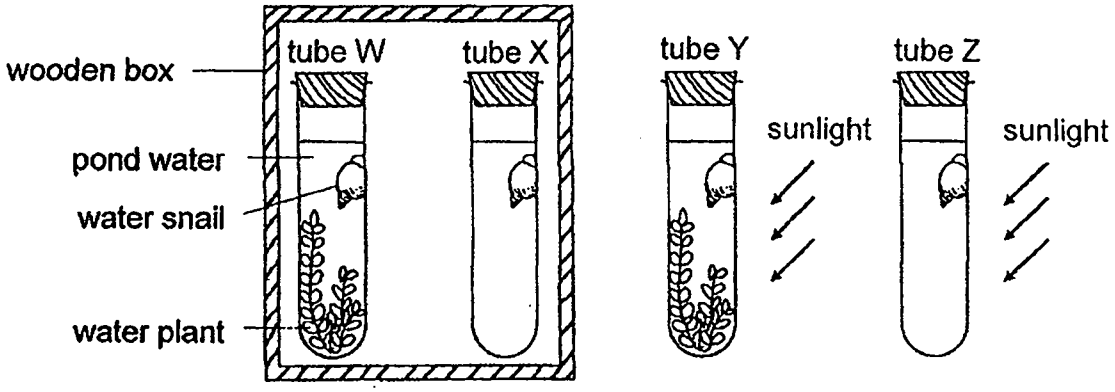
The same amount of blood was taken from W, X, Y and Z. The charts below show the comparison of the amount of carbon dioxide in the blood samples.



What are A, B and C?

	A	B	C
(1)	lungs	heart	other parts of the body
(2)	heart	lungs	other parts of the body
(3)	other parts of the body	lungs	heart
(4)	other parts of the body	heart	lungs

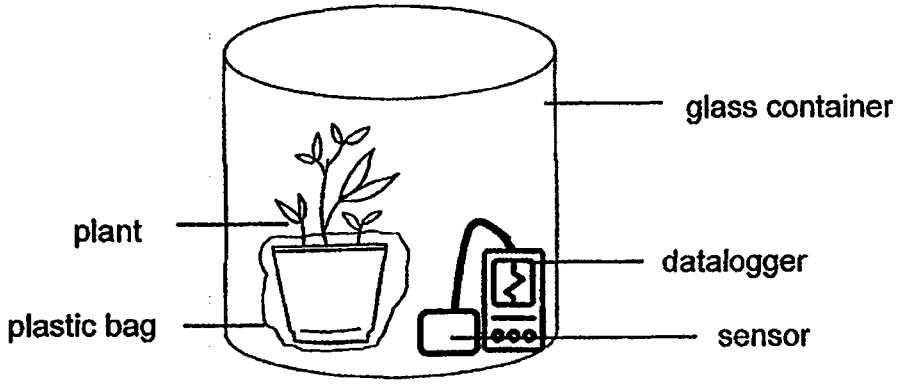
6. The diagram below shows four sealed test-tubes, W, X, Y and Z, placed either in a wooden box or under the sunlight. Each test-tube contained the same amount of pond water.



Which of the following test tubes, W, X, Y or Z, shows the most oxygen and carbon dioxide after three hours?

	Most oxygen	Most carbon dioxide
(1)	X	Y
(2)	Y	W
(3)	Z	W
(4)	Y	X

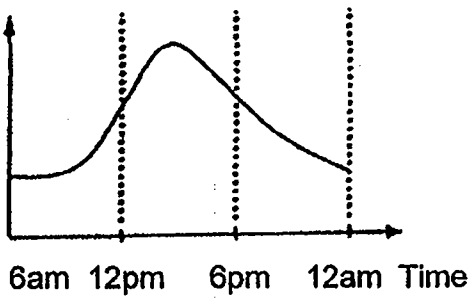
9. Timothy placed a set-up in the field as shown. The datalogger detects the amount of oxygen in the sealed glass container. The results are recorded over a period of 18 hours.



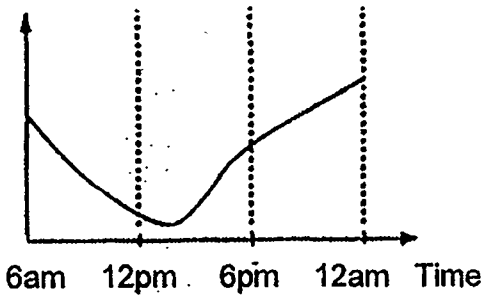
Setup

Which of the following graphs shows the amount of oxygen detected?

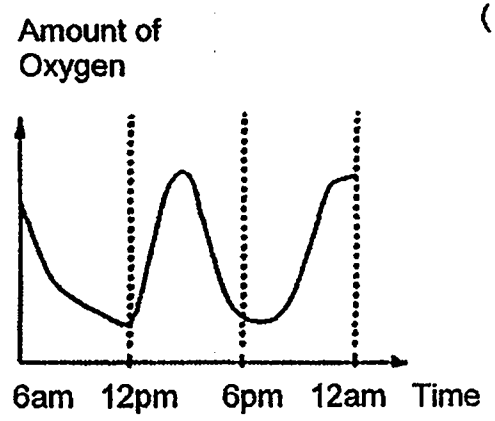
(1)



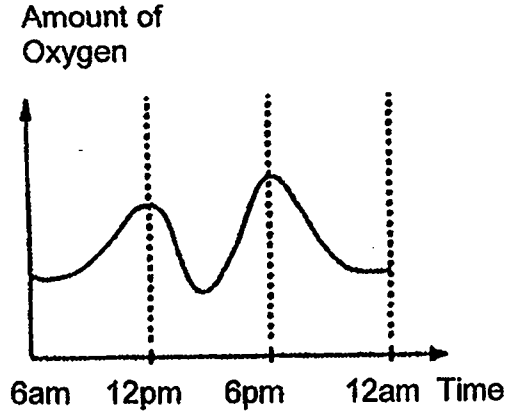
(2)



(3)



(4)



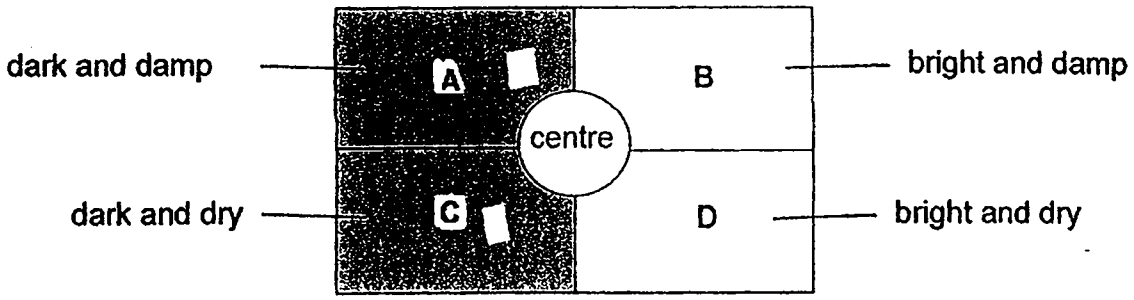
10. Samu observed some organisms at different places in his school. He recorded his observations in the table below.

Organisms living and reproducing at		
fish tank	pond	field
2 gold fish	3 tadpoles 2 frogs 2 hydrilla plants	3 caterpillars 2 butterflies

Based on the table above, which statement is correct?

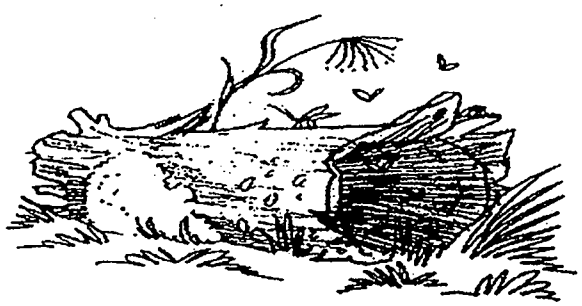
(1) There is 1 population in the field.
(2) There are 3 organisms in the pond.
(3) There are 14 populations altogether.
(4) There are 4 communities in his school.

11. Nancy conducted an investigation to find out about four organisms, P, Q, R and S. She divided a rectangular tray into four sections, A, B, C and D, and placed the same number of organisms at the centre of the tray.



After thirty minutes, the number of organisms found in each section of the tray was recorded below.

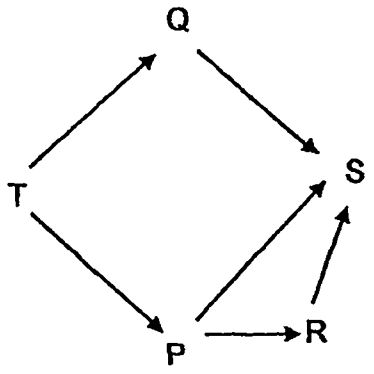
Organism	Number of organisms in each section			
	A	B	C	D
P	3	0	27	0
Q	28	1	1	0
R	0	2	0	28
S	0	29	0	1



Which organism(s) is/are **most likely** to be found inside a rotting tree trunk habitat as shown above?

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

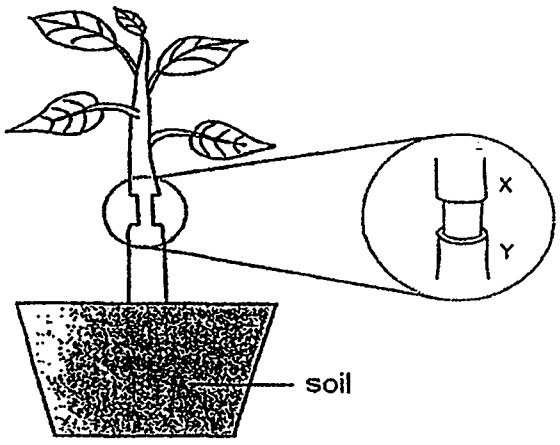
12. The diagram below shows a food web. P, Q, R, S and T represent different living things.



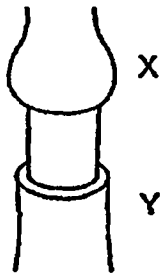
Which of the following is a correct conclusion?

(1) S is a decomposer.
(2) P is both a predator and a prey.
(3) Energy from the Sun is transferred to T, Q and S only.
(4) When the number of S decreases, the number of Q increases.

13. The diagram shows a plant. The outer layer of the stem between X and Y is removed.



The diagram below shows the stem after a few days.



Which statement explains why part X swell up after a few days?

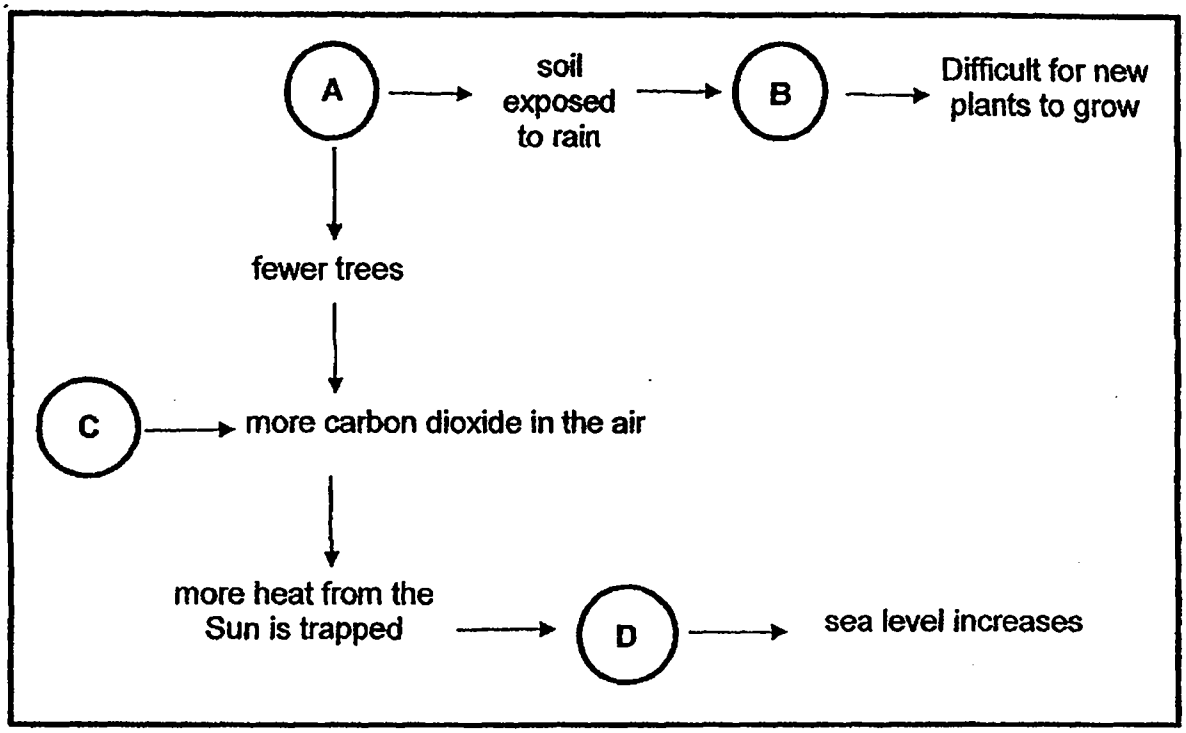
(1) The food carrying tubes were removed.

(2) The water carrying tubes were removed.

(3) The leaves could not photosynthesize.

(4) The roots could not absorb water for the plant.

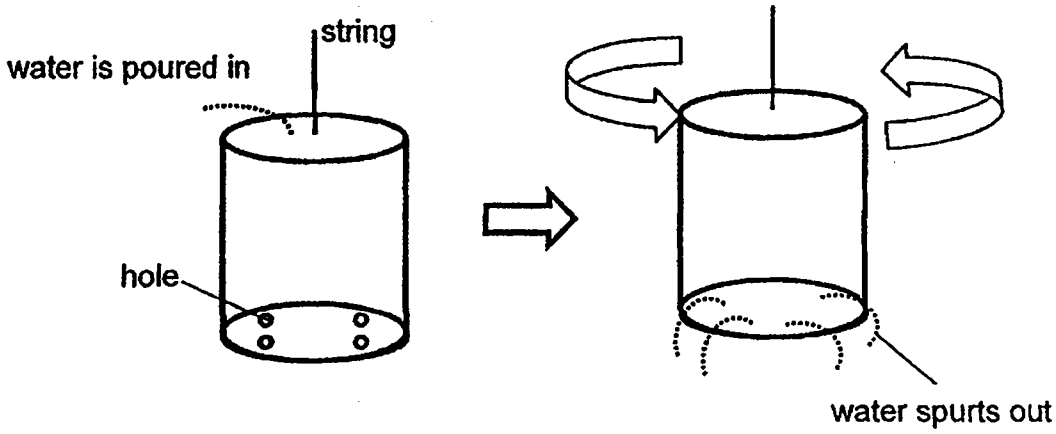
14. The diagram below is a representation of human's activities and the effects on the environment.



What do A, B, C and D represent?

	A	B	C	D
(1)	soil erosion	burning fossil fuels	deforestation	global warming
(2)	deforestation	soil erosion	global warming	burning fossil fuels
(3)	soil erosion	deforestation	global warming	burning fossil fuels
(4)	deforestation	soil erosion	burning fossil fuels	global warming

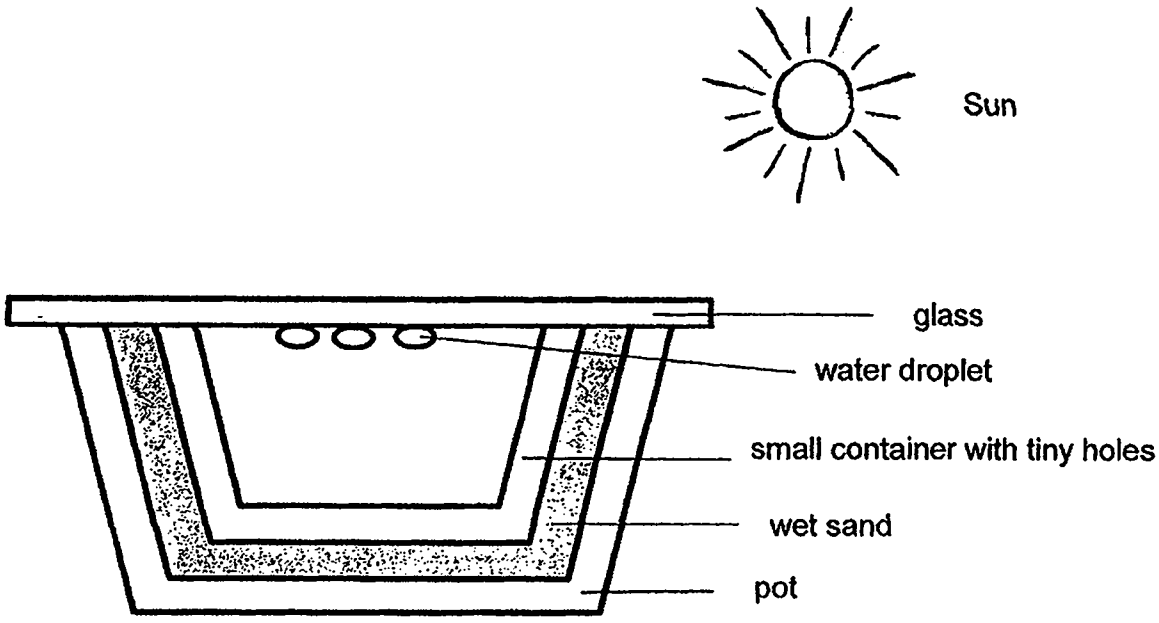
15. Minnie made holes at the base of a can as shown in the diagram below. The can is hung on a string. Water is then poured into the can from the top. As water spurts out of the can, it starts to spin.



The can spins because _____.

(1) potential energy of the water is converted to kinetic energy of the can
(2) kinetic energy of the water is converted to potential energy in the can
(3) kinetic energy of the water is converted to kinetic energy of the can
(4) potential energy of the water is converted to potential energy of the can

16. Maria set up the experiment as shown below.



She placed the set-up in a hot place and water droplets can be seen.

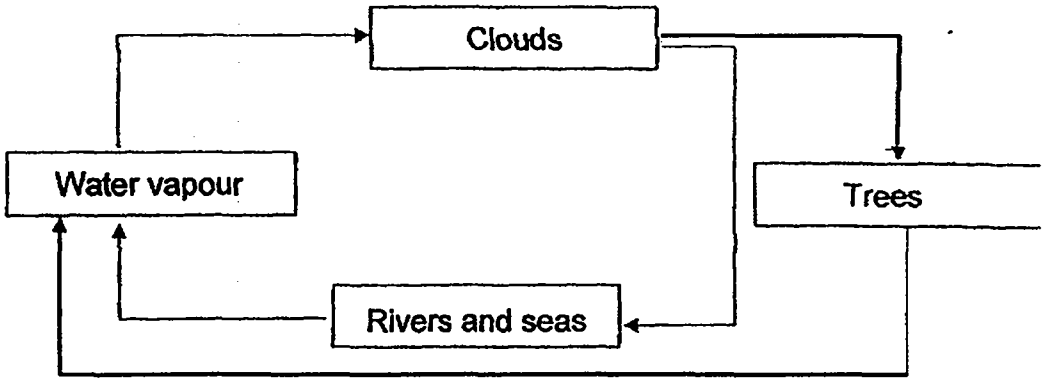
Which of the following statements about the set up are true?

A: water in the wet sand lose heat
B: water in the wet sand evaporated
C: water vapour condensed on the glass

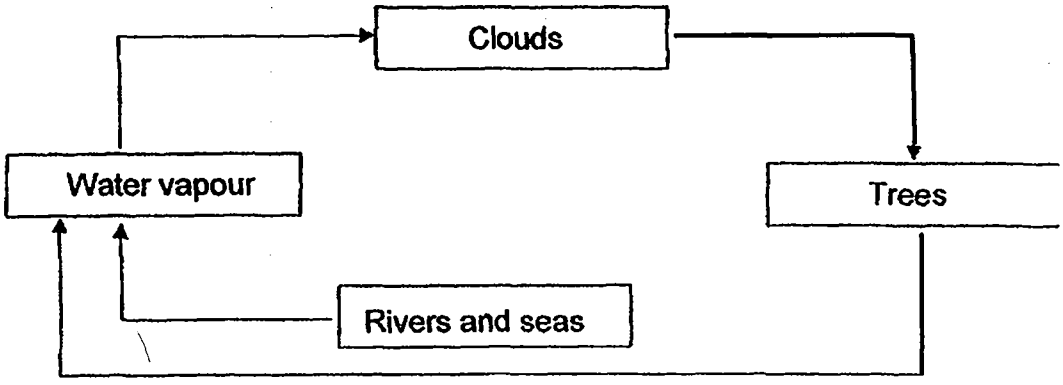
(1) A only
(2) A and B only
(3) B and C only
(4) A, B and C

17. Which of the following correctly shows how trees play a part in the water cycle?

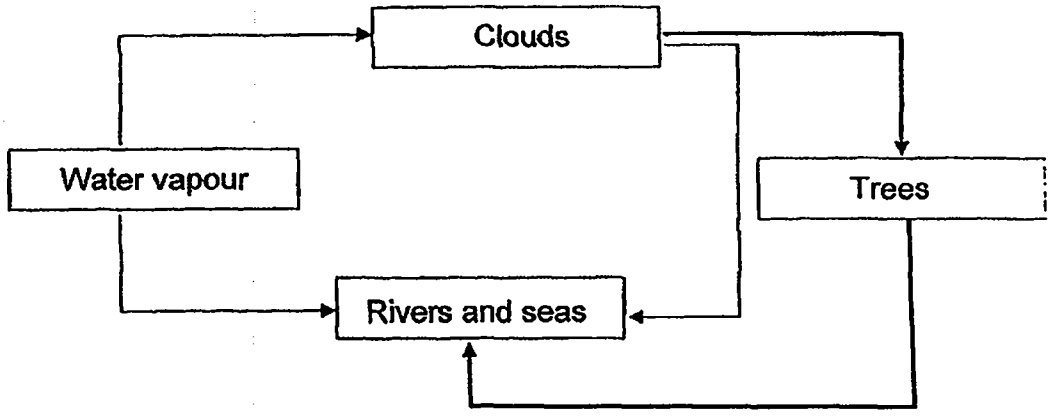
(1)



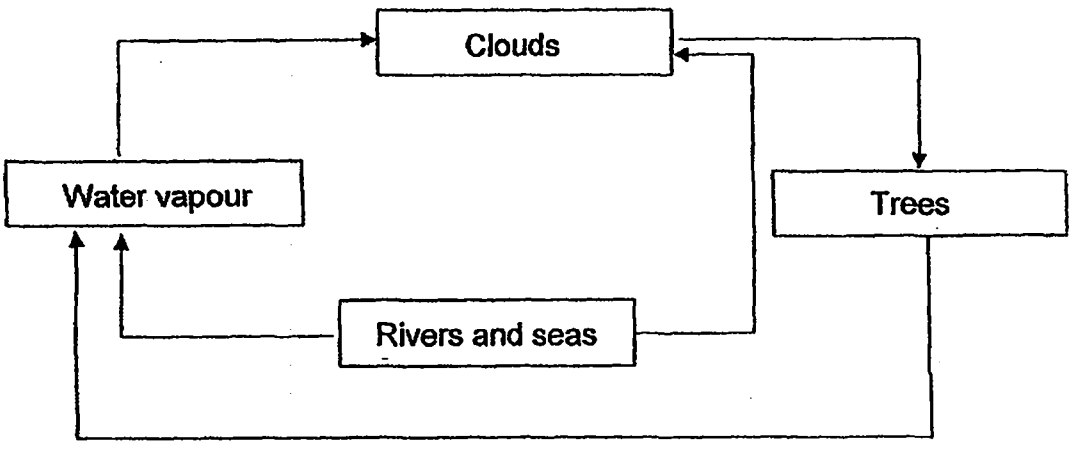
(2)



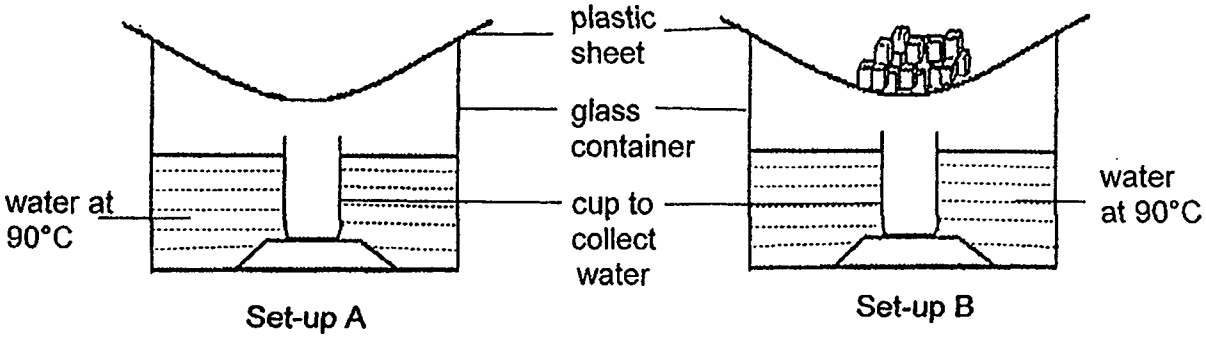
(3)



(4)



18. Ben placed two similar glass containers with equal amounts of water at 90°C at the same location.



Based on the set-up, Ben wants to find out if _____.

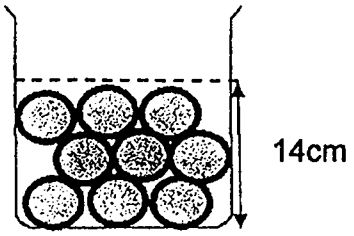
(1) condensation occurs at 90°C

(2) ice melts at a higher temperature

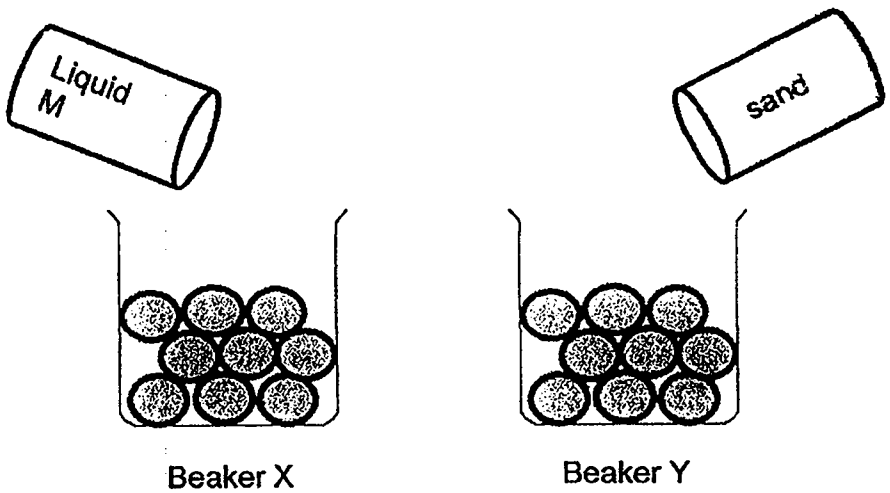
(3) rate of condensation increases with ice

(4) rate of evaporation decreases with ice

19. Becky was given a beaker with some balls. She poured 500 cm^3 of water into the beaker. She measured the height of the water to be at 14cm as shown in the diagram belom.



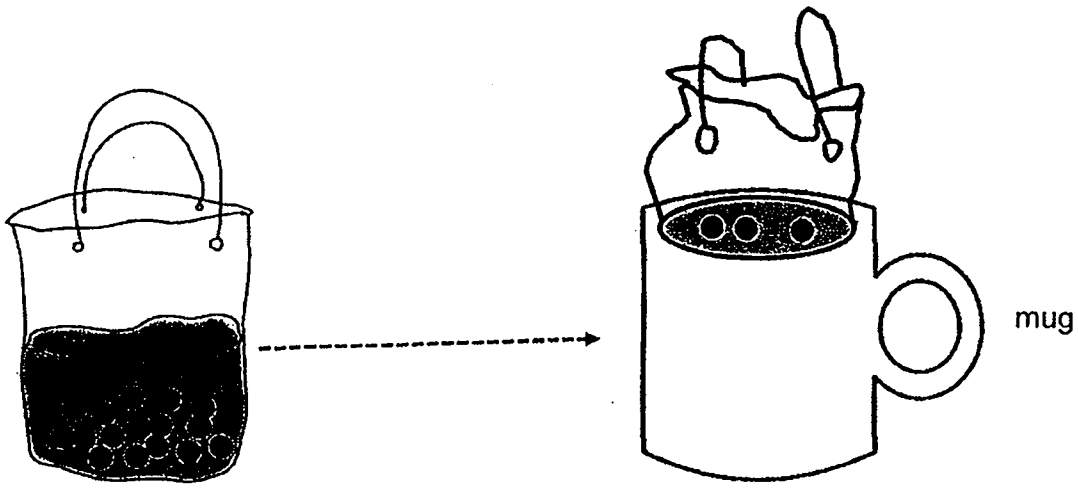
Becky prepared similar beakers, X and Y, with the same number identical balls. She added 500 cm^3 of Liquid M into beaker X and 500 cm^3 of sand into beakers Y .



Which of the following could be the final height of Liquid M and the sand in beakers X and Y?

	Beaker X	Beaker Y
(1)	15 cm	13 cm
(2)	14 cm	14 cm
(3)	14 cm	15 cm
(4)	15 cm	14 cm

20. Dinesh bought a packet of milk tea with pearls. He placed it into a mug without overflowing as shown in the diagram below.



A packet of milk tea with pearls

Which of the following statements about the packet of milk tea are correct?

A: Both the shape and the volume of the pearls did not change.

B: Both the shape and the volume of the milk tea changed.

C: The volume of the milk tea did not change.

D: The shape of the milk tea did not change.

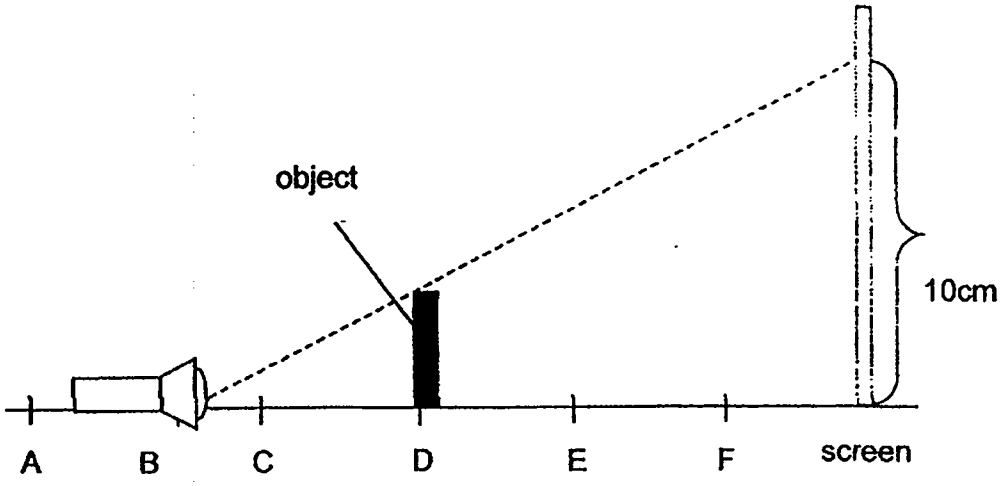
(1) A and C

(2) A and D

(3) B and C

(4) B and D

21. Jenna carried out an experiment to find out if the position of an object would affect the length of its shadow on the screen. The experiment was set up as shown in the diagram below.

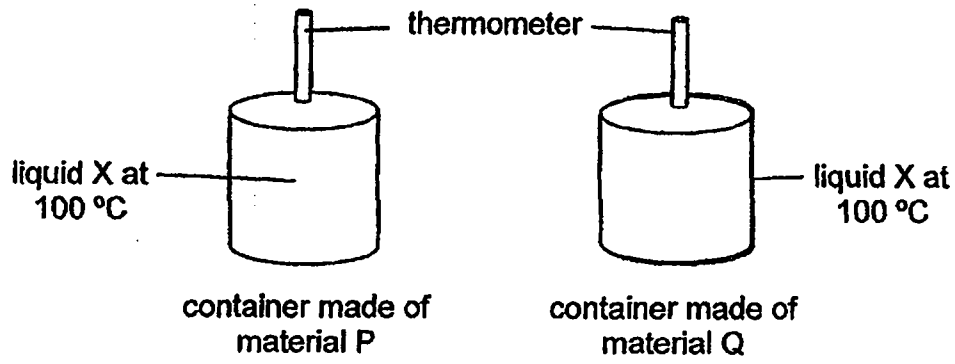


Jenna observed that when she placed the torch at Position B, the object makes a shadow of 10cm. She then placed the torch at different positions and recorded her findings in the table below.

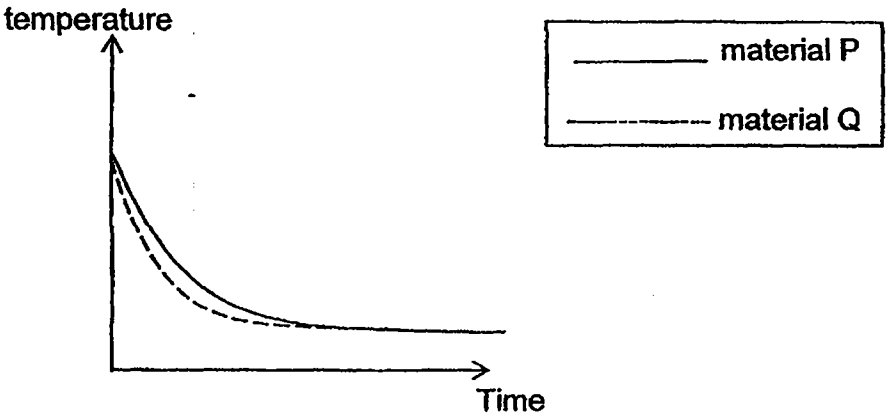
Which set of data is correct?

	Position of torch	Position of Object	Length of shadow
(1)	A	D	11cm
(2)	B	F	6cm
(3)	C	D	8cm
(4)	B	C	9cm

22. Marie has two containers made of different materials. She filled the containers with the same amount of liquid X.



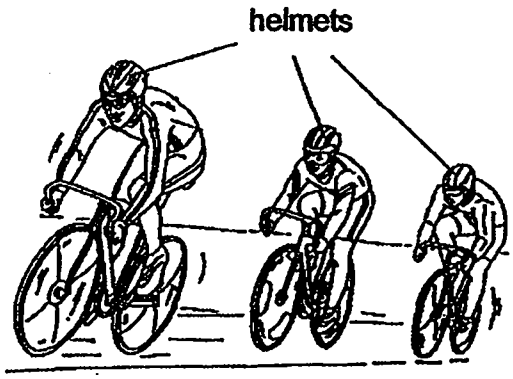
She measured the temperature of liquid X in the two containers over some time and recorded the results in the graph below.



Which material(s) should she choose to keep cold drinks cool and a hot drink warm for the longest time?

	To keep cold drinks cool	To keep hot drinks warm
(1)	P	P
(2)	Q	Q
(3)	P	Q
(4)	Q	P

23. Cyclists wear helmets to protect their heads when they cycle.

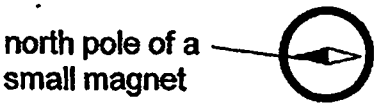


Based on the properties shown below, which material is the most suitable for the helmet to keep cyclists safe?

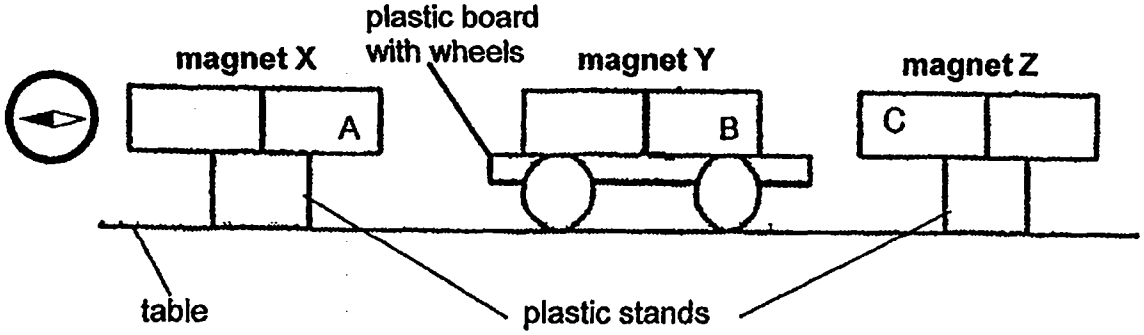
	Material	Property			
		strong	smooth	flexible	ability to float
(1)	A	√	X	√	X
(2)	B	√	√	X	X
(3)	C	√	X	X	√
(4)	D	X	√	√	√

Key
√ : yes
X : no

24. A compass has a small magnet that can rotate freely as shown.



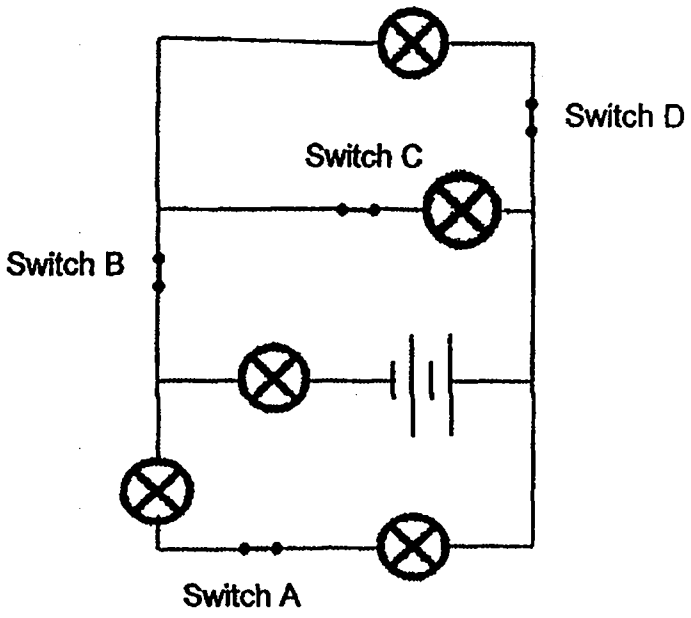
Penny prepared the set-up as shown below. Magnets X and Z were placed on plastic stands, while magnet Y was placed on a plastic board with wheels. Penny pushed magnet Y towards one of the magnets and observed that magnet Y moved between the two magnets continuously.



Which of the following statements is correct?

(1) Pole A of magnet X repels pole C of magnet Z.
(2) Pole B of magnet Y attracts magnet Z.
(3) Pole C of magnet Z is a north pole.
(4) Pole C of magnet Z is a south pole.

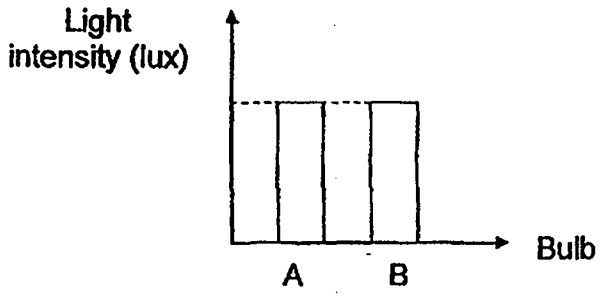
25. Colin set up a circuit as shown below.



All the bulbs were lit when all the four switches were closed. He wanted the most number of bulbs to light up when only one switch is open. Which switch should he open?

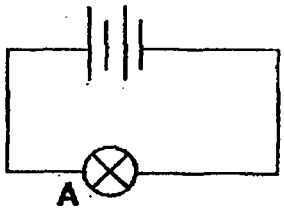
(1) A or B
(2) B or D
(3) A or C
(4) C or D

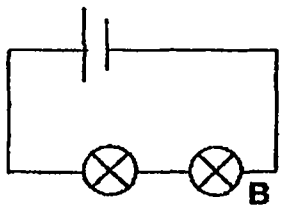
26. Varun constructed 2 electrical circuits, X and Y. He then measured the intensity of Bulb A from Circuit X and Bulb B from Circuit Y. He recorded the intensity of the bulbs as shown.



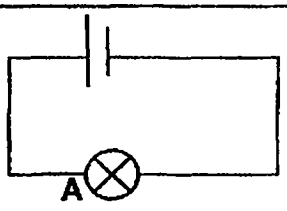
Which one of the following correctly matches the arrangement of the circuit with the intensity of light?

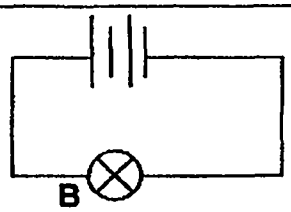
(1)



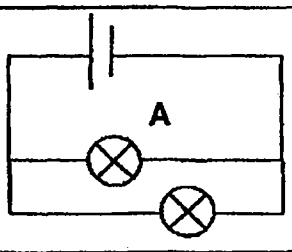


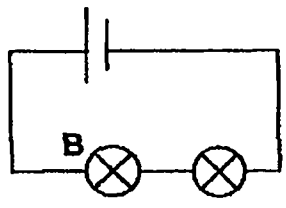
(2)



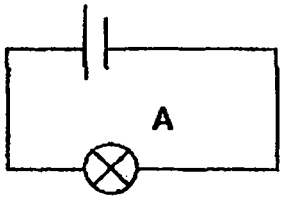


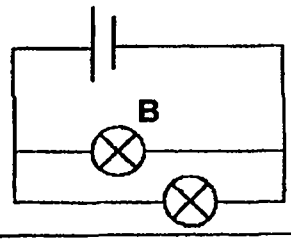
(3)



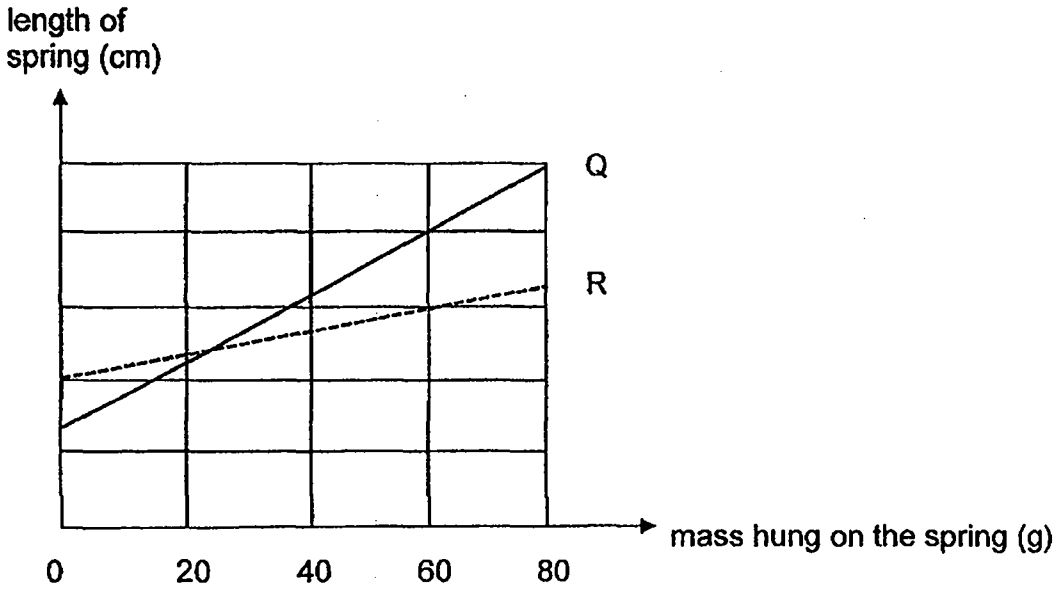


(4)





27. The graph below shows how the length of two springs, Q and R, changed when different amounts of mass were added to each spring.



Which of the following statements are correct?

A: The original length of Spring R is longer than that of Spring Q.

B: The original length of Spring R is shorter than that of Spring Q.

C: When a 40 g mass was hung on both springs, their lengths became the same.

D: When a 40 g mass was hung on both springs, the length of Spring Q was more than that of Spring R.

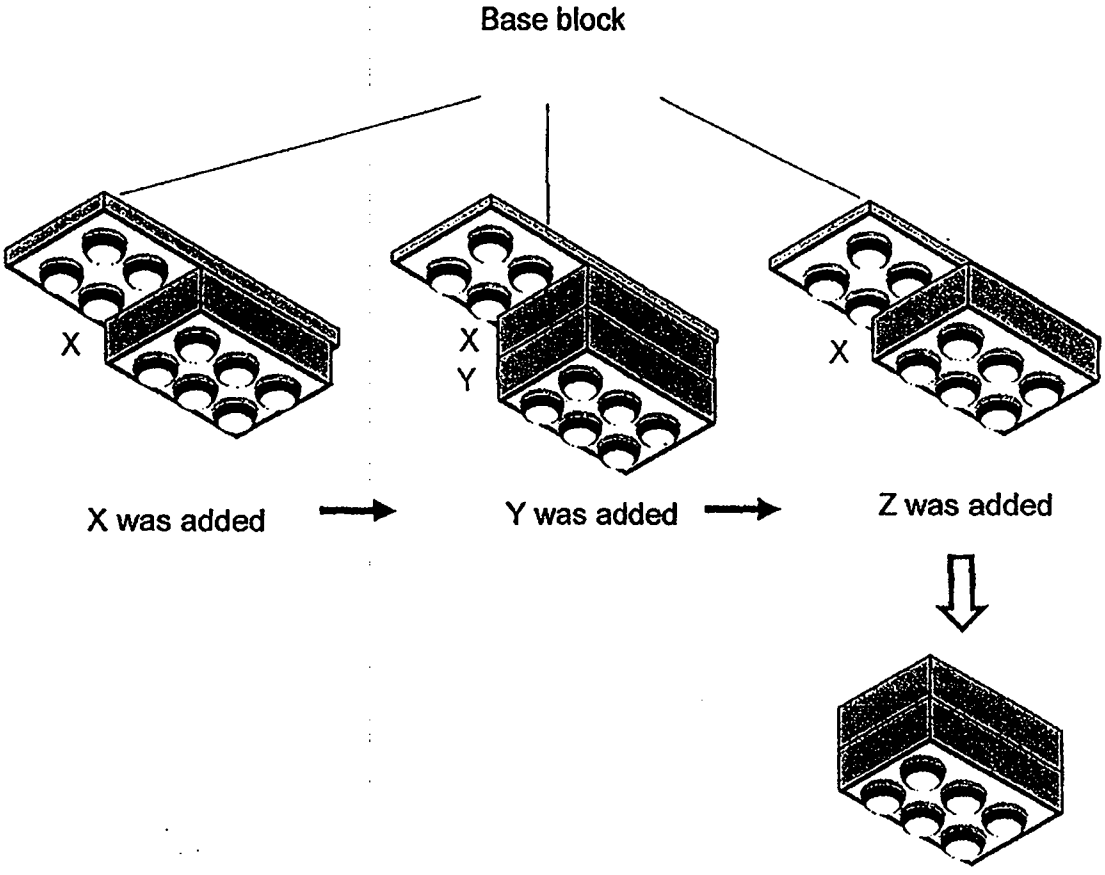
(1) A and C

(2) A and D

(3) B and C

(4) B and D

28. Ray added blocks X and Y one at a time to the base block. When he added the third block Z, the blocks Y and Z fell to the ground, leaving X stuck to the base block.



Which one of the following is the reason why the two blocks, Y and Z, fell?

(1) The weight of Z was greater than the weight of Y.

(2) Friction between X and Y was less than the weight of Y and Z.

(3) The weight of Y and Z was greater than the weight of X and Y.

(4) Friction between X and the base was less than the weight of X, Y and Z.

~ End of Booklet A ~

RIVER VALLEY PRIMARY SCHOOL
2019 PRELIMINARY EXAMINATION
PRIMARY 6

STANDARD SCIENCE

(BOOKLET B)

Name : _____ ( ) Date : 27 August (Tue)

Class : P6 _____ Time : 1 hour 45 min

INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the space above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For Section A, shade your answers for questions 1 to 28 on the OAS.
6. For Section B, write your answers for questions 29 to 40 in the space provided.
7. The total marks for Booklet B is 44 marks.

Booklet A	56
Booklet B	44
Total	100

Parent's Signature: _____

Section B (44 marks)

Write your answers to questions 29 to 40 in this booklet.

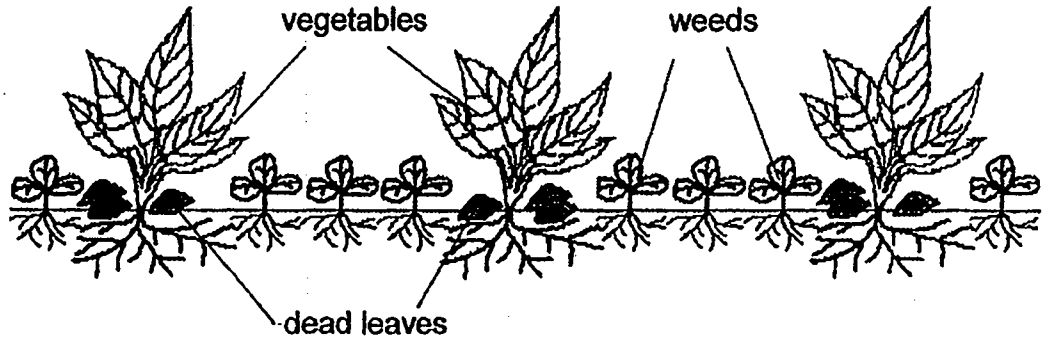
29. John grew some seeds of a plant on four trays inside a room. The experimental conditions and results are shown below.

Tray	Soil	Presence of light	Appearance of seeds on Day 5
A	dry	no	
B	wet	no	
C	dry	yes	
D	wet	yes	

(a) Which two sets of trays should John select if he wanted to find out whether water is required for germination? [1m]

(b) From Day 5 to Day 15, the plants in Tray D grew taller than the plants in Tray B. Explain why. [1m]

30. Weeds are plants which are not wanted by farmers. A farmer observed weeds and dead leaves around his vegetables in his garden as shown below.



The dead leaves provide nutrients for the vegetables.

(a) Describe how the dead leaves provide nutrients for the vegetables. [1m]

_____

_____

(b) The farmer observed that the vegetables decreased as the weeds multiply too quickly. Give a reason for the observation. [1m]

_____

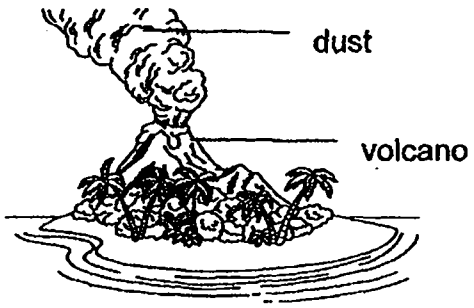
_____

	2

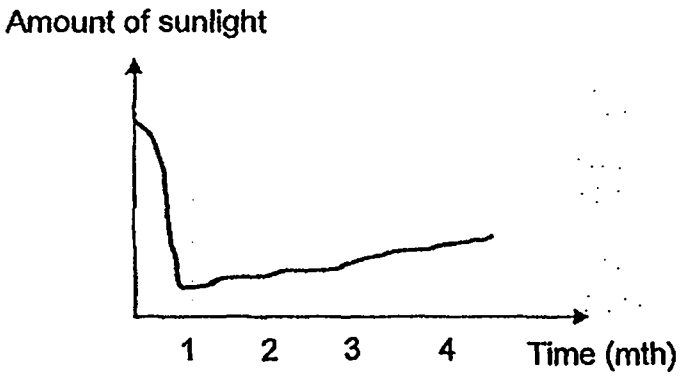
31. Organisms A and B are found on island H and the food relationship is shown below.

A ⟶ B

A volcano on island H erupted and filled the air around the island with dust.



The graph below shows the amount of sunlight covering island H for 4 months after the eruption.



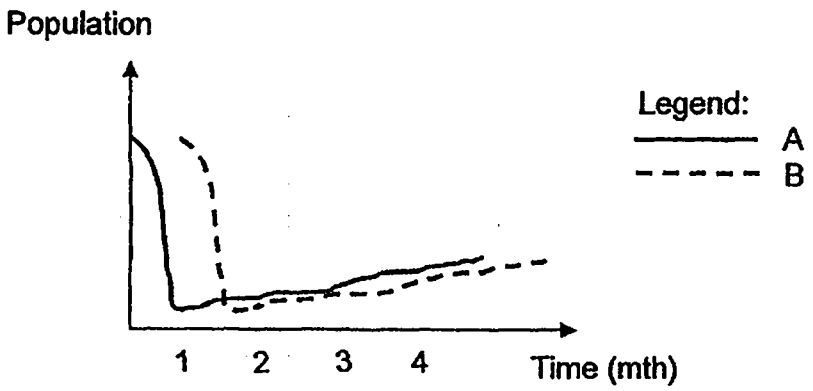
(a) Predict whether the population of A will increase, remain the same or decrease in the first month after the eruption. Explain your answer. [1m]

_____

_____

	1

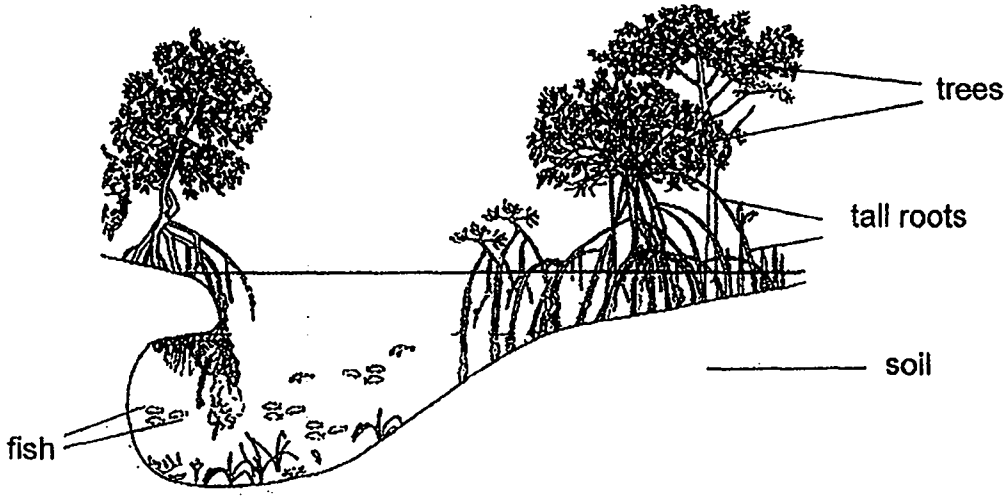
After the volcanic eruption, the soil becomes fertile for plants to grow. The graph below shows how the population of A and B changes after the volcano erupted.



(b) Explain why the population of B started increasing one month after the population of A increased. [1m]

	1

32. The diagram below shows trees that live near the sea. They have tall roots that rise above the water.



When the water level is low, the roots are exposed. When the water level is high, part of the roots are submerged in water.

(a) Give a reason why the tall roots need to rise above the water. [1m]

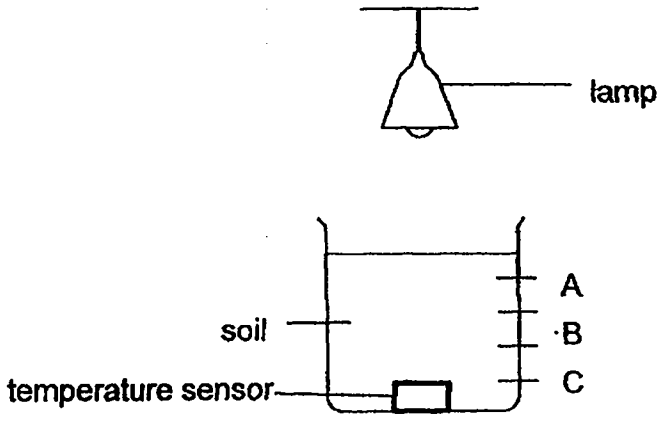
(b) Soil erosion happens when the soil is washed away by water. Explain how the trees help to prevent soil erosion. [1m]

	2

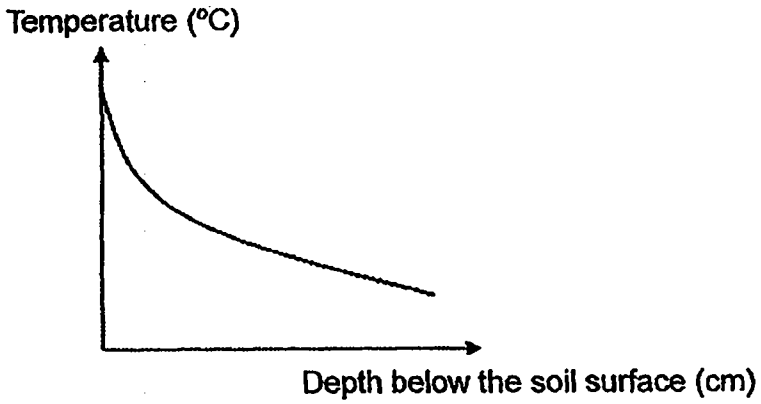
(c) State how the roots help the fish to escape from their predator. [1m]

	1

33. Selma conducted an experiment to see how temperature changes with the depth of soil using the set-up shown below. After the lamp had been turned on for one hour, Selma recorded the temperature of the soil at points A, B and C using a temperature sensor.



The results is shown in the graph below.



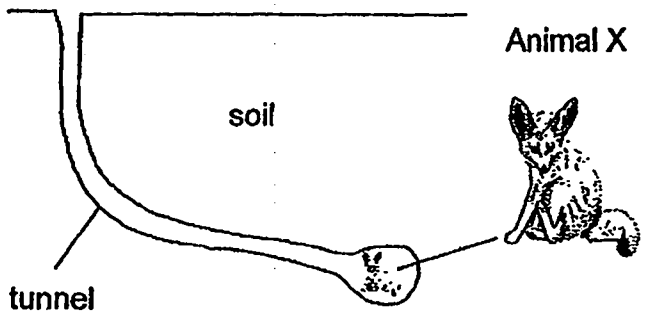
(a) Based on the graph above, state the relationship of the temperature and the depth of the soil. [1m]

_____

_____

	1

Animal X has big ears and thick fur. It lives in the desert where the days are hot and the nights are cold. It stays underground in the tunnel during the day.



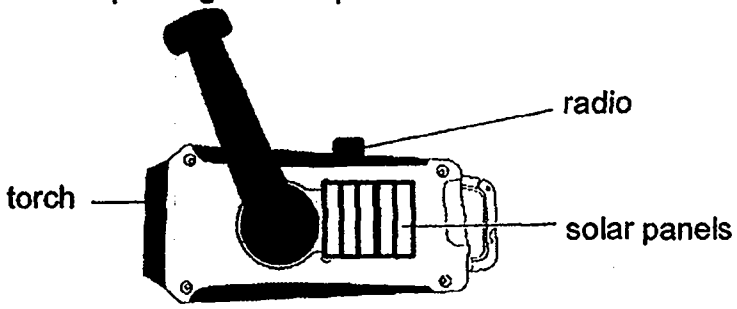
(b) Explain how staying underground in the day helps Animal X. [1m]

(c) Describe how a structural adaptation of Animal X helps it to keep cool. [1m]

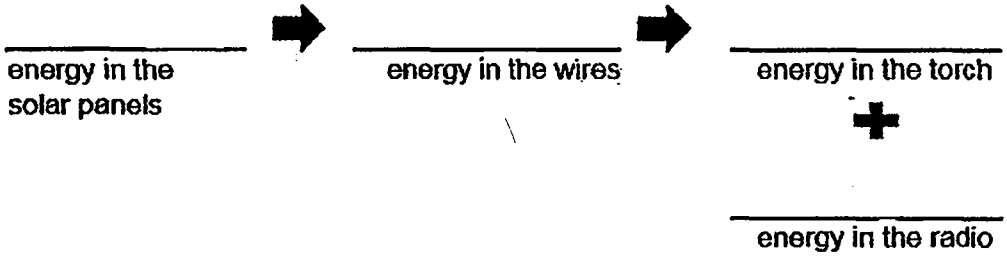
(d) Describe how Animal X keeps warm at night. [1m]

	3

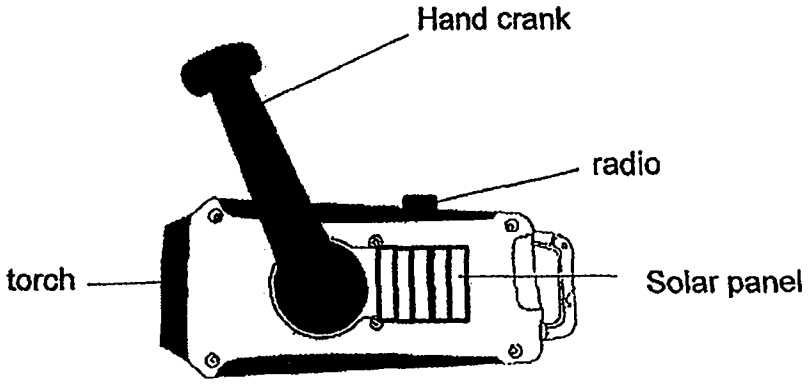
34. Lim Teck received the following device after participating in an emergency exercise. The solar panels trap sunlight which powers the device to work as a torch and a radio.



(a) Complete the energy conversion when the device is using the energy from the solar panels. [1m]



The device can also be powered by turning the hand crank continuously.



(b) Lim Teck observed that the torch turned on first before the radio. Explain why. [1m]

2

(c) Without adding or removing any part of the device, state one way to increase the brightness of the torch. [1m]

_____

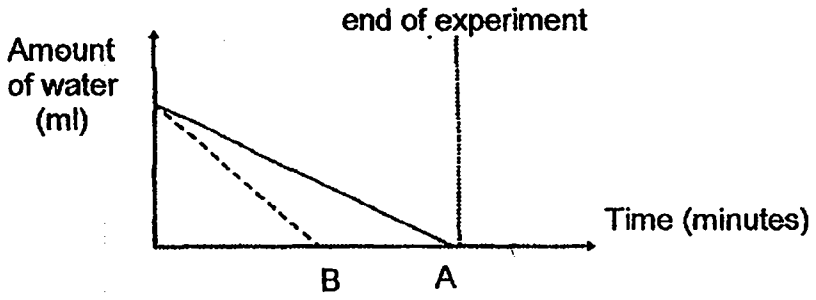
_____

	1

35 (a) State a difference between evaporation and boiling. [1m]

Charles filled two identical containers with the same amount of water and left them at two different locations.

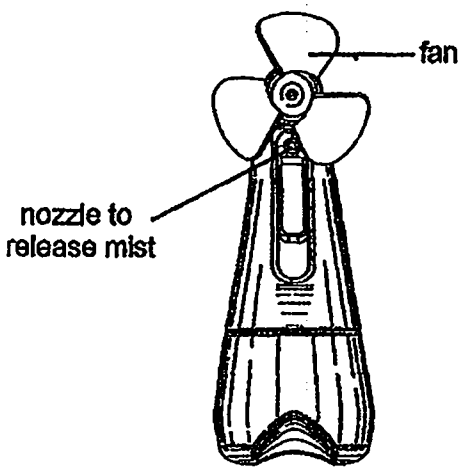
After a few hours, he measured and recorded the amount of water left in each container.



(b) Explain why the changes in the water level in A and B are different. [1m]

	2

Charles used a fan shown below to cool himself. When the fan was switched on, mist comes out through the nozzle.



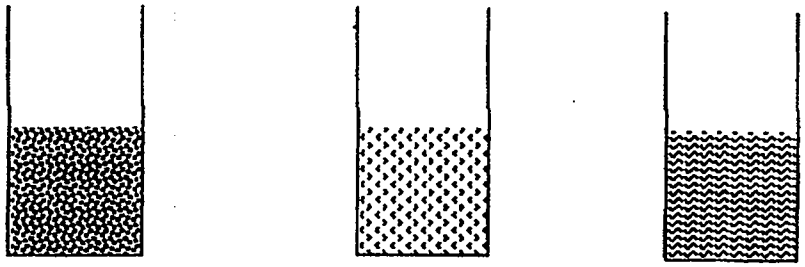
When he held the fan in front of his face and switched it on, the mist landed on his face and within a few minutes, the mist disappeared.

(c) Explain how the fan helps Charles cool down. [2m]

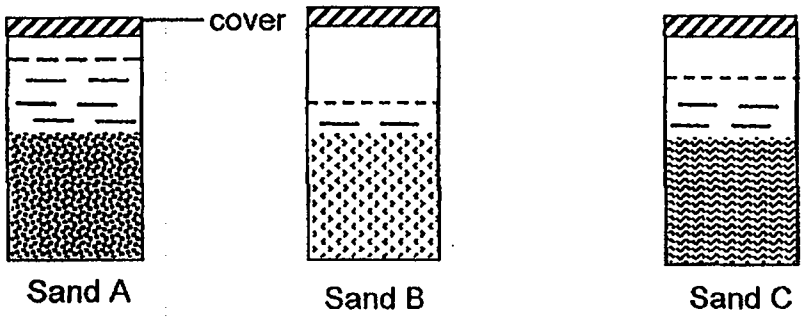
(d) The time taken for the mist to disappear was shorter when Charles' body temperature was higher. Explain why this is so. [1m]

3

36. Lim put the same amount of sand A, B and C into three identical containers.



Then he added the same amount of water into the containers before covering them. After twenty minutes, the water level is shown below.



(a) State a property of matter shown by the water in the experiment. [1m]

_____

_____

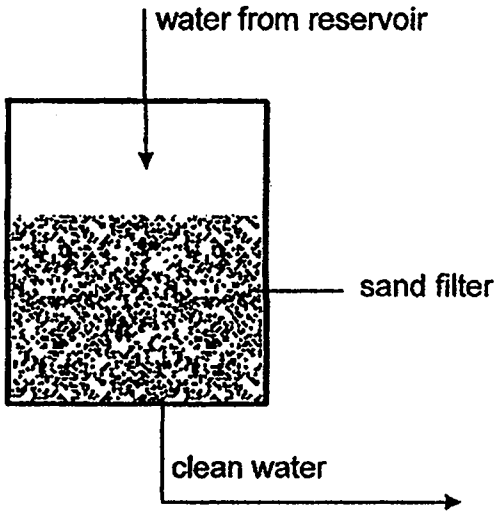
(b) Give a reason why the water level in container B is the lowest. Explain your answer. [2m]

_____

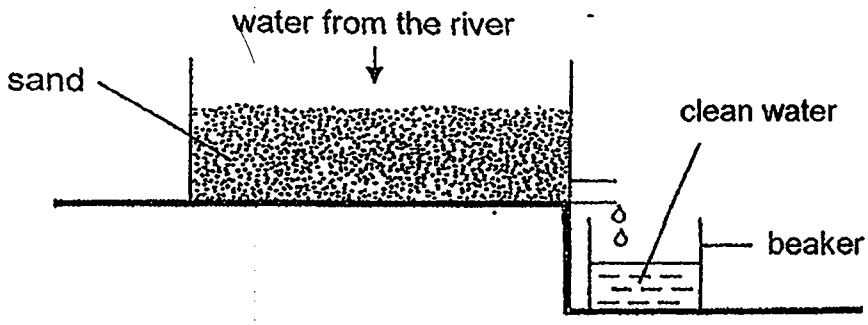
_____

	3

To get clean water, water from the reservoir is passed through a sand filter so that dirt is trapped in the filter.

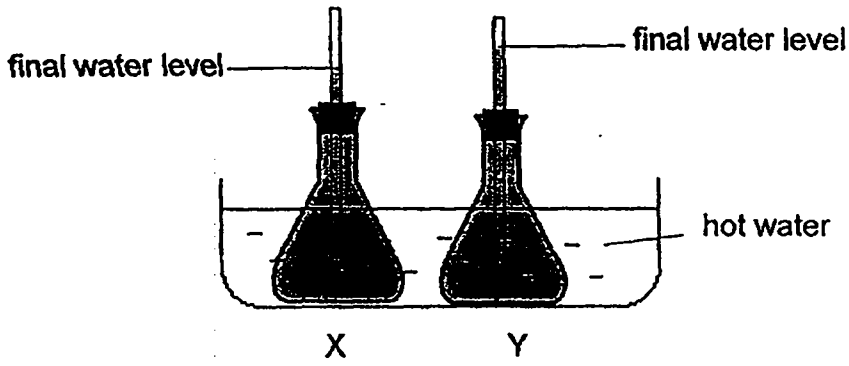


Lim wanted to get clean water from a nearby river by creating his own filter system.



(c) Which type of sand, A, B or C, should Lim use to get clean water? Explain your answer. [2m]

37. Smith conducted an investigation on materials X and Y. He made two flasks out of material X and Y and filled them with the same amount of coloured water. They were placed in a container of hot water. The diagram shows the final water level in each flask after five minutes.



(a) To ensure a fair experiment, what should Smith change and keep the same? [1m]

To change: _____

To keep the same: _____

(b) Explain why the final water level in flask Y is higher than flask X. [1m]

_____

_____

	2

The table below shows the highest and lowest temperature which the laboratory and clinical thermometer can reach.

Type of thermometer	Temperature (^{0}C)	
	Lowest	Highest
Laboratory	-10	110
Clinical	35	42

(c) Which material X or Y is more suitable to be used in a clinical thermometer? Explain your answer. [2m]

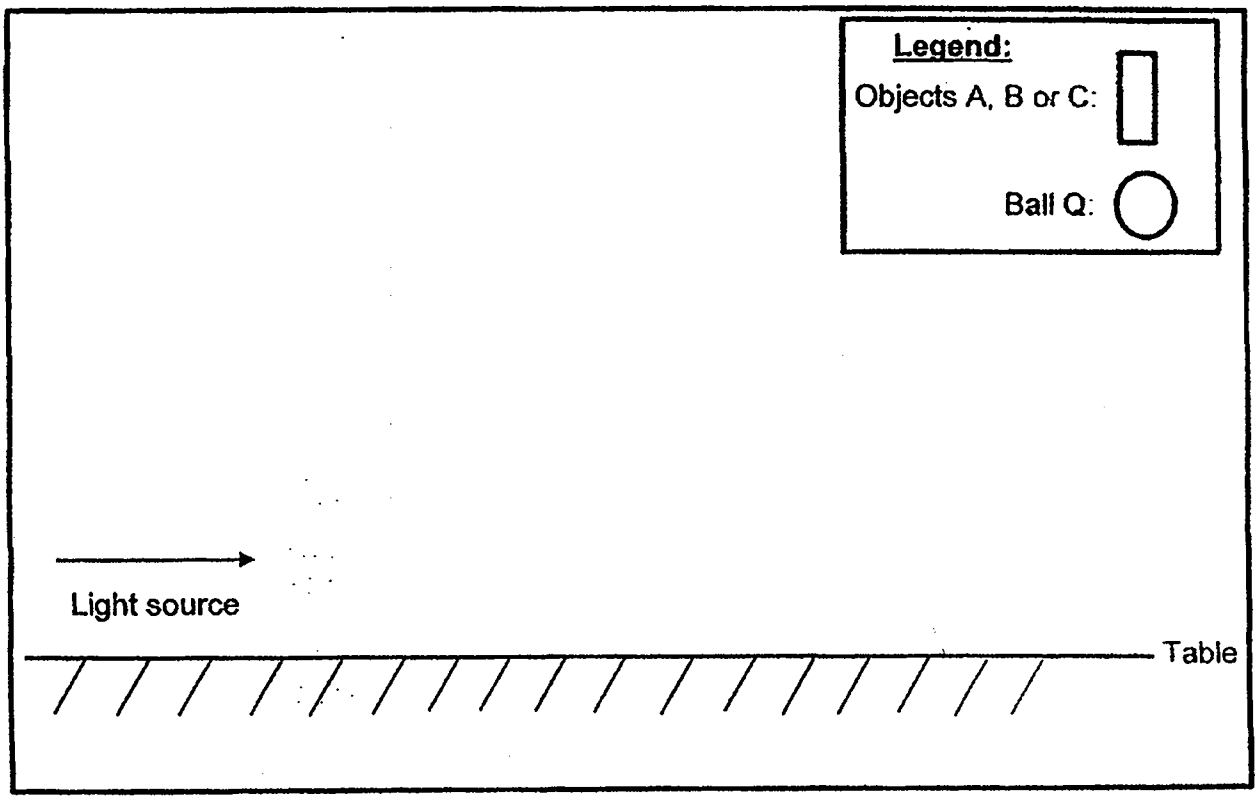
	2

38. Ariel plans to set up an experiment in a dark room using different objects, A, B, C and Q.

A	B	C	Q
Storybook	Mirror	Clear glass	Ball

Ball Q must be placed between two objects before forming a shadow.

(a) Help Ariel by sketching in the box below how you would form a shadow of Ball Q based on the information given. [2m]



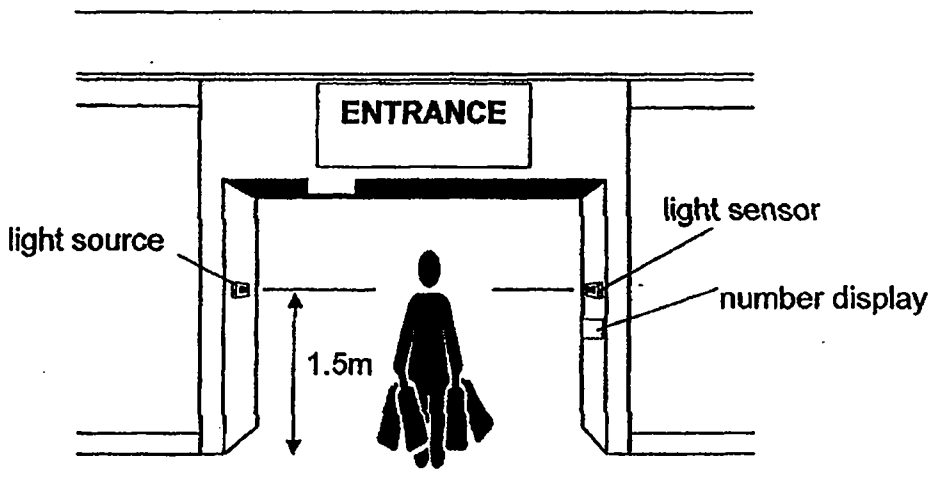
(b) What can Ariel do to the position of the torch to make the shadow bigger? [1m]

_____

_____

3

Ariel observed that a device is installed at the entrance of a shop to count the number of customers entering the shop.

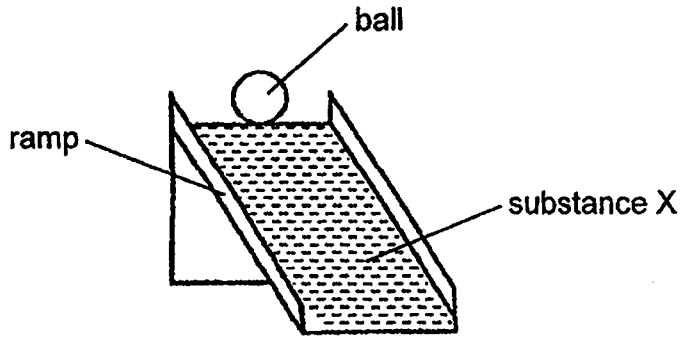


(c) Explain how the device is able to count the number of customers. [1m]

(d) Ariel noted that the device did not accurately count the number of customers who entered the shop. Suggest one change to the device so that the counting can be accurate. [1m]

2

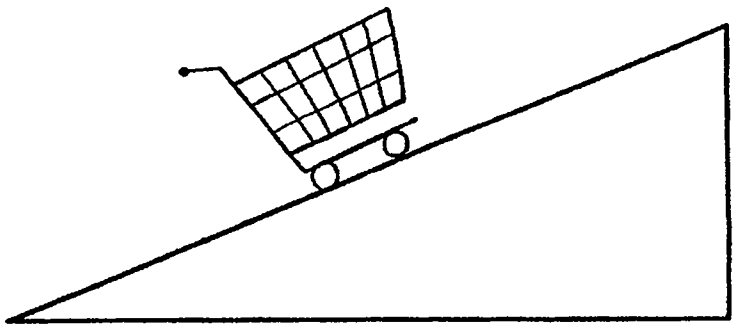
39. Peter did an experiment to find out which type of substance, X, Y or Z, lets the ball roll down the ramp the fastest. He covered the ramp surface with substance X and measured the time taken for the ball to reach the bottom of the ramp.



He repeated the experiment with similar ramps covered with substance Y and Z in each experiment, he pushed the ball with the same amount of force. The results are shown in the table below.

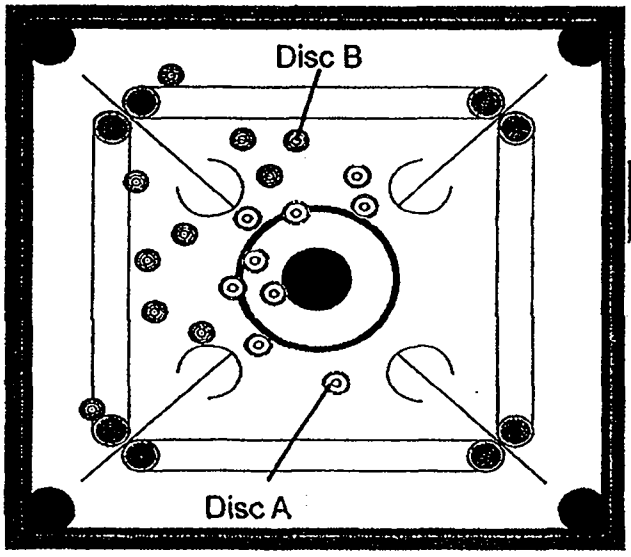
Substance	Time taken for the ball to roll down the ramp (s)
X	8
Y	2
Z	5

Peter tried to push a trolley up a slope as shown in the diagram below.

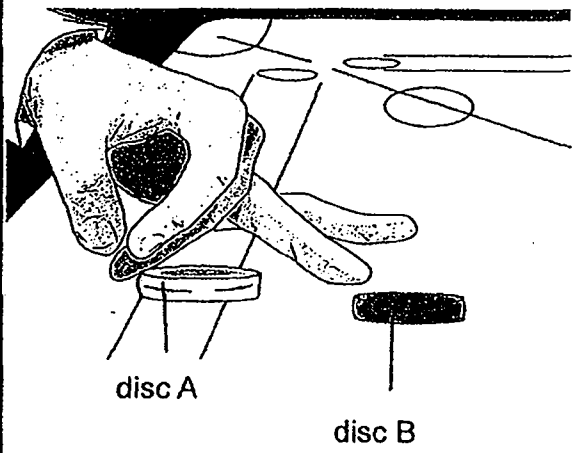


(a) Based on the results of his experiment, which substance, X, Y or Z, is the most suitable for the trolley to stop halfway on the ramp? Explain your answer. [1m]

Carrom is played on a board where players push a disc at other discs as shown below.



carrom board

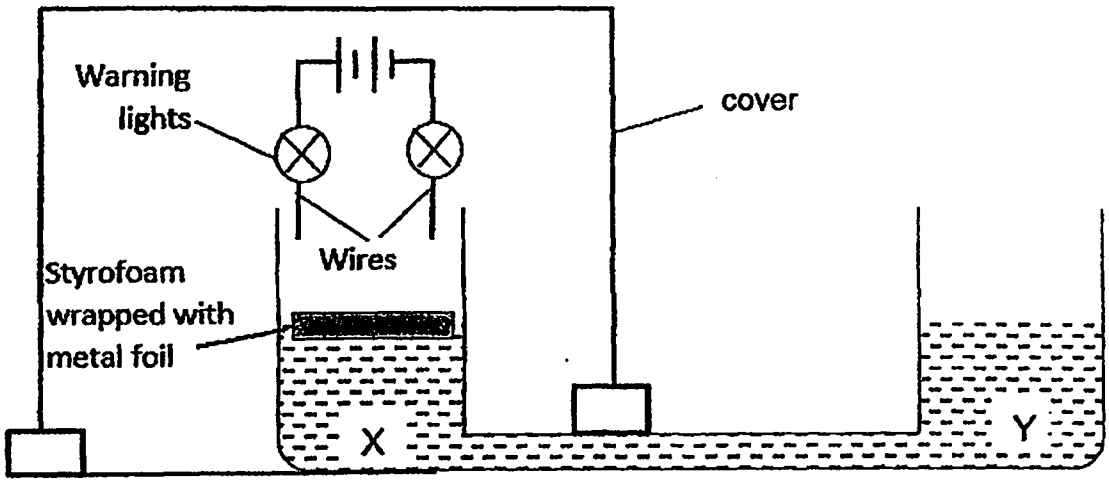


(b) After Peter pushed disc A, he observed that disc A moved a short distance and stopped before it reached disc B. Explain, in terms of forces, why disc A stopped. [1m]

(c) Peter wanted the discs to move faster on the board. Which substance, X, Y or Z, should Peter use on the board? Explain your answer. [2m]

	3

40. Archie constructed a simple flood warning system as shown below. Part X is covered and Part Y is not covered. When it rains, rainwater will flow into Part Y.



(a) Explain how a heavy rain can cause the warning lights to light up. [2m]

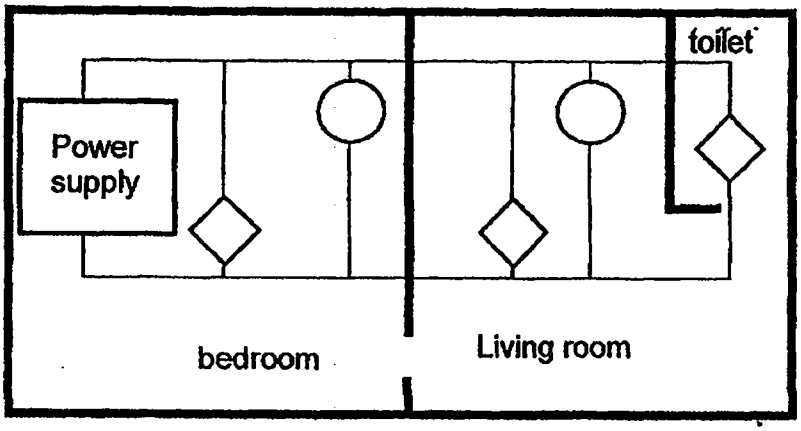
_____

_____

	2

In the diagrams below, the fans and lights are connected in two different ways.

Diagram 1



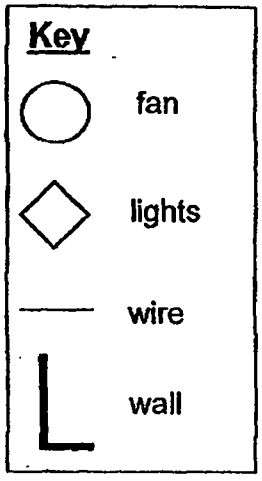
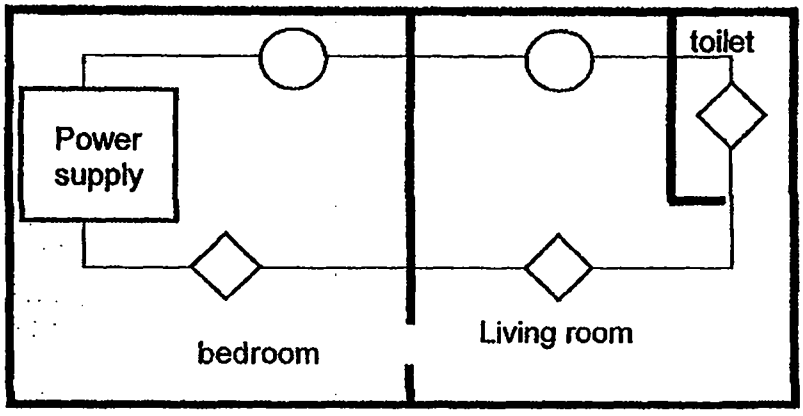


Diagram 2



(b) Mark a cross (X), on **Diagram 1** to show the position of a switch that controls the fan in the bedroom only. [1m]

(c) Compare Diagrams 1 and 2. Which electrical circuit arrangement will make the room brighter? Explain your answer. [2m]

_____

_____

	3

~ End of Paper ~

Suggested Answer for RVPS Prelims 2019

29b. There is presence of sunlight in Tray D but not in Tray B. Plants in Tray D could received more sunlight to photosynthesize and thus grew taller.

30a. The decomposers break down the dead leaves into simpler substances by which act as nutrients for the vegetables.

30b. There is overcrowding and the weeds compete with the vegetables for sunlight, water, space and nutrients.

(Do not mention air or food. Air is all around unless it is in an enclosed or airtight place)

31a. The population of A will decrease as it cannot photosynthesize as it receives less sunlight.
(start food chain with A so A must be a food producer.)

31b. B eats A. When A increases, there will be more A for B to feed on so B increases too.

32a. The roots need to take in air from the surrounding because there is not enough air for the roots/plant in the soil.

32b. The roots of the trees hold on to the soil so it will not be washed away easily.

32c. The fish hides among the roots to escape from their predators.

33a. When the depth of the soil increases, the temperature decreases.
(Take note of cause and effect)

33b. The temperature underground is lower than above so by staying underground, Animal X will gain less heat and feel cooler.

33c. Animal X has big ears that help it to lose heat to the surroundings more quickly thus helping it to keep cool.

33d. Animal X has thick fur (1/2m). There is air trapped in the thick fur and air is a poor conductor of heat. This will help Animal X lose heat slower to the surroundings, keeping it warm at night.

35a. Evaporation is at any temperature / all temperatures while boiling is at a fixed temperature.

OR

Evaporation occurs on the surface of the liquid while boiling occurs throughout/whole the liquid

35b. Rate of evaporation was faster in B than A.

35c. When the mist lands on Charles' face, it gained heat from his face and evaporated. Charles' face lost heat and thus helps him to cool down.

35d. The mist gains heat faster and evaporates faster when Charles' body temperature was higher.

36b. The sand in B has the most air spaces (1m) between them, thus allowing most water to fill up the spaces (1m), resulting in the lowest water level.

36c. Choose: Sand A.

Evidence: Container with Sand A has the highest water level which means it has the least air spaces (1m),

Concept: Thus it will be able to allow the least dirt to pass through (1m).

37b. Y is a better conductor of heat, allowing the water to gain heat faster and expand faster.

37c. Material Y. Material Y is more sensitive to temperature change (1m) as it gains heat faster and expands more (1m).

38c. The light sensor is unable to detect the light when blocked by the customer thus each time the light is blocked, a customer is being counted (on the number display).

38d. Lower both the light source and light sensor to a suitable height for both children and adults.

39a. Choose: Substance X.

Evidence: The ball took the longest time to roll down the ramp, meaning there is most amount of friction between the ball and ramp.

Concept: Hence it is most suitable to be used to stop the trolley on ramp as it will have the most amount of friction between the ramp and the wheels of the trolley.

39b. The pushing force could not overcome the friction force between disc A and the board.

39c. Choose: Substance Y.

Evidence: The ball took the shortest time to roll down the ramp, showing it has the least friction between the ball and the ramp.

Concept: So it will be most suitable to use on the board to create least friction between the disc and the board so it will move faster.

40a. The heavy rain caused the water level in X to increase, pushing the styrofoam wrapped with metal foil upwards to touch the wire. As the metal foil is a conductor of electricity, this will form a closed circuit, allowing electricity to flow through the circuit to light up the warning lights.

40c. Diagram 1 will make the room brighter. The lights are in parallel arrangement and thus the brightness for each bulb will be brighter than the bulbs in the series arrangement.

SgTestPaper.com | P6 | P5 | P4 | P3 | P2 | P1 | ENGLISH | MATHS | SCIENCE | CHINESE | TAMIL | 2019 | 2018 | 2017 | 2016 | PAST WORKSHEETS | SG MATH | ENGLISH COMPOSITION | ASSESSMENT BOOKS |

Free Downloads

SgTest Papers

- Primary 6
- Primary 5
- Primary 4
- Primary 3
- Primary 2
- Primary 1

Top School Test Papers

- Nanyang
- Raffles
- Rosyth
- Tao Nan
- CHIJ St Nicholas
- Red Swastika

Free Weekly Worksheet Subscription

Free Weekly Step-By-Step Maths Worked Solutions and Top 3 English Topical Worksheets are available at the links below:

Primary 6 English 2019 Test Paper Page
Primary 6 Maths 2019 Test Paper Page

Primary 5 English 2019 Test Paper Page
Primary 5 Maths 2019 Test Paper Page

Primary 4 English 2019 Test Paper Page
Primary 4 Maths 2019 Test Paper Page

Model English Composition samples for Primary School

2018 & Earlier Worksheets

One-Click Download of All 2019 P6 papers
One-Click Download of All 2019 P5 papers
One-Click Download of All 2019 P4 papers

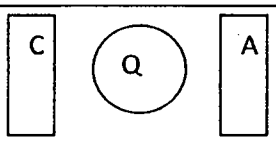
Click on the links to go to the pages

SCHOOL : RIVER VALLEY PRIMARYSCHOOL
LEVEL : PRIMARY 6
SUBJECT : SCIENCE
TERM : 2019 PRELIM

SECTION A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	3	4	2	2	2	4	2	1	1
Q 11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
2	4	1	4	3	3	1	3	3	1
Q 21	Q22	Q23	Q24	Q25	Q26	Q27	Q28		
2	1	1	3	4	4	2	2		

SECTION B

Q29)	a)Tray A and B
Q34)	a) Light → Electrical → Light + sound b)Most kinetic energy is converted to light energy first to produce the light. c)Turn off the radio.
Q36)	a)Matter occupies space.
Q37)	a)To change : The type of material b)To keep the same :The amount of coloured water.
Q38)	a)→  b)Ariel could bring the torch nearer to the objects.

Q40)	b)

Diagram 1