

Name : _____ ()

Class : Primary 3 : _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Second Semestral Assessment – 2007

SCIENCE

BOOKLET A

12th October 2007

Total Time for Booklets A and B: 1 hour 30 minutes

**30 questions
60 marks**

**Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.**

Section A : (30 x 2 marks)

For each question from 1 to 30, 4 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.

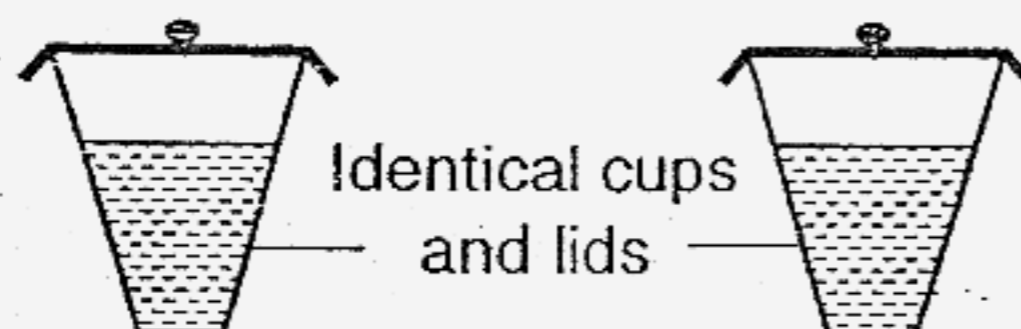
1. The table below shows the conditions under which four different bread samples, A, B, C and D, were kept.

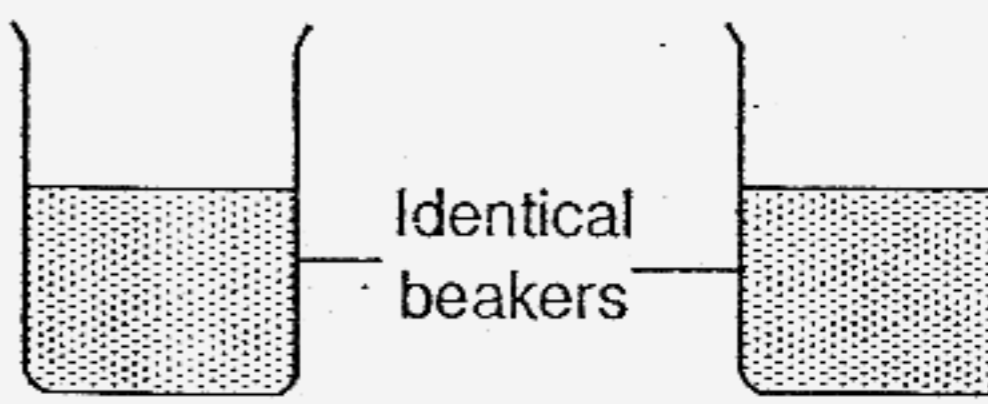
	Bright	Dark	Dry	Moist
Sample A		√	√	
Sample B	√		√	
Sample C	√			√
Sample D		√		√

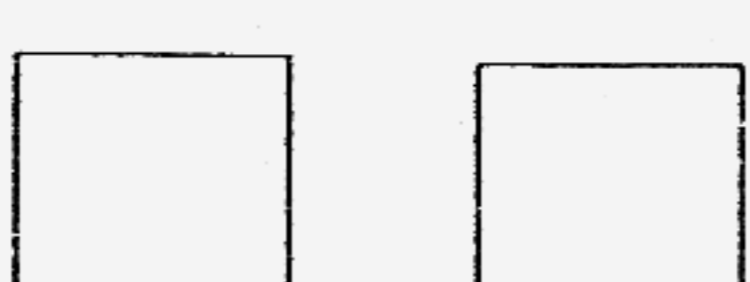
In which bread sample would the most bread mould be found?

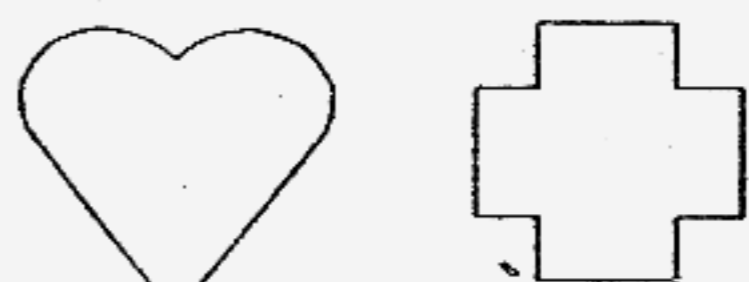
- (1) Sample A
 - (2) Sample B
 - (3) Sample C
 - (4) Sample D
2. Priscilla is blindfolded and given four different sets of items to compare.

Using only her sense of touch, which one of the following sets of items would she not able to compare?

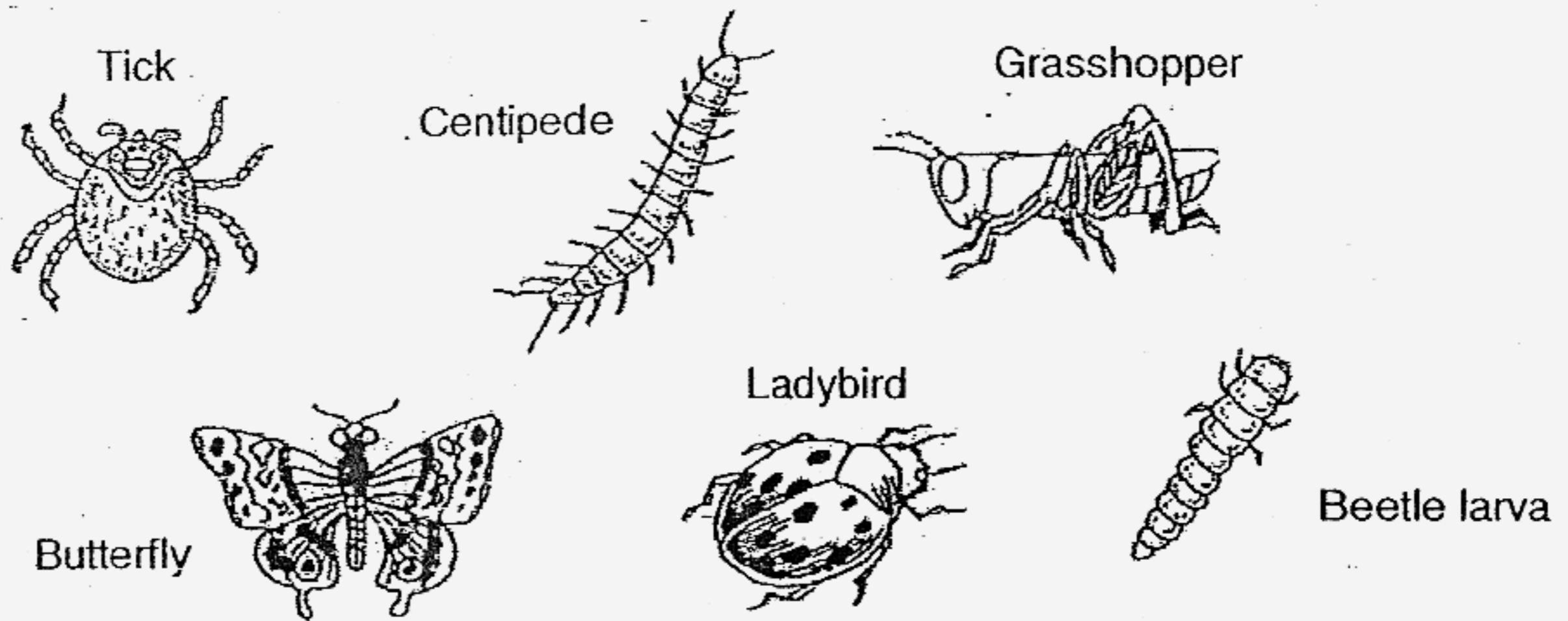
(1)  Identical cups and lids
Cold orange juice Hot coffee

(2)  Identical beakers
Tap water Rain water

(3)  Sandpaper Plastic sheet

(4)  Heart-shaped paper Cross-shaped paper

3. The diagram below shows some animals.



Classify the six animals into 2 groups, X and Y, such that there are only three animals in each group.

	Group X	Group Y
(1)	Has wings	Without wings
(2)	Has feelers	Has no feelers
(3)	Two body parts	Three body parts
(4)	Has six legs	Has more than six legs

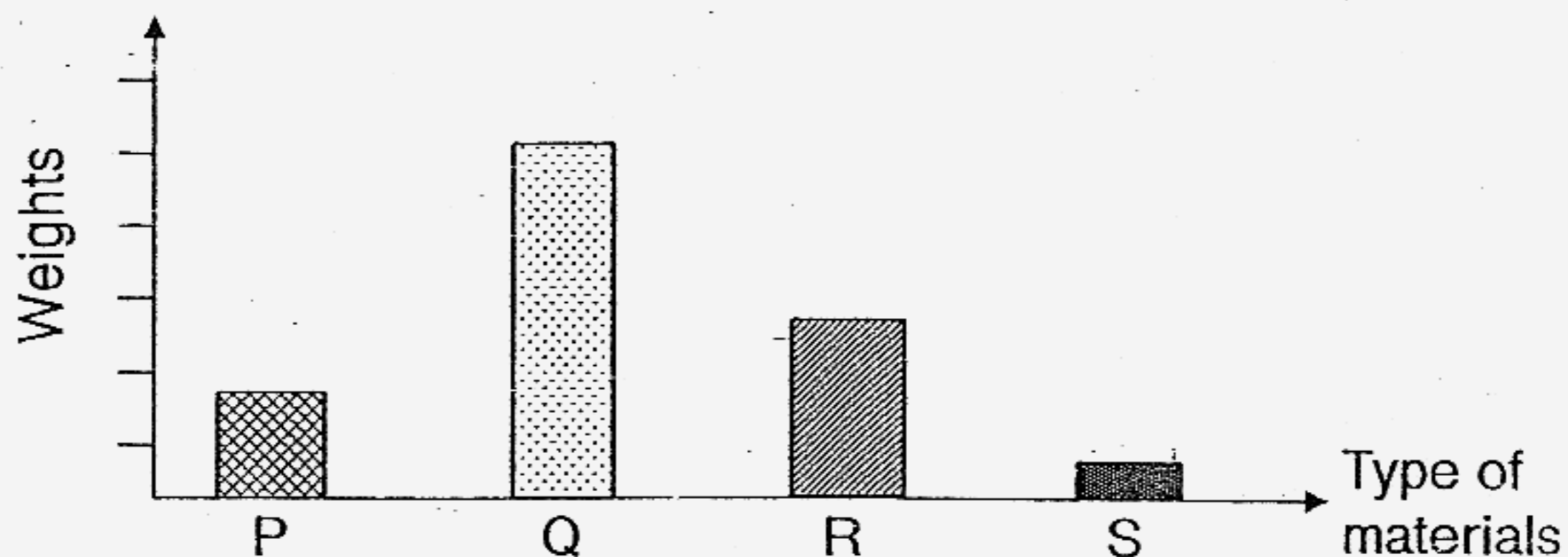
4. Which of the following statements are **true** for all living things?

- A: They will die eventually.
- B: They give birth to their young.
- C: They depend on others for food.
- D: They go through the same life cycle as their parents.

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

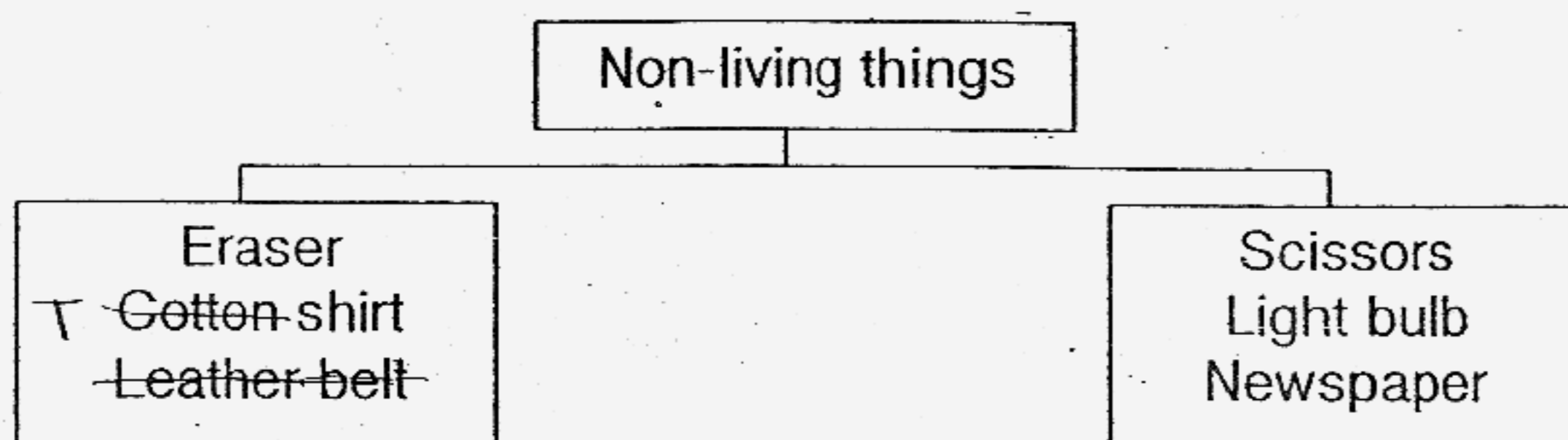
5. Four types of materials, P, Q, R and S of similar lengths, were tied to a retort stand and weights were hung on them until they broke.

The results were recorded in the graph below.



Based on the graph, which one of the following comparisons could be made about the materials?

- (1) Material S is the softest.
 - (2) Material Q is the hardest.
 - (3) Material P is the weakest.
 - (4) Material R is stronger than material P.
6. Study the classification table below.



Which one of the above objects has been **wrongly** classified?

- (1) Eraser
- (2) Scissors
- (3) Newspaper
- (4) ~~Leather belt~~

7. The table below shows how fruits can be grouped.

	One seed	Many seeds
Rough skin	E	G
Smooth skin	F	H

In which box, E, F, G or H, would you place watermelon?

- (1) E
- (2) F
- (3) G
- (4) H

8. Which of the following characteristics are true for all birds?

- A. They can fly.
- B. They lay eggs.
- C. They have feathers.
- D. They breathe through their lungs.

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

9. Which one of the following is **not** a fungus?

- (1) Moss
- (2) Mould
- (3) Toadstool
- (4) Jew's ears

10. Study the classification table as shown below.

Group A	Group B
Cat Molly	Chicken Goldfish

Which one of the following pairs of headings is correct?

	Group A	Group B
(1)	Animals that live on land	Animals that live in water
(2)	Animals that breathes through their gills	Animals that breathes through their skin
(3)	Animals that have fur	Animals that have scales
(4)	Animals that give birth to their young alive	Animals that lay eggs

11. The diagrams below show a silverfish and its young.

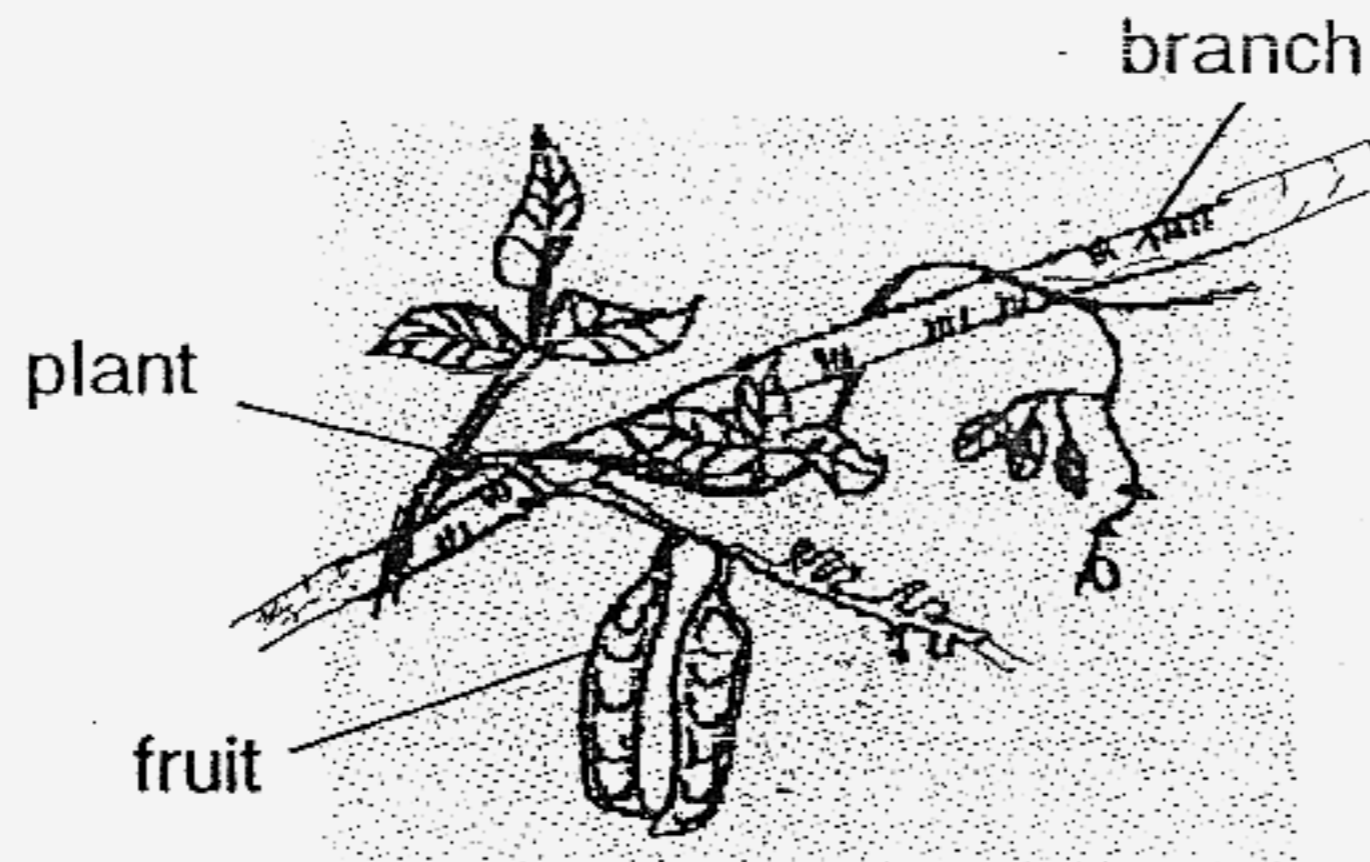


Which of the following statement(s) about the silverfish is/are correct?

- A: It is an insect.
- B: It swims in water.
- C: Its young is called a wiggler.
- D: It has a similar life cycle as a cockroach.

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

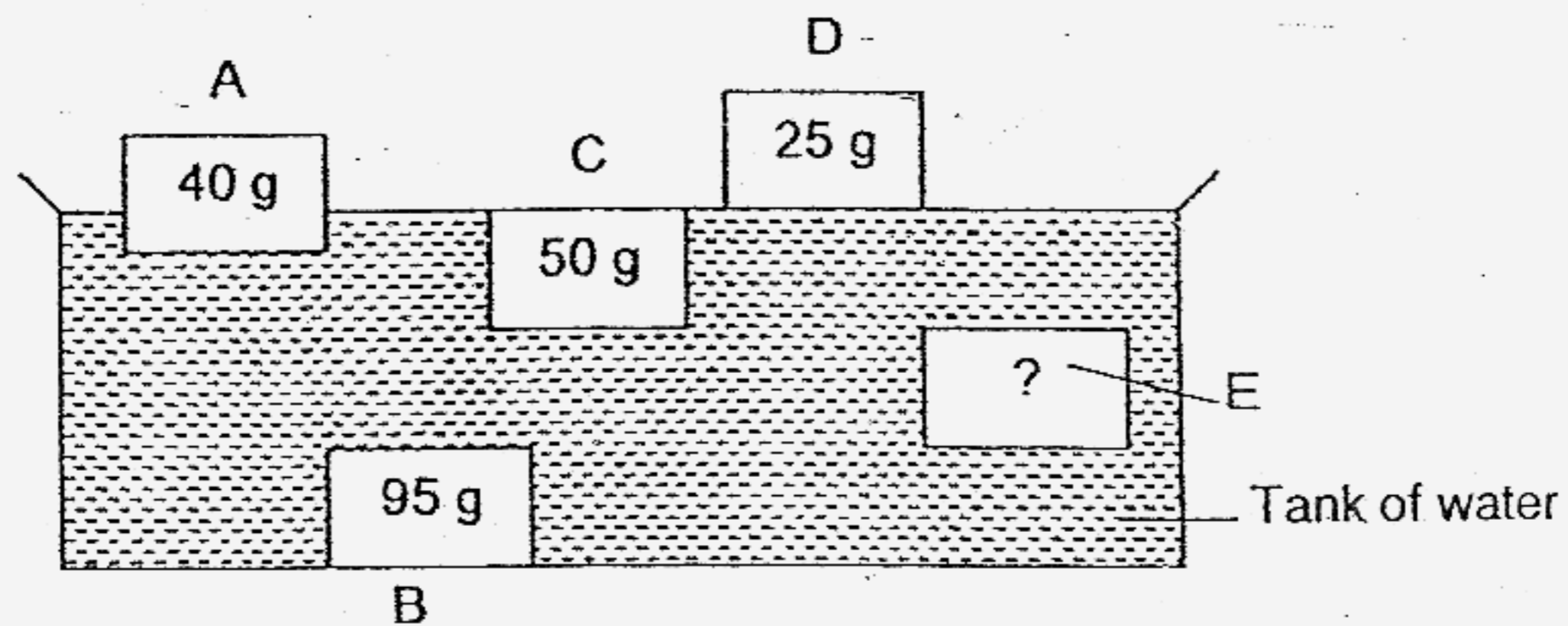
12. Study the diagram below.



Which one of the statements about the above plant is most likely to be true?

- (1) It is a flowering plant.
- (2) It reproduces by spores.
- (3) It cannot make its own food.
- (4) its stem holds the plant upright.

13. The diagram below shows what happens when 5 objects A, B, C, D and E of the same size but made of different materials are placed in a tank of water.



Which one of the following can object E be?

- (1) 35g
- (2) 50g
- (3) 70g
- (4) 95g

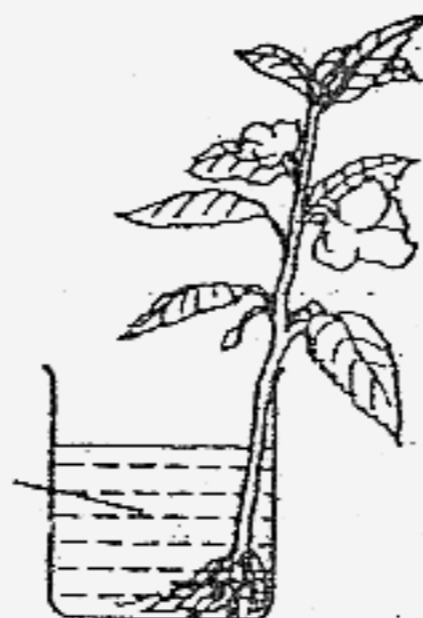
14. Study the following properties of material Z.

Properties of material Z
Light
Waterproof
Man-made
Light can pass through it

Which one of the following objects is made of material Z?

- (1) paper box
 (2) glass mug
 (3) porcelain bowl
 (4) plastic container
15. What is the function of the large intestine in our digestive system?
- (1) It digests the food.
 (2) It stores the digested food temporarily.
 (3) It takes away water from the undigested food.
 (4) It absorbs the digested food into the blood stream.
16. James places a plant into a beaker of water. He puts a few drops of red ink into the beaker of water. After a few days, he observes that the white flowers have turned red.

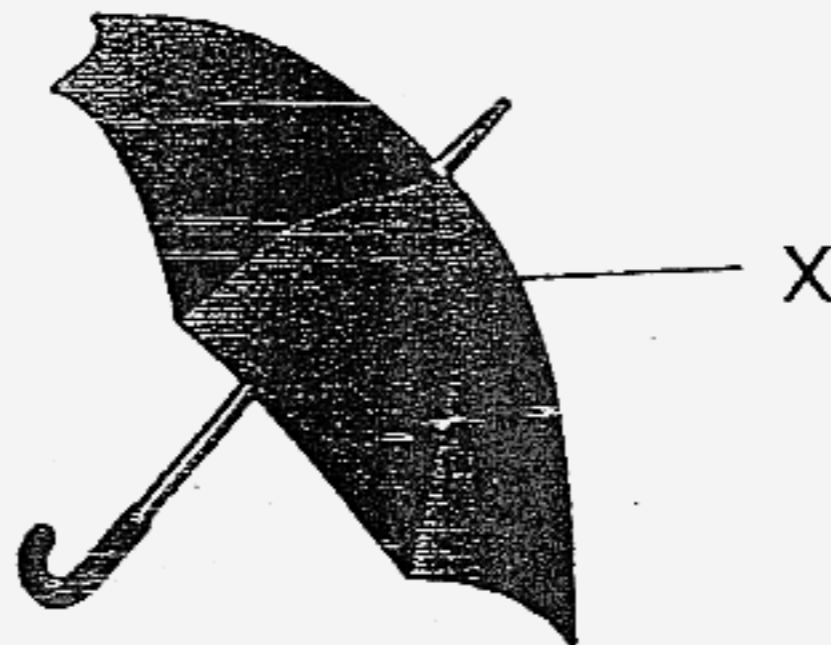
Red coloured
water



What can he conclude from his observation?

- (1) The flowers are able to absorb water.
 (2) The plant uses its stem to absorb water.
 (3) The stem carries water from the roots to the rest of the plant.
 (4) The stem carries food from the flowers to the rest of the plant.

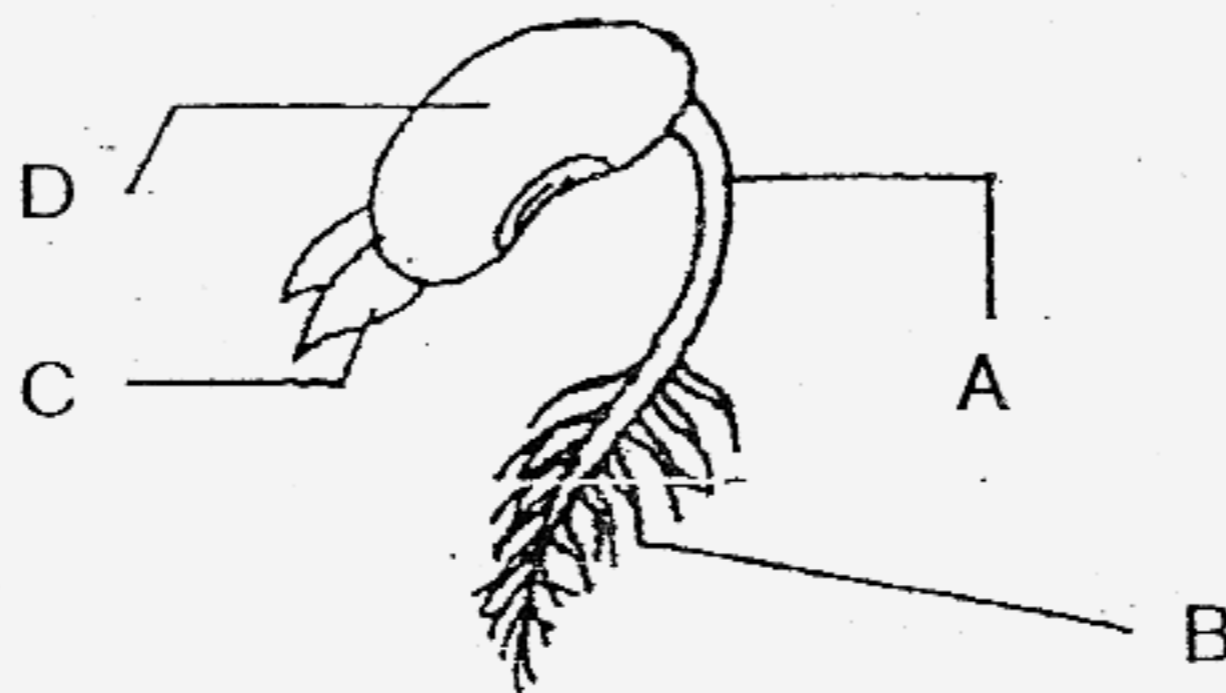
17. The diagram below shows an umbrella with a part marked X.



Which one of the following material will be most suitable for making part X of the umbrella for use during the rainy and sunny days?

	Materials	Transparent	Waterproof	Does not get hot easily	Flexible
(1)	A	Yes	Yes	Yes	No
(2)	B	No	Yes	No	No
(3)	C	No	Yes	Yes	Yes
(4)	D	No	No	No	Yes

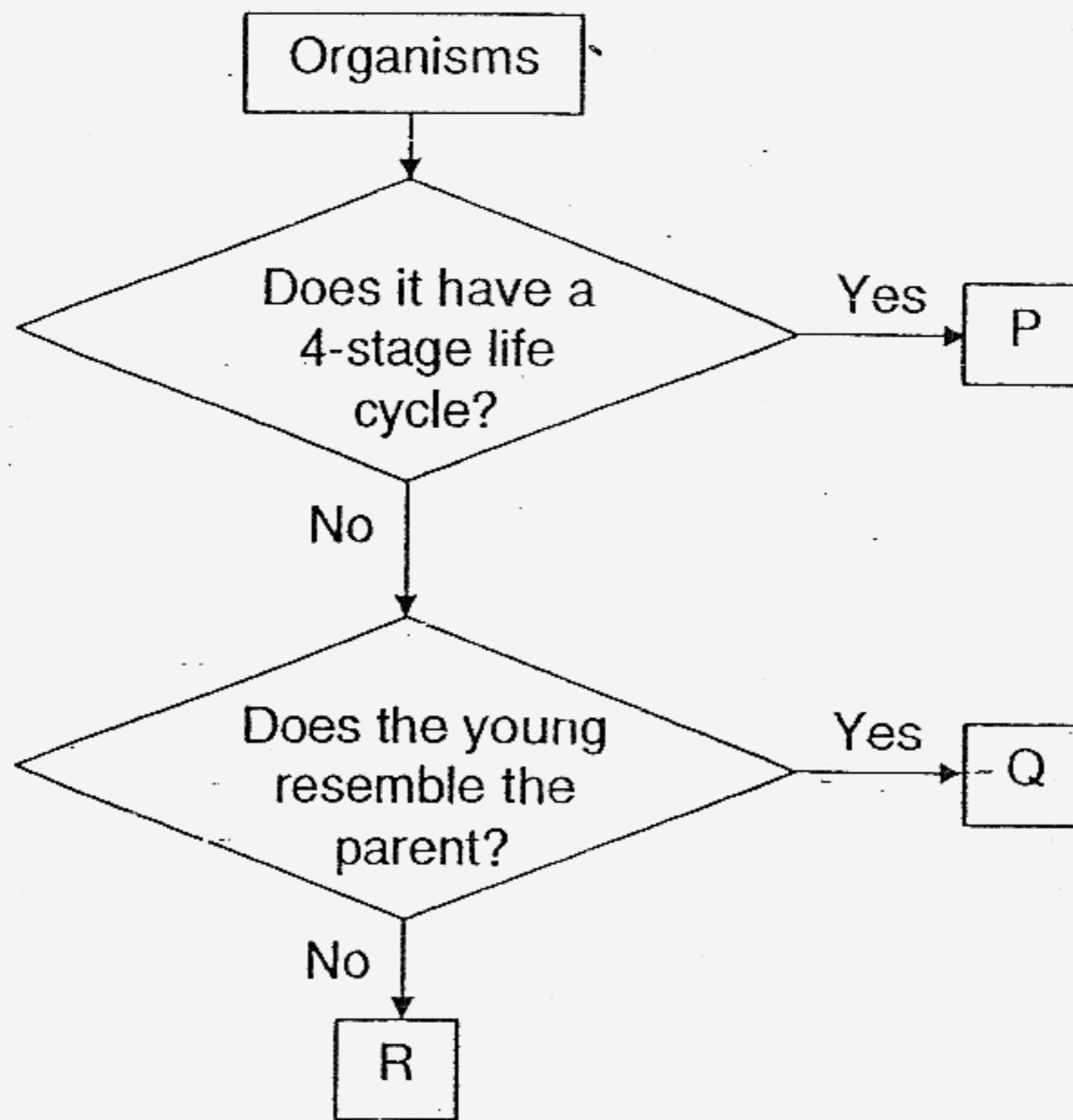
18. The picture below shows a developing seedling.



Which part of the seedling provides it with food?

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

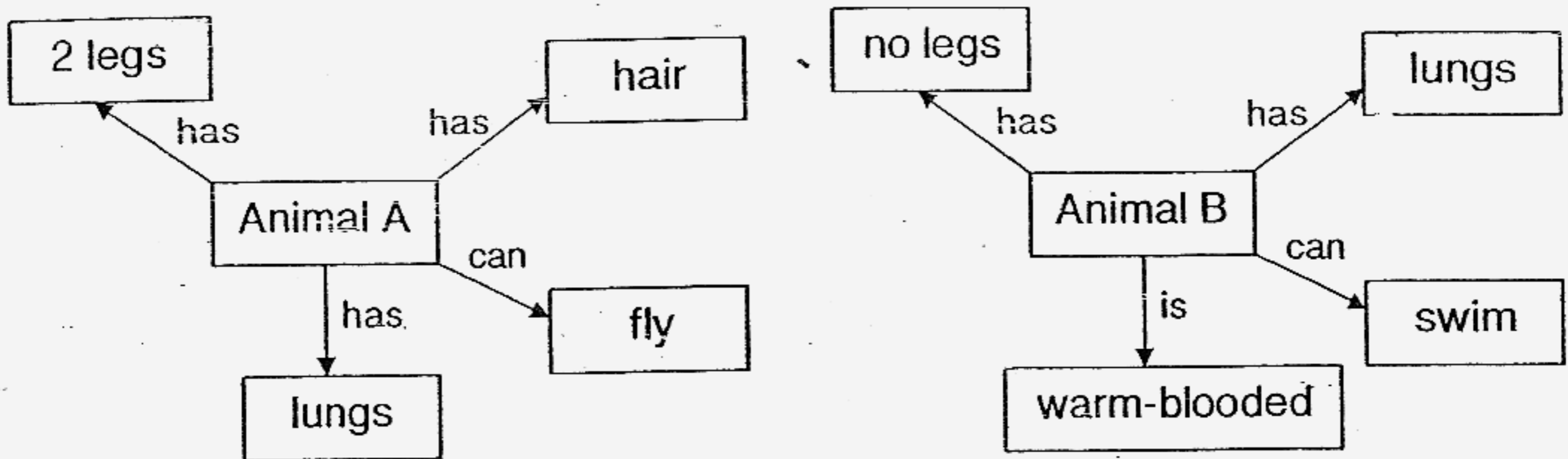
19. Study the flowchart below.



Which one of the following represents P, Q and R correctly?

	P	Q	R
(1)	Ant	Toad	Butterfly
(2)	Grasshopper	Frog	Housefly
(3)	Butterfly	Chicken	Frog
(4)	Moth	Dog	Grasshopper

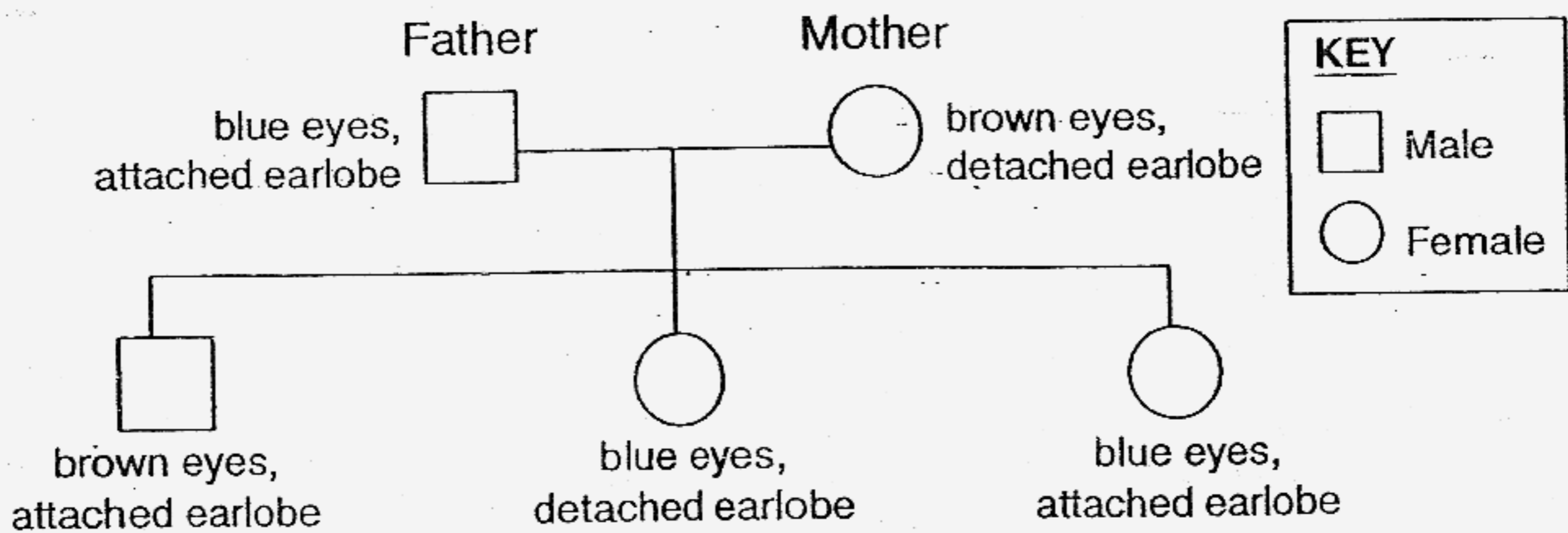
20. Study the diagrams below carefully.



Which of the following animals can Animal A and B be?

	Animal A	Animal B
(1)	Sparrow	Turtle
(2)	Bat	Dolphin
(3)	Eagle	Snake
(4)	Penguin	Whale

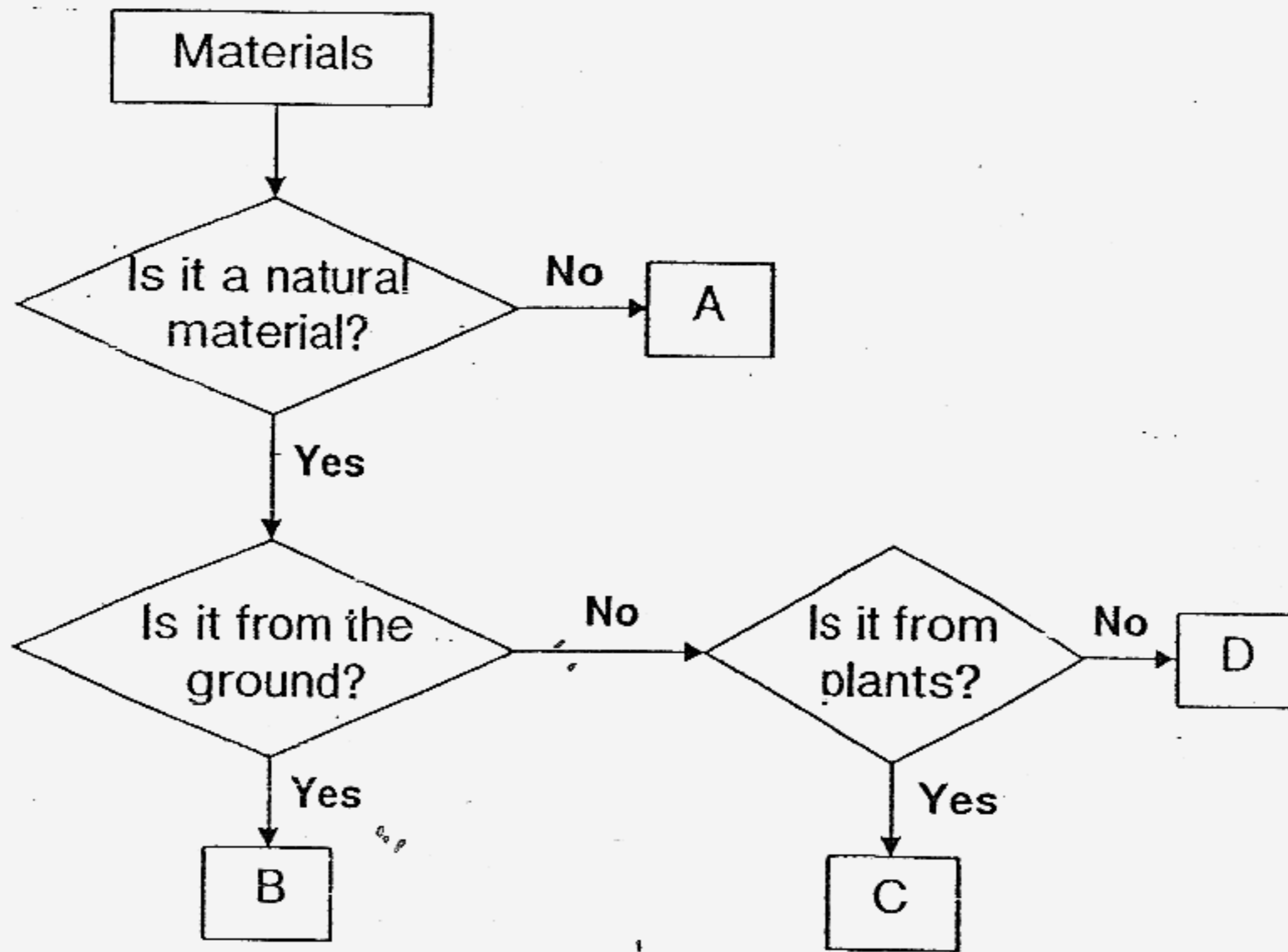
21. The diagram below shows a family tree.



Which one of the following characteristics does the two females in the family inherit from their father?

- (1) blue eyes
- (2) brown eyes
- (3) attached earlobe
- (4) detached earlobe

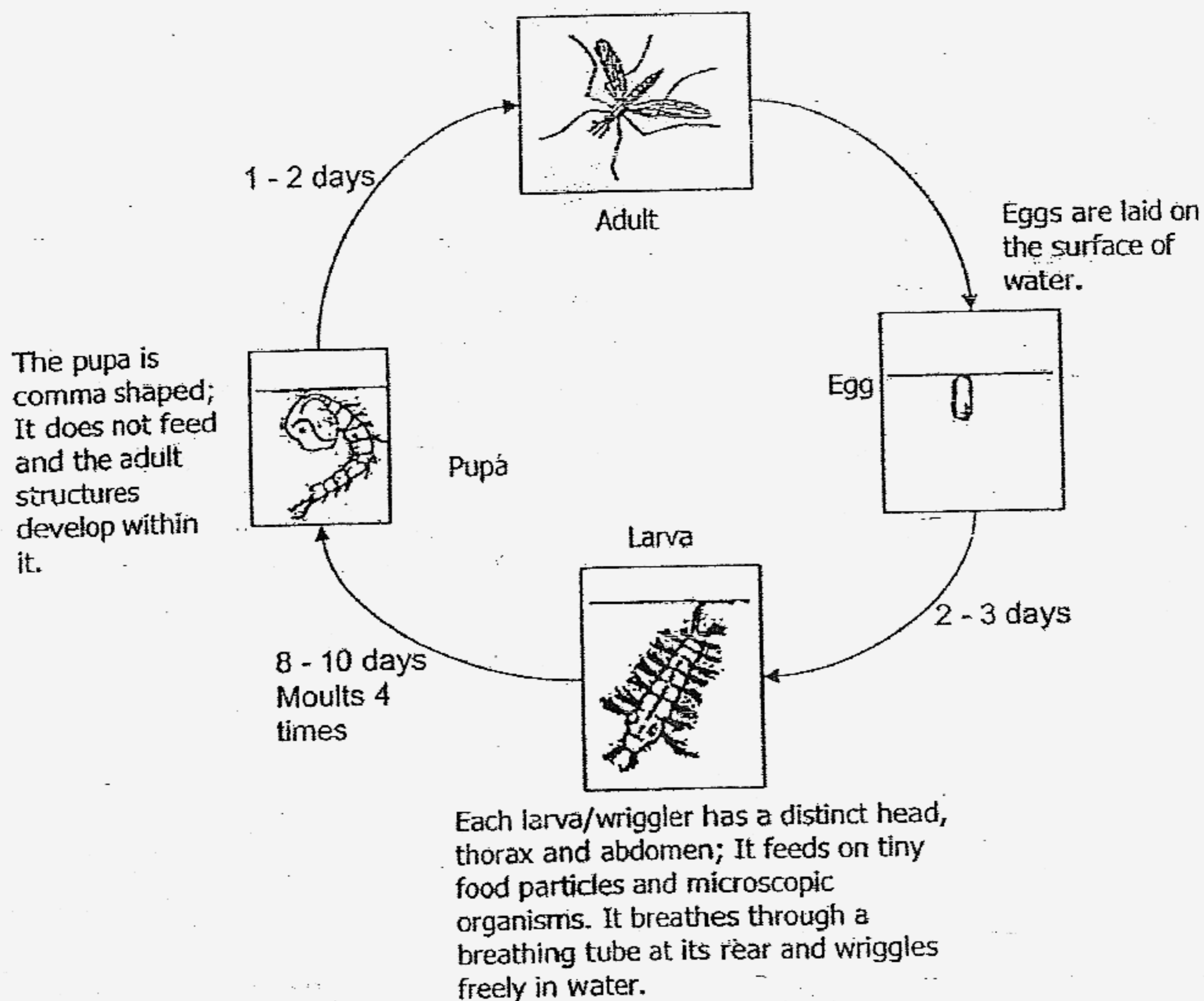
22. Study the flowchart below.



Which one of the following can A, B, C and D be?

	A	B	C	D
(1)	silk B	rubber	rocks	metal
(2)	plastic	leather	nylon	rubber
(3)	rubber	metal	glass	leather
(4)	nylon	rocks	rubber	silk

23. Study the diagram below.



Which one of the following statements about the life cycle of the mosquito is correct?

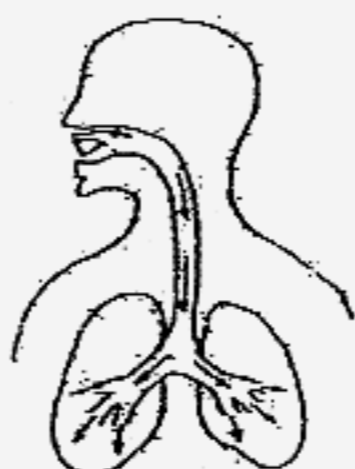
- (1) It moults during the pupa stage.
- (2) The wriggler breathes through its gills.
- (3) The size of the wriggler is twice the size of the pupa.
- (4) It takes about 14 days to turn from an egg into an adult.

24. Which of the following systems work together to enable Roy to play a game of soccer?

- A: skeletal system
- B: muscular system
- C: circulatory system
- D: respiratory system

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

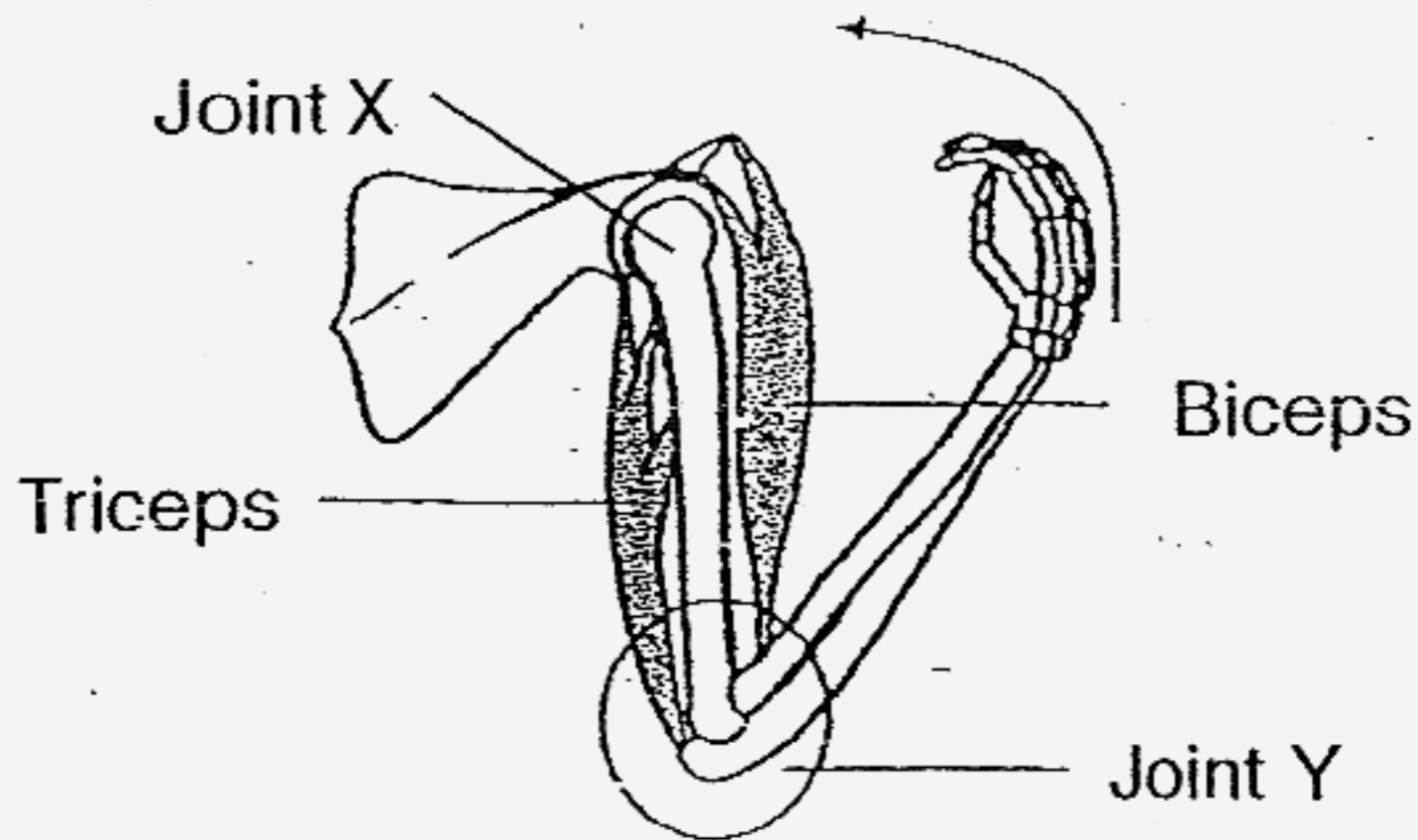
25. The diagram below shows one of the systems in the human body.



What is the function of the above body system?

- (1) To break down food into simpler substances.
- (2) To exchange gases with the air that we breathe.
- (3) To interact with the skeletal system to enable movement.
- (4) To transport oxygen, food and waste materials to different parts of the body.

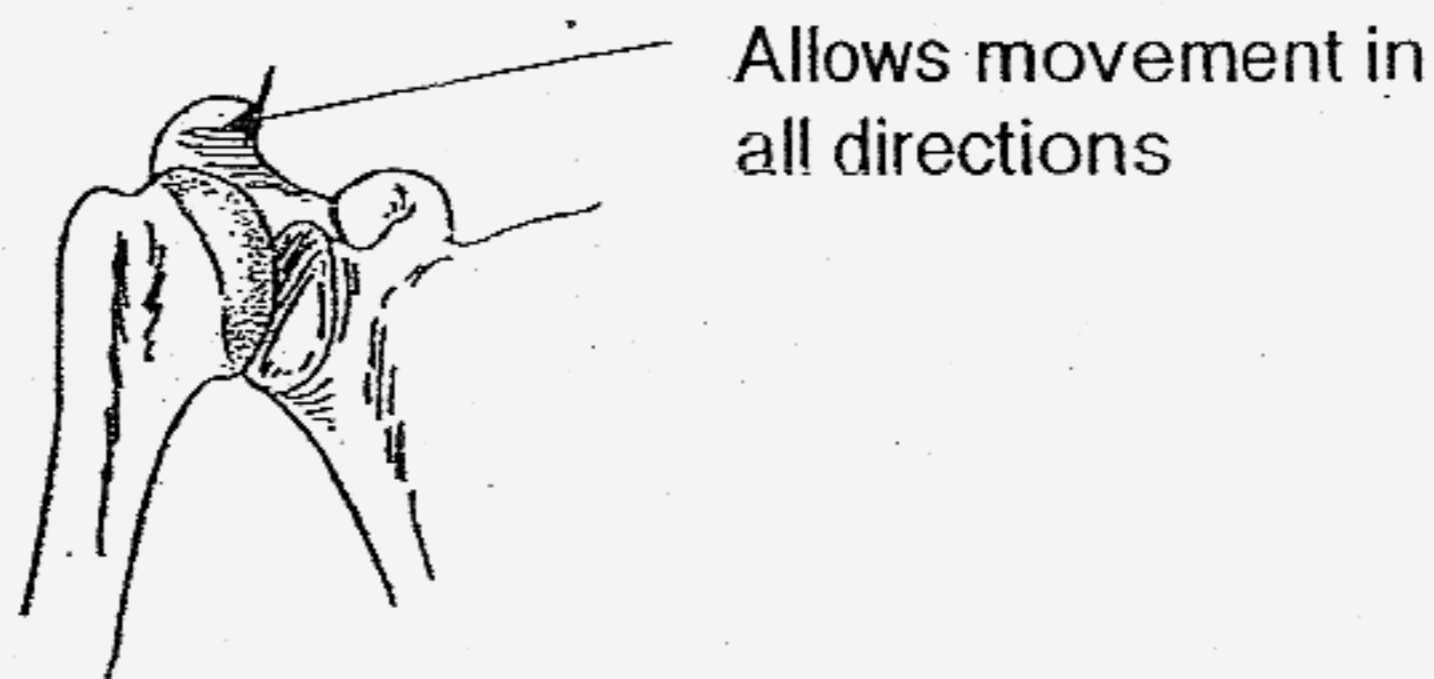
26. The diagram below shows the movement of the joints and muscles when a man touches his shoulder.



Which one of the following correctly shows the joint and the movement of the muscles when the above action takes place?

	Joint	Biceps	Triceps
(1)	X	Contracts	Relaxes
(2)	X	Relaxes	Contracts
(3)	Y	Contracts	Relaxes
(4)	Y	Relaxes	Contracts

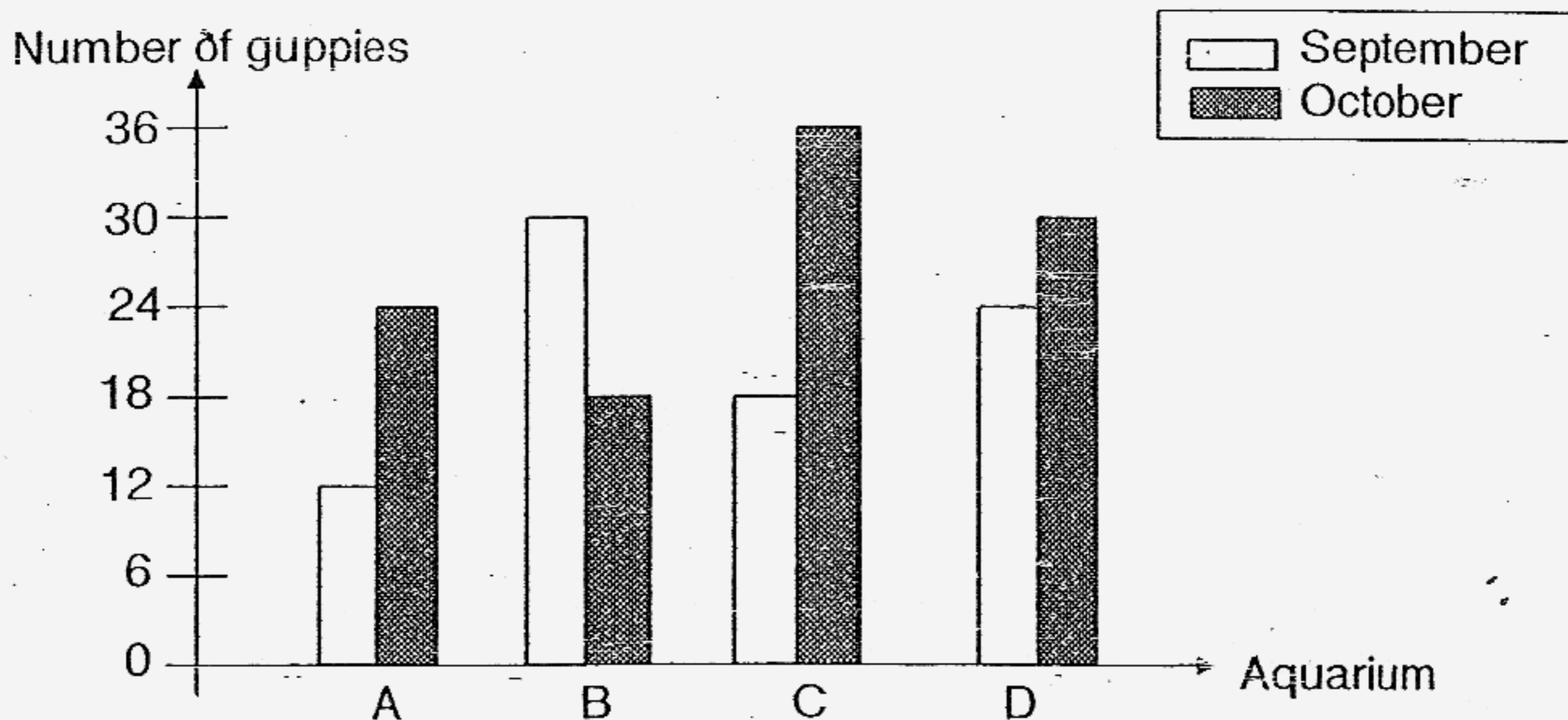
27. The diagram below shows a kind of joint in our body.



Which one of the following can this kind of joint be found?

- (1) hip
- (2) toes
- (3) knee
- (4) finger

28. The number of guppies in four aquariums, A, B, C and D were recorded in a graph over a period of two months.



Which aquarium shows the greatest increase in the number of guppies after two months?

- (1) Aquarium A
 - (2) Aquarium B
 - (3) Aquarium C
 - (4) Aquarium D
29. Which of the following are functions of the skeleton?
- A It protects our stomach.
 - B It gives our body its shape.
 - C It protects important organs inside the body from injury.
 - D It allows the muscles to attach themselves to enable the body to move.
- (1) B and C only
 - (2) A and D only
 - (3) B, C and D only
 - (4) A, B, C and D only

30. A boy raises his hand to hit a shuttlecock with a badminton racket as shown in the diagram below.



Which of the following joint(s) in the boy's upper body will enable him to carry out his action?

- A: Hip joint
 - B: Knee joint
 - C: Elbow joint
 - D: Shoulder joint
-
- (1) A and C only
 - (2) C and D only
 - (3) A, B and D only
 - (4) A, B, C, D

******* End of Section A *******

Name : _____ ()

Class : Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Second Semestral Assessment – 2007

SCIENCE

BOOKLET B

12th October 2007

Total Time for Booklets A and B: 1 hour 30 minutes

**16 questions
40 marks**

Booklet A	60
Booklet B	40
Total	100

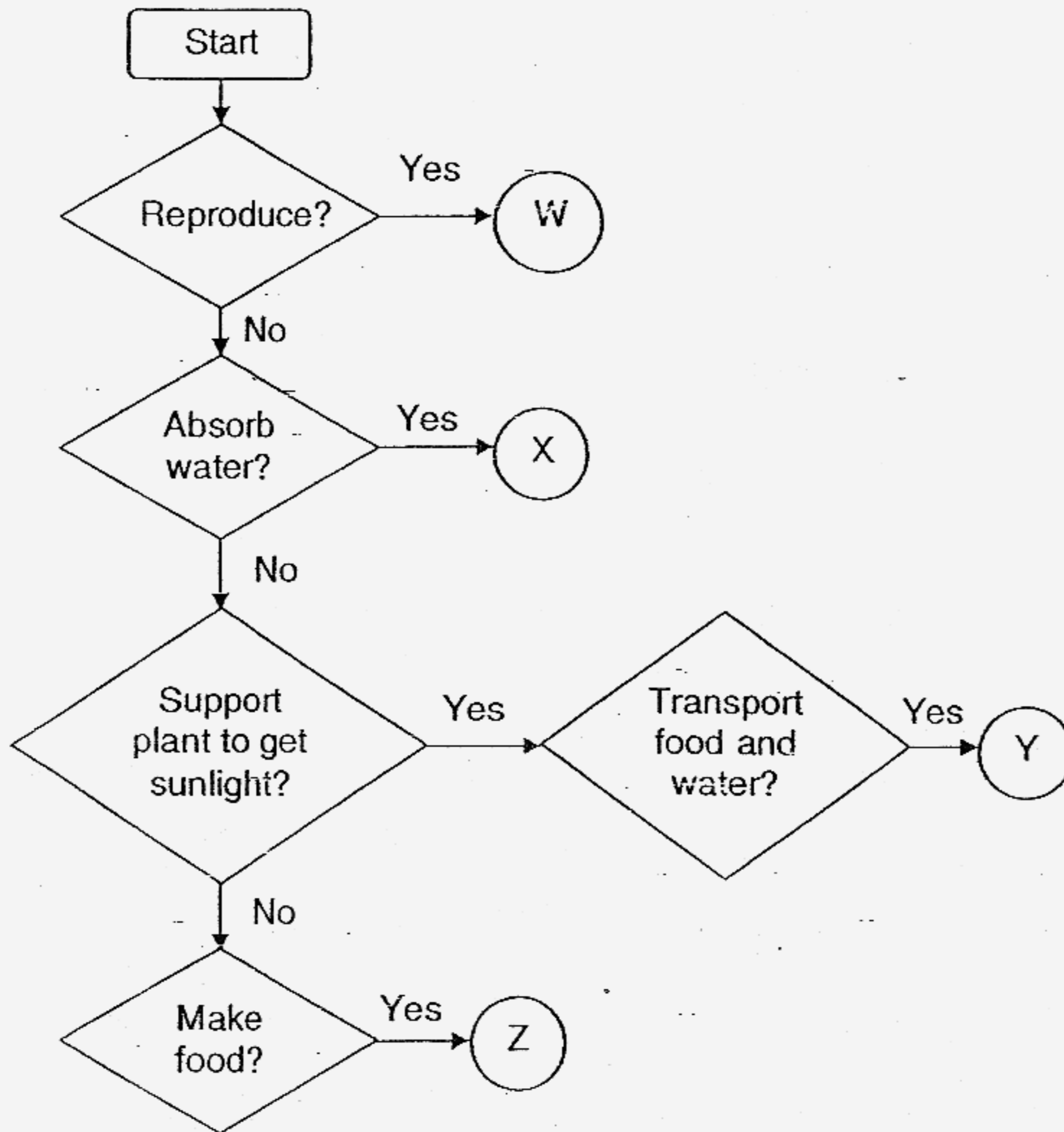
**Do not open this booklet until you are told to do so.
Follow all instructions carefully.**

Parent's Signature/Date

Section B : (40 marks)

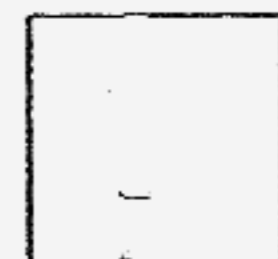
Answer all questions in the space provided.

31. The flowchart below describes the functions of some parts of the plant.

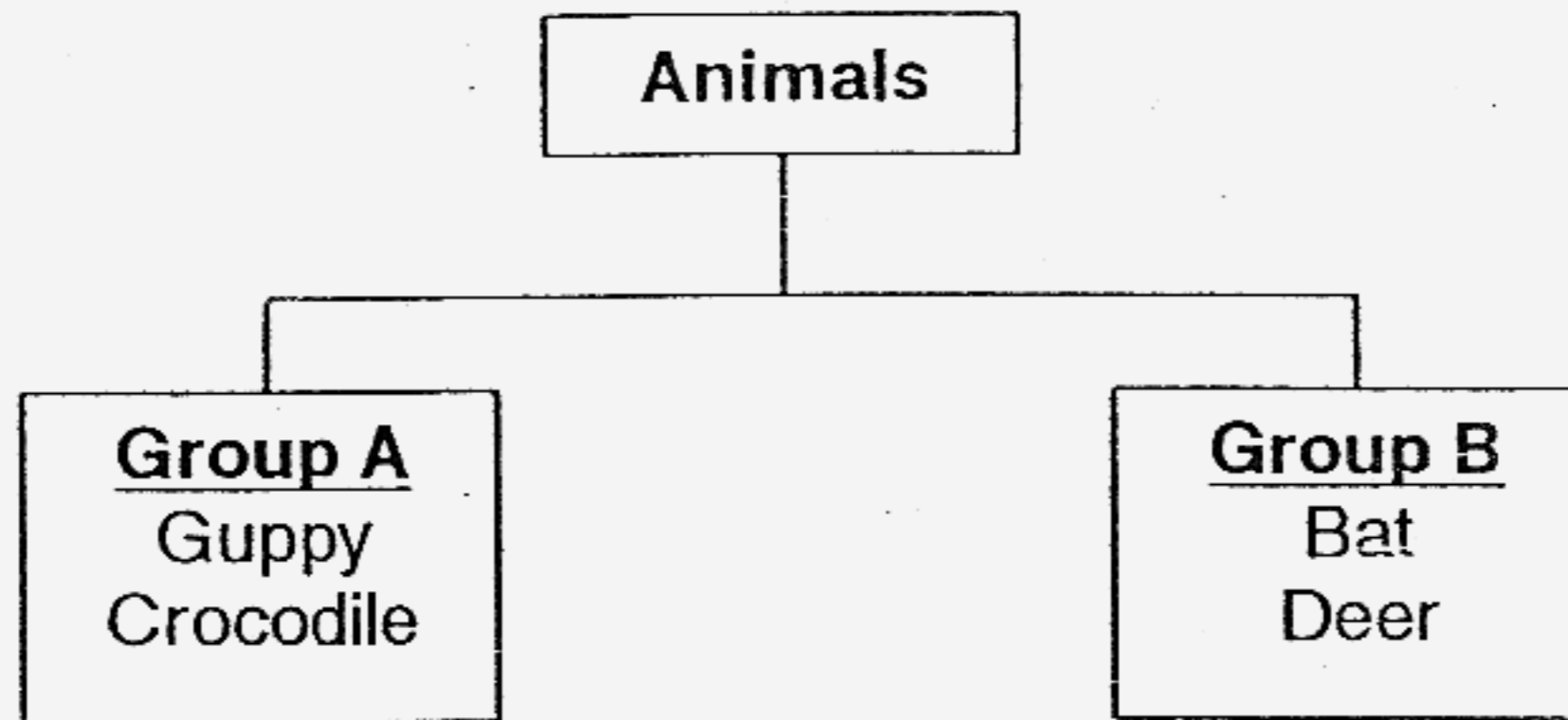


Based on the flowchart, identify the parts of the plant for each of the following: (2 marks)

- (i) W : _____
- (ii) X : _____
- (iii) Y : _____
- (iv) Z : _____



32. Study the classification table below.



(a) Give a suitable heading for Group A and Group B. (1 mark)

(i) Group A: _____

(ii) Group B: _____

(b) Which one of the above animals is different from the rest in terms of the way it reproduces? (1 mark)

(c) Explain your answer in (b). (1 mark)

33. The table below shows the sense organs, S, T, U and V, which Tanya used to make the following observations:

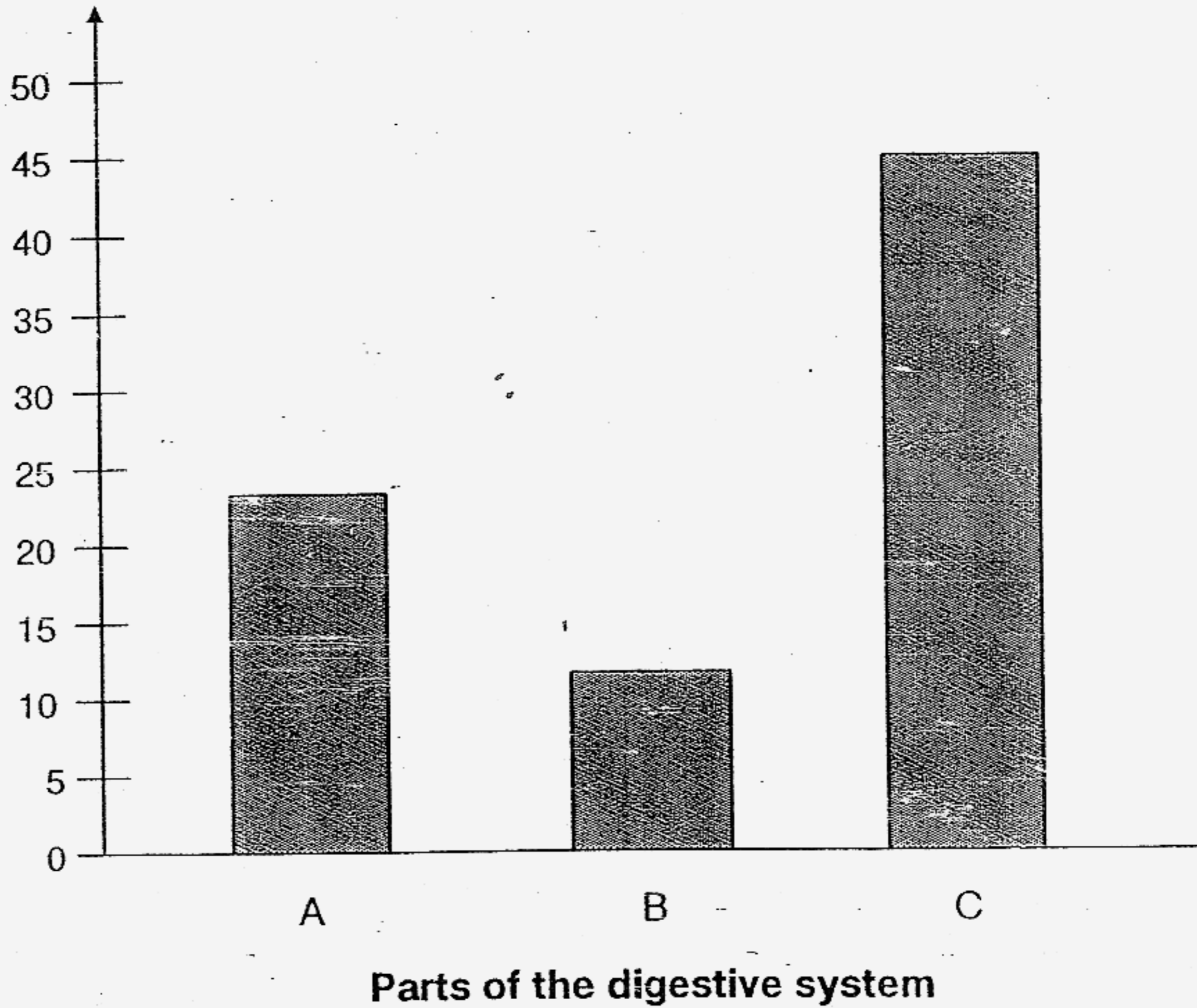
Observation \ Sense Organ	S	T	U	V
The teddy bear is brown and soft.	√			√
The tap is leaking.				√
The flower is fragrant and its petals are soft.	√	√		
The lime is sour.			√	

Identify the following sense organs which Tanya used to make her observations. (2 marks)

- (i) S : _____
- (ii) T : _____
- (iii) U : _____
- (iv) V : _____

34. Nixon ate 50 grams of food during his recess. The graph below shows the amount of food digested by 3 different parts A, B and C of the digestive system.

Amount of food digested (g)

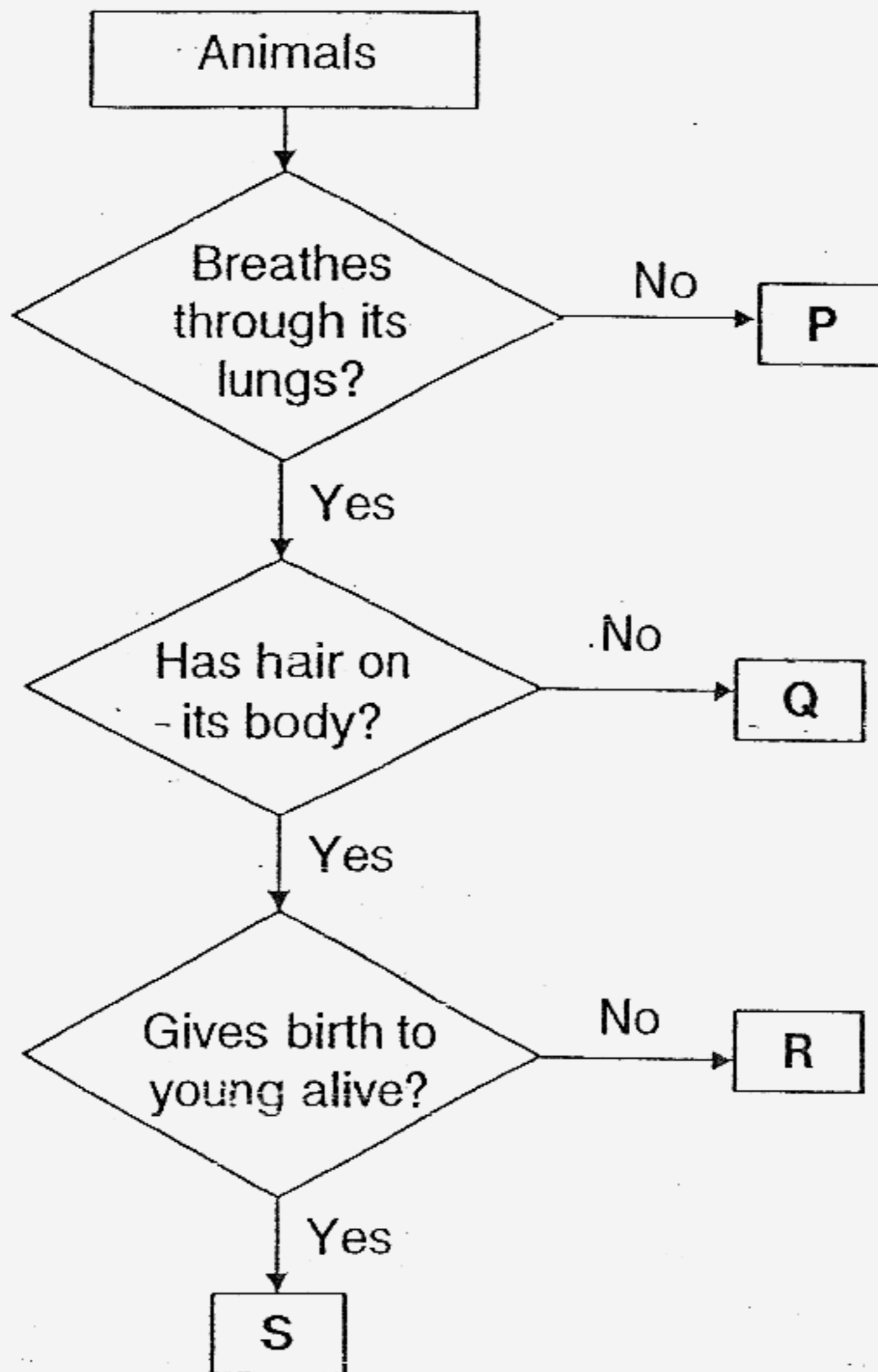


- (a) Which part of the digestive system does A most likely represent? (1 mark)

- (b) What is the function of part C in the digestive system? (1 mark)

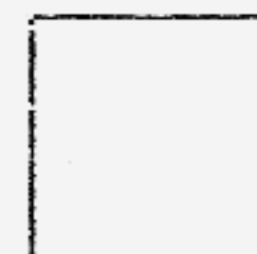


35. The flowchart below shows how some animals are grouped.

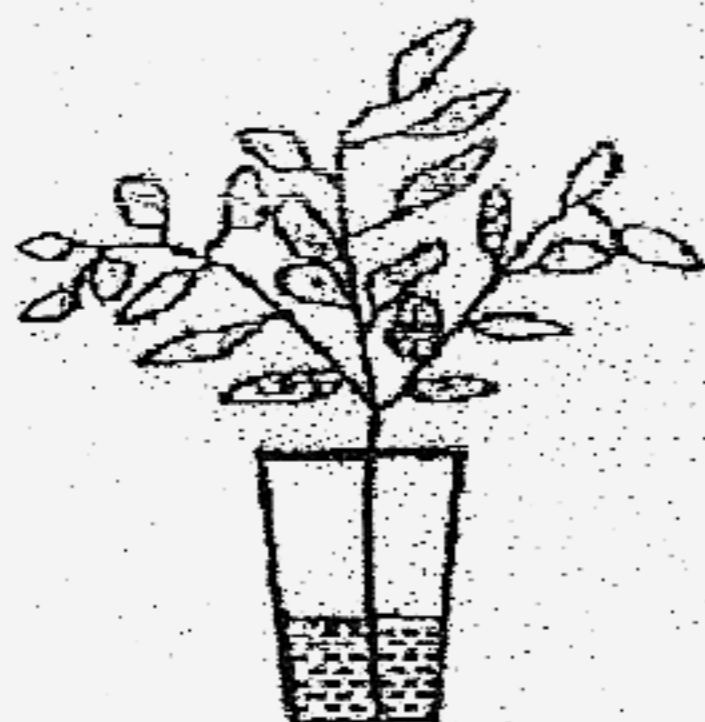


(a) What are two similarities between animals R and S?

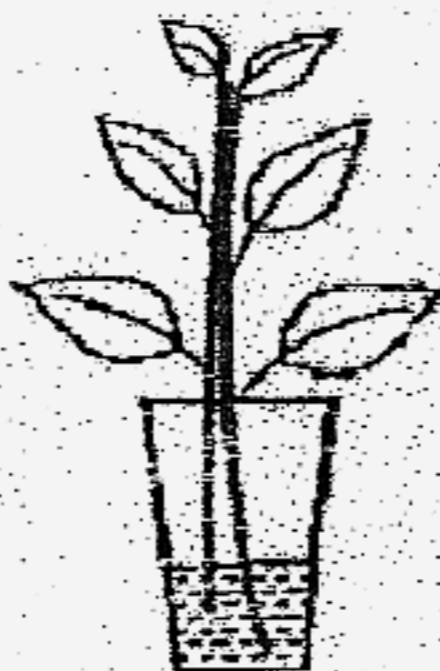
(b) Name two animal groups which can be placed in P. (1 mark)



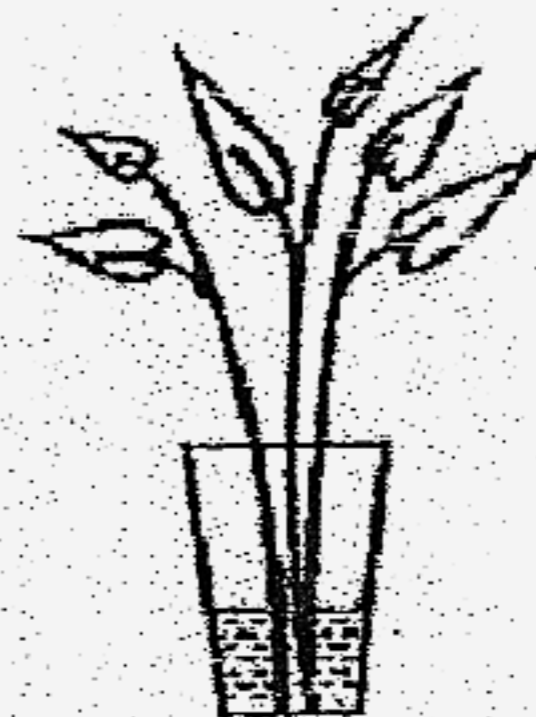
36. Three types of plants were placed into three identical containers A, B and C which were filled with 200ml of water each.



Container A



Container B



Container C

The volume of water in each container was recorded on the 7th day as shown in the table below.

Container	Volume of water (ml)	
	Day 1	Day 7
A	200	181
B	200	176
C	200	200

(a) Which of the following containers, A, B or C, contained a plastic plant? (1 mark)

(b) Explain why there was a drop in the water level in containers A and B after 7 days. (1 mark)

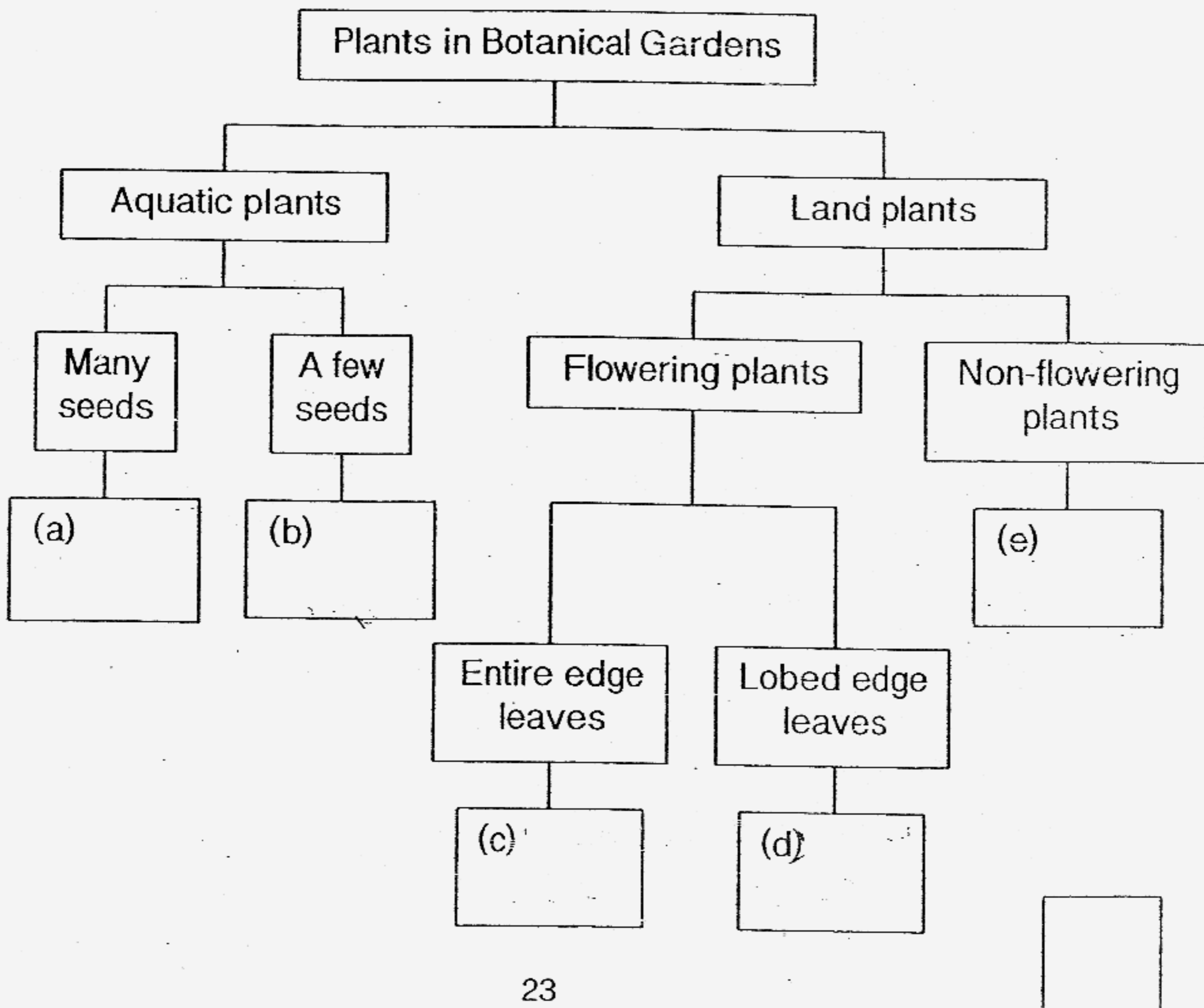
(c) From this experiment, what can we conclude about the needs of a living thing? (1 mark)



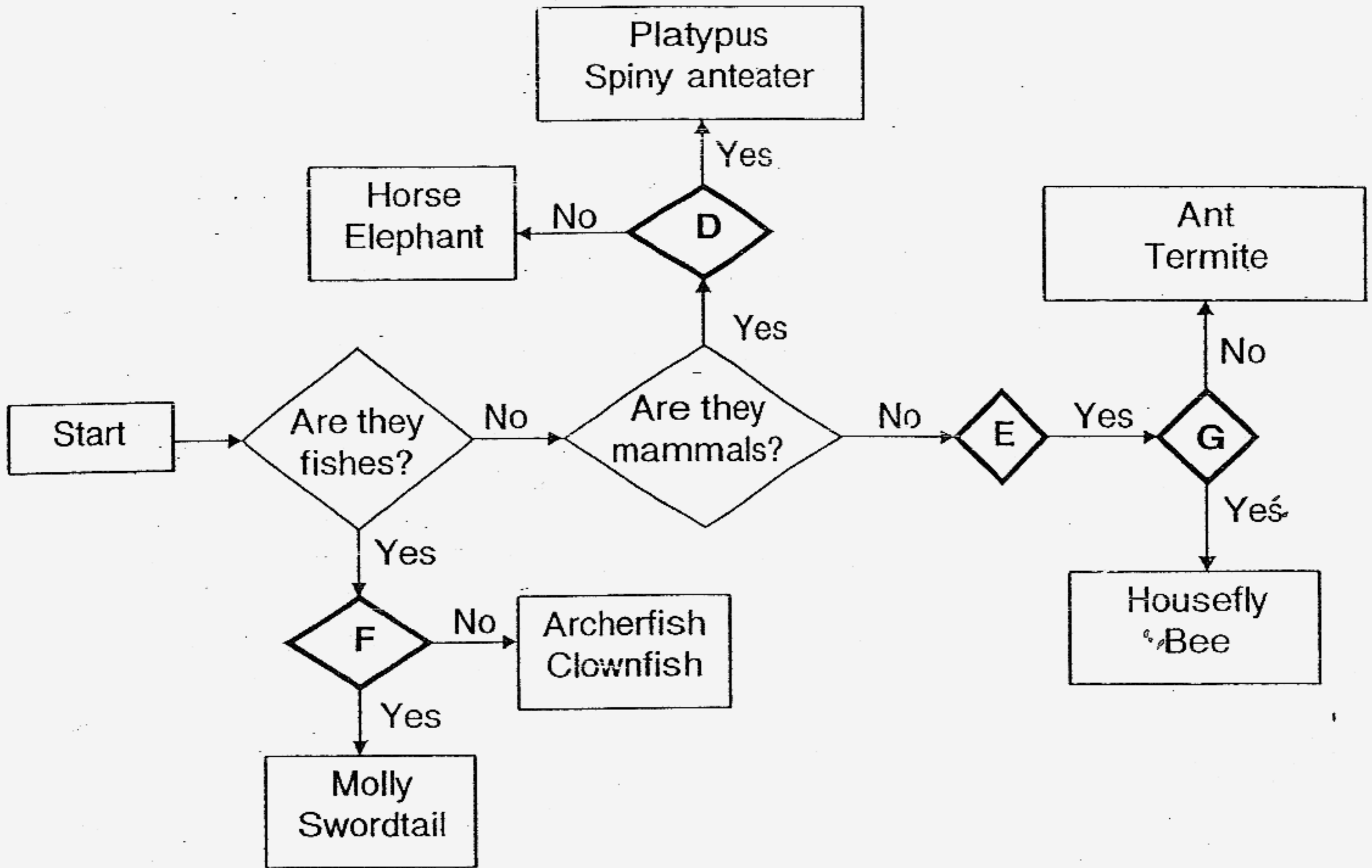
37. Ahmad, Belle and Candy went for a learning journey to the Botanical Gardens. They discovered some plants which they have not seen before. They observed the plants carefully and recorded their observations in the table below.

Plant	Type of plant	Seed	Leaf	Where can the plant be found?
A	Flowering plant	Many	Lobed edge	Water
B	Flowering plant	Many	Lobed edge	Land
C	Flowering plant	A few	Toothed edge	Water
D	Non-flowering plant		Entire edge	Land
E	Non-flowering plant		Entire edge	Land
F	Flowering plant	A few	Entire edge	Land

Based on the observations given in the table above, classify all the plants by placing the letters (A to F) in the boxes provided below. (3 marks)



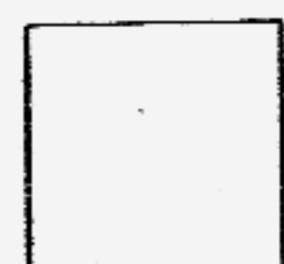
38. Study the flowchart on animals below.



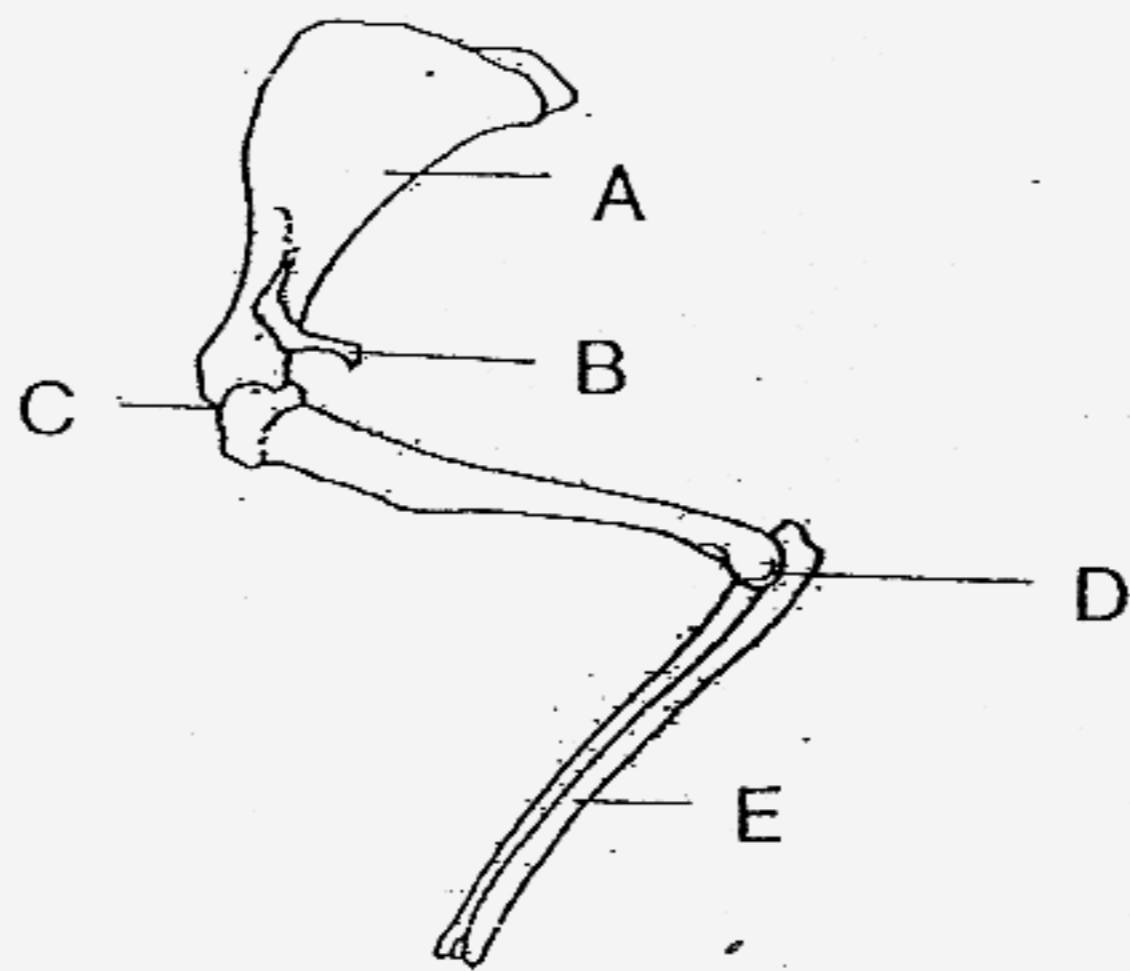
The letters D, E, F and G each represent a question that classifies the organisms suitably.

Write the letter, D, E, F or G in the correct boxes below to indicate the question they represent. Each letter can only be used **once**. (2 marks)

	Questions	Letter
i)	Can they fly?	
ii)	Can they swim?	
iii)	Are they insects?	
iv)	Are they reptiles?	
v)	Do they lay eggs?	
vi)	Do they give birth to their young alive?	



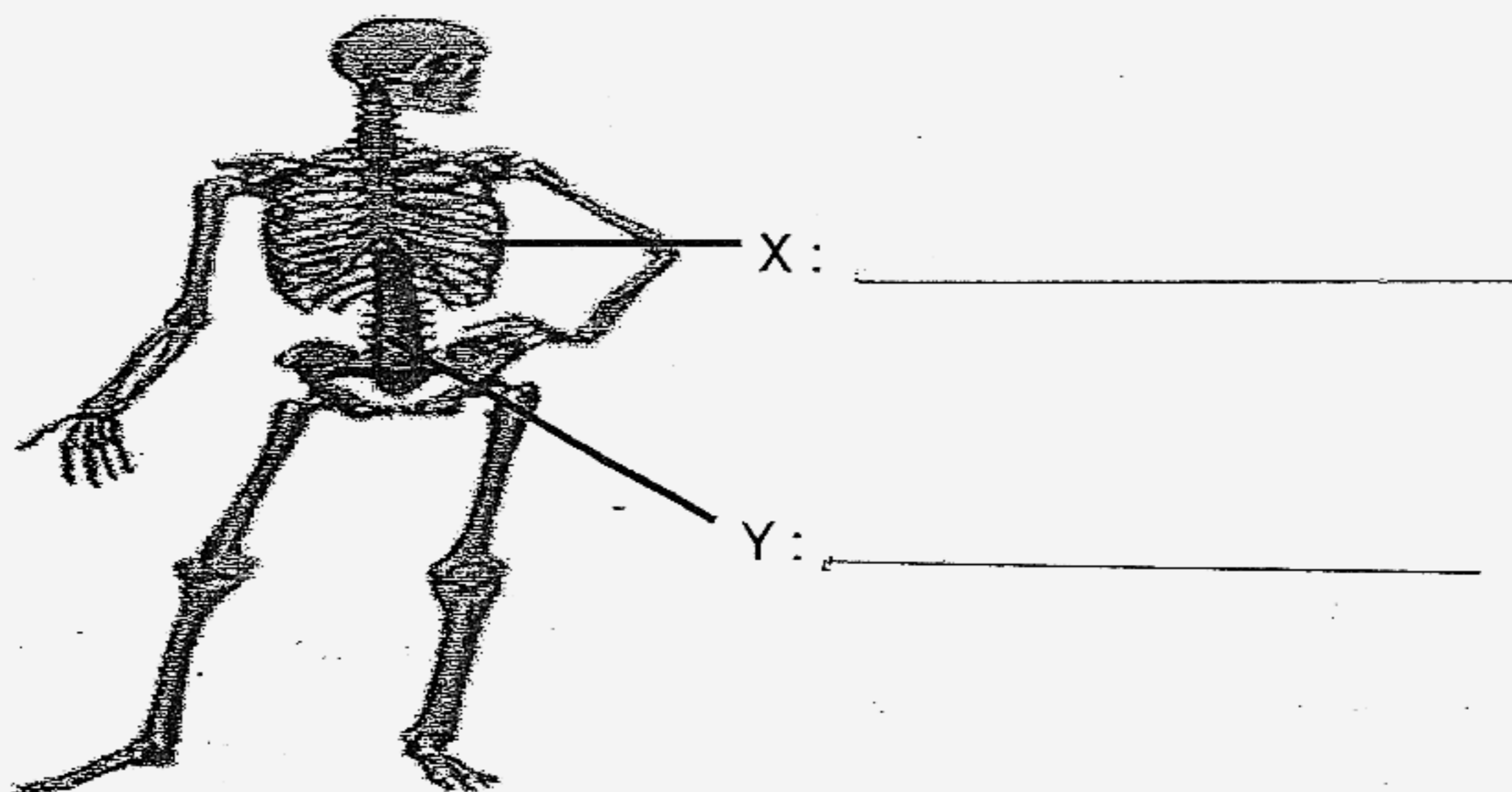
39. The diagram below shows parts of the skeletal system of an animal.



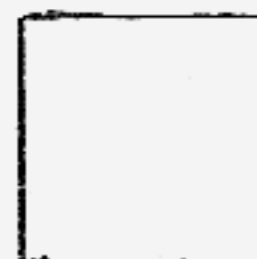
(a) Which two parts, A, B, C, D or E, are joints in the limb as shown above? (1 mark)

(b) Give a reason why joints are needed in the limbs. (1 mark)

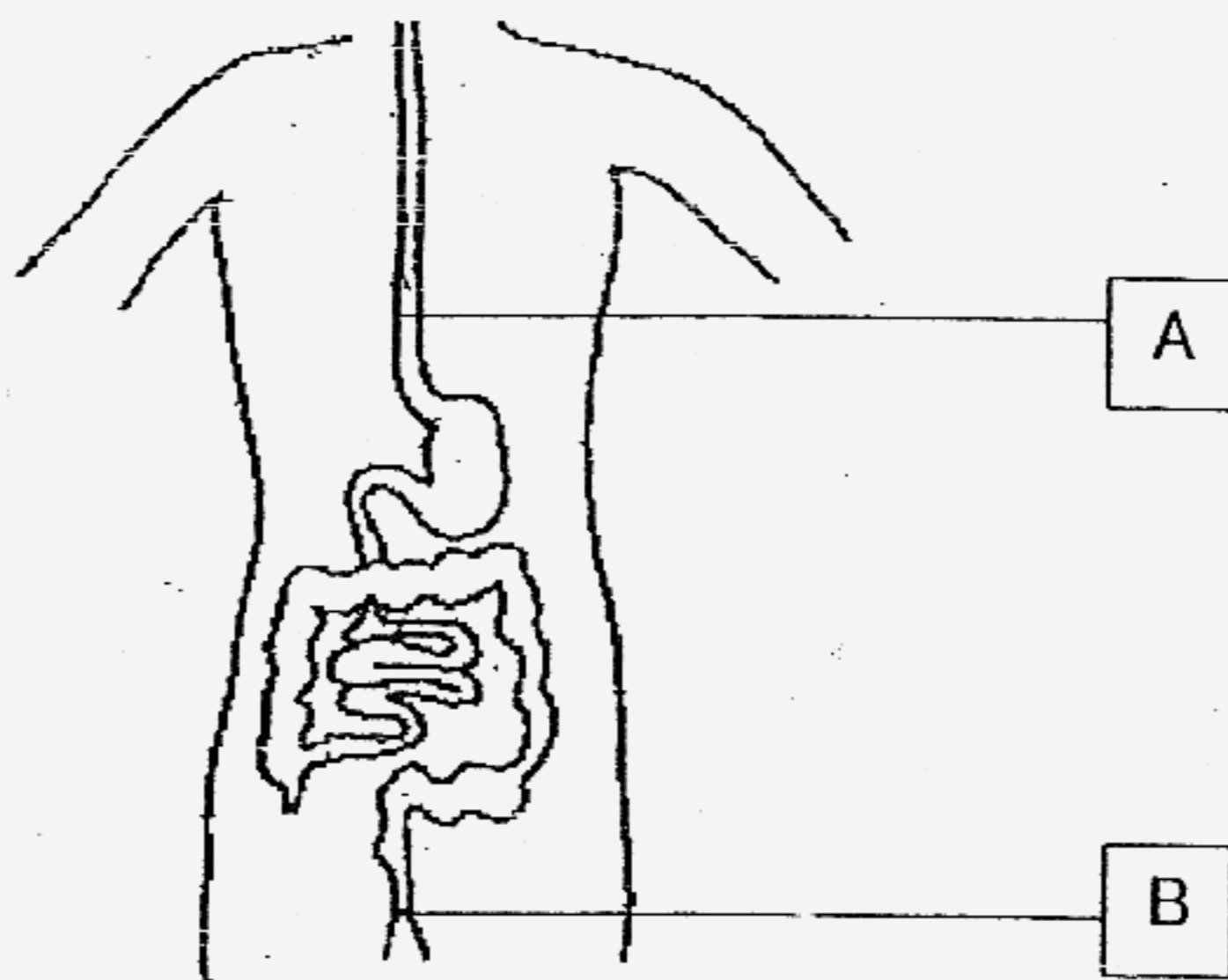
40. The diagram below shows a skeleton of a man.



- (a) Identify the names of the parts marked X and Y by writing in the space provided. (2 marks)
- (b) What is the common function of these two parts of the skeleton? (1 mark)
- _____



41. The diagram below shows part of our digestive system.

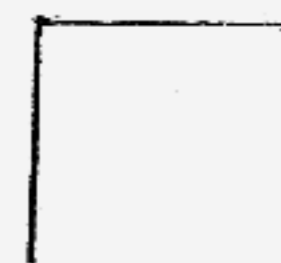


(a) What is the function of parts A and B? (2 marks)

(i) Part A : _____

(ii) Part B : _____

(b) Digestion of food takes place in another part of the digestive system that is not shown in the diagram above. Name this part. (1 mark)



42. The diagram below shows a cockroach and a frog.



(a) Complete the life cycles of the cockroach and the frog in the boxes below. (1 mark)

(i)	(ii)
Life cycle of a cockroach	Life cycle of a frog
Adult cockroach 	Adult frog

(b) State one difference and one similarity between the life cycle of a cockroach and a frog. (2 marks)

(i) Difference: _____

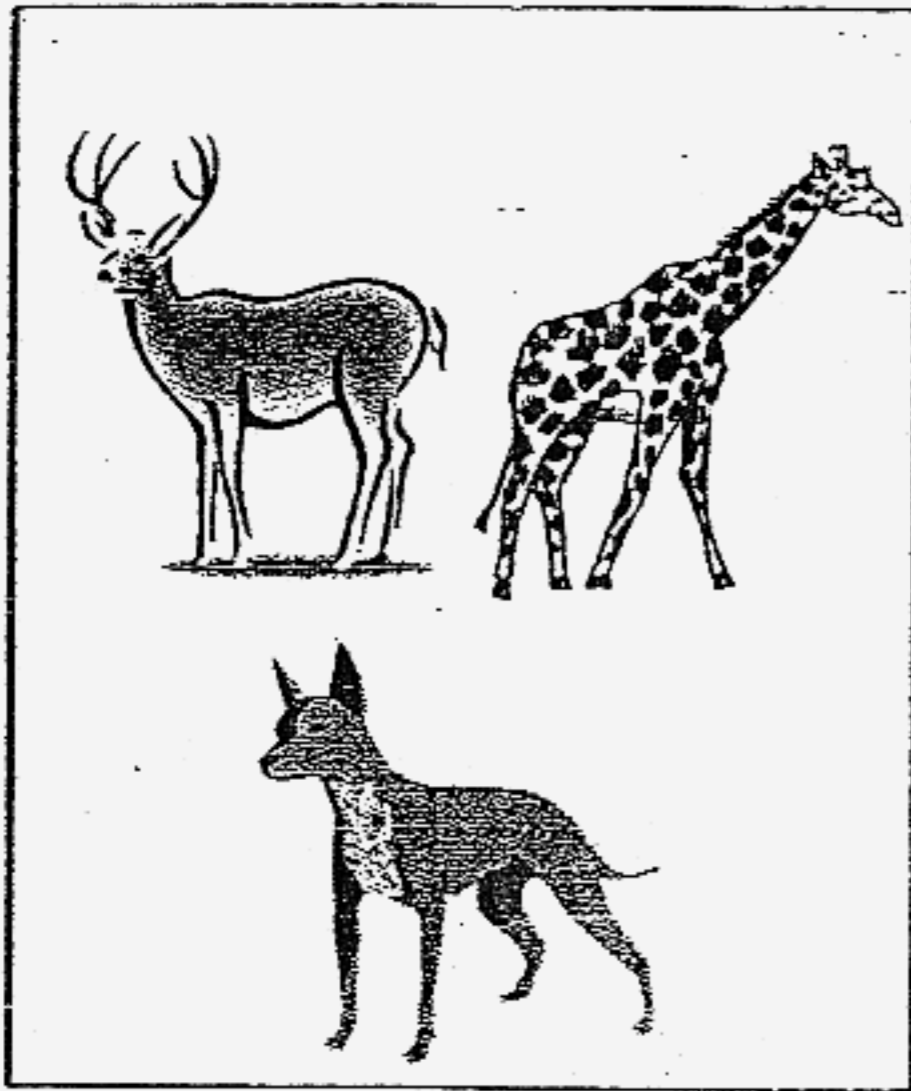
(ii) Similarity: _____



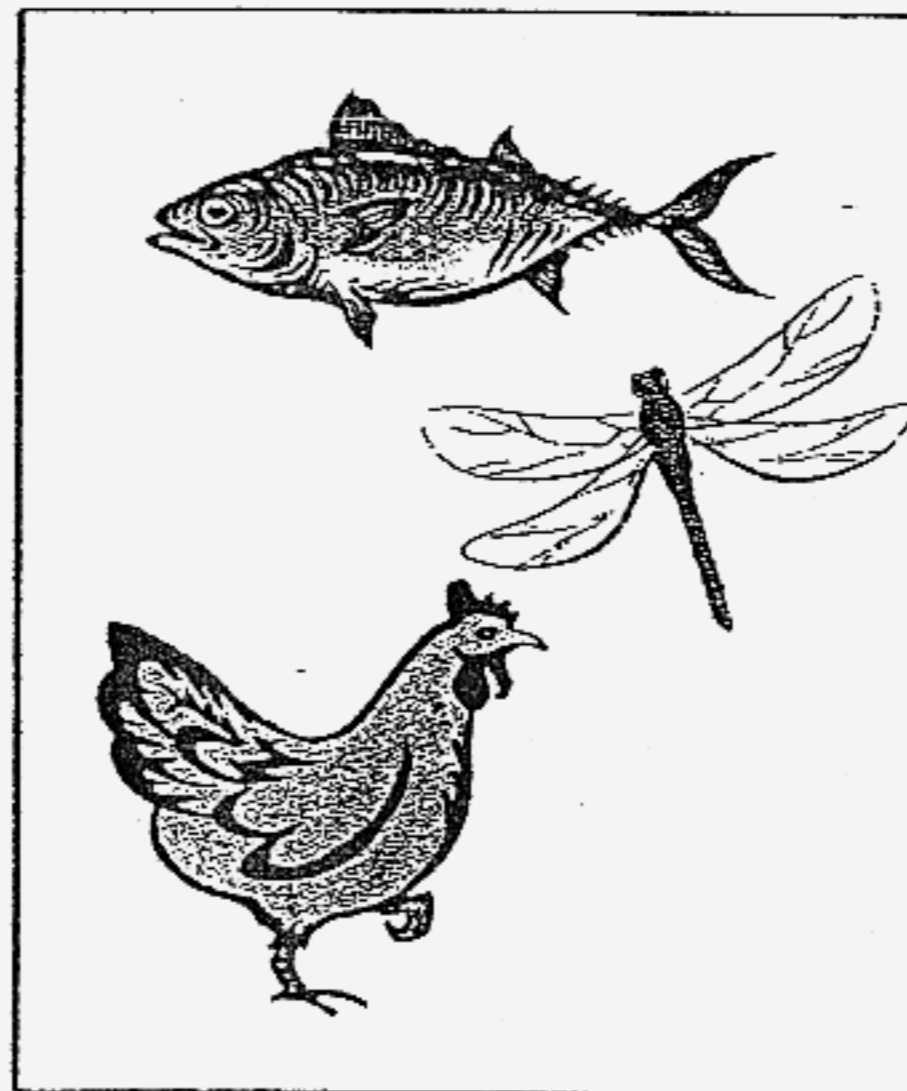
43. (a) State one way in which ferns and mushrooms are similar in the way they reproduce. (1 mark)

(b) How do the ferns and mushrooms get food? (1 mark)

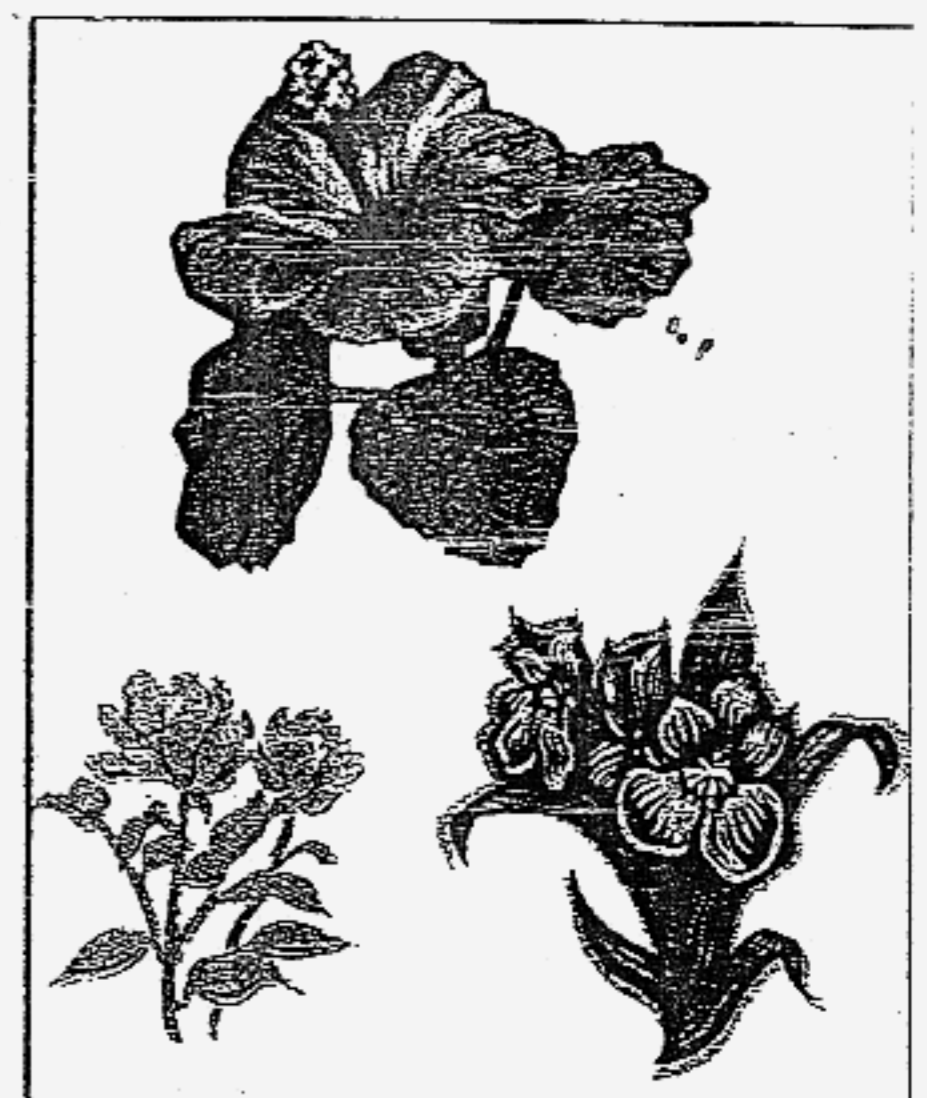
44. Study the diagrams below carefully.



Group A



Group B



Group C

(a) How are the living things in groups A, B and C classified? (1 mark)

(b) Explain your answer clearly in (a). (2 marks)

45. Charlie has two similar pots of soil, labelled A and B. He puts 3 seeds in each pot. He places Pot A in a dark cupboard and Pot B in a place with light.

Charlie observes the seeds and records their growth daily. The heights of the seedlings are shown in the graph below.

Pot A

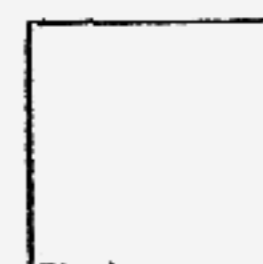
	Height of seedling (cm)					
Bean	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
1	0	0	1.5	3.2	4.8	6.9
2	0	0	1.4	3.0	5.2	7.0
3	0	0	1.7	3.1	5.0	7.1

Pot B

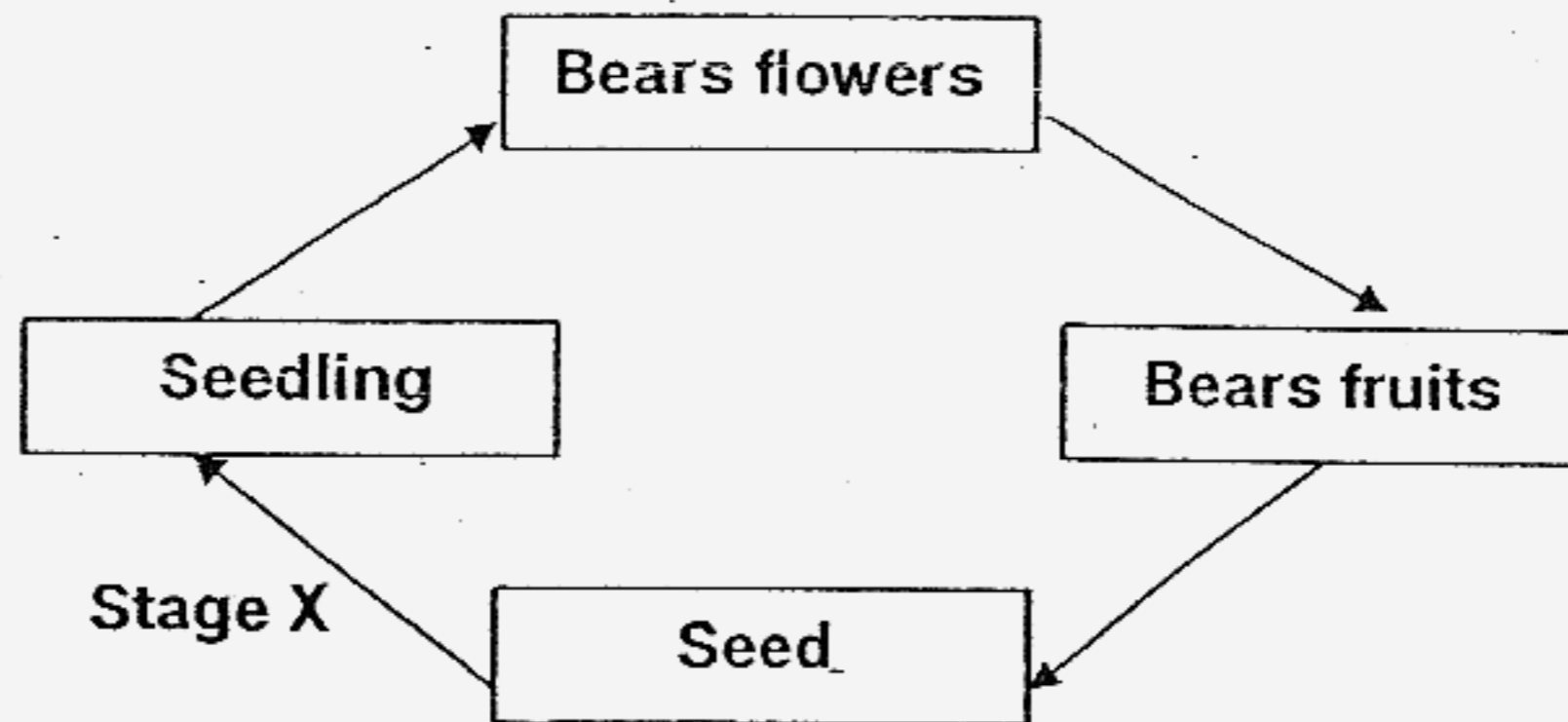
	Height of seedling (cm)					
Bean	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
1	0	0	0.9	1.8	3.2	5.4
2	0	0	1.0	2.0	3.0	5.0
3	0	0	0.8	2.1	3.1	4.9

Study the statements below and indicate whether each of the following statements is 'True', 'False' or 'Not Possible to Tell' by putting a tick (✓) in the correct box. (2 marks)

	Statements	True	False	Not Possible to Tell
(a)	All the seeds in the pots germinated by the second day.			
(b)	All the seeds are obtained from the green bean plant.			
(c)	The seeds in Pot A are able to germinate without light.			
(d)	Seedlings in the light are shorter than seedlings in the dark.			



46. The diagram above shows the stages of growth of a plant.



(a) State (all) the conditions needed in Stage X for the seed to grow into a seedling. (1 mark)

(b) What is the function of the seed in the life cycle of a plant?

(c) Give an example of a plant that does not follow the above order of development. (1 mark)

***** End of Paper *****

CHIJ Primary School

Primary 3 Science SA2 Exams (2007)

Answer Keys

SECTION A : (60 MARKS)

Qn no.	Ans
1	4
2	2
3	1
4	1
5	4
6	3
7	4
8	3
9	1
10	4

Qn no.	Ans
11	2
12	1
13	3
14	4
15	3
16	3
17	3
18	4
19	3
20	2

Qn no.	Ans
21	1
22	4
23	4
24	4
25	2
26	3
27	1
28	3
29	3
30	2

SECTION B (40 MARKS)

- 31a. (i) seed
 (ii) roots
 (iii) stem
 (iv) leaves

- 32a. (i) covered with scales
 (ii) covered with fur.

32b. crocodile.

32c. Crocodile lay eggs while the other gives birth.

33. (i) Skin
 (ii) nose
 (iii) tongue
 (iv) eyes

34a. Stomach.

34b. H digests food further so that the digested food can enter the blood stream.

35a. They breathe through their lungs and have hair on their body.

35b. Insect and fish.

36a. Container C.

36b. Because the plant absorb water.

36c. Living things need water.

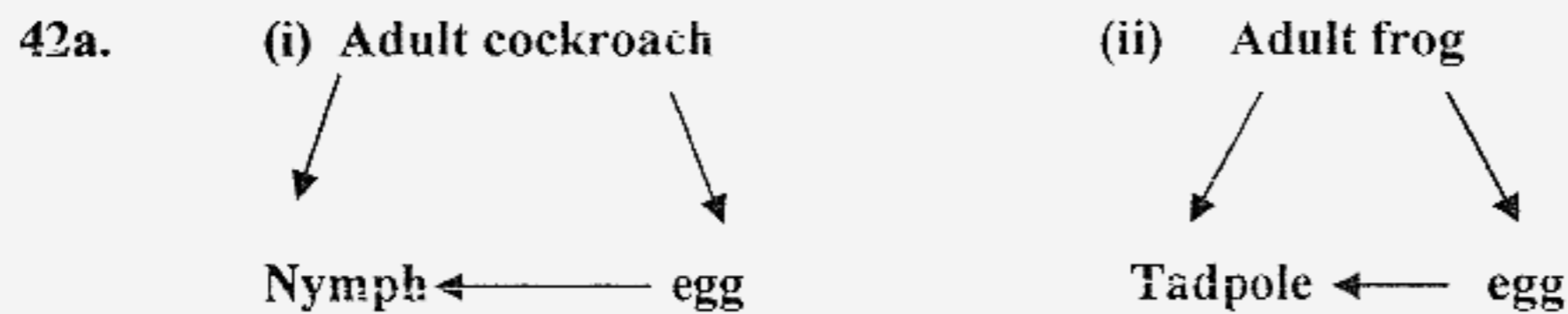
- 37a. A
- 37b. C
- 37c. F
- 37d. B
- 37e. D, E

38. (i) G (iii) E (v) D (vi) F

- 39a. C and D
- 39b. Joints helps us to bend

- 40a. X: ribcage
Y: back bone
- 40b. They protect the vital organs.

- 41a. (i) A is to transport the food to the stomach.
- (ii) B is to pass out undigested food.
- 41b. Mouth



- 42b. (i) Frog laid eggs in water but cockroach laid eggs on land.
- (ii) They both have three stages in their life cycle.

- 43a. They reproduce by spores.
- 43b. Fern can make their own but mushroom feed dead plants and organisms.

- 44a. According to the way they reproduce.
- 44b. Group A give, Group B lay eggs & Group C reproduces from seed.

- 45a. False
- 45b. Not
- 45c. True
- 45d. True

- 46a. Air, water and warmth.
- 46b. To reproduce.
- 46c. Onion.