METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887

SEMESTRAL ASSESSMENT 1 2015
PRIMARY 5
SCIENCE

BOOKLET A1

Total Time for Booklets A and B: 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Shade your answers in the Optical Answer Sheet (OAS) provided.

Name: _____ ( )

Class: Primary 5._____

Date : 14 May 2015

This booklet consists of 12 printed pages including this page.

For each question from 1 to 15, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet (OAS).

[30 marks]

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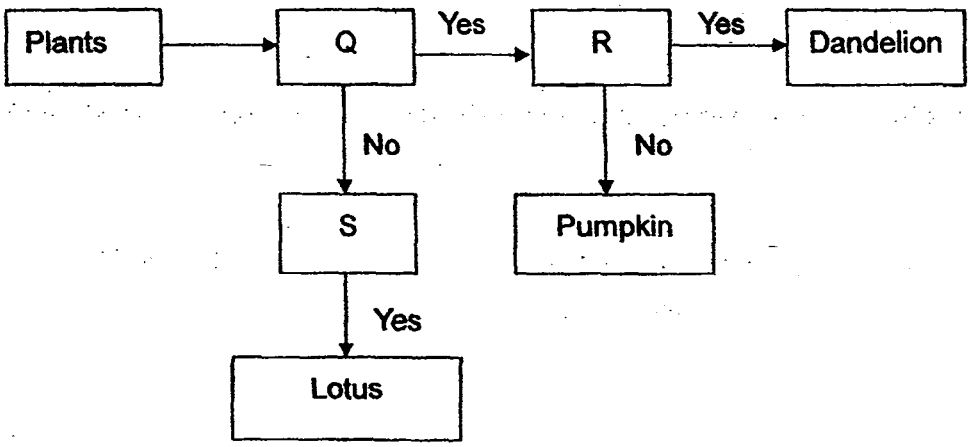
1. The table below shows how a pigeon, a bat, a platypus and a cat can be classified.

Animals			
Lays eggs		Does not lay eggs	
Has feathers	Has hair	Can fly	Cannot fly
pigeon	platypus	bat	cat

One of the purposes of this classification table is to show that a _____.

(1) cat and a bat do not reproduce
(2) bat and a platypus are mammals
(3) pigeon can fly but a platypus cannot
(4) platypus lays eggs but a bat does not

2. Study the flow chart below.



Which of the following best describes headings for Q, R and S?

	Q	R	S
(1)	Grows on land?	Dispersed by wind?	Reproduced from seeds?
(2)	Grows on land?	Dispersed by animal?	Reproduced from flowers?
(3)	Grows in water?	Dispersed by water?	Reproduced from seeds?
(4)	Grows in water?	Dispersed by water?	Reproduced from fruits?

(Go on to the next page)

3. The table below shows the comparison between the life cycle of a butterfly and a grasshopper.

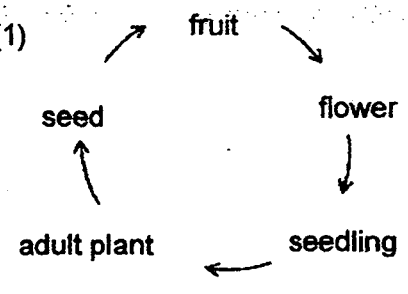
	Statements	Butterfly	Grasshopper
A	It has a four-stage life cycle.	Yes	Yes
B	The young has a pair of wings.	No	Yes
C	The young ~~does not resemble~~ resembles its parents.	No	Yes
D	The young undergoes moulting several times.	Yes	Yes

Which of the statements show the correct comparison?

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

4. Which one of the following diagrams shows the stages of development in a flowering plant?

(1)



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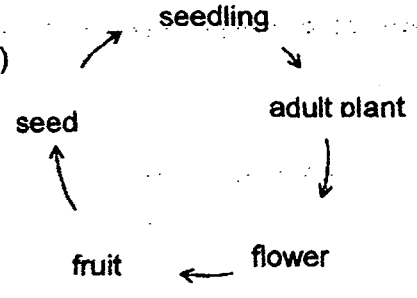
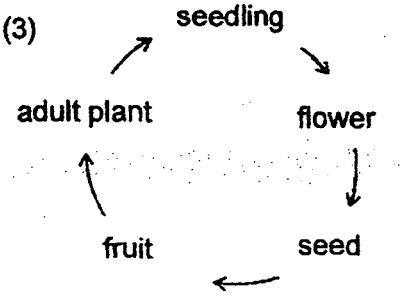


(3)



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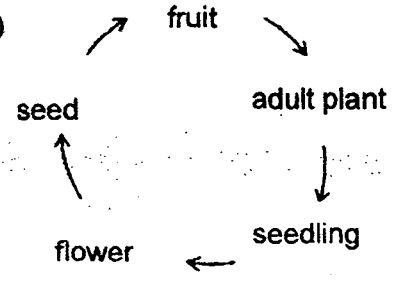

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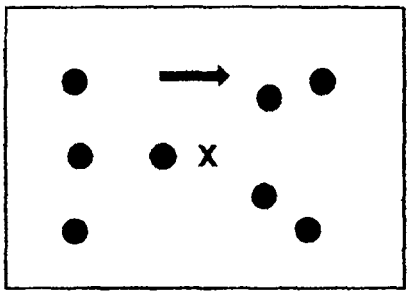
5. Salim found a fruit as shown below while he was walking in MacRitchie Reservoir.

KEY:
- → wind direction
- X parent plant
- ● position of fruits

Based on the structure of the fruit, which one of the diagrams below best illustrates the dispersal pattern of the fruit?

(1)



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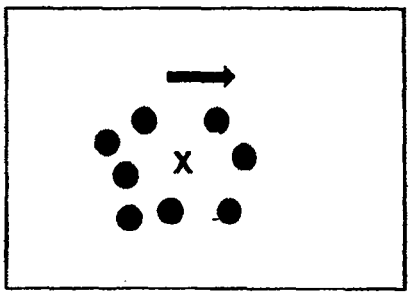

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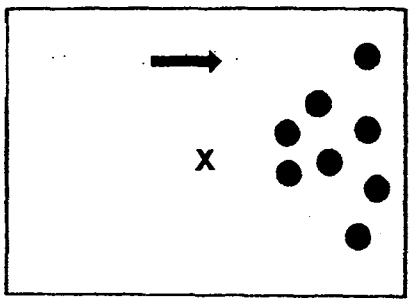

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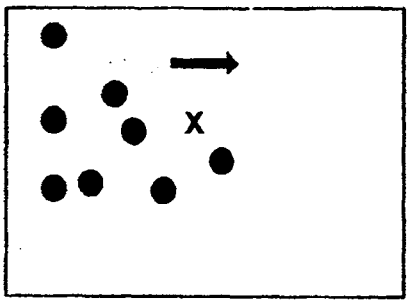

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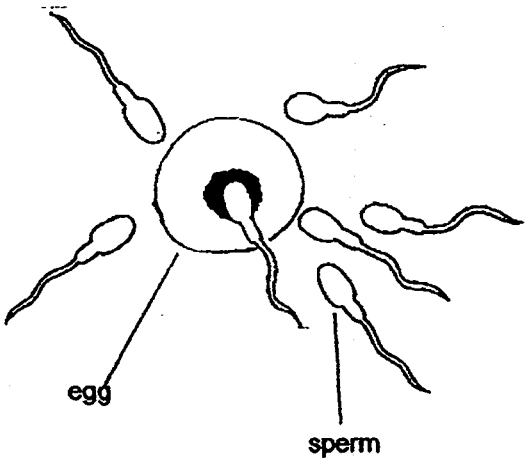
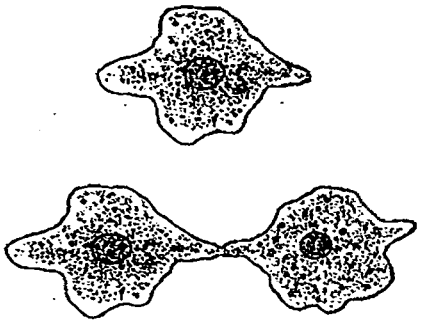
6. The diagrams show how reproduction takes place in a human and an amoeba.



Fusion of human sperm and egg



Cell division in amoeba

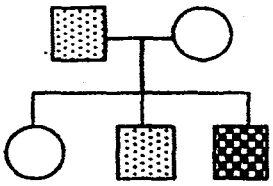
Which of the following pair of statements about the two methods of reproduction is **not correct**?

	Human	Amoeba
(1)	Two parents (a male and a female) are involved.	Only one organism is involved.
(2)	The offspring has some of the characteristics of both parents.	The two amoebae have identical characteristics as their parent.
(3)	Fertilisation is required.	No fertilisation is required.
(4)	Cells multiply through budding.	Cells divide and multiply.

(Go on to the next page)

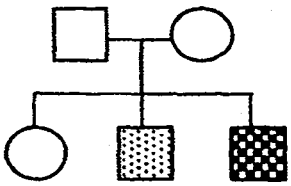
7. Ali has a rare blood disease. His mother and sister do not have this disease. However, his father and brother are carriers of this disease. Which one of the family trees shown below correctly represents the above information?
(A carrier is a person who is infected with the disease but does not display any symptoms.)

(1)



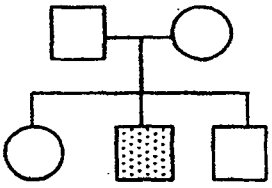
Ali

(2)



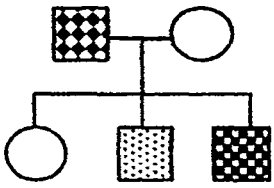
Ali

(3)



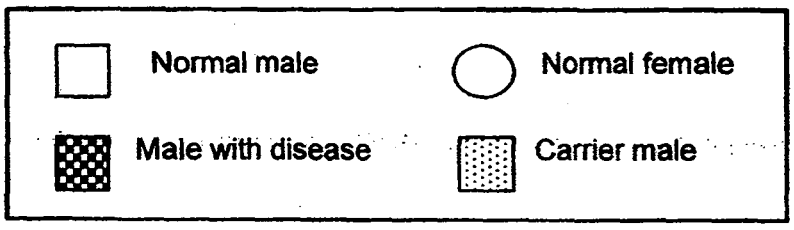
Ali

(4)



Ali

Key:



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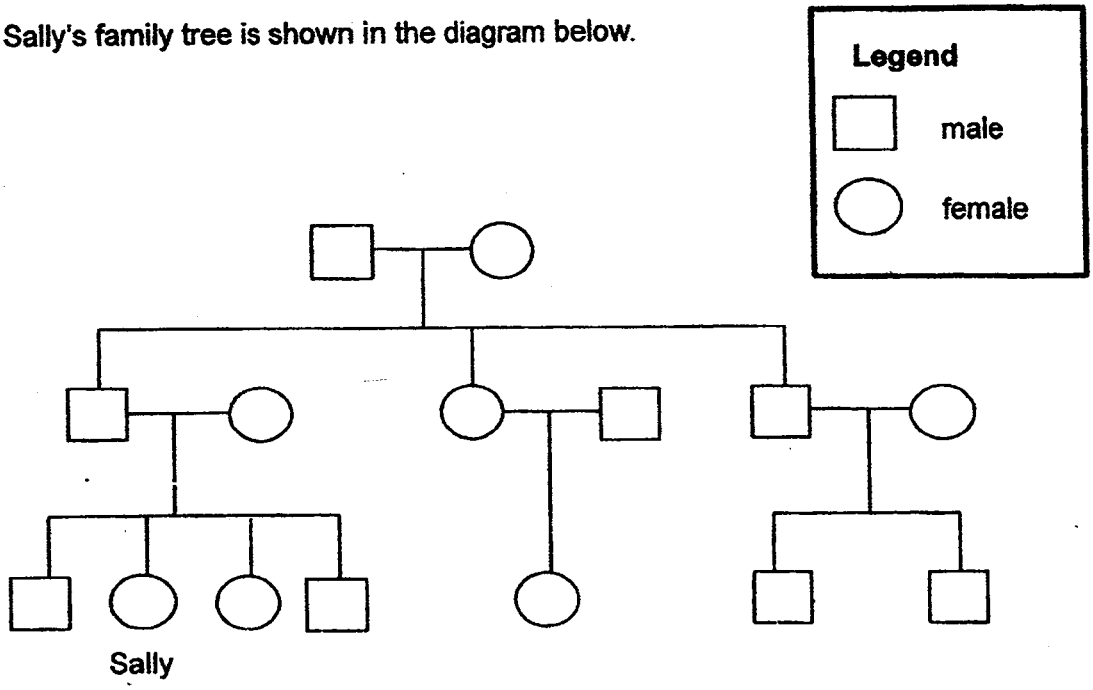
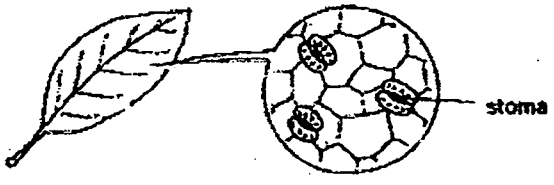
8. Sally's family tree is shown in the diagram below.



How many cousins does Sally have?

(1) 1
(2) 2
(3) 3
(4) 6

9. Study the diagram below.



Which of the following is **not** a function performed by the stomata?

(1) Trap sunlight to make food for the plant.
(2) Take in carbon dioxide and give out oxygen.
(3) Take in oxygen and give out carbon dioxide.
(4) Allow excess water to evaporate from the leaves.

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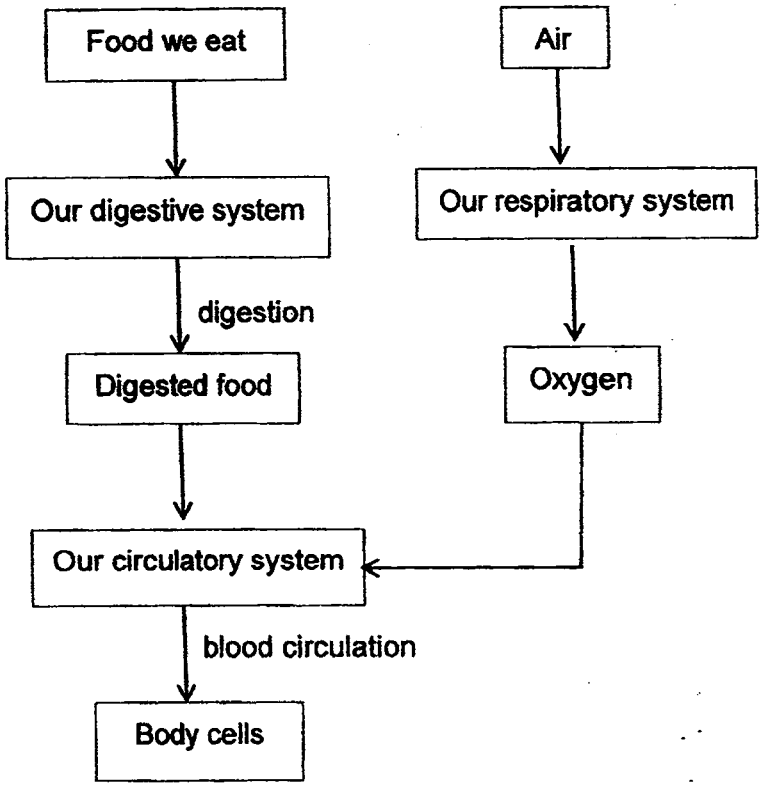
10. Study the flowchart below carefully.



Based only on the flowchart above, what information can you gather from it?

A : breathing take place in our circulatory system.
B : Our circulatory system transports digested food and oxygen to our body cells.
C : The food we eat is completely digested in the small intestine in our digestive system.
D : Different systems in our body work together to carry out life processes efficiently.

(1) A and C only
(2) B and D only
(3) A, C and D only
(4) All of the above

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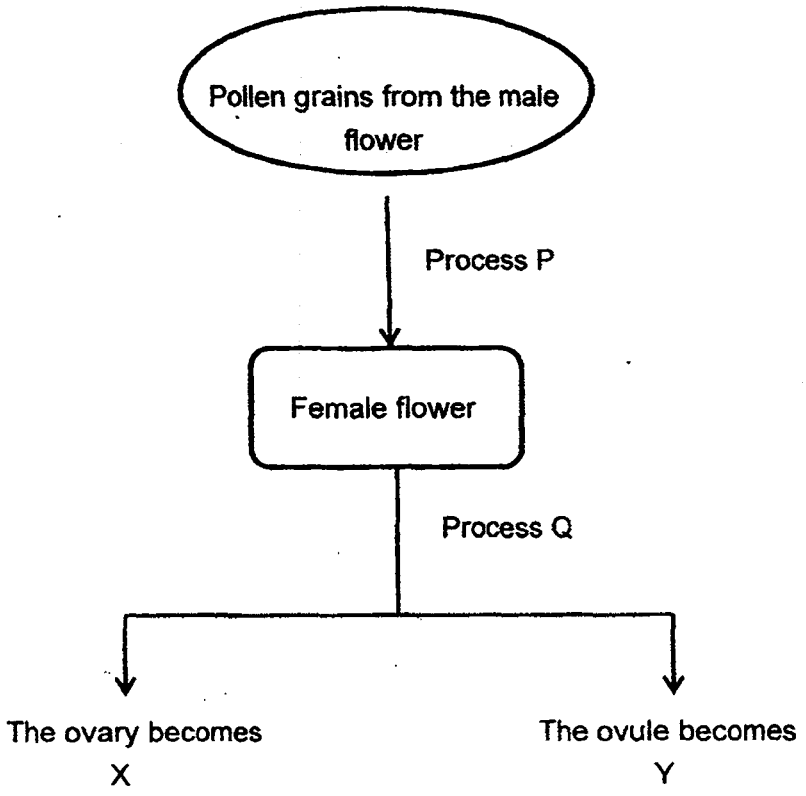
11. Study the diagram below carefully.

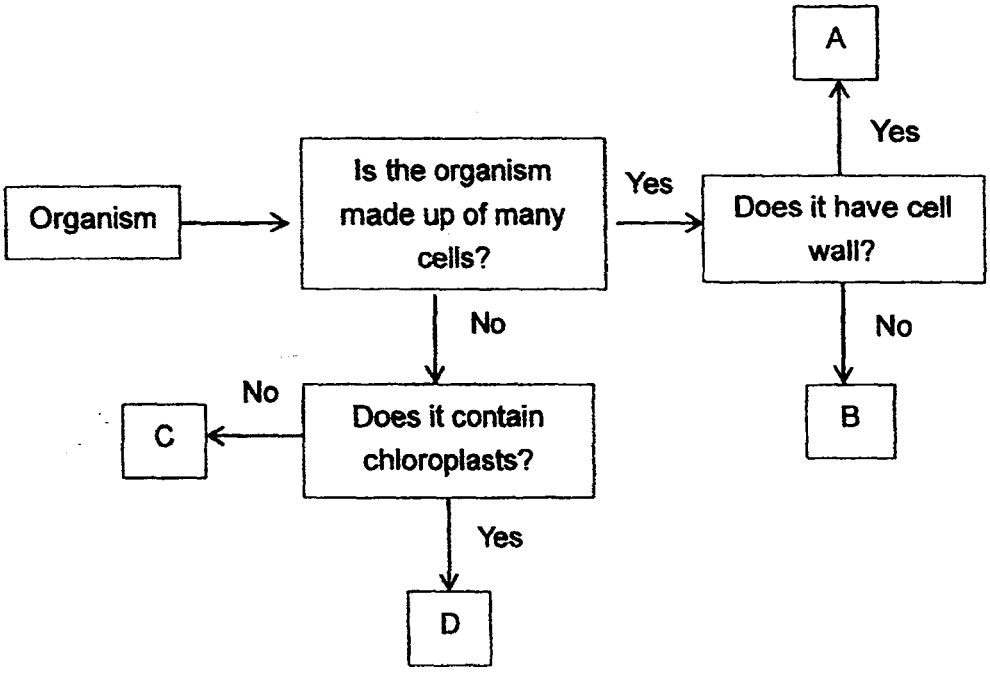


Which one of the following correctly represents P, Q, X and Y?

	Process		Part of the plant	
	P	Q	X	Y
(1)	Fertilisation	Pollination	Seed	Fruit
(2)	Pollination	Fertilisation	Fruit	Seed
(3)	Pollination	Fertilisation	Seed	Fruit
(4)	Fertilisation	Pollination	Fruit	seed

(Go on to the next page)

12. Study the flowchart below.

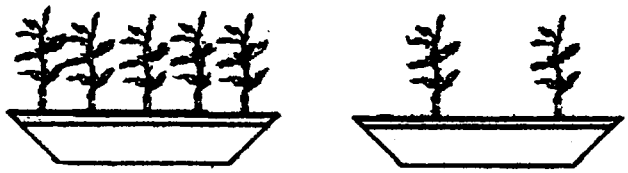


Based on the information given in the flowchart, what are organisms, A,B,C and D?

	A	B	C	D
(1)	moss	amoeba	algae	mimosa
(2)	mimosa	insect	bacterium	algae
(3)	insect	bacterium	mushroom	moss
(4)	amoeba	algae	insect	bacterium

(Go on to the next page)

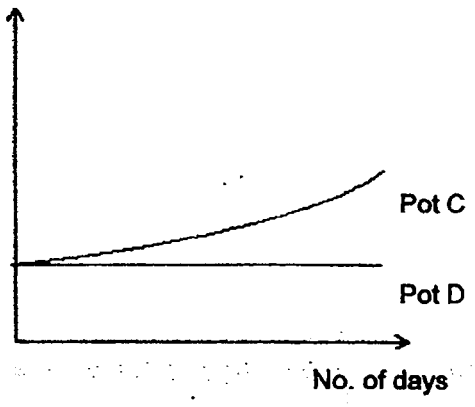
13. Some seedlings were planted in two identical pots, C and D for two weeks. The pots had the same amount of soil and were placed side by side in the garden, receiving the same amount of sunlight. The pots were given the same amount of water daily.



Pot C Pot D

Which graph below correctly shows the average heights of the plants in pots C and D?

(1)



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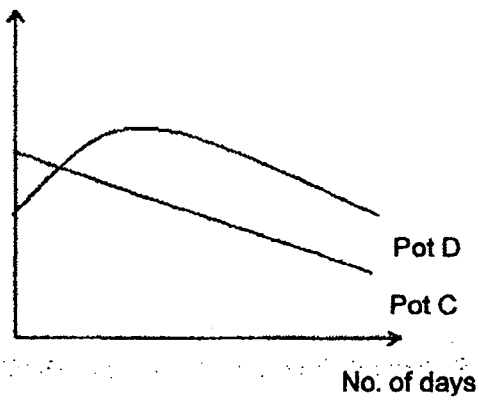
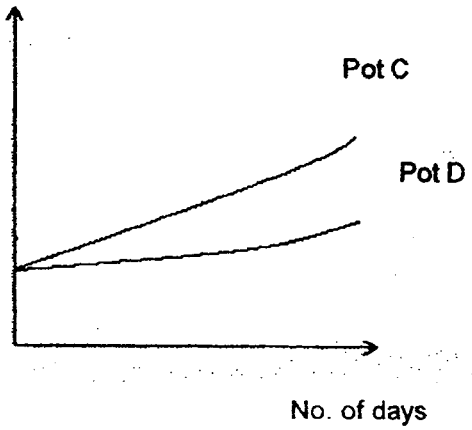
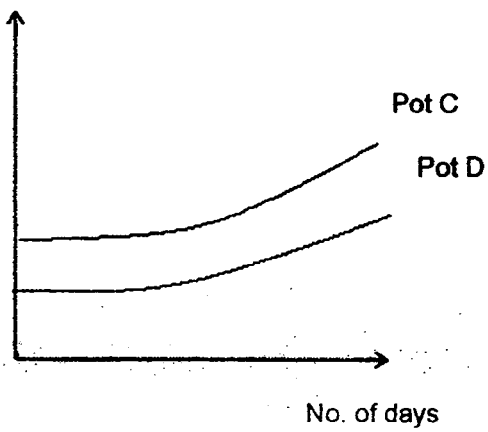


(3)



(4)



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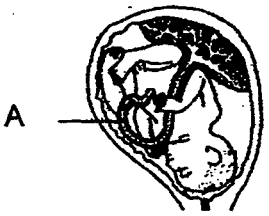
14. The diagram below shows a developing baby in the mother's womb.



How does Part A help the developing baby ?

A : It carries digested food to the developing baby.
B : It carries oxygen to the developing baby.
C : It carries the developing baby's wastes to his mother to be removed.

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

15. The table below describes the differences in sexual reproduction between plants and humans.

	Humans	Plants
Male sex cell	sperm	X
Female sex cell	egg	Y
Formed after fertilisation	baby	Z

Which of the following correctly identifies X, Y and Z?

	X	Y	Z
(1)	anther	stigma	seed
(2)	sperm	ovary	fruit
(3)	filament	style	seed
(4)	pollen grain	egg	seed

End of Booklet A1

METHODIST GIRLS' SCHOOL

Founded in 1887

SEMESTRAL ASSESSMENT 1 2015
PRIMARY 5
SCIENCE

BOOKLET A2

Total Time for Booklets A and B: 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES
Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Shade your answers in the Optical Answer Sheet (OAS) provided.

Name: _____ ( )

Class: Primary 5._____

Date : 14 May 2015

This booklet consists of 14 printed pages including this page.

For each question from 16 to 30, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet (OAS).

[30 marks]

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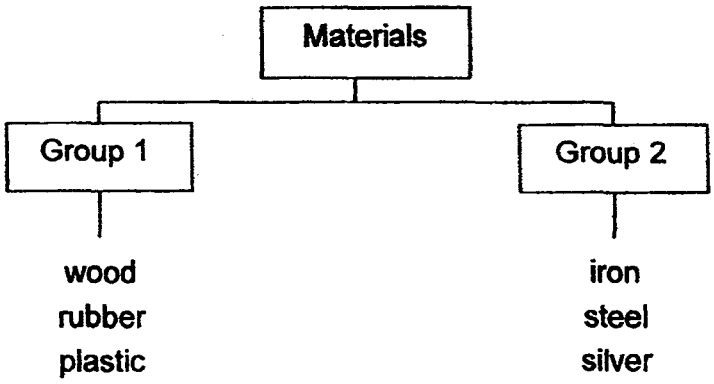
16. The following shows a classification diagram.

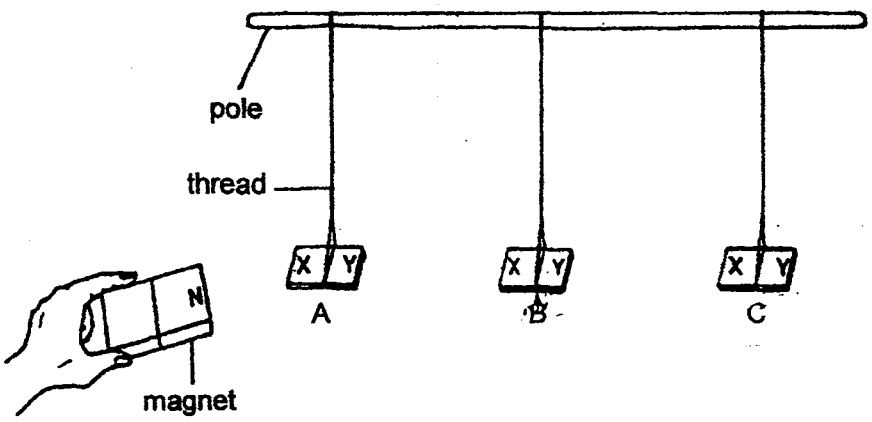


How are the materials in Group 1 different from those in Group 2?

	Group 1	Group 2
A	Flexible	Inflexible
B	Non-metals	Metals
C	Non-magnetic	Magnetic
D	Poor conductors of heat	Good conductors of heat

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

17. Mei Ling hung three bars, A, B and C from a pole.



She held the N-pole of a magnet near X and then Y of each bar. She recorded her observations in the table below.

	Bar A	Bar B	Bar C
N-pole of magnet and X	remained stationary	attracted	attracted
N-pole of magnet and Y	remained stationary	attracted	repelled

What do the above observations show about the three bars?

A : Bar A could be made of iron but is not a magnet.

B : Bar B could be made of iron and is a magnet with a S-pole at X.

C: Bar C could be made of steel and is a magnet with a N-pole at Y.

D: Bar C could be made of copper and is a magnet with a S-pole at X.

(1) C only

(2) A and C only

(3) B and D only

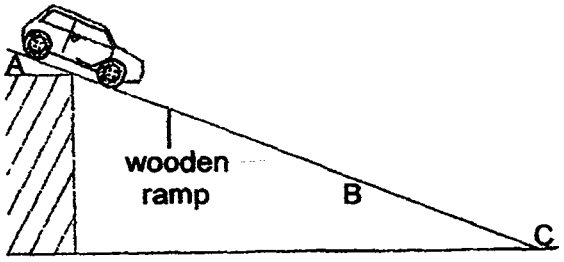
(4) A, B, C and D

(Go on to the next page)

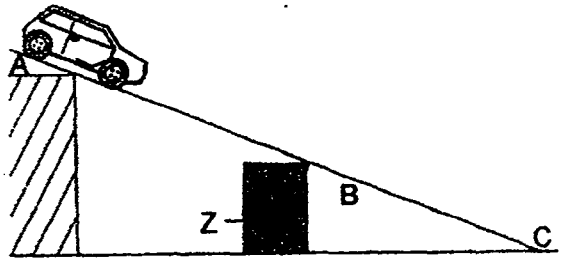
18. Two experiments were carried out as shown below.

In experiment 1, a toy car, made of iron, was released at A of a wooden ramp. The time taken for it to move from A to B and then from B to C was recorded.

In experiment 2, the same experiment was repeated with an object Z placed under the ramp.



Experiment 1



Experiment 2

The following table shows the time taken for the toy car to travel from A to B and from B to C in the two different experiments.

Experiment	Time taken (seconds)	
	A to B	B to C
1	14	6
2	10	9

Which of the following statements about the two experiments are correct?

A : Object Z was likely to be a magnet.

B : Object Z was likely to be a block of wood.

C : Object Z caused the toy car to travel down slower from A to B, but faster from B to C.

D : Object Z caused the toy car to travel down faster from A to B, but slower from B to C.

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

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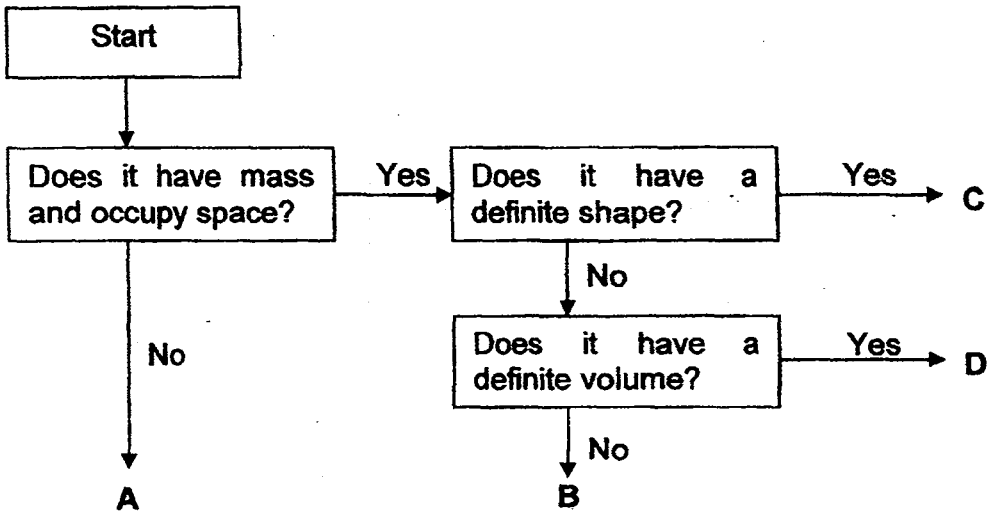
19. Study the following flow chart.

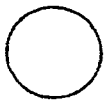


Exit points : **A, B, C and D**

Which set of exit points correctly matches each of the given things in the table below?

	Oxygen	Petrol	Stone	Shadow
(1)	A	D	C	B
(2)	B	D	C	A
(3)	C	B	D	A
(4)	D	A	B	C

20. Jane accidentally stepped on a table tennis ball. When she examined the table tennis ball, she noticed that there was a dent on it. However, the table tennis ball was not broken and there were no holes on it.



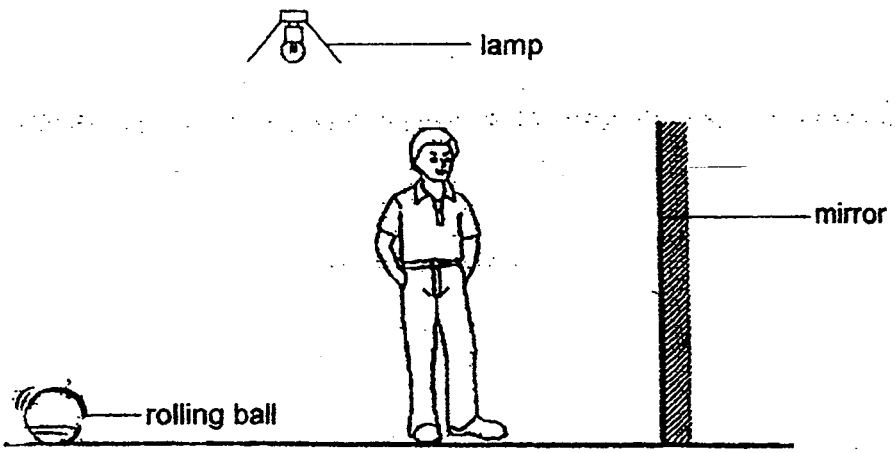
normal table tennis ball

dented table tennis ball

Which one of the following correctly shows the changes in the mass and volume of the dented table tennis ball?

	Mass	**Volume**
(1)	no change	no change
(2)	increase	increase
(3)	no change	decrease
(4)	decrease	decrease

21. When the boy looks into the mirror, he can see the ball rolling towards him.

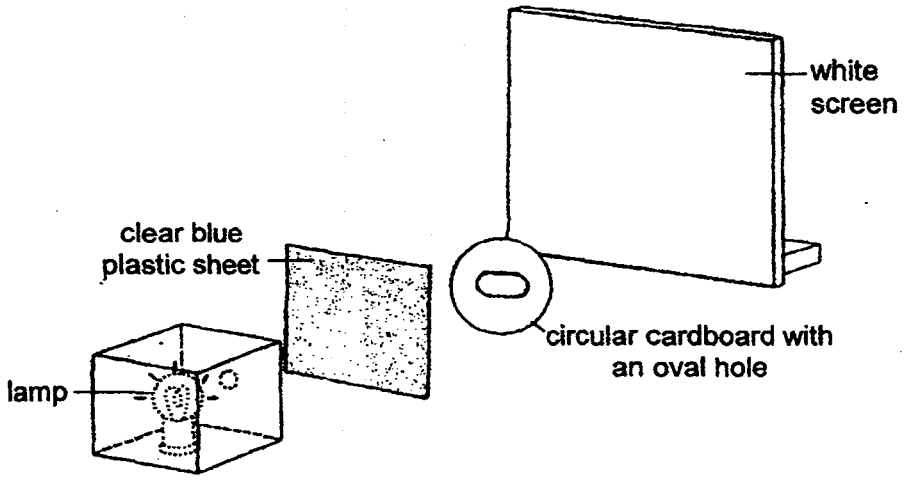


Which one of the following shows correctly the path of light that makes it possible for the boy to see the ball in the mirror?

(1) From ball to boy to lamp
(2) From ball to mirror to lamp to boy
(3) From lamp to ball to boy
(4) From lamp to ball to mirror to boy

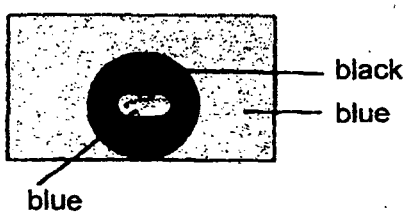
(Go on to the next page)

22. An experiment was carried out using the set-up below and a shadow was formed on the white screen.

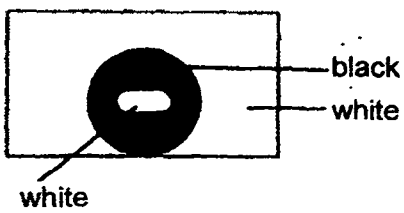


Which one of the following shadows would be observed on the white screen?

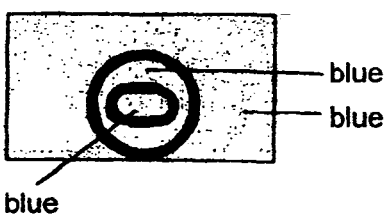
(1)



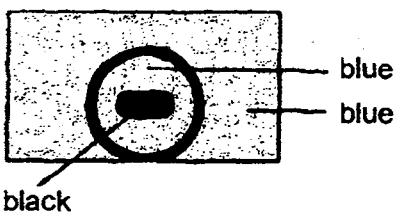
(2)



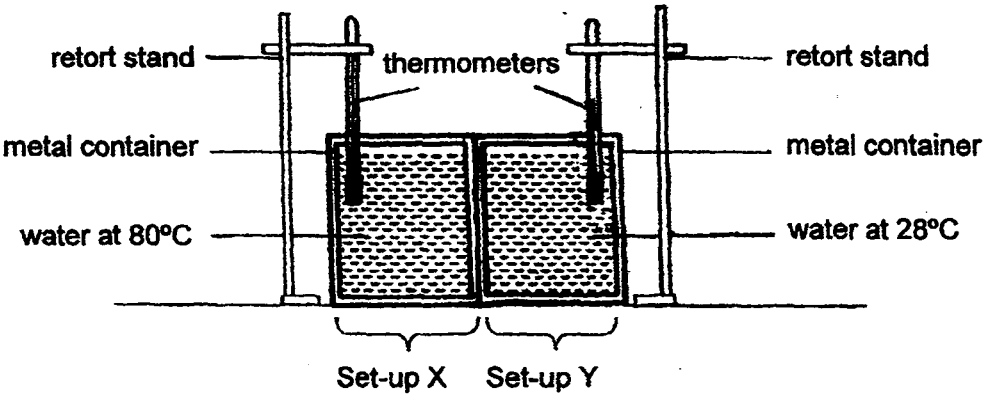
(3)



(4)



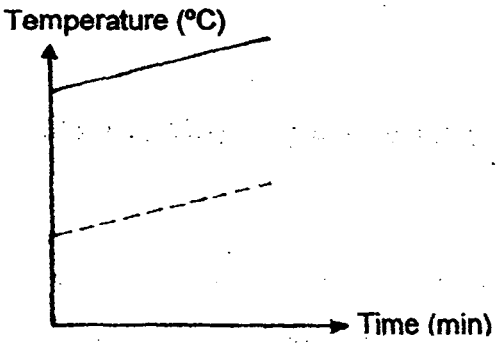
23. Two set-ups, X and Y, were placed beside each other in a room at 30°C as shown below.



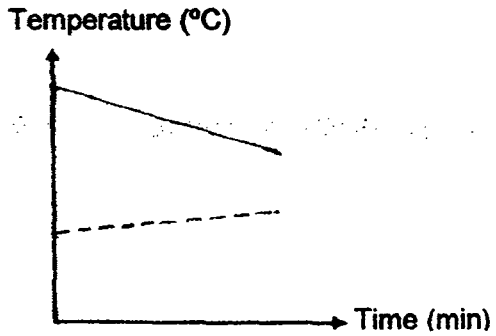
Which one of the following graphs shows the most likely temperature changes in each set-up for a period of three minutes?

Key :
— Set-up X
---- Set-up Y

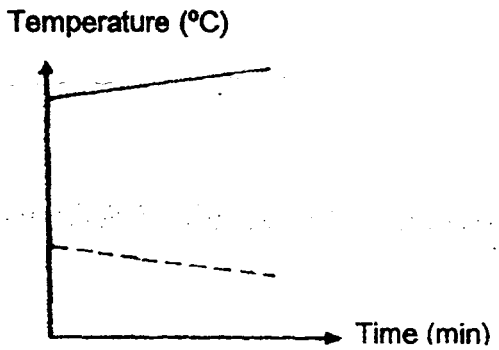
(1)



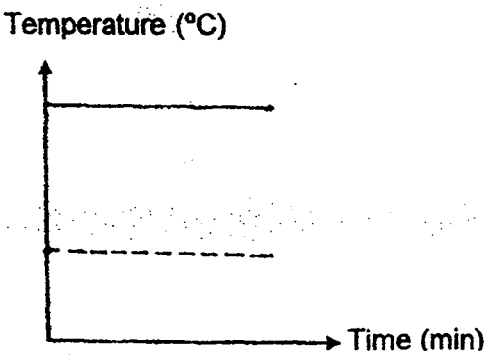
(2)



(3)



(4)



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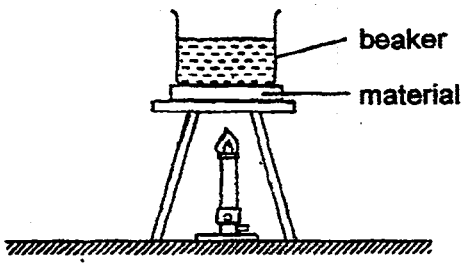
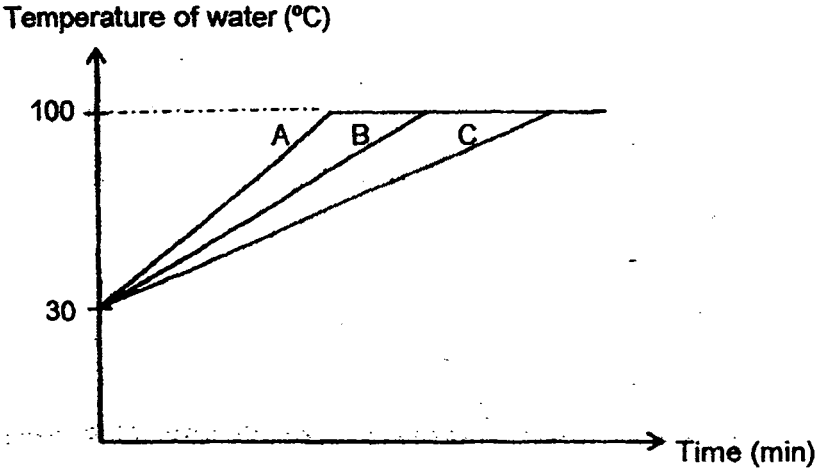
24. Roshini conducted an experiment using the set-up shown below. The beaker contained 100 ml of water at 30°C.



She recorded the time taken for the water to boil when different materials A, B and C were placed below the beaker of water.

Her results are shown in the graph below.

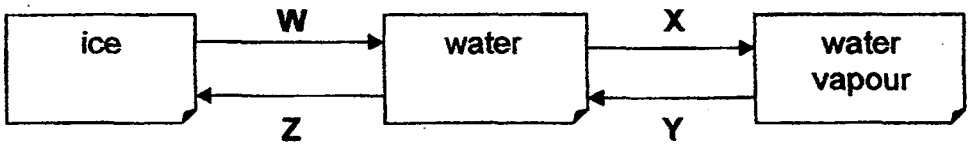


Roshini wanted to bring cold drinks and hot food for a picnic. She wanted to keep the drinks cold and the food hot. Which material would be the most suitable for the containers carrying cold drinks and hot food respectively?

	Material for container carrying	
	cold drinks	**hot food**
(1)	A	A
(2)	B	B
(3)	C	A
(4)	C	C

(Go on to the next page)

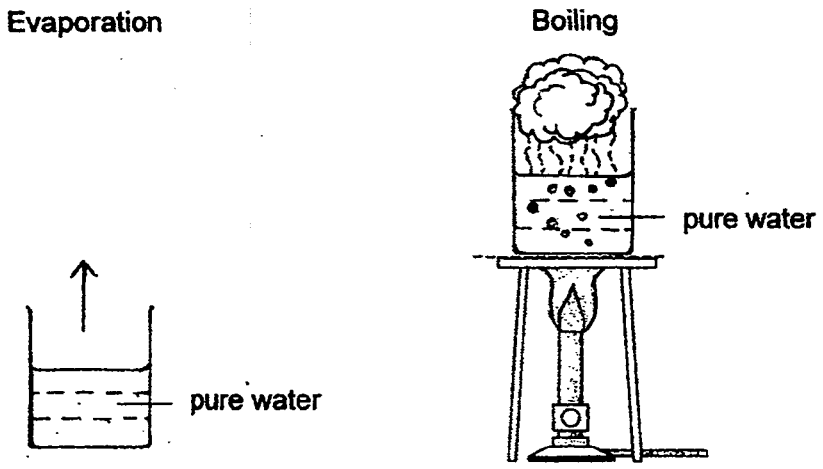
25. The diagram below shows the three states of water.
W, X, Y and Z represent four different processes.



Which one of the following correctly indicates whether heat is gained or heat is lost during the processes W, X, Y and Z?

	W	X	Y	Z
(1)	Heat is gained	Heat is gained	Heat is lost	Heat is lost
(2)	Heat is gained	Heat is lost	Heat is gained	Heat is lost
(3)	Heat is lost	Heat is lost	Heat is gained	Heat is gained
(4)	Heat is lost	Heat is gained	Heat is lost	Heat is gained

26. The experiment below was carried out in a school laboratory.



Each student made a statement about the two processes.

Susan : Evaporation is a slower process than boiling.

Mingwei : Evaporation takes place at any temperature while boiling takes place at 100°C.

Siti : Both evaporation and boiling take place throughout the liquid.

Raju : Both evaporation and boiling involve water changing from a liquid state to a gaseous state.

Whose statements are correct?

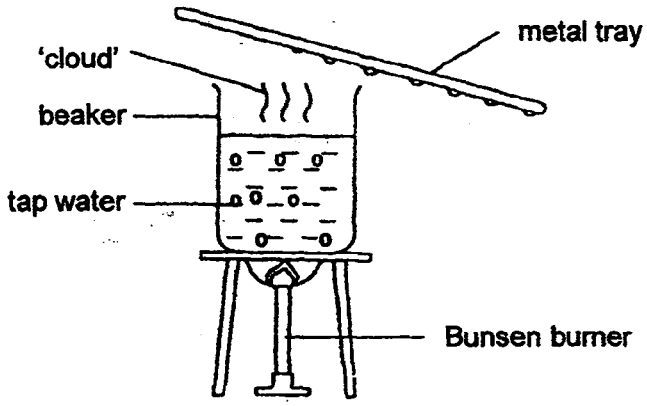
(1) Susan and Siti only
(2) Mingwei and Raju only
(3) Susan, Mingwei and Raju only
(4) Susan, Mingwei, Siti and Raju

(Go on to the next page)

27. An experiment was carried out using the set-up as shown below.

A beaker containing some tap water was heated until it boiled.

A metal tray was then placed above the beaker.



Which of the following statements about the experiment is **not true**?

(1) The 'cloud' was made up of tiny droplets of water.

(2) The 'cloud' was formed from the condensation of steam in the cooler air.

(3) When the metal tray was first placed above the beaker, it was cool and water droplets formed on it slowly.

(4) After some time, the metal tray became warm and fewer water droplets formed on it.

28. The following table shows the melting points and boiling points of four substances, P, Q, R and S.

Substance	Melting point (°C)	Boiling point (°C)
P	44	280
Q	80	218
R	119	445
S	114	184

Based on the information given above, which one of the following is **not correct**?

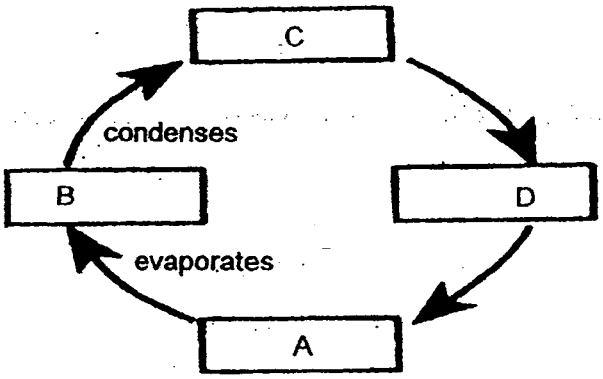
(1) All the four substances are solids at 5°C.

(2) One of the substances is a liquid at 20°C

(3) Two of the substances are solids at 100°C.

(4) All the four substances are gases at 500°C.

29. Study the diagram of the water cycle below.

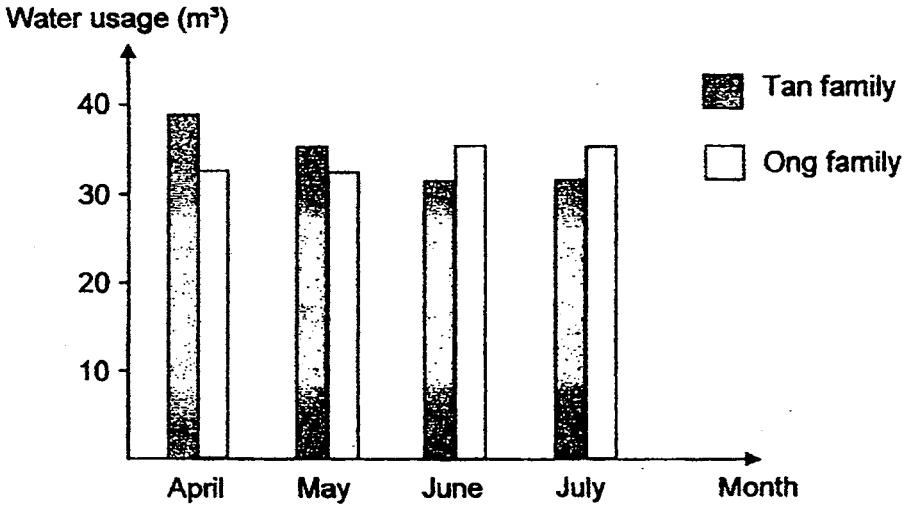


Which one of the following should be placed in the boxes to show the water cycle correctly?

	A	B	C	D
(1)	water	clouds	water vapour	rain
(2)	clouds	rain	water	water vapour
(3)	clouds	water vapour	rain	water
(4)	water	water vapour	clouds	rain

(Go on to the next page)

30. The graph below shows the usage of water per month for the Tan and the Ong families from the month of April to July.



Which one of the following is the most likely reason for the change in the usage of water for both families?

(1) Both families implemented water saving tips at home.

(2) Both families switched to using a running hose to water the plants in their gardens instead of using a watering can.

(3) The Tan family started reusing rinse water from the washing machine to flush the toilets whereas the Ong family started to wash dishes in a container and not under a running tap.

(4) The Tan family started taking shorter showers and turning off the shower taps while soaping whereas the Ong family switched to using a running hose instead of a pail of water to wash their car.

End of Booklet A2

METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887

SEMESTRAL ASSESSMENT 1 2015
PRIMARY 5
SCIENCE

BOOKLET B1

Total Time for Booklets A and B: 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

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 ____

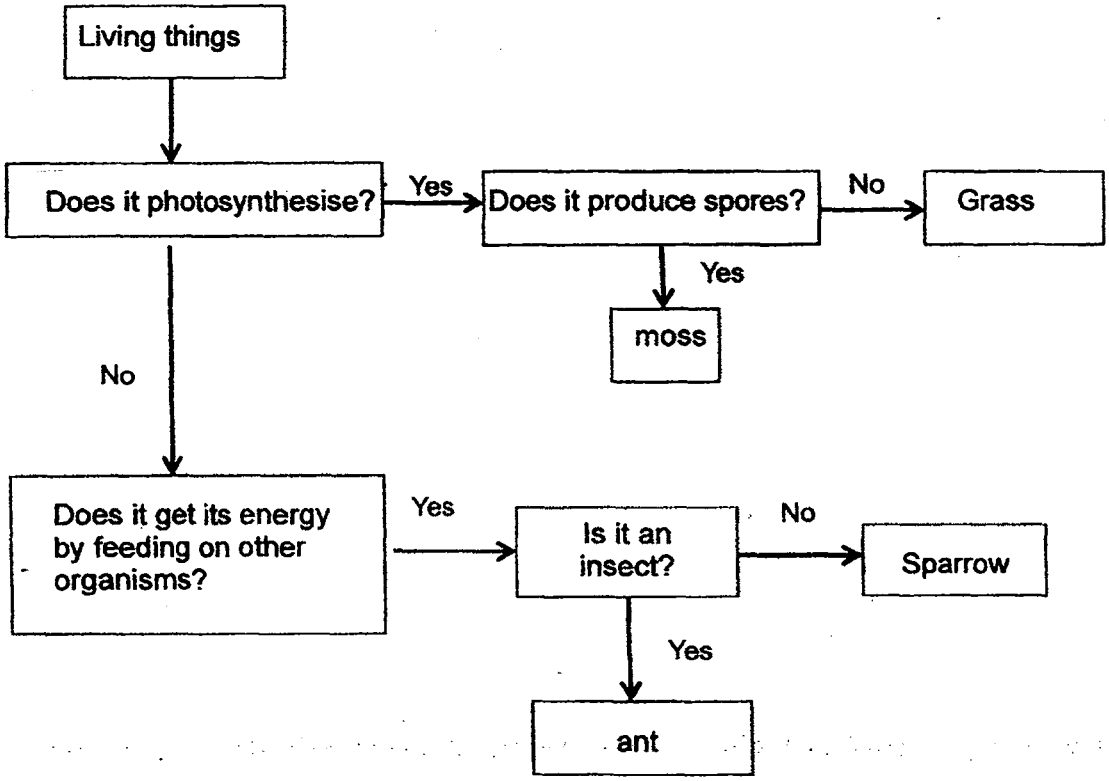
Date : 14 May 2015

This booklet consists of 8 printed pages including this page.

(Go on to the next page)

For questions 31 to 37, write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part question.
[20 marks]

31. The flowchart below shows the differences between a few living things.



(a) Based on the flowchart, what are the characteristics of the moss? [1]

(b) Based on the above flowchart, the sparrow and the ant are living things. State one similarity between the sparrow and the ant. [1]

2

(Go on to the next page)

32. Salim is investigating a particular condition that seeds require in order to germinate. He puts the same amount of cotton wool and 10 similar-sized bean seeds in each of the three similar petri dishes.

He then puts one petri dish into the refrigerator, one in the corner of the classroom and one in a sunny spot in the garden. He waters the seeds daily and recorded the results in the table below.

	Number of seeds germinated			
	Day 1	Day 2	Day 3	Day 4
Refrigerator	0	0	0	0
Classroom	0	4	10	10
Garden	0	1	3	6

(a) State two **other** variables that he needs to keep the same in order to conduct a fair test. [1]

_____

_____

(b) Salim observed that the classroom was the most suitable place for germination to take place. Explain how the data in the table supports Salim's observation. [1]

_____

_____

(c) Based on the results obtained, what is the condition needed for seeds to germinate? [1]

_____

3

33. The diagrams below show two systems in the human body.

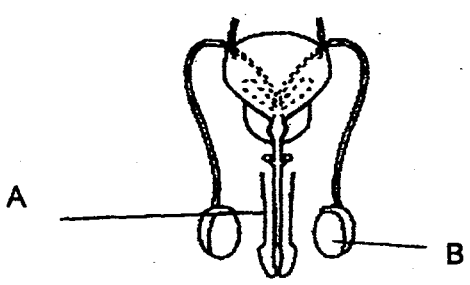


Diagram X

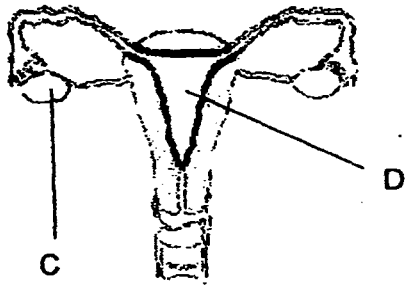


Diagram Y

(a) What systems do diagrams X and Y represent? [1]

Diagram X : _____

Diagram Y : _____

(b) Name the parts labelled B and C [1]

Part B : _____

Part C: _____

(c) Why do the offspring and parents share some common characteristics? [1]
Explain your answer clearly.

_____

_____

3

(Go on to the next page)

34. Leila has one brother and two sisters. Her maternal and paternal grandparents are still alive. Her maternal grandparents have two sons and a daughter, while her paternal grandparents have a son and a daughter.

(a) In the box below, draw Leila's family tree. Label Leila in the family tree. [2]

KEY:

☐ Male
○ Female

(b) How many uncles does Leila have in total? [½]

_____

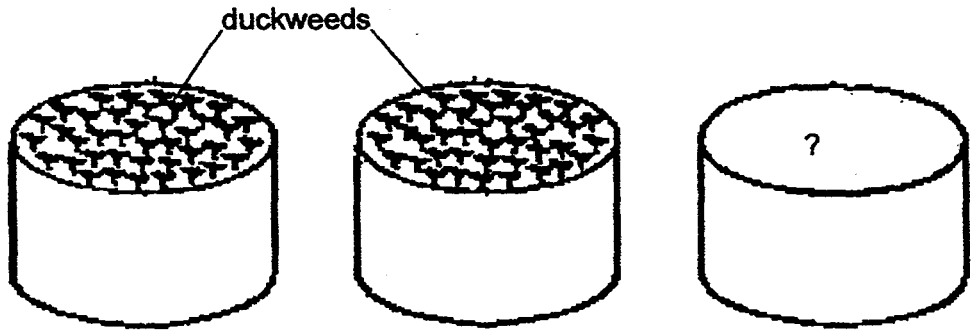
(c) How many children do Leila's parents have? [½]

_____

3

(Go on to the next page)

35. Cindy set up an experiment to find out how the amount of soap solution affects the growth of duckweeds. She used three identical containers and filled them with the same type of duckweeds and the amount of pond water. She then added soap solution into Set-up 1 and Set-up 2.



Set-up1 Set-up 2 Set-up 3

The table below shows how the experiment was set up.

	Number of duckweeds	**Soap solution (ml)**	**Pond water (ml)**
Set-up 1	40	5	500
Set-up 2	40	10	500
Set-up 3			

(a) In order to conduct a fair test, she used Set-up 3 as a control experiment. Complete the table for Set-up 3. [1]

(b) Besides using the same type of soap solution, pond water and duckweed, what is **another** important factor not stated above that should be kept constant in order for the experiment to be a fair test? [1]

_____

_____

(c) What observation should Cindy make in order to compare how well the duckweeds grow in each set-up? [1]

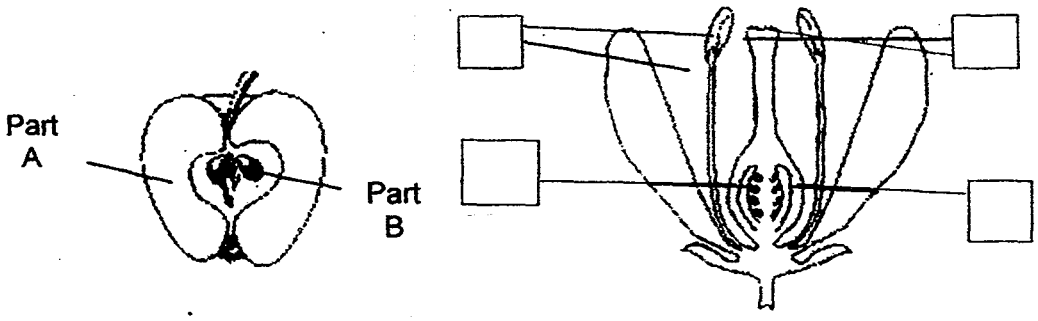
_____

_____

3

(Go on to the next page)

36. The diagram below shows two plant parts, Fruit S and Flower S, which belong to the same plant. Part A and Part B of Fruit S were developed from two parts of Flower S.



Fruit S Flower S

(a) Write A and B in the appropriate boxes to match Part A and B in the fruit. [1]

Fruit Q in the diagram below is inedible but like Fruit S, is dispersed by animals.

(b) Explain how the characteristics of the two fruits, S and Q, enable them to be dispersed by animals. [2]

Fruit S : _____

_____

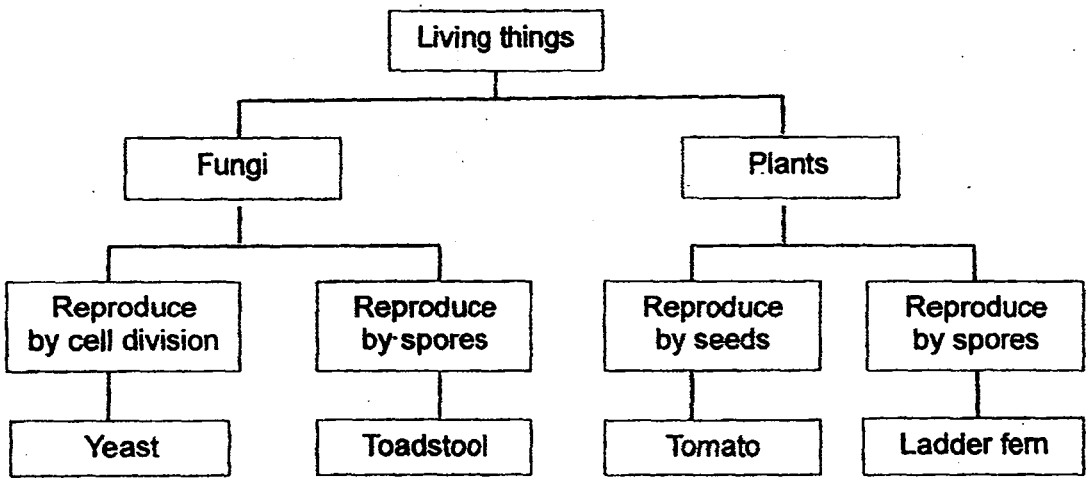
Fruit Q : _____

_____

3

(Go on to the next page)

37. Study the classification chart below carefully.



(a) Based on the classification chart above, state a similarity between the toadstool and the ladder fern. [1]

_____

(b) Like plants, fungi are organisms with a cell wall, cell membrane and cytoplasm. However, they are not grouped under plants. Explain why.
(Do not compare their physical appearances.) [1]

_____

_____

(c) A pot of soil was left in Jamal's garden for a long time. No plant was found growing in it. He used it as a container to feed the birds. He scattered some cooked rice in it to feed the birds coming to his garden. After some time, he was surprised to find a tomato plant growing in the pot. Nobody had planted it.

Explain how the tomato plant got there. [1]

_____

_____

END OF BOOKLET B1

3

METHODIST GIRLS' SCHOOL

Founded in 1887

SEMESTRAL ASSESSMENT 1 2015
PRIMARY 5
SCIENCE

BOOKLET B2

Total Time for Booklets A and B: 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

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._____

Date : 14 May 2015

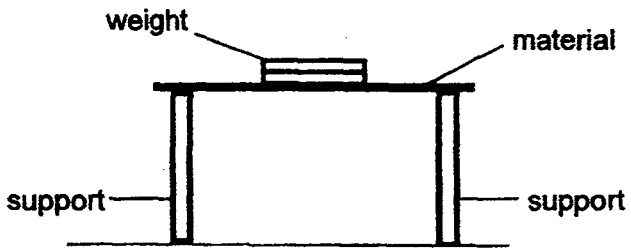
Booklet A1 & A2	60
Booklet B1	20
Booklet B2	20
Total	100
Parent's Signature	

This booklet consists of 10 printed pages including this page.

For questions 38 to 44, write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part question.

[20 marks]

38. Mr Lee tested four different types of materials, A, B, C and D. Each piece of material was of the same size and thickness. He placed weights on each piece of material and increased the number of weights until the piece of material broke.



In the table below, he recorded the maximum number of weights that each piece of material could support before breaking.

Material	Number of weights the material could support before breaking
A	10
B	3
C	7
D	5

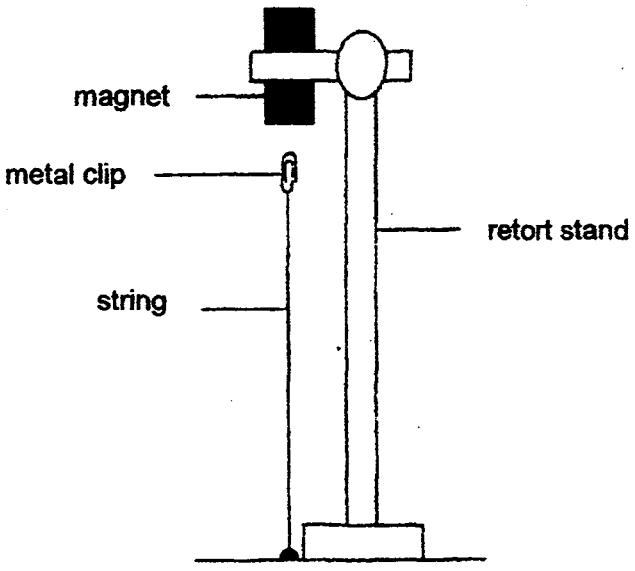
(a) What property of the materials was Mr Lee testing? [1]

(b) Which material, A, B, C or D would be best for making a bookshelf? Explain your answer. [1]

2

(Go on to the next page)

39. Sally carried out the following experiment. She clamped a magnet as shown. A metal clip, tied to the bench by a string of length 30 cm, was found to remain in the air.



(a) Give a reason why the metal clip could remain in the air as shown in the diagram. [1]

(b) Sally placed a sheet of glass between the magnet and the metal clip. The metal clip remained where it was. What does this show? [1]

(c) Sally dropped the magnet on the floor 40 times. She observed that unless she used a longer string of length 32 cm, the metal clip dropped to the bench. Give a reason why she had to use a longer string of 32 cm. [1]

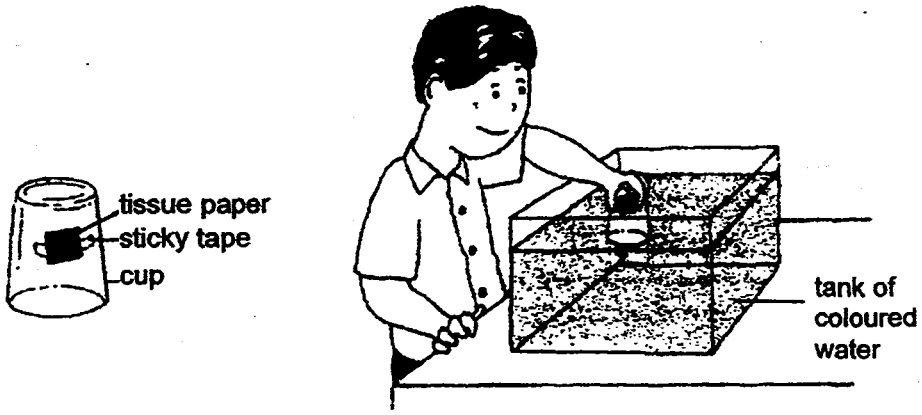
3

(Go on to the next page)

40. John conducted three different activities as shown below.

(a) First activity

John stuck a piece of tissue paper inside a clear plastic cup. Then he held the cup upside down and pushed it down vertically into a tank of coloured water until it touched the bottom of the tank.

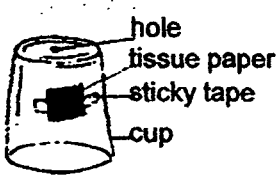


When John lifted the cup out of the water, he observed that the tissue paper was dry. From this observation, what property of air can John infer? [1]

_____

(b) Second activity

John made a small hole at the bottom of the same cup. Then he pushed it down vertically into the same tank of coloured water until it touched the bottom of the tank.



When John lifted the cup out of the water this time, he observed that the tissue paper was wet with water. Explain how the tissue paper became wet with water. [1]

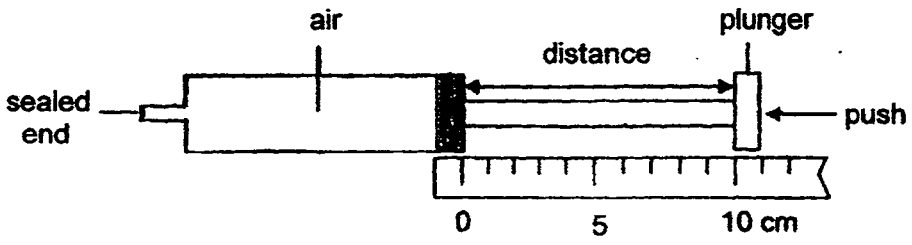
_____

_____

2

(c) Third activity

John filled a syringe completely with air. The diagram below shows the syringe at the start of the experiment before the plunger was pushed in.



Next, he pushed in the plunger of the syringe as hard as possible. He was able to obtain a distance of 5 cm. However, he could not obtain a distance of 0 cm no matter how hard he tried.

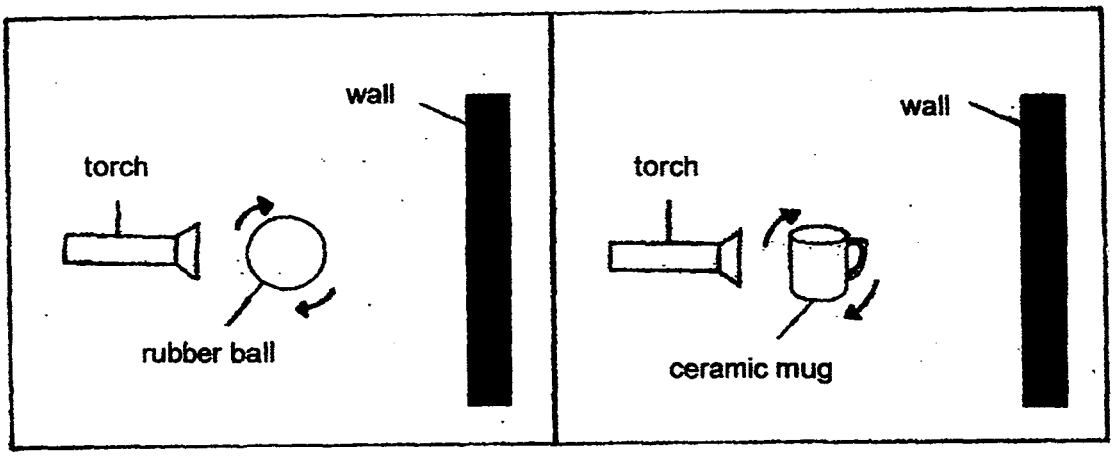
(c) Why was John able to obtain a distance of 5 cm but not a distance of 0 cm? [1]

_____

_____

1

41. A ball and a mug were slowly rotated in front of a torch in separate experiments as shown below. The shadows of the ball and the mug were formed on the wall.



(a) What caused the shadows of the objects to form on the wall? [1]

_____

(b) Would the shape of the shadows of the ball and the mug remain the same or change as they were slowly rotated? [1]

Shape of the shadow of the ball :

_____

Shape of the shadow of the mug :

_____

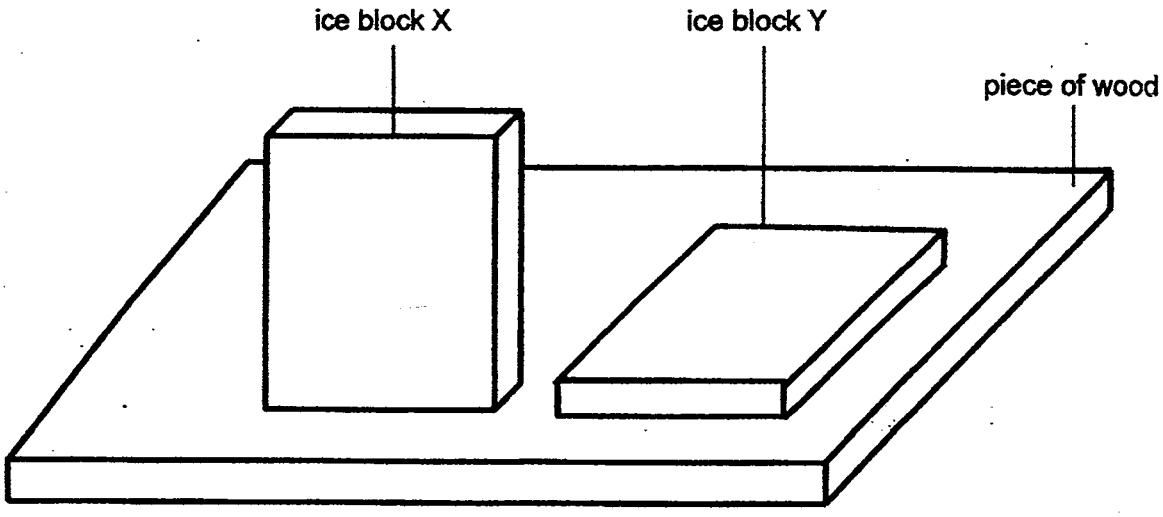
(c) The ball and the mug were moved nearer to the wall while the torch remained in the same position. What would happen to the **size** of the shadows? [1]

_____

3

(Go on to the next page)

42. Henry placed two identical blocks of ice, X and Y, of the same shape and volume, on a piece of wood as shown below.



He measured the time taken for each block of ice to melt completely. He recorded his results in the table below.

Ice block	Time taken (min)
X	30
Y	60

(a) Ice block X took a shorter time than ice block Y to melt completely. Explain why. [1]

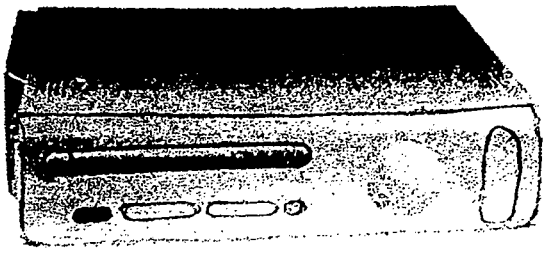
_____

_____

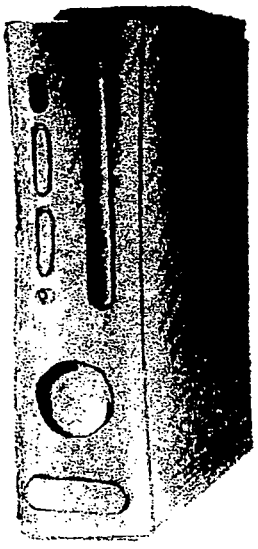
_____

1

(b) Henry bought a game console and was deciding if he should place it horizontally or vertically so as to prevent it from overheating after a long period of play.



Game console placed horizontally



Game console placed vertically

How should he place the game console so as to prevent it from overheating after a long period of play? Explain your answer. [2]

_____

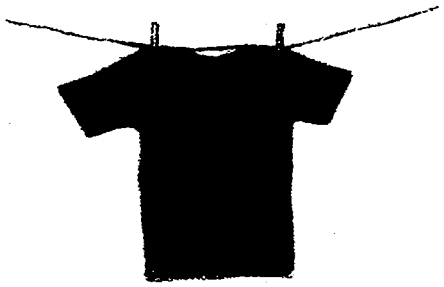
_____

_____

2

(Go on to the next page)

43. Azman conducted an experiment as shown below. He washed his T-shirt, weighed it and then hung it on a clothesline in his backyard.



He weighed the T-shirt every 15 minutes and recorded his results in the following table.

Time (min)	Mass of T-shirt (g)
0	450
15	430
30	405
45	335
60	305
75	280
90	255
105	240
120	?
135	240

(a) What is the mass of the T-shirt at the 120th minute? [1]

_____

(b) Explain your answer in (a). [1]

_____

_____

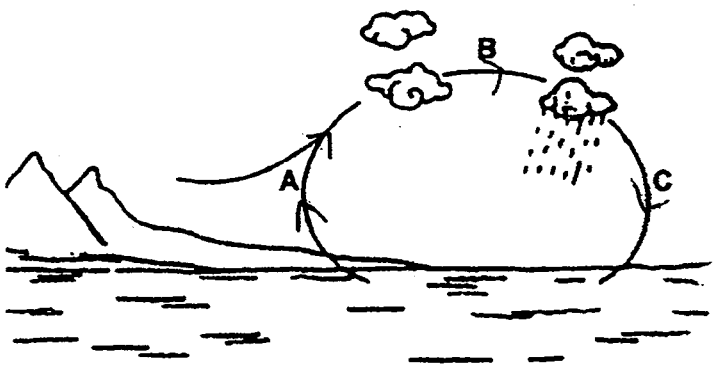
(c) Azman repeated the experiment the next day. He hung the same wet T-shirt weighing 450g in the same way at the same place. He found out that his T-shirt dried faster this time round. Suggest a reason why his T-shirt dried faster. [1]

_____

3

(Go on to the next page)

44. Study the diagram of the water cycle below.



(a) **Draw arrowheads on the lines A, B and C** to show the movement of water in the water cycle. [1]

(b) Why is the sun's heat energy necessary for the water cycle? [1]

_____

_____

(c) Explain why the water cycle is important to living things. [1]

_____

_____

3

EXAM PAPER 2015
LEVEL : PRIMARY 5
SCHOOL : METHODIST GIRLS' SCHOOL (PRIMARY)
SUBJECT : SCIENCE
TERM : SA1

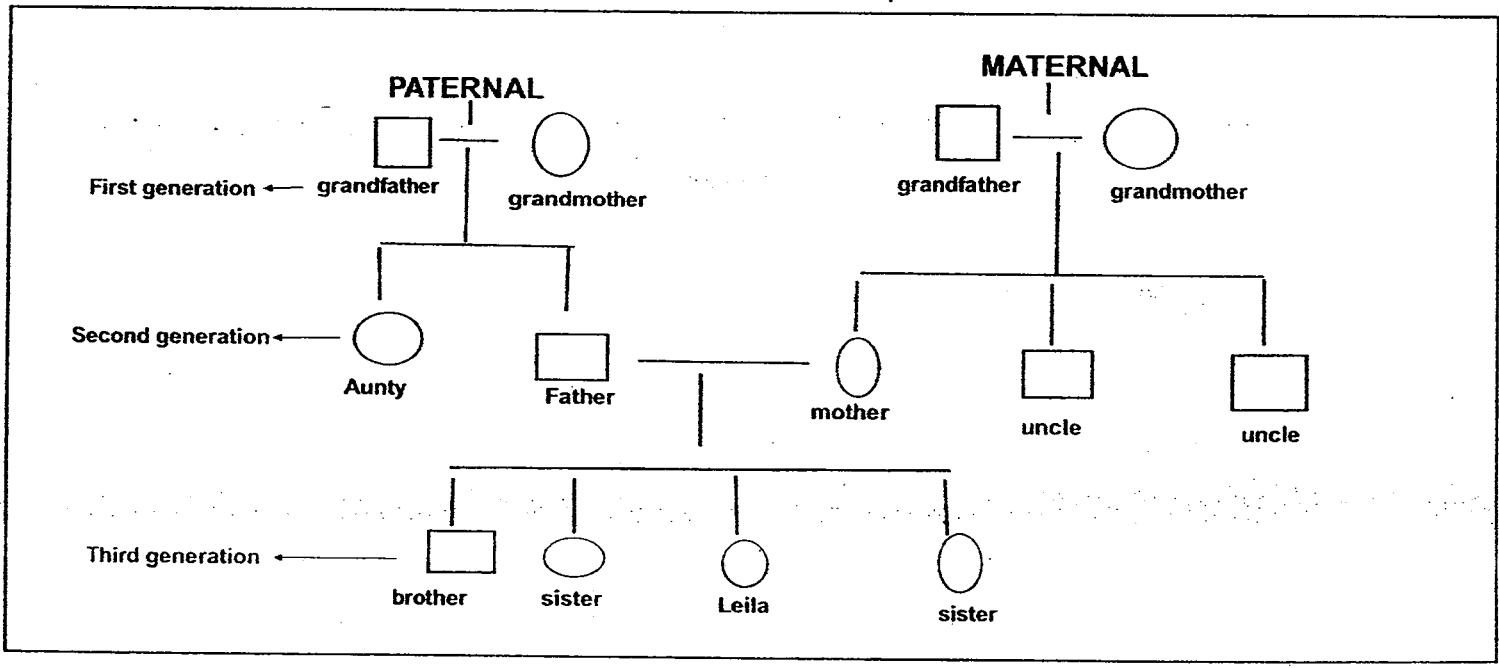
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	1	2	2	3	4	1	4	1	4
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
2	2	3	4	4	2	1	4	2	3
Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
4	2	---	---	1	---	---	2	4	4

Q31a. It is a living thing, it photosynthesizes and it produces spores.
Q31b. They do not phtosynthesise.

Q32a. Same type of beans and amount of water.
Q32b. Most number of seeds germinated on the second day and by the 4th day, all the seeds have germinated compared to the other 2 locations.
Q32c. Warmth.

Q33a.
Diagram X : Male reproductive system
Diagram Y : Female reproductive system
Q33b.
Part B: Testis
Part C: Ovary
Q33c. The offspring inherits the characteristics from the parents when the nucleus of the sperm and the nucleus of the egg fuse together.

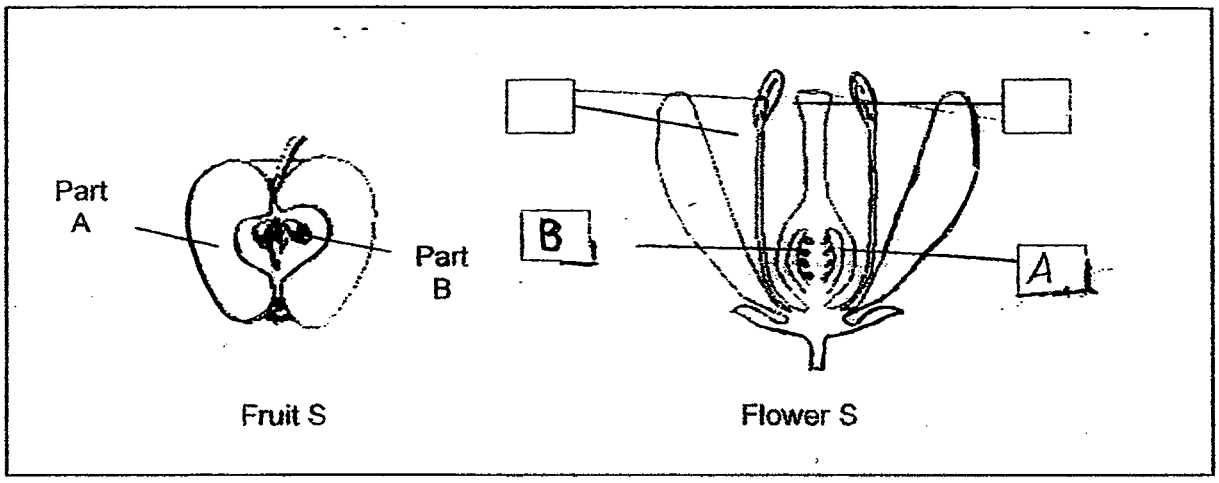
Q34a. SEE PICTURE



Q34b. 2 uncles
Q34c. **4 children**

Q35a.
No. of duckweeds – 40
Soap solution – 0ml
Pond Water -- 500ml
Q35b. They must be placed in the same location or same temperature of the surroundings.
Q35c. She should count the number of live / dead duckweeds in the 3 containers.

Q36a. SEE PICTURE



Q36b.
Fruit S : It is brightly coloured and has a sweet scent. The animal is attracted to eat the fruit and discard the seeds or pass them out in their waste.
Fruit Q. It has stiff hairs, which hook onto the animal's outer covering, and they are dispersed as the animals move around or thrown away by the man.

Q37a. Both of them reproduce by spores.
Q37b. Fungi cannot make food unlike plants and they do not have plant parts unlike plants.
Q37c. Some of the birds have eaten a tomato and dispersed its seeds through its droppings in the pot. The conditions were right for the tomato to grow, and thus a tomato plant would grow in the pot.

Q38a. Strength
Q38b. A. A could support the greatest number of weights before breaking, showing that is the strongest.

Q39a. The metal clip, which is made of a magnetic material, is attracted to the magnet.
Q39b. Magnetism can pass through non – magnetic materials such as glass.

Q39c. Dropping the magnet has caused the magnet to lose some of its magnetism, so a longer string of 32cm allows the metal clip to be nearer to the magnet so as to be attracted by it.

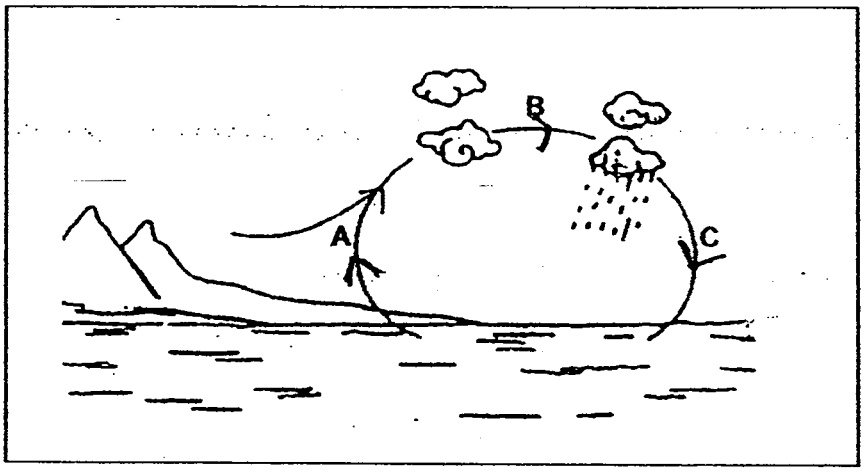
Q40a. Air occupies space.
Q40b. Air came out through the hole in the cup and allowed the water to take its place. The water hen caused the tissue paper to be wet.
Q40c. Air can be compressed but not entirely, it also occupies space which does not allow the syringe to be pushed to a distance of 0 cm.

Q41a. Light was blocked by the object , causing a shadow to be formed.
Q41b. It would remain the same.
Q41c. It would change.
Q41c. The size of the shadow decreased.

Q42a. Ice block X has a bigger surface area to the air compared with ice block Y , thus ice block X gains heat at a faster rate and melts faster.
Q42b. He should place the game console vertically so that there is a bigger exposed surface area to the air for it to lose heat at a faster rate.

Q43a.240g
Q43b. Most of the water from the wet T- shirt has evaporated decreasing in mass. From the 105 minutes, the mass has remained constant.
Q43c. The next day was hotter.

Q44a. SEE PICTURE



Q44b. So that the water can evaporate which allows it to form water vapour. It then condenses to form clouds and when it is too heavy, it would rain.
Q44c. It ensures a continuous supply of water to the living things on earth.

THE END