

# METHODIST GIRLS' SCHOOL

Founded in 1887



## MID-YEAR EXAMINATION 2018 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. \_\_\_\_\_

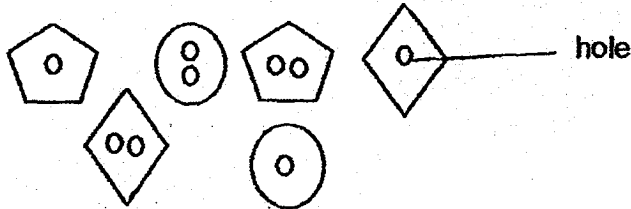
Date : 8 May 2018

This booklet consists of 15 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 A group of pupils are classifying some buttons as shown below.



Which one of the following classification chart shows a possible way of classifying the buttons into two groups, A and B?

(1)

Group A	Group B

(2)

Group A	Group B

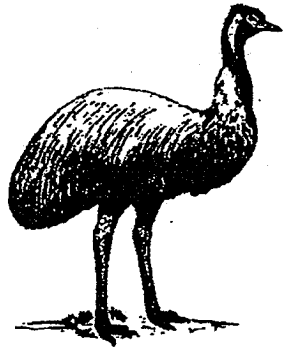
(3)

Group A	Group B

(4)

Group A	Group B

- 2 The picture below shows an emu.



The emu is a bird because it \_\_\_\_\_.

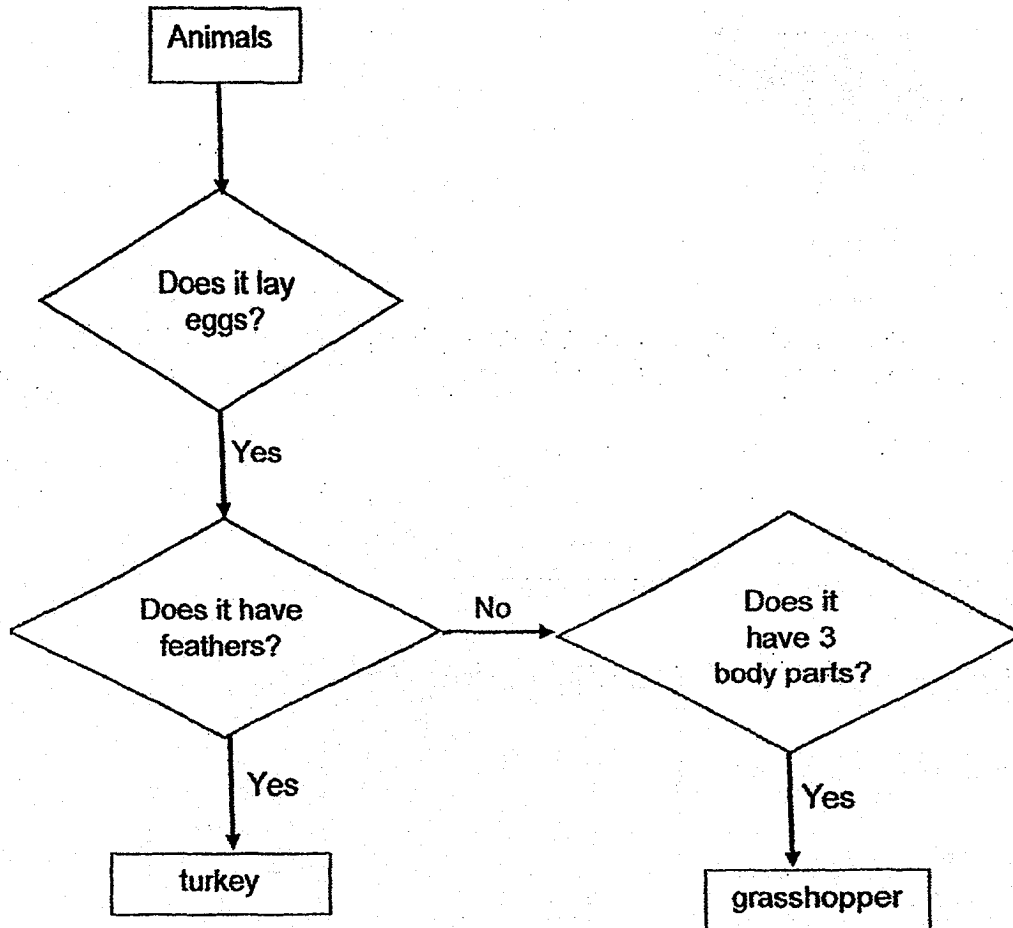
- (1) can fly
  - (2) lays eggs
  - (3) has feathers
  - (4) has two legs
- 3 The table below shows the characteristics of Organisms A, B and C.  
A tick (✓) indicates the presence of the characteristic.

Characteristics	Organism	Organism	Organism
	A	B	C
Respond to changes around them	✓	✓	✓
Can reproduce	✓	✓	✓
Can move from place to place		✓	
Can produce its own food	✓		

Which of the following correctly show the group of living things that Organisms A, B and C belong to?

	Organism A	Organism B	Organism C
(1)	Plants	Fungi	Animals
(2)	Plants	Animals	Fungi
(3)	Fungi	Animals	Plants
(4)	Animals	Plants	Fungi

4 Study the flowchart below carefully.



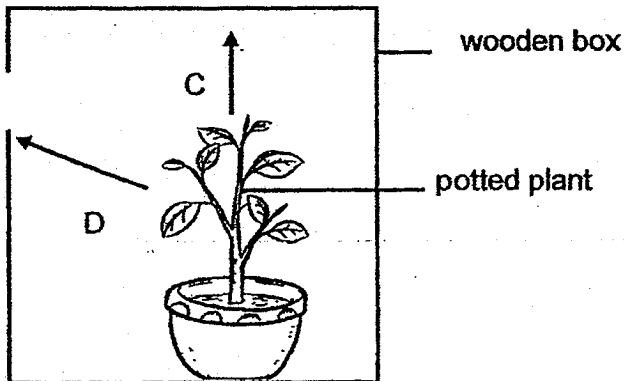
What is the similarity between the two animals?

- (1) They lay eggs.
- (2) They live on land.
- (3) They have feathers.
- (4) They have three body parts.

- 5 The table below shows how the four groups of animals breathe. Which one of the following is wrongly matched?

	Group	Breathe through
(1)	fish	gills
(2)	whales	gills
(3)	reptiles	lungs
(4)	amphibians	moist skin

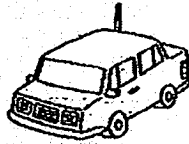
- 6 Mr Yip placed a potted plant into a wooden box with a hole cut on one side as shown in the diagram below. The box was placed in a sunny spot and watered daily. The arrows, C and D, show the possible direction of the plant growth over time.



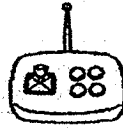
After some time, the plant would grow in direction \_\_\_\_\_.

- (1) D because air can enter the box
- (2) C because the plant will grow upwards
- (3) C because the plant will respond to sunlight
- (4) D because the plant will grow towards sunlight

- 7 Four children, Ahmad, Lily, Siva and Boon played with a remote controlled car as shown below.



car



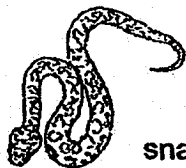
remote control

Based on their observations, they made the following statements.

- Ahmad The car is a living thing because it responds to changes.  
 Lily The car is a non-living thing because it needs battery to move.  
 Siva The car is a living thing because it is able to move from place to place.  
 Boon The car is a non-living thing because it does not need air, food and water to survive.

Whose statement(s) is/are correct?

- (1) Siva only
  - (2) Ahmad only
  - (3) Lily and Siva only
  - (4) Lily and Boon only
- 8 The pictures below show some animals.



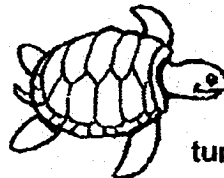
snake



salamander



alligator

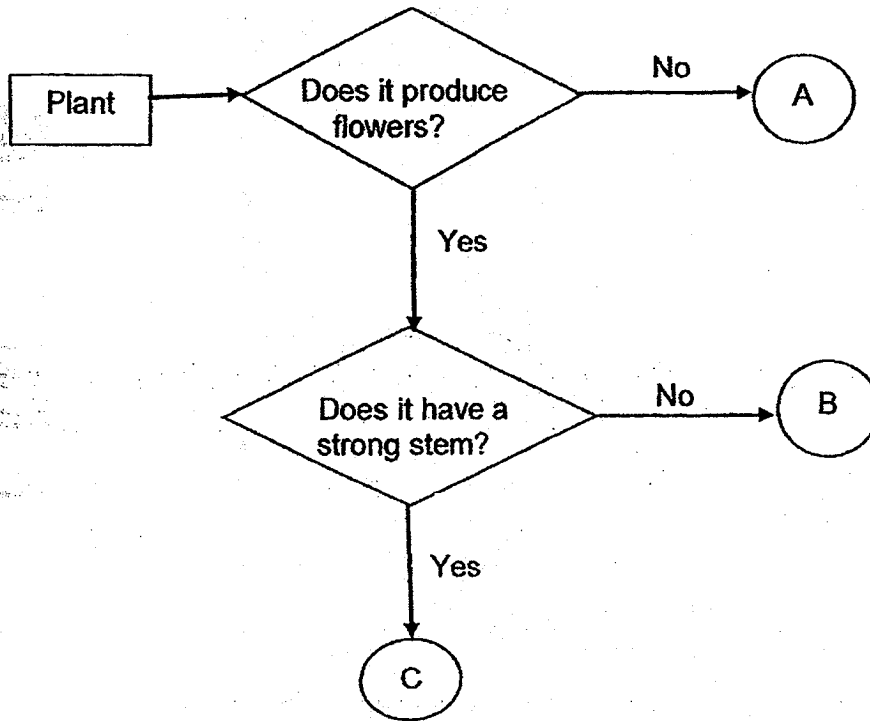


turtle

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

- (1) turtle
- (2) snake
- (3) alligator
- (4) salamander

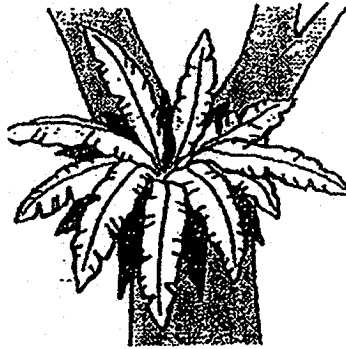
9 Study the flowchart as shown below.



Daffodil



Bird's Nest Fern



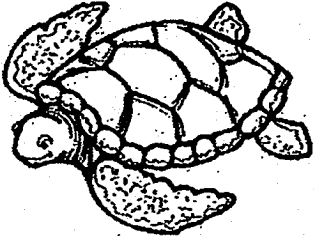
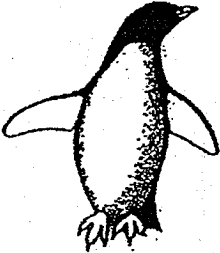
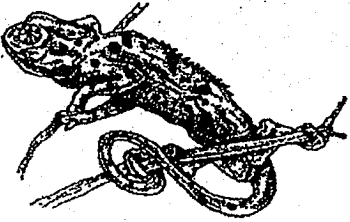
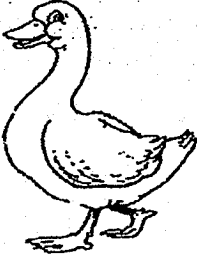
Tomato Plant



Which of the plants above best represent plants A, B and C?

	Daffodil	Bird's Nest Fern	Tomato Plant
(1)	C	B	A
(2)	B	A	C
(3)	A	C	B
(4)	C	A	B

10 Study the classification table below carefully.

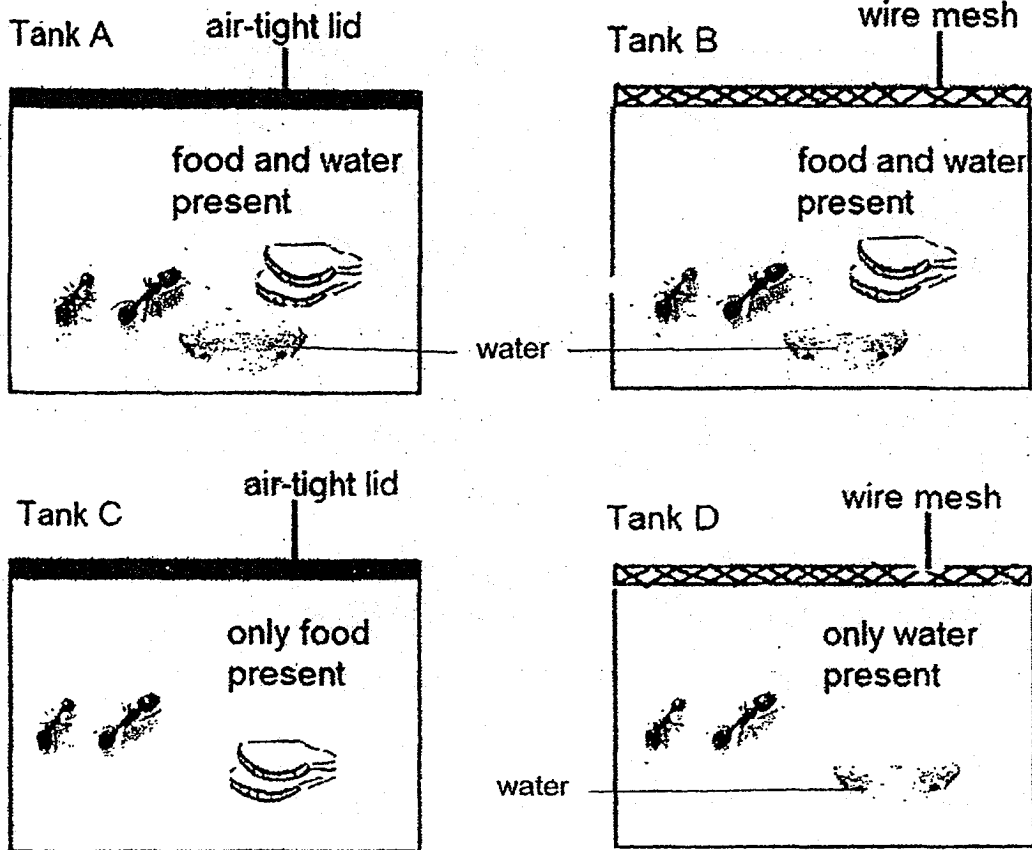
Group A	Group B
	
	

Which of the following correctly shows the characteristics of the animals in group A or B?

	Group	Have scales	Have feathers	Gives birth to young
(1)	A	Yes	No	Yes
(2)	B	No	Yes	Yes
(3)	A		No	Yes
(4)	B	No	Yes	No



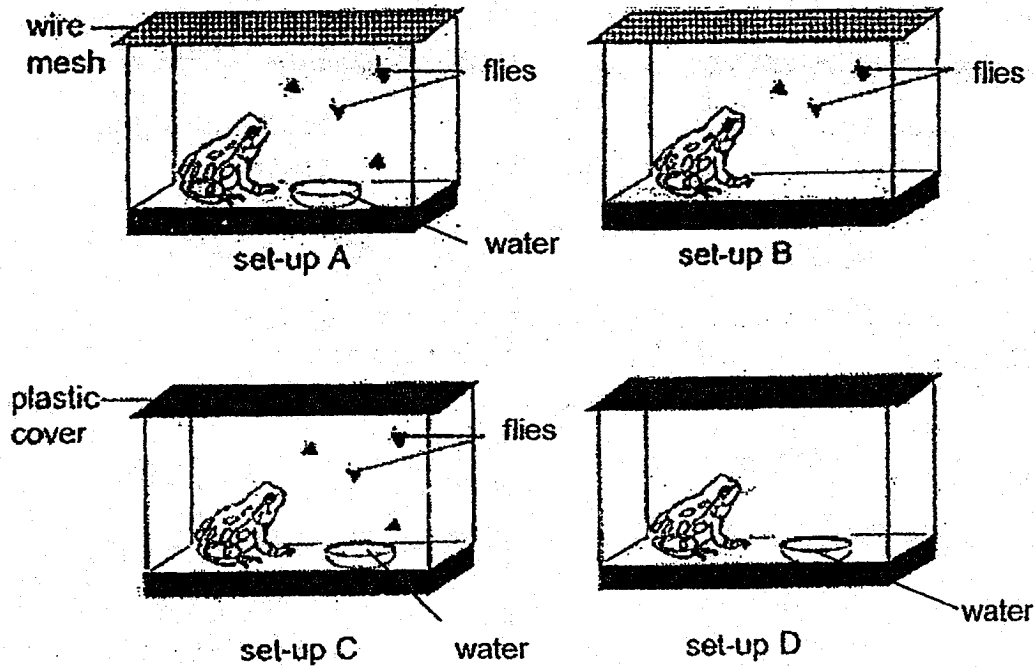
- 11 Bee Eng put ants of similar size into four glass tanks A, B, C and D as shown in the diagram below.



In which glass tank would the ants most likely survive for the longest period of time?

- (1) Tank A
- (2) Tank B
- (3) Tank C
- (4) Tank D

- 12 Kumar wanted to find out if living things need air to survive. He prepared four set-ups as shown below.



Which two set-ups should he use to make sure that his experiment is fair?

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

13 The diagram below shows four organisms, A, B, C and D.

A



Papaya tree

B



Ladder Fern

C



Toadstool

D



Sunflower plant

Which of the organisms reproduce from seeds?

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

- 14 Zainal found a puffball as shown below while hiking.



puffball

He wrote the following statements based on his observations.

- A It grew on a rotting log.
- B It was white and round like a ball.
- C When it was pressed, some spores were released.

Which of the above characteristic(s) confirmed that the puffball is a fungi?

- (1) A only
  - (2) B and C only
  - (3) A and C only
  - (4) A, B and C
- 15 Four pupils made the following statements to compare the similarity between the yeast and the bacteria.

Tim Yeast and bacteria are fungi.

Muthu Yeast and bacteria are microscopic organisms.

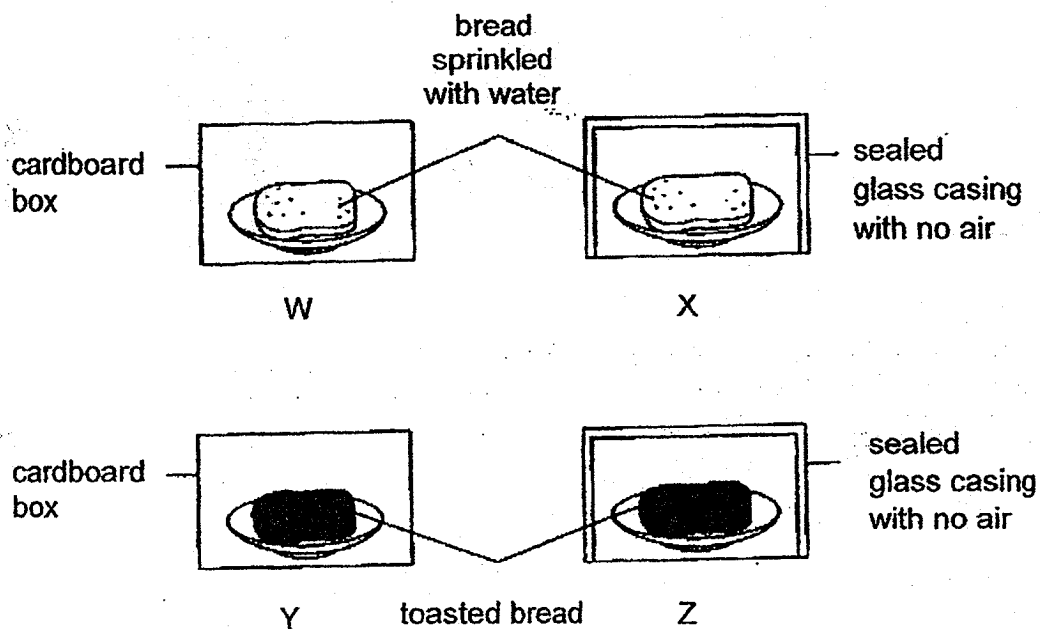
Joe Yeast and bacteria need water and air to grow.

Fatimah Yeast and bacteria belong to the same animal group.

Whose statement(s) is/are correct?

- (1) Muthu and Joe only
- (2) Tim and Fatimah only
- (3) Muthu, Tim and Joe only.
- (4) Muthu, Tim and Fatimah only.

- 16 Betty wanted to find out if moisture is needed for fungi to grow. Set-ups W, X and Y were left in the kitchen while set-up Z was left in the refrigerator.



Which two of the following set-ups should she use?

- (1) X and Y
  - (2) W and Y
  - (3) X and Z
  - (4) Y and Z
- 17 Aisha prepares four types of cheese A, B, C and D under different conditions as shown below. After a week, mould was found on all the cheese.

Cheese	Location	Sprinkled with water
A	cupboard	Yes
B	refrigerator	Yes
C	cupboard	No
D	refrigerator	No

Which of the following correctly shows how the cheese is arranged from the least to the most amount of mould found on them?

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

- 18 The pictures below show four items found in Sally's house.  
[Pictures are not drawn to scale].



bamboo  
chopsticks



wooden chair



books



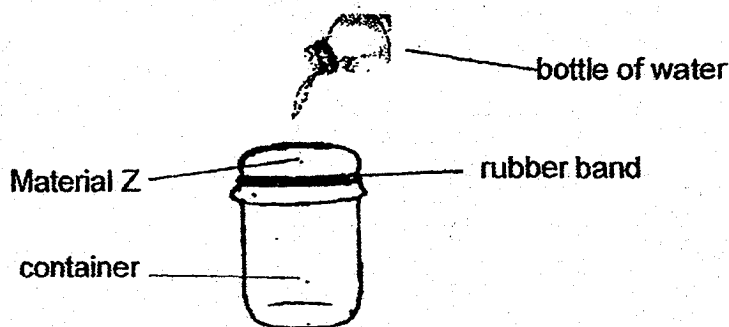
wooden door

What do these items have in common?

- A They come from plants.
- B They need air to survive.
- C They are non-living things.
- D They respond to changes around them.

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

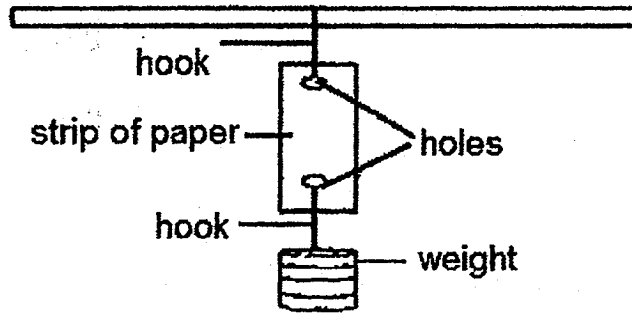
- 19 Nurul wanted to find out if a sheet made of material Z allows water to pass through it. She put the sheet over a container and secured it tightly with a rubber band. She then poured some water from a bottle onto the sheet as shown in the diagram below.



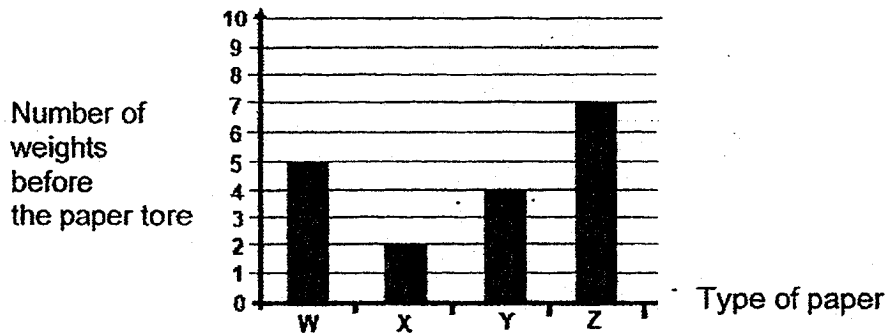
Nurul found that some water was collected in the container after some time.  
What material could Z be?

- (1) fabric
- (2) metal
- (3) rubber
- (4) ceramic

- 20 Sammy wanted to find out the strength of four different types of paper, W, X, Y and Z of the same size. He hung each piece of paper, one at a time, using the following set-up as shown below:



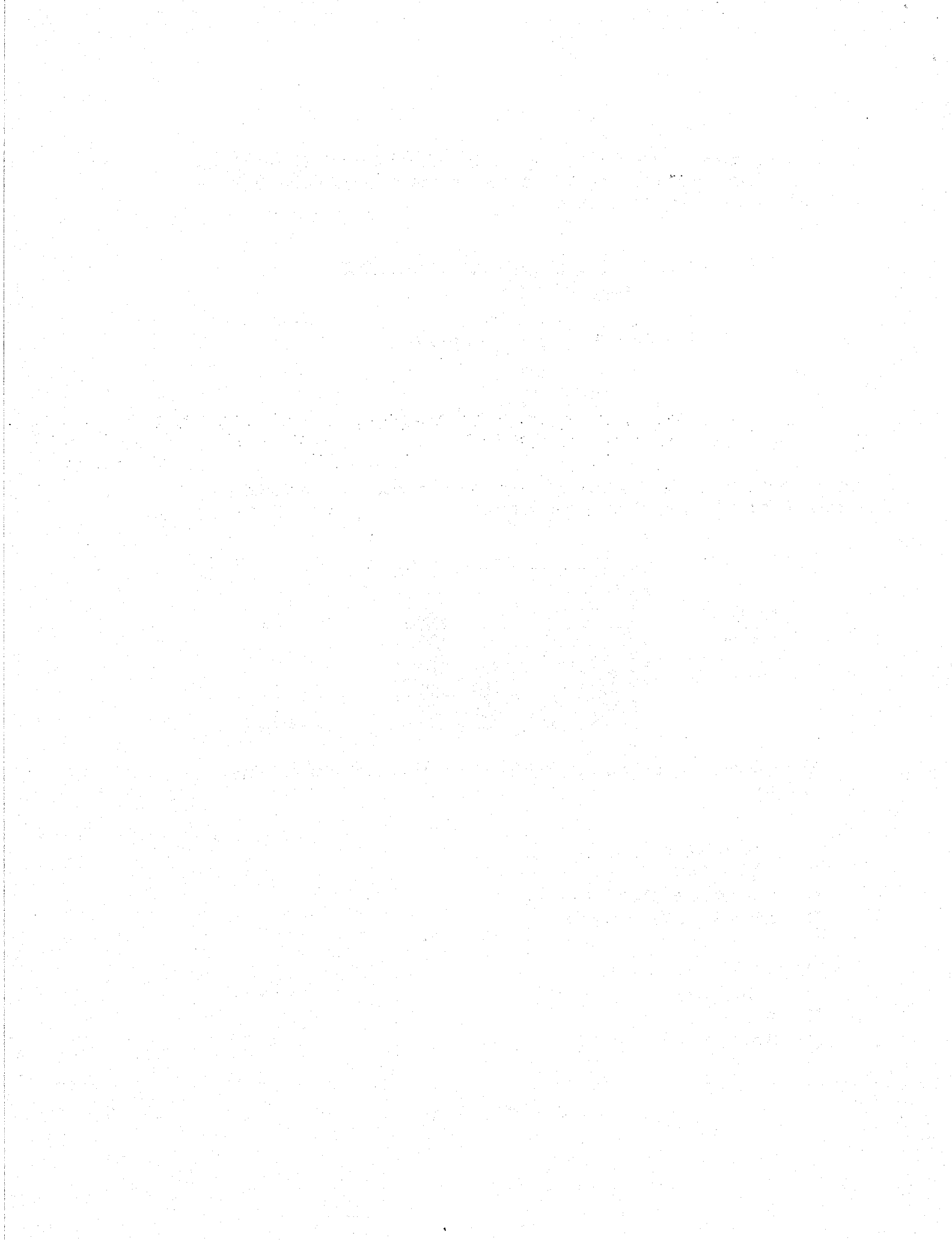
Sammy added one weight at a time to the hook until the paper started to tear and recorded his results as shown in the graph below.



Based on the information above, which of the following statement(s) is/are correct?

- A Y is stronger than Z.
- B Z is the strongest paper.
- C W is stronger than X and Y
- D X is stronger than W and Y

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





# METHODIST GIRLS' SCHOOL

Founded in 1887



## MID-YEAR EXAMINATION 2018

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 : 8 May 2018

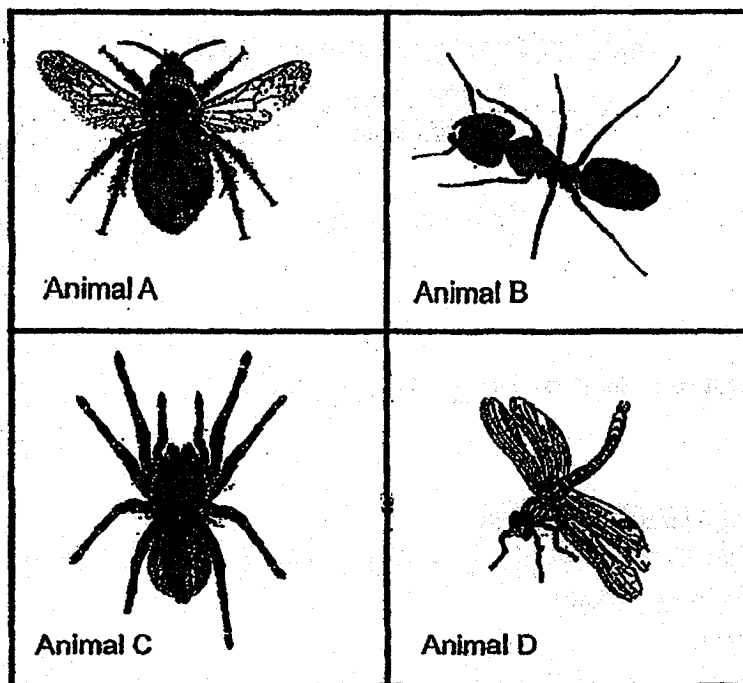
Booklet A	40
Booklet B	20
Total	60
Parent's Signature	

This booklet consists of 10 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 During an outdoor science lesson, Rani was asked to draw four insects she saw in the garden. The diagram below shows what Rani drew.

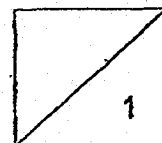


Her classmates said that one of her drawings was not an insect.

- (a) Which animal, A, B, C or D is not an insect? Suggest two reasons for your answer.[1]

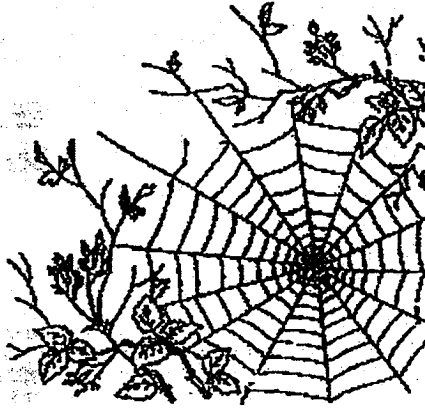
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Rani then noticed a spider web moving on a tree as it was blown by the wind.

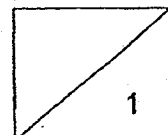


(b) Is the spider web a living or non-living thing? Give one reason to explain your answer.

[1]

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- 22 The table below shows the characteristics of four plants, A, B, C and D. A tick (✓) shows the characteristic that describes the plant.

Characteristics	Plants			
	A	B	C	D
Has flowers	✓			✓
Grows in water		✓		✓

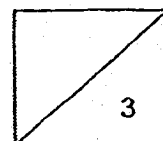
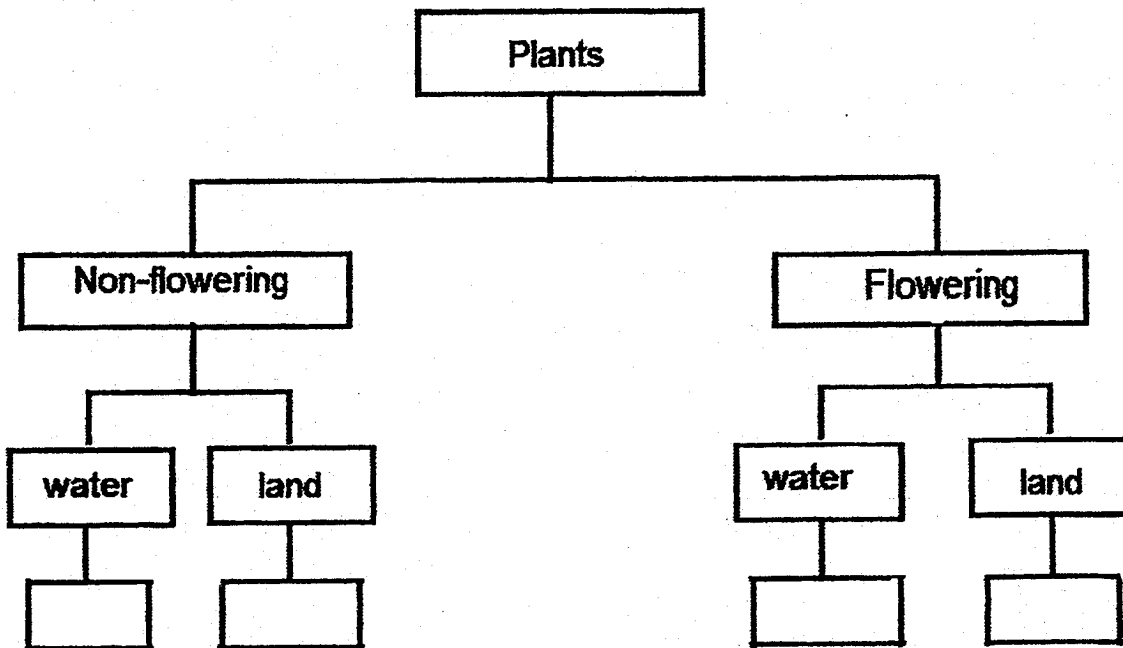
- (a) What are the two characteristics of Plant B? [1]

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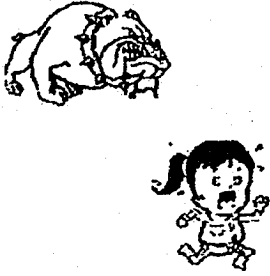

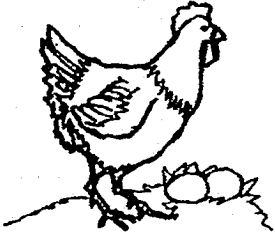


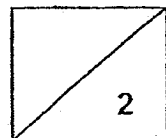
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- (b) Using the information from the table above, classify the plants A, B, C and D in the classification chart below. [2]



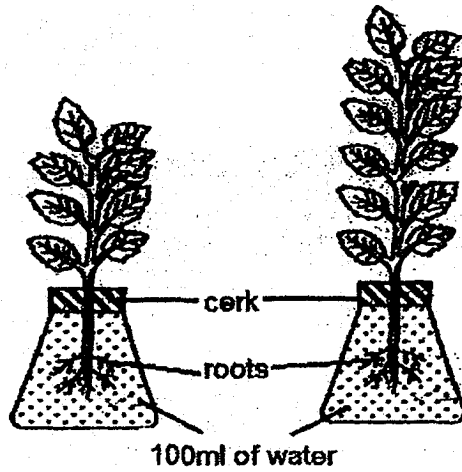
23 Which characteristic of living things is shown by each observation as shown below. [2]

Observation	Characteristic
<p>(a) A caterpillar changes into a butterfly.</p> 	<p>Living things _____</p> <p>_____</p>
<p>(b) The girl running away from the dog.</p> 	<p>Living things _____</p> <p>_____</p>
<p>(c) A bird flying to its nest on a tree.</p> 	<p>Living things _____</p> <p>_____</p>
<p>(d) A hen lays eggs.</p> 	<p>Living things _____</p> <p>_____</p>



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- 24 A group of pupils wanted to find out if the size of a plant affects the amount of water it takes up. They carried out an experiment using two plants.



- (a) Tick (✓) the variable(s) that they must keep the same and the variable(s) that must be changed. An example is shown on the table. [2]

Variable	To be kept the same	To be changed
Location where the pots are placed	✓	
Amount of water		
Type of plant		
Size of plant		
Duration of experiment		

- (b) What do the pupils need to measure to conclude their experiment? [1]

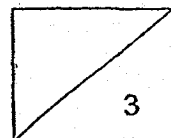
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25 Annie was given two picture cards as shown below.



Fern



Mushroom

- (a) She classified the fern and mushroom in the same group of living things because they both reproduce by spores. Is Annie correct? Give two reasons for your answer. [2]

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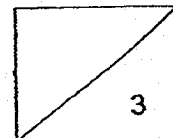


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- (b) In the diagram below, label "X" to show the part of the mushroom where spores are found. [1]



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26 The pictures below show the mould growing on the banana and the Bird's Nest fern.  
( Pictures are not drawn to scale )



mould growing on a banana



Bird's Nest fern

(a) Why was there mould growing on the banana? Explain your answer. [2]

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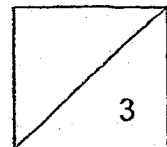
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(b) How do the mould and the Bird's Nest fern differ in the way they obtain nutrition for their growth? [1]

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- 27 Nancy set up an experiment to compare the property of three materials as shown below. Diagram 1 shows a strip of material on the support at the start. Diagram 2 shows the material bending by a distance when a weight was hung in the middle of the material.

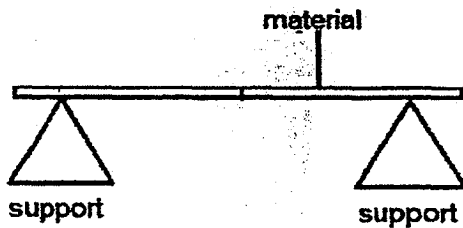


Diagram 1

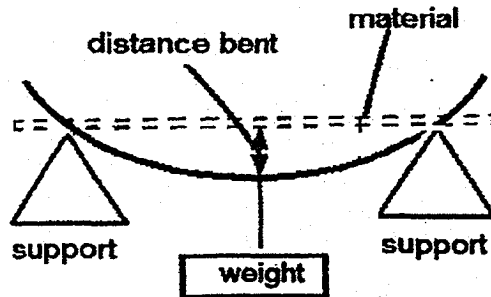


Diagram 2

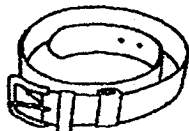
Nancy tested three strips of materials, P, Q and R. She measured the distance bent for each rod when the same weight was hung on the strip of material and recorded the results as shown in the table below.

Material	Distance bent (cm)
P	4
Q	8
R	2

- (a) Which property of materials was Nancy trying to compare?

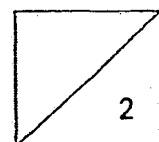
[1]

Nancy wanted to use one of the materials to make a belt as shown below.



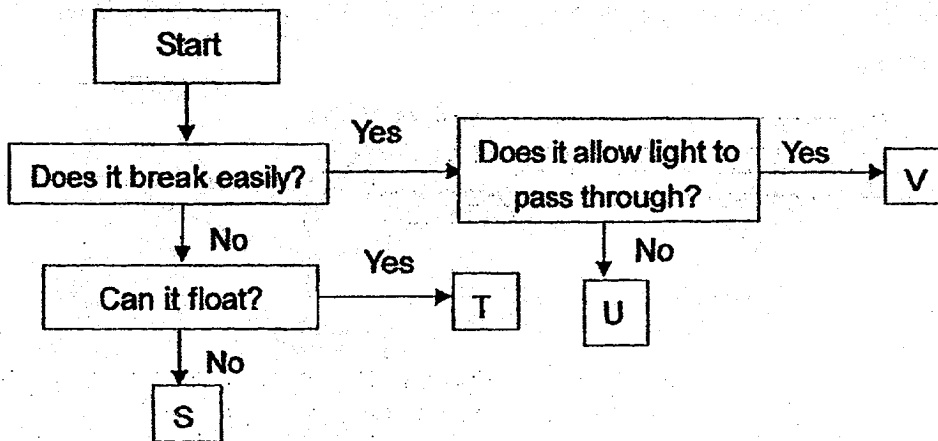
- (b) Based on the table of results, which material, P, Q or R, is most suitable for making the belt? Explain your answer.

[1]



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28 Study the flowchart below carefully. U, V, S and T are different types of materials.



(a) What could be a suitable material represented by S?

[1]

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(b) Which material is most suitable for making the lens of a magnifying glass?

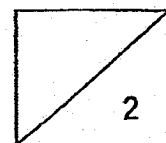
Give a reason for your answer.

[1]

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**EXAM PAPER 2018 (P3)**

**SCHOOL : MGS**

**SUBJECT : SCIENCE**

**TERM : SA1**

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

Q21) a) C. Insects have 6 legs, 3 body parts and a pair of feelers but Animal C has a pair of feelers but not 3 body parts and 6 legs.

b) Non-living thing. Non living things need air, food and water to survive. The web does not need air, food and water to survive.

Q22) a) It does not have flowers and grows in water.

b) water – B land – C water – D land – A

Q23) a) Living things grow.

b) Living things respond to changes.

c) Living things move from places to places on its own.

d) Living things reproduce.

**Q24) a) Amount of water – To be kept the same**

**Type of plant – To be kept the same**

**Size of plant – To be changed**

**Duration of experiment – To be kept the same.**

**b) How much water is left.**

**Q25) a) A fern is a plant and makes its own food while the mushroom feeds on other living things which may be dead or alive where their growing on for food. A fern is a non-flowering plant while mushroom is a fungi.**

**Q26) a) Spores in the air landed on the banana and grew when there was air, warmth food and water. Mould reproduce by spores.**

**b) Bird's Nest Fern make its own food while the mould feeds on the banana where it is growing on for food.**

**Q27) a) Flexibility.**

**b) Q. Q is the most flexible and can be bent easily compared to P and R. A belt needs to be flexible so that we can wear it around our waist and keep it easily.**

**Q28) a) Metal**

**b) V. It allows light to pass through and the person using it can see through it.**