

METHODIST GIRLS' SCHOOL

Founded in 1887



MID -YEAR EXAMINATION 2017
PRIMARY 3
SCIENCE

BOOKLET A

Total Time for Booklets A and B: 1 hour 15 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 3. _____

Date : 9 May 2017

This booklet consists of 13 printed pages including this page.

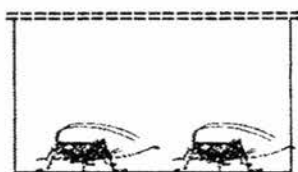
For each question from 1 to 20 four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet (OAS).

[40 marks]

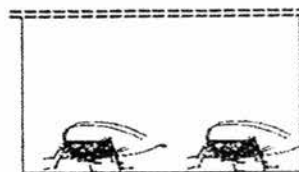
1. Which one of the following observations is matched correctly to the characteristic of living things?

	Observation	Characteristic
(1)	A frog lays eggs.	Living things can grow.
(2)	A caterpillar changes into a butterfly.	Living things need air, food and water.
(3)	A boy moved his foot away from a sharp object he stepped on.	Living things can reproduce.
(4)	A monkey swings from trees to trees.	Living things can move by themselves.

2. Bee Li wanted to find out if animals can survive without food. She kept two similar animals in two different tanks as shown below.



Container A



Container B

Which of the following variables should be kept the same for the both tanks in order for the test to be fair?

- A Amount of air
- B Size of the animals
- C Amount of food given to the animals
- D Amount of water given to the animals

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

3. Study the characteristics of A, B, C and D as shown below.

	Respond to changes	Move from place to place	Reproduce	Make its own food
A	√			
B	√	√	√	
C	√	√		
D	√		√	√

Which one of the following statements is true?

- (1) A is a bacteria.
- (2) B and D are living things
- (3) D depends on other living things for food
- (4) B and C are alive as they can move from place to place.

4. The table below provides information about 4 different living things, Q, R, S and T.

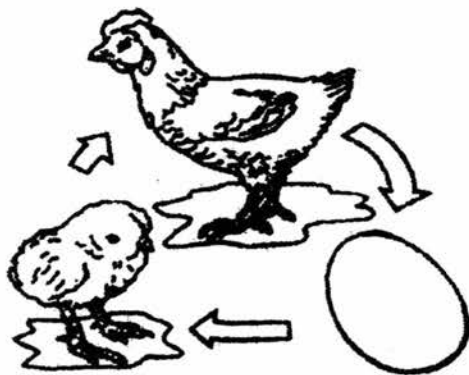
Living things	Does it make food?	Does it reproduce by spores?
Q	Yes	Yes
R	No	Yes
S	No	No
T	Yes	No

Which one of the living things, Q, R, S or T best represents the organism shown below?



- (1) Q
- (2) R
- (3) S
- (4) T

5. Study the diagram below.



The diagram above shows that living things can _____.

- A die
- B grow
- C breathe
- D reproduce

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

6. Alan was moving house. He packed some belongings into boxes and sealed them two weeks before he moved. While unpacking, he discovered that a pot of plants that was kept in one of the boxes had died. Which of the following explains what had happened?

- A The plant did not move.
- B It was too warm in the box.
- C The plant did not receive water.
- D The plant did not have enough air.

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

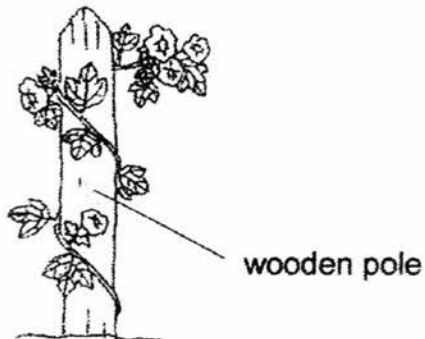
7. Sally carried out an experiment to find out if plants need water to grow. She used two similar pots, X and Y, for her experiment. The variables for her experiment are shown in the table below.

Pot	Amount of water (ml)	Number of hours in the sun daily
X	100	5
Y	?	?

Which one of the following options is correct if Sally was to conduct a fair experiment?

	Pot Y	
	Amount of water (ml)	Number of hours in the sun daily
	A	B
(1)	100	5
(2)	100	3
(3)	0	5
(4)	0	3

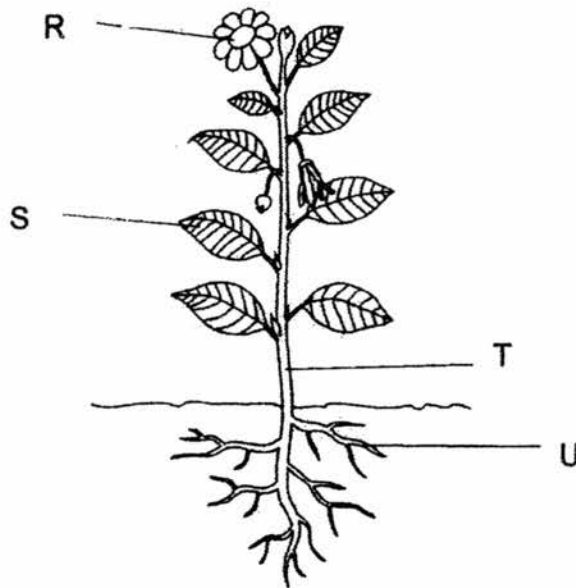
8. The plant below uses the wooden pole for support to grow.



Which one of the following statements best explains the reason for doing so?

- (1) Fruits would have space to grow.
- (2) The flowers would attract more insects.
- (3) The roots would be able to absorb more water.
- (4) The leaves would be able to get enough sunlight.

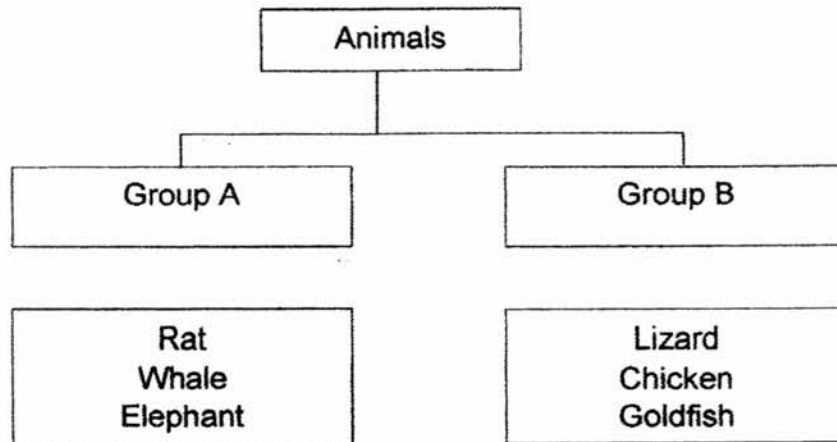
9. The different parts of a plant are labelled R, S, T and U as shown below.



Which one of the following options is correct?

	R	S	T	U
(1)	Flower	Leaf	Stem	Root
(2)	Leaf	Stem	Flower	Root
(3)	Flower	Leaf	Root	Stem
(4)	Root	Flower	Stem	Leaf

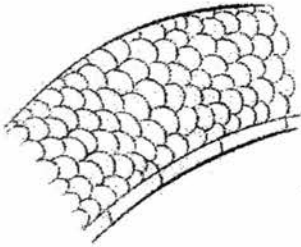
10. The classification diagram below shows two groups of animals.



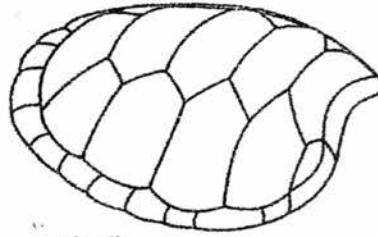
Which one of the following options correctly describes the animals in each group?

	Group A	Group B
(1)	Animals that live on land	Animals that live in water
(2)	Animal eaters	Plant eaters
(3)	Animals that give birth to their young	Animals that lay eggs
(4)	Animals covered with hair	Animals covered with scales

11. The outer covering of some animals are shown below.



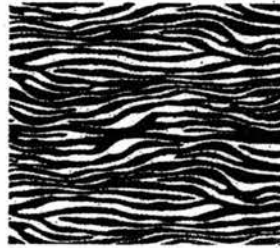
scales



shell



feathers

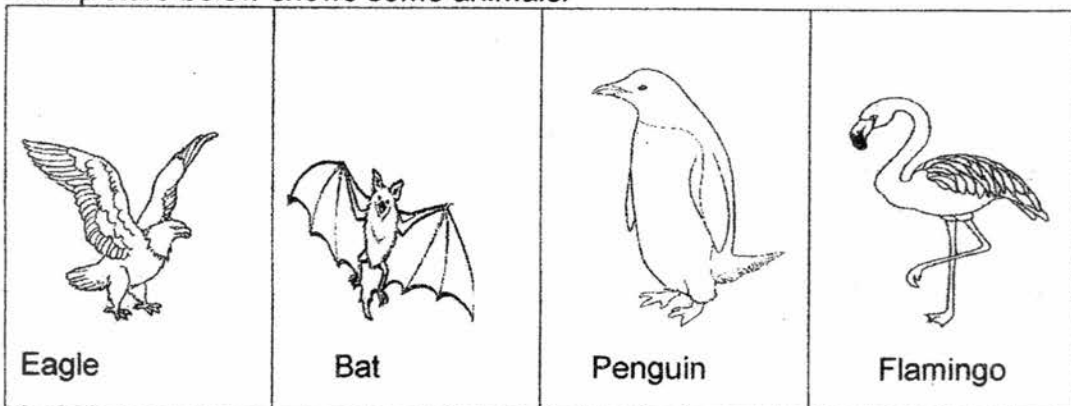


hair

Which one of the following statements describes the functions of the outer coverings of the animals?

- (1) They help the animals to fly.
- (2) They help to keep the animals warm.
- (3) They help the animals hide from their enemies.
- (4) They help to protect the soft bodies of the animals.

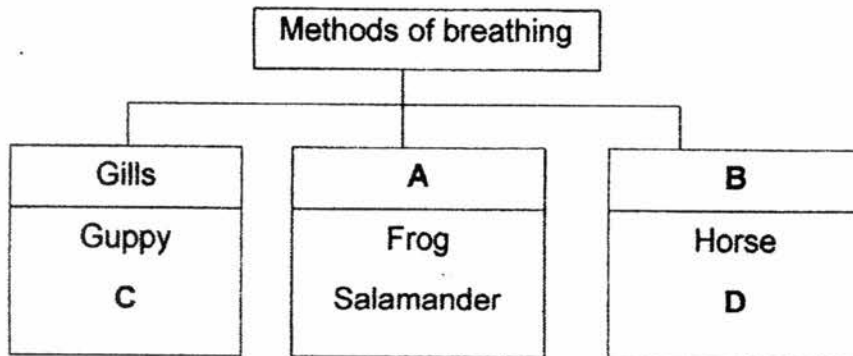
12. The picture below shows some animals.



Which one of the animals **does not** belong to the same group as the rest?

- (1) Bat
- (2) Eagle
- (3) Penguin
- (4) Flamingo

13. Study the classification diagram below.



Which one of the following options is correct?

	A	B	C	D
(1)	Lungs	Moist skin	Goldfish	Dolphin
(2)	Lungs	Moist skin	Dolphin	Whale
(3)	Moist skin	Lungs	Dolphin	Goldfish
(4)	Moist skin	Lungs	Goldfish	Whale

14. Which of the following statements about fungi are incorrect?

- A Fungi need sunlight to make food.
- B A mushroom has a cap, gills and stalk.
- C Mould gets its food from where it grows.
- D Fungi cannot respond to changes in their surroundings.

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

15. Li Yan and Meena classified these organisms into two groups as shown below.

Li Yan's classification:

Group X	Group Y
Bird's nest fern Mushroom	Orchid Ixora

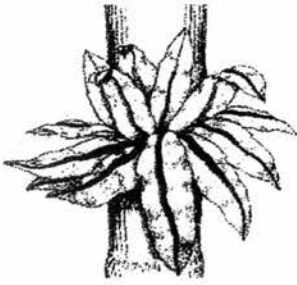
Meena's classification:

Group R	Group S
Mushroom	Orchid Ixora Bird's nest fern

Which one of the following options show how they have grouped the organisms?

	Li Yan		Meena	
	Group X	Group Y	Group R	Group S
(1)	Can make their own food	Cannot make their own food	Non-flowering Plants	Flowering Plants
(2)	Non-flowering Plants	Flowering Plants	Plants	Fungi
(3)	Reproduces by spores	Reproduces by seeds	Cannot make their own food	Can make their own food
(4)	Fungi	Plants	Non-flowering Plants	Flowering Plants

16. Study the two organisms as shown below.



Bird's nest fern



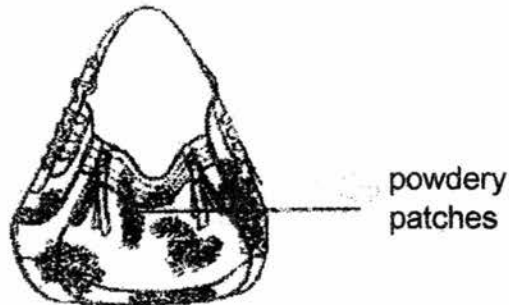
Shiitake Mushroom

Which of the following statements about both the organisms is/are incorrect?

- A They have gills.
- B They reproduce from spores.
- C They cannot make their own food.

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

17. May got wet in the rain while returning home from work. She left her wet leather handbag in the cupboard quickly and forgot about it. A month later, She decided to use it and took it out from the cupboard. She took out the bag and saw some powdery patches growing on her bag.



What could the powdery patches be?

- (1) Dirt
- (2) Fern
- (3) Mould
- (4) Bacteria

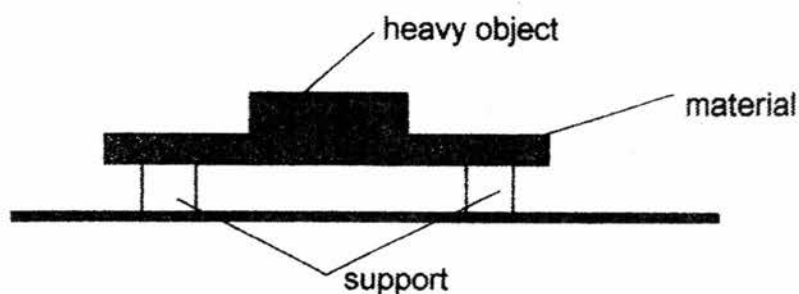
18. Study the table below.

Properties	Object A	Object B	Object C
Breaks into pieces when dropped	Yes	No	Yes
Can be seen through	No	No	Yes
Is waterproof	Yes	No	Yes

Which one of the following can these three objects be?

	Object A	Object B	Object C
(1)	Ceramic tile	Metal ruler	Clear glass bottle
(2)	Ceramic tile	Paper bag	Clear glass bottle
(3)	Clear glass bottle	Paper bag	Ceramic tile
(4)	Clear glass bottle	Plastic bottle	Paper bag

19. Leo carries out an experiment to test the flexibility of three types of materials shown in the diagram below. A heavy object is used to bend the materials. The more the material bends, the more flexible it is.

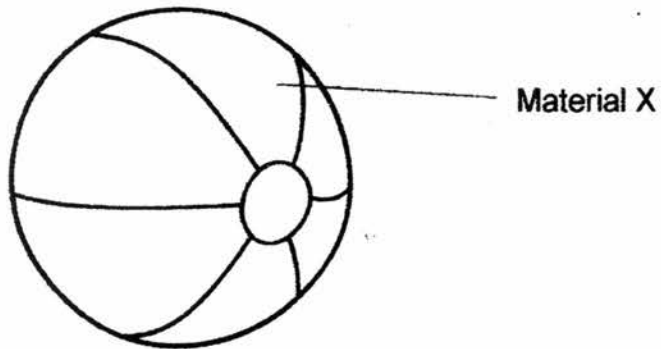


Which of the following should be kept the same to ensure a fair experiment?

- A Types of materials
- B Mass of heavy object
- C Sizes of materials

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

20. The picture shows a beach ball made of material X.



Which of the following properties of material X are taken into consideration to make the beach ball?

- A: Flexible
- B: Waterproof
- C: Can float on water
- D: Can allow light to pass through

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

End of Booklet A

METHODIST GIRLS' SCHOOL

Founded in 1887



MID-YEAR EXAMINATION 2017

PRIMARY 3
SCIENCE

BOOKLET B

Total Time for Booklets A and B: 1 hour 15 minutes

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Name: _____ ()

Class: Primary 3. _____

Date : 9 May 2017

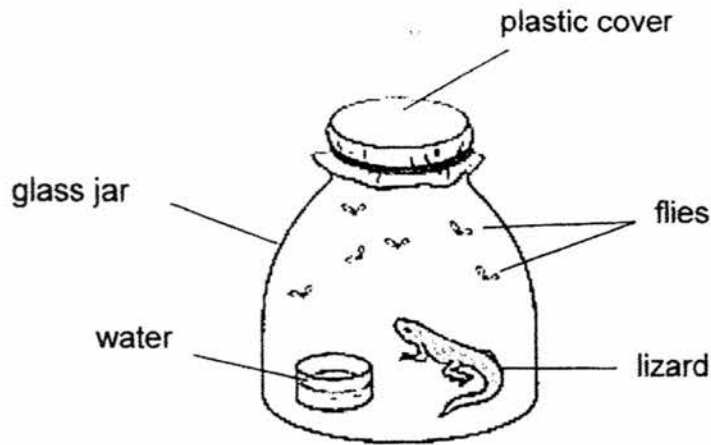
Booklet A	40
Booklet B	20
Total	60
Parent's Signature	

This booklet consists of 2 printed pages including this page.

For questions 21 to 28, 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]

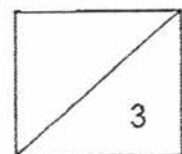
21. Study the set-up below.



(a) What will likely happen to the lizard after a week? [1]

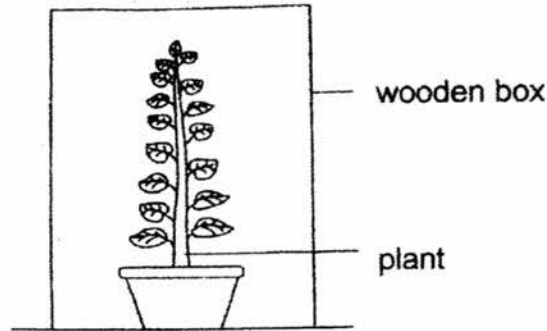
(b) Explain your answer in (a) clearly. [1]

(c) What change should be made to the set-up so that the lizard is able to survive longer without escaping from the glass jar? [1]

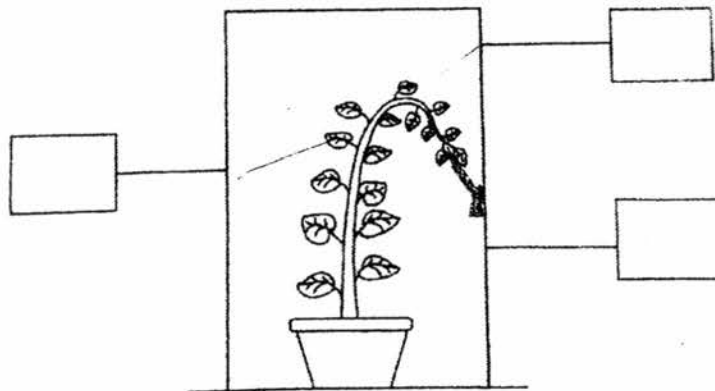


(Go on to the next page)

22. Leena wanted to find out how light affected the growth of a plant. She took a plant, watered it and then covered the plant with a wooden box as shown below.

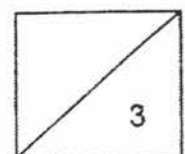


- (a) Leena made a hole in the wooden box. After a few days, she observed that the plant grew towards one side. In the diagram below, put a tick (✓) in the box where the hole has been cut. [1]



- (b) Besides movement and growth, what does this experiment show about the characteristic of a living thing? [1]

- (c) Besides light, name two other conditions that this plant needs in order to stay alive. [1]

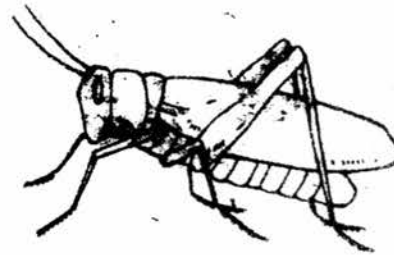


(Go on to the next page)

23. The two animals below are found in the garden.



Lizard



Grasshopper

(a) How do these two animals reproduce? [1]

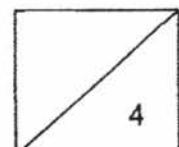
(b) Do they belong to the same animal group? Give a reason for your answer. [1]

24. The classification table below shows how some animals, R, S, T and U are grouped.

Animals			
Feed young with milk		Do not feed young with milk	
Can swim	Cannot swim	Can swim	Cannot swim
R	S	T	U

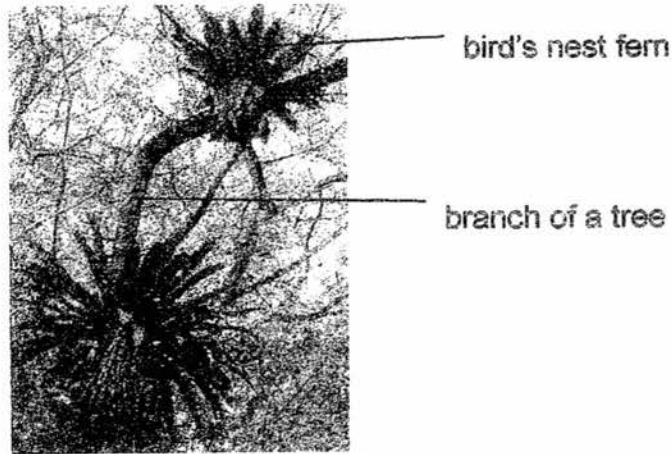
(a) From the table, in which group of animals would animals R and S belong to? [1]

(b) List one use of the body covering of the animals, R, S, T and U. [1]



(Go on to the next page)

25. While playing in the school field, Joy saw many bird's nest ferns growing on the tree branches as shown in the diagram below.



(a) How did the bird's nest fern get onto the tree branch?

[1]

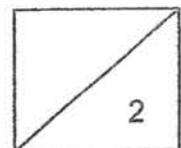
Joy came across Plant X as shown below.



Rose plant

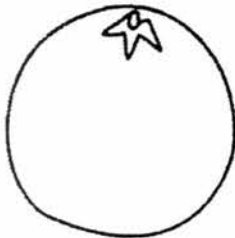
(b) Does Plant X reproduce in the same way as the Bird's nest fern?
Explain your answer.

[1]



(Go on to the next page)

26. Devi wanted to find out how the amount of water affects the rate at which mould grew on an orange. She carried out an experiment using four oranges. She sprinkled them with different amounts of water. She then left the oranges on the table as shown below.



Orange A
(No water)



Orange B
(2 drops of water)



Orange C
(5 drops of water)

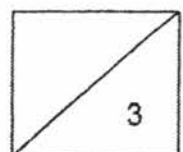


Orange D
(10 drops of water)

- (a) Which orange, A, B, C or D would have the most amount of mould growing on it after a week? Explain your answer. [1]

- (b) How could Devi be sure of her results? [1]

- (c) Where did the mould get its food from? [1]



(Go on to the next page)

27. A group of students carried out an experiment on 3 different materials, X, Y and Z. The results were recorded in the table shown below.

Properties	Material X	Material Y	Material Z
Is it flexible?	No	No	Yes
Is it waterproof?	Yes	Yes	No
Does it float on water?	No	No	No
Does it break easily?	Yes	No	No

(a) Based on the results given, which material would you use to make a t-shirt? Give a reason why this material is suitable. [1]

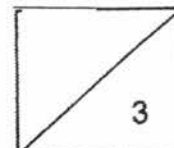
(b) Which material is not suitable to make a toy for a one- year-old child? Explain your answer. [1]

(c) This picture below shows a water hose.



water hose

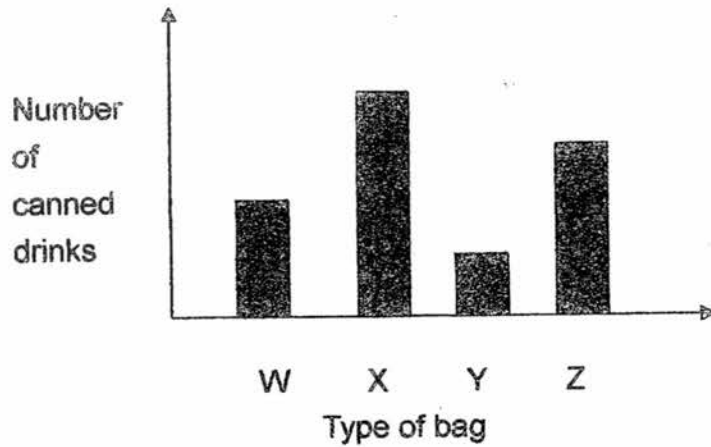
Is Material Y suitable to make the water hose? Give a reason for your answer. [1]



(Go on to the next page)

28. Sheila has four bags, W, X, Y and Z. She wanted to find out which bag is the strongest. She filled the bags with canned drinks, one at a time.

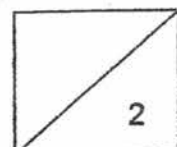
The bar graph below shows the greatest number of canned drinks that each bag could hold just before it broke.



- (a) How would Sheila know which type of bag is the strongest from the experiment? [1]

- (b) What must be kept different for the bags used in this experiment? [1]

End of Booklet B



EXAM PAPER 2017

LEVEL : PRIMARY 3
SCHOOL : MGS
SUBJECT : SCIENCE
TERM : SA1

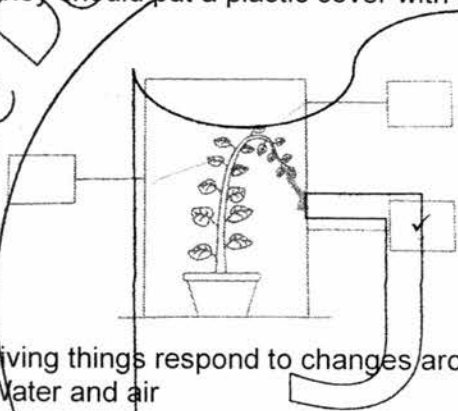
Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	3	2	2	2	3	3	4	1	3
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
4	1	4	1	3	4	3	2	2	3

Booklet B

- Q21 (a) It will most likely die.
(b) It does not have air to survive.
(c) They should put a plastic cover with small holes so the lizard cannot escape.

Q22 (a)



- (b) Living things respond to changes around them.
(c) Water and air
- Q23 (a) These two animals reproduce by laying eggs.
(b) No. Grasshopper is an insect but a lizard is a reptile.
- Q24 (a) Mammals
(b) To protect them from injuries.
- Q25 (a) The spores got blown onto the tree branches by the wind.
(b) No. Plant X reproduce by seeds while Bird's nest fern reproduces by spores.
- Q26 (a) Orange D. The most amount of water was sprinkled on it.
(b) She should repeat the experiment.
(c) From the orange
- Q27 (a) Material Z. A t-shirt is flexible to fit the person who is wearing it.
(b) Material X. Material X is hard and it breaks easily so it won't be dangerous for a small child.
(c) No. Material Y is not flexible so it is not easy to use.
- Q28 (a) The bag that would hold the most number of canned drinks without tearing.
(b) The material should be kept different.

END