



**HOUGANG PRIMARY SCHOOL  
SECOND SEMESTRAL ASSESSMENT 2009  
SCIENCE  
PRIMARY 3**

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

Class: Pr. 3. ( )

Date: 5<sup>th</sup> November 2009

**BOOKLET A**

There are 30 questions in this booklet. (60 marks)

Total time for Booklets A and B is 1 h 45 min.

Follow all the instructions carefully:

- Use 2B pencils only.
- Select only one answer for each question.
- Shade the oval completely.
- Erase any answer you wish to change using an eraser.
- Do not make any stray marks on the answer sheet.

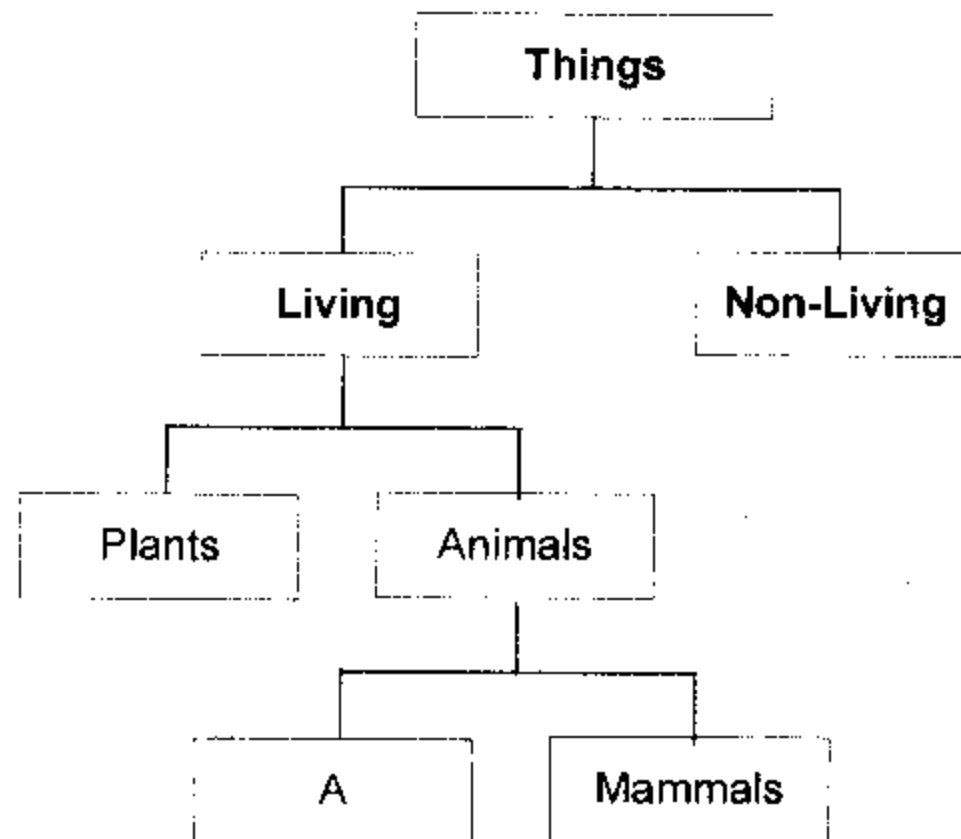
Answer all the questions.

**DO NOT OPEN THESE BOOKLETS UNTIL YOU ARE TOLD TO DO SO.**

**BOOKLET A (30 × 2 MARKS)**

For each question from 1 to 30, 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.

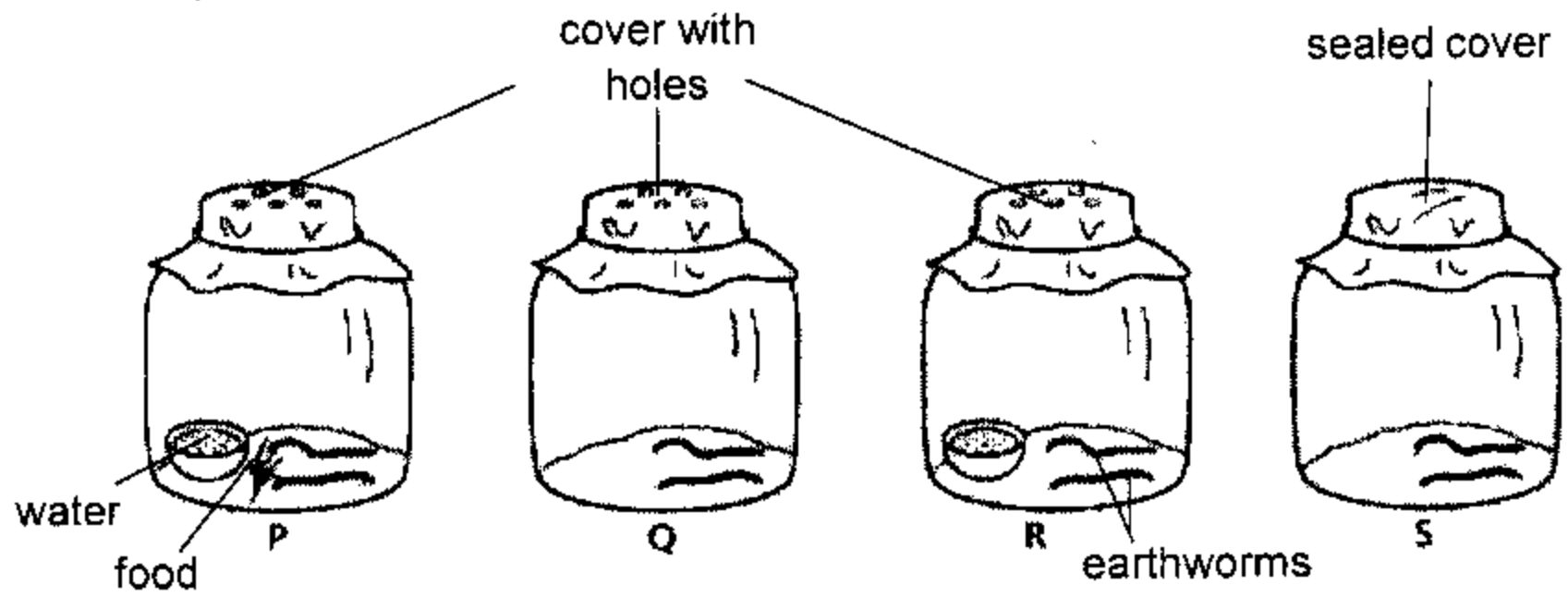
1. Study the classification table below.



Which one of the following can be A?

- 1) Fishes
  - 2) Rubber
  - 3) Plastics
  - 4) Flowering
2. Which one of the following is a characteristic found only in plants?
- 1) They can reproduce.
  - 2) They can make their own food.
  - 3) They can move from place to place.
  - 4) They can only be seen through a microscope.

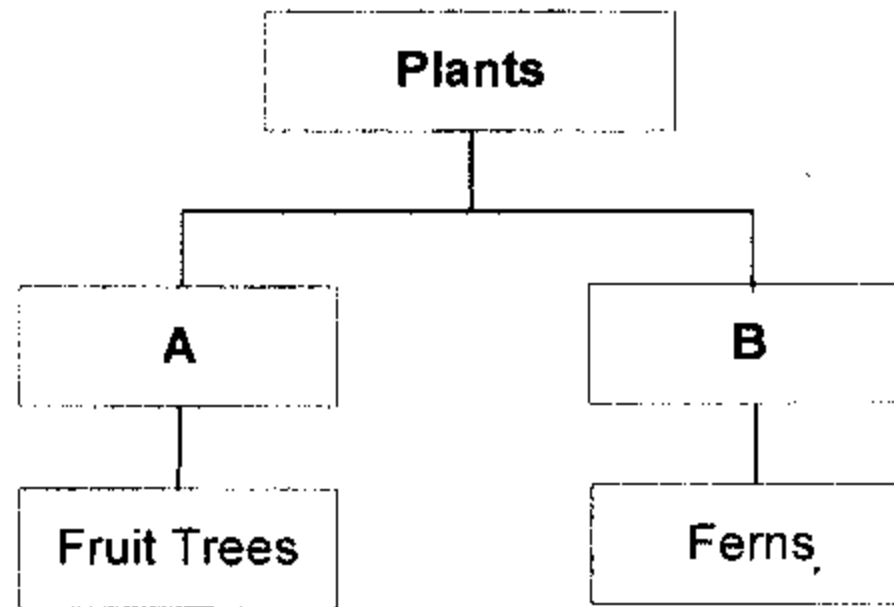
3. Study the set-ups below. Two earthworms of similar size are placed in each jar.



Arrange the earthworms in the jars, starting with the one that will live the longest to the one that will die first.

- 1) P, R, S, Q
  - 2) P, R, Q, S
  - 3) R, Q, S, P
  - 4) R, P, Q, S
4. Which of the following statement is **true** about roots?
- 1) They are all big and strong.
  - 2) Only land plants have roots.
  - 3) Roots help to support the plant upright.
  - 4) Some roots are found above the ground.

5. Study the classification table below.



What would be a suitable heading for A and B?

**Group A**

- 1) Water plants
- 2) Land plants
- 3) Flowering plants
- 4) Non-flowering plants

**Group B**

- Land plants
- Water plants
- Non-flowering plants
- Flowering plants

6. Tom wanted to conduct an experiment to find out how light affects the growth of plants. Which two of the following set-ups should he use?

Set-up	Plant	Conditions		
		Air	Sunlight	Water
A	Balsam	✓	✓	✓
B	Orchid	✓		✓
C	Balsam	✓		✓
D	Orchid	✓	✓	

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

7. **Animal X** has four legs, gives birth and feeds its young with milk.  
From the statement above, which group does Animal X belong to?

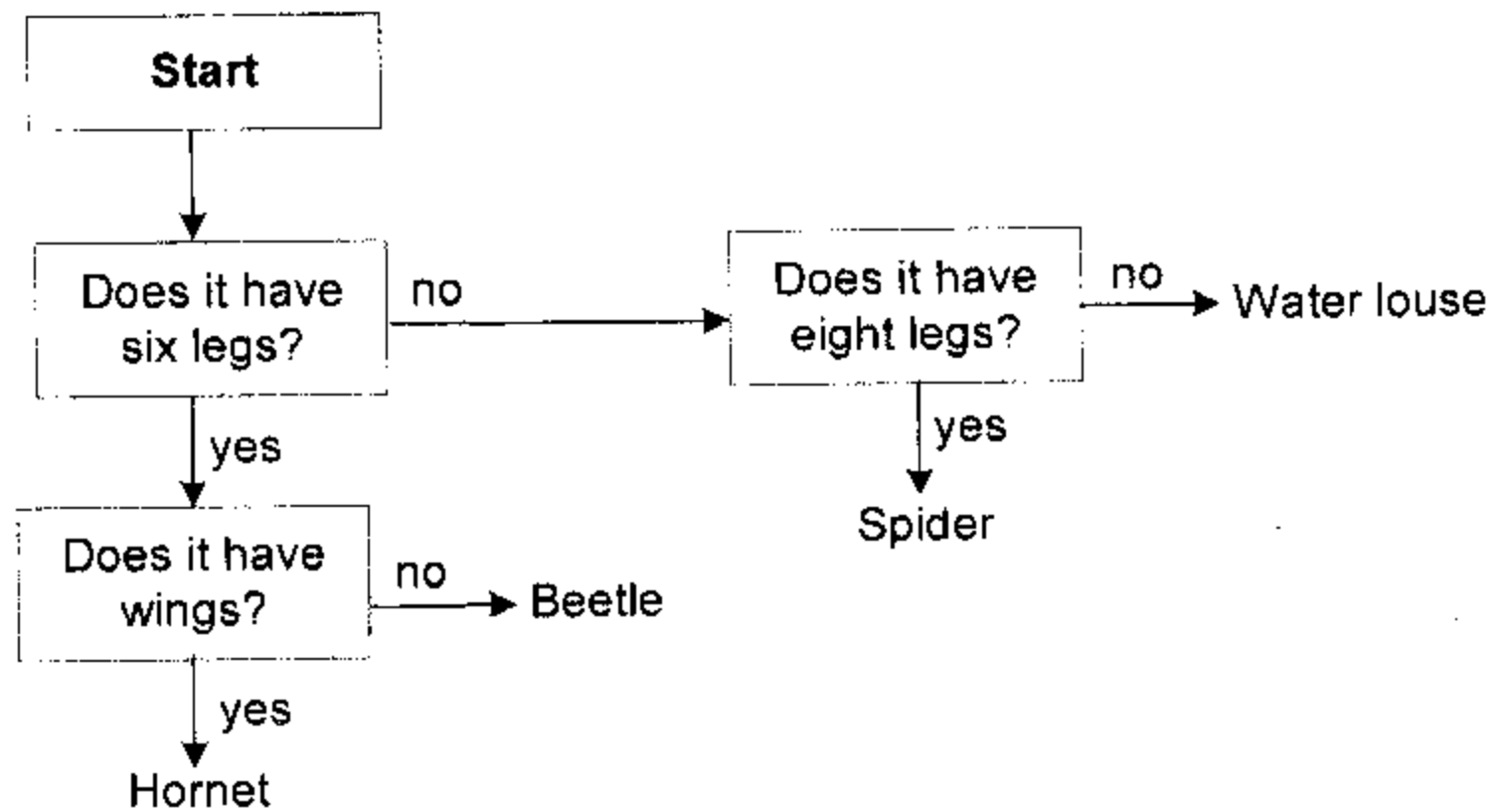
- 1) Bird
- 2) Fish
- 3) Insect
- 4) Mammal

8. Study the picture of Animal A.



Animal A

Identify Animal A using the diagram below.



- 1) Beetle
- 2) Spider
- 3) Hornet
- 4) Water louse

9. The table below shows the characteristics of 4 animals A, B, C and D. (✓) means the animal has the characteristic.

Which animal(s) is/are most likely a fish?

Animal	Has fins	Has hair on its body	Reproduce by laying eggs	Live in water
A	✓			✓
B		✓	✓	
C	✓		✓	✓
D	✓	✓		✓

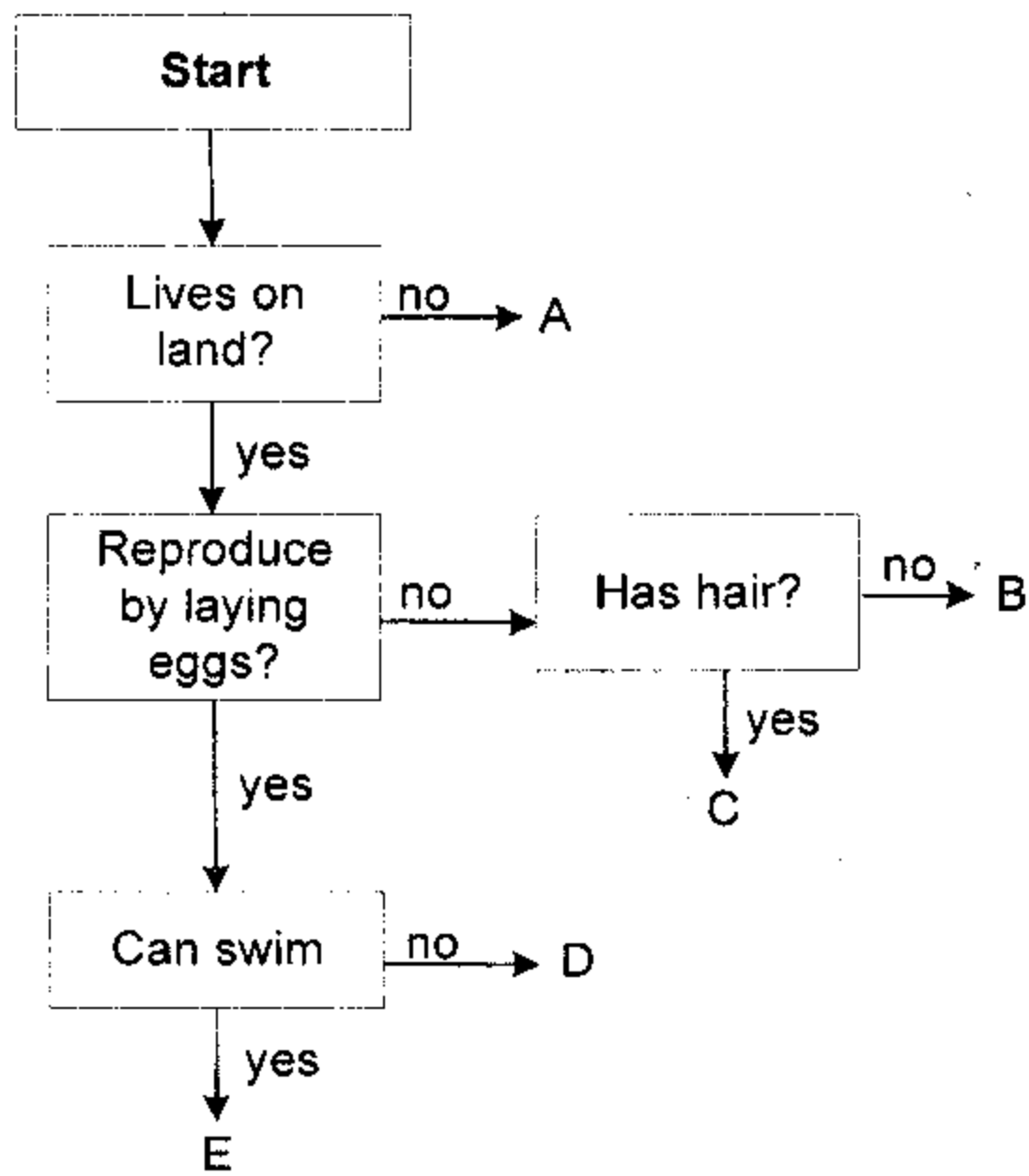
- 1) A only
- 2) B only
- 3) A and C only
- 4) A, C and D only.

10. Which of the following statements on micro-organisms are true?

- A: Micro-organisms reproduce by spores.
- B: All micro-organisms are non-living things.
- C: Not all micro-organisms are harmful to people.
- D: Micro-organisms cannot be seen with the naked eye.

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

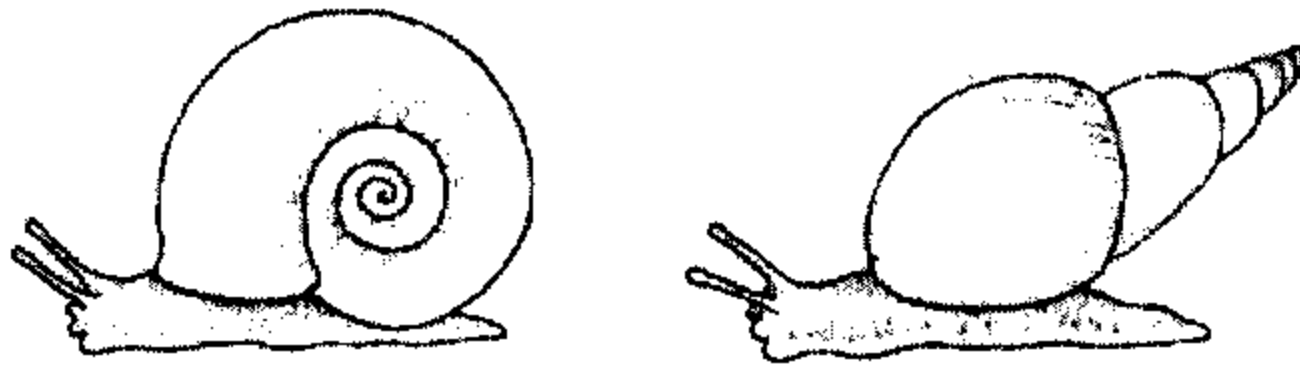
11. Study the chart below carefully.



Which animals reproduce by laying eggs?

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

12. Ali found organisms X and Y and he observed the similarities between the two organisms



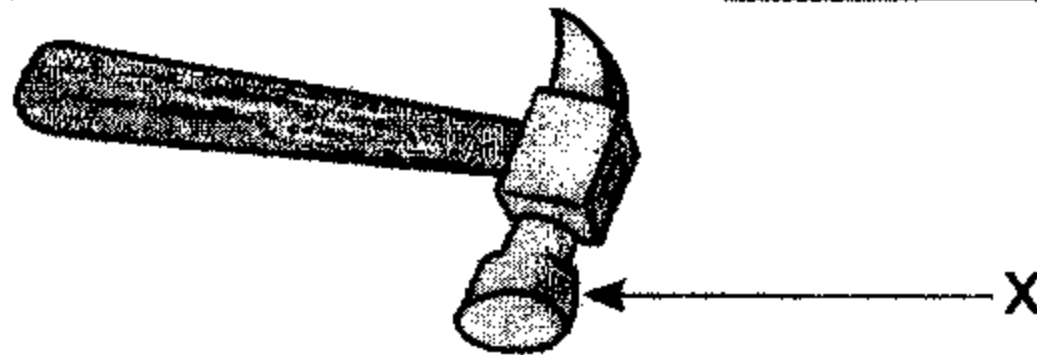
He recorded his observations below.

- A: Both have shells.
- B: Both have no legs.
- C: Both have 'feeler' like structures.

Which of his observations above are true?

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

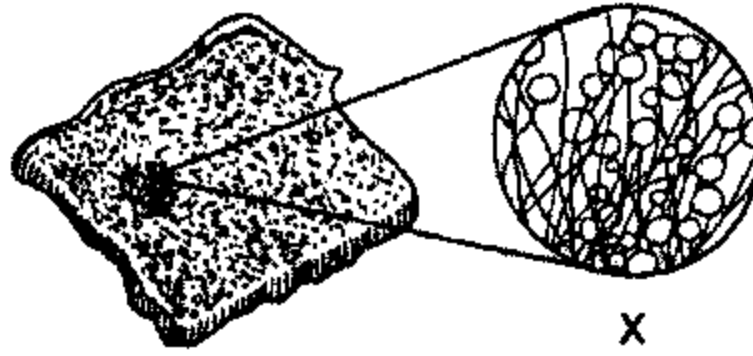
13. The part marked X should be made of \_\_\_\_\_.



- 1) steel
- 2) glass
- 3) wood
- 4) ceramic



14. A piece of bread was left in the kitchen. After a few days, tiny black spots labelled X were formed as shown in the picture below.



Which of the following statements describe X **correctly**?

- A: They are edible.
- B: They are small and light.
- C: They help in the reproduction of the organisms.

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

15. A group of pupils made the following statements about fungi.

Ali: Some fungi get their food from decaying organisms.

Tina: All fungi must be seen with a microscope.

Samy: They are living organisms.

John: Some fungi are poisonous.

Which of the following pupils made the **WRONG** statement?

- 1) Ali
- 2) Tina
- 3) Samy
- 4) John

16. Which of the following materials come from plants?

- 1) Metal and wood
- 2) Metal and rubber
- 3) Glass and rubber
- 4) Rubber and wood

17. The objects below are made of \_\_\_\_\_.



Tyre



Balloon



Eraser

- 1) glass
- 2) metal
- 3) rubber
- 4) plastic

18

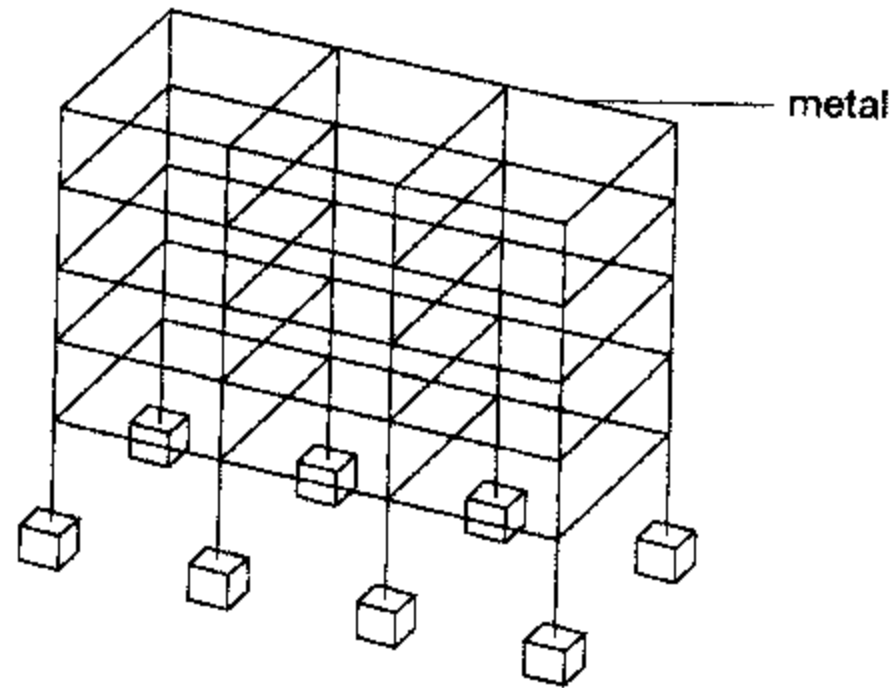
18. Cassie made an object with the following properties:

- light
- waterproof
- soft and flexible

Which group of objects has properties similar to Cassie's object?

- 1) Fur coat, marble
- 2) Raincoat, plastic bag
- 3) Wine glass, cooking pot
- 4) Rubber band, newspaper

19. Which one of the following explains why the framework of a building is made of metal?



- 1) Metal is shiny.
  - 2) Metal is strong.
  - 3) Metal is flexible.
  - 4) Metal sinks in water.
20. Seng Wee conducted a series of tests on materials P, Q, R and S. His results are tabulated below.

	<b>P</b>	<b>Q</b>	<b>R</b>	<b>S</b>
Fragile	√		√	
Flexible	√	√		√
Stretchable		√		√
Waterproof	√	√	√	

Which material should he use to make a tent cover?

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

21. Which organ(s) pump(s) blood to all parts of our body?

- 1) Lungs
- 2) Heart
- 3) Muscles
- 4) Stomach

22. Which of the following are transported by the circulatory system?

- A: Water
- B: Oxygen
- C: Waste substances
- D: Digested food substances

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

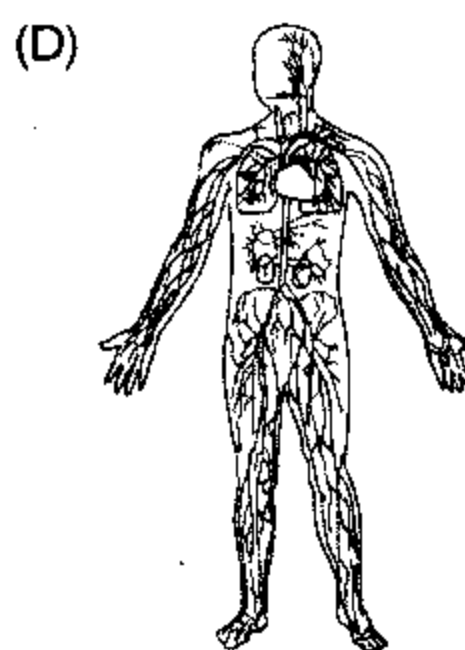
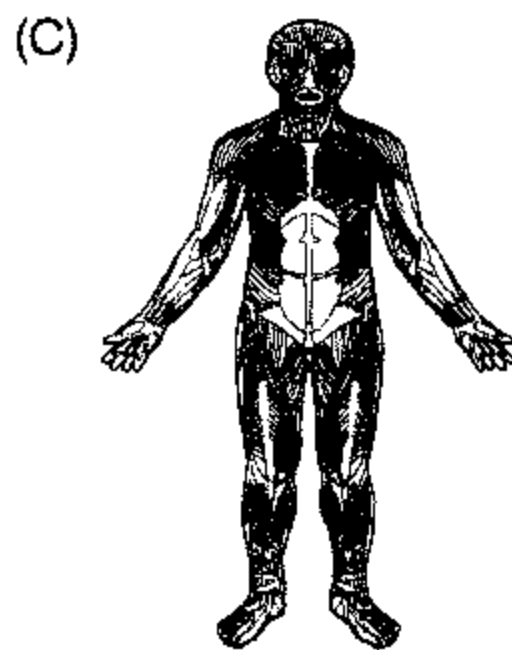
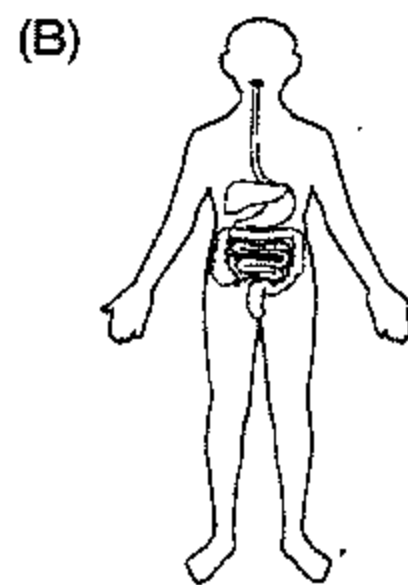
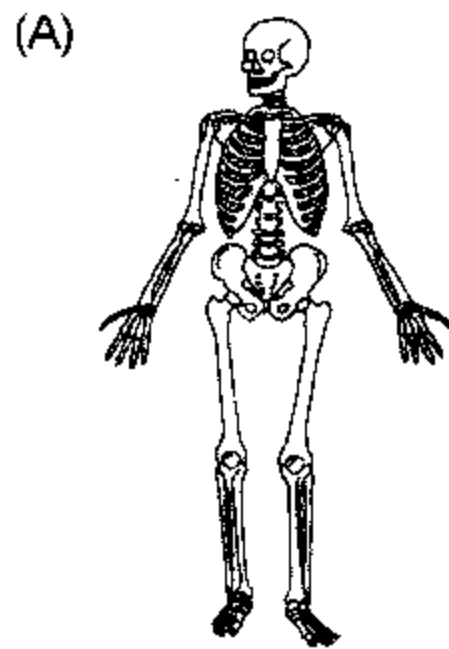
23. The table below shows the time taken to completely digest the same amount of food A, B, C and D when they are eaten at the same time.

Type of food	Food A	Food B	Food C	Food D
Time taken to completely digest food	3 hours	6 hours	7 hours	4 hours

Which of the different types of food listed above do not get completely digested five hours after they are eaten?

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

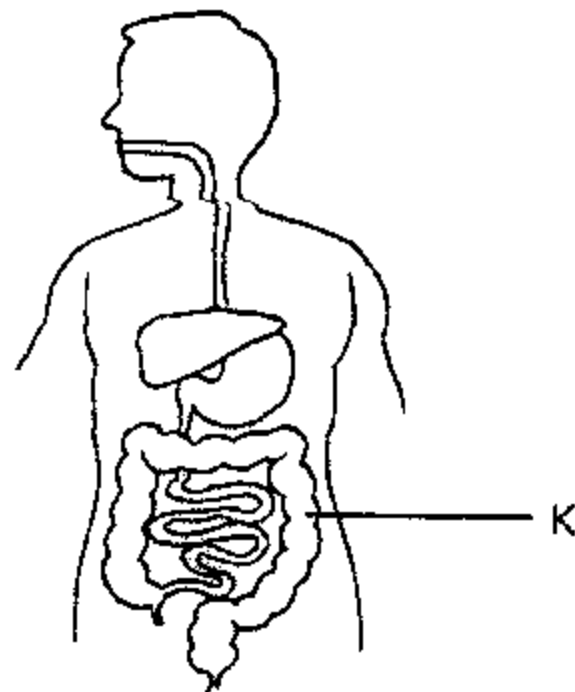
24. Study the different organ systems below.



Which two systems work together to enable your arm to bend?

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

25. The diagram below shows our digestive system.



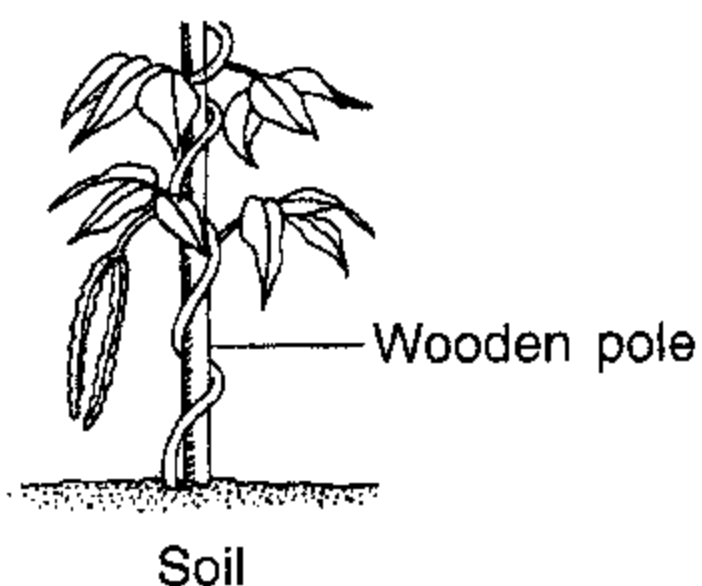
What will happen if food passes through part K too quickly?

- 1) Food will not be grinded into smaller pieces.
- 2) The digestive juices will not digest the food completely.
- 3) Digested food will not be absorbed into the bloodstream.
- 4) There will not be enough time for water to be removed from food.

26. Plants get air through tiny openings in the \_\_\_\_\_.

- 1) roots
- 2) stem
- 3) leaves
- 4) flowers

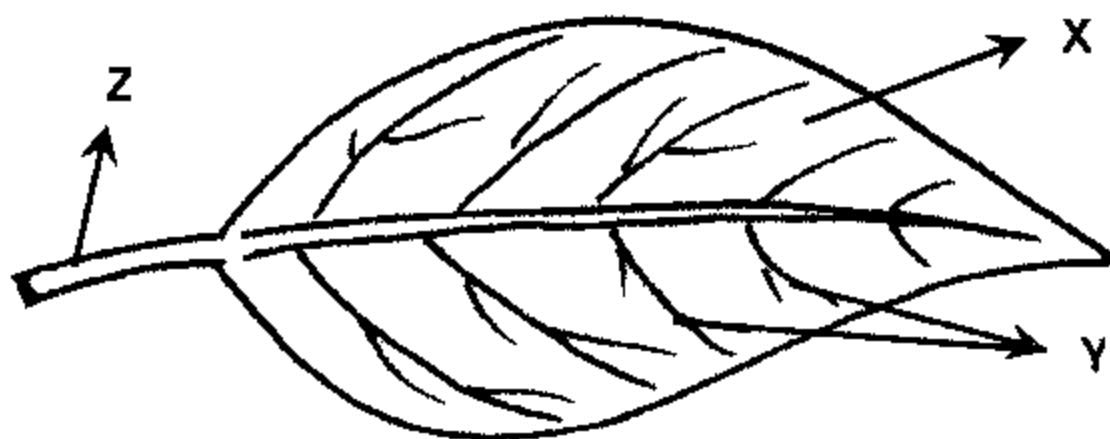
27. The diagram below shows a plant growing in the garden.



Which part of the plant helps it to climb up the wooden pole to get more sunlight?

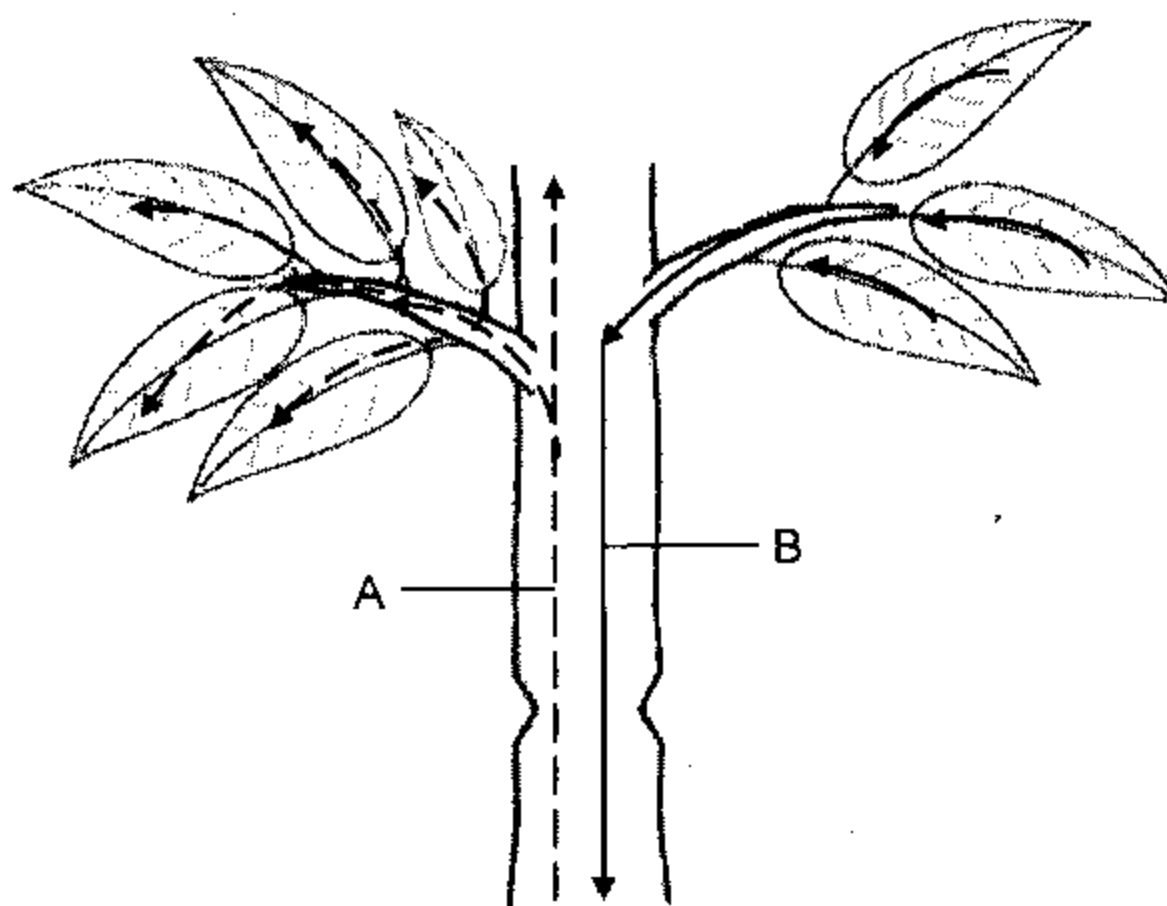
- 1) Leaf
- 2) Fruit
- 3) Stem
- 4) Flower

28. Name the parts of the leaf labelled X, Y and Z.



1)	X: Leaf vein	Y: Leaf blade	Z: Leaf stalk
2)	X: Leaf stalk	Y: Leaf vein	Z: Leaf blade
3)	X: Leaf blade	Y: Leaf vein	Z: Leaf stalk
4)	X: Leaf blade	Y: Leaf stalk	Z: Leaf vein

29. Tiny tubes are found in the stem of a plant. The arrows in the diagram below show the movement of food and water in the plant.



The following statements are made by three students.

Rita:	Tube B carries food from the roots to the other parts of the plant.
Ali:	Tube A carries water from the roots to the other parts of the plant.
Tim:	Tube B carries food from the leaves to the other parts of the plant.
Ken:	Tube A carries water and food from the roots to the other parts of the plant.

Who made the correct statements?

- 1) Rita and Ali
- 2) Ali and Tim
- 3) Tim and Ken
- 4) Rita and Ken



30. Audrey tried very hard to pull out a plant from her garden, but she could not.



What can you tell about the roots of the plant that Audrey was trying to pull out from her garden?

- 1) The roots grow into new plants.
- 2) The roots make food for the plant.
- 3) The roots support the plant upright.
- 4) The roots have grown deep into the ground.



**HOUGANG PRIMARY SCHOOL  
SECOND SEMESTRAL ASSESSMENT 2009  
SCIENCE  
PRIMARY 3**

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

Class: Pr. 3. ( )

Parent's Signature

Date: 5<sup>th</sup> November 2009

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**BOOKLET B**

There are 14 questions in this booklet. (40 marks)

Total time for Booklets A and B is 1 h 45 min.

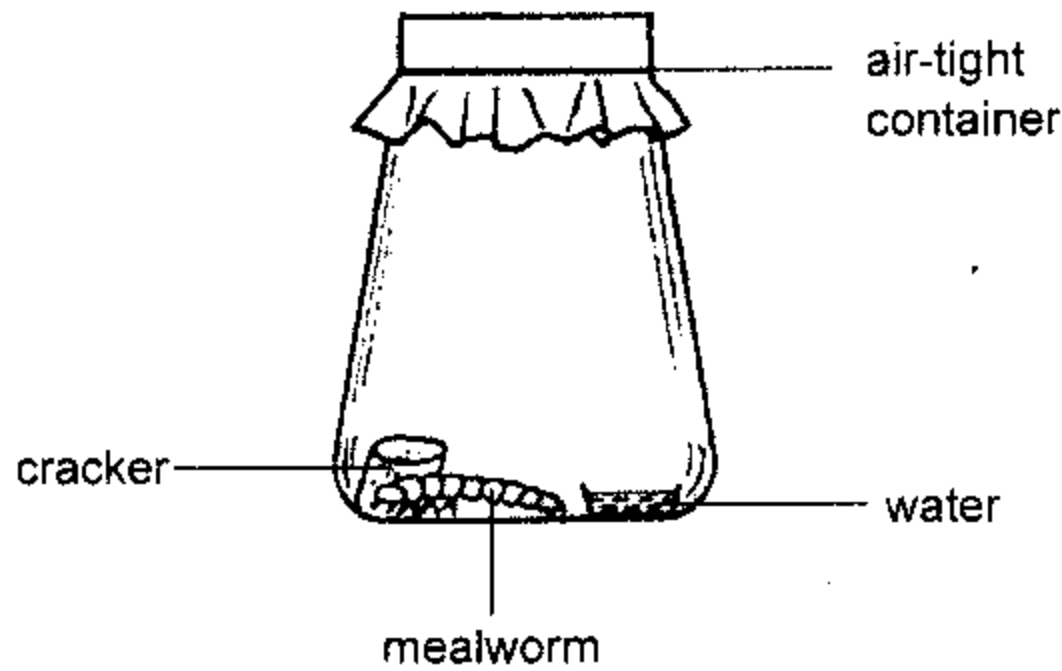
Follow all the instructions carefully.

	Max. Marks	Marks Obtained
Booklet B	40	
Booklet A	60	
Overall Total	100	

**BOOKLET B (40 MARKS)**

For questions 31 to 44, write your answers in the spaces provided.

31. A mealworm is put into an air-tight container together with a cracker and a small dish of water.



- (a) What do you think will happen to the mealworm larva after one week?  
(1 mark)

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- (b) What does this experiment show? (1 mark)

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32. Kelly collected some things from the garden and put them into 2 groups based on their similar characteristics. She put one group in Container K and the other group in Container L. She placed some leaves in both containers and observed them for 2 weeks. Below were her findings.

Observations	Things in Container K	Things in Container L
A	Moved slowly most of the time.	No movement at all.
B	Curled up when touched	No reaction when touched.
C	Fed on leaves.	Leaves left untouched.
D	Had young after 2 weeks.	No young after 2 weeks.

(a) What do you think are in the containers?

Fill in the blanks below with "living things" or "non-living things". (1 mark)

Container K: \_\_\_\_\_

Container L: \_\_\_\_\_

(b) Based on the table above, which **statement** suggests that living things respond to changes? (1 mark)

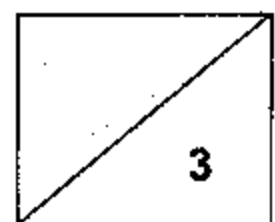
\_\_\_\_\_

\_\_\_\_\_

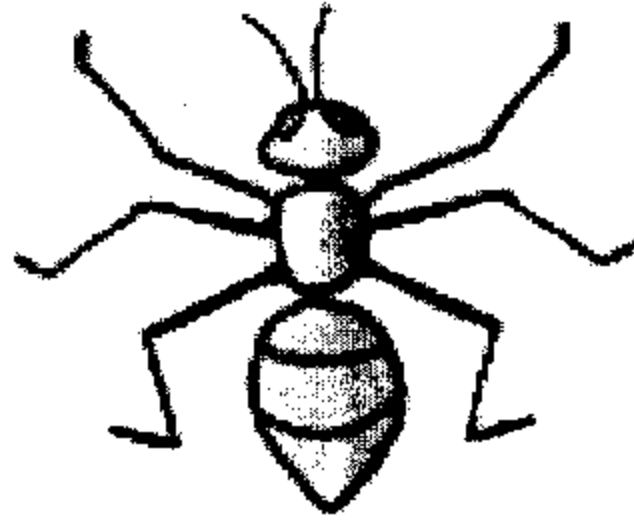
(c) State the characteristic of living things based on the observation of D. (1 mark)

\_\_\_\_\_

\_\_\_\_\_



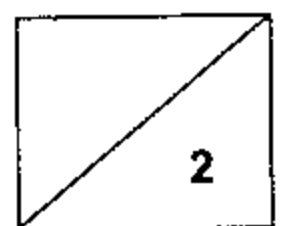
33. Observe the animal below and answer the following question.



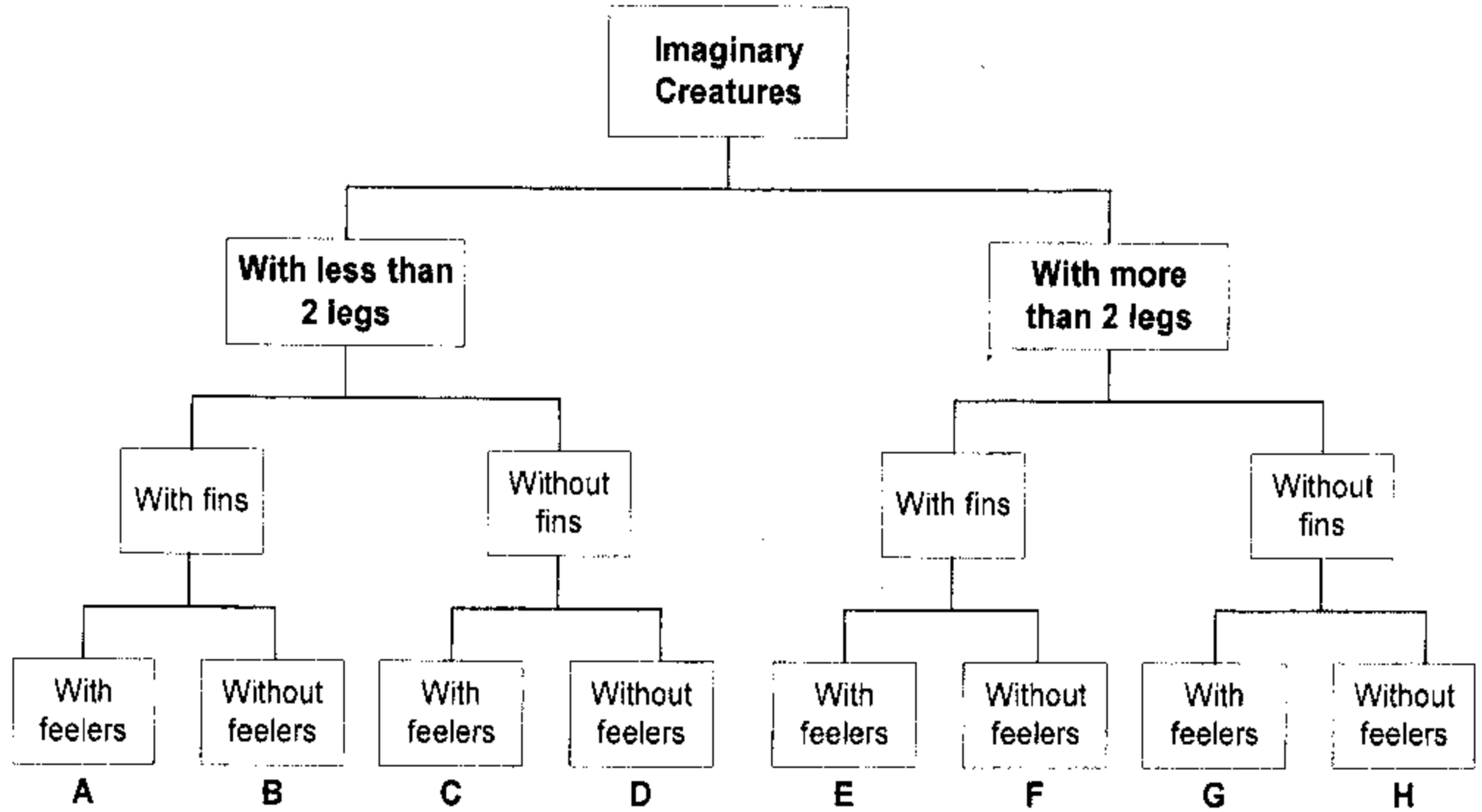
Give two reasons why scientists have classified it as an insect.  
(2 marks)

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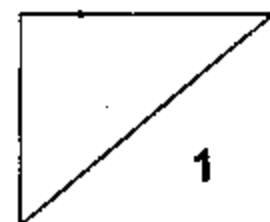


34. The classification chart below shows how some imaginary creatures can be grouped.

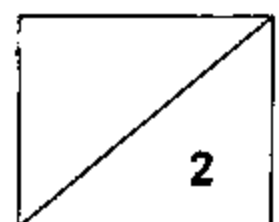


**Based on the information above, answer the following questions:**

- (a) Tam found a creature that has four legs, a pair of fins and does not have any feelers. Which creature, A to H, is most similar to Tam's creature? (1 mark)



- (b) Study the imaginary creatures below.  
**Circle** the one that is most likely to be **Creature D**.  
Cross 'X' on the one that is most likely to be Creature G. (2 marks)



35. Study the pictures below.



(a) By observing the pictures above, list one way in which X and Y are similar.  
(1 mark)

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(b) Mary said that all organisms that reproduce from spores are plants as they can make their own food. Do you agree with her? Why? (2 marks)

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36. Fannie wanted to find out the conditions needed for milk to turn bad and lumpy. She poured 50 ml of milk into each beaker A, B and C. She then put them in locations with different conditions as shown below.

Beaker	Conditions			
	Warm	Cold	Dry	Moist
A		√	√	
B	√		√	
C	√			√

(a) After 4 days, the milk in one of the beakers had turned bad and there were lumps in it. Which beaker was it? (1 mark)

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(b) What organism had caused the milk to turn bad? (1 mark)

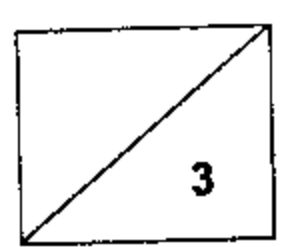
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(c) Fannie bought a new packet of fresh milk. Her sister told her to place it in a refrigerator while her brother told her to place it in the kitchen cupboard. Where should Fannie place her milk if she wants the milk to last for a week? Explain your answer? (1 mark)

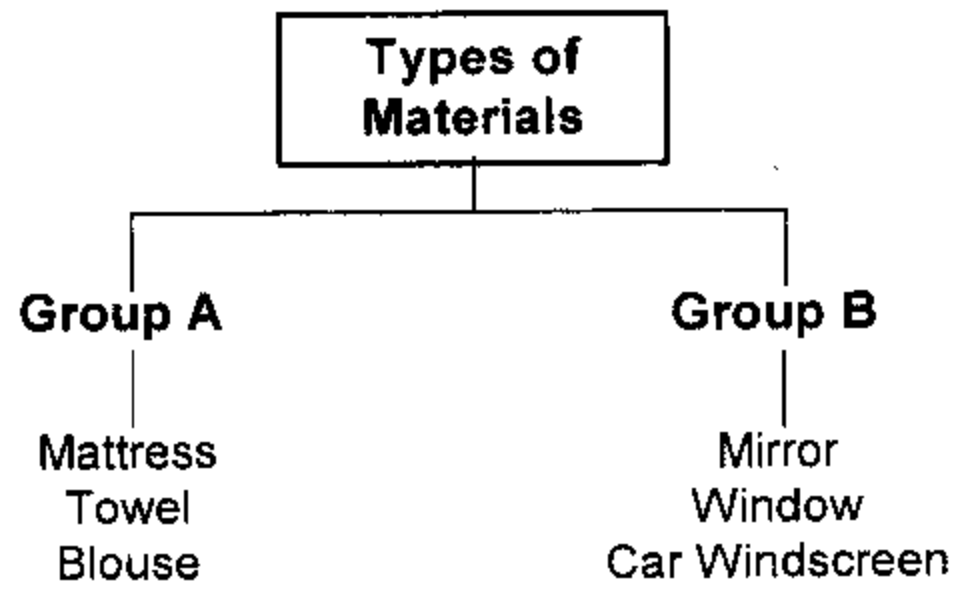
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37. Study the two groups of things given in the classification diagram below.

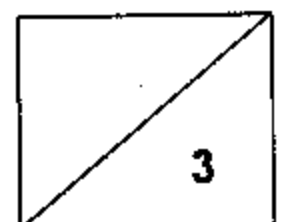


(a) Give a suitable title for Group A and Group B. (2 marks)

Group A	Group B

(b) Which group does a magnifying lens belong to? (1 mark)

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38. The table below shows some properties of four different types of plastics.

Property	Plastic A	Plastic B	Plastic C	Plastic D
Flexible	Yes	No	Yes	No
Lightweight	No	Yes	Yes	No
Waterproof	Yes	Yes	Yes	Yes

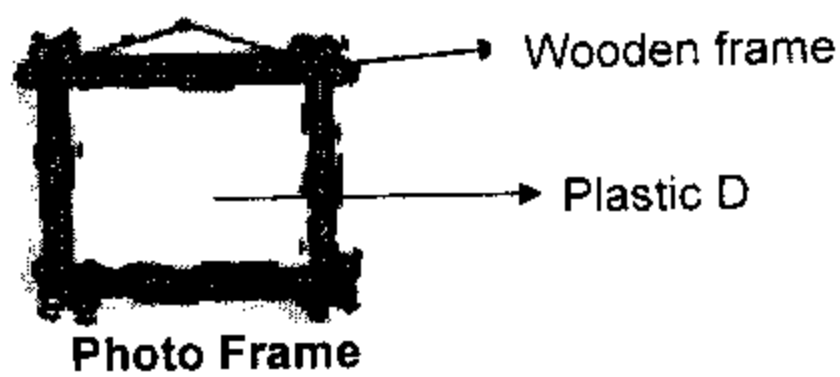
(a) What is the common property of the four types of plastics? (½ mark)

\_\_\_\_\_

(b) Sally wants to bring some biscuits to school. She wants to choose a plastic container that can ensure her biscuits will not be crushed and she can carry it around easily. Which type of plastic material A, B, C or D is the best choice for her? Explain why. (2 marks)

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

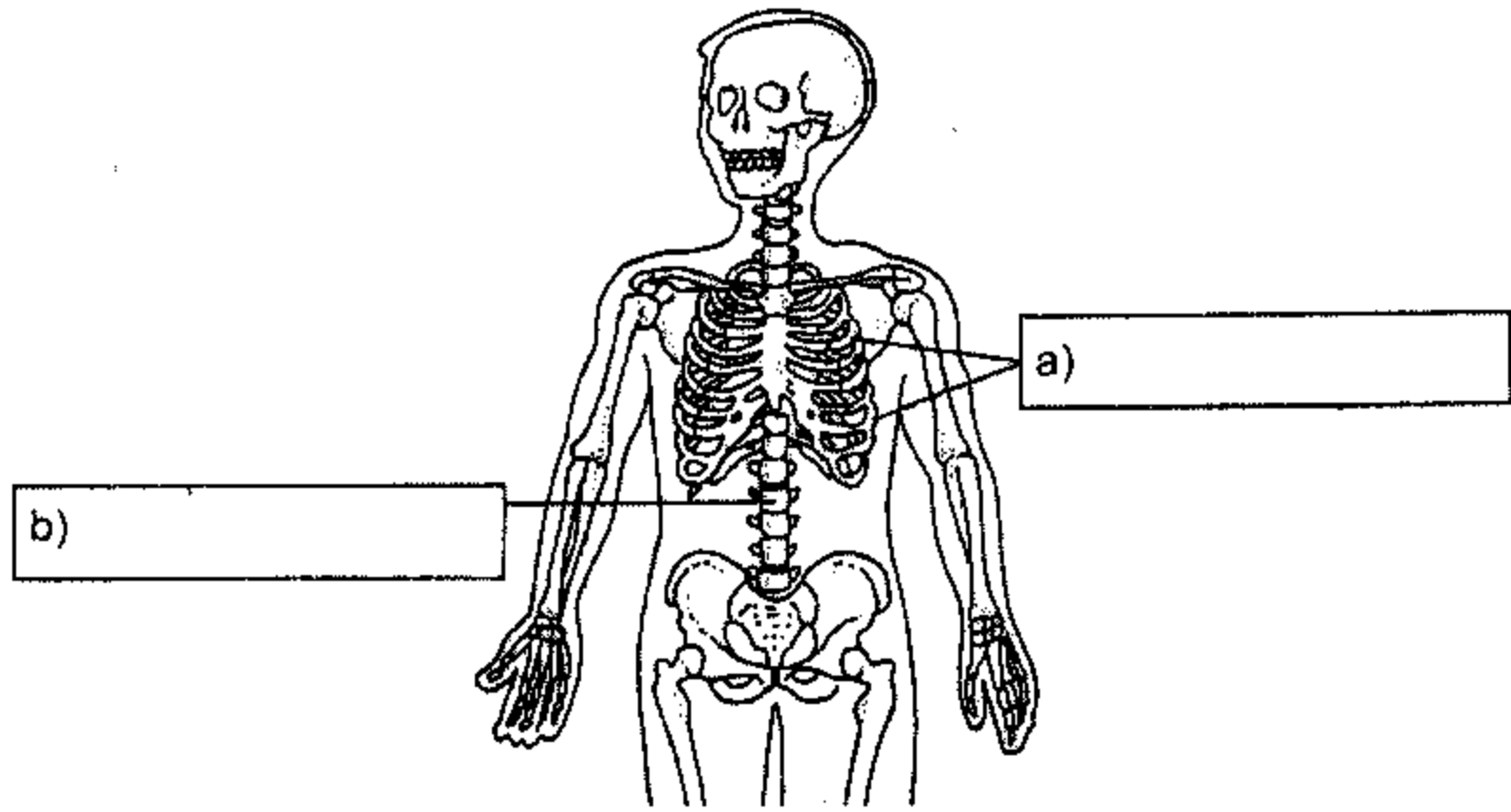
(c) The picture below shows a photo frame. Plastic D can be used as one of the materials to make the photo frame



State another property of Plastic D. (½ mark)

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

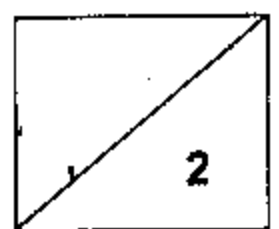
39. Fill in the names of the bones in the skeleton. (1 mark)



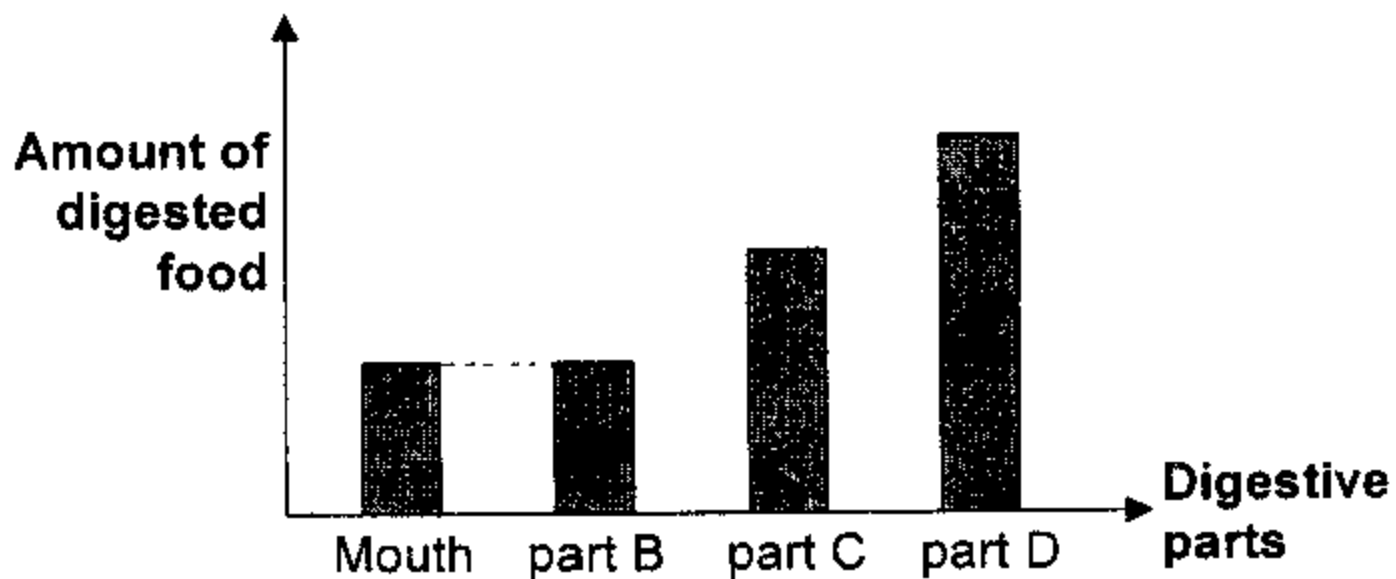
(c) State two functions of the skeleton. (1 mark)

(i) \_\_\_\_\_

(ii) \_\_\_\_\_



40. John had a plate of chicken rice for dinner. The graph below shows the amount of food that had been digested when the meal passed through the organs in his digestive system.



(a) At which part B, C or D of the digestive system did the amount of digested food remain the same? (½ mark)

\_\_\_\_\_

(b) At which part B, C or D had the digestion of food been completed? (½ mark)

\_\_\_\_\_

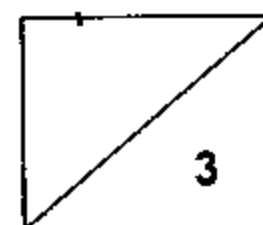
(c) Which part of the digestive system does C and D most likely represent? (1 mark)

Part C: \_\_\_\_\_

Part D: \_\_\_\_\_

(d) What do you think is taking place at Part B of the digestive system? (1 mark)

\_\_\_\_\_



41. Some plant parts that give us food are shown in the diagram below.



**Fruit W**



**Fruit X**



**Fruit Y**



**Fruit Z**

(a) What can be found inside the above plant parts? (1 mark)

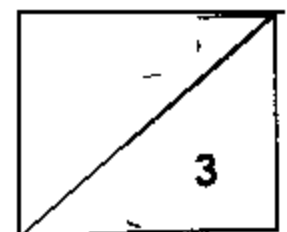
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(b)\* Why are the above plant parts important? (1 mark)

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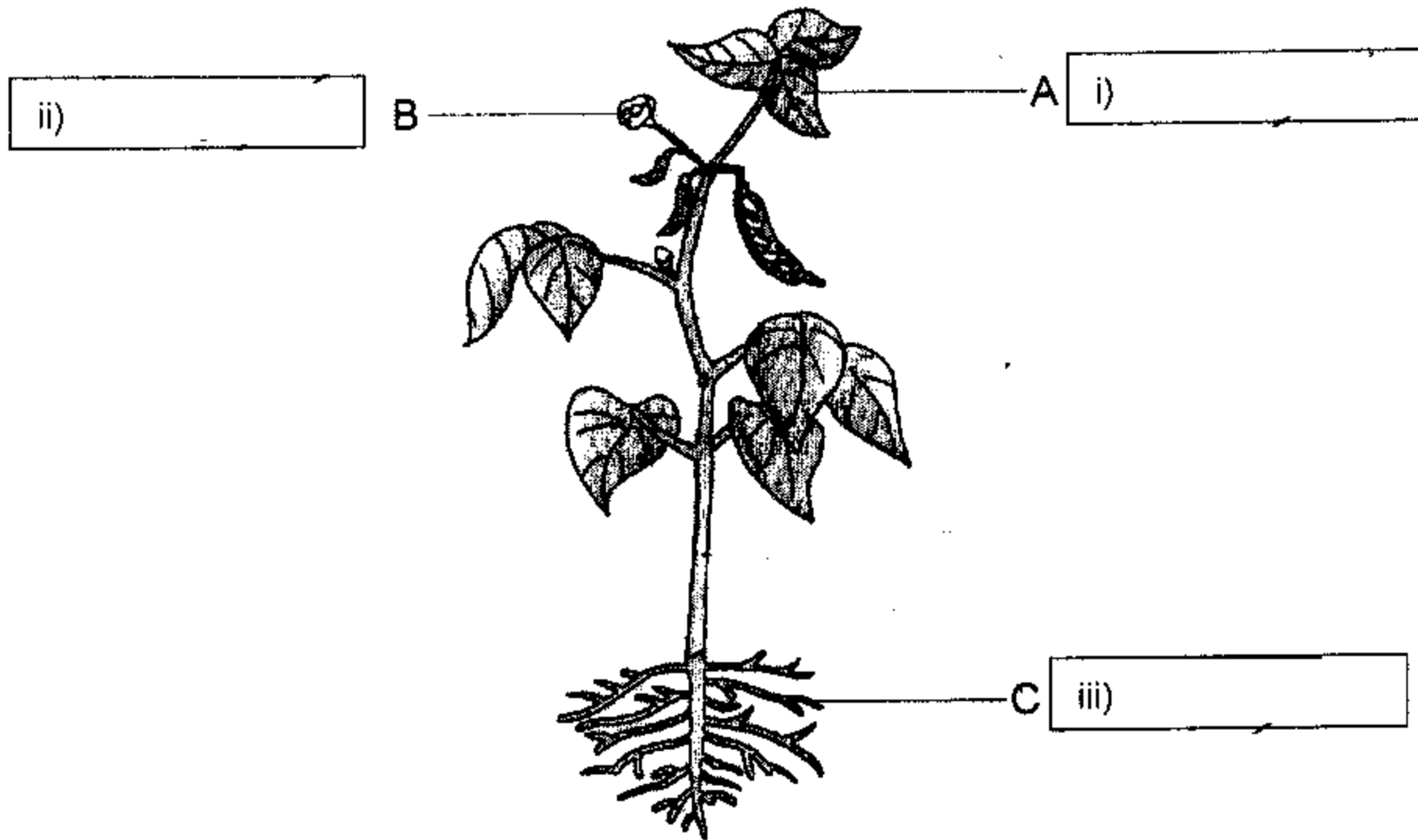
(c) Which part of the plant does the above plant parts develop from?  
(1 mark)

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42. Study the picture below carefully.

(a) Label the plant parts in the boxes below. (1½ marks)



(b) How would the plant be affected if part C was removed? (½ mark)

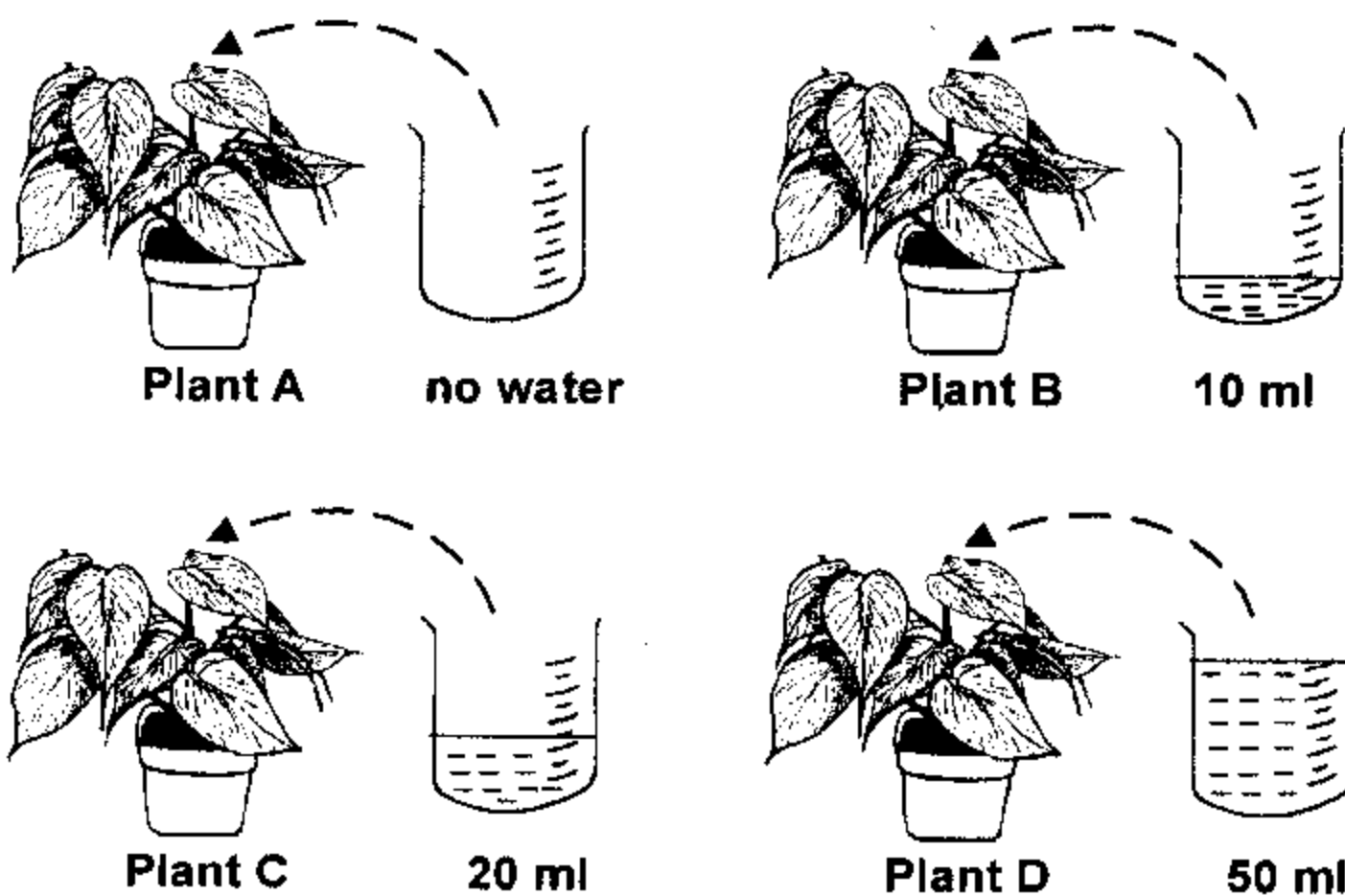
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(c) How would part A be affected if it was covered entirely with black paper? (1 mark)

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43. Robert carried out an experiment to find out if the amount of water affects the growth of an orchid plant. He had 4 similar orchid plants in the same type of soil and he placed all the plants in the garden. He added different amounts of water to Plant B, C and D everyday but none to Plant A.



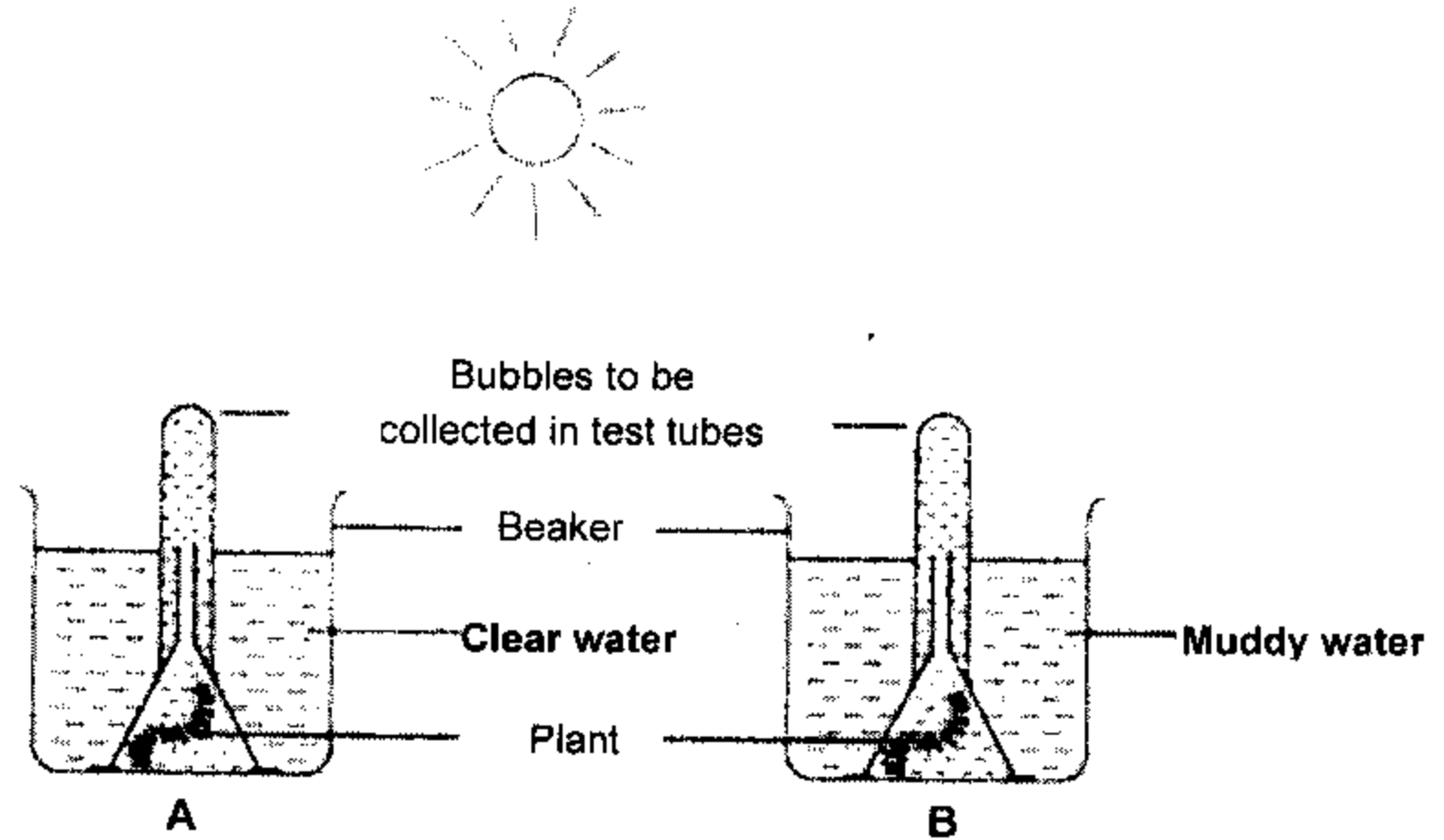
The table below shows the observations he recorded.

Plant	Height of plants (cm)			
	At start	Week 1	Week 2	Week 3
A	9 cm	dead	dead	dead
B	9 cm	11 cm	12 cm	dead
C	9 cm	11 cm	?	13 cm
D	9 cm	10 cm	11 cm	dead

- (a) Robert had forgotten to write down the height for Plant C for Week 2. What do you think the height was? (½ mark)
- 
- (b) From the information above, how much water does the orchid plant need daily for it to grow? (½ mark)
- 
- (c) Explain your answer in (b). (2 marks)
-



44. Joseph sets up an experiment as shown below. He wants to find out which type of water is the best for water plants to make food by counting the number of bubbles produced in Beakers A and B.



(a) State 2 conditions which he must keep the same to ensure that his experiment is fair. (2 marks).

(i) Condition 1:

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(ii) Condition 2:

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(b) Which beaker, A or B, will have more bubbles? (1 mark)

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

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----- End of Paper -----

# Hougang Primary School - 2009 - P3- SA2 - Science

## Booklet A - MCQ :

(01)	1	(02)	2	(03)	2	(04)	4	(05)	3
(06)	1	(07)	4	(08)	3	(09)	3	(10)	4
(11)	3	(12)	4	(13)	1	(14)	3	(15)	2
(16)	4	(17)	3	(18)	2	(19)	2	(20)	2
(21)	2	(22)	4	(23)	3	(24)	2	(25)	4
(26)	3	(27)	3	(28)	3	(29)	2	(30)	4

## Booklet B :

- (31) a. The mealworm larva will die. b. Living thing need air to survive.
- (32) a. K - living things L- non-living things b. It curled up when touched  
c. Living thing reproduce.
- (33) It has 3 body parts and six legs.
- (34) a. F b.  1  2  
3 4
- (35) a. They have no flowers. b. No I don't agree with her.  
Not all organisms that reproduce from spores are plants which can make their own food, example fungi, mushroom, mold reproduce by spores, but they are not green plant which can make their own food.
- (36) a. C b. Bacteria  
c. Refrigerator. Because refrigerator is cold and dry, so bacteria can't grow in the milk.
- (37) a. Fabric, Glass b. Group B
- (38) a. They are all waterproof. b. Material B. it is not flexible, so it can ensure the biscuits won't crush in the plastic container.  
c. Transparent.
- (39) a. Ribcage c. i. Skeleton protect our organs.  
b. Spine ii. Skeleton support our body shape.  
iii. Skeleton works with the muscles to enable us to move.
- (40) a. B b. Part D  
c. stomach, small intestine d. It should be the Gullet, no digestion has taken place there.
- (41) a. seeds b. It helps the plant to reproduce.  
b. Flower
- (42) a. i. Leaf ii. Flower iii. Roots b. The plant will not have mineral salts and die.  
c. The leaf can't adsorb sunlight to make food and will eventually die.
- (43) a. 12cm b. 20ml  
c. 20ml is not too much and not too little for the plant to grow well.
- (44) a. i. same amount of water. ii. same place.  
b. beaker A c. The clear water allows the plant to make food.