



Rulang Primary School

SEMESTRAL ASSESSMENT 2 SCIENCE 2018

Name: _____

Marks: _____ / 50

Level: Primary 3

Total Time for Booklets

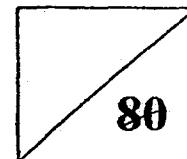
Class: Primary 3 ()

A and B: 1 h 15 min

Setter: Ms Sng Chee Hoon

Date: 30 Oct 2018

Total Marks:



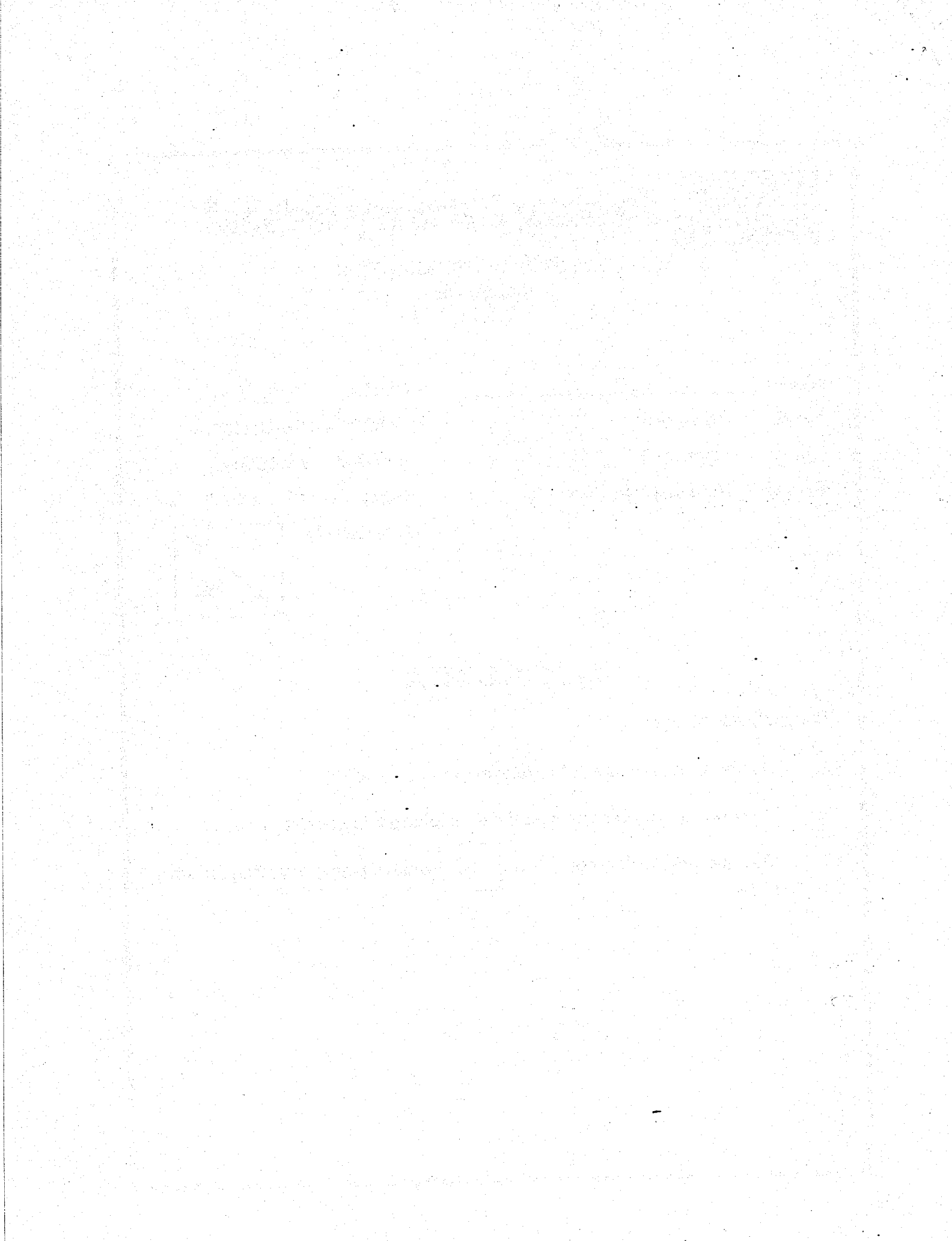
BOOKLET A

Instructions to pupils:

1. Do not open this booklet until you are told to do so.
2. You are required to answer all the questions in this booklet.
3. This question booklet consists of

16

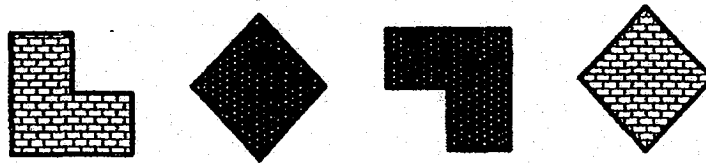
 printed pages, including the cover page.



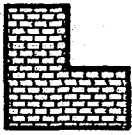
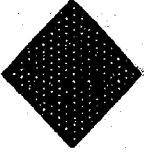
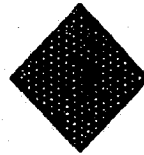
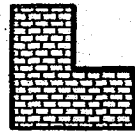
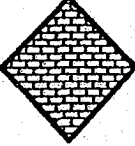
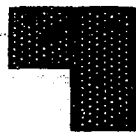
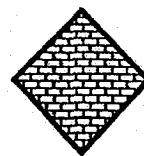

Section A (25 x 2 marks)

For each of the questions from 1 to 25, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade the answers in the Optical Answer Sheet (OAS) provided.

1. Mandy and Kenny were each given 4 objects.



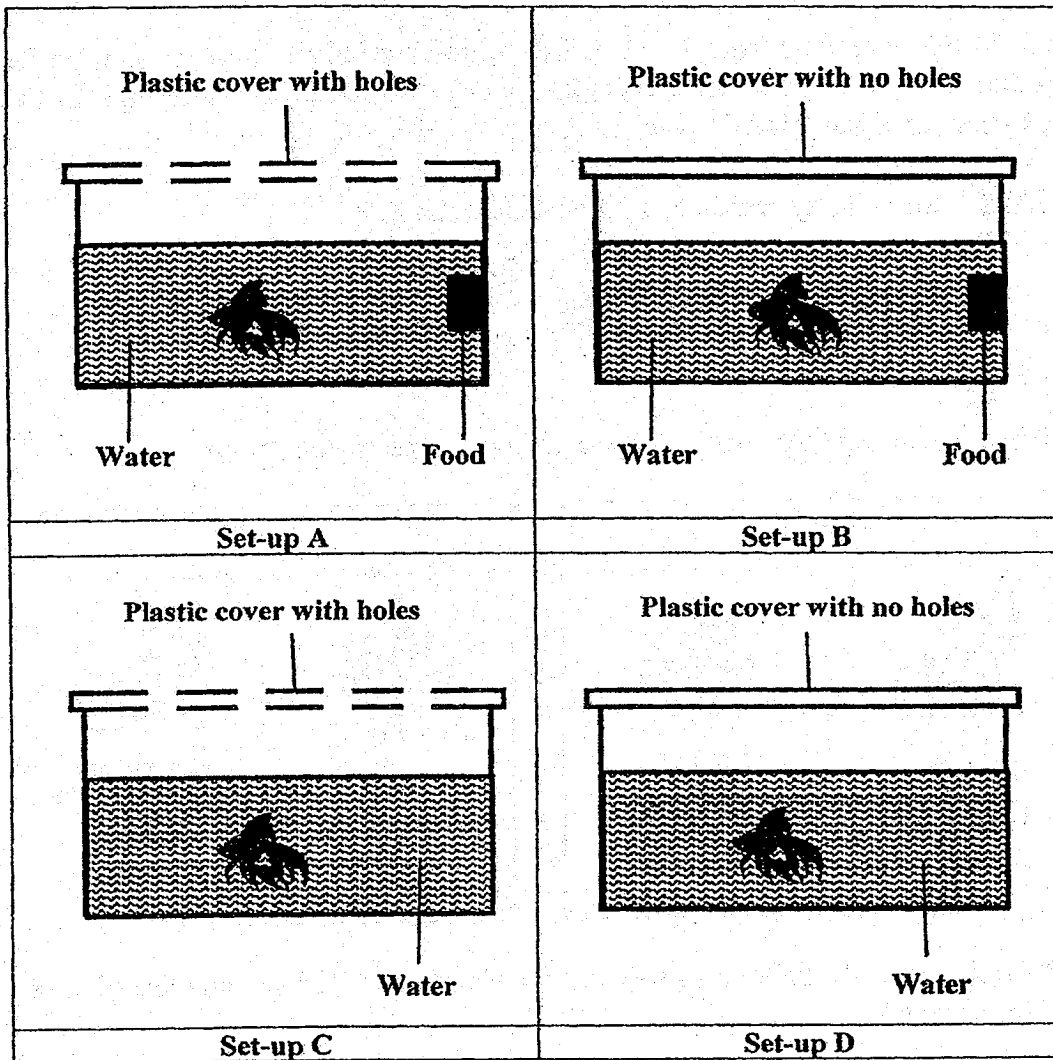
They classified them differently as shown in the tables below.

Mandy		Kenny	
			
			

Which one of the following shows how Mandy and Kenny had classified the four objects?

	Mandy	Kenny
(1)	patterns	shapes
(2)	sizes	shapes
(3)	shapes	patterns
(4)	patterns	sizes

2. Valerie wanted to find out if a fish needs air to survive. She prepared four set-ups as shown below.



Which pair of set-ups should she use for her experiment?

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

3. Four pupils made the following comments about plants.

Ali: A plant is a living thing because it can grow taller.

Bob: A plant is a non-living thing because it cannot reproduce.

Cath: A plant is a non-living thing because it cannot move on its own.

Devi: A plant is a living thing because it needs air, food and water to survive

Which one of the following pairs of comments are correct?

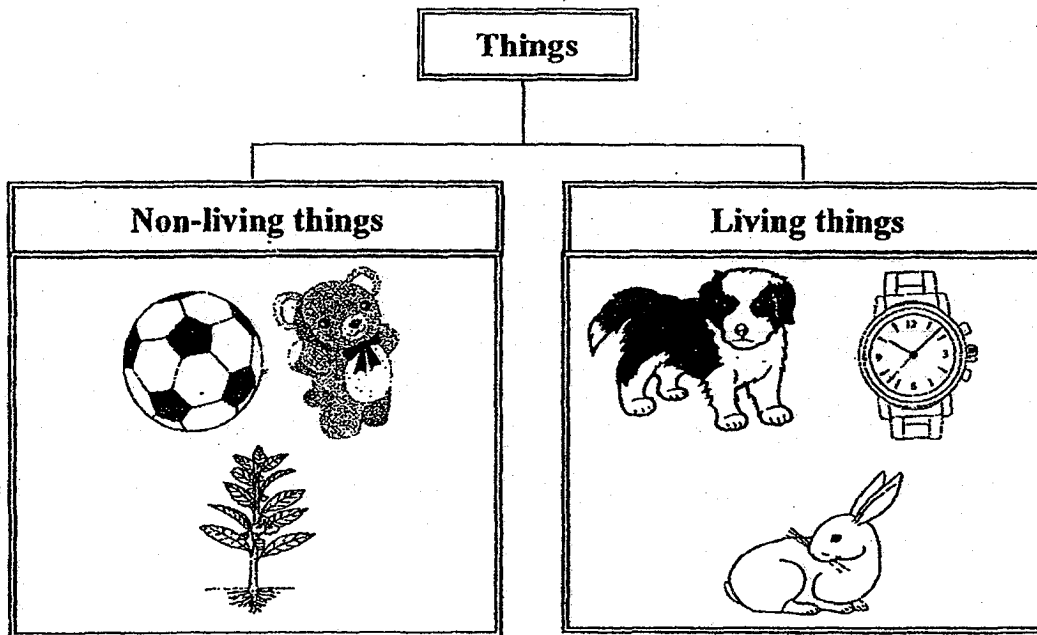
(1) Ali and Cath

(2) Ali and Devi

(3) Bob and Cath

(4) Bob and Devi

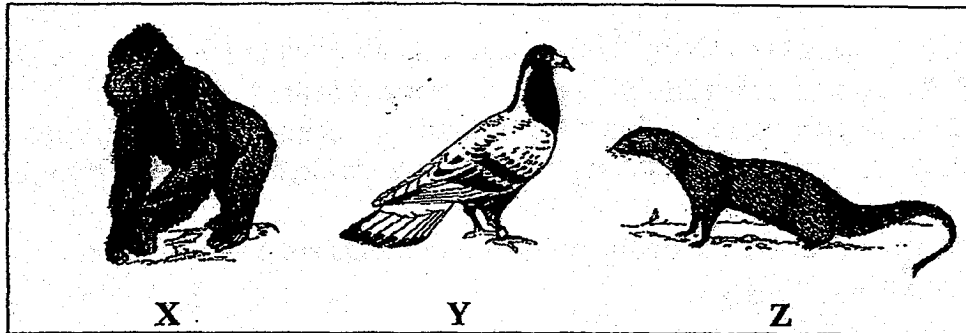
4. Study the classification chart below carefully.



Which one of the following things are wrongly classified under the headings?

	Non-living things	Living things
(1)	football	watch
(2)	teddy bear	rabbit
(3)	balsam plant	watch
(4)	football	puppy

5. The diagram below shows a group of three animals, X, Y and Z.



Animal Y does not belong to the group because it _____.

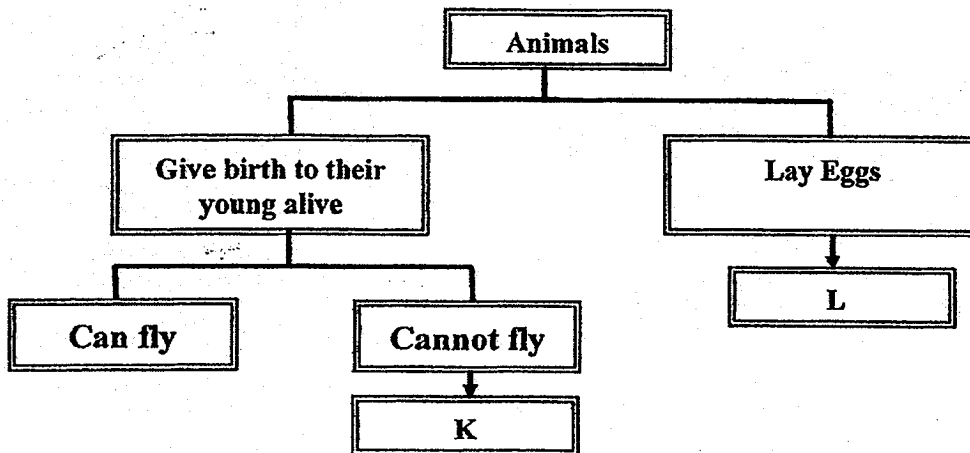
- (1) has a tail
 - (2) has two eyes
 - (3) gives birth to its young alive
 - (4) has feathers as its outer covering
6. Study the table below carefully.

Animal	Has wings to fly	Has fins to swim
bat	x	✓
shark	x	x
pigeon	✓	x
monkey	✓	x

Which one of the following animals has been described correctly?

- (1) bat
- (2) shark
- (3) pigeon
- (4) monkey

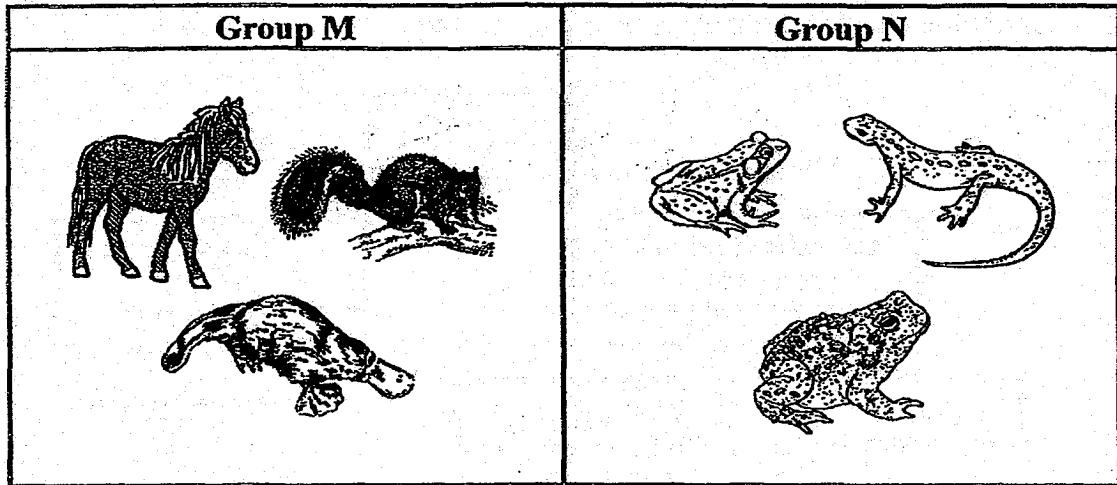
7. Study the classification chart below carefully.



Based on the information in the chart above, which one of the following sets of descriptions states the correct difference between animals K and L?

Difference		
	Animal K	Animal L
(1)	It can fly.	It cannot fly.
(2)	It cannot fly.	It can fly.
(3)	It lays eggs.	It gives birth to its young alive.
(4)	It gives birth to its young alive.	It lays eggs.

8. Study the pictures below carefully.



Which one of the following sets is the possible headings for groups M and N?

	Group M	Group N
(1)	Amphibians	Mammals
(2)	Mammals	Reptiles
(3)	Mammals	Amphibians
(4)	Reptiles	Mammals

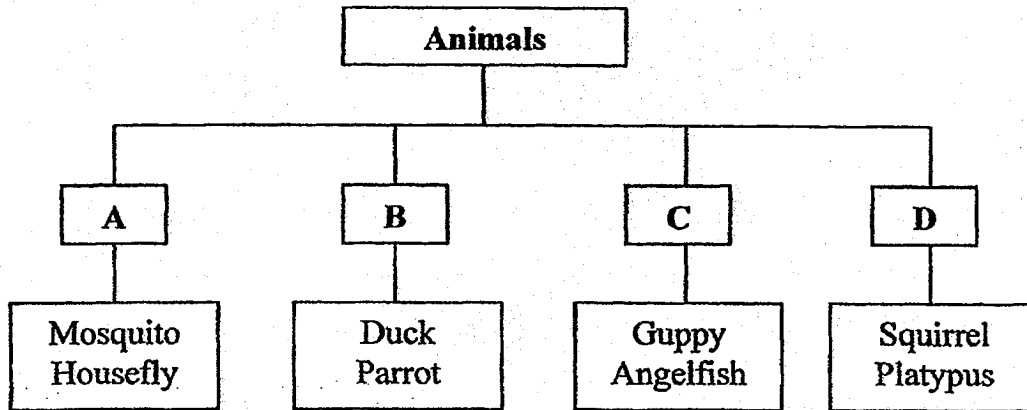
9. Animal X has the following characteristics as shown below.

- | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • It breathes through its lungs. • It reproduces by laying eggs. • It has scales as its body covering. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Which one of the following groups of animals does X belong to?

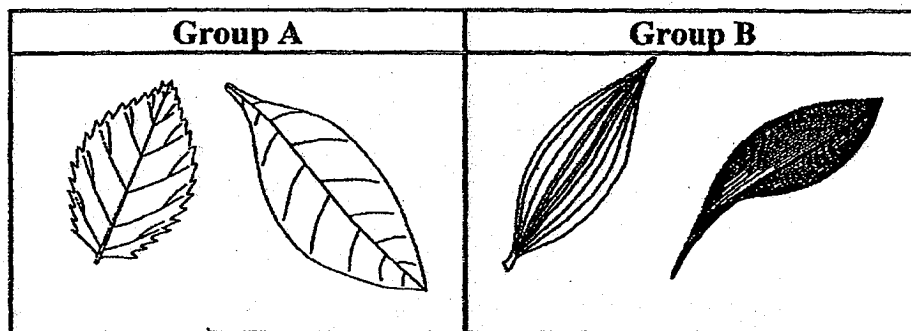
- (1) fish
- (2) birds
- (3) reptiles
- (4) mammals

10. The classification chart below shows how some animals are grouped according to their body coverings.



In which group should a bat be placed under?

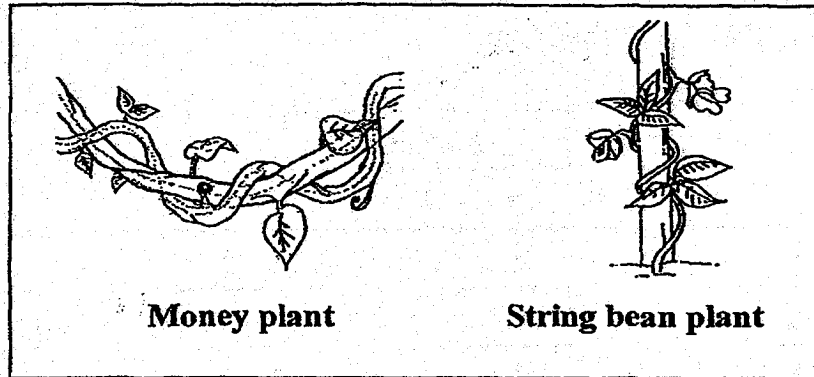
- (1) A
 - (2) B
 - (3) C
 - (4) D
11. Study the classification table below carefully.



Which one of the following sets best represents the headings for groups A and B?

	Group A	Group B
(1)	Leaves with a stalk	Leaves with no stalk
(2)	Leaves with network veins	Leaves with parallel veins
(3)	Leaves with jagged edges	Leaves with entire edges
(4)	Heart-shaped leaves	Lance-shaped leaves

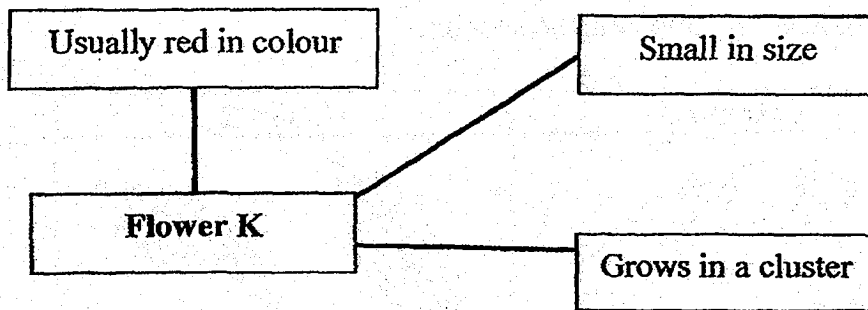
12. The diagram below shows two plants.



What can you tell about the stems of both plants?

- (1) Both have no stems.
- (2) Both have weak stems.
- (3) Both have strong stems.
- (4) Both have woody and strong stems.

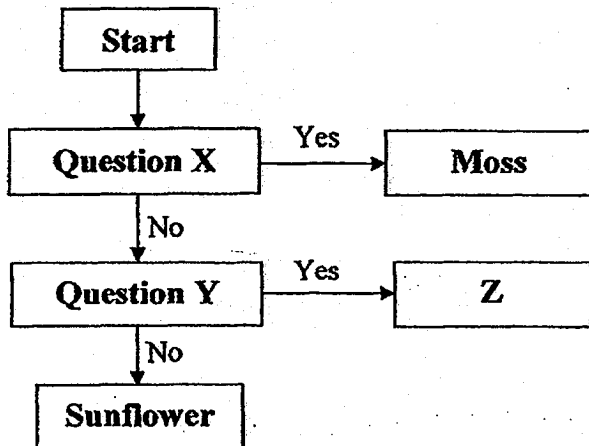
13. Study the concept map below carefully.



Which one of the following best represents flower K?

- (1) Ixora
- (2) Hibiscus
- (3) Water lily
- (4) Sunflower

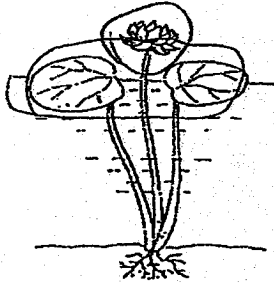
14. Study the flowchart below carefully.



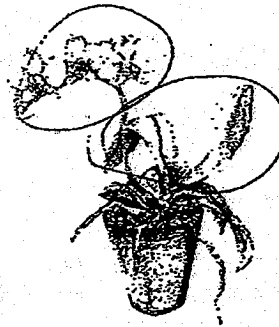
Which one of the following sets best represents question X, question Y and Z?

	Question X	Question Y	Z
(1)	Does it reproduce by spores?	Does it have a weak stem?	Morning glory
(2)	Does it reproduce by seeds?	Does it have fruits?	Onion
(3)	Does it have leaves?	Does it have a weak stem?	Morning glory
(4)	Does it have roots?	Does it have fruits?	Onion

15. Study the pictures below carefully.



Plant P



Plant Q

What are the common observable features of both plants?

- A: They have leaves.
- B: They are land plants.
- C: They are flowering plants.

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

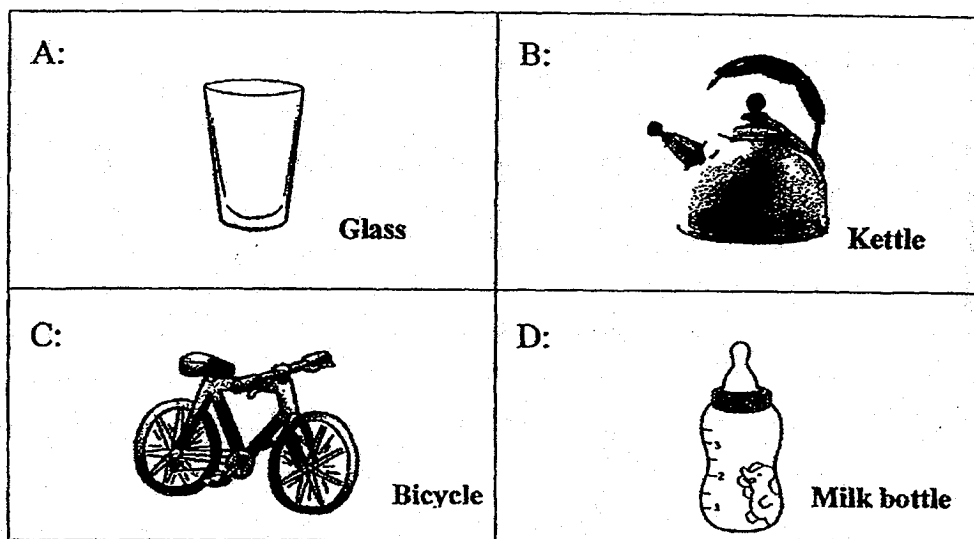
16. Umar said that all bacteria are harmful. However, her friends disagreed with her and made the following comments.

- Ahmad : Bacteria can be used to make bread.
- Bala : Some bacteria aid in our digestion.
- Caili : Some bacteria turn milk into cheese.
- Devi : Bacteria can cure sore throat or stomachache.

Whose comments about bacteria are correct?

- (1) Ahmad and Bala only
- (2) Caili and Devi only
- (3) Ahmad, Bala and Caili only
- (4) Ahmad, Caili and Devi only

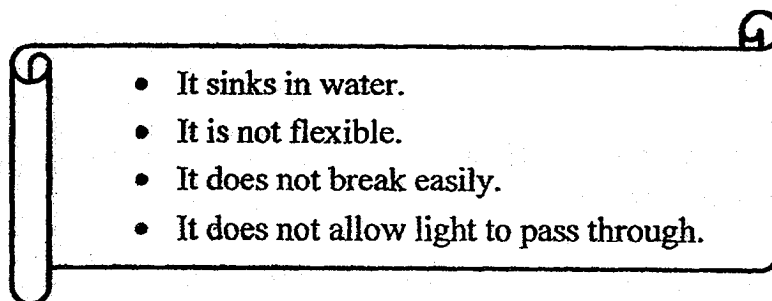
17. Study the pictures below carefully.



Which of the following objects are most likely made of more than one material?

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

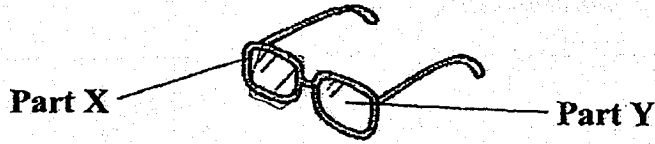
18. Michael described the properties of item X as shown below.



Based on the descriptions above, which one of the following items best represents item X?

- (1) Metal key
- (2) Paper boat
- (3) Rubber band
- (4) Styrofoam box

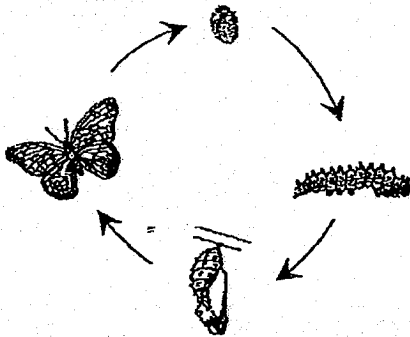
19. Study the diagram below carefully.



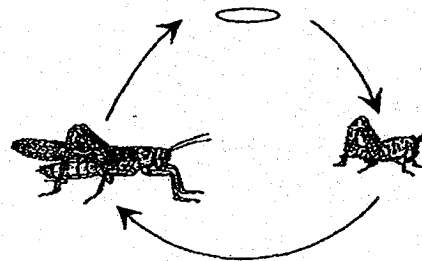
Which one of the following sets of materials best represents parts X and Y?

	Part X	Part Y
(1)	Metal	Glass
(2)	Wood	Rubber
(3)	Glass	Wood
(4)	Plastic	Metal

20. The diagrams below show the life cycles of a butterfly and a grasshopper.



Life Cycle of a Butterfly

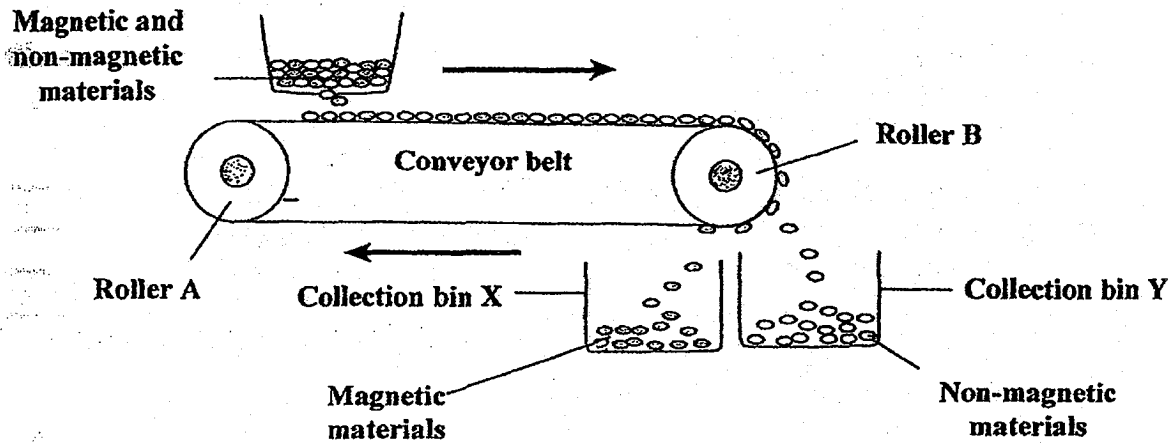


Life Cycle of a Grasshopper

Which one of the following differences between the life cycles of a butterfly and a grasshopper is correct?

- (1) The butterfly lays eggs but the grasshopper does not.
- (2) The adult butterfly can fly but the adult grasshopper can hop only.
- (3) The butterfly has a four-stage life cycle but the grasshopper has a three-stage life cycle.
- (4) The young of the grasshopper does not resemble the adult but the young of the butterfly does.

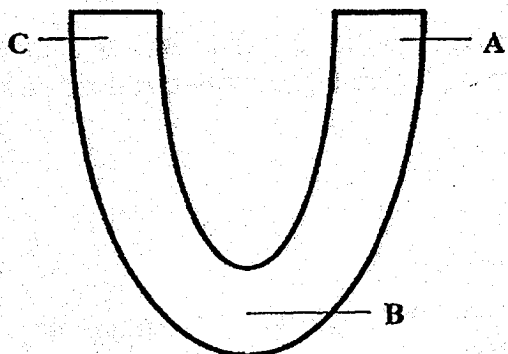
21. A machine was designed to separate magnetic materials from non-magnetic materials. It consists of a conveyer belt passing over two rollers as shown below.



What can you conclude from the diagram above to explain why the magnetic materials can be separated from the non-magnetic materials?

- (1) Roller B is a magnet.
- (2) The rollers and conveyor belt are made of non-magnetic materials.
- (3) Collection bin X is made of non-magnetic materials to attract magnetic materials to it.
- (4) Collection bin Y is made of magnetic materials to attract non-magnetic materials to it.

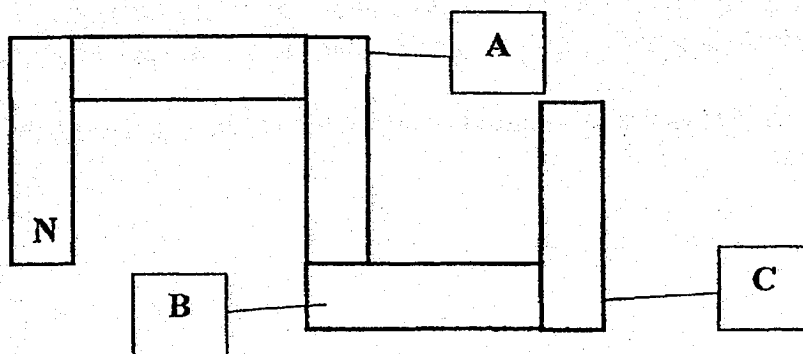
22. Study the U-shaped magnet shown below.



The magnet was placed in a tray of thumbtacks. Which one of the following best represents the number of thumbtacks attracted to A, B and C?

	A	B	C
(1)	5	10	5
(2)	10	5	10
(3)	10	10	10
(4)	10	10	5

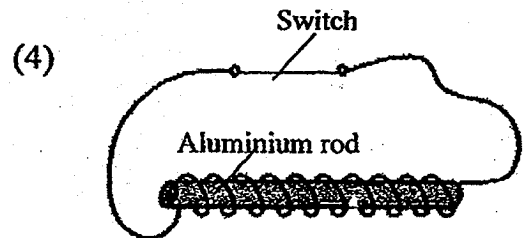
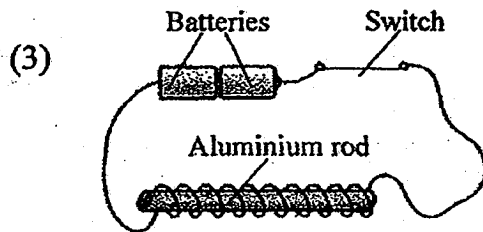
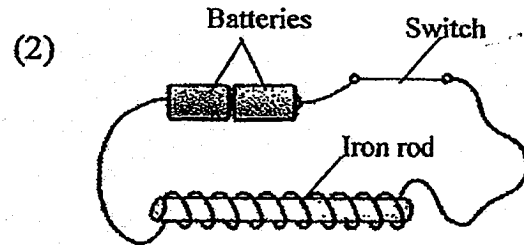
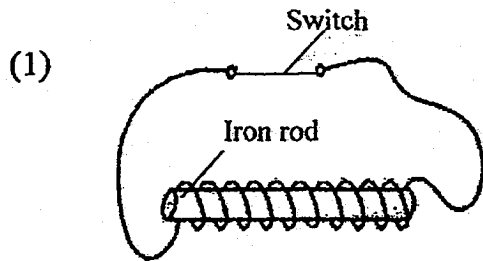
23. The diagram below shows five bar magnets.



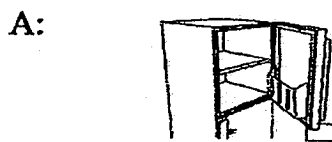
Which one of the following sets best identifies the labelled poles of the magnets?

	A	B	C
(1)	North	North	North
(2)	North	South	South
(3)	South	North	South
(4)	South	South	South

24. Which one of the following rods will become an electromagnet?



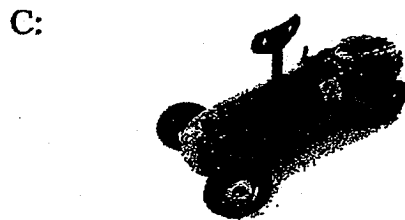
25. Study the diagrams below carefully.



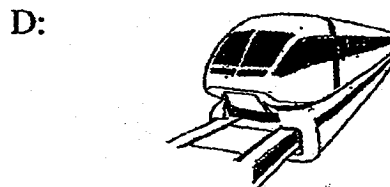
Refrigerator



Pencil case



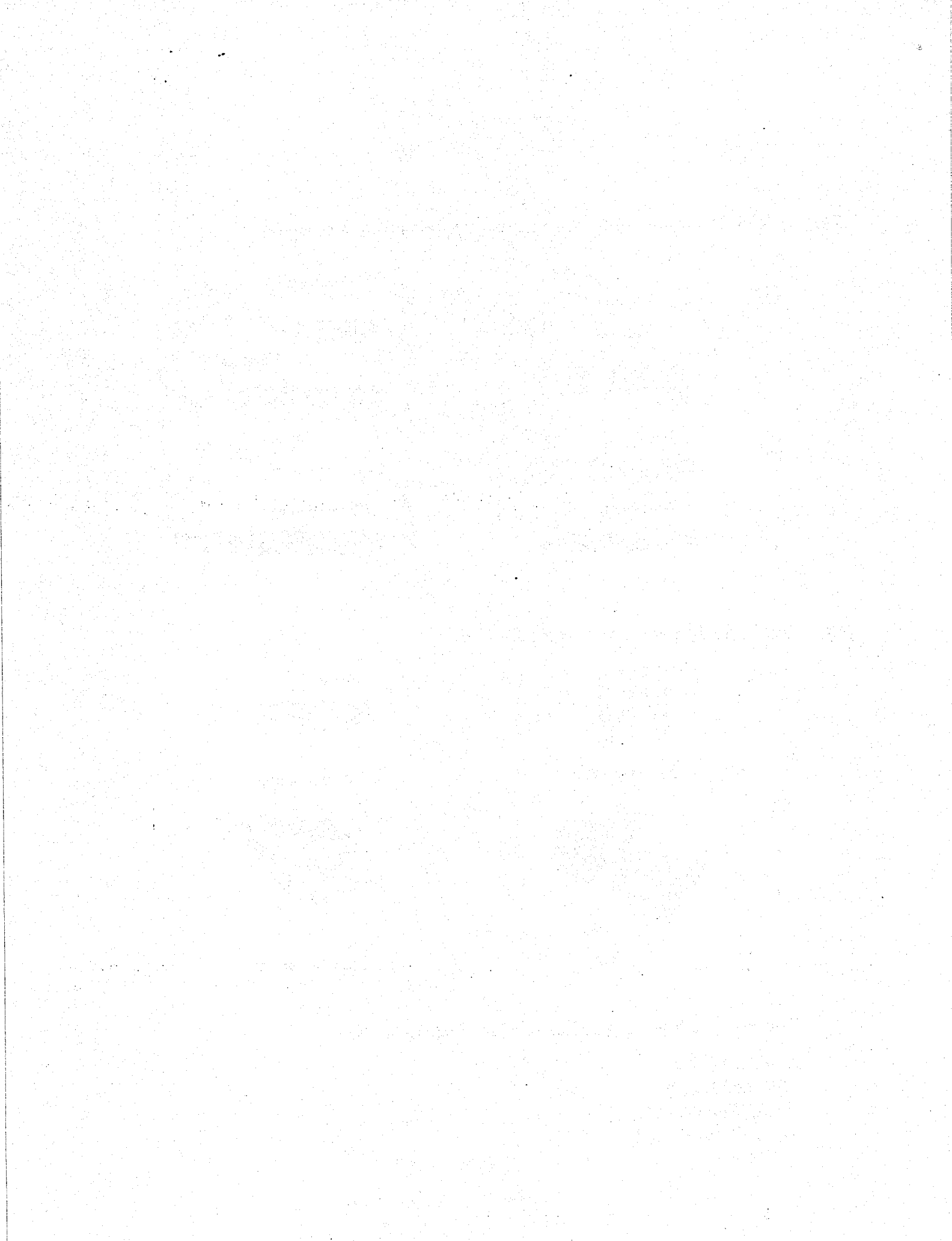
Toy car



Maglev train

Which of the following make use of magnets to work?

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





Rulang Primary School

SEMESTRAL ASSESSMENT 2 SCIENCE 2018

Name: _____

Marks: _____ / 30

Level: Primary 3

Date: 30 Oct 2018

Class: Primary 3 ()

Parent's
Signature: _____

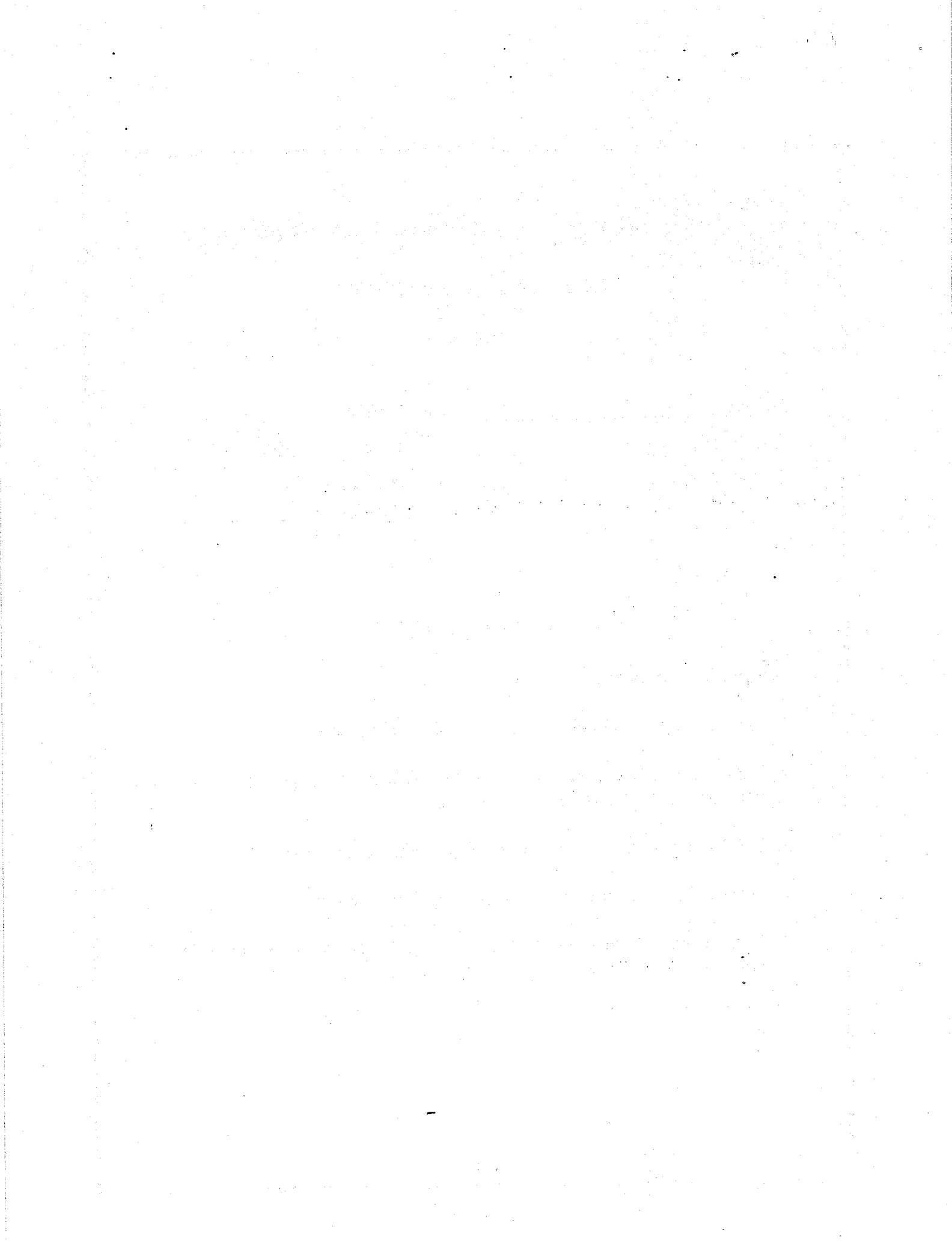
BOOKLET B

Instructions to pupils:

1. Do not open this booklet until you are told to do so.
2. You are required to answer **all** the questions in this paper using your own words / expressions as far as possible.
3. All drawings / diagrams must be clearly shown and labelled.
4. Marks will be deducted for wrongly spelt key words.
5. This question booklet consists of

11

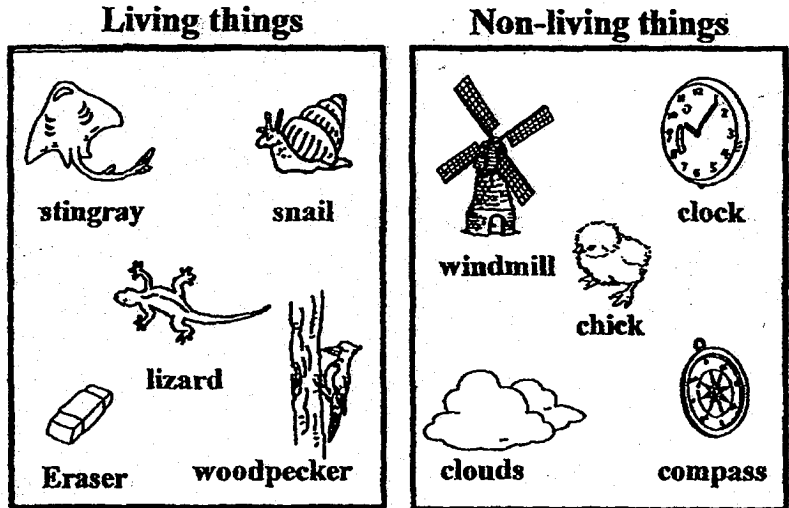
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Section B: (30 marks)

Write your answers to questions 26 to 35 in this booklet.

26. Study the two groups of things as shown below carefully.

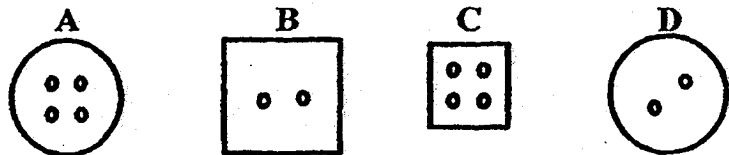


(a) One thing in each of the two groups above are not classified correctly. What are they? (2 m)

_____ and _____

(b) Write down a difference between the characteristics of the things in the two groups. (1 m)

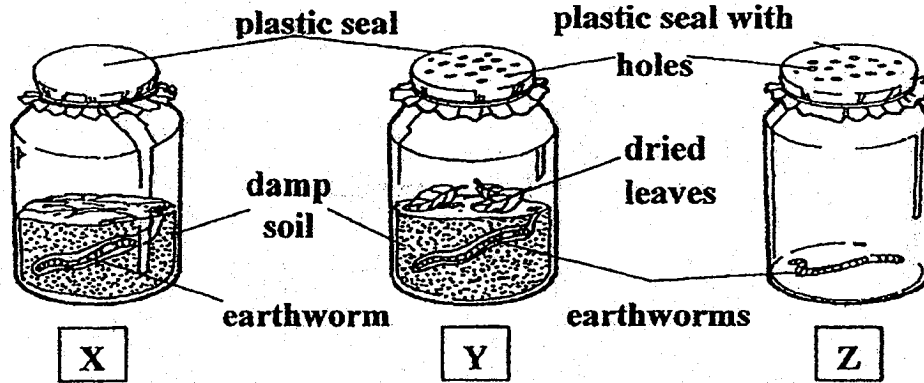
(c) Kiara is given 4 different buttons, A, B, C and D, as shown below.



Classify the 4 buttons under groups X and Y below by their shapes. Write down the letters "A", "B", "C" and "D" in the table below. (1 m)

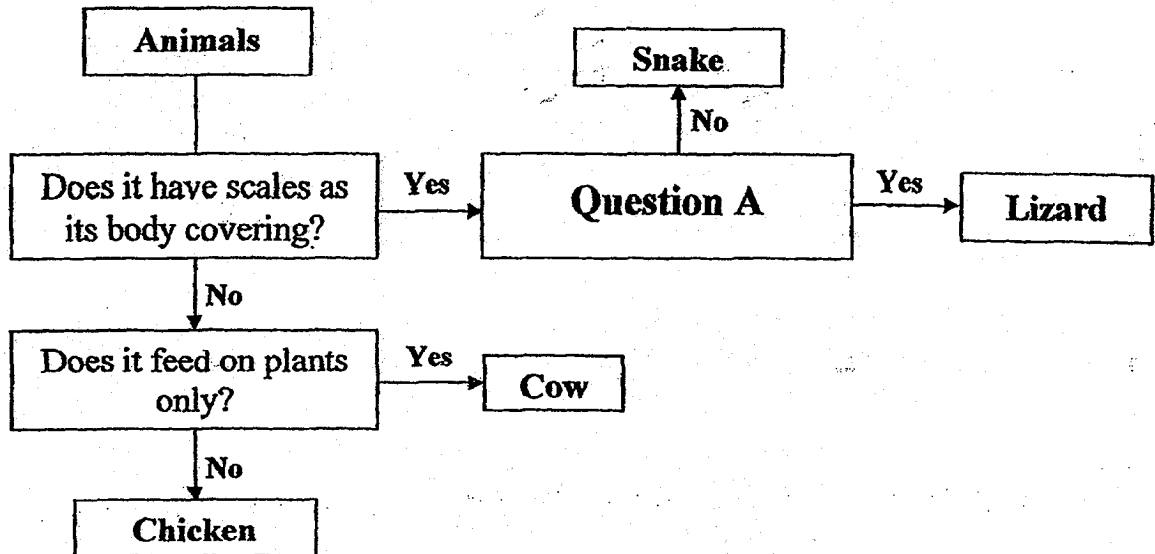
Group X	Group Y

27. In the following experiment, earthworms are kept in three jars under different conditions.



The earthworm in jar Y can survive the longest. Explain clearly why the earthworm will survive the longest. (2 m)

28. Study the flowchart below carefully.

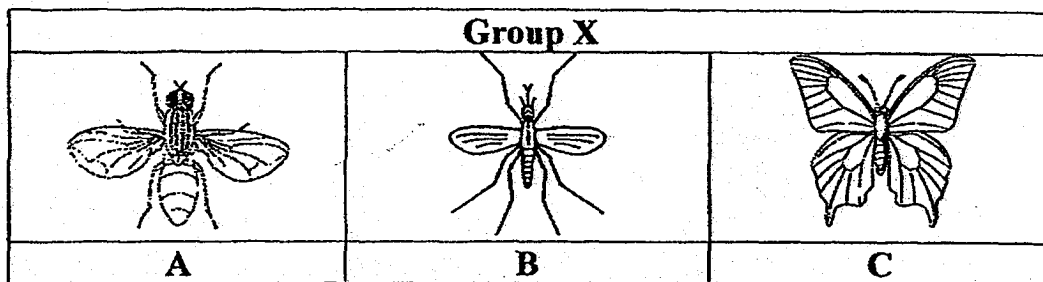


(a) Based on the information in the flowchart, write down question A. (1 m)

(b) Based on the information in the flowchart, write down a difference between a lizard and a cow. (1 m)

(c) Based on the information in the flowchart, write down one characteristic of a chicken. (1 m)

29. Study the pictures below carefully.



(a) Which one of the following animals can be placed in the same group as shown above? Put a tick (✓) in the box provided below. (1 m)



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(b) What are two common observable characteristics to distinguish the animals in group X from other living things? (2 m)

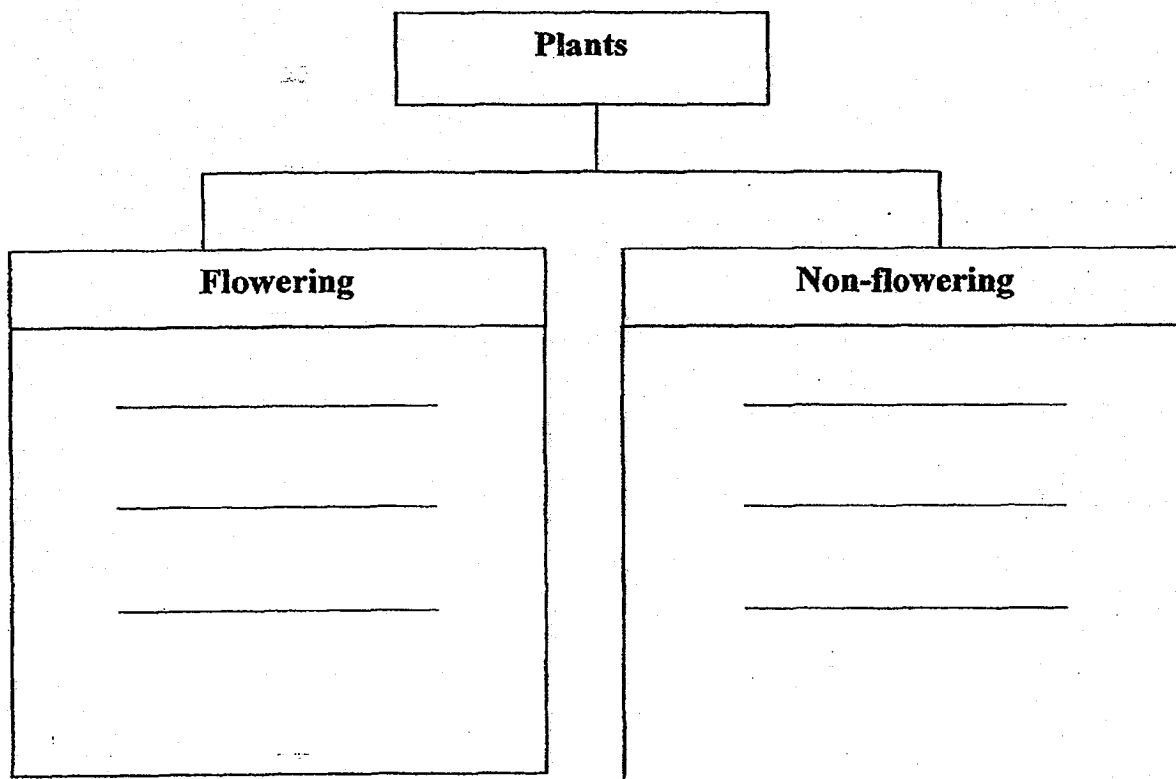
(i) _____

(ii) _____

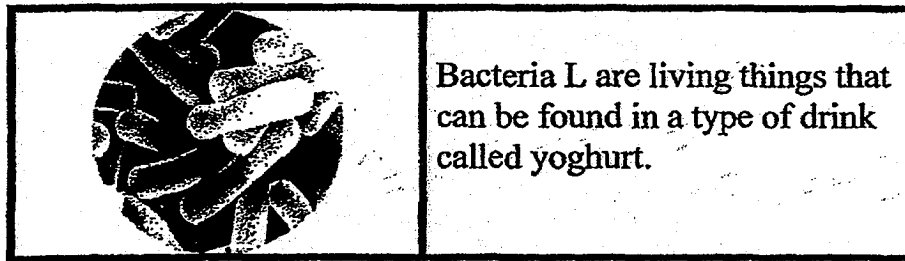
30. The table below shows some plants.

Orchid	Tomato
Rose	Ladder fern

Classify the plants from the table above into two groups by completing the classification chart below. (2 m)



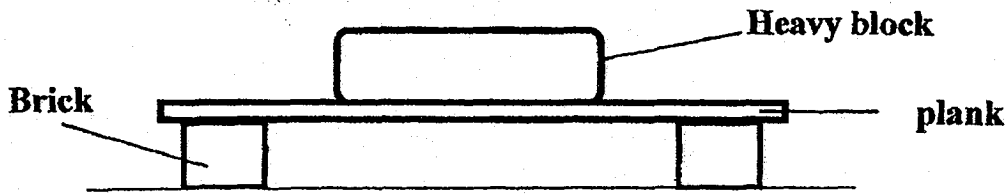
31. The picture below shows bacteria L under a microscope.



Which of the following statements correctly describe bacteria L? Put a tick (✓) in the box for a true statement and a cross (X) in the box for a false statement. (2 m)

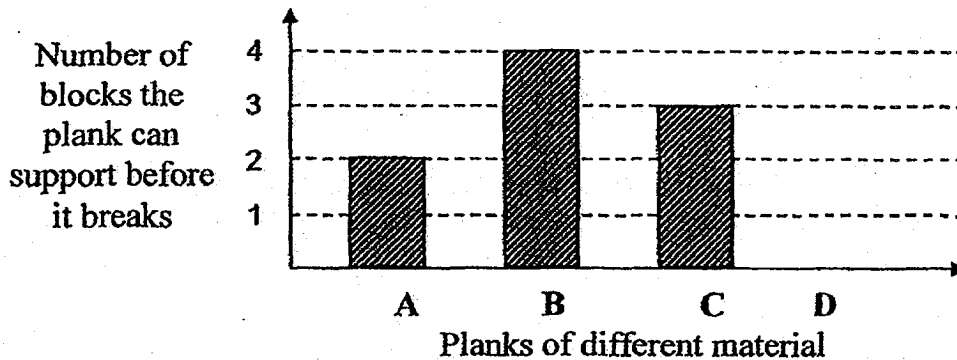
Statements	Put a tick (✓) for a true statement and a cross (X) for a false statement
(a) Bacteria L are harmful to human because they cause illness.	
(b) Bacteria L are used to make edible yoghurt for human consumption.	
(c) Bacteria L can be seen with our naked eyes.	
(d) Bacteria L do not need food to survive.	

32. Kelly set up an experiment to test the strength of four planks, A, B, C and D. They are made of different materials. She placed plank A on two bricks as shown below. Then, she placed some heavy blocks on the plank, one at a time, and recorded down the number of blocks the plank could support before it broke. She repeated the experiment with the other three planks.



She recorded her results in the bar graph below.

- (a) Based on this information, draw the bar graph for plank D which was the weakest plank in the graph below. (1 m)



Based on the experiment and graph, arrange the planks from the strongest to the weakest in the boxes below. (1 m)

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Strongest plank Weakest plank

- (b) Which plank should Kelly use to support her heavy load of books? Explain your choice. (2 m)

33. The pictures below show the different stages in the life cycle of a mosquito.



A



B



C



D

(a) Arrange the stages (A, B, C and D) in the correct order. (1 m)

Egg	Larva	Pupa	Adult

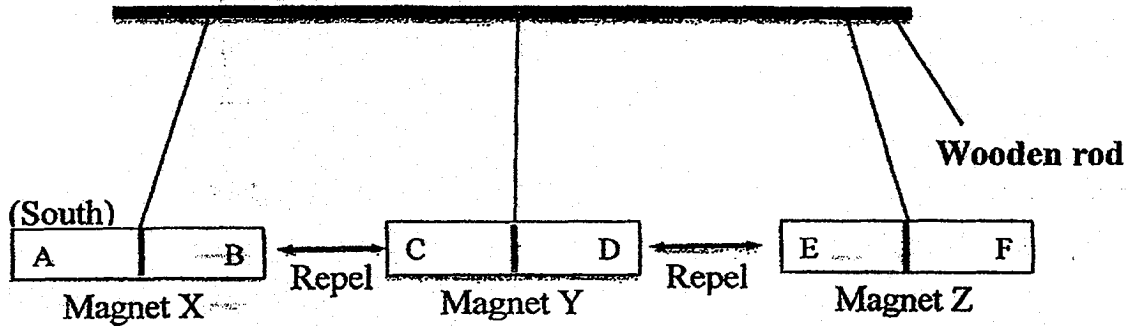
(b) At which stage (A, B, C or D) is the mosquito most harmful to the human? (1 m)

At stage _____

(c) Which of the following statements are correct ways of preventing mosquitoes from breeding? Put a tick "✓" for each of the correct ways and a "X" for each of the wrong ways. (2 m)

	Statement	"✓" or "X"
(i)	Leave the water on the plates beneath the pots of flower alone.	
(ii)	Scrub the inside of the vase to remove the eggs of mosquitoes.	
(iii)	Cover the toilet bowls if the whole family is away on a holiday.	
(iv)	Turn over all pails and water storage containers when not in use.	

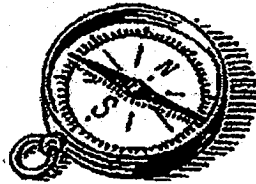
34. Tim hung three similar magnets X, Y and Z on a wooden rod. The diagram below shows magnet Y repelling magnet X and magnet Z. The letters A, B, C, D, E and F represent the poles of the 3 magnets.



- (a) If A is the South pole of magnet X, what are D and E? (1 m)

D: _____ pole E: _____ pole

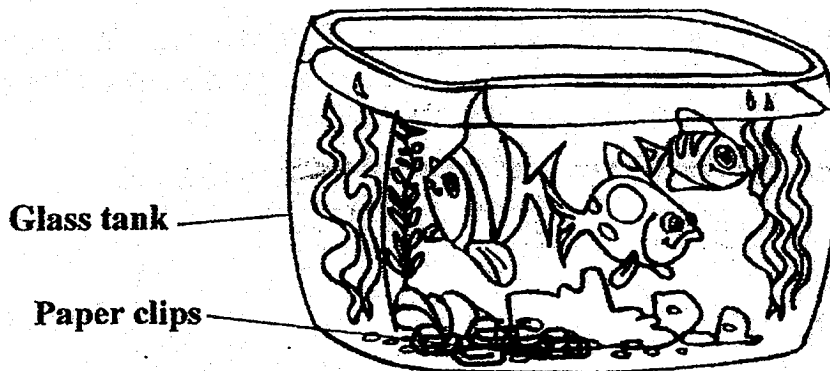
The diagram below shows a compass.



- (b) Write down the part of the compass which is a magnet. (1 m)

- (c) In which direction will the compass's magnet be pointing after some time if it is left freely suspended as shown above? (1 m)

35. Jolene has a fish tank made of glass. One day, she found some paper clips inside the tank.



She decided to use a strong magnet to remove these paper clips. She had three magnets, A, B and C. The table below shows the number of paper clips the magnets could attract from a distance of 20cm.

Magnet	Number of paper clips attracted from a distance of 20cm
A	8
B	3
C	10

- (a) Jolene wanted to choose the strongest magnet to remove the paper clips from the fish-tank. From the data above, which magnet should she use? Give a reason for your choice. (2 m)

- (b) If some iron nails had fallen into the fish tank instead, would Jolene be able to remove them by using the magnet? Explain why you think so. (1 m)

END OF PAPER

EXAM PAPER 2018 (P3)

SCHOOL : RULANG

SUBJECT : SCIENCE

TERM : SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	1	2	3	4	3	4	3	3	4
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
2	2	1	1	2	3	4	1	1	3
Q21	Q22	Q23	Q24	Q25					
1	2	1	2	3					

Q26) a) Eraser and chick

b) Living things need air, food and water to survive but non-living things do not need air, food and water to survive.

c) Group X – A , D

Group Y – B , C

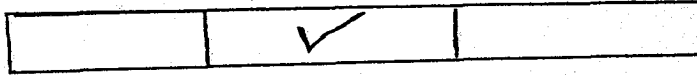
Q27) The earthworm in Jar X does not have air and food and the earthworm in Jar Z does not have food and water.

Q28) a) Does it have four legs?

b) The lizard has scales as it body covering but the cow does not have scales as it body covering.

c) The chicken does not feed on plants only and it does not have scales as it body covering.

Q29) a)



b) i) Group X has three body parts but other living things does not have three body parts.

ii) They have two feelers.

Q30) Flowering – Tomato , Rose , Orchid

Non-flowering – Ladder fern

Q31) a) cross

b) tick

c) cross

d) cross

Q32) a) B – C – A – D

b) Plank B , because plank B is the strongest among all the other plank as it can hold 4 blocks before it breaks.

Q33) a) C – B – D – A

b) At stage A

c) i) cross

ii) tick

iii) tick

iv) tick

Q34) a) D : South pole E : South pole

b) The needle

c) The compass's magnet will be pointing at the north-south direction.

Q35) a) Magnet C, because it is the strongest magnet among all the other magnets as it can attract 10 paper clips from a distance of 20 cm.

b) Yes, because a magnet can attract magnetic materials and iron is a magnetic material.

