



**RAFFLES GIRLS' PRIMARY SCHOOL  
P3 SCIENCE**

**SEMESTRAL ASSESSMENT (2)**

Name: \_\_\_\_\_ Index No: \_\_\_\_\_ Class: P3 \_\_\_\_\_


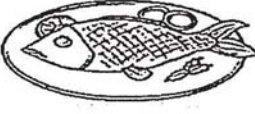


**30 October 2019      SCIENCE      ATT: 1 h 30 min**

Section A	48
Section B	32
Your score out of 80 marks	
Parent's signature	

**SECTION A (24 x 2 marks)**

For each question from 1 to 24, 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. Observe the things in the table shown below. The pictures are not drawn to scale.

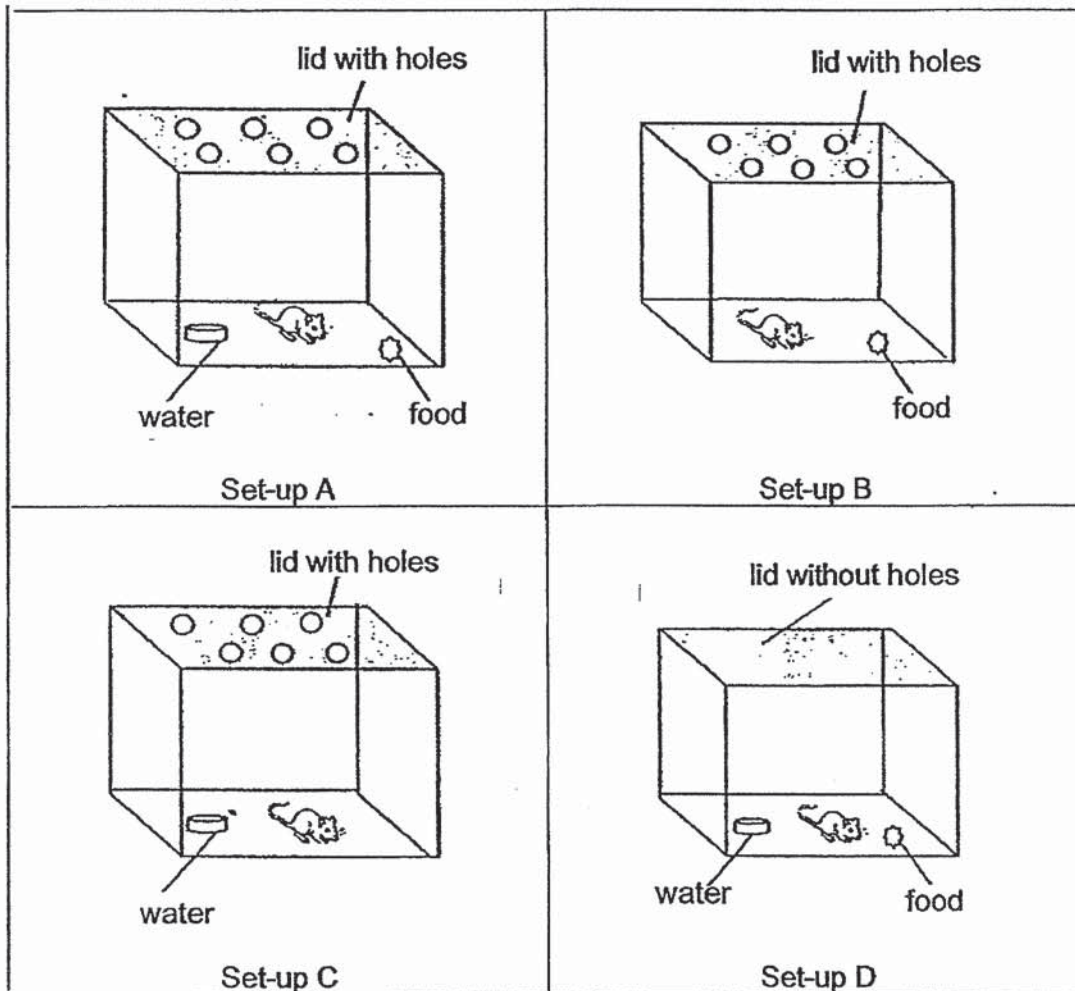
Non- Living Things	Living Things
 Doughnut	 Steamed fish
 Dried leaf	 Hamster

Which one of the following items is grouped wrongly?

- (1) Hamster
- (2) Doughnut
- (3) Dried Leaf
- (4) Steamed Fish



2. Sally wants to find out if living things need food to survive.



To ensure a fair test, which two set-ups should she use for her experiment?

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

3. Each pupil made a statement as shown below.

Andy: Amphibians can live both on land and in water.

Benny: All birds can fly as they have a pair of wings.

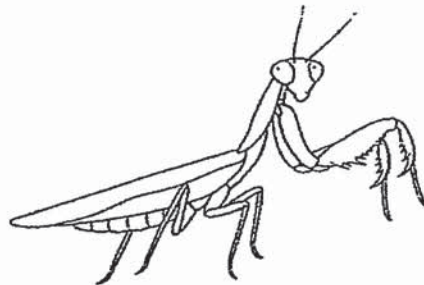
Cindy: All fish have gills that allow them to breath in water.

Danny: Mammals have body covering of hair or fur.

Who has made an incorrect statement?

- (1) Andy
- (2) Benny
- (3) Cindy
- (4) Danny

4. Observe animal Q in the picture below.



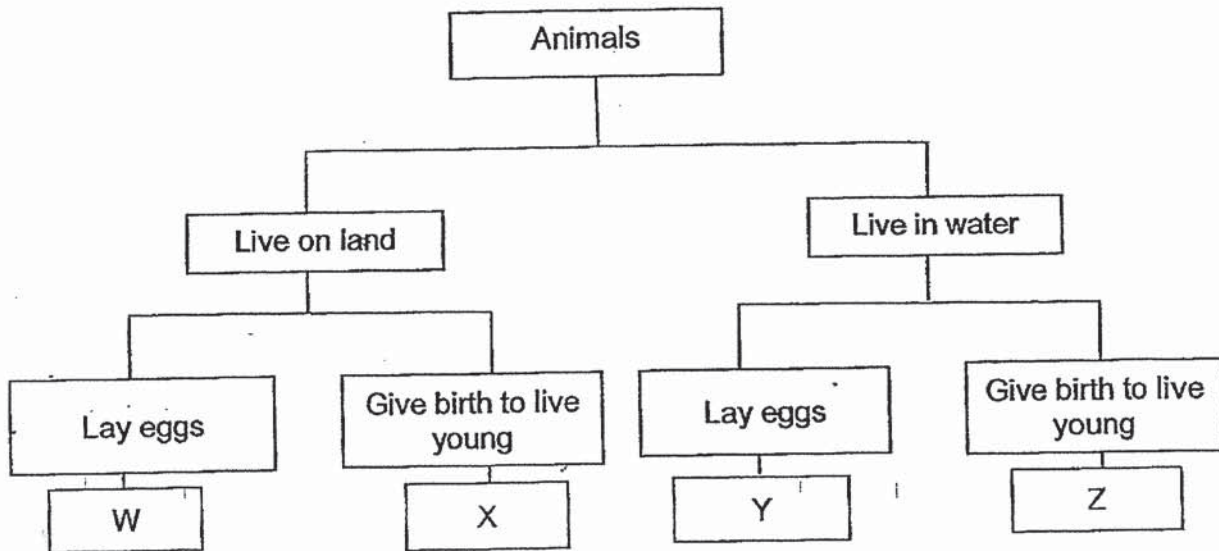
Animal Q

Which animal group does animal Q belong to?

- (1) Fish
- (2) Insect
- (3) Reptile
- (4) Amphibian

5. Study the classification chart below.

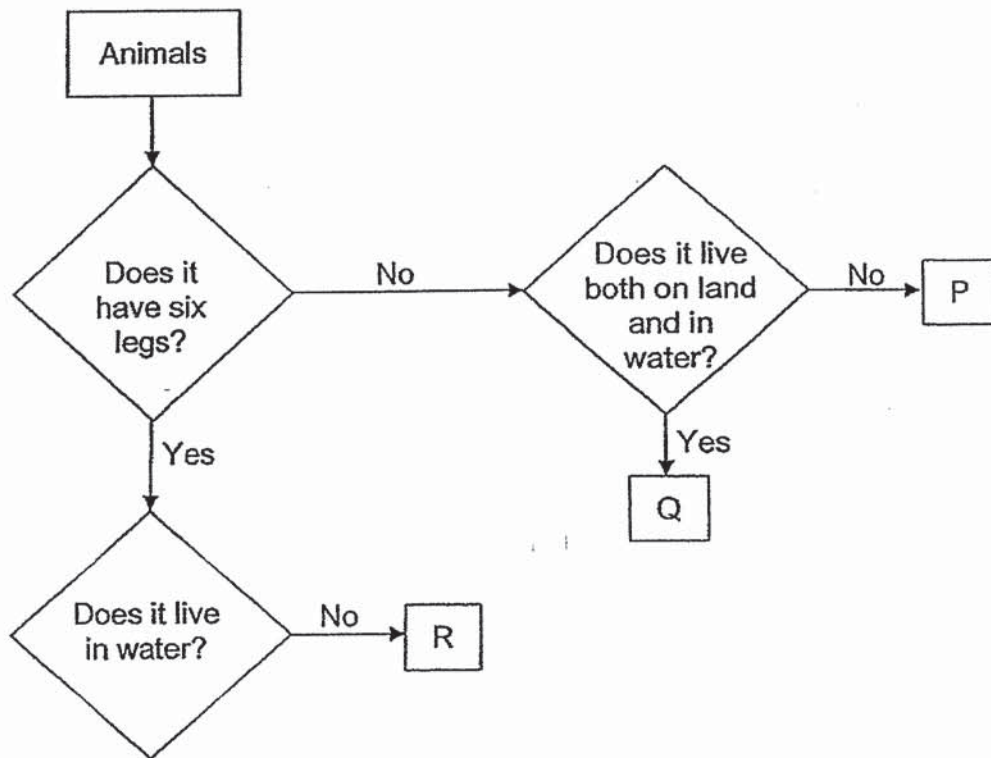
Which of the following best represent the animal shown below?



Rabbit

- (1) W
- (2) X
- (3) Y
- (4) Z

6. Four children make statements about animals P, Q and R based on the flow chart below.



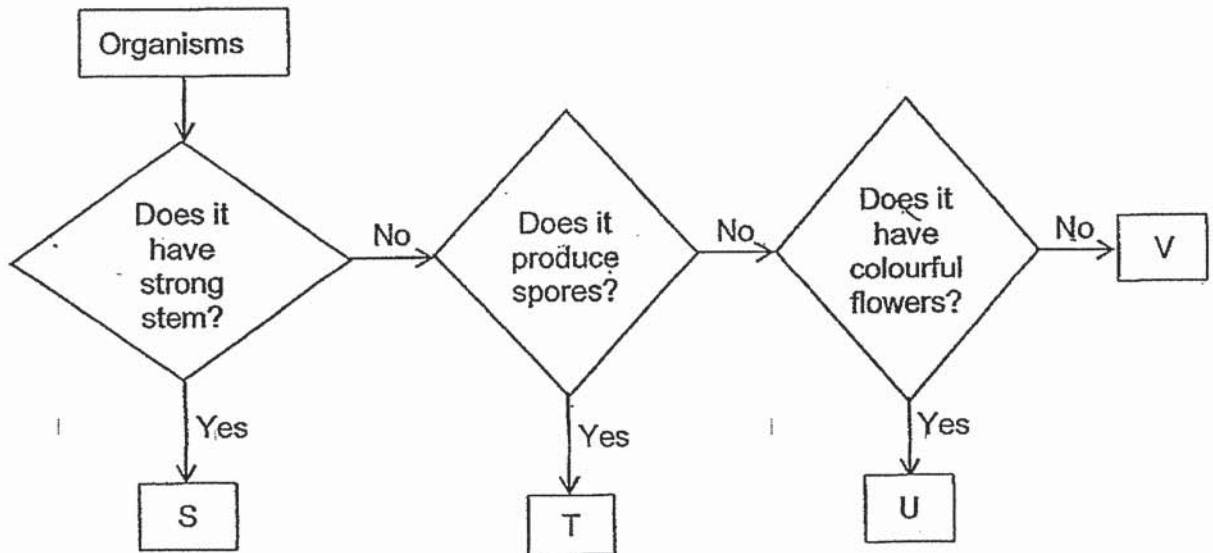
- Alice: Both animals P and Q have six legs,  
Betty: Both animal P and R do not live in water.  
Carol: Only animal Q lives both on land and in water.  
Devi: animal R has six legs but animal Q does not have six legs.

Which of the children's statements are correct?

- (1) Alice and Betty only
- (2) Carol and Devi only
- (3) Alice, Carol and Devi only
- (4) Betty, Carol and Devi only

7. The following are the characteristics of organism A:

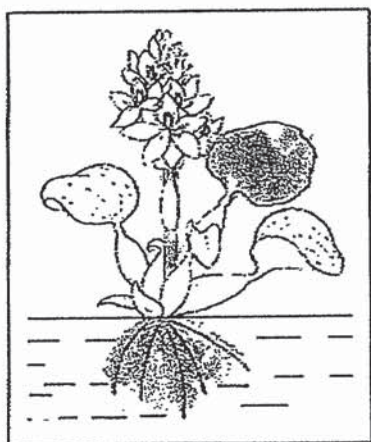
- It has weak stem.
- It produces seeds.
- It has colourful flowers.



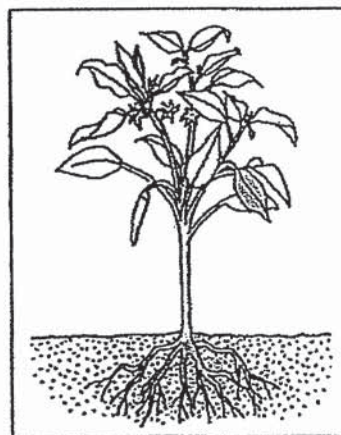
Which one of the following best represents organism A?

- (1) S
- (2) T
- (3) U
- (4) V

8. Observe plant P and Q carefully.



Plant P



Plant Q

Based on your observations, which of the following statements about both plants are correct?

- A Both Plants P and Q live on land.
- B Both Plants P and Q are flowering plants.
- C Both Plants P and Q have roots, stem and leaves.

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



9. Which of the following would fungi most likely be found growing?

- A Rotting log
- B Metal cup in the kitchen
- C Damp bread on the table
- D Plastic bottle in the fridge

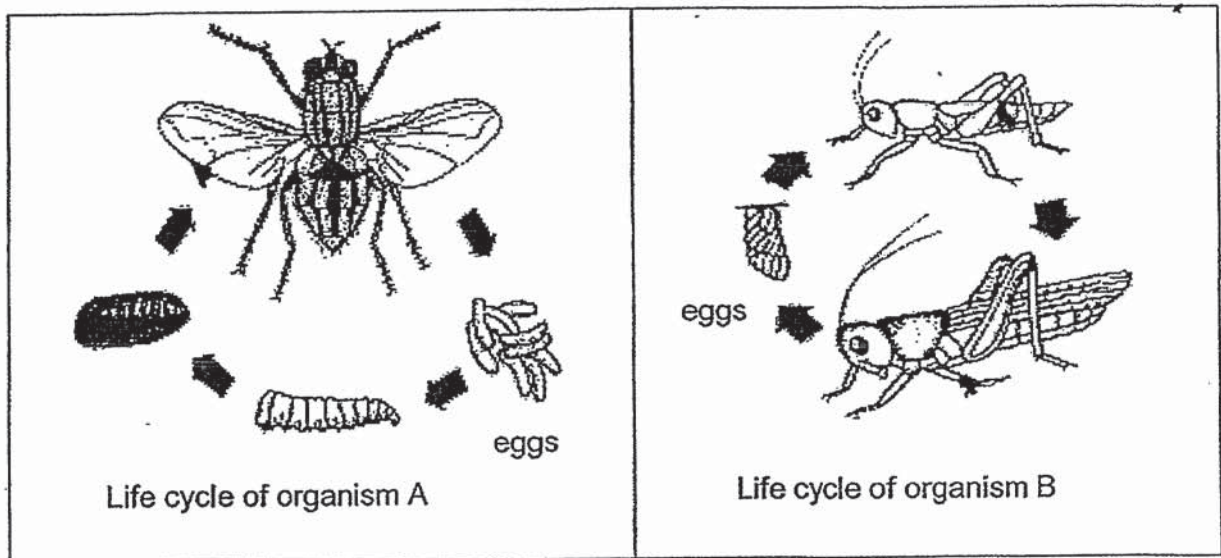
- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) B and D only

10. Which of the following statements on the life cycle of the butterfly is / are correct?

- A It has wings at the adult stage.
- B It does not eat when it is at the pupa stage.
- C The young of a butterfly does not resemble its adult.

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

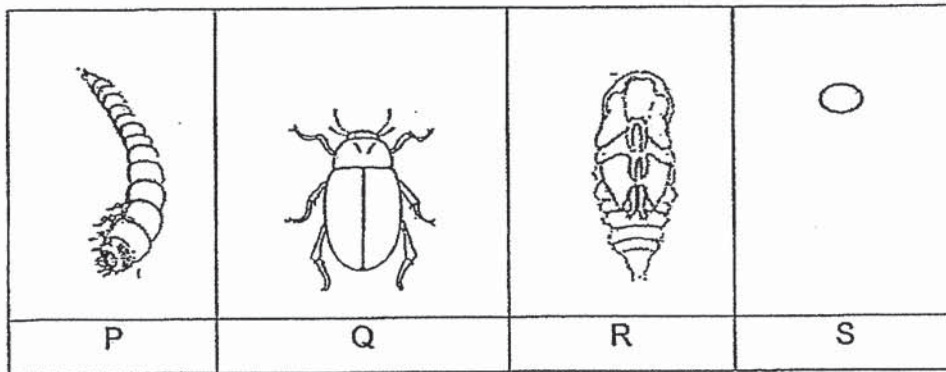
11. The diagrams below show the life cycles of organism A and B.



Which of the following statements of the two life cycles above is / are correct?

- A Both have young that resemble the adults.
  - B Both have the pupa stage in their life cycles.
  - C Both have different number of stages in their life cycles.
- (1) A only  
(2) C only  
(3) A and B only  
(4) B and C only

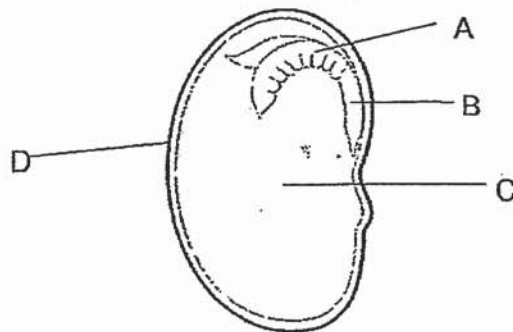
12. The following pictures show the different stages of the life cycle of a mealworm beetle.



Which of the following is correct?

	Stage	Name of stage	Characteristic
(1)	P	Larva	It does not eat.
(2)	R	Pupa	It does not eat.
(3)	Q	Pupa	It has wings.
(4)	S	Adult	It cannot move.

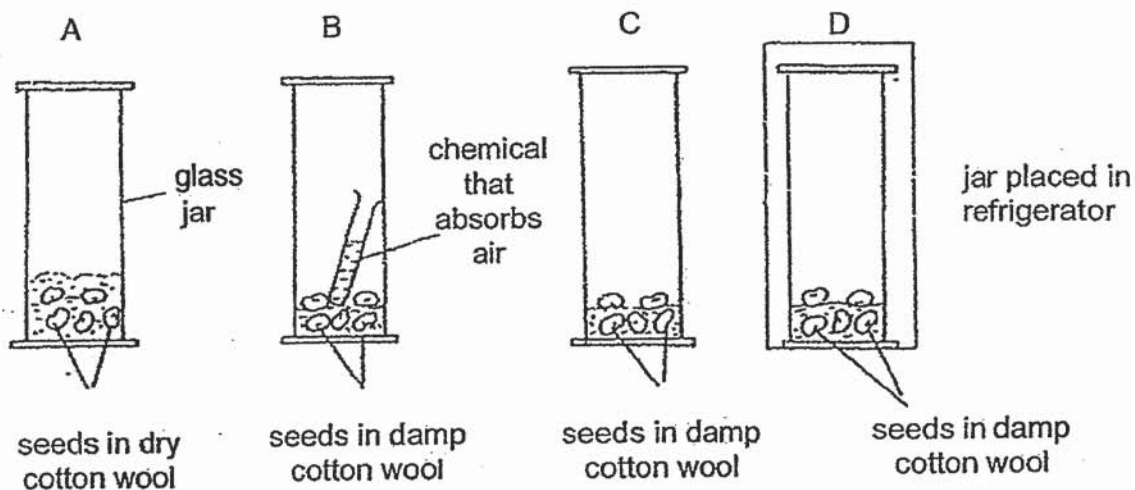
13. The diagram below shows a different parts of a seed.



Which one of the following parts protects the seed?

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

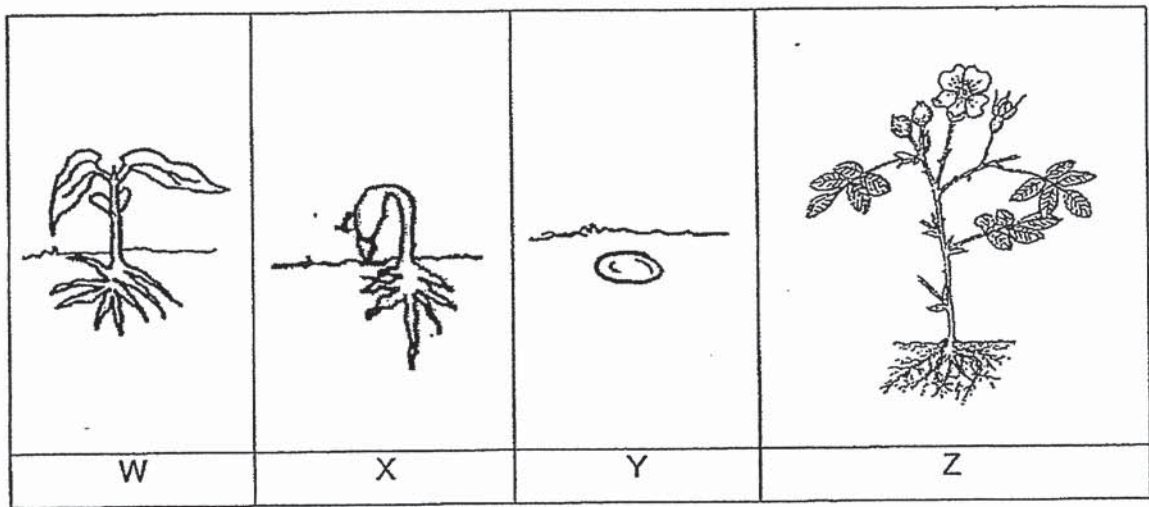
14. Clara placed set-ups A, B and C in her room and left set-up D in the refrigerator.



In which of the following set-up will the seeds germinate after a few days?

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

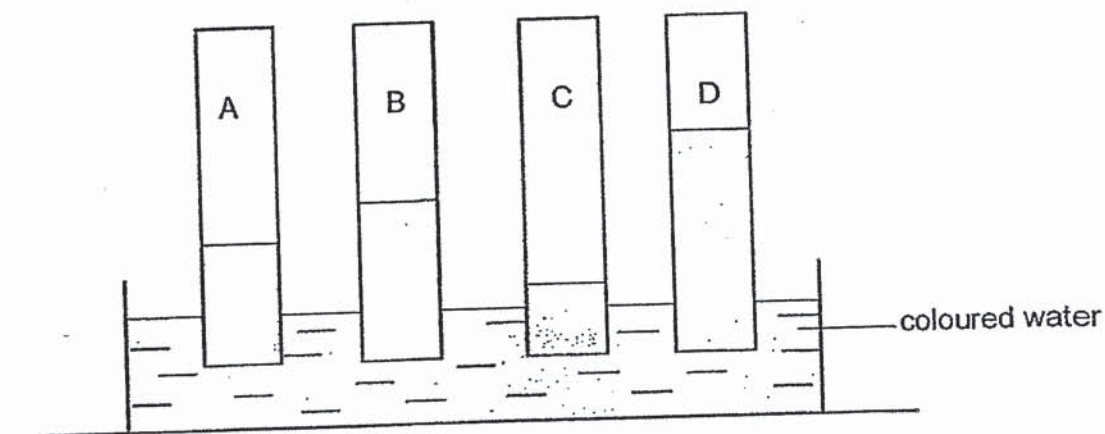
15. The following pictures show the different stages in the life cycle of a plant.



At which stage of the life cycle will the plant be able to produce seeds?

- (1) W
- (2) X
- (3) Y
- (4) Z

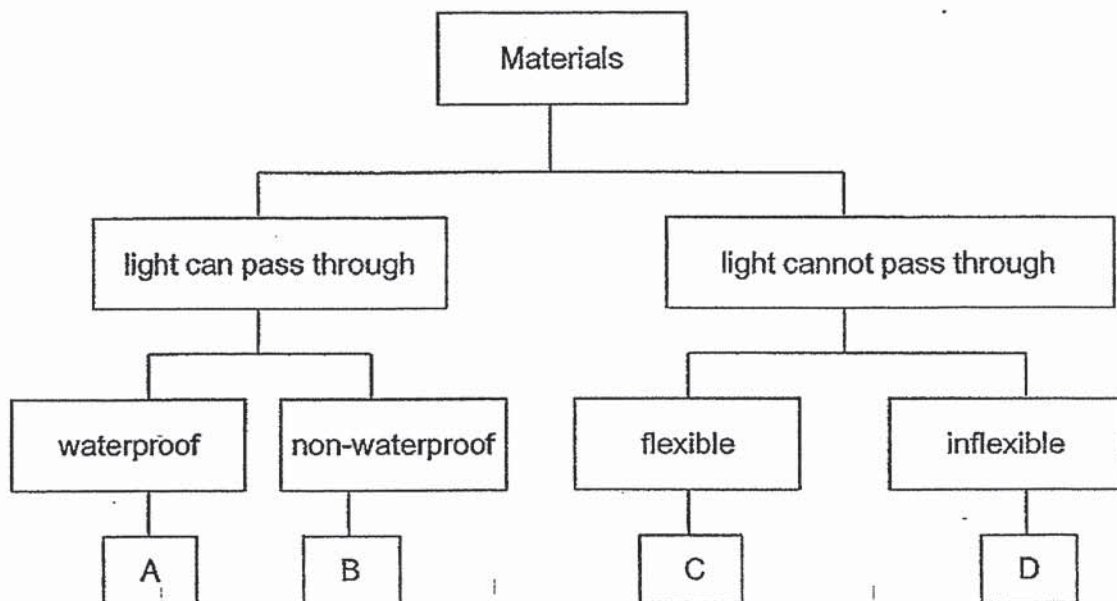
16. Four strips of different materials, A, B, C and D, of identical size were placed onto a tray of coloured water. The diagram below shows the observations after five minutes.



Based on the above observations, which material is most suitable to be used for wiping away water on the table?

- (1) A
  - (2) B
  - (3) C
  - (4) D
17. Shawna is given a piece of material. What should she do to find out if the material allows most light to pass through?
- (1) Bend it.
  - (2) Shine a torch at it.
  - (3) Put it in a dark room.
  - (4) Put it in a bucket of water.

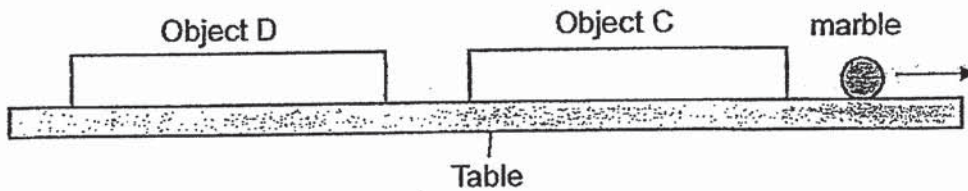
18. Study the classification table below.



Based on the information provided, which of the following materials is the most suitable to make the window and tyre?

	Window	Tyre
(1)	A	C
(2)	A	D
(3)	B	C
(4)	B	D

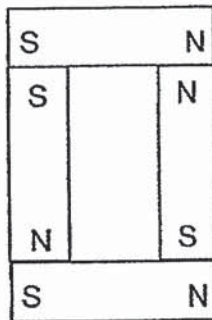
19. Kylie first placed object C and a marble on a table. When she pushed object D near object C, object C moved and hit the marble which rolled off the table.



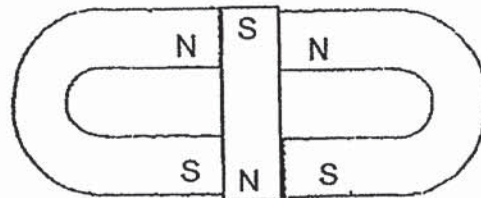
Based on the observation above, which of the following statements is correct?

- (1) Object D is a magnet and attracted Object C.
  - (2) Object C is a magnet and attracted Object D.
  - (3) Both Object C and Object D are magnets with their like poles facing each other.
  - (4) Both Object C and object D are magnets with their unlike poles facing each other.
20. Which of the following shows the correct interaction between the magnets?

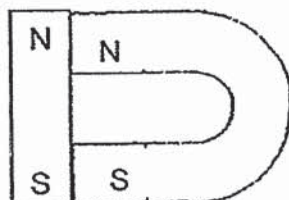
(1)



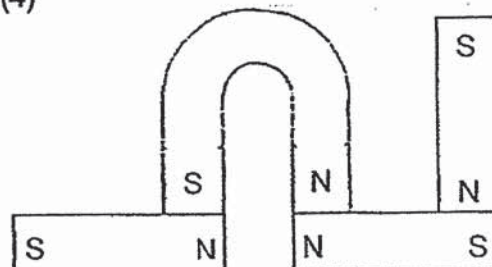
(3)



(2)

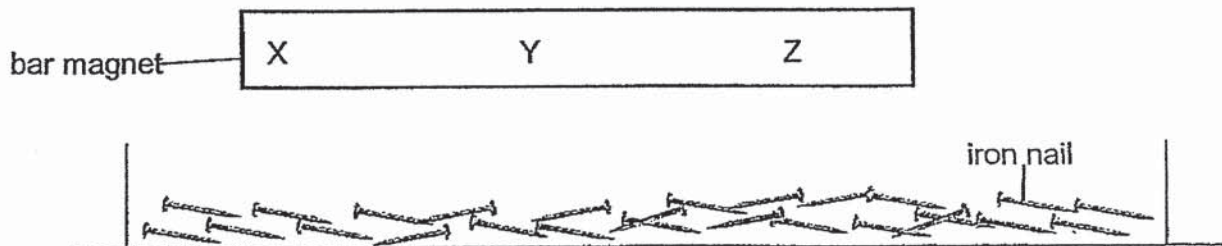


(4)





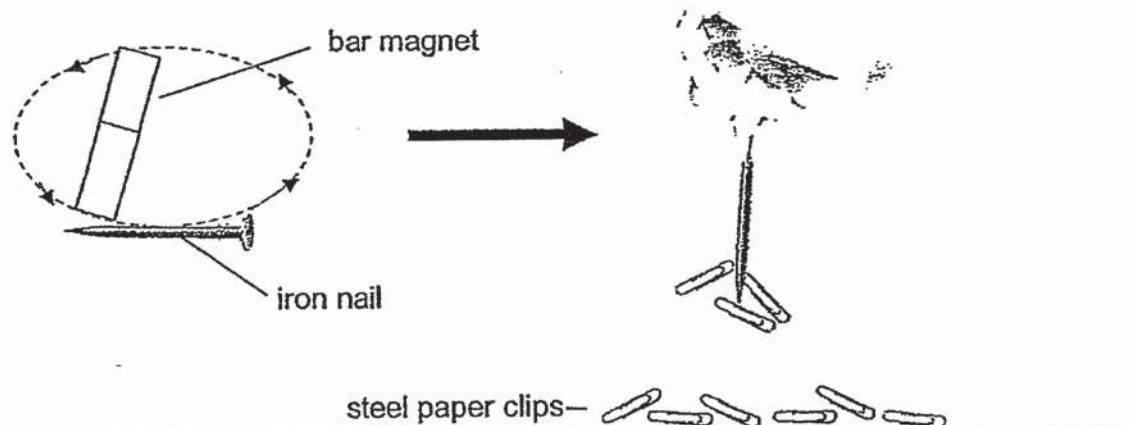
21. Sunita placed the bar magnet above a tray of the iron nails as shown in the diagram below, she observed the number of iron nails attracted to the different parts of magnet.



Which of the following most likely shows the correct number of iron nails attracted to part X, Y and Z?

	Number of iron nails attracted on the bar magnet		
	X	Y	Z
(1)	9	4	1
(2)	1	5	9
(3)	7	9	3
(4)	9	2	10

22. Zach repeatedly stroked an iron nail using the same pole of a magnet. He then held the iron nail above some steel paper clips after stroking.



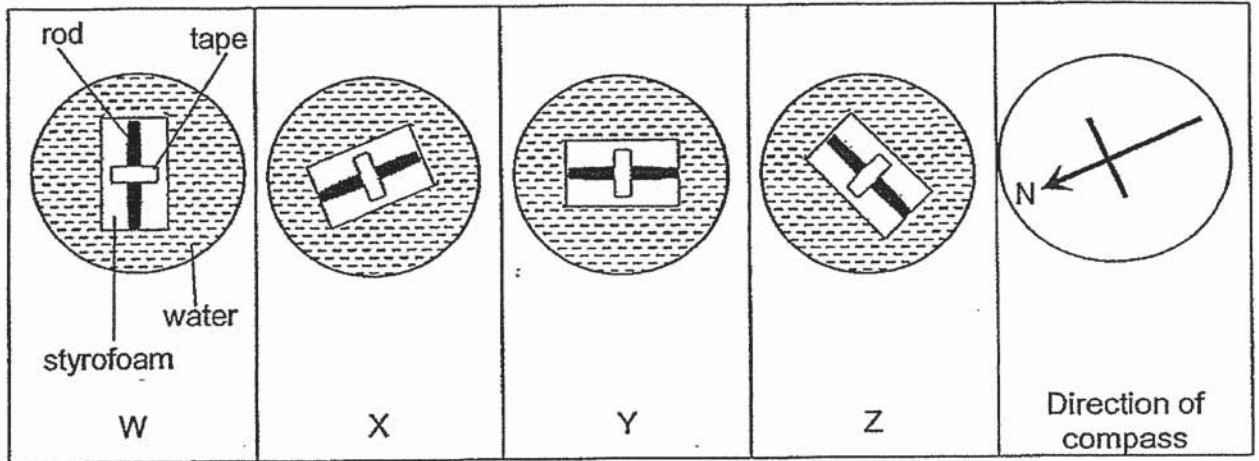
Zach repeated the same experiment a few times with different number of strokes each time. He then recorded his findings as shown in the table below.

Number of strokes	4	8	12	16	20	24	28
Number of steel paper clips attracted by the iron nail	0	4	8	13	17	17	17

What can Zach conclude from his experiment?

- (1) The strength of the bar magnet has been totally transferred to the iron nail.
- (2) The minimum number of strokes the iron nail needs to become a magnet is four.
- (3) The number of steel paper clips attracted to the iron nail increases by four each time.
- (4) A minimum number of twenty strokes on the iron nail is required for the magnetized nail to attract the most number of steel paper clips.

23. Natalia taped four different rods W, X, Y, and Z onto a piece of styrofoam each and put them into four different containers of water to allow them to float freely on the water.



Based on the observations above, which of the following rods is a magnet?

- (1) W
- (2) X
- (3) Y
- (4) Z

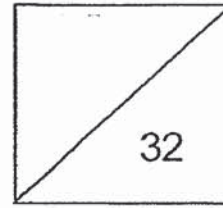
24. Darius placed both the N-pole and S-pole of a bar magnet near four objects, A, B, C and D, and observed the interactions between them. He recorded his observations in the table below.

Magnets	Observations			
	Objects			
	A	B	C	D
North-seeking pole of bar magnet	Attracted	No interaction	Repelled	Attracted
South-seeking pole of bar magnet	Attracted	No interaction	Attracted	Repelled

From the observations above, which one of the following is correct?

	Magnets	Magnetic objects	Non-magnetic objects
(1)	A and B	D	C
(2)	A and B	C	D
(3)	C and D	A	B
(4)	C and D	B	A

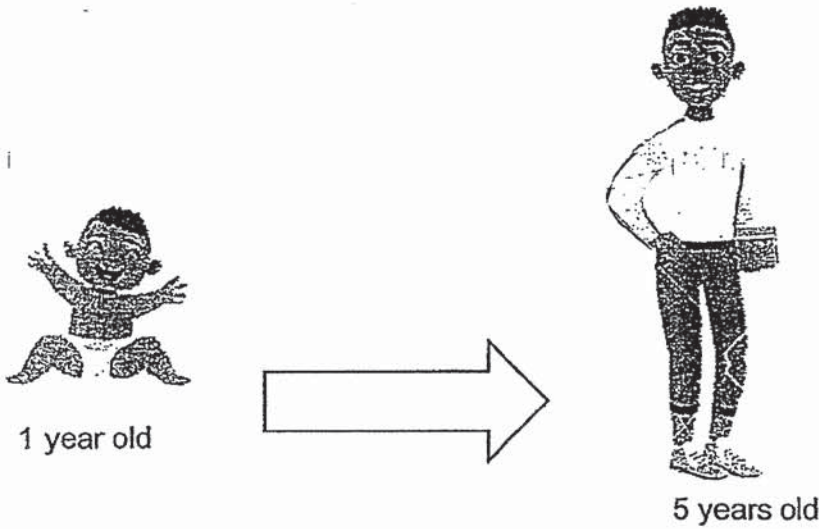
\_\_\_\_\_ ( )  
Class: P 3 ( )



**SECTION B (32 marks)**

For questions 25 to 37, 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.

25. Observe the diagram below.



(a) Based on your observation, name the characteristic of living thing shown in the diagram. [1]

\_\_\_\_\_

\_\_\_\_\_

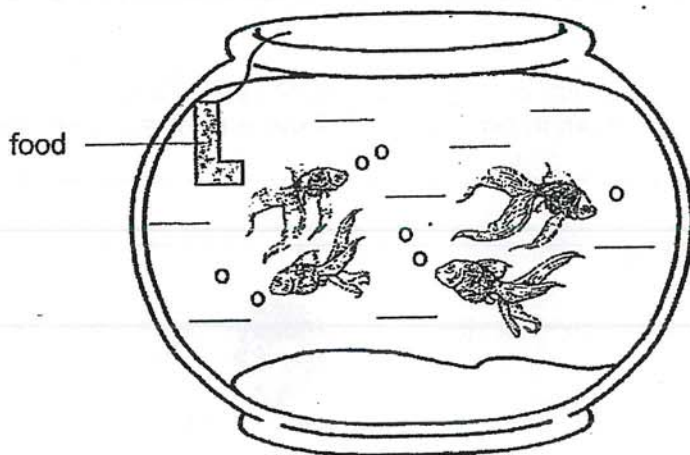
(b) Give a reason for your answer in (a). [1]

\_\_\_\_\_

\_\_\_\_\_

Score	2
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26. Betty kept some fishes in a fish tank without a lid. After a few weeks, the number of fishes in the tank increased even though no fish was added to the tank.



- (a) What could be the possible reason for an increase in the number of fishes? [1]

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- (b) Betty covered the fish tank with an air-tight lid. What would happen to the fishes after a few days? Give a reason for your answer. [1]

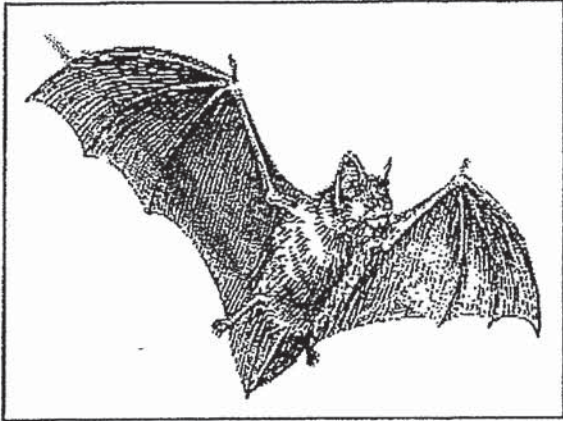
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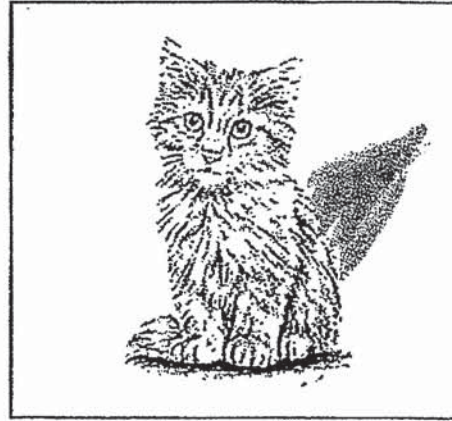
Score	2
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2019 P3 SCIENCE SA2

27. Study animals P and Q as shown in the diagrams below.



P



Q

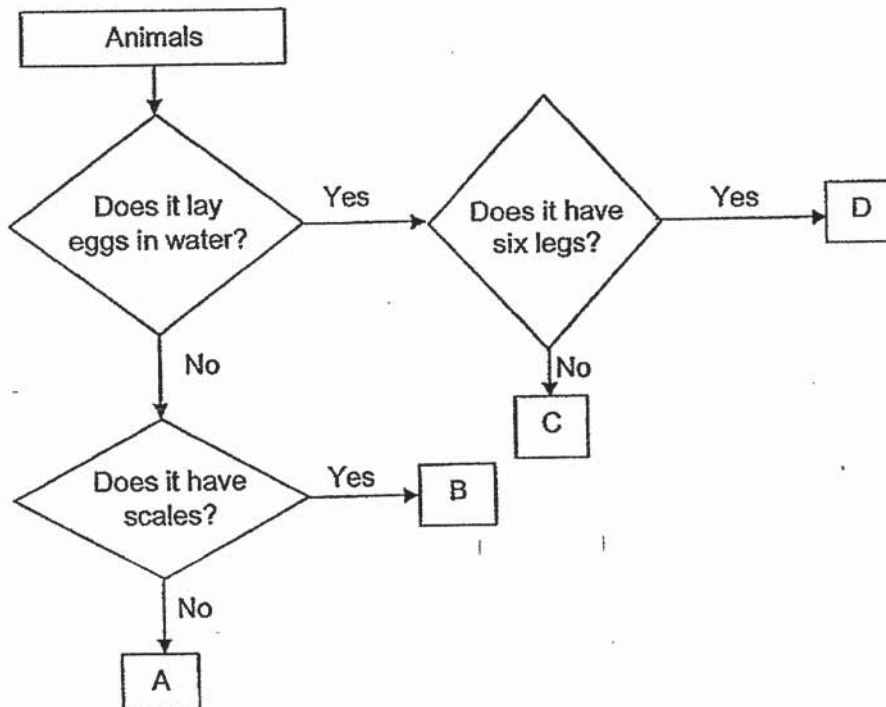
Write down one similarity and one difference between animals P and Q based on your observations only. [2]

[Do NOT compare body shapes, sizes and colours.]

Similarity	<hr/> <hr/> <hr/> <hr/>
Difference	<hr/> <hr/> <hr/> <hr/>

Score	2
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28. Study the flow chart as shown below.



Based on the information above, answer the following questions:

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

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(b) State one similarity between animals A and B. [1]

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(c) Which animals, A, B, C or D, best represent snake and mosquito respectively? [1]

(i) snake : \_\_\_\_\_

(ii) mosquito : \_\_\_\_\_

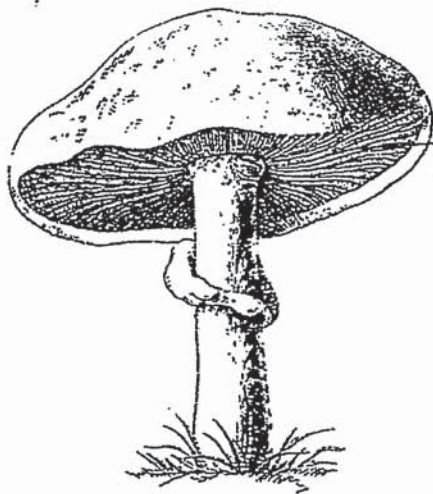
Score	3
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29. (a) Read the following statements and put a tick (✓) in the right column. [1]

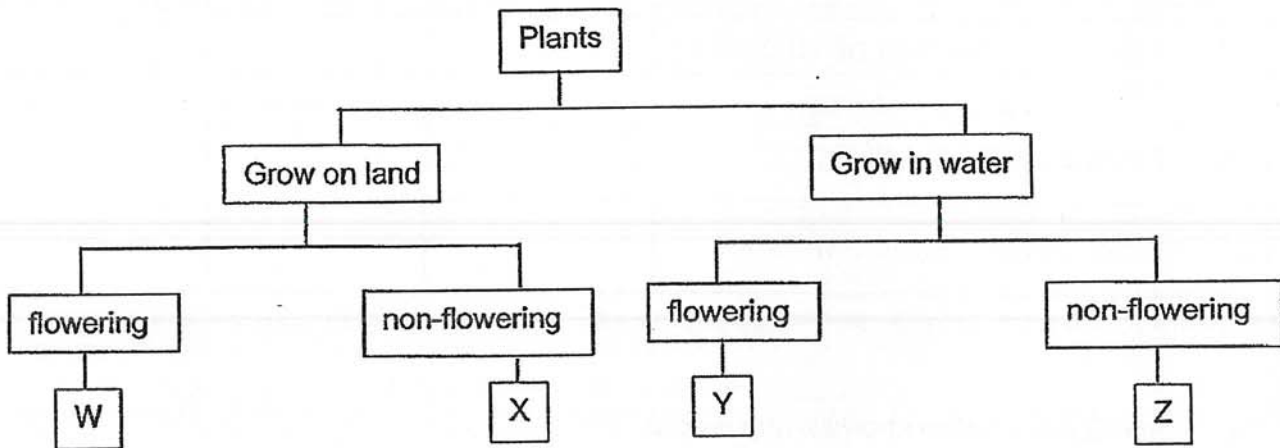
Statements	True	False
(a) Bacteria can be seen with the naked eyes.		
(b) Ferns are flowering plants.		
(c) Fungi cannot make its own food.		

(b) The diagram below shows a mushroom.  
Label and name the part where spores are found. [1]

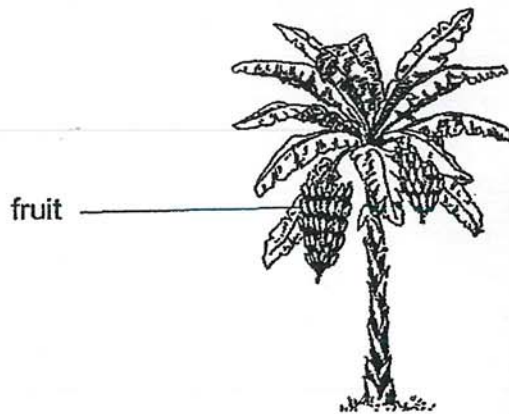


Score	2
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30. Karen classified plants as shown in the following diagram.



Karen found the plant shown below in her garden.



- (a) Based on the information above, which plant, W, X, Y or Z best represents the plant shown above? Give a reason for your answer. [1]

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Score	1
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(b) Based on the information above,

(i) state a common characteristic of plants W and X. [1]

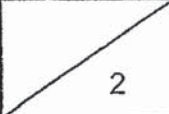
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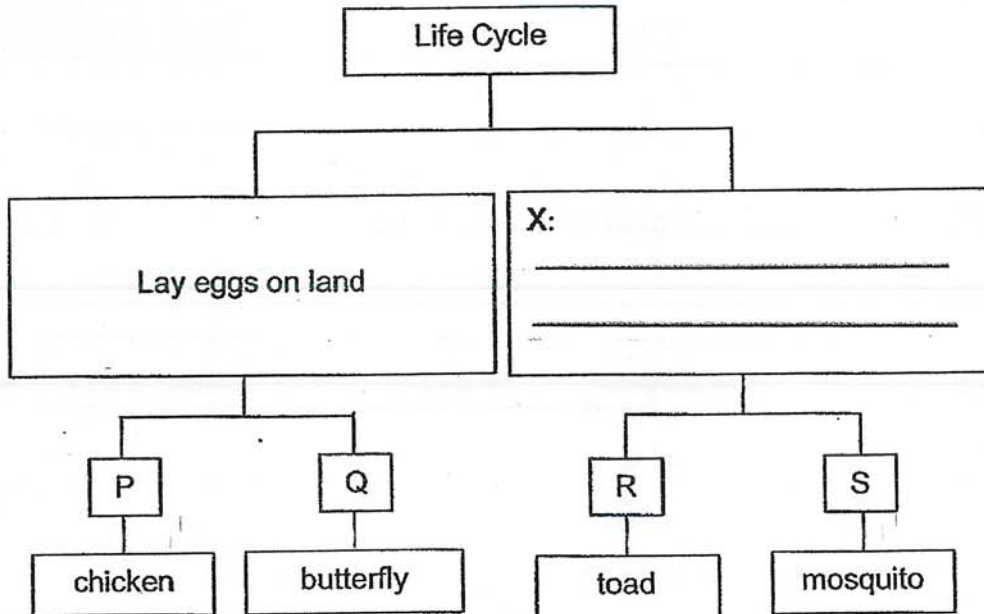
(ii) state a difference between plants X and Z. [1]

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Score	
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31. Some animals are grouped as shown below.



(a) In the diagram above, write a suitable sub-heading in the box marked X. [1]

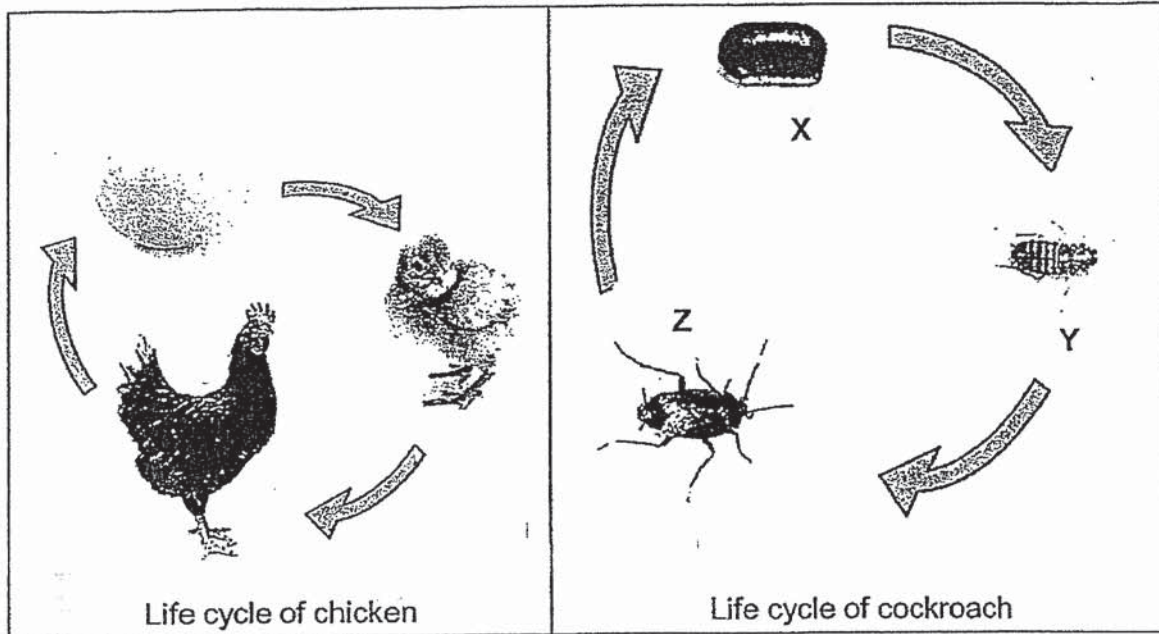
(b) The toad and mosquito are grouped according to the number of stages in their life cycles.

Write the number of stages in the life cycle of each animal below. [1]

(i)	R	_____ stages
(ii)	S	_____ stages

Score	2
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32. The life cycles of chicken and cockroach are shown in the diagrams below.



(a) Based on the information above, state one similarity between the two life cycles shown above. [1]

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(b) Name the stage Y in the life cycle of cockroach. [1]

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(c) Name the stage, X, Y or Z, of the life cycle where it is easiest to get rid of the cockroach. Explain your answer. [1]

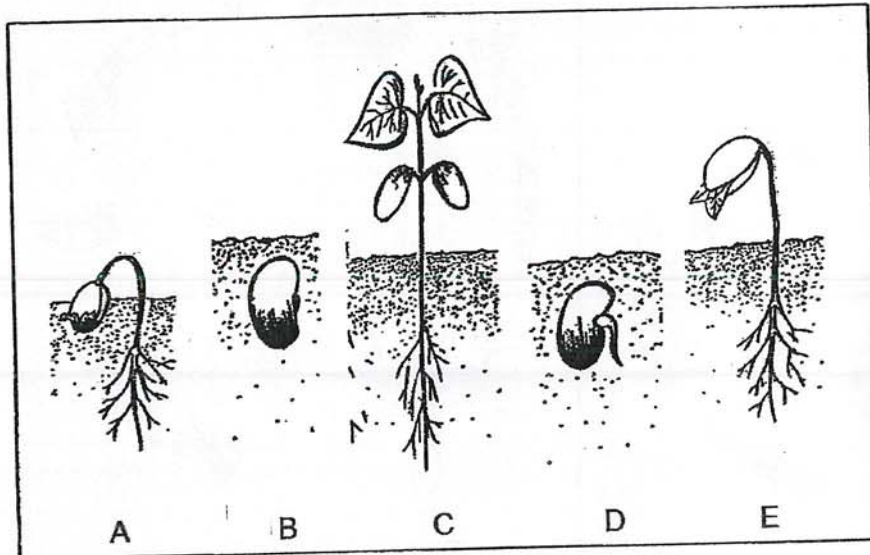
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Score	3
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33. The diagram below shows the stages of the growth of a germinating seed.



(a) Arrange the stages, A, B, C, D and E, to show the correct order of the growth of a germinating seed. Fill in the boxes below. [1]

B				
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(b) Name the stage, A, B, C, D or E, which the seedling can make its own food. Give a reason for your answer. [1]

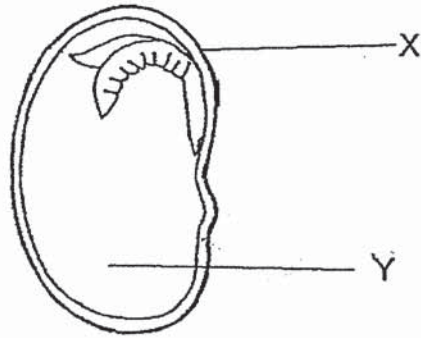
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Score	2
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34. The diagram below shows a developing seed.



(a) Name parts X and Y. [1]

X: \_\_\_\_\_

Y: \_\_\_\_\_

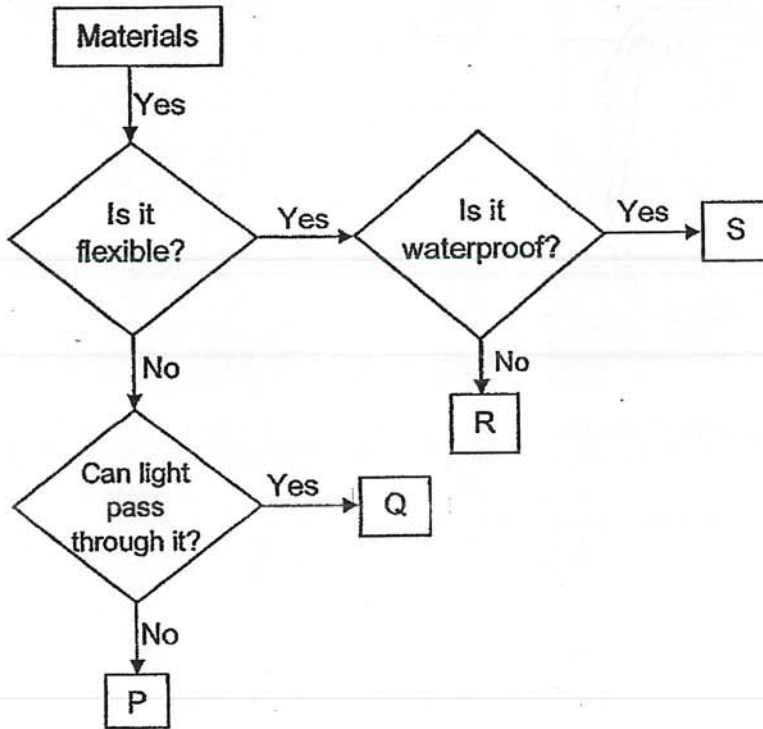
(b) State the function of part Y. [1]

\_\_\_\_\_

\_\_\_\_\_

Score	2
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35. The flow chart below shows how four materials, P, Q, R and S, are being grouped.



(a) Based on the flowchart above, state a difference between materials P and R. [1]

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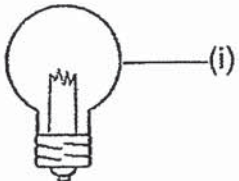
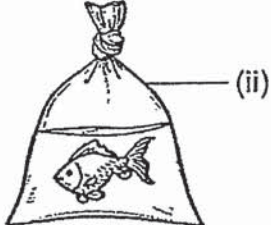
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Score	1
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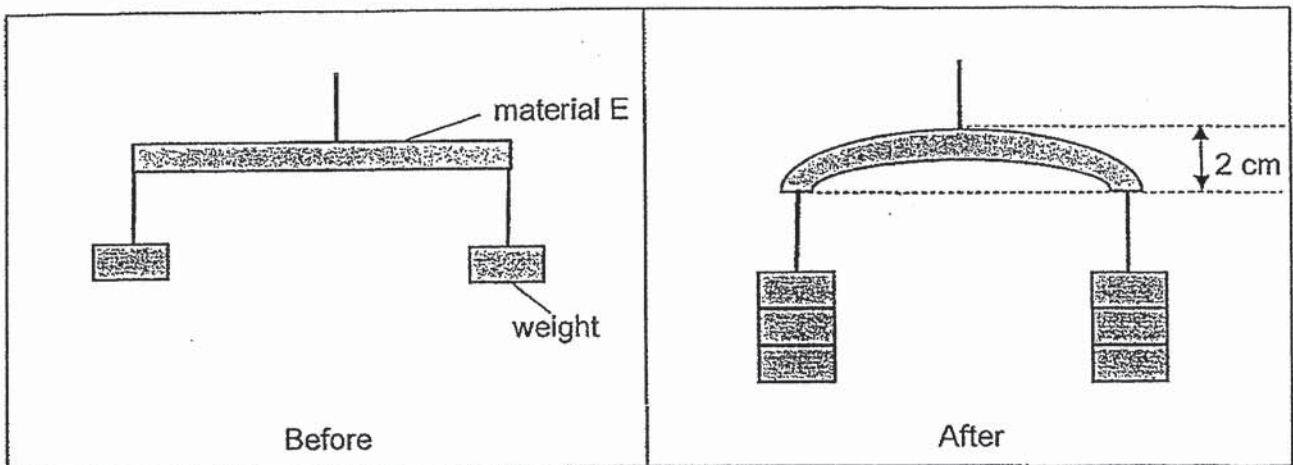


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- (b) From the flow chart, which material, P, Q, R or S, is the most suitable for making the labelled parts of the objects below. Write your answers in the box provided. [1]

Object	Material
 Light bulb	
 Bag for holding a pet fish	

36. Daphne conducted an experiment to find out the flexibility of materials E, F, G and H. She hung some weights of equal mass on both ends of a plank made of material E as shown in the diagram below.



She added equal weights on both ends of the plank until it bent 2 cm. The experiment was repeated using planks made of materials F, G and H.

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Score	1
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The results are shown in the table below.

Materials	Total number of weights added until plank bent 2cm
E	2
F	14
G	6
H	10

- (a) List the materials from the least flexible to the most flexible. [1]

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
least flexible			most flexible

Isabel would like to use one of the four materials, E, F, G or H to make part X of the shoe below.



- (b) Which material E, F, G or H will be the most suitable for making part X? Give a reason for your answer. [2]

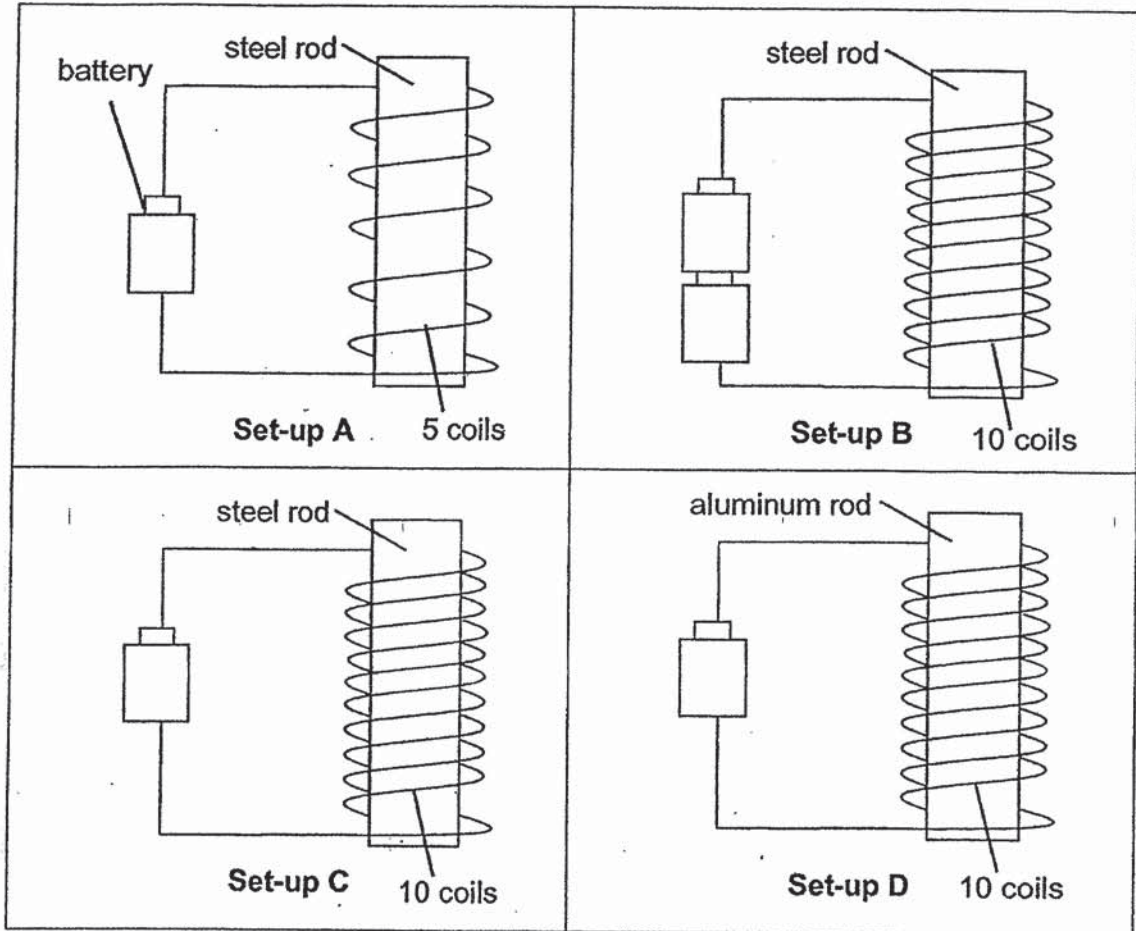
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Score	3
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37. Kate used four identical-sized rods and prepared set-ups of electromagnets with wires coiled around rods. The set-ups A, B, C and D are as/ shown below.



Kate would like to find out if the number of coils on the rod would affect the strength of the electromagnet.

- (a) What variable should Kate change in her experiment? [1]

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- (b) Which two set-ups should Kate use for her experiment? [1]

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Score	2
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- (c) Kate tested set-ups A and D by putting the set-ups close to some steel paper clips. She recorded her observations in the table below.
- (i) Write down the possible number of steel paper clips that the electromagnet in set-up D could attract. [1]

Set-up	Number of steel paper clips attracted
A	9
D	(i) _____

- (ii) Give a reason for your answer in c (i) [1]

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End of Paper

Score	2
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# ANSWER KEY

**YEAR : 2019**  
**LEVEL : PRIMARY 3**  
**SCHOOL : RAFFLES GIRL'S PRIMARY SCHOOL**  
**SUBJECT : SCIENCE**  
**TERM : SA2**

## BOOKLET A

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

## BOOKLET B

**Q25 (a) Living things grow.**

**(b) There is an increase in height.**

**Q26 (a) The fish reproduce.**

**(b) The fish will die when the lid is closed, there will be insufficient air. Fish is a living thing which needs air to survive.**

**Q27 Similarity : They both have wings.**

**Difference : Animal P has wings but Animal Q does not.**

**Q28 (a) Animal D has six legs but Animal C does not.**

**(b) Both do not lay eggs.**

**(c)(i) B**

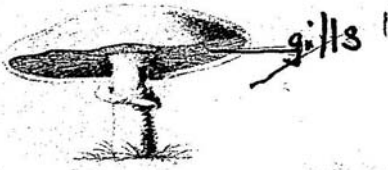
**(ii) D**

**Q29 (a) False**

**(b) False**

**(c) True**

(b)  
(d)



Q30 (a)W. The plant shown above grows on land plant. It also bears fruits, like flowering plants.

- (b)(i)They both grow on land .  
(ii)X grows on land but Z grow in water.

Q31 (a)X : Lay eggs in water

- (b)(i) 3 stages  
(ii)4 stages

Q32 (a)They both have an egg stage.

- (b)nymph  
(c)X. At stage X, it is not able to move. Therefore, it is the easiest to get rid of.

Q33 (a)D A E C

- (b)C. Only stage C has leaves. A plants needs leave to make its own food.

Q34 (a) X : seed coat

Y : seed leaf

- (b)Y provides food for the developing seed.

Q35 (a)R is flexible but P is not.

- (b)(i)Q  
(ii)S

Q36 (a)F H G E

- (b) Material E. It is the most flexible for making part X needs to be flexible so that it can be tied together. It requires the least number of weight added for the plank to bend 2 cm.

Q37 (a)The number of coils

- (b)C and A  
(c)(i)O

- (ii)It could not ttract any steel paper clips as aluminium is a non-magnetic material thus it cannot be magnetised.

2  
END