

# AI TONG SCHOOL

2006 SEMESTRAL ASSESSMENT ( 2 )

PRIMARY THREE SCIENCE

DURATION : 1hr 30 min

DATE: 31<sup>st</sup> October 2006

## INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

Name : \_\_\_\_\_ ( )

Class : Primary \_\_\_\_\_

Parent's Signature : \_\_\_\_\_

Date : \_\_\_\_\_

MARKS	
	100

**Section A: Multiple-Choice Questions (60 marks)**

Choose the correct answer and shade its number (1, 2, 3 or 4) in the Optical Answer Sheet (OAS) provided.

1. Kelly listed the following animals according to their outer body covering. Which one of the animals does not match the outer body covering?

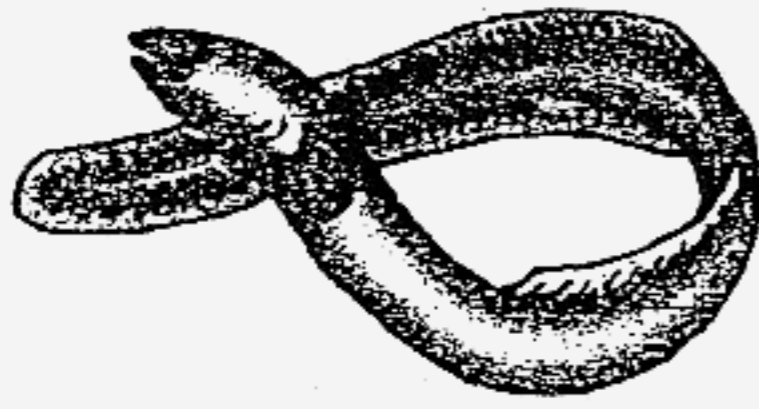
	<b>Animal</b>	<b>Outer body covering</b>
(1)	polar bear	hair
(2)	kiwi	feathers
(3)	lobster	shell
(4)	frog	scales

2. Tom saw an animal and thought it was an insect. How could he be sure that the animal was an insect? It would have \_\_\_\_\_.

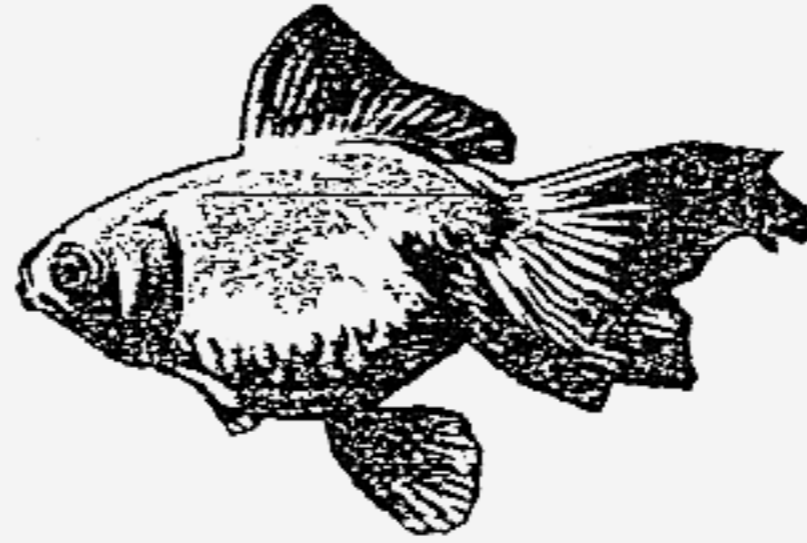
- (1) wings
  - (2) three pairs of legs
  - (3) a head and an abdomen only
  - (4) the ability to reproduce by laying eggs
3. Aili classified the following things as fruits. Her sister said that she has classified one of them wrongly. Which one was it?

<b>Fruits</b>
(1) Papaya
(2) Carrot
(3) Mango
(4) Tomato

4. Ahmad grouped the following animals together. What was his reason for doing so?



electric eel



goldfish



seahorse

They \_\_\_\_\_.

- A live in water
- B feed on water plants
- C have fins for swimming
- D breathe through their gills

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

5. In what ways are the life cycles of a chicken and a cockroach similar?

- A There are three stages.
- B The young looks like its parents.
- C The young moults several times.
- D The eggs are left to hatch on their own.

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

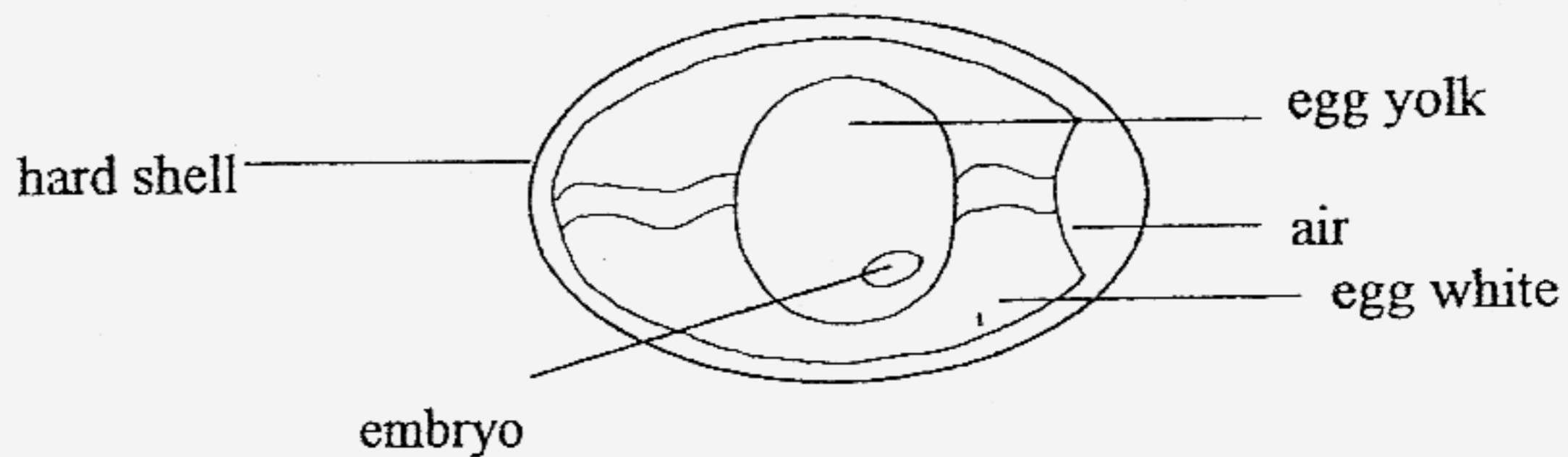
6. At which stage of the butterfly's life cycle does it moult?

- (1) egg
- (2) larva
- (3) pupa
- (4) adult

7. Which one of the following plants does **not** grow from seeds?

- (1) apple
- (2) chilli
- (3) tapioca
- (4) watermelon

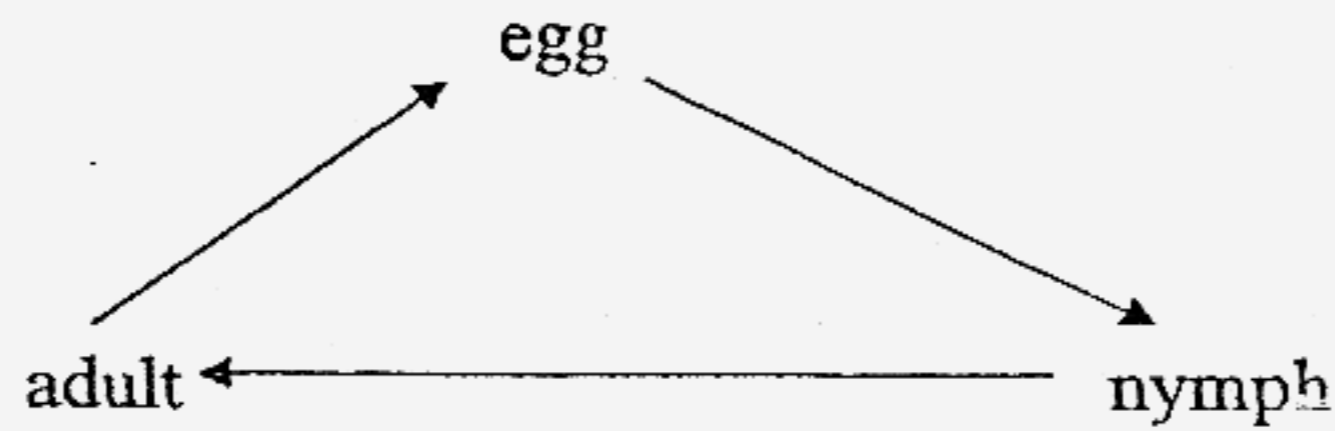
8. The diagram below shows a fertilised chicken egg.



Which part of the egg will develop into a chick under the right conditions?

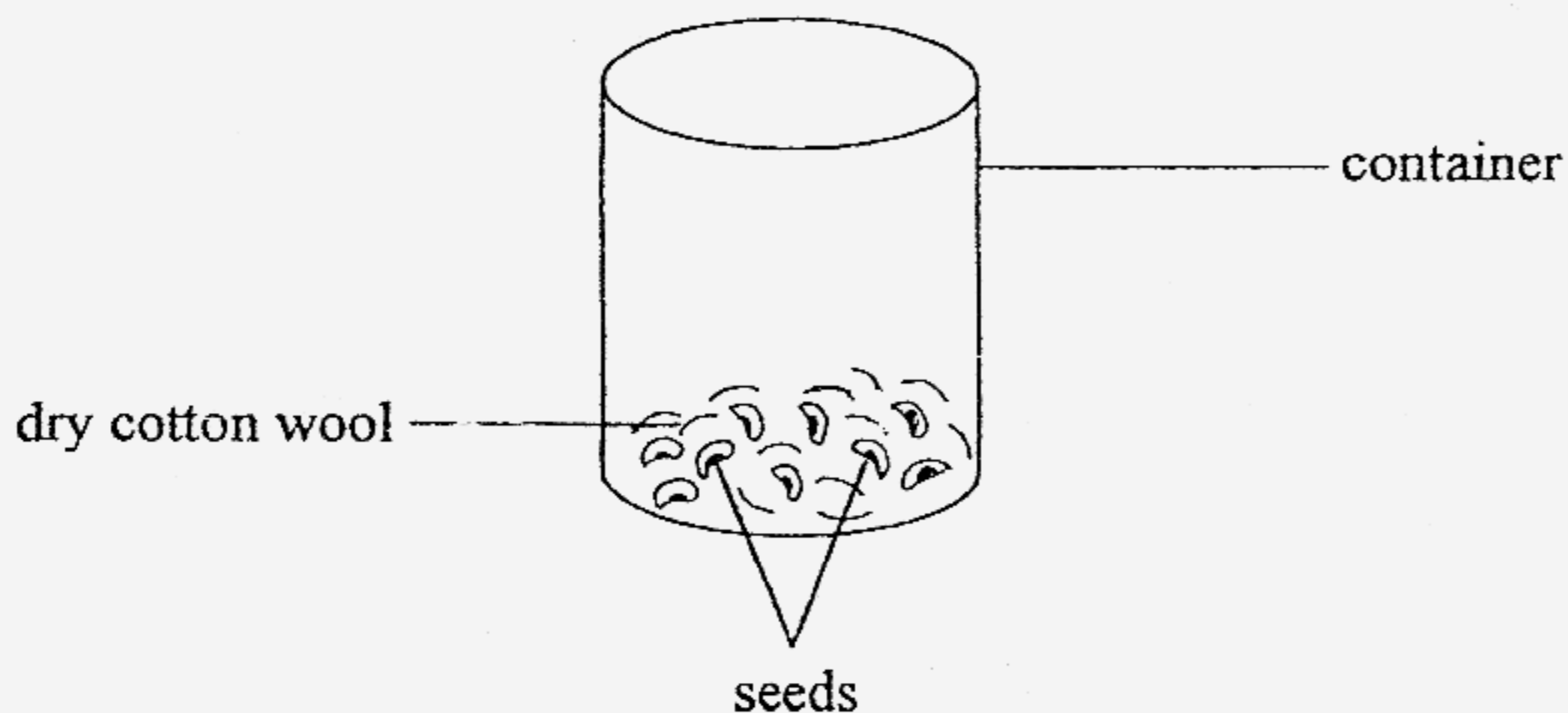
- (1) embryo
- (2) egg yolk
- (3) hard shell
- (4) egg white

9. Which one of the following animals has a life cycle similar to the one shown below?



- (1) toad
- (2) moth
- (3) beetle
- (4) dragonfly

10. Muthu prepared the set-up as shown below so that the seeds would germinate. He placed the container on a table near the window.



What was wrong with his set-up?

- (1) There was no water.
- (2) There was no sunlight.
- (3) There was not enough air.
- (4) There were too few seeds.

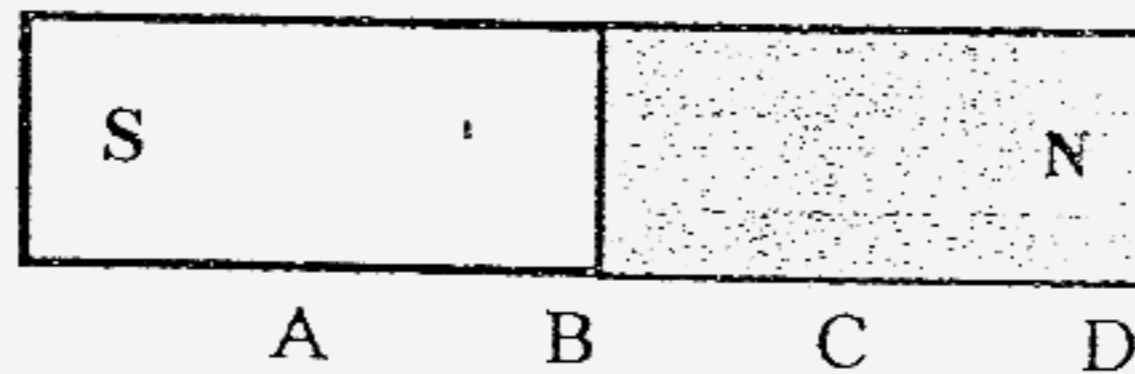
11. Which one of the following objects makes use of magnets?

- (1) water bottle
- (2) refrigerator
- (3) basketball
- (4) battery

12. Fatimah brought a magnet close to a spoon. What material would the spoon have to be made of for it to be attracted to the magnet?

- (1) plastic
- (2) wood
- (3) silver
- (4) steel

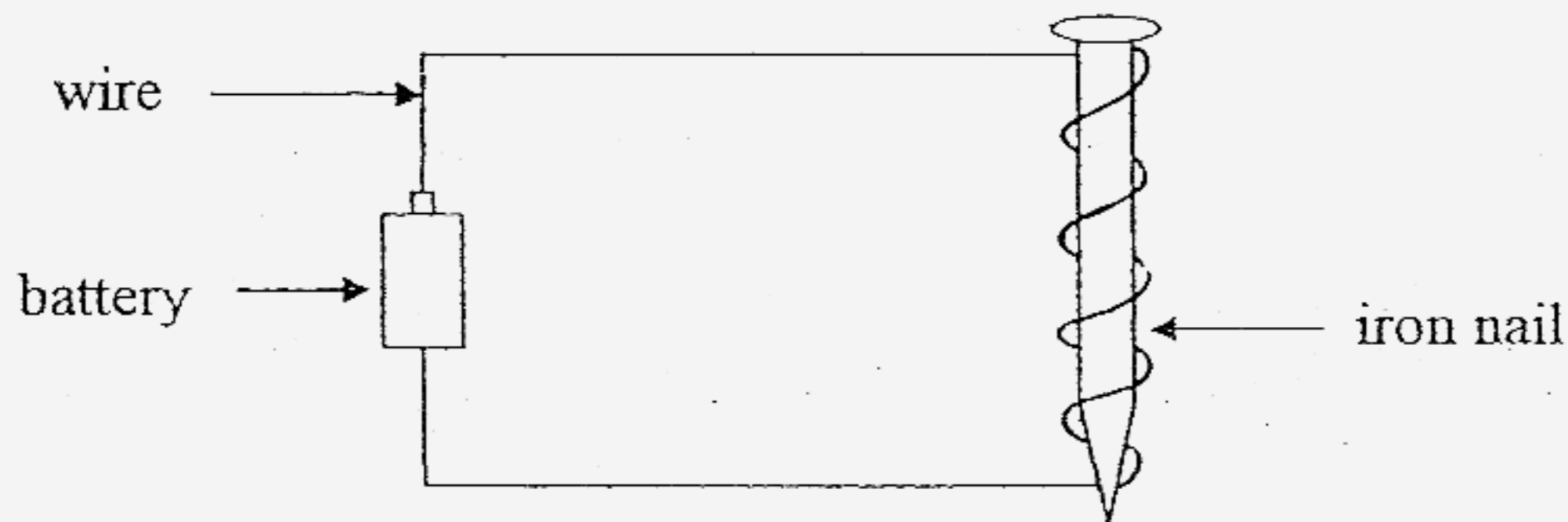
13. Alan has a bar magnet as shown below. He holds it from one end and brings it close to a pile of needles.



Which part of the magnet will attract the most number of needles?

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

14. Dehua prepared a set-up of an electromagnet as shown below. He wanted to increase the strength of the electromagnet.

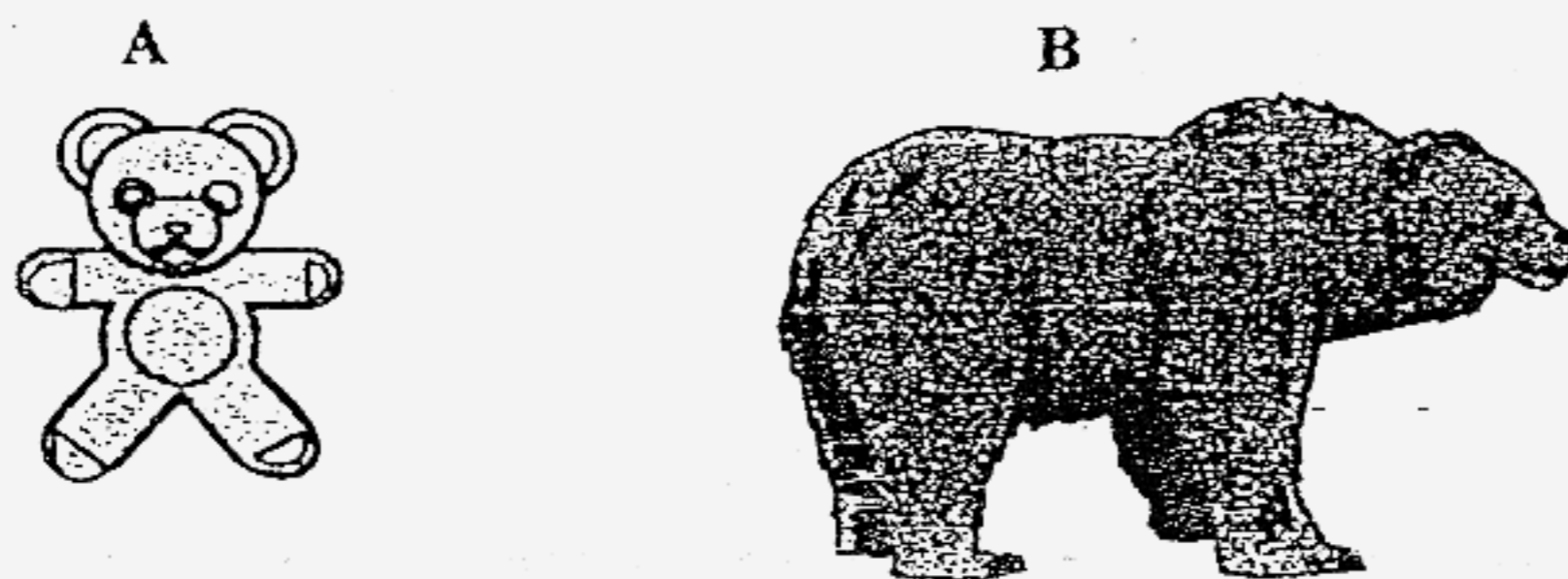


Which of the following things should he do?

- A Use a longer nail.
- B Use more batteries.
- C Increase the length of the wires.
- D Increase the number of coils of wire around the nail.

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

15. Ali observed that B is an organism because it can move on its own and respond to changes. How else can he prove that it is an organism?

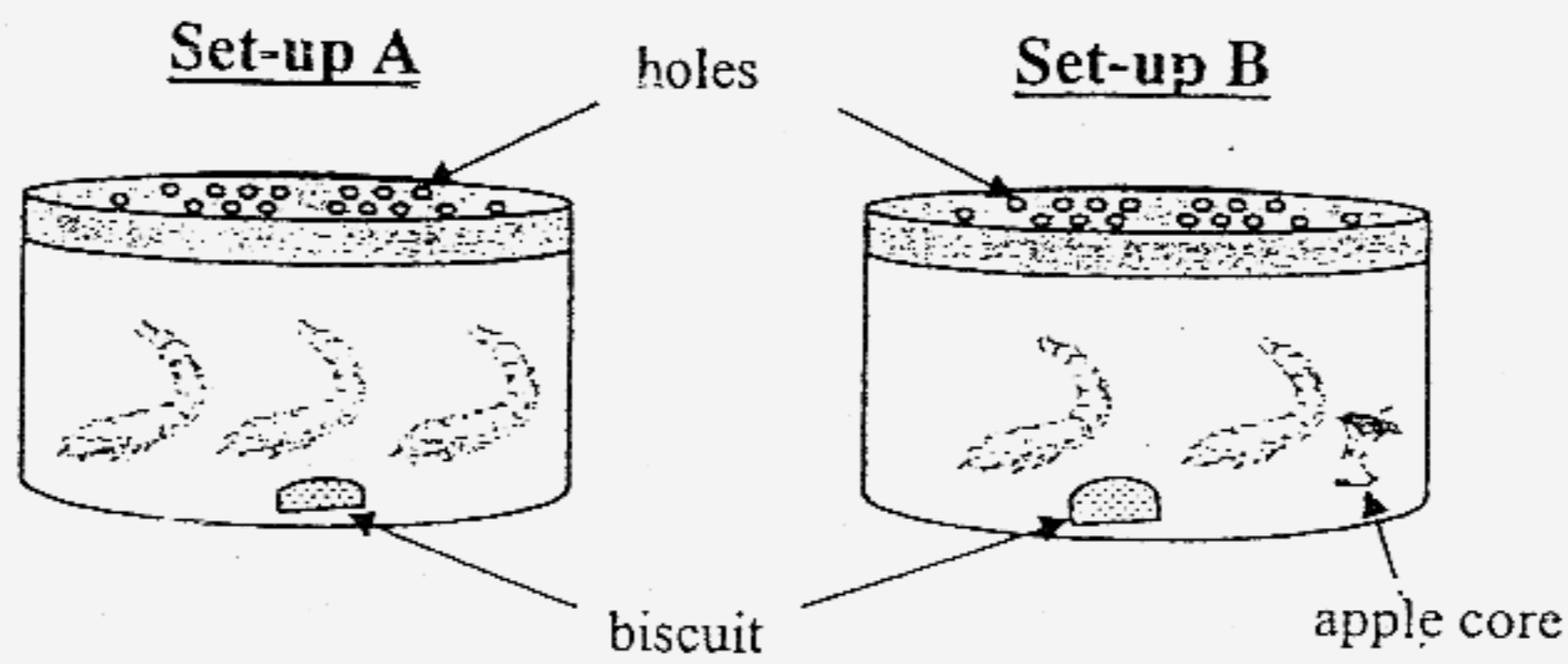


It \_\_\_\_\_.

- (1) is heavy
- (2) takes up space
- (3) can grow bigger
- (4) can float on water



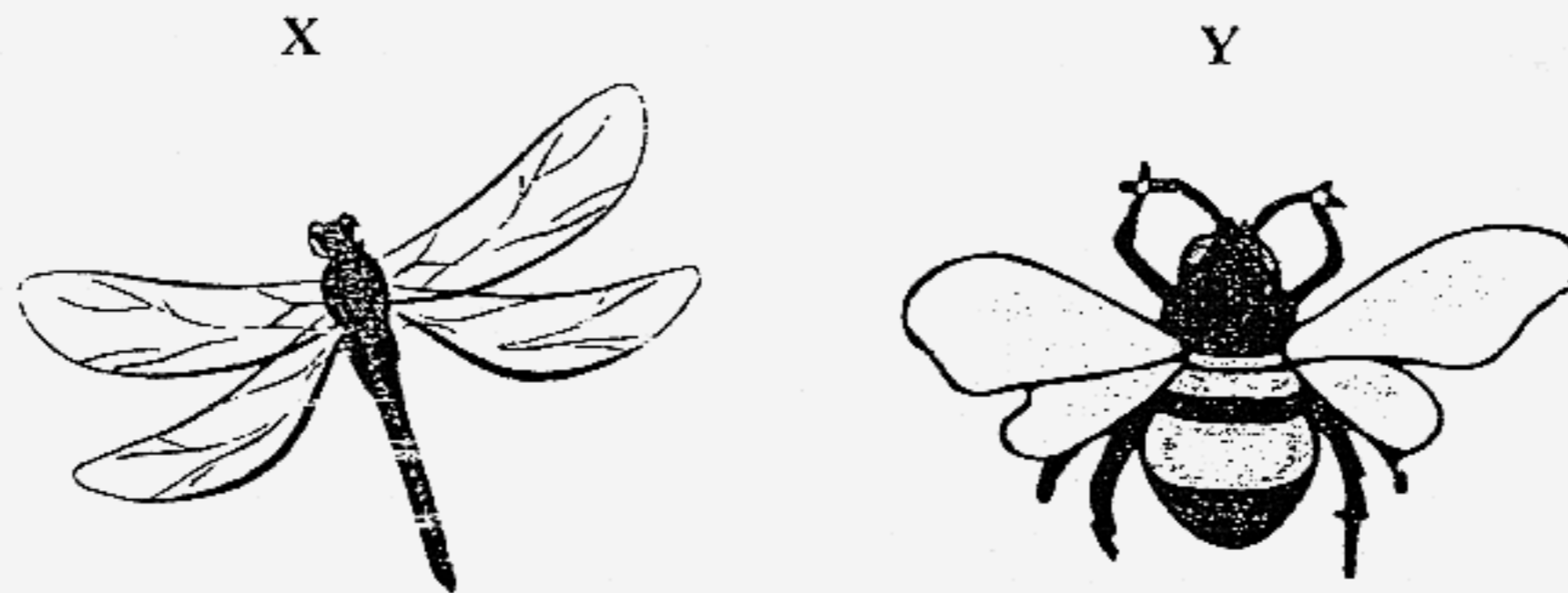
16. Kym wants to find out if an animal needed water to stay alive and develop into adults. She has two set-ups as shown in the diagrams below. Her teacher said that there was a mistake in the set-ups.



What was the mistake in the experiment?

There should be \_\_\_\_\_.

- (1) an apple core in Set-up A
  - (2) three animals in Set-up B
  - (3) a bigger container for Set-up A
  - (4) two containers of water in both set-ups
17. Based only on your observation of the diagrams below, how are the two things similar?



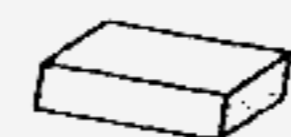
Both \_\_\_\_\_.

- A feed on plants
- B have three body parts
- C have two pairs of wings
- D are colourful organisms

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

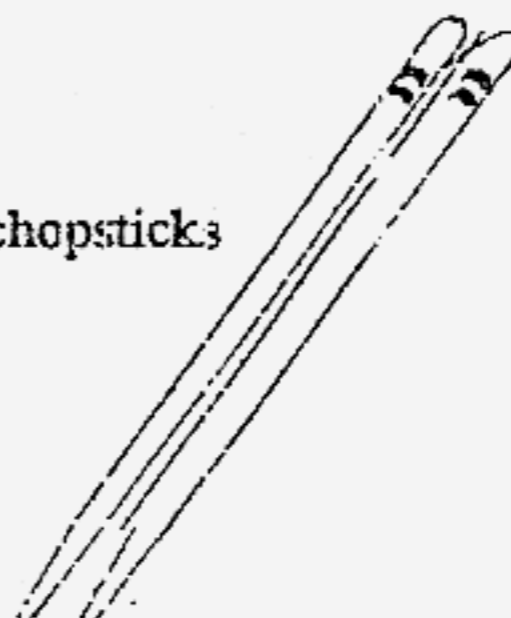


18. What are the common properties of the things shown below?



eraser

bamboo chopsticks



They \_\_\_\_\_.

- A are non-living things
- B can respond to changes
- C are made of only one material
- D are made of things that were once alive

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

19. Kelvin placed two slices of bread each on a dish. He observed the changes to the bread after four days and recorded his results below.

	Changes to the bread	
	Slice A	Slice B
DAY 1	no change	no change
DAY 2	tiny dots	no change
DAY 3	white patches, slight smell	no change
DAY 4	green patches, smelly	no change
DAY 5	mushy, black patches, smelly	no change

What are the reasons for the results shown above?

- A Slice A was moist.
- B Slice B was toasted and dry.
- C Bread mould was growing on Slice A.

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

20. Siti classified 'fungi' in Group Y. Her teacher said she had grouped it correctly.

Group X	Group Y
bacteria	puff balls
yeast	bread mould

What is the teacher's reason? Fungi \_\_\_\_\_.

- (1) is a plant
- (2) can make food
- (3) is a micro-organism
- (4) reproduces by spores

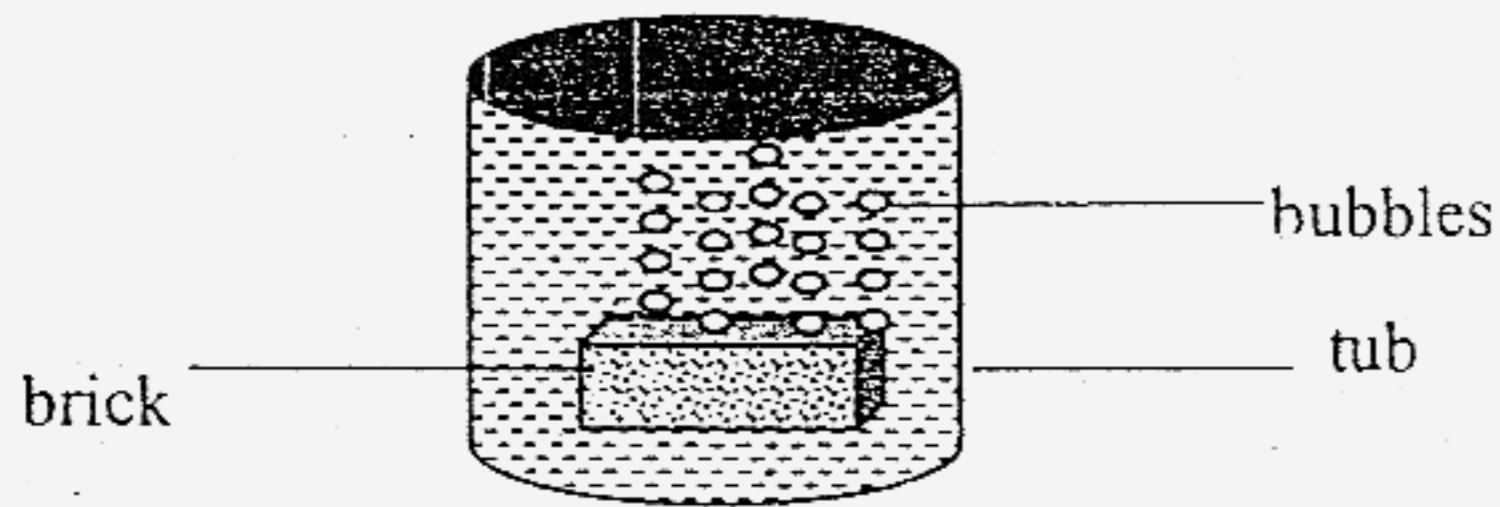
21. Some characteristics of an organism are listed below.

- It is a living thing.
- It reproduces by spores.
- It cannot make its own food.
- It usually grows on dead plants.

What is the organism?

- (1) Moss
- (2) Fern
- (3) Algae
- (4) Mushroom

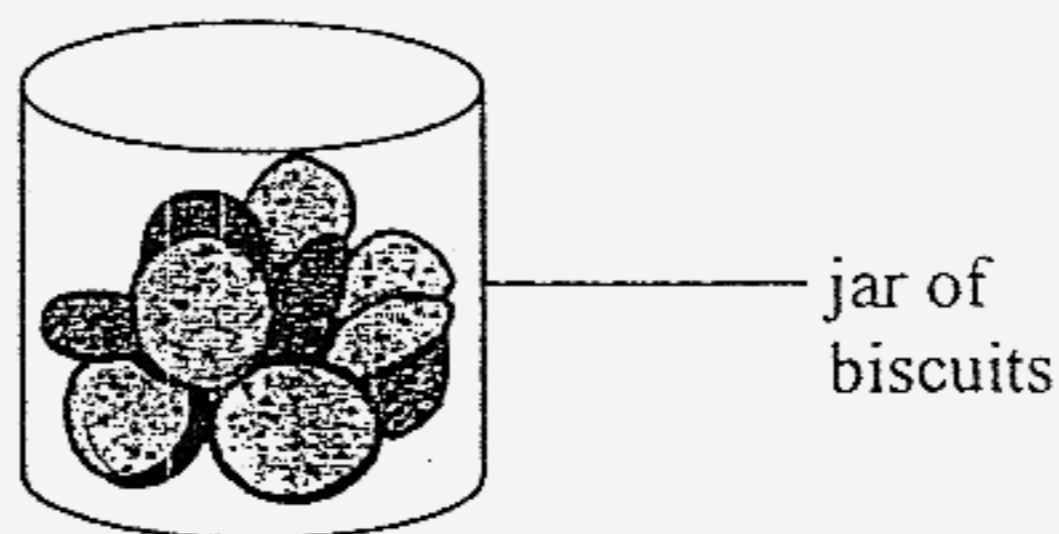
22. Bob put a brick into a tub of water and saw bubbles coming out of the brick as shown below. He recorded his observations and made some statements about the brick.



Which statement is correct?

The brick \_\_\_\_\_.

- (1) has air in it
  - (2) is made of clay
  - (3) does not float in water
  - (4) is a non-living thing that was never alive
23. Kate could see that the jar below contained some biscuits.



Which property of glass helped her to see the biscuits?

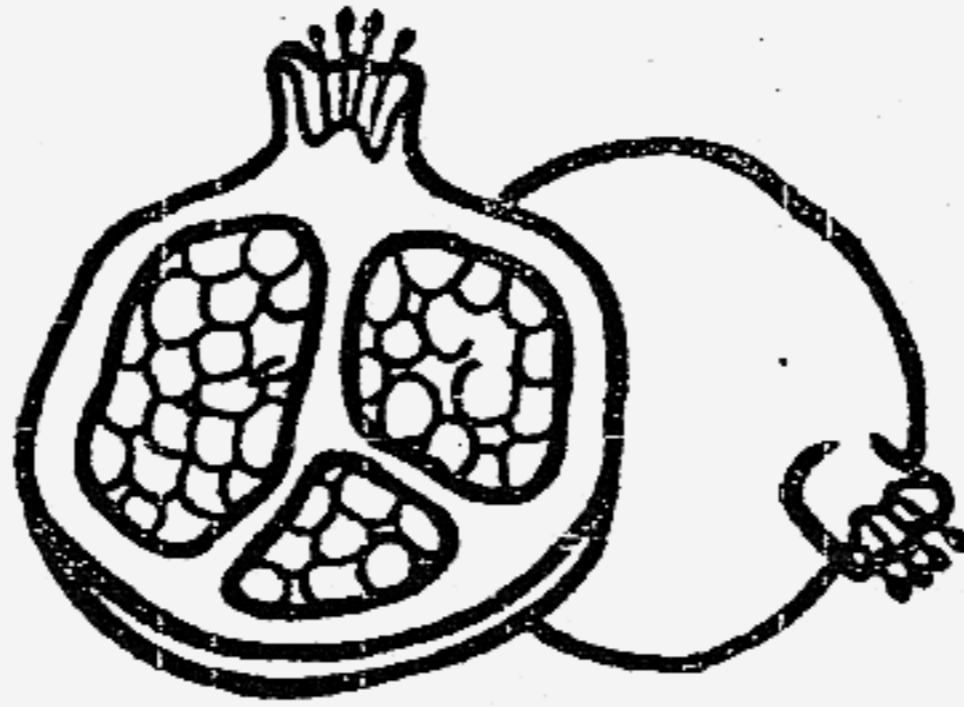
It is \_\_\_\_\_.

- (1) hard
- (2) breakable
- (3) waterproof
- (4) transparent

24. Which one of the following objects is light and makes a soft sound when it is dropped from a height?

- (1) Feather
- (2) Basketball
- (3) Glass beaker
- (4) Ten-cent coin

25. By looking at the picture shown below, what can you tell about the fruit?



It \_\_\_\_\_.

- (1) is very sweet and juicy
- (2) is green in colour
- (3) grows in a bunch
- (4) has many seeds

26. John wanted to find out whether a yellow mango or a green mango was sweeter. Which one of the following senses does he need to use?

- A Taste
- B Sight
- C Touch
- D Hearing

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

27. What is the function of the stem in a plant?

- (1) Protect the plant from diseases and harm.
- (2) Hold the plant upright and supports the branches and leaves.
- (3) Use the carbon dioxide in the air and sunlight to make food.
- (4) Help the plant to take in oxygen and give out carbon dioxide.

28. In which parts of the digestive system is food broken down?

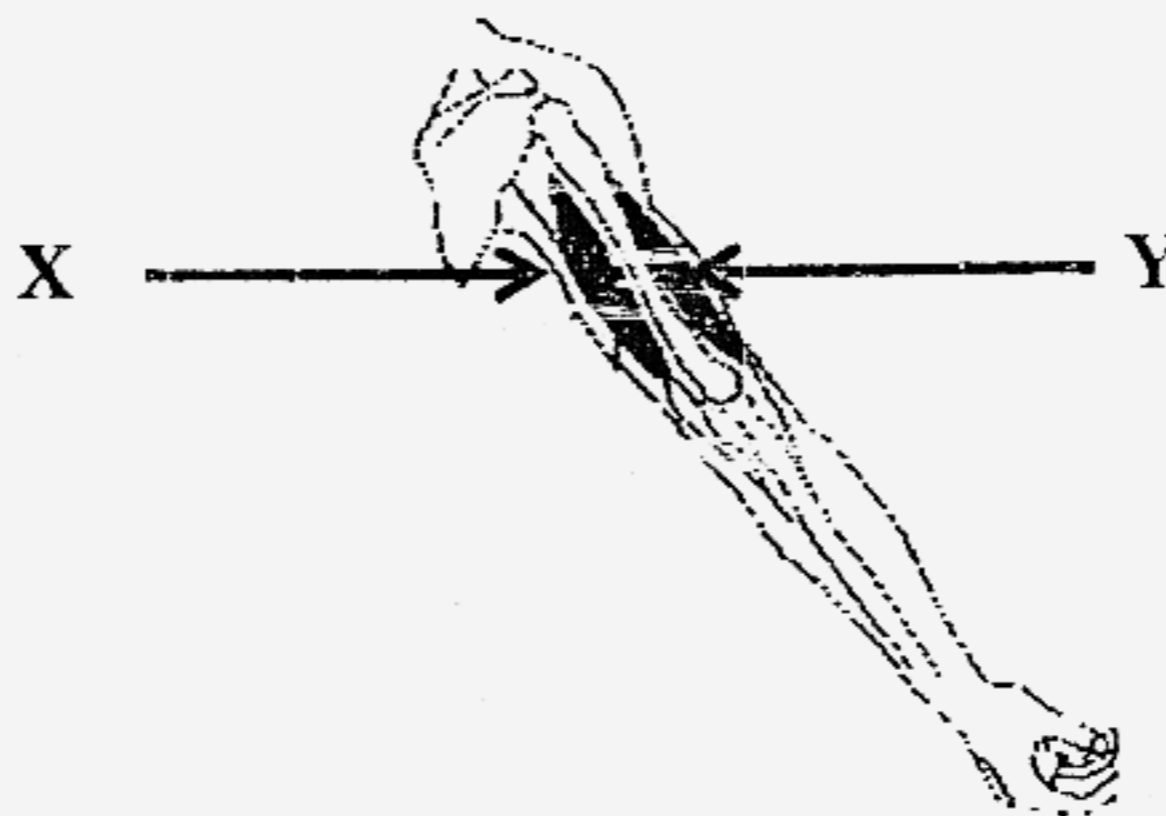
- A mouth
- B stomach
- C large intestine
- D small intestine

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

29. The diagram below shows the right hand arm when it is bent.



The diagram below shows the right hand arm when it is straightened.

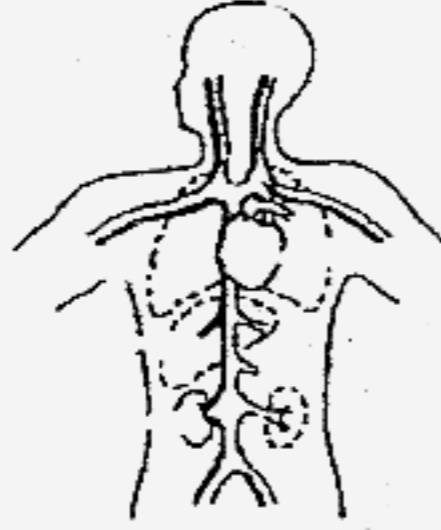


Which one of the following shows the correct behaviour of the muscles when the right arm is straightened?

	Muscles X	Muscles Y
(1)	contracts	contracts
(2)	relaxes	relaxes
(3)	contracts	relaxes
(4)	relaxes	contracts

30. Which one of the following systems takes in and breaks down food into simpler substances?

(1)



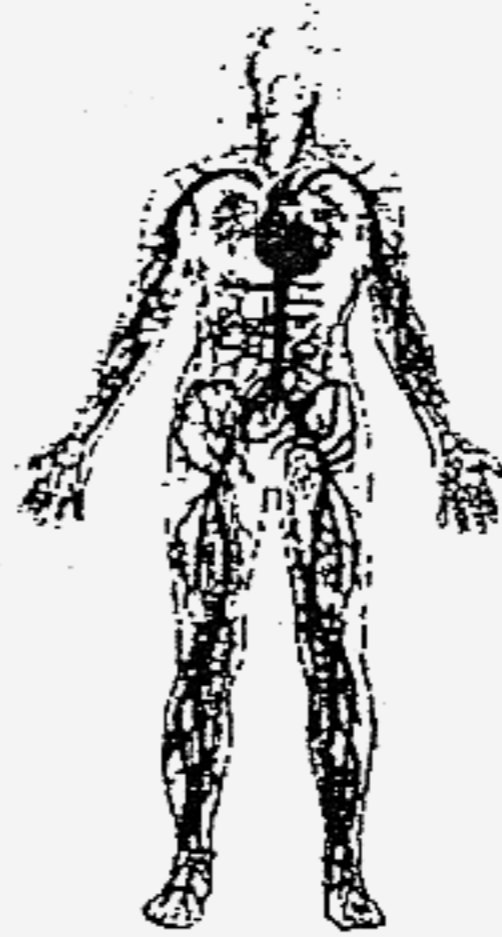
(2)



(3)



(4)



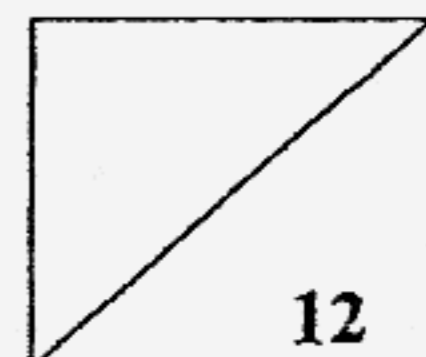


**Section B: Completing Sentences (20 marks)**

Complete the sentences below with the correct answer from the box.  
Use each word ONCE only.

flying	growth	colour	heating
flightless	moulting	interacts	attract
stroking	repel	fabric	shape
mineral salts	wood	thread	carbon dioxide

31. Emus have wings but are \_\_\_\_\_ birds.
32. The nymph of a cockroach has a hard body covering that is shed during \_\_\_\_\_.
33. The roots of a plant take in water and \_\_\_\_\_ from the soil.
34. When a magnet is attracted to an object, we say it \_\_\_\_\_ with the object.
35. Like poles of two magnets \_\_\_\_\_ each other.
36. \_\_\_\_\_ a magnet will cause it to become weaker.



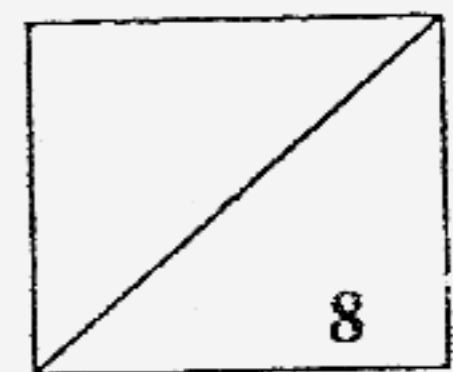


37. Plasticine changes its \_\_\_\_\_ when moulded.

38. A handkerchief wrinkles up when crumpled because it is made of soft \_\_\_\_\_.

39. The handle of a mop is usually made of \_\_\_\_\_ but its strands are made of cloth.

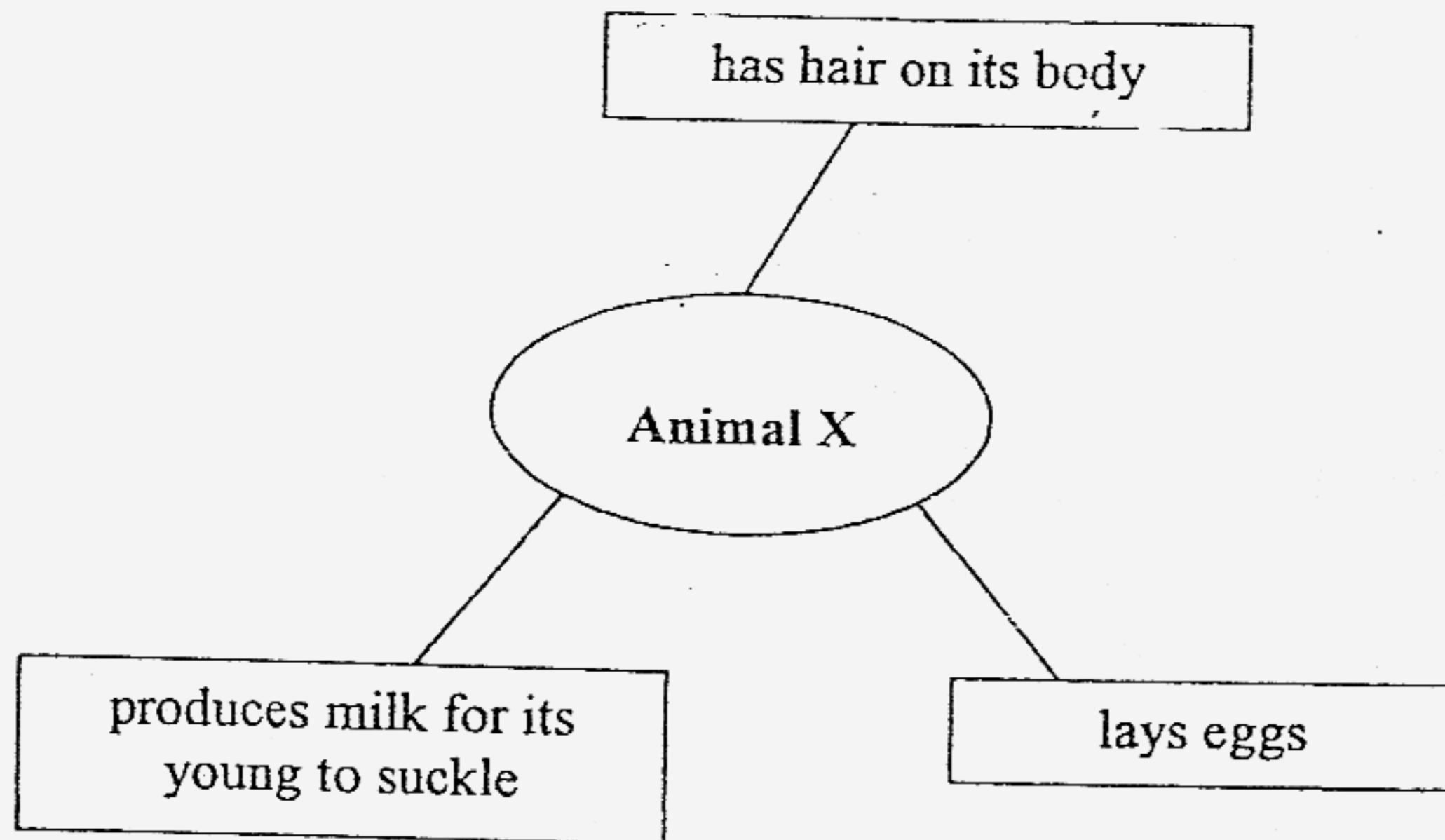
40. A plant takes in \_\_\_\_\_ and gives off oxygen during the day when there is sunlight.



**Section C: Open-ended Questions (20 marks)**

Read questions 41 to 45 below carefully and write your answers in the spaces provided.

41. The diagram below describes an animal.



a) Which group of animals does Animal X belong to? [1]

\_\_\_\_\_

b) Name Animal X. [1]

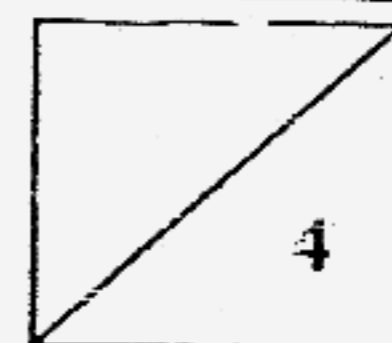
\_\_\_\_\_

c) Name **ONE** other animal which belongs to the same group as Animal X but does not lay eggs. [1]

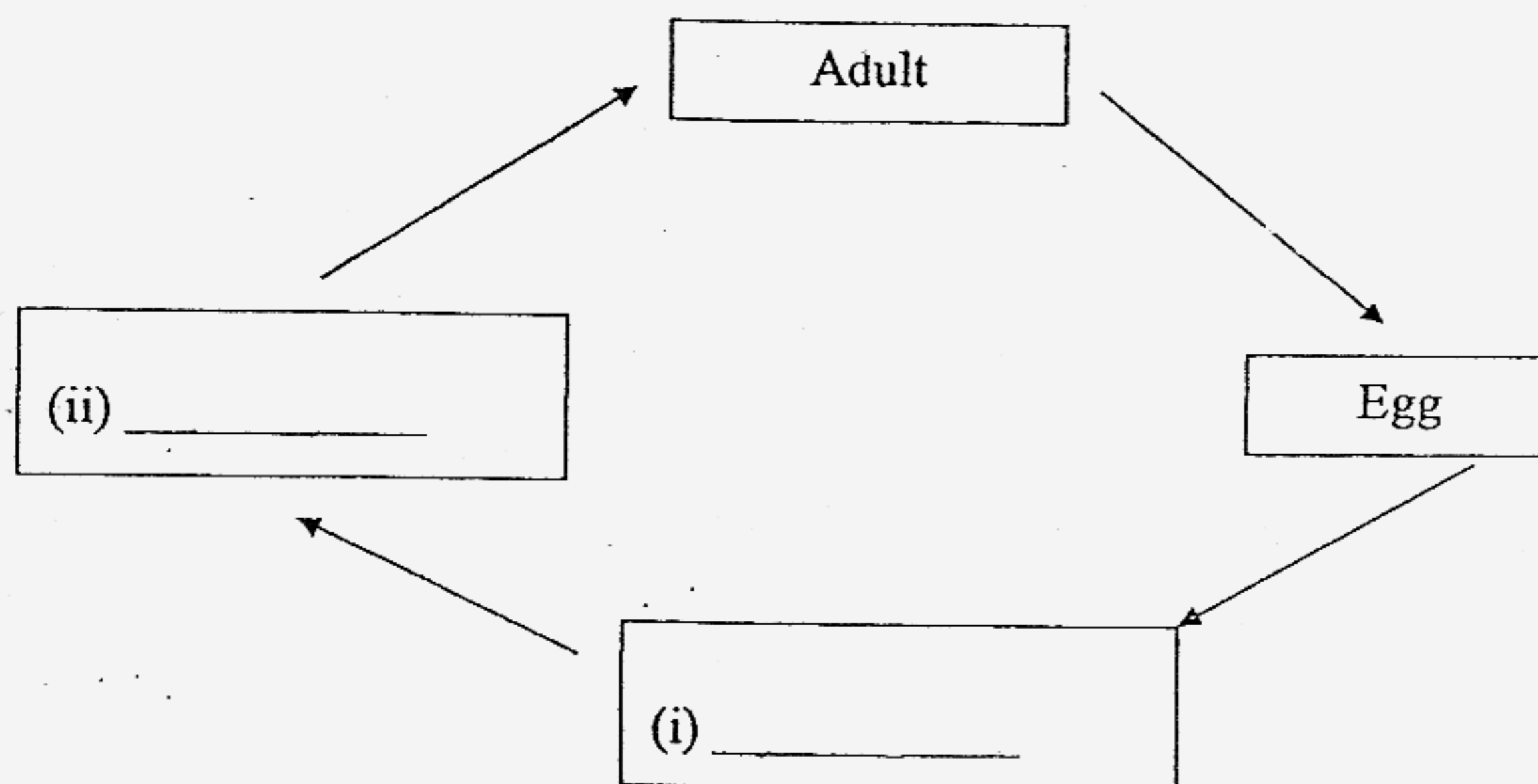
\_\_\_\_\_

d) How does the animal you named in (c) reproduce? [1]

\_\_\_\_\_



42. The diagram below shows the life cycle of a mosquito.



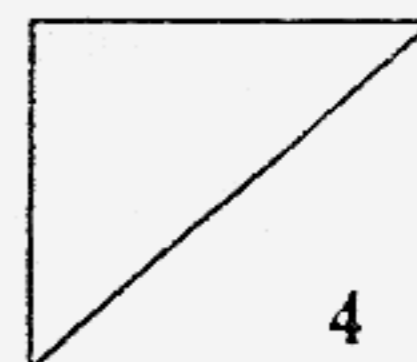
a) Name the stages at (i) and (ii). [2]

b) Where do mosquitoes lay their eggs? [1]

\_\_\_\_\_

c) At which stage of its life cycle is the mosquito harmful to humans? [1]

\_\_\_\_\_  
\_\_\_\_\_



43. A toy car can move but is a non-living thing.  
Give **TWO** reasons why it is a non-living thing.

a) \_\_\_\_\_  
\_\_\_\_\_ [2]

b) \_\_\_\_\_  
\_\_\_\_\_ [2]

44. John wanted to buy a stool made of wood.



a) What properties of wood should John check for?

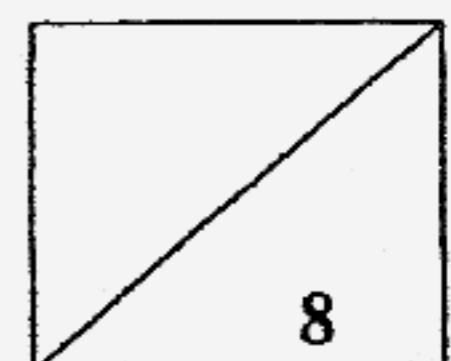
( Tick ✓ the correct boxes. ) [ 2 ]

<input type="checkbox"/>	It is hard.
<input type="checkbox"/>	It is strong.
<input checked="" type="checkbox"/>	It is durable.
<input type="checkbox"/>	It is flexible.

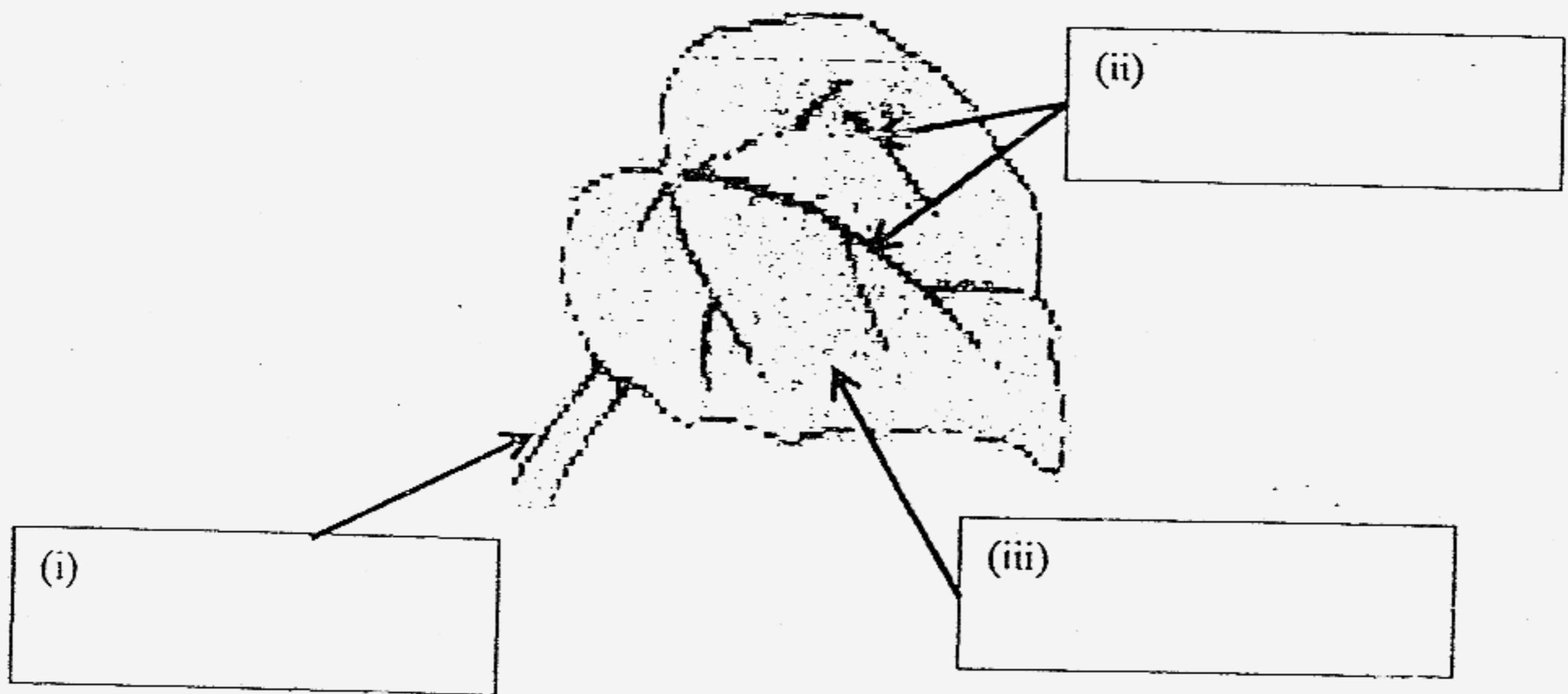
b) Instead of using wood to make the stool, what other materials can John use?

Material : \_\_\_\_\_ [ 1 ]

Material : \_\_\_\_\_ [ 1 ]

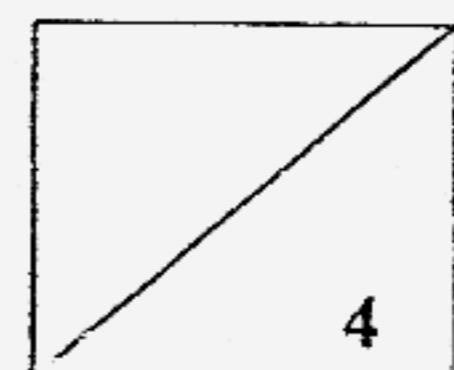


45 a) The diagram below shows a leaf. Label the different parts of the leaf. [3]



b) Name the process by which a leaf makes food. [1]

END OF PAPER  
PLEASE CHECK YOUR WORK CAREFULLY



- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1) 4  | 2) 2  | 3) 2  | 4) 3  | 5) 2  |
| 6) 2  | 7) 3  | 8) 1  | 9) 4  | 10) 1 |
| 11) 2 | 12) 4 | 13) 4 | 14) 4 | 15) 3 |
| 16) 2 | 17) 2 | 18) 4 | 19) 4 | 20) 4 |
| 21) 4 | 22) 1 | 23) 4 | 24) 4 | 25) 4 |
| 26) 1 | 27) 2 | 28) 3 | 29) 3 | 30) 2 |

- Q31. Emus have wings but are **flightless** birds.
- Q32. The nymph of a cockroach has a hard body covering that is shed during **moulting**.
- Q33. The roots of a plant take in water and **minerals salts** from the soil.
- Q34. When a magnet is attracted to an object, we say it **interacts** with the object.
- Q35. Like poles of two magnets **repels** each other.
- Q36. **Heating** a magnet will cause it to become weaker.
- Q37. Plasticine changes its **shape** when moulded.
- Q38. A handkerchief wrinkles up when crumpled because it is made of soft **fabric**.
- Q39. The handle of a mop is usually made of **wood** but its stands are made of cloth.
- Q40. A plant takes in **carbon dioxide** and gives off oxygen during the day when there is sunlight.
- Q41a. Animal X belongs to mammals.  
 b. Spiny anteater.  
 c. Lion  
 d. It reproduces by giving birth to its young.

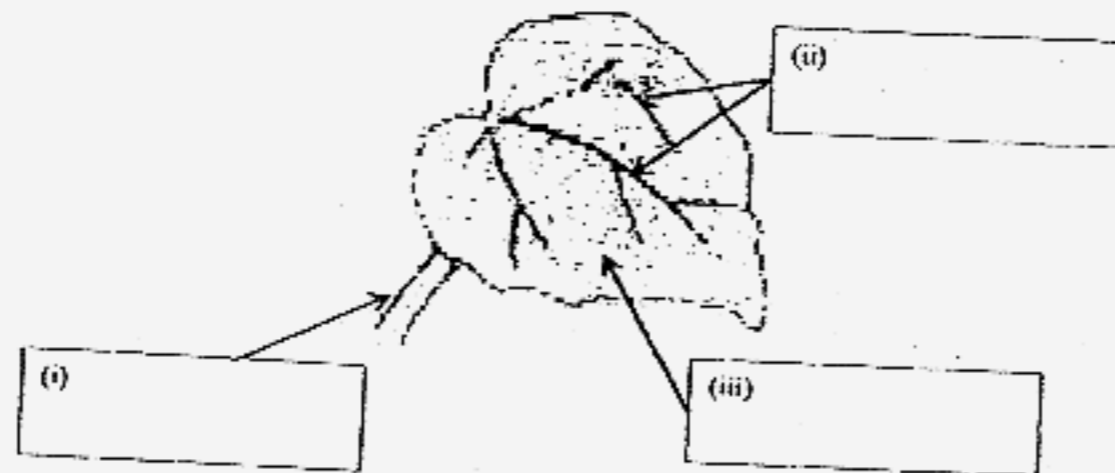
- Q42a (i) Larva  
(ii) Pupa  
b. Its lay eggs in the pond on stagnant water.  
c. Adult stage of the life cycle.

- Q43a. It does not need air, water and food.  
b. It cannot reproduce.

- Q44a. It is hard  
It is strong  
It is durable

- b. Material : Plastic  
Material : metal

Q45a



- (i) Leaf stalk  
(ii) Leaf veins  
(iii) Leaf blade

- b. By photosynthesis.