

RAFFLES GIRLS' PRIMARY SCHOOL

END-OF-YEAR EXAMINATION  
2020

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

Name : \_\_\_\_\_

Index No.: \_\_\_\_\_

Class: P3 \_\_\_\_\_

**28 October 2020**

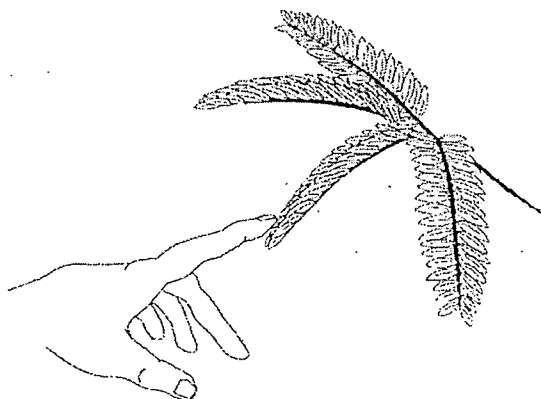
**SCIENCE**

**Duration: 1 h 15 min**

**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. The leaves of plant Q close when touched.



This shows that plant Q is a living thing because it can \_\_\_\_\_.

- (1) grow
- (2) breathe
- (3) reproduce
- (4) respond to changes

2. John listed the characteristics of living and non-living things, A, B, C and D, in the table below. A tick ( ✓ ) shows the presence of the characteristic.

Things	Does it need food?	Does it reproduce?	Does it grow?
A	✓	✓	✓
B			✓
C			

Which of the following things is/are non- living thing(s)?

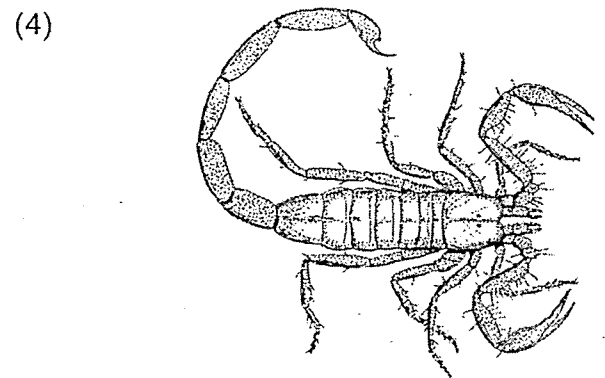
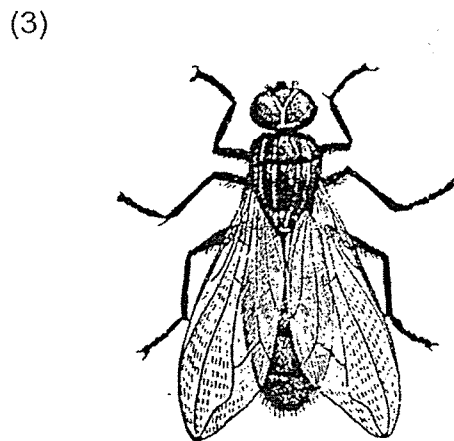
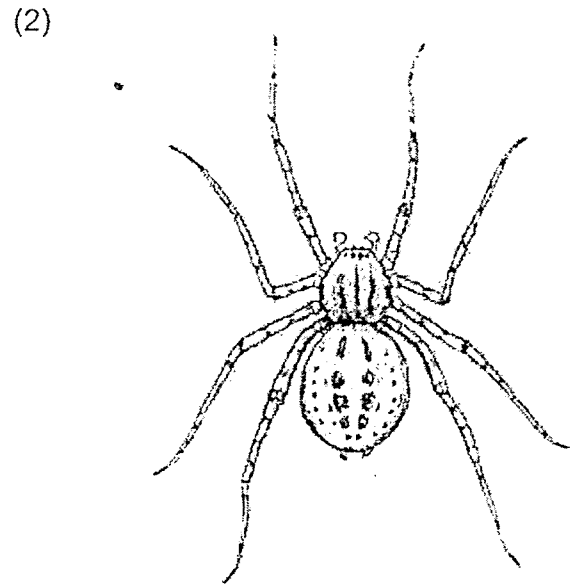
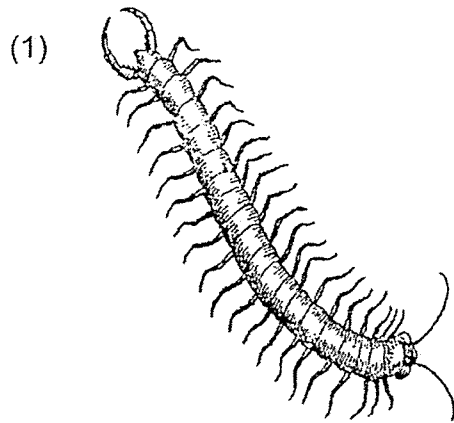
- (1) A only
- (2) B only
- (3) A and C only
- (4) B and C only

3. Which of the following is/are characteristics of all birds?

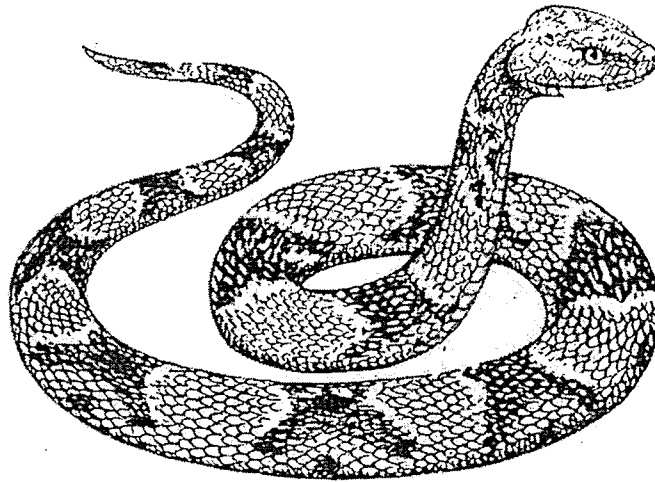
- A They can fly.
- B They lay eggs.
- C They have feathers.
- D They have a pair of wings.

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

4. Which of the following animals is an insect?



5. The diagram below shows animal P.

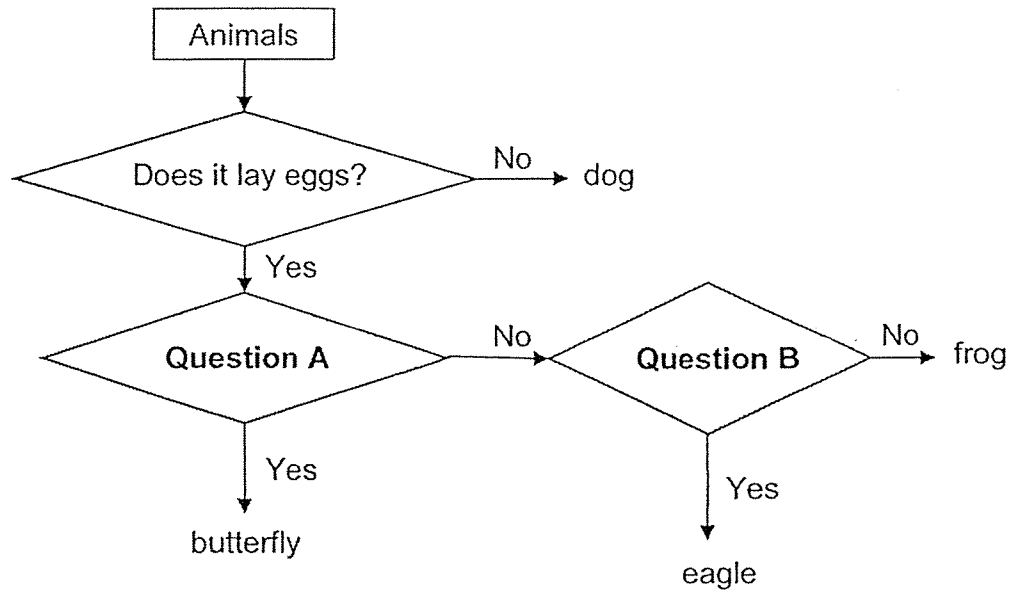


Based on your observation of the diagram above, which of the following describe the physical characteristic of animal P correctly?

Animal P \_\_\_\_\_.

- (1) has gills
- (2) has scales
- (3) lays eggs
- (4) lives on land

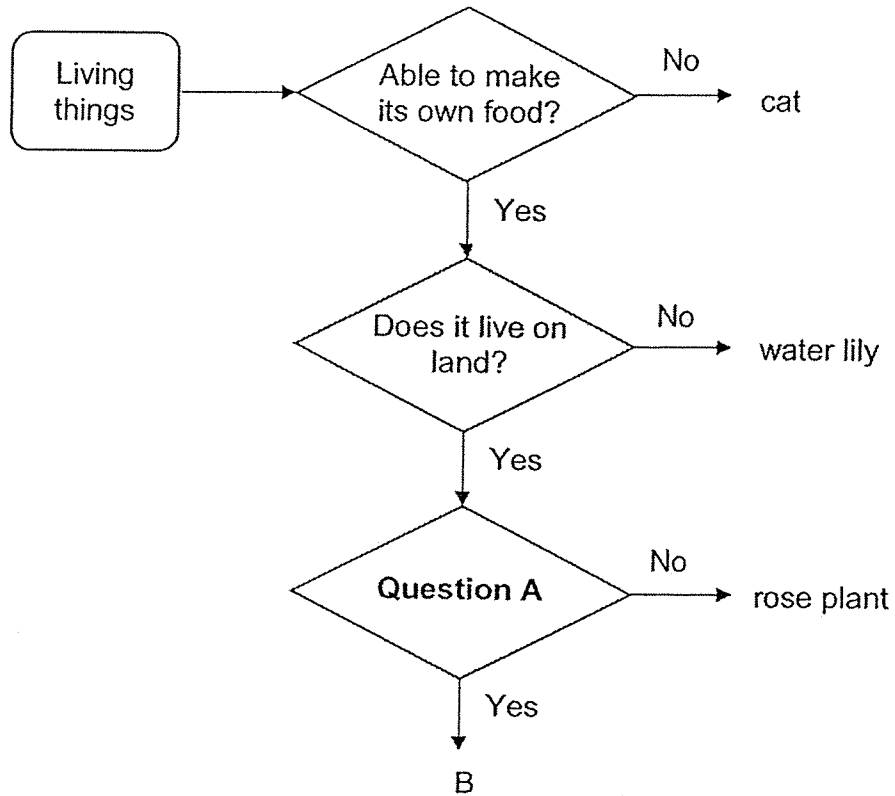
6. Study the flow chart below.



Which of the following is correct?

	Question A	Question B
(1)	Does it have a beak?	Does it have wings?
(2)	Does it have wings?	Does it have six legs?
(3)	Does it have three body parts?	Does it have wings?
(4)	Does it have a pair of legs?	Does it have three body parts?

7. Study the flowchart below.



Which one of the following is correct?

	Question A	B
(1)	Does it have fruits?	toadstool
(2)	Does it reproduce by spores?	bird's nest fern
(3)	Does it have flowers?	dragon scales
(4)	Does it reproduce by seeds?	orchid

8. The table below shows the characteristics of two plants X and Y.  
A tick (✓) indicates that the presence of the characteristic.

Characteristics	Plant X	Plant Y
Plant lives in water.		✓
Plant has fruits.	✓	
Plant has flowers.	✓	✓

Based on the information in the table above, which of the following statements below is/are correct?

- A Plant Y is a fern.
- B Plant X is a water plant.
- C Plant X does not bear fruits.
- D Plant X and Y reproduce by seeds.

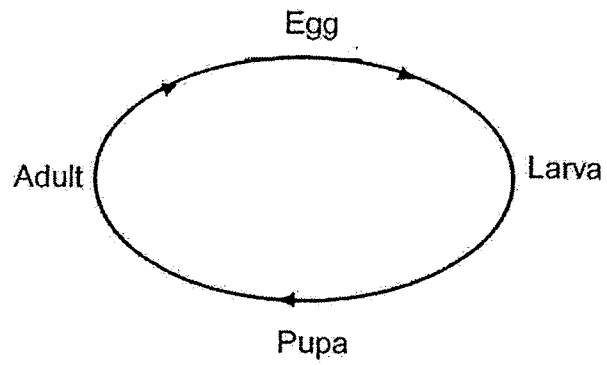
- (1) C only
- (2) D only
- (3) C and D only
- (4) A, B and C only

9. Which of the following statement(s) is/are correct about bacteria?

- A All bacteria are harmful.
- B Some bacteria reproduce by seeds.
- C Bacteria can only be seen under the microscope.

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

10. The diagram below shows the life cycle of an animal.



Which animal is likely to have the life cycle as shown above?

- (1) frog
- (2) chicken
- (3) butterfly
- (4) cockroach



11. Jason observed two animals, A and B, and recorded his observations in the table below.

Observation	Animal A	Animal B
Spends some stages of its life cycle in water.	No	Yes
Has a 3-stage life cycle.	No	Yes
Adult has wings.	Yes	No

Which of the following correctly identifies animals A and B?

	Animal A	Animal B
(1)	butterfly	grasshopper
(2)	butterfly	frog
(3)	grasshopper	butterfly
(4)	grasshopper	frog

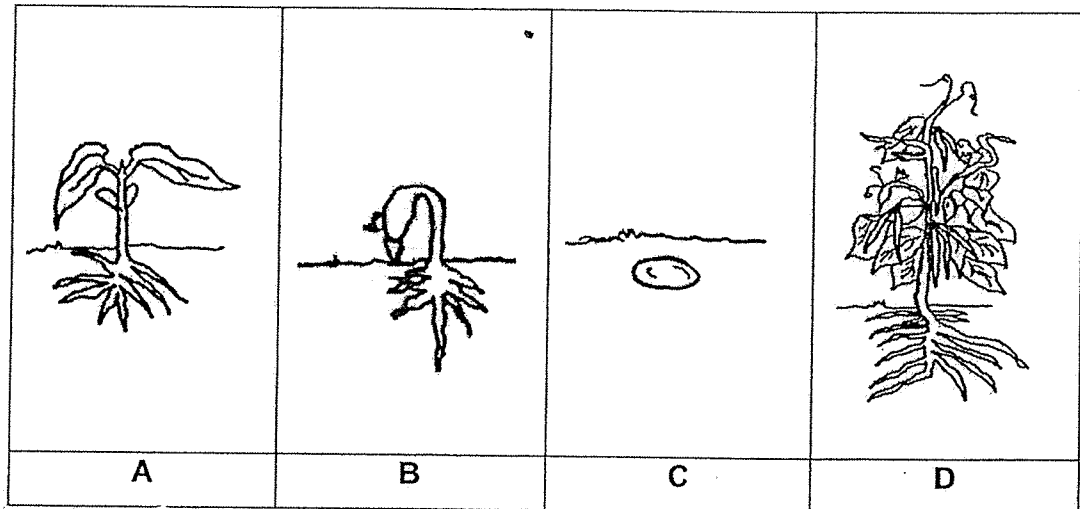
12. The table below shows the amount of food animal A eats after it has been hatched from the egg.

Stage in life cycle	Stage X	Stage Y	Stage Z
Amount of food eaten(g)	26	15	0

Based on the information above, which of the following correctly identifies the stages in the life cycle of animal A?

	Stage X	Stage Y	Stage Z
(1)	larva	pupa	adult
(2)	larva	adult	egg
(3)	pupa	egg	adult
(4)	egg	larva	pupa

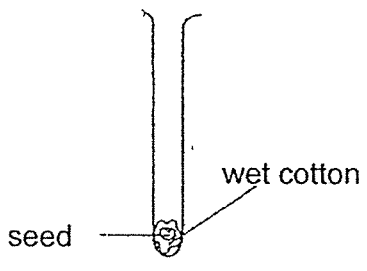
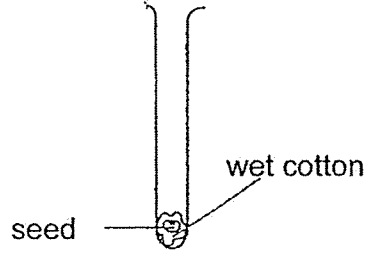
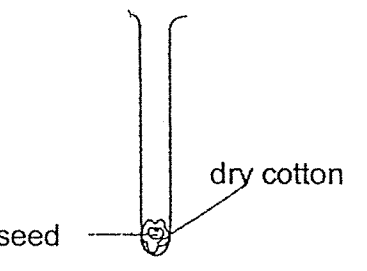
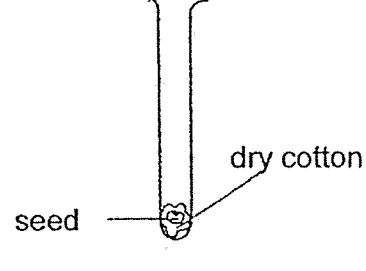
13. The diagrams below show the stages of growth of a bean plant.



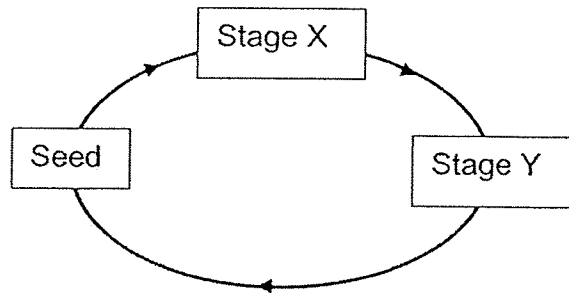
Which of the following shows the correct order of its growth?

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

14. Four set-ups as seen below were prepared. In which of the following set-ups will the seed germinate?

<p>(1)</p>  <p>seed</p> <p>wet cotton</p>	<p>(2)</p>  <p>seed</p> <p>wet cotton</p>
<p><b>Placed in a dark room</b></p>	<p><b>Placed in the freezer</b></p>
<p>(3)</p>  <p>seed</p> <p>dry cotton</p>	<p>(4)</p>  <p>seed</p> <p>dry cotton</p>
<p><b>Placed under sunlight</b></p>	<p><b>Placed in the freezer</b></p>

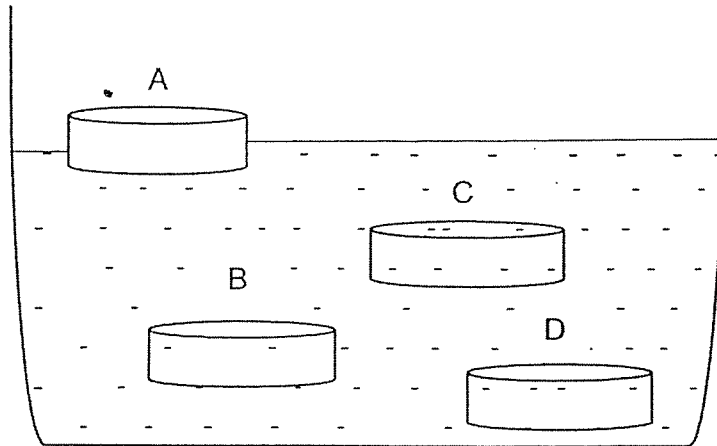
15. The diagram below show the life cycle of a flowering plant.



Which of the following pair of statements correctly describes stages X and Y?

	Stage X	Stage Y
(1)	Flowers are seen.	It makes its own food.
(2)	It depends on its seed leaf for food.	Fruits are produced.
(3)	It can make its own food.	Its roots is first produced.
(4)	Fruits are produced.	It depends on its seed leaf for food.

16. Objects A, B, C and D, made of different materials, are placed in a tank of water as shown in the diagram below.



Which of the following object best represents the material used to make X as shown in the diagram below?

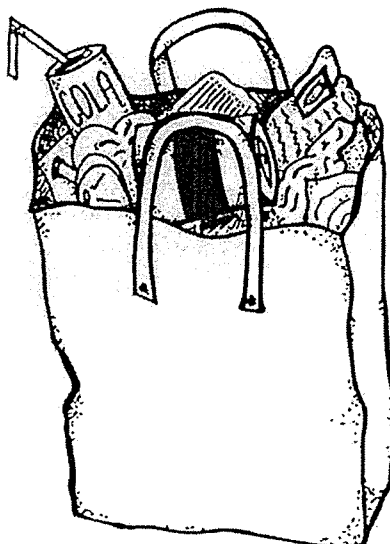


- (1) A
- (2) B
- (3) C
- (4) D

17. The table below shows the properties of four materials, W, X, Y and Z. The presence of property is shown with a tick (✓).

Properties	Material W	Material X	Material Y	Material Z
Is it flexible?		✓		✓
Is it strong?	✓	✓		✓
Is it waterproof?			✓	✓

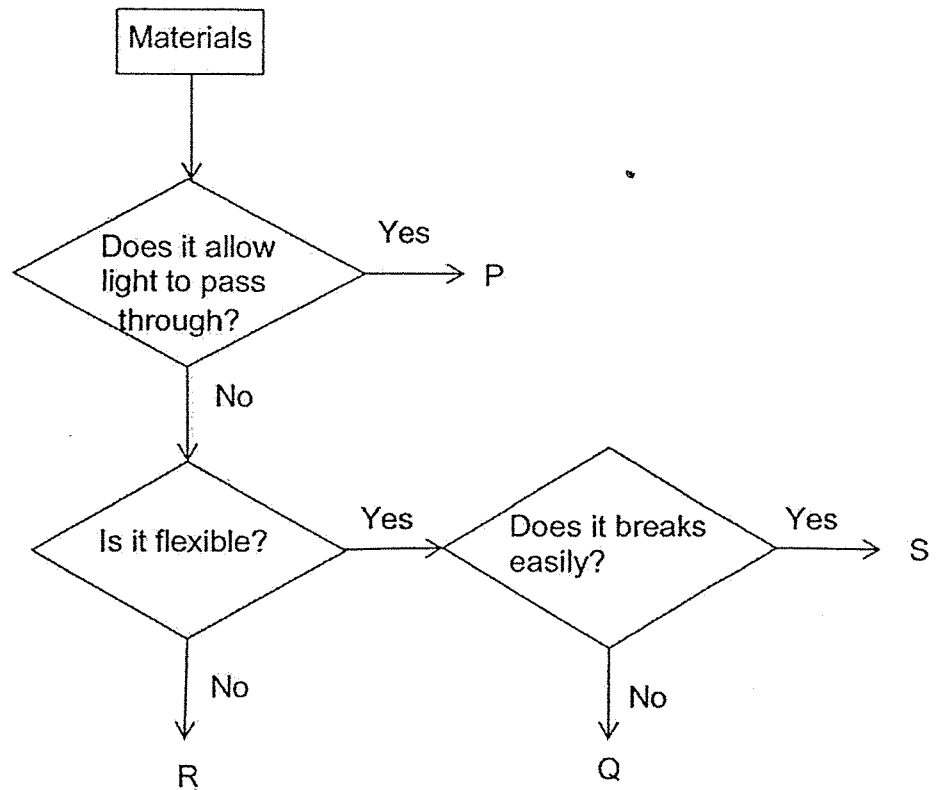
Alice put all her wet groceries into her bag as shown below.



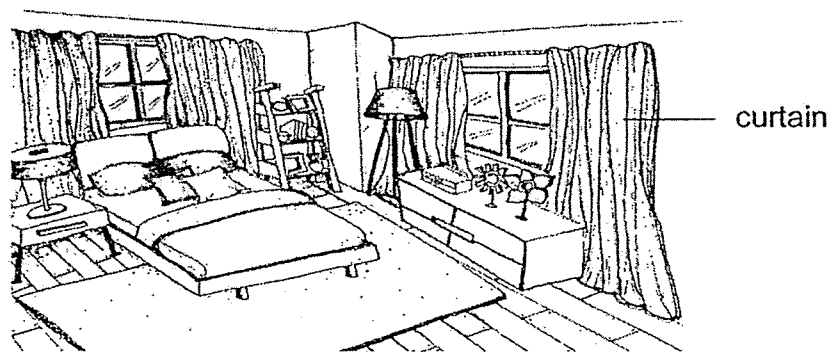
Which of the following materials is the most suitable to make the bag to hold her wet groceries?

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

18. Study the flowchart below.

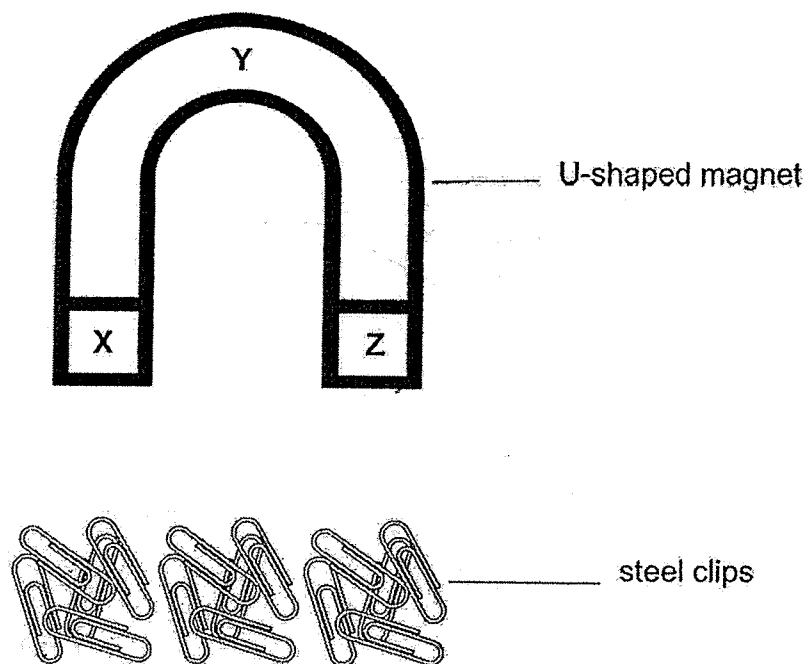


Which one of the following materials is most suitable for making curtain to keep the bedroom dark in the afternoon during nap?



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

19. A U-shaped magnet was held above some steel clips as shown in the diagram below.

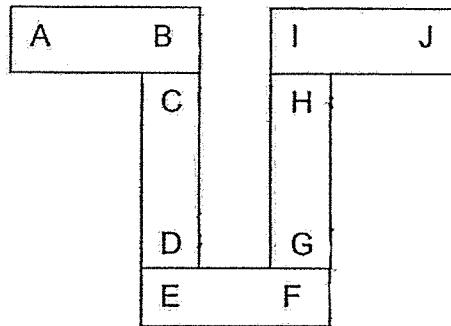


Which of the following correctly shows the number of steel clips attracted to parts, X, Y and Z, of the magnet?

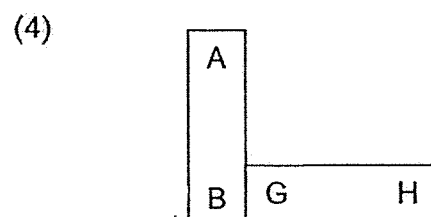
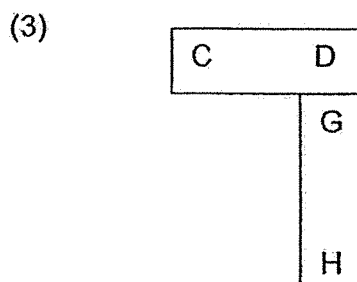
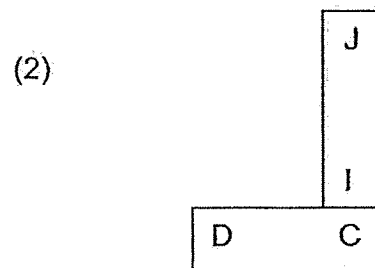
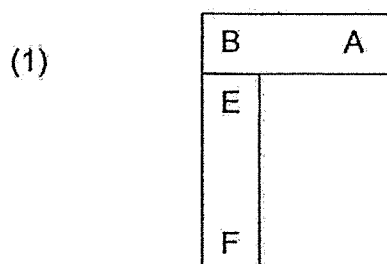
	X	Y	Z
(1)	10	3	2
(2)	6	1	7
(3)	2	5	8
(4)	0	15	0






20. Five bar magnets with their poles marked A to J are arranged as shown below.



Which one of the following diagrams is **NOT** a possible arrangement of the two magnets?



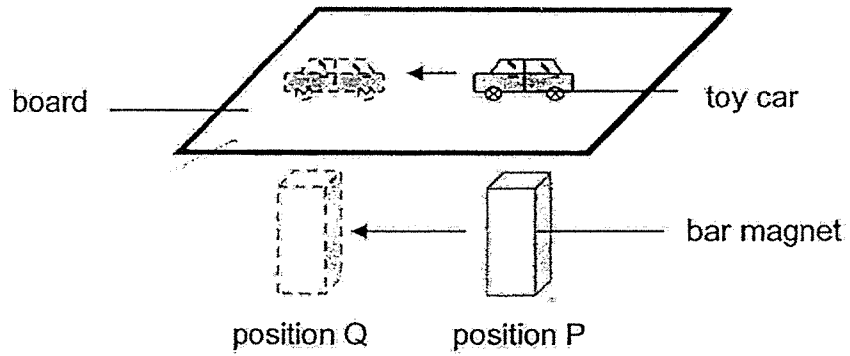
21. The diagram below shows how three different bars; A, B and C, interact with each other.

Bars placed near to each other	Observation
 <p style="text-align: center;">A                      B</p>	No interaction
 <p style="text-align: center;">B                      C</p>	Attraction
 <p style="text-align: center;">C                      A</p>	No interaction

Which one of the following correctly identifies bars A, B and C?

	A	B	C
(1)	magnet	iron	copper
(2)	iron	magnet	copper
(3)	copper	magnet	iron
(4)	magnet	copper	iron

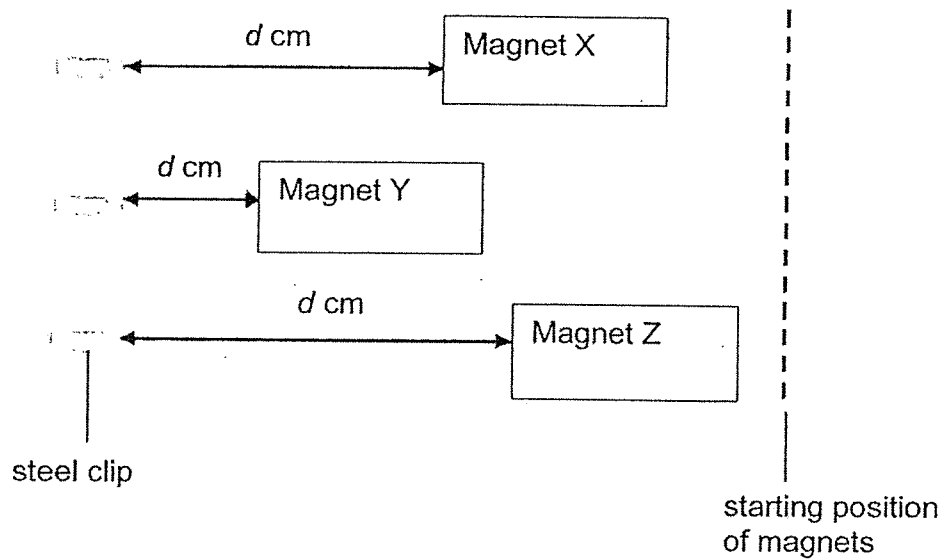
22. Jimmy moved the toy car across the board using a bar magnet from position P to Q as shown in the diagram below. The arrows below show the direction of movement.



What materials could the board and toy car be made of?

	Board	Toy Car
(1)	iron	plastic
(2)	steel	paper
(3)	plastic	steel
(4)	glass	aluminium

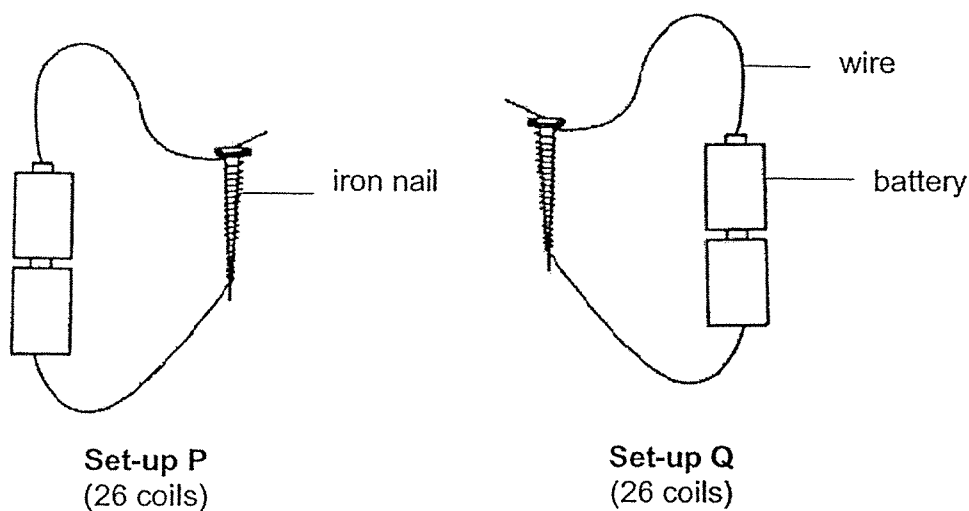
23. Helen wanted to find out the strength of magnets X, Y and Z. She moved each magnet from the same starting position towards the steel clip until it started to attract the paper clip. She measured the distance,  $d$ , between the magnet and the steel clip as shown in the diagram below.



Which one of the following shows the correct order of the magnetic strength of the magnets arranged from the weakest to the strongest?

	Weakest	→	Strongest
(1)	X		Z
(2)	Y		Z
(3)	Z		Y
(4)	Z		X

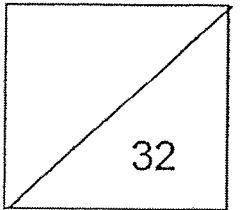
24. Mrs Lim set up an experiment, using identical batteries, iron nails and wire, as shown in the diagrams below.



Which of the following changes should be made to set-up P or Q to allow the electromagnet in set-up Q to attract more iron pins?

- A Use a longer wire in set-up Q.
  - B Add more batteries to set-up Q.
  - C Remove a battery from set-up P.
  - D Increase the number of coils around the iron nail in set-up Q.
- (1) B and D only  
(2) A, B and D only  
(3) B, C and D only  
(4) A, B, C and D

Name; \_\_\_\_\_ Index No: \_\_\_\_\_ Class : 3 \_\_\_\_\_



**SECTION B (32 marks)**

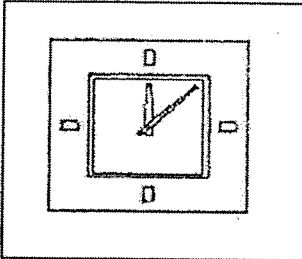
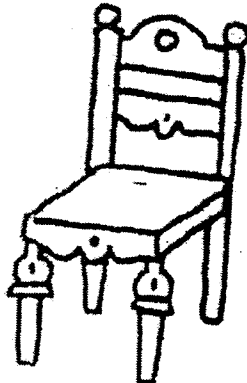
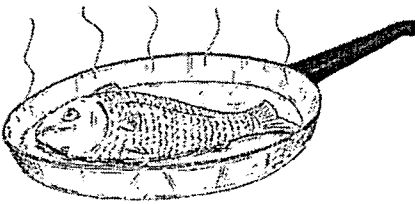
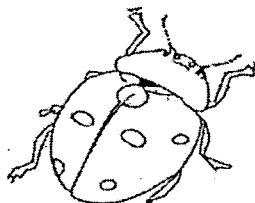
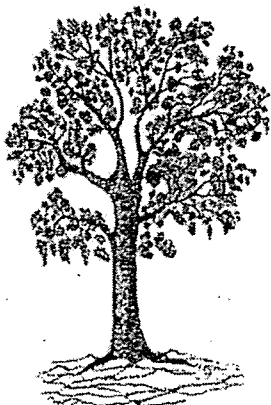
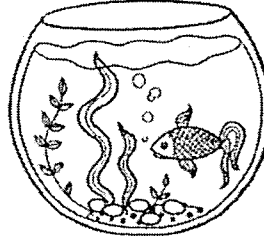
For questions 25 to 37, write your answers clearly in the spaces provided.

The number of marks available is shown in brackets [ ] at the end of each question or part question.

25. Jackson found some things and classified them into two groups X and Y.

(a) Give suitable sub-headings for each group.

[1]

(a) Things	
Group X	Group Y
<p>(ai) _____</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">             clock         </div> <div style="text-align: center;">             chair         </div> </div> <div style="text-align: center; margin-top: 20px;">             fried fish         </div>	<p>(aii) _____</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">             ladybug         </div> <div style="text-align: center;">             tree         </div> </div> <div style="text-align: center; margin-top: 20px;">             fish         </div>

(b) State a common characteristic that the things in group Y have but not in group X. [1]

\_\_\_\_\_

Score	2
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26. Ben placed the same number of guppies into three identical glass tanks, X, Y and Z. The guppies in each tank were fed with different amount of food. The number of guppies was recorded after a month.

	Tank X	Tank Y	Tank Z
Number of guppies at first	4	4	4
Number of guppies after a month	0	7	12

- (a) She forgot to feed the guppies in one of the tanks. Which tank was it? Explain your answer.

[1]

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- (b) Explain why there are more guppies in tanks Y and Z after a month when Ben did not add any guppies into the tanks.

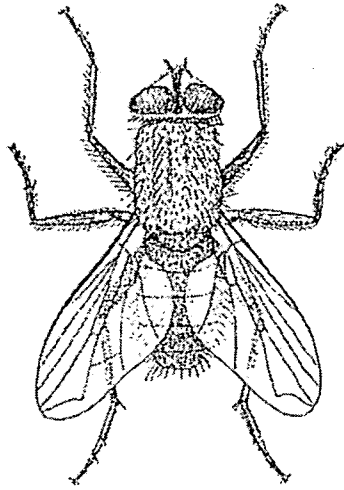
[1]

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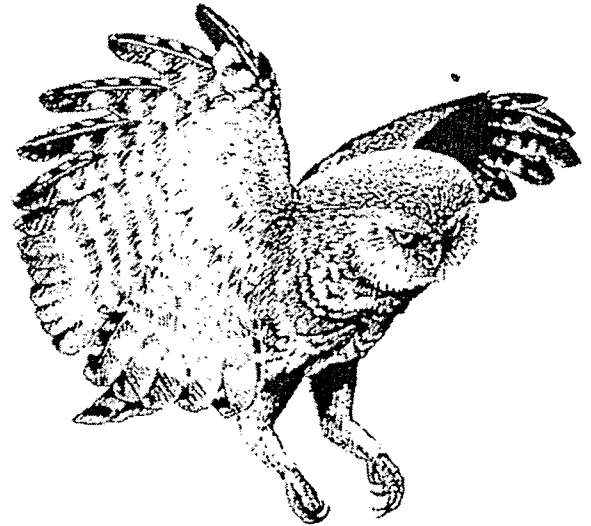
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Score	2
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27. Animals, X and Y, are shown in the diagram below.



Animal X



Animal Y

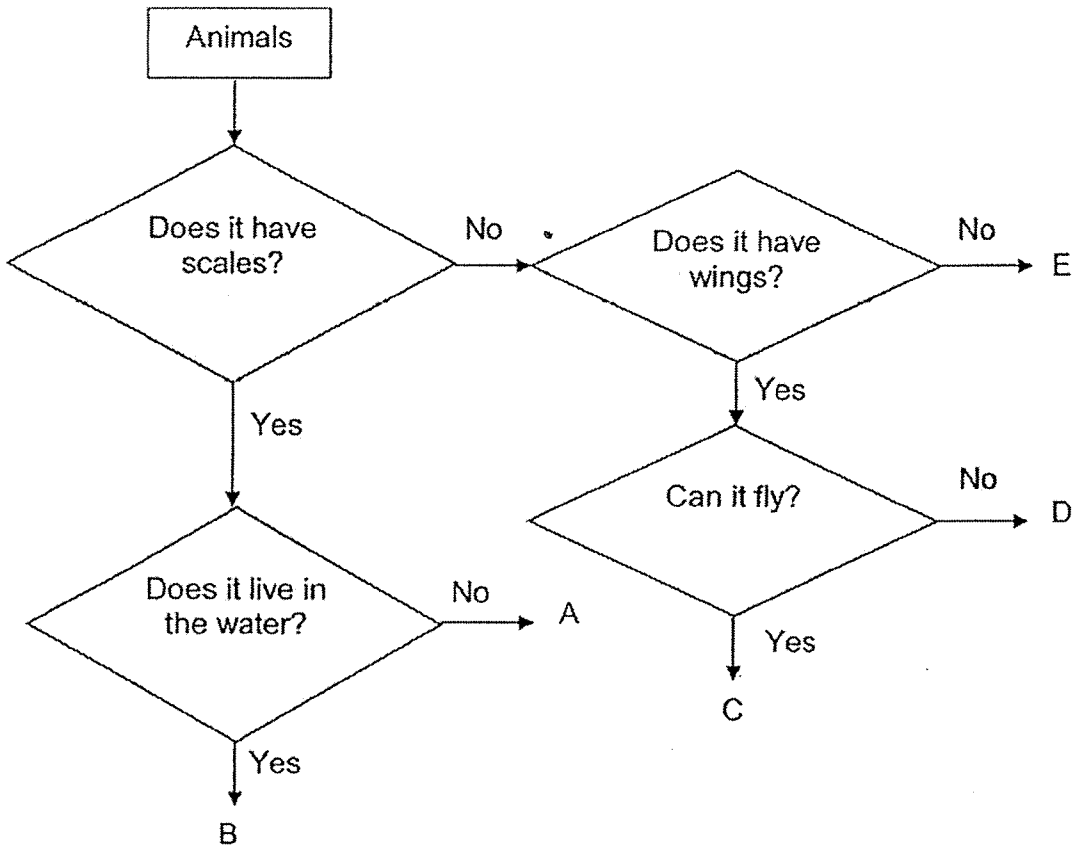
Based on your observation, state one similarity and one difference between animals X and Y. Do not compare shape, size, colour or pattern. [2]

<b>(a) Similarity</b>	<hr/> <hr/>
<b>(b) Difference</b>	<hr/> <hr/>

Score	2
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28. Study the flow chart below carefully.



Based on the information above, answer the following questions.

(a) State one characteristic of Animal B. [1]

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(b) Could animal A be a fish? Give a reason for your answer. [1]

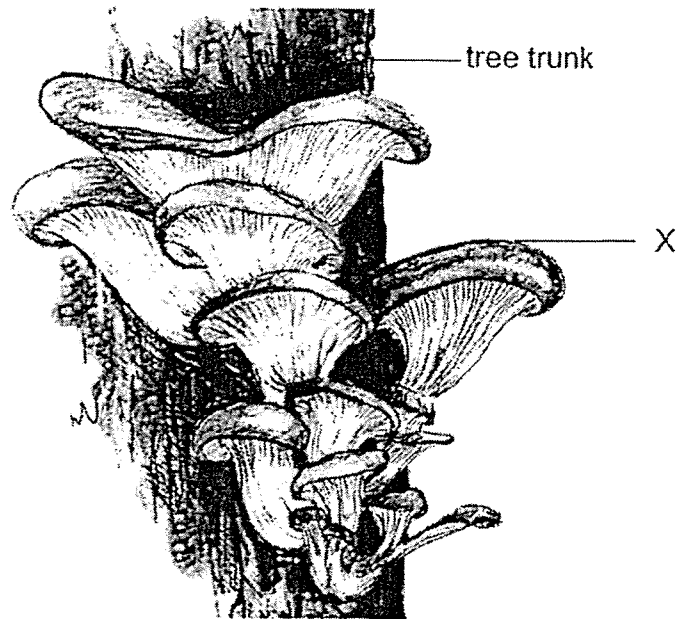
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(c) State a common characteristic of animals C and D. [1]

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Score	3
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29. The diagram below shows X growing on a tree.



(a) Name the group of living things that X belongs to.

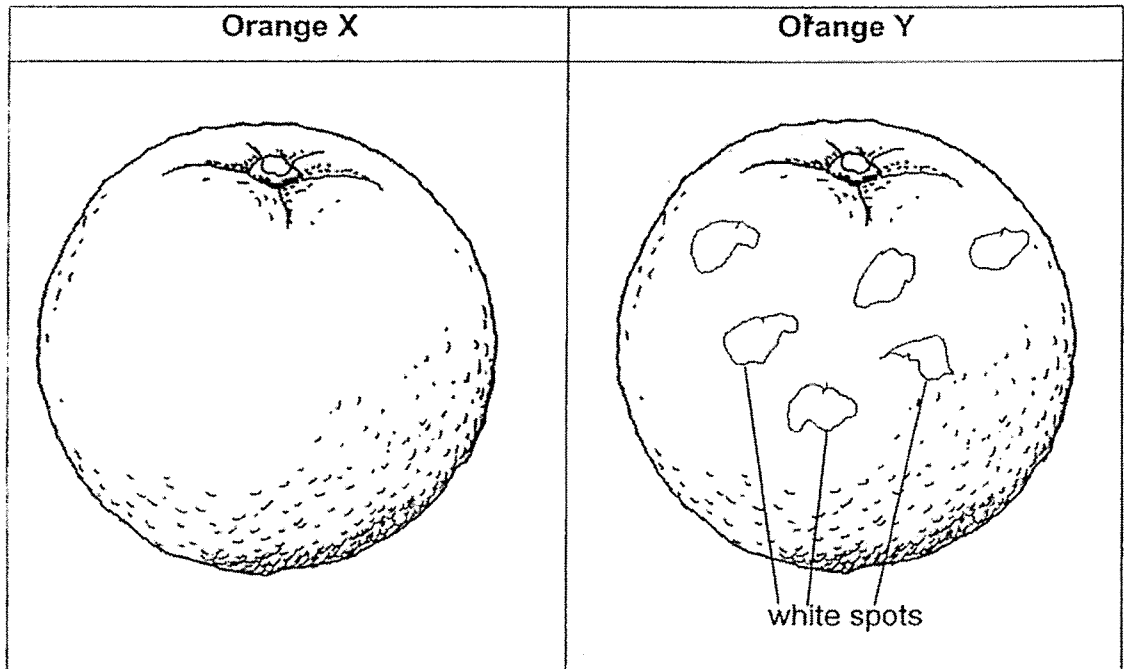
[1]

(b) How does X reproduce?

[1]

Score	2
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30. Sam set up an experiment to find out if water affects the growth of the white spots. He placed two oranges in two identical lunch boxes. He added some water to the orange in one lunch box. He recorded his observations after one week, as shown below.



- (a) What could the white spot in orange Y be? [1]

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- (b) Sam added water to one of the oranges. Which orange, X or Y, did he add the water? [1]

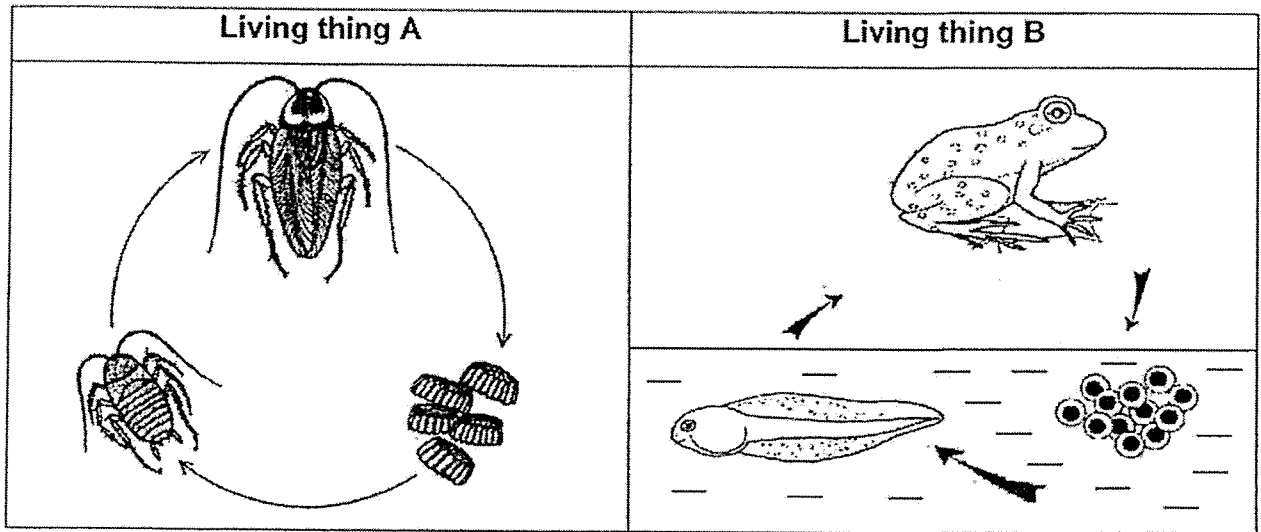
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- (c) Explain your answer in (b). [1]

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Score	3
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31. The diagrams below show the life cycle of living things A and B.



State one similarity and one difference between the life cycle of living things A and B. [2]

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

Score	2
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32. Michael observed how long animal X spend at each stage of its life cycle. He recorded his observations in the table below.

Stages of life cycle	Egg	larva	Pupa	Adult
Number of days	3	25	17	14

(a) Based on his observations above, how long does it take for animal X to reach the pupal stage after it was hatched? [1]

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(b) At which stage(s) would it be the easiest to get rid of animal X? Explain your answer. [1]

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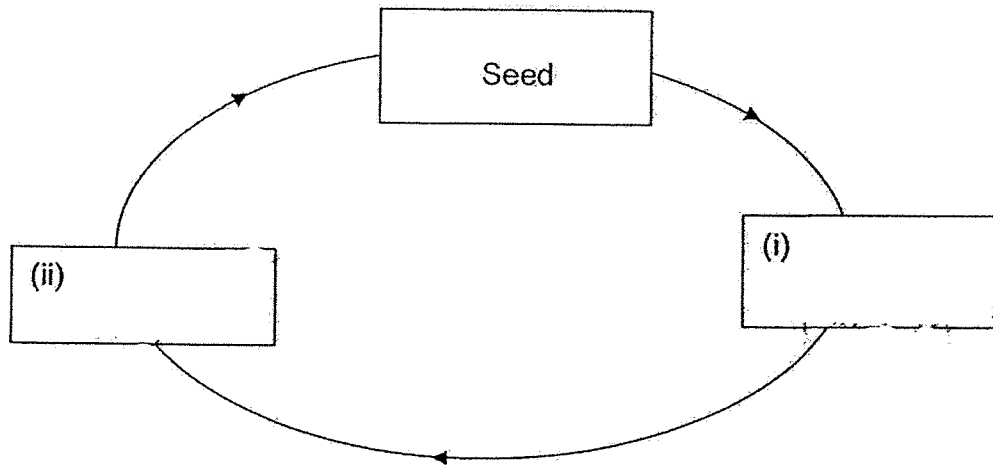
(c) X spends part of its life cycle in the water. Give an example of animal X. [1]

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Score	3
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33. The diagram below shows the life cycle of a plant.

(a) Complete the life cycle of the plant by identifying the correct stages in (i) and (ii). [1]



(b) Name the part of the plant that helps to make food at stage (ii).

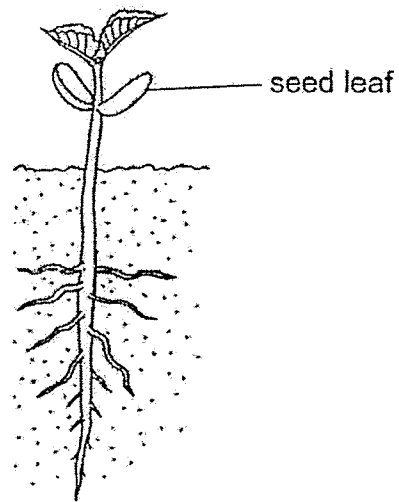
[1]

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Score	2
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34. The diagram below shows a seedling with its seed leaf.



The mass of the seed leaf is recorded in the table below.

Day	Mass of seed leaf (g)
0	5
5	3
10	1

- (a) Base on the table above, describe the change in the mass of the seed leaf over time. [1]

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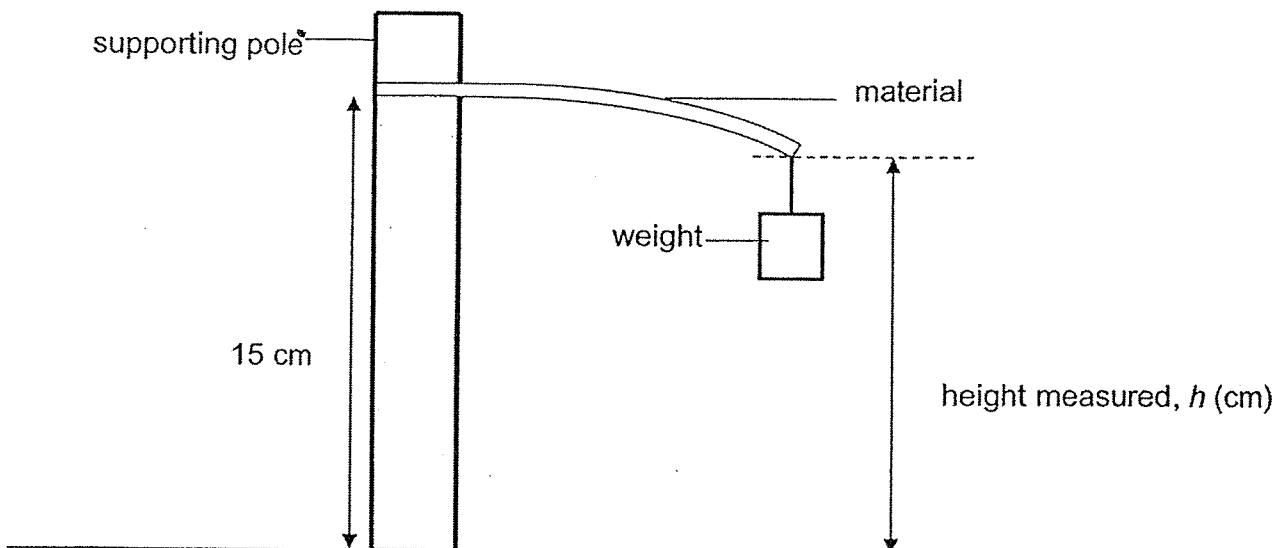
- (b) Give a reason for your answer in (a). [1]

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Score	2
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35. Kristy wanted to find out the flexibility of four materials, W, X, Y and Z. She set up the experiment as shown below, using the same supporting pole and hanging the weight on each material.



Kristy then measured the height,  $h$ , as shown above and recorded her results in table below.

Materials	W	X	Y	Z
Height measured, $h$ (cm)	15	5	9	11

- (a) Which is the most flexible material, W; X, Y or Z? Give a reason for your answer. [1]

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- (b) Which material, W, X, Y or Z, is most suitable to make into a chopsticks? Give a reason for your answer. [1]

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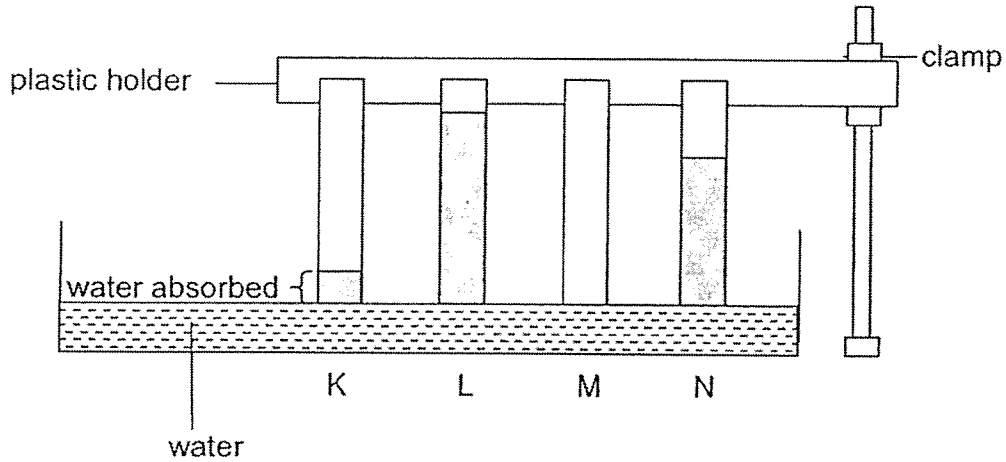
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Score	2
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2020 P3 Science EYE



36. Four different materials, K, L, M and N, of equal length and size were placed in a basin of coloured water. The diagram below shows the amount of water absorbed by each material after four minutes.



- (a) Arrange the materials, K, L, M and N, starting with the most absorbent. [1]

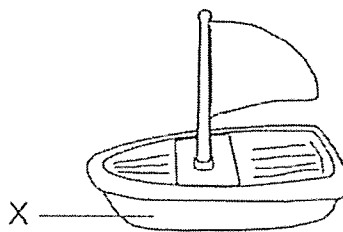


most absorbent



least absorbent

- (b) Which material, K, L, M or N is most suitable to make part X of the sailing boat shown below? Explain your answer. [2]



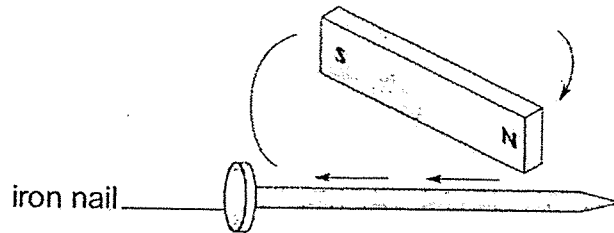

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Score	3
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37. Lily wanted to find out if the number of strokes made by a magnet on an iron nail would affect the number of steel pins attracted to the iron nail. She stroked an iron nail twenty times as shown in the diagram below. She then placed the iron nail above a tray of steel pins and counted the number of steel pins it attracted.



She repeated the experiment with two other identical iron nails, stroking each iron nail thirty and eighty times respectively.

- (a) Tick (✓) the variable(s) that has/have to be kept the same in order to conduct a fair test. [1]

Variables	Kept the same (✓)
Number of strokes	
Pole of the magnet used to stroke the iron nail	
Length of iron nail	
Size of steel pins	

Lily recorded her results as shown below.

Number of strokes	Number of steel pins attracted
20	3
30	5
80	11

- (b) What is the relationship between the number of strokes and the number of steel pins attracted? [1]

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- (c) Lily then replaced the iron nail with an aluminium nail and repeated the experiment. How many steel pins would it attract? Explain your answer. [2]

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End of Paper

Score	4
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SCHOOL : RAFFLES GIRLS PRIMARY SCHOOL  
 LEVEL : PRIMARY 3  
 SUBJECT : SCIENCE  
 TERM : 2020 SA2

**SECTION A**

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	4	3	3	2	3	2	2	2	3
Q 11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
2	1	3	1	2	1	4	2	2	2
Q 21	Q22	Q23	Q24						
3	3	2	3						

**SECTION B**

Q25)	Ai) Non-living things Aii) Living things b) Group Y require oxygen but Group X don't.
Q26)	a) Tank X. The number of guppies decreased as they had no food. Living things need food to survive. b) The guppies reproduced.
Q27)	a) They both have wings. b) Animal X has six legs but Animal Y has two legs.
Q28)	a) Animal B has scales b) No. Although animal A has scales, it does not live in water. All fish live in water. c) They both have wings.
Q29)	a) Fungi b) By spore
Q30)	a) Mould b) Orange Y.

	c) Mould grows faster when there is water.				
Q31)	Similarity: They both have three stages. Difference: The young of living thing B does not resemble the adult but the young of living thing A resembles the adult.				
Q32)	a) 25 days. b) Egg. The sgg does not move. c) Mosquito.				
Q33)	a)i) young plant ii) adult plant b)leaf.				
Q34)	a) It decreased. b) When the young plant takes more food from the seed leaf, it becomes lighter.				
Q35)	a) X. The height is the lowest, which means it is the most flexible. b) W. It is the stiffest material.				
Q36)	a) L, N, K, M b) M, it is not absorbent.				
Q37)	a) <table border="1" style="margin-left: 20px;"> <tr><td> </td></tr> <tr><td>V</td></tr> <tr><td>V</td></tr> <tr><td>V</td></tr> </table> b)The more the number of strokes, the more steel pins attracted. c)0. Aluminium is not a magnetic material, it cannot be made into a magnet		V	V	V
V					
V					
V					