RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT (1) 2019

Section A	/36
Section B	/24
Your score **out of 100 %**	
Parent's signature	

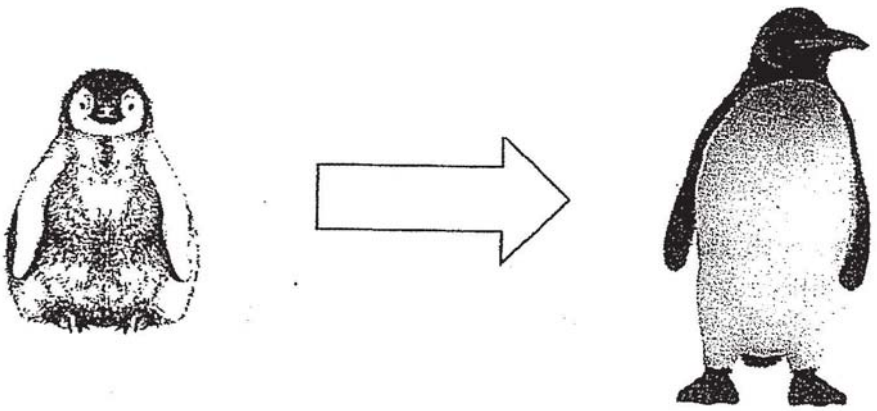
Name : _____ **Index No.:** ____ **Class: P3** ___ **Date:** _____

15 May 2019 **SCIENCE** **ATT: 1 h 15 min**

SECTION A (18 x 2 marks)

For each question from 1 to 18, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. The pictures below show a young emperor penguin becoming an adult emperor penguin.



young adult

This shows that the emperor penguin is a living thing because it can _____.

(1) grow
(2) breathe
(3) respond
(4) reproduce

2. Mei Mei made the following observations.

A The pigeon laid eggs in the nest.
B A tortoise hid in its shell when touched.
C The curtain moved when a strong wind blew.
D A girl scratched herself when she was bitten by a mosquito.

Which of the following observation(s) show(s) that living things respond to changes around them?

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

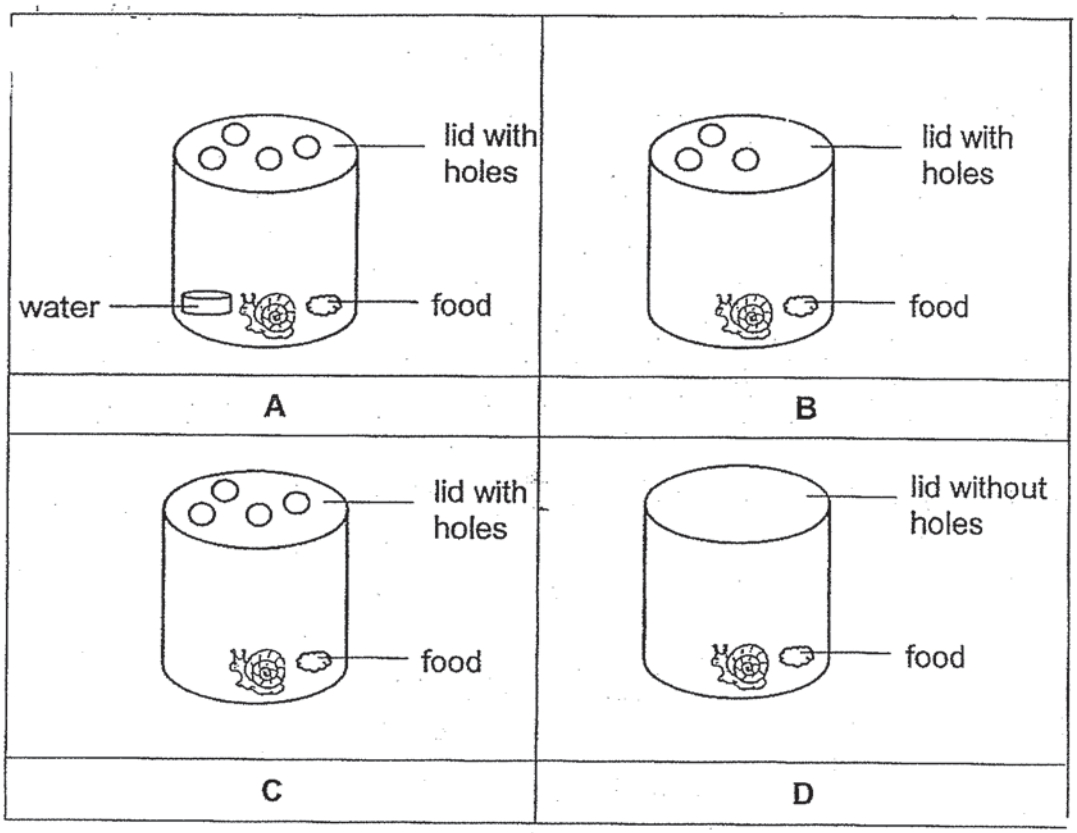
3. The table below shows the characteristics of organisms X, Y and Z.
A tick (√) shows the presence of the characteristic.

Organism	Can reproduce	Cannot make its own food	Needs food to survive
X		√	
Y	√	√	√
Z	√		√

Based on the information above, which of the organism(s) is/are non-living thing(s)?

(1) X only
(2) Z only
(3) X and Y only
(4) Y and Z only

4. Anna prepared four set-ups, A, B, C and D, as shown below to find out if water is needed for the snail to survive.



Which pair of set-ups should she choose to conduct a fair test?

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

5. Wendy went for an excursion at the zoo and described animal Q as shown below.

A It has four legs.
B It has moist skin.
C It lays eggs in water.
D It lives both on land and in water.

Which one of the following animal group does animal Q belong to?

(1) Birds
(2) Insects
(3) Reptiles
(4) Amphibians

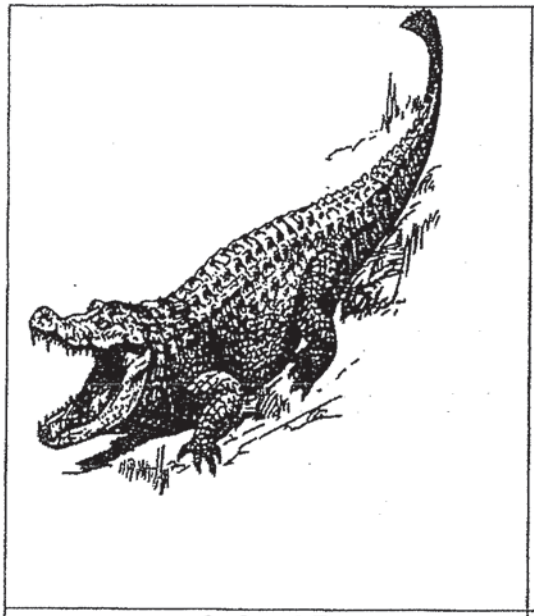
6. The table below shows the characteristics of animals A, B and C.
A tick (√) shows the presence of the characteristic.

Animal	Has wings	Has antennae	Has 3 pairs of legs	Has 1 pairs of legs
A	✓	✓	✓	
B	✓			✓
C		✓		

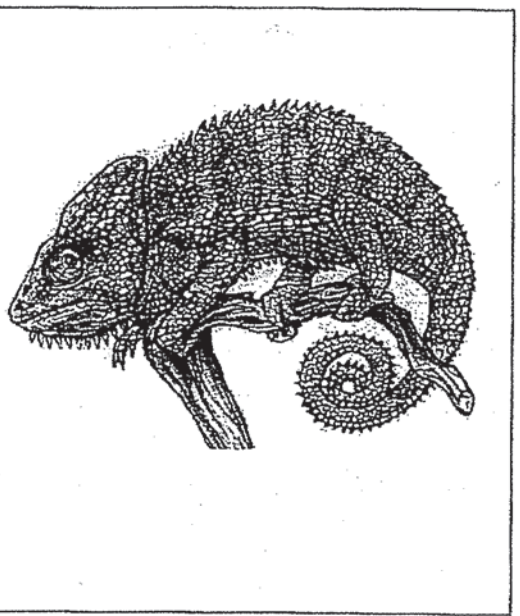
Based on the information above, which animal(s) is/are most likely to be an insect?

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

7. Based on your observations of the animals below, which one of them **cannot** be classified in the same group?

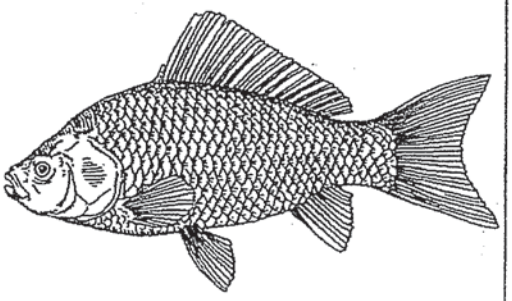


Animal P



Animal Q

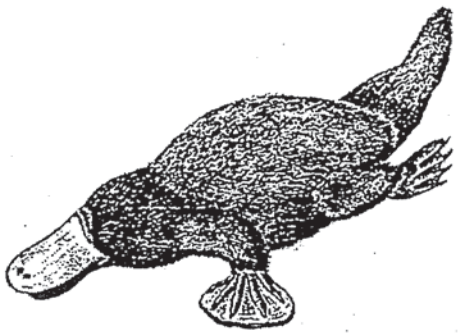
Animal R



Animal S

(1) Animal P
(2) Animal Q
(3) Animal R
(4) Animal S

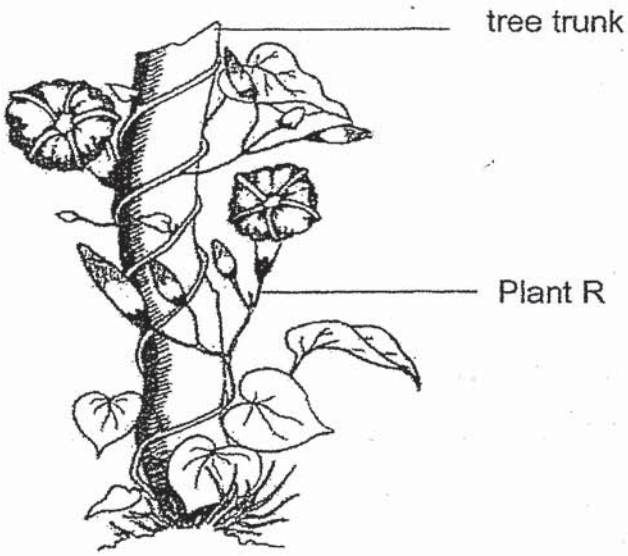
8. Study animals R and S.

	
Animal R	**Animal S**

Based on your observations of the animals, which one of the following statement is **correct**?

(1) Both animals have a beak.
(2) Both animals have feelers.
(3) Both animals have a body covering of hair.
(4) Both animals have a body covering of feathers.

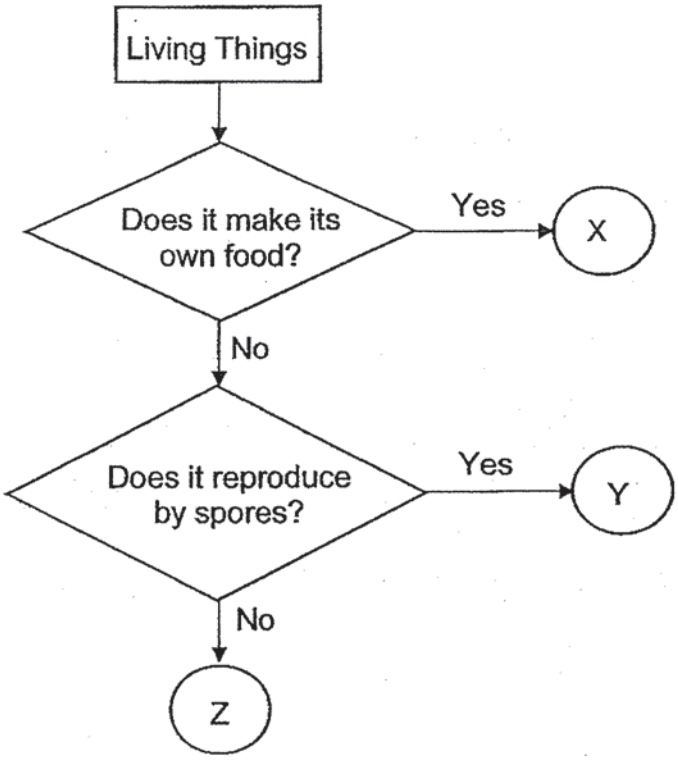
9. May observed plant R as shown in the diagram below.



Which statement can be concluded from her observations?

(1) Plant R has a strong stem.
(2) Plant R reproduces by seeds.
(3) Plant R reproduces by spores.
(4) Plant R is a non-flowering plant.

10. The flow chart below shows how some living things are grouped.



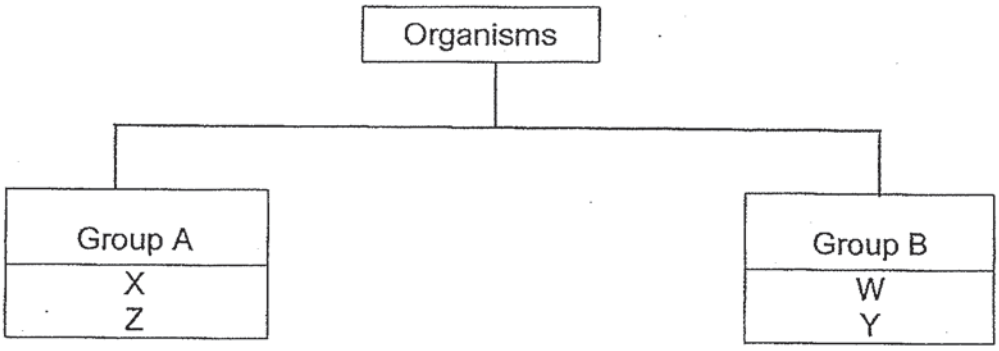
Based on the flowchart, which one of the following living things best represents X, Y and Z?

	X	Y	Z
(1)	mushroom	bird's nest fern	toadstool
(2)	bird's nest fern	mushroom	butterfly
(3)	water lily	mushroom	bird's nest fern
(4)	mushroom	toadstool	butterfly

11. Organisms W, X, Y and Z have common characteristics as shown in the table below. A tick (✓) in the box indicates the presence of the characteristic.

Characteristic	Organisms			
	W	X	Y	Z
Has leaves		✓		
Bears flowers	✓		✓	
Bears edible fruits			✓	
Reproduces by spores		✓		✓

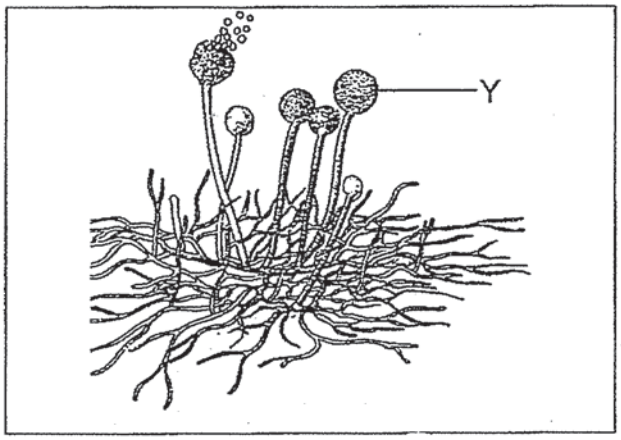
Using the information above, Jason grouped the plants in the classification table below.



What are the suitable sub-headings for Group A and Group B?

	Group A	Group B
(1)	fungi	ferns
(2)	land plants	water plants
(3)	non-flowering	flowering
(4)	bears inedible fruits	bears edible fruits

12. The diagram below shows a magnified view of organism Y which grows on stale bread.



Which one of the following statements describes the characteristics of Y?

(1) Y cannot grow.
(2) Y reproduces by seeds.
(3) Y is a non-flowering plant.
(4) Y feeds on dead and living organisms.

13. Eleora found a rotting orange on the kitchen counter.
Her classmates made the following conclusion.

Ben : Micro-organisms feed on things dead or alive.

April : Harmful micro-organisms on the orange caused it to turn bad.

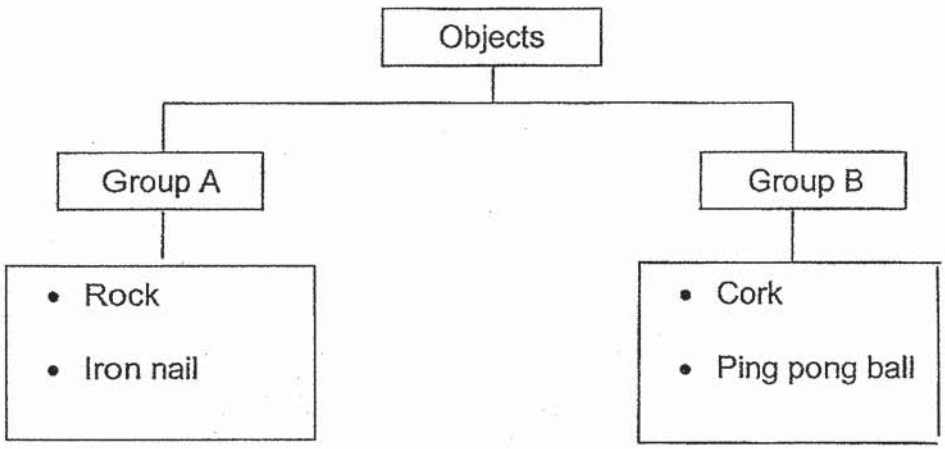
David : Micro-organisms in the rotting orange can be seen with the naked eyes.

Cindy : All micro-organisms are useful. They would not cause oranges to turn bad.

Which pupil(s) made the **correct** conclusion?

(1) Ben only
(2) April only
(3) Ben and April only
(4) April and Cindy only

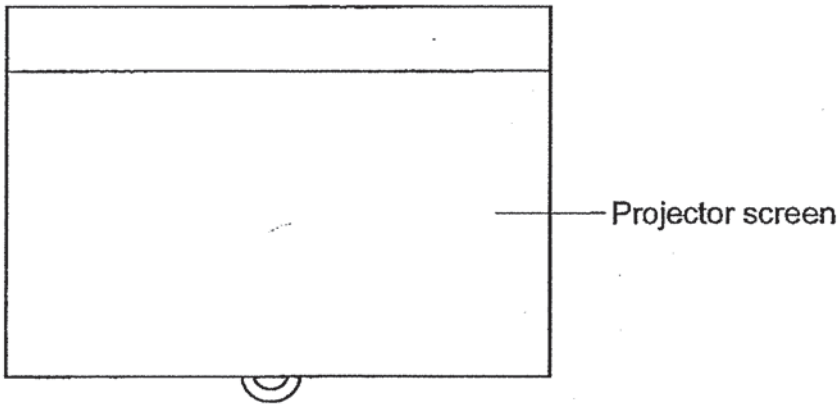
14. Study the classification table below.



Based on the classification table, which one of the following are suitable headings for group A and group B?

	Group A	**Group B**
(1)	Flexible	Not flexible
(2)	Able to sink in water	Able to float on water
(3)	Transparent	Not transparent
(4)	Waterproof	Not waterproof

15. Jane wanted to choose a suitable material to make a classroom projector screen as shown below.



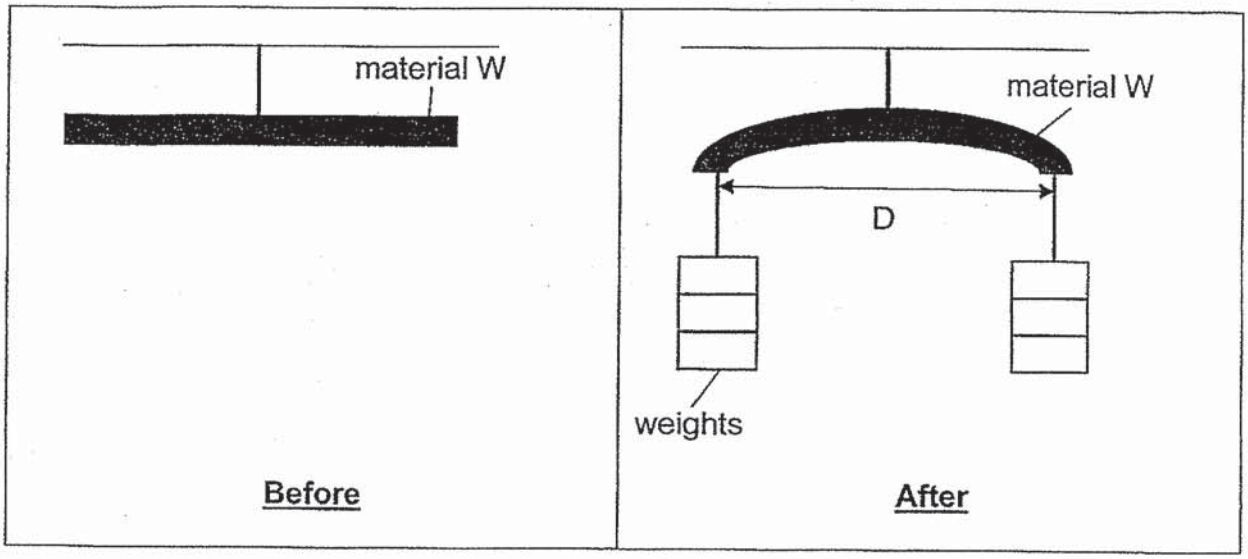
Properties	Materials			
	A	B	C	D
Strong	√	√	√	
Flexible		√	√	
Allows most light to pass through	√		√	√

The properties of materials A, B, C and D are as shown in the table above. A tick (√) shows the presence of the property.

Which one of the following materials should she choose?

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

16. Elsie conducted an experiment to find out the flexibility of four planks which were made up of materials W, X, Y and Z respectively. She hung a plank made of material W as shown in the diagram below labelled 'before'. She added three weights on each end of the plank. She measured the distance, D, which each material could bend. The table below shows the distance, D, in cm.



The experiment was repeated using planks made of materials X, Y and Z.

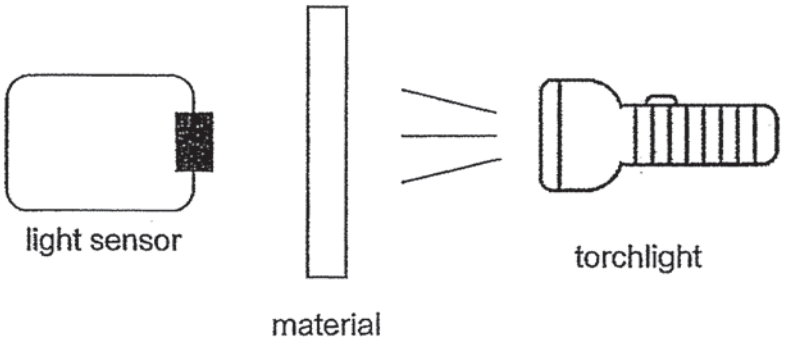
The results were shown in the table below.

Material	Distance (D) in cm
W	12
X	18
Y	5
Z	9

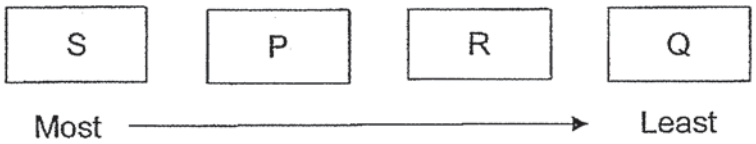
Based on her results, which one of the following statement is the **correct** conclusion?

(1) Y is less flexible than Z.
(2) Z is more flexible than W.
(3) X is the most flexible material.
(4) Y is the least flexible material.

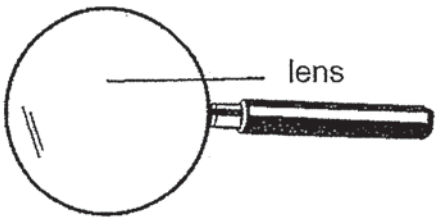
17. A light sensor was used to measure the amount of light that passes through four different materials as shown below.



Jenny ranked the materials according to how much light can pass through each of them.



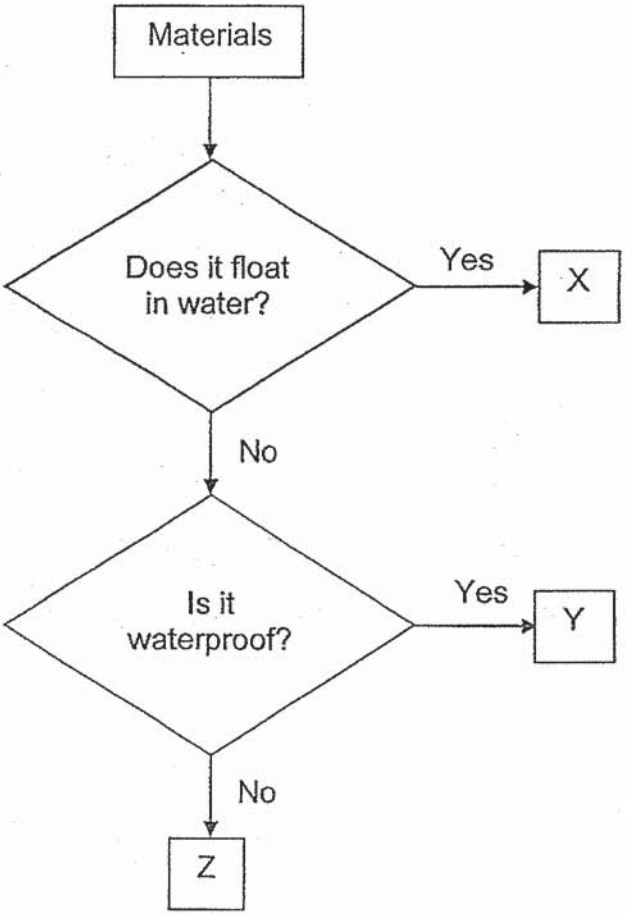
People see through magnifying glasses to make objects appear larger to enable them to see the details of tiny objects.
The diagram of a magnifying glass is as seen below.



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

(1) Material P
(2) Material Q
(3) Material R
(4) Material S

18. Study the flowchart below carefully.



Which one of the following best represents objects made by materials X, Y and Z?

	X	Y	Z
(1)	paper	coin	ping pong ball
(2)	coin	cotton cloth	paper
(3)	ping pong ball	cotton cloth	metal ruler
(4)	ping pong ball	coin	paper

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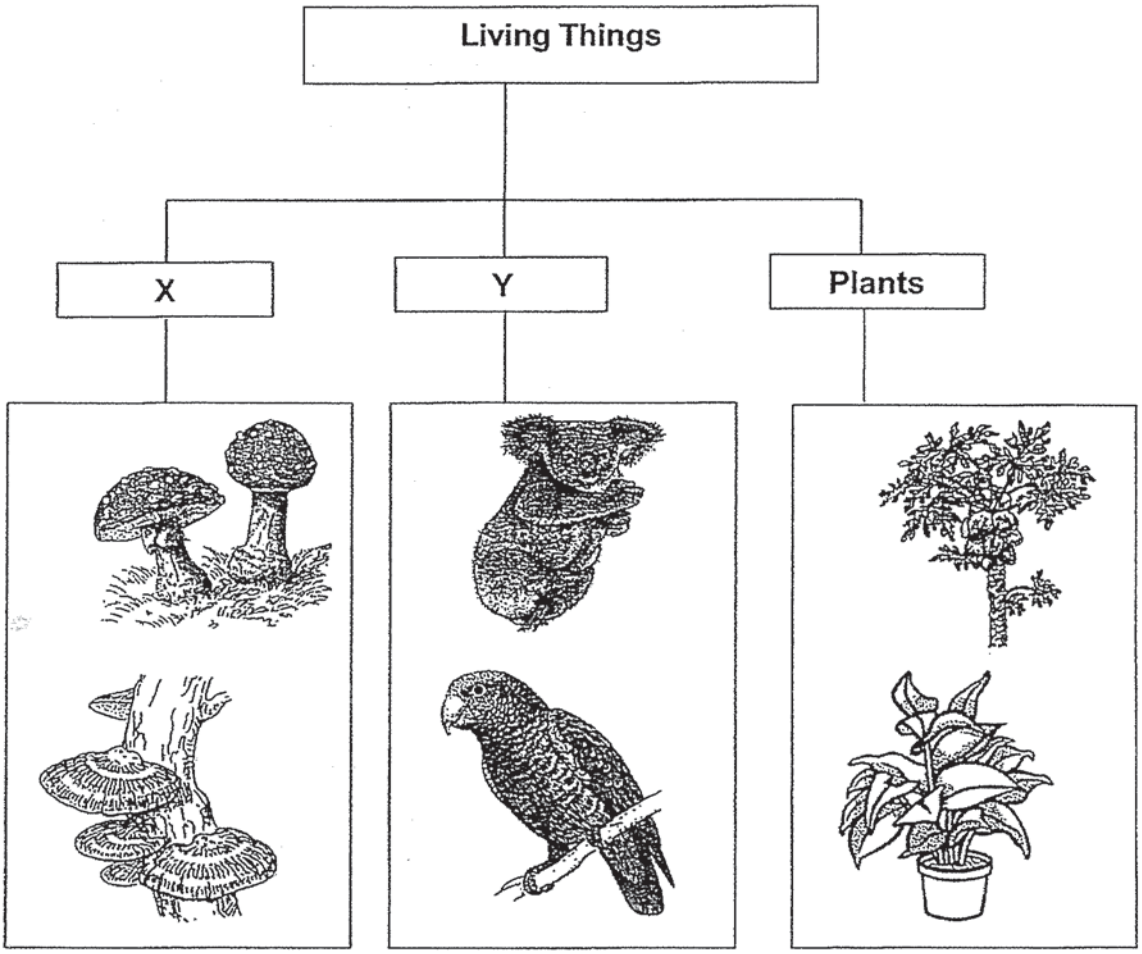
SECTION B (24 marks)

For questions 19 to 30, write your answers clearly in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part question.

19. The diagram below shows how some living things are being classified.



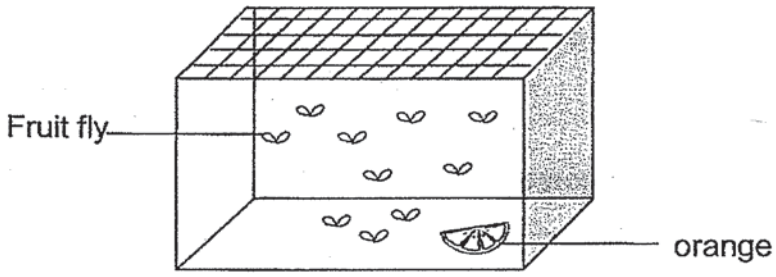
Write suitable headings for X and Y. [2]

X: _____

Y: _____

Score 2

20. Jane conducted an experiment as shown below. She provided the fruit flies with sufficient air, food and water daily. No fruit flies were added or removed to the set-up.



She recorded the number of fruit flies for a period of eight days.

Day	Number of fruit flies
0	3
2	5
4	7
6	9
8	10

Based on the results above, answer the following questions:

(a) What could be the possible reason for the increase in number of fruit flies? [1]

_____

_____

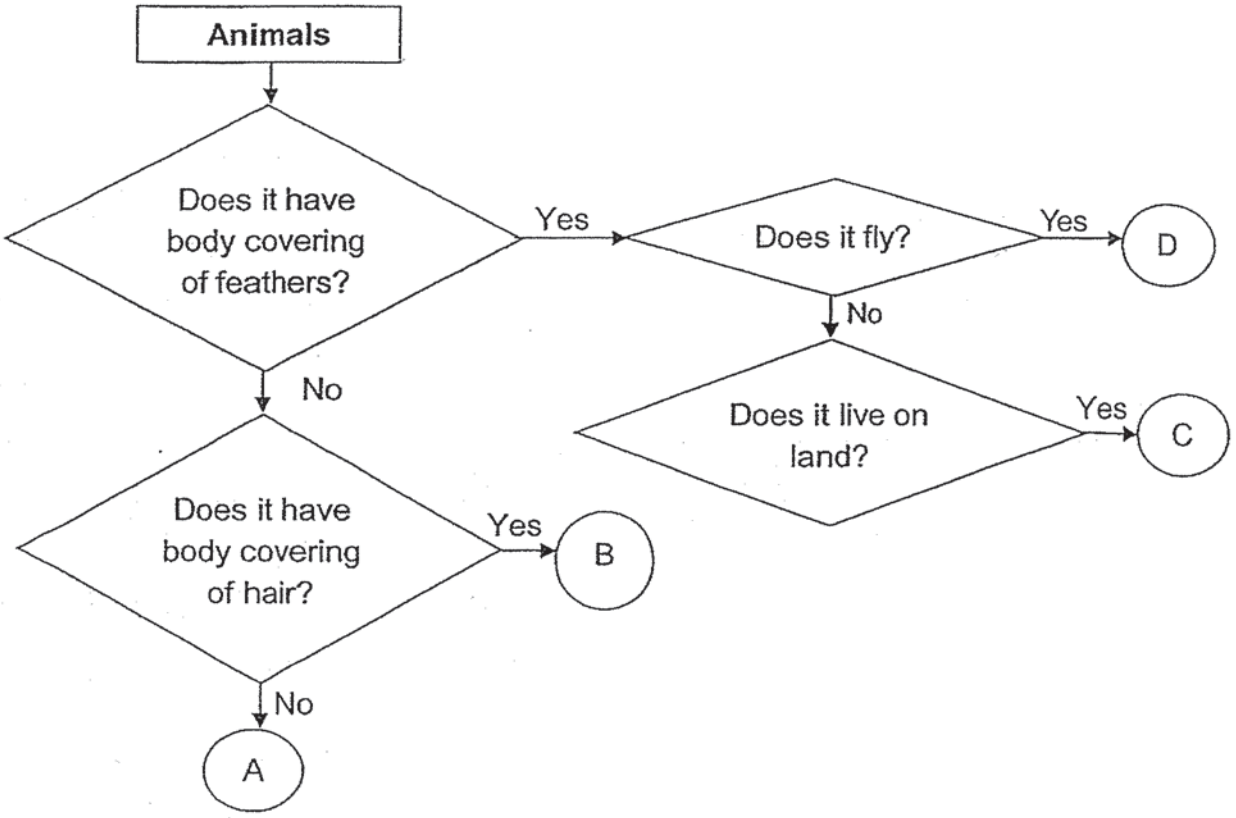
(b) On day eight, Jane removed the slice of orange. What would happen to the fruit flies one week after the removal of the orange? [1]

_____

_____

Score	/ 2

21. The flowchart below shows how four animals, A, B, C and D, are grouped.



(a) State one similarity between C and D. [1]

_____

_____

Study animal Y as shown below.

(b) Which group of animals, A, B, C or D, would you classify Animal Y under? Give a reason for your answer. [1]

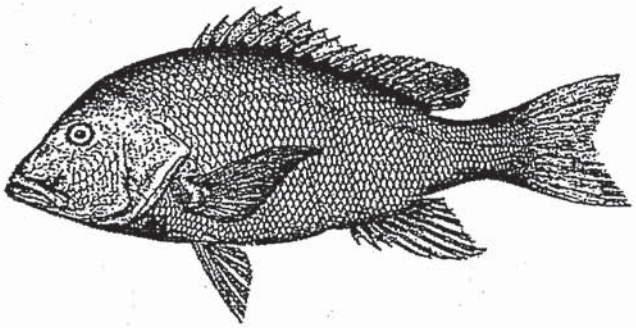
_____

_____

Score	
	2

22. Study Animals P and Q as shown in the diagrams below.

Animal P



Animal Q

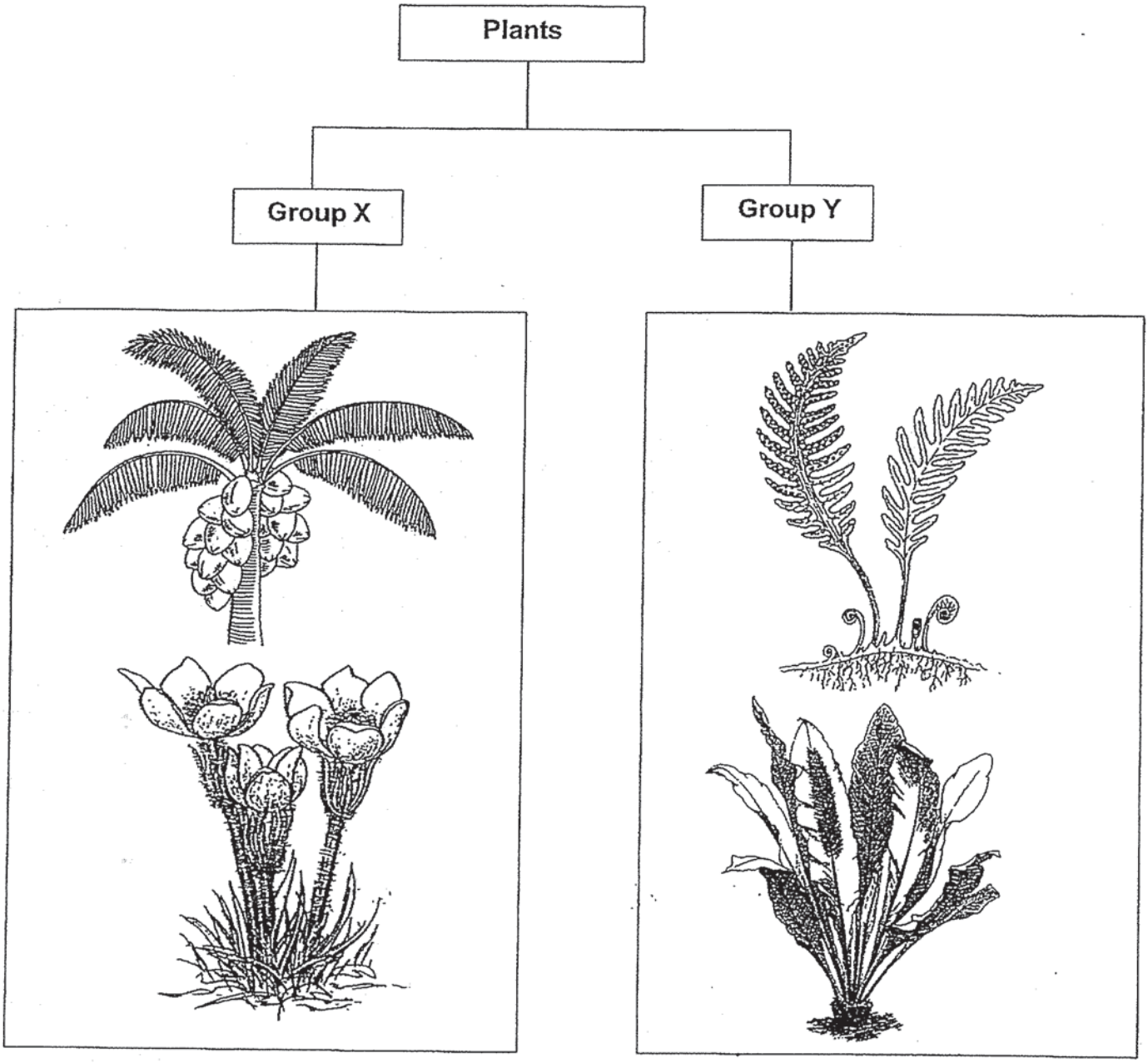
Based on your observations of the two animals above, state one similarity and one difference in the physical characteristic between animals P and Q. [2]

(Do not compare size, colour, body shape and pattern)

Similarity	_____ _____ _____
Difference	_____ _____ _____

Score	/ 2

23. Megan observed some plants and classified them based on their physical characteristics in group X and Y.



(a) Write a suitable sub-heading for group X and group Y. [1]

X : _____

Y : _____

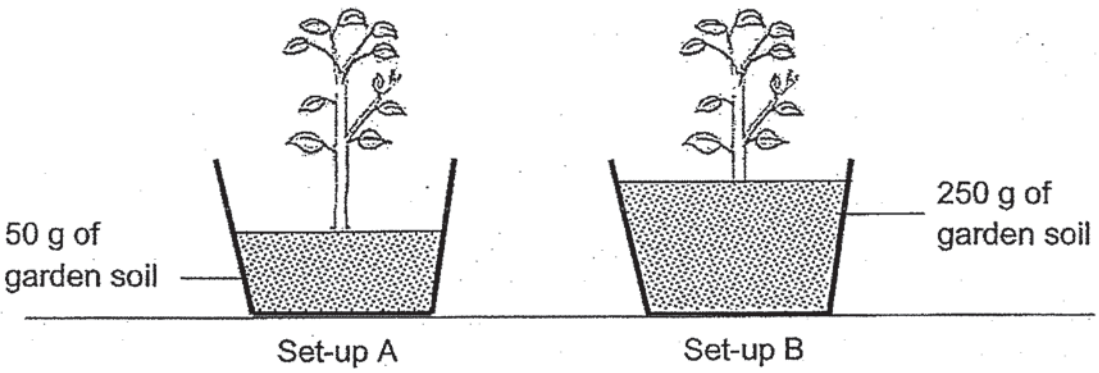
(b) Which group, X or Y, should moss be classified under? [1]

_____

Score	/2

24. Emma wanted to find out if the amount of soil used affected the growth of a plant.

She then carried out an experiment based on the set-ups shown below.



Complete the table below by ticking (√) the correct boxes accordingly to ensure a fair experiment. [2]

Variables	Kept the same	To be changed
Type of soil		
Amount of soil		
Type of plant		
Amount of water used to water the plant		

Score	
	2

25. Write '**T**' for true and '**F**' for false for each of the following statements in the boxes provided. [2]

	Statements	T / F
(a)	Fungi reproduce by seeds.	
(b)	Fungi cannot make its own food.	
(c)	Bacteria are classified as microorganisms.	
(d)	Bacteria respond to changes around them.	

Score	/ 2

26. Peter conducted an experiment using four pieces of bread to test how bread mould would grow in different conditions. He placed four pieces of bread in identical plastic bags as shown below.

dry bread 	wet bread 
Set-up W (kept in refrigerator)	**Set-up X (kept in freezer)**
dry bread 	wet bread 
Set-up Y (kept in kitchen)	**Set-up Z (kept in kitchen)**

(a) Which two set-ups should Peter choose if he wanted to find out if water was needed for mould to grow? [1]

_____

_____

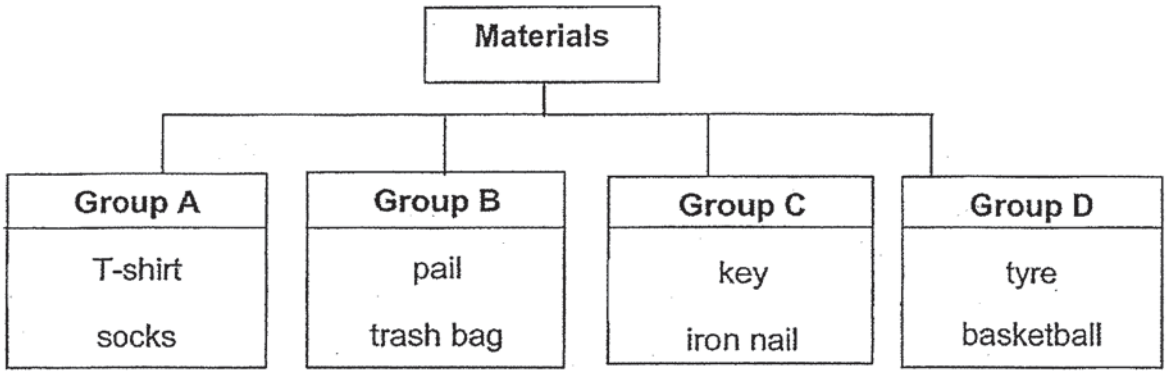
(b) Which set-up (W, X, Y or Z) would bread mould first appear on? Give a reason for your answer. [1]

_____

_____

Score	/ 2

27. Study the classification chart below.

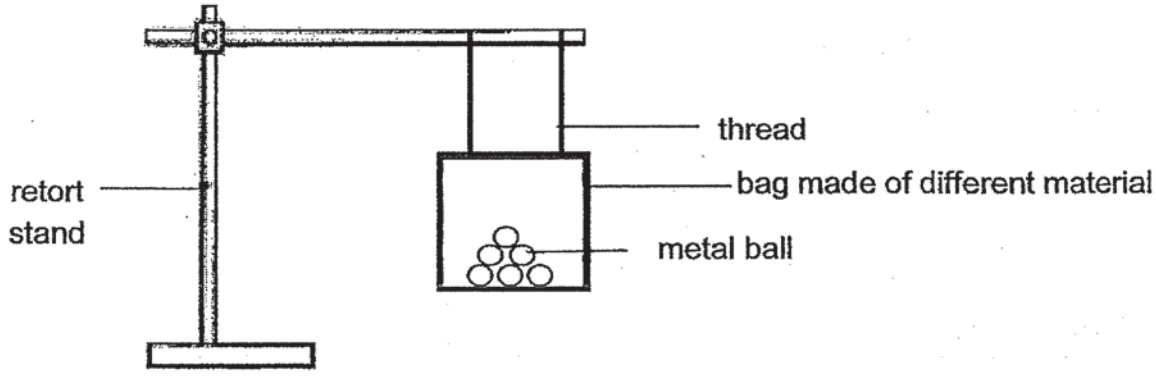


In the table below, write a suitable material for making each group of objects. [2]

Group	Material
A	
B	
C	
D	

Score	/ 2

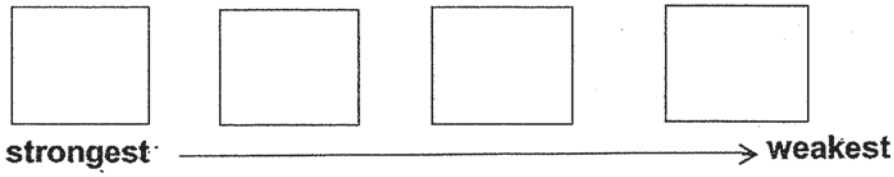
28. Sandy set up an experiment below to find out the strength of four similar bags made of materials, P, Q, R and S. She added similar metal balls of 1-kg mass each into the bag until the bag started to tear.



She recorded her observation in the table below.

Material	Number of metal balls added until the bag started to tear
P	9
Q	3
R	15
S	7

(a) Arrange the materials (P, Q, R and S) according to its strength beginning with the strongest. [1]



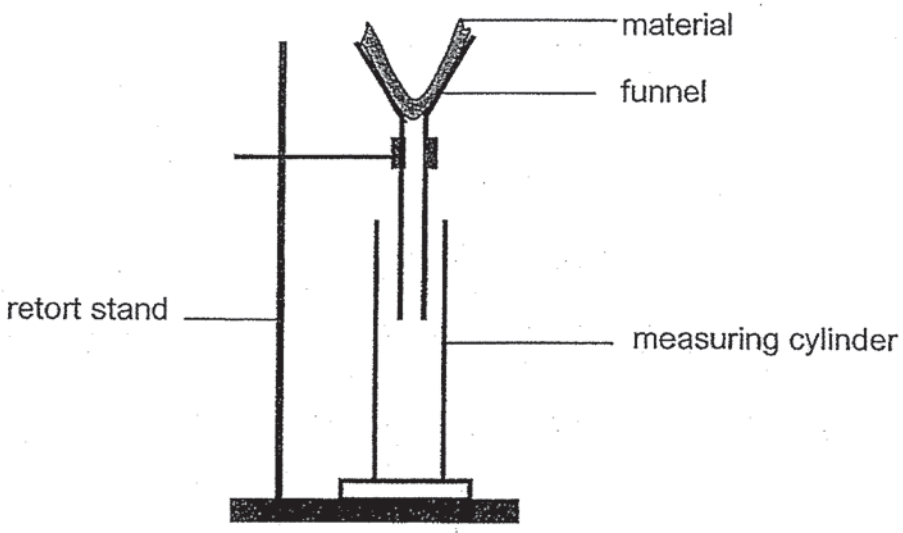
(b) Sandy wanted a bag to hold a packet of 7 kg rice, which material(s), P, Q, R or S, would be the most suitable to make into a bag for her use? [1]

_____

_____

Score	/2

29. Timothy wanted to find out the amount of water that can be absorbed by materials K, L and M. He placed a piece of material onto the funnel and poured 50 ml of water onto the material. He measured the amount of water that passed through the material into the cylinder. He repeated the experiment for each of the materials.



Timothy recorded the results three minutes after all the water had been poured onto each material in the table below.

Material	Volume of water collected in measuring cylinder (ml)
K	24
L	42
M	0

Based on the information above, which material, K, L or M, is most suitable to make a raincoat? Give a reason for your answer. [2]

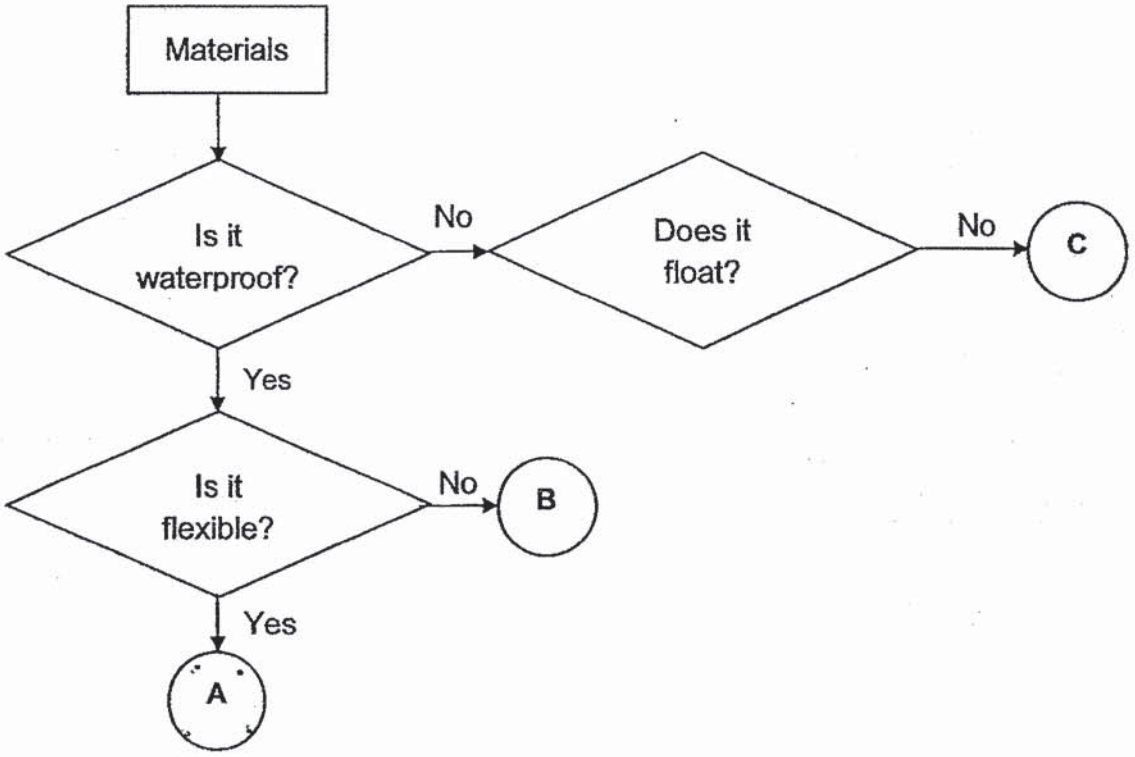
_____

_____

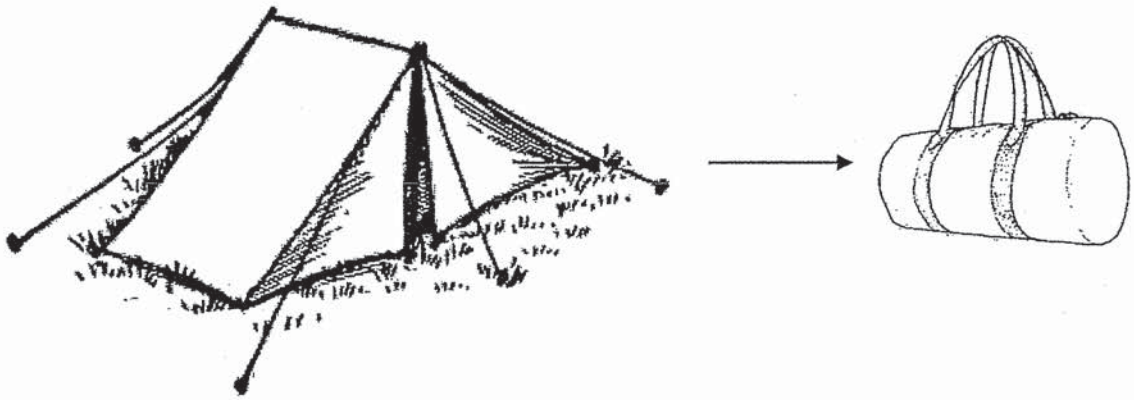
_____

Score	/ 2

30. Study the chart below.



Below is a diagram of a tent that serves as a overnight shelter for the campers to rest in and it can be kept in a bag to allow the camper to move from place to place.



Which material, A, B or C, is the most suitable to make the tent? Explain your choice. [2]

_____

_____

_____

End of Paper

Score	
	2

ANSWER KEY

YEAR : 2019
LEVEL : PRIMARY 3
SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL
SUBJECT : SCIENCE
TERM : SA 1

SECTION A

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

SECTION B

Q19) X: Fungi Y: Animals

Q20a) The fruit flies reproduced.

Q20b) The fruit flies died due to lack of food.

Q21a) Both have feathers as their body covering.

Q21b) It does not have an outer covering of feathers, but it has an outer covering of hair.

Q22) Similarity: Both have a tail.
Difference: Animal P has legs but Animal B does not.

Q23a) X: Flowering plants Y: Non-flowering plants

Q23b) Group Y.

ANSWER KEY

YEAR : 2019
LEVEL : PRIMARY 3
SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL
SUBJECT : SCIENCE
TERM : SA 1

SECTION A

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

SECTION B

Q19) X: Fungi Y: Animals

Q20a) The fruit flies reproduced.

Q20b) The fruit flies died due to lack of food.

Q21a) ı have feathers as their body covering.

Q21b) B. It does not have an outer covering of feathers, but it has an outer covering of hair.

Q22) Similarity: Both have a tail.
Difference: Animal P has legs but Animal B does not.

Q23a) X: Flowering plants Y: Non-flowering plants

Q23b) Group Y.