



RED SWASTIKA SCHOOL

RED SWASTIKA SCHOOL

2006 SEMESTRAL ASSESSMENT 1

SCIENCE

Name : _____ ()

Class : Primary 5/ ____

Date : 11 May 2006

BOOKLET A

30 Questions

60 Marks

Duration of Paper : 1 hour 45 minutes

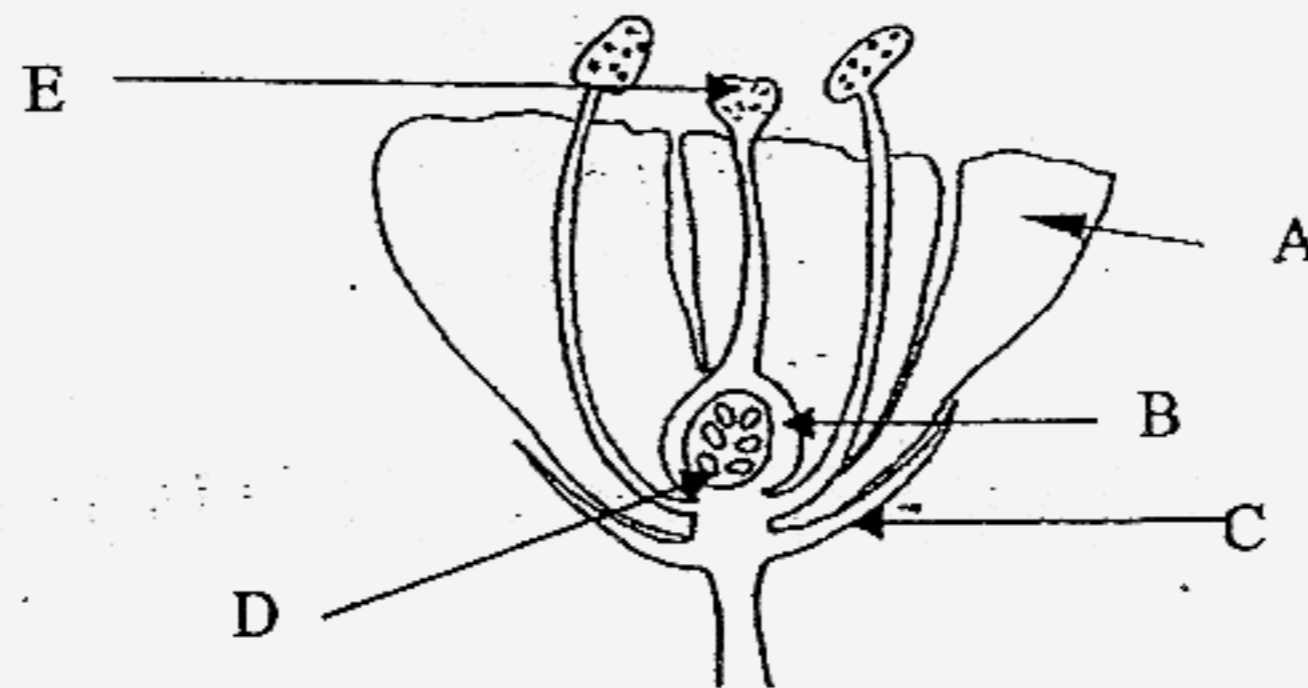
Note:

1. Do not open this Booklet until you are told to do so.
2. Questions 1 - 30 are to be done on the OAS provided.
3. Read carefully the instructions given at the beginning of each part of the Booklet.
4. Do not waste time. If a question is difficult for you, go on to the next one.
5. Check your answers thoroughly and make sure you attempt every question.

Section A: MCQ (30 Questions x 2 marks = 60 marks)

Choose the most suitable answer and shade its number in the OAS provided.

1.



Study the diagram above and identify all the female parts of the flower.

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

2. Which of the following activities is affected by the change of day and night?

- (1) Evaporation of water.
- (2) The folding of the leaves of the raintree.
- (3) Change of seasons.
- (4) High and low tides.

3. Which of the following statements are true about the importance of all bones?

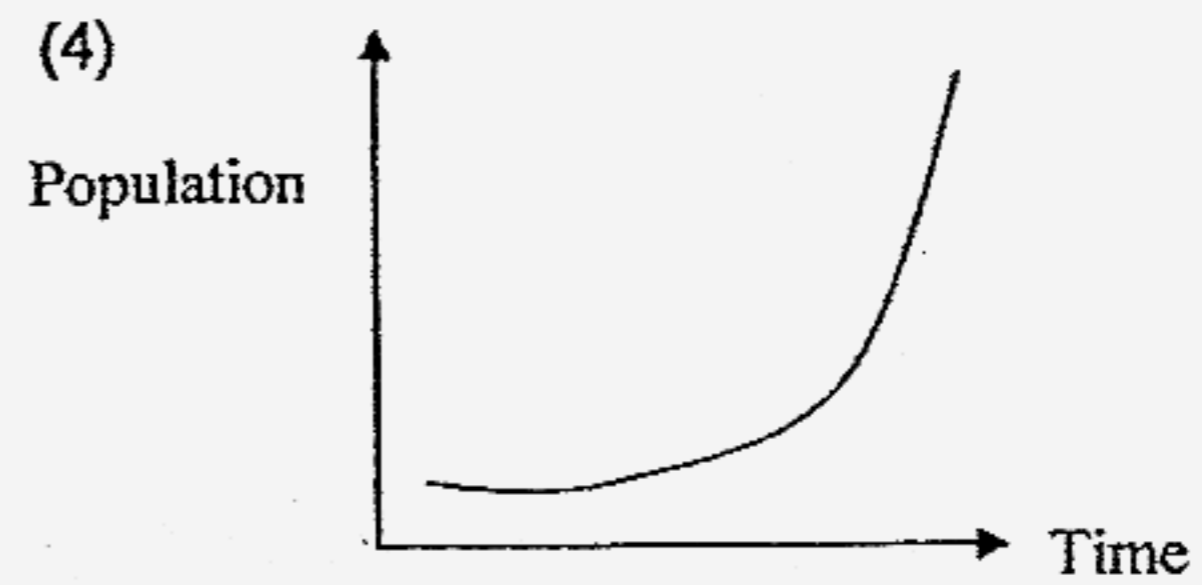
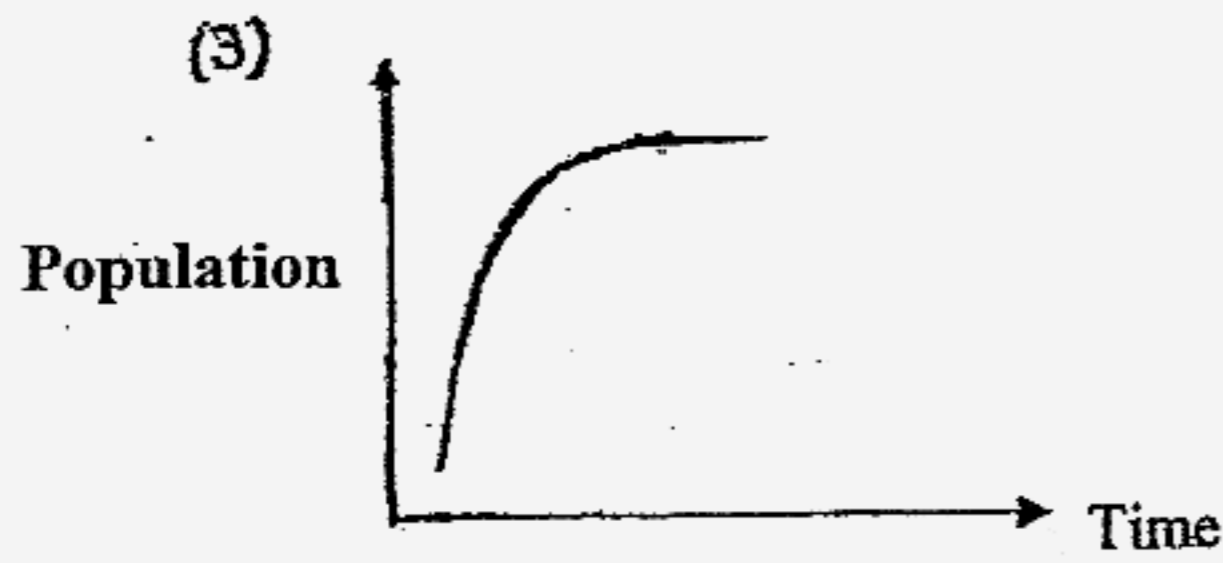
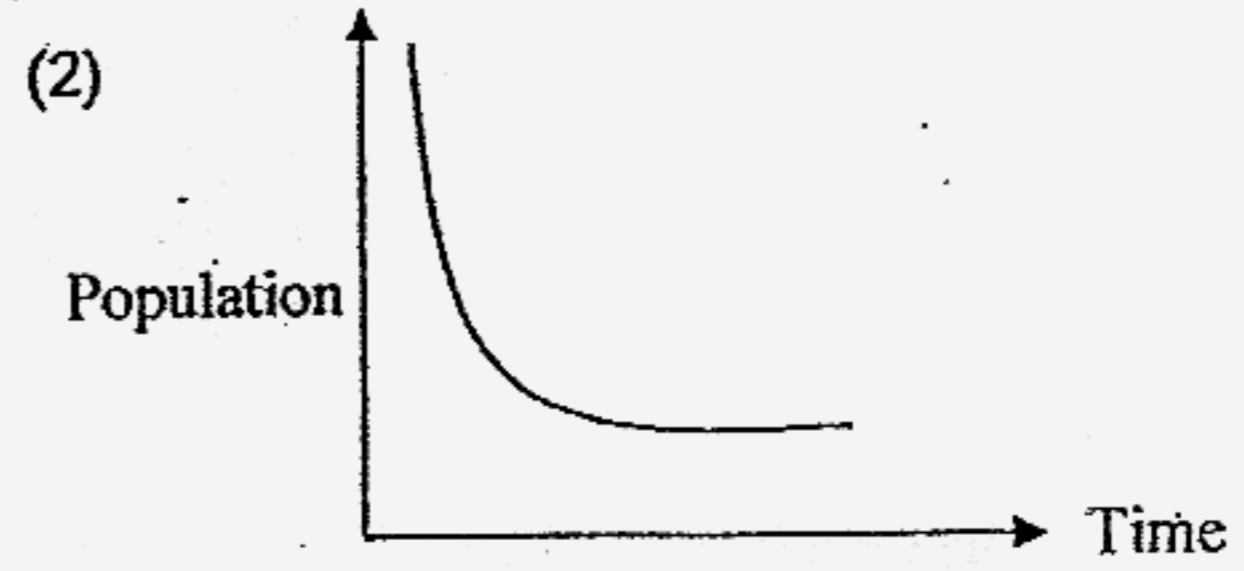
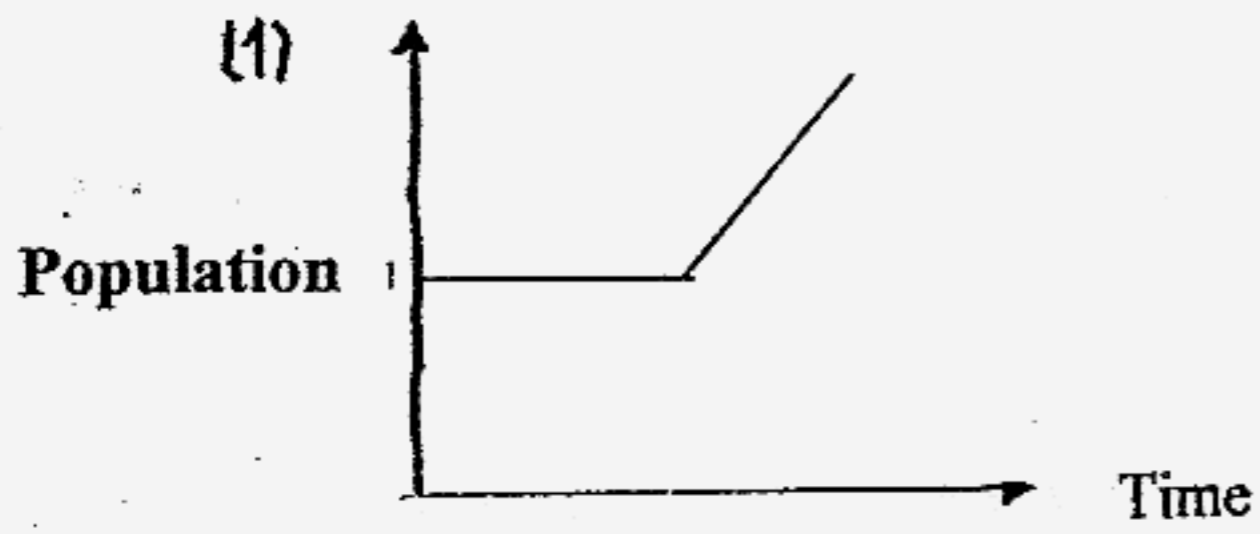
- (a) Give the body its shape
- (b) Help man to move different parts of the body
- (c) Protect the internal organs
- (d) Provide places for the muscles to attach to enable the body to move

- (1) a and b only
- (2) a and d only
- (3) a, b and c only
- (4) a, c and d only

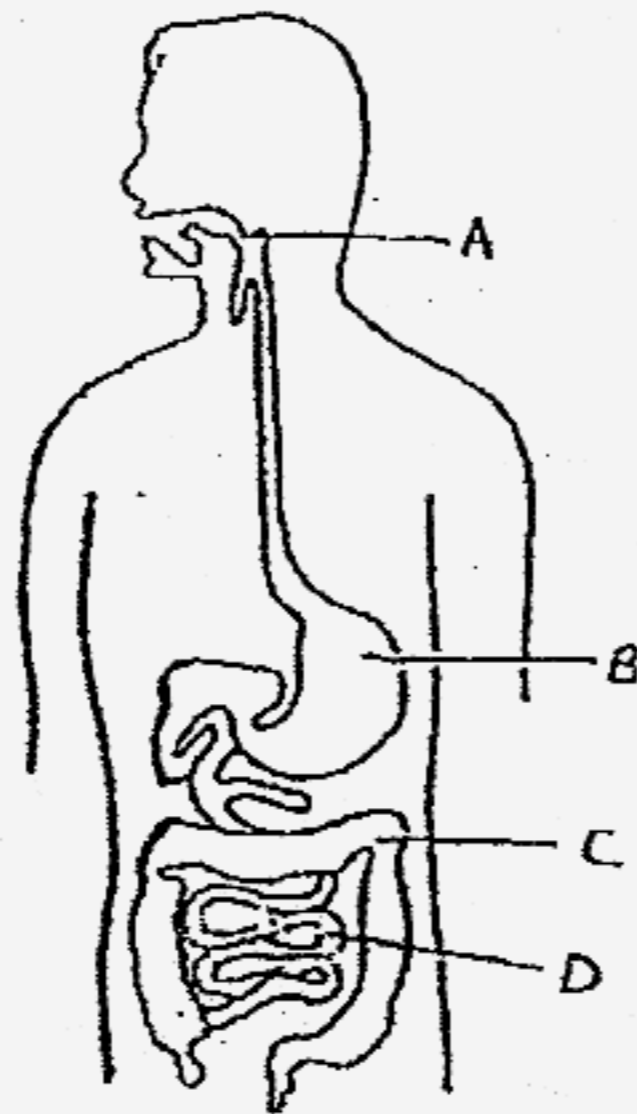
4. Which part of the leaf absorbs light energy from the Sun, which helps the plant make food?

- (1) Leaf veins
- (2) Leaf blade
- (3) Stomata
- (4) Green Pigment in the leaf

5. Which of the following graphs shows that a population has been preyed upon by predators in the community?



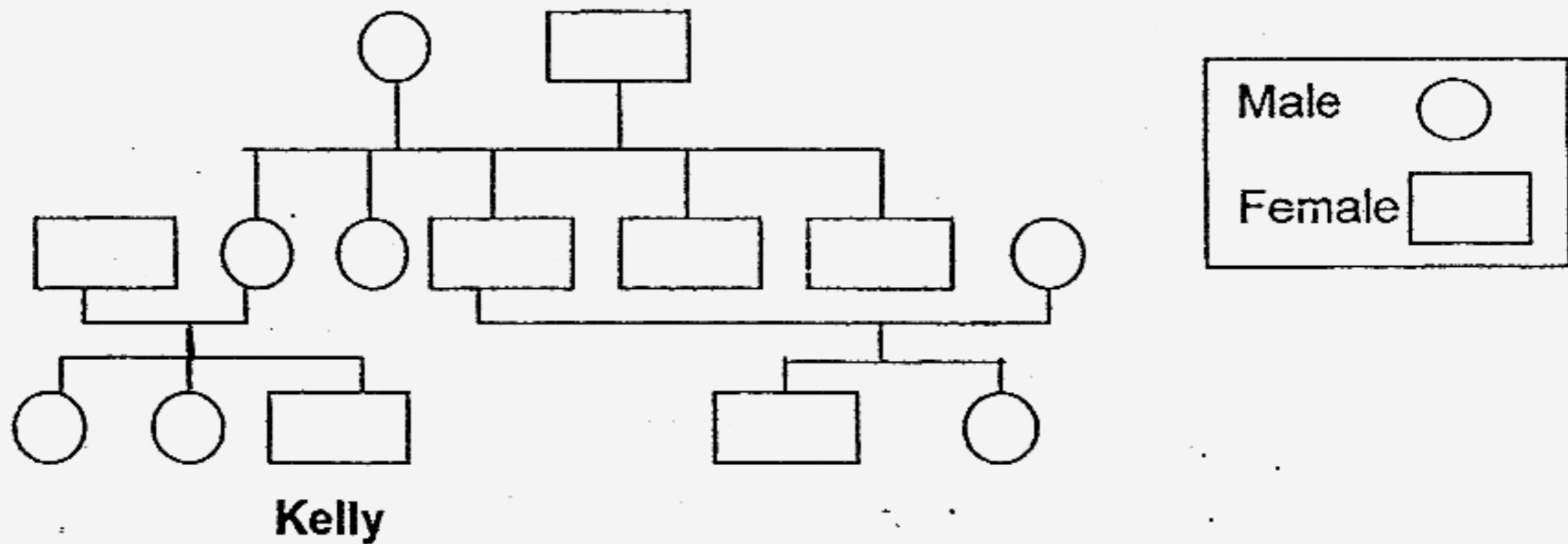
6. Study the diagram below.



In which part of the digestive system are simple food substances taken into the blood?

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

7. The diagram below shows Kelly's family tree.

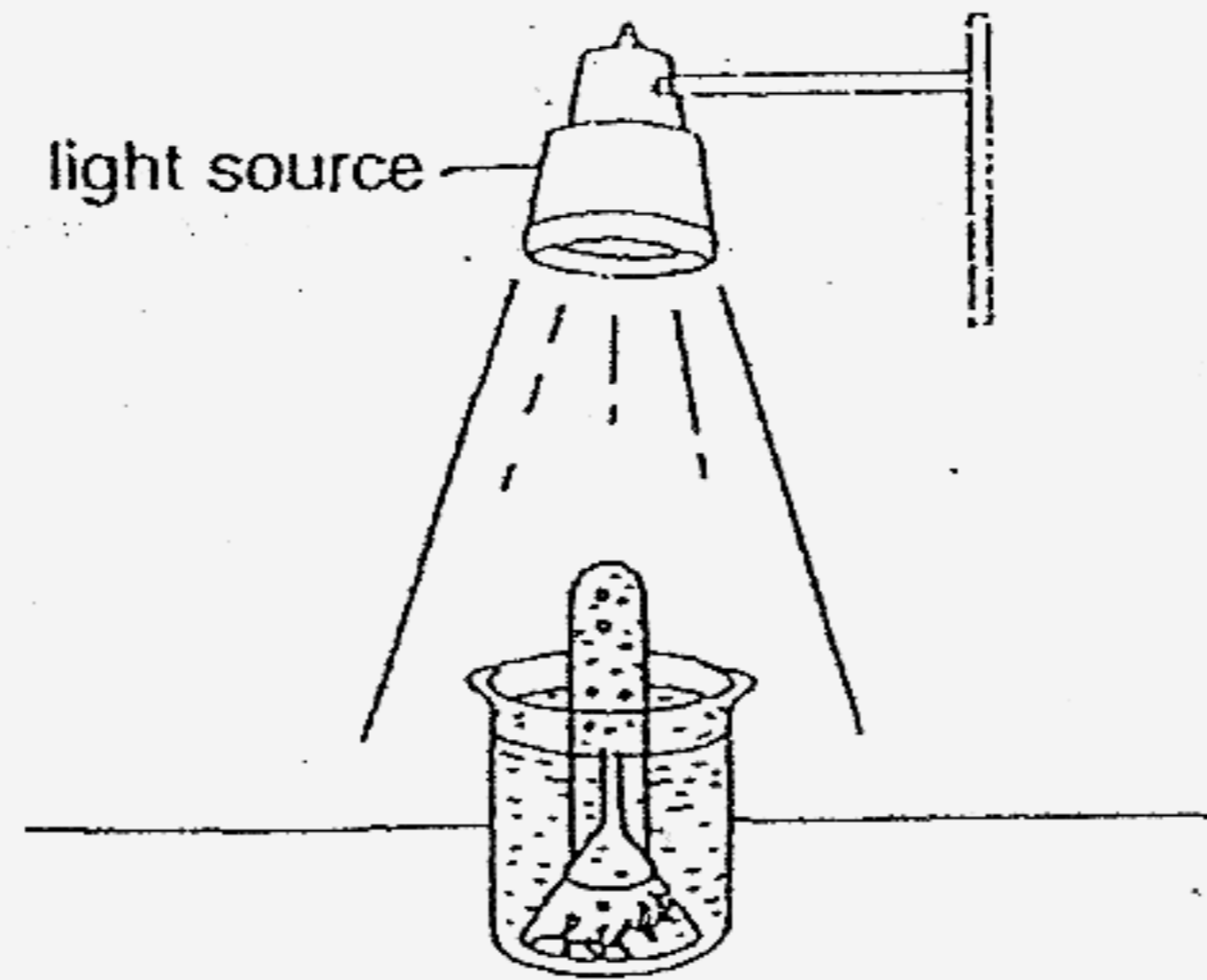


How many granddaughters do Kelly's grandparents have?

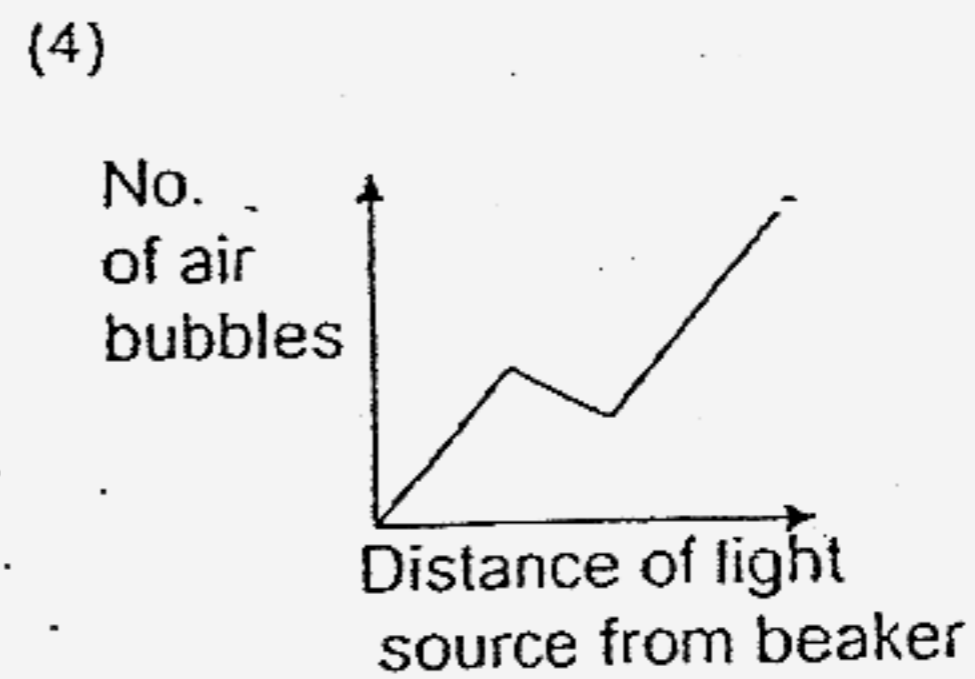
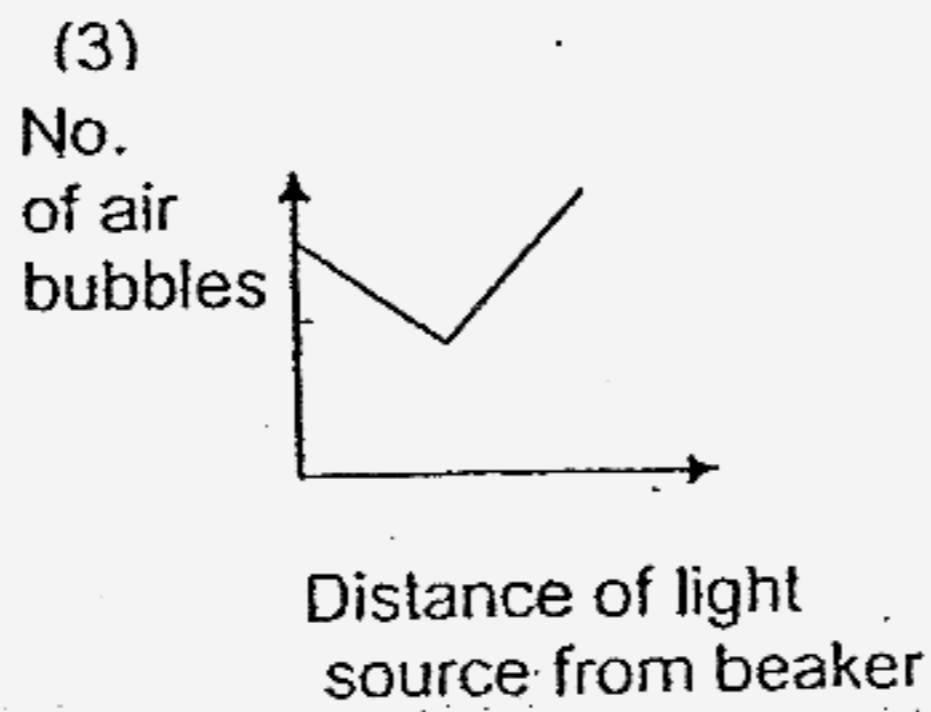
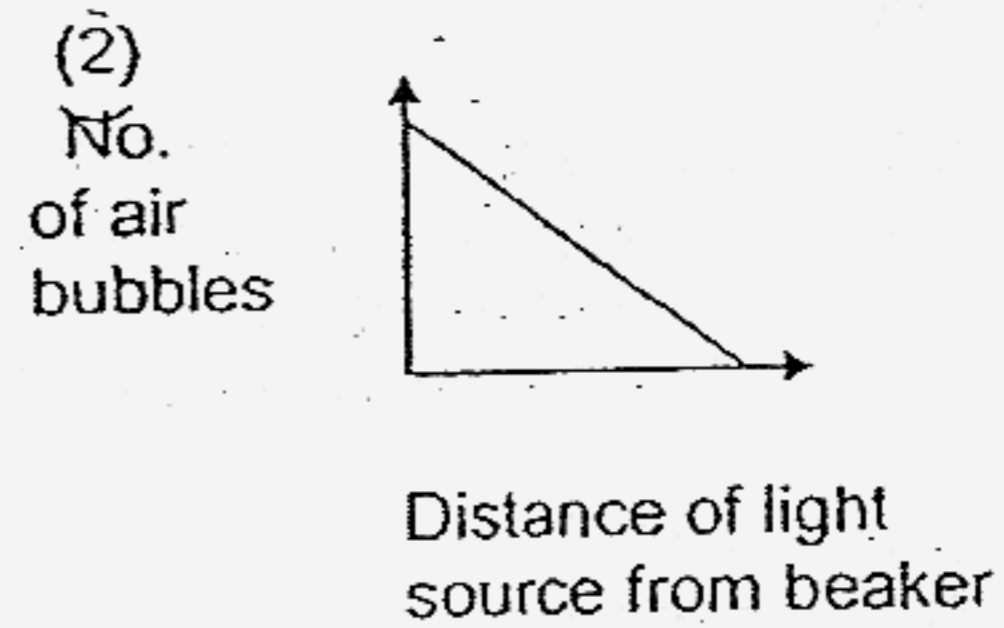
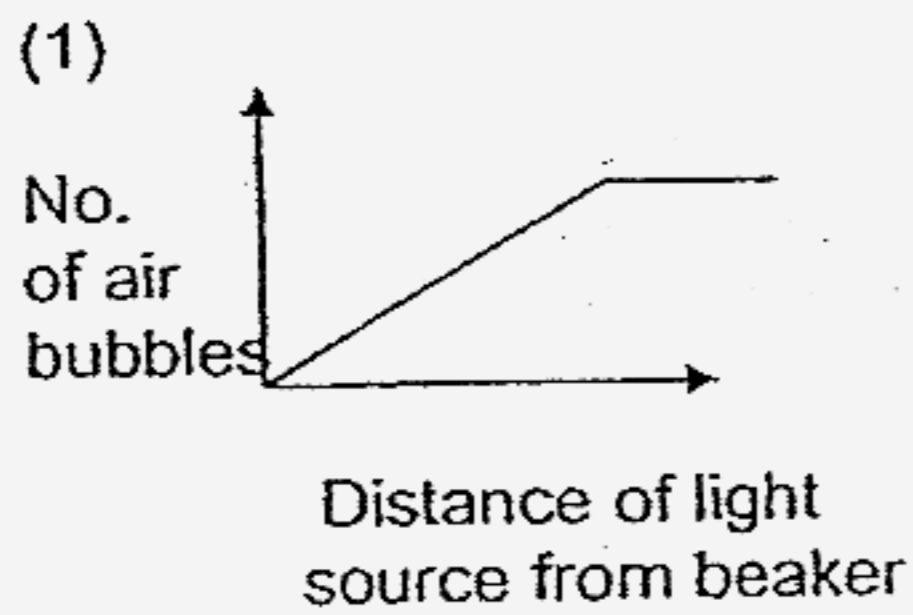
- (1) Two
- (2) Three
- (3) Four
- (4) Five

8. Which of the following plants **does not** reproduce in the same way as the onion plant?
- (1) Carrot
 - (2) Ginger
 - (3) Potato
 - (4) Yam
9. What form of energies is passed from the plants to the animals?
- (a) Oxygen
 - (b) Sugar
 - (c) Starch
 - (d) Water
- (1) a and b
 - (2) a and c
 - (3) b and c
 - (4) a and d
10. Which of the following statements about sexual reproduction in animals are true?
- (a) The baby develops in the mother's womb.
 - (b) All eggs will develop into young organisms.
 - (c) All female egg cells are found in the ovary.
 - (d) All sperms will fuse with the egg.
- (1) a and b
 - (2) b and c
 - (3) a and c
 - (4) b and d

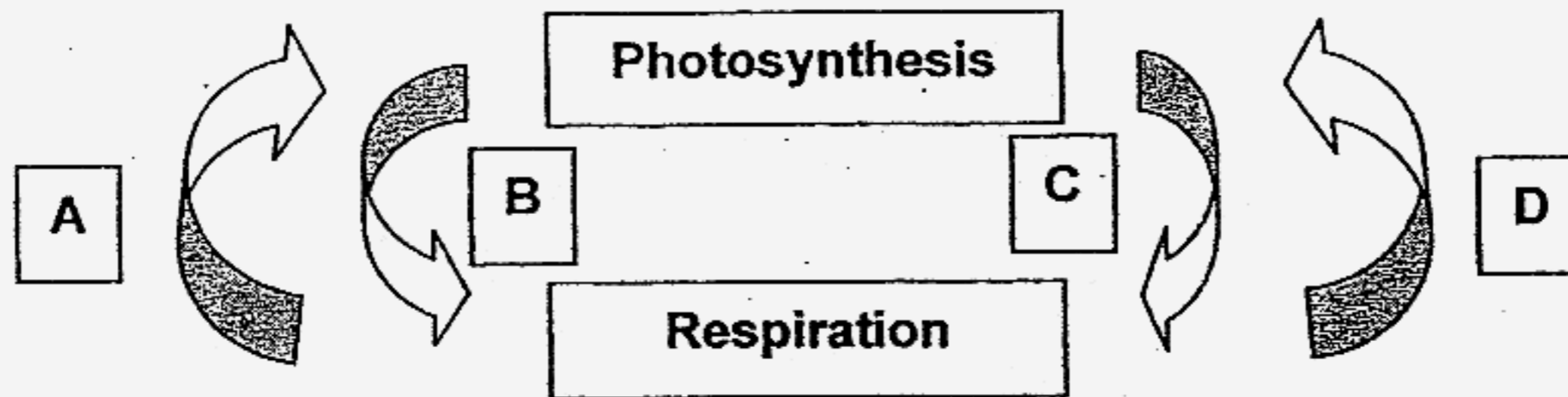
11. Sam set up an experiment with some water plant as shown in the diagram. He wanted to find out the relationship between the distance of the light source and the number of bubbles produced by the water plant during photosynthesis.



Which one of the following graphs below shows the results of her experiment?
his



12. The diagram below shows two processes, respiration and photosynthesis. Identify the products given out and raw materials that are needed for these two processes.



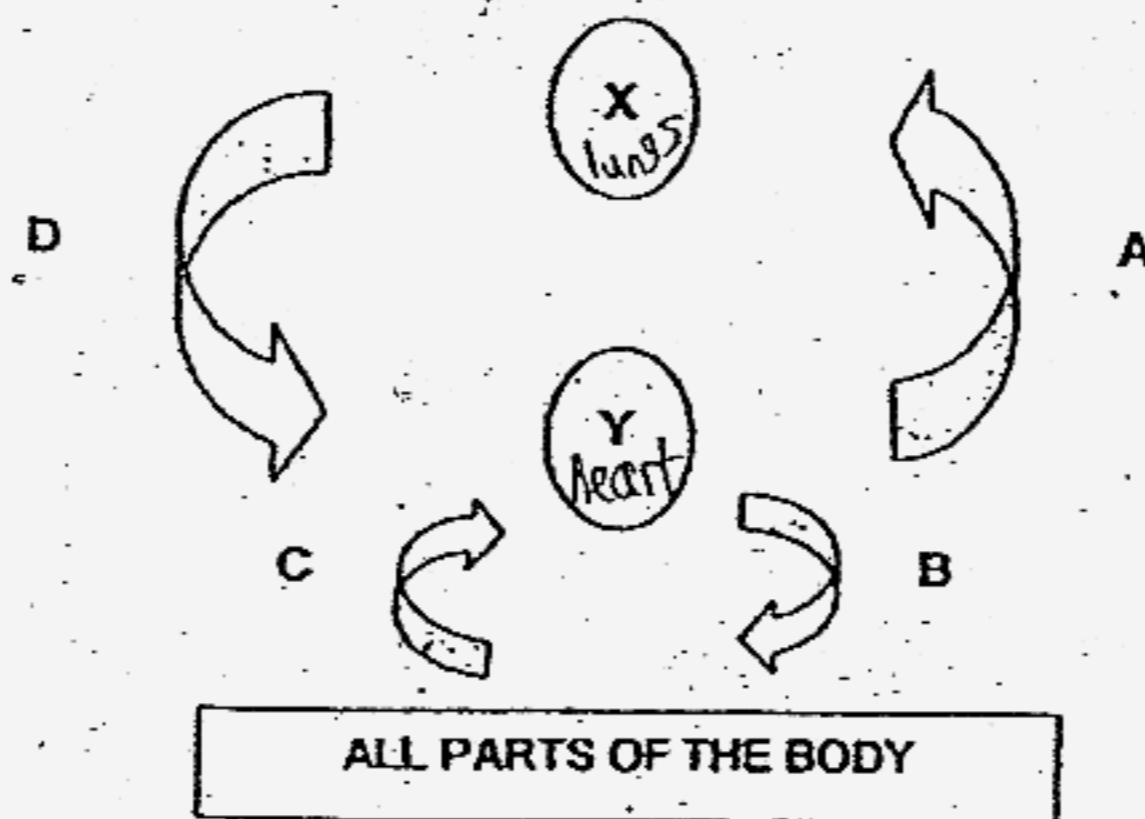
What do A, B, C and D represent?

	A	B	C	D
(1)	Oxygen	Water	Sugar	Carbon dioxide
(2)	Carbon dioxide	Sugar	Oxygen	Water
(3)	Carbon dioxide	Water	Oxygen	Sugar
(4)	Oxygen	Sugar	Carbon dioxide	Water

13. Liming observed a single organism. He learnt that this organism will go through cell division in order to reproduce. Can you tell her how many cells there will be after 5 generations of cell division? *him*

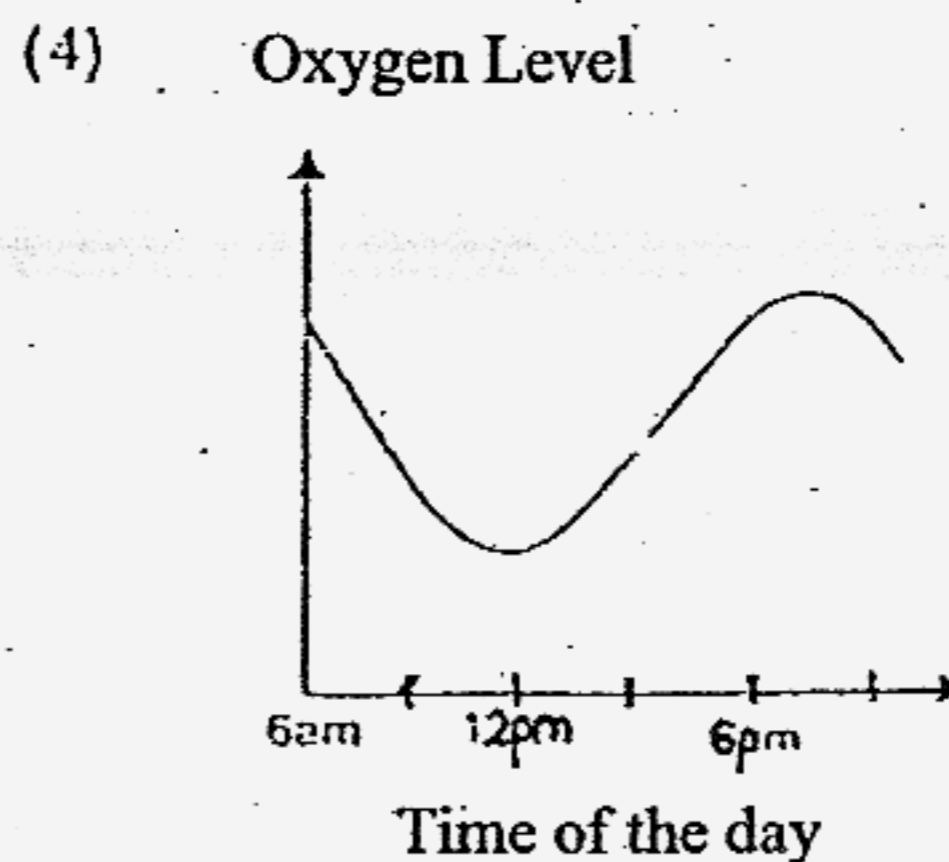
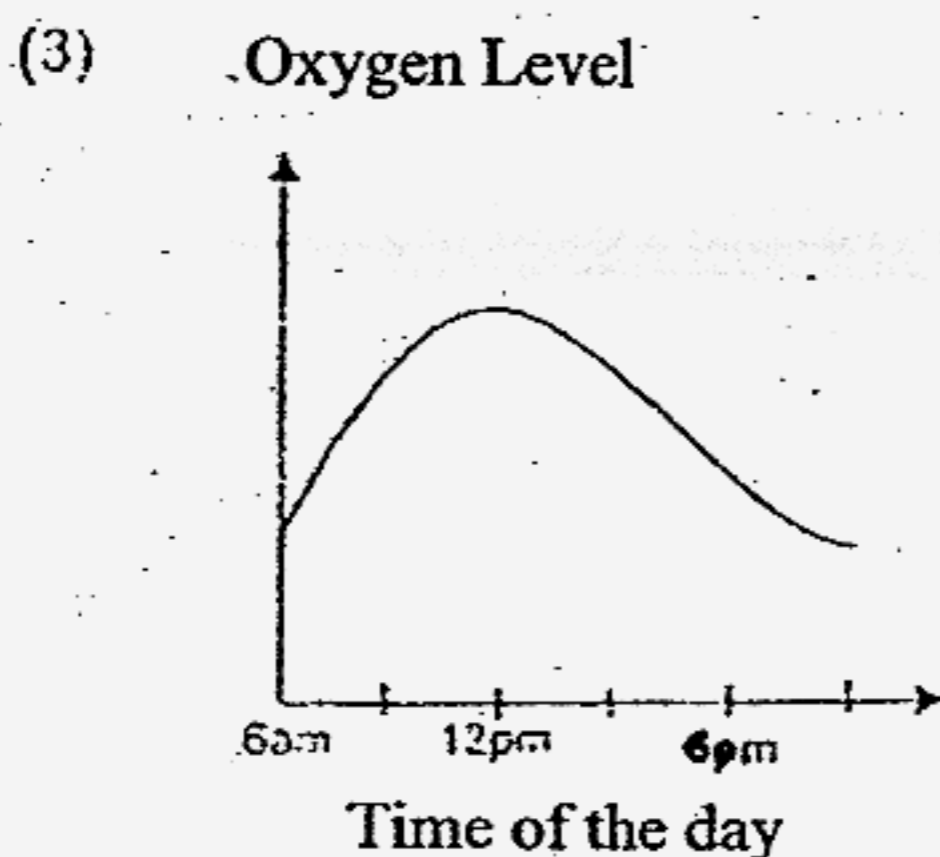
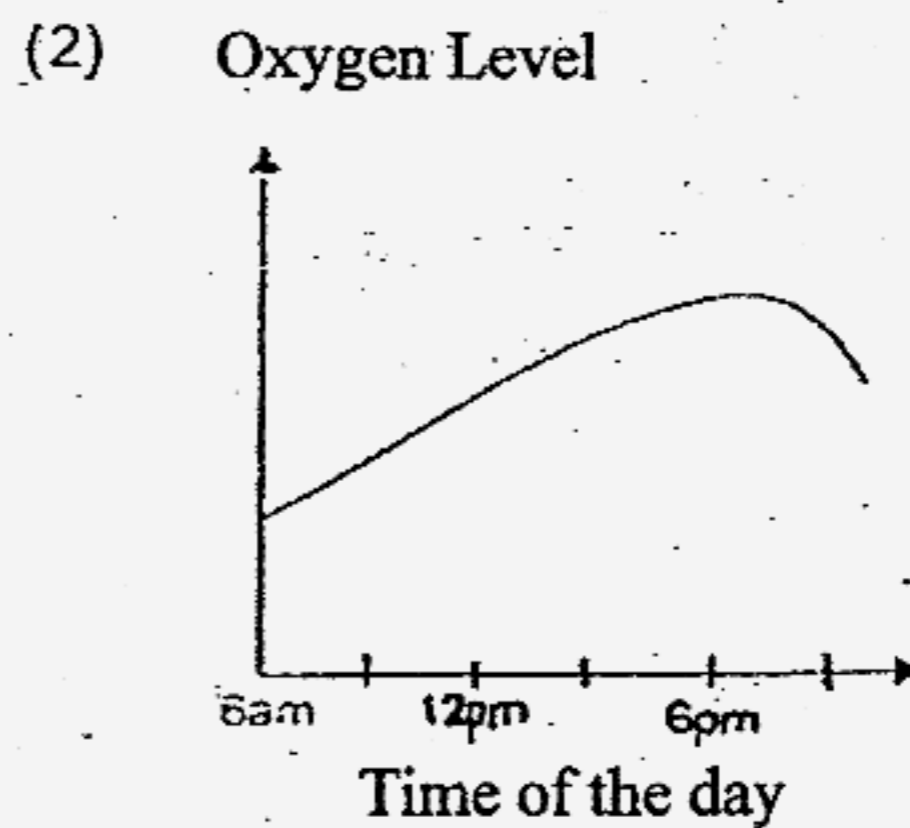
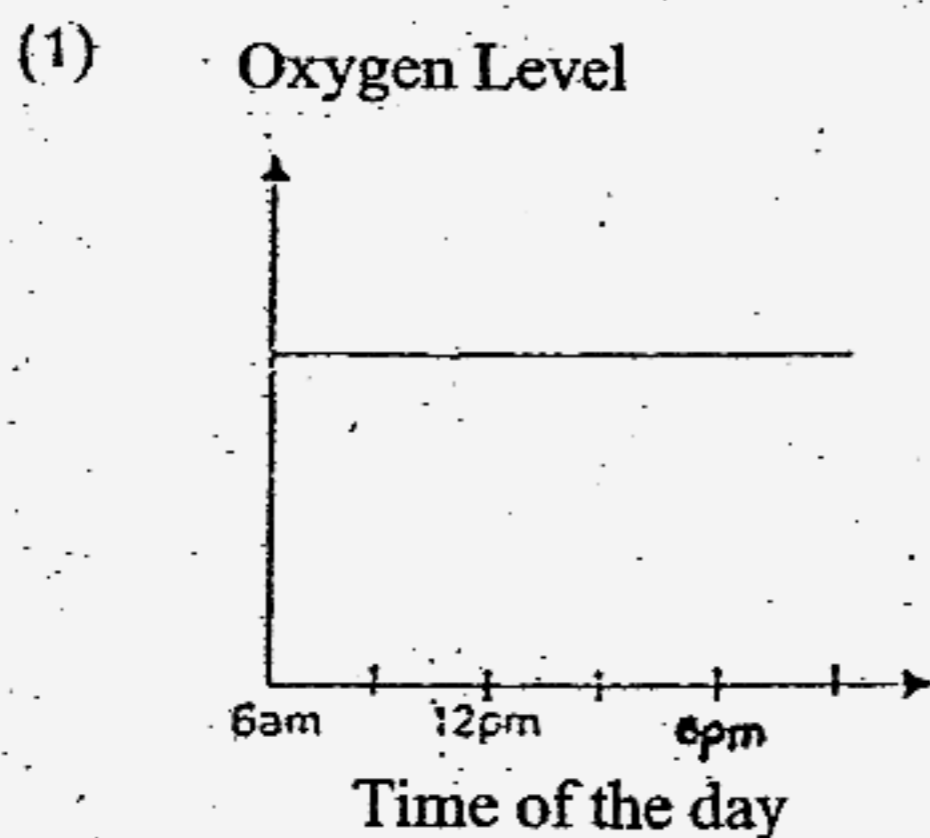
- (1) 5
- (2) 16
- (3) 32
- (4) 64

14. The diagram below shows how our blood travels in our body. Arrows A, B, C and D represent the movement of blood. X and Y represent the organs.

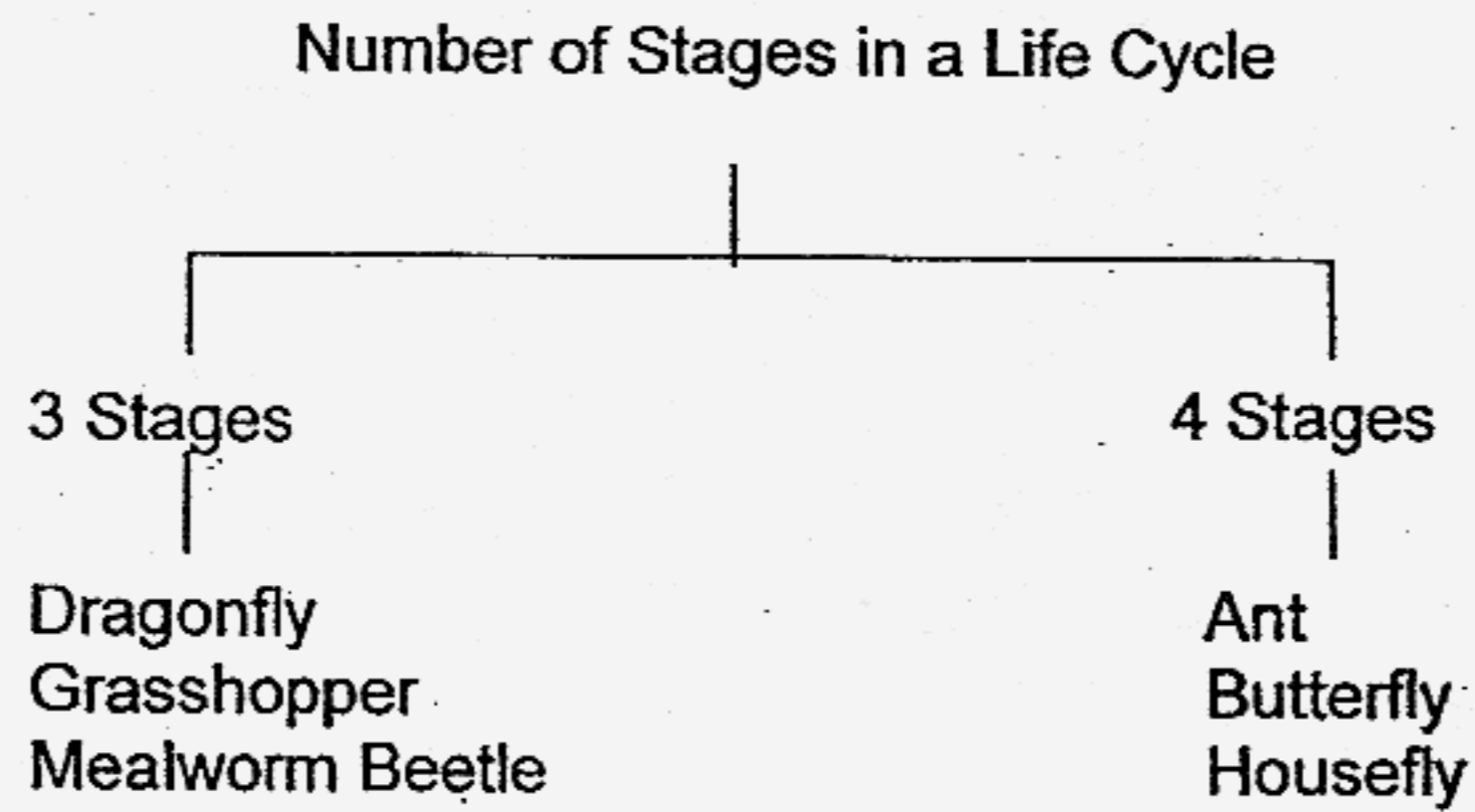


Which arrows represent the movement of blood rich in oxygen?

- (1) A and B
 - (2) A and C
 - (3) B and D
 - (4) C and D
15. Lisa places a potted balsam plant under a large bell jar. She monitored the oxygen level in the bell jar. Which of the following graphs shows the correct oxygen levels in the bell jar over a period of 15 hours?

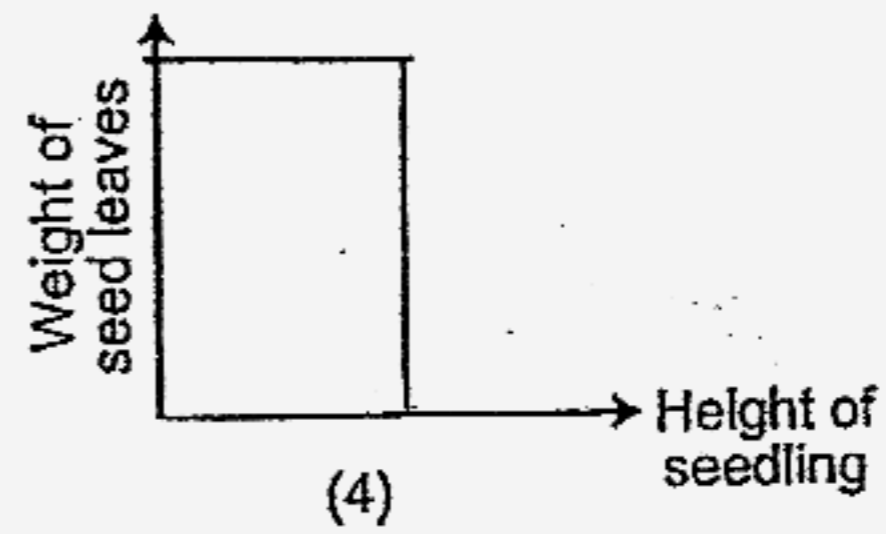
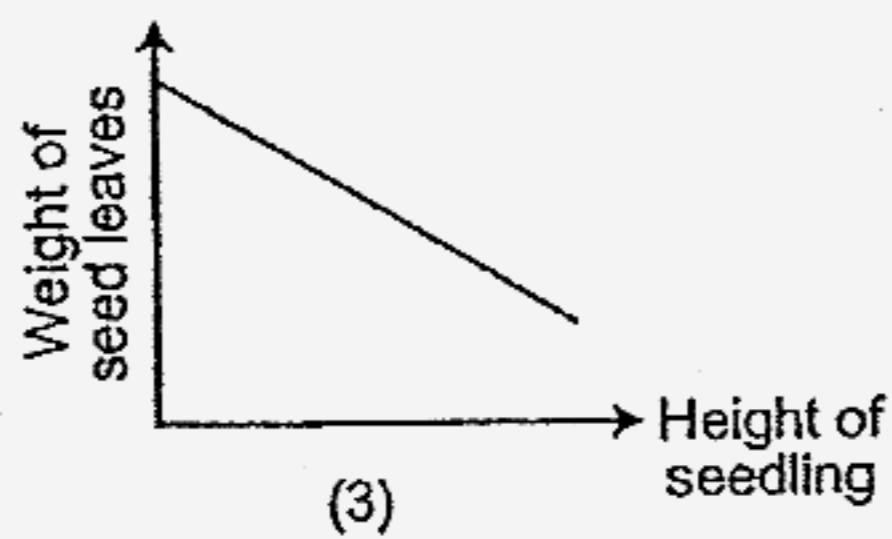
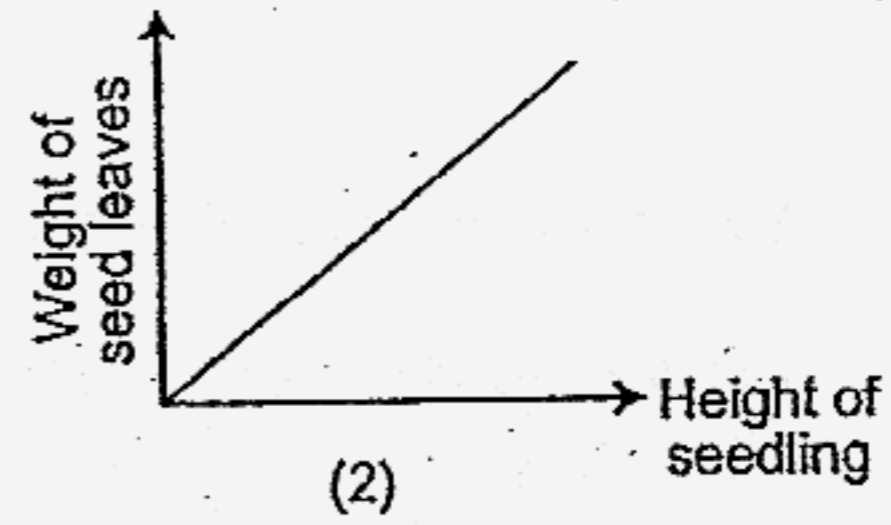
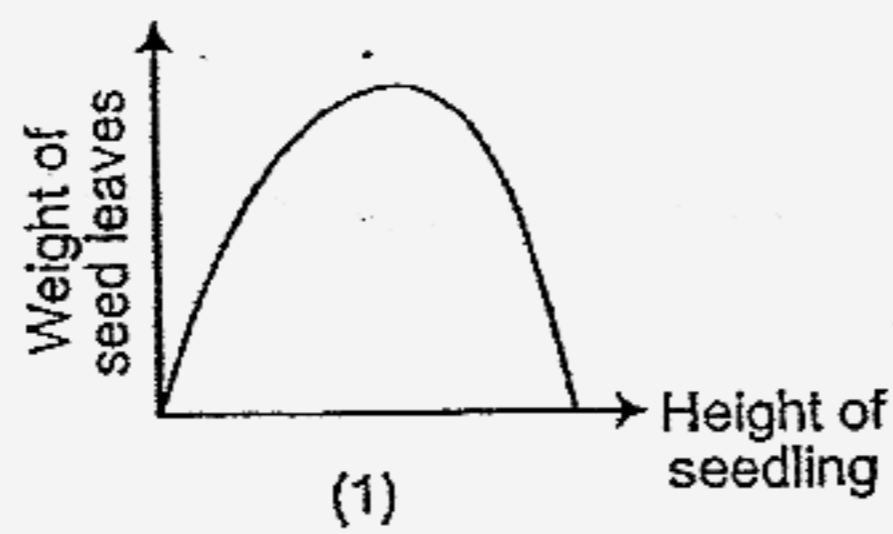


16. Which of the following insects has been wrongly classified?

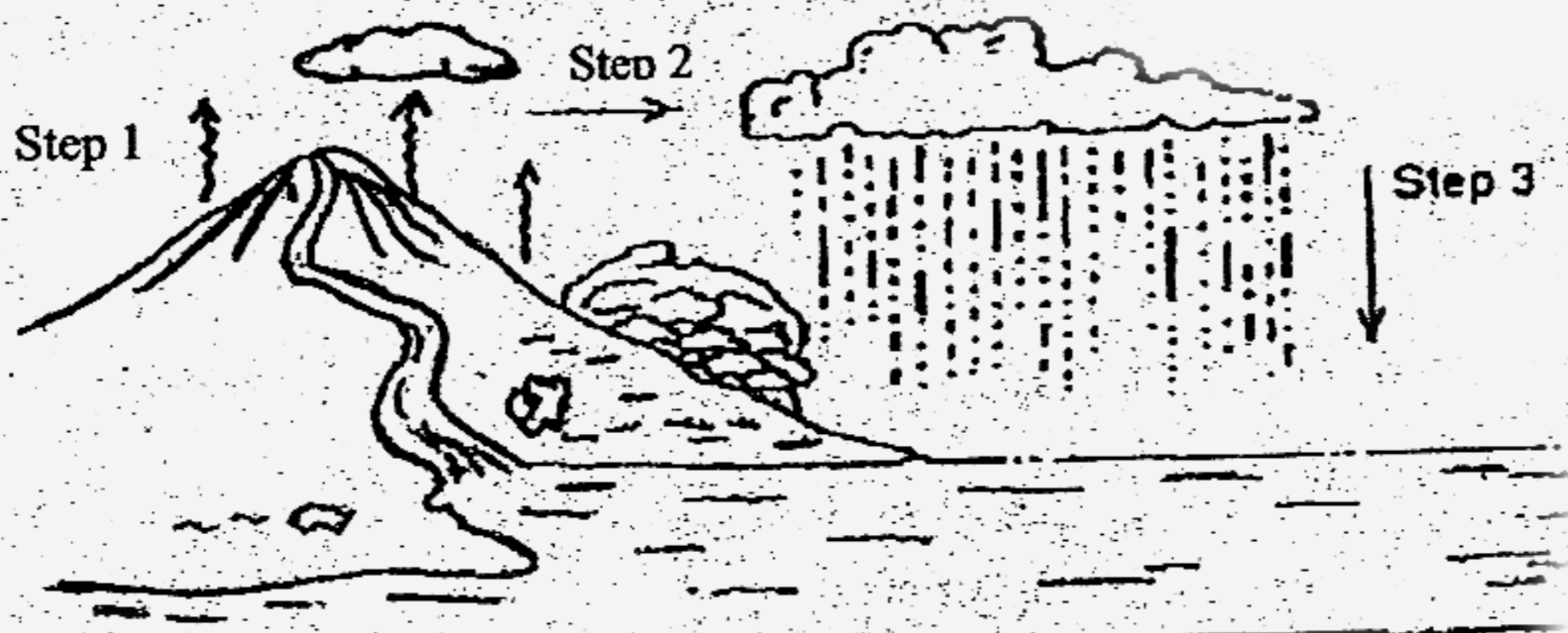


- ① Butterfly
- ② Ant
- ③ Grasshopper
- ④ Mealworm Beetle

17. Which of the following graphs shows the relationship between the weight of the seed leaves and the height of the seedling?



18. The diagram below shows a water cycle.



In which step(s) is/are there heat gain from the surrounding?

- (a) Step 1
- (b) Step 2
- (c) Step 3

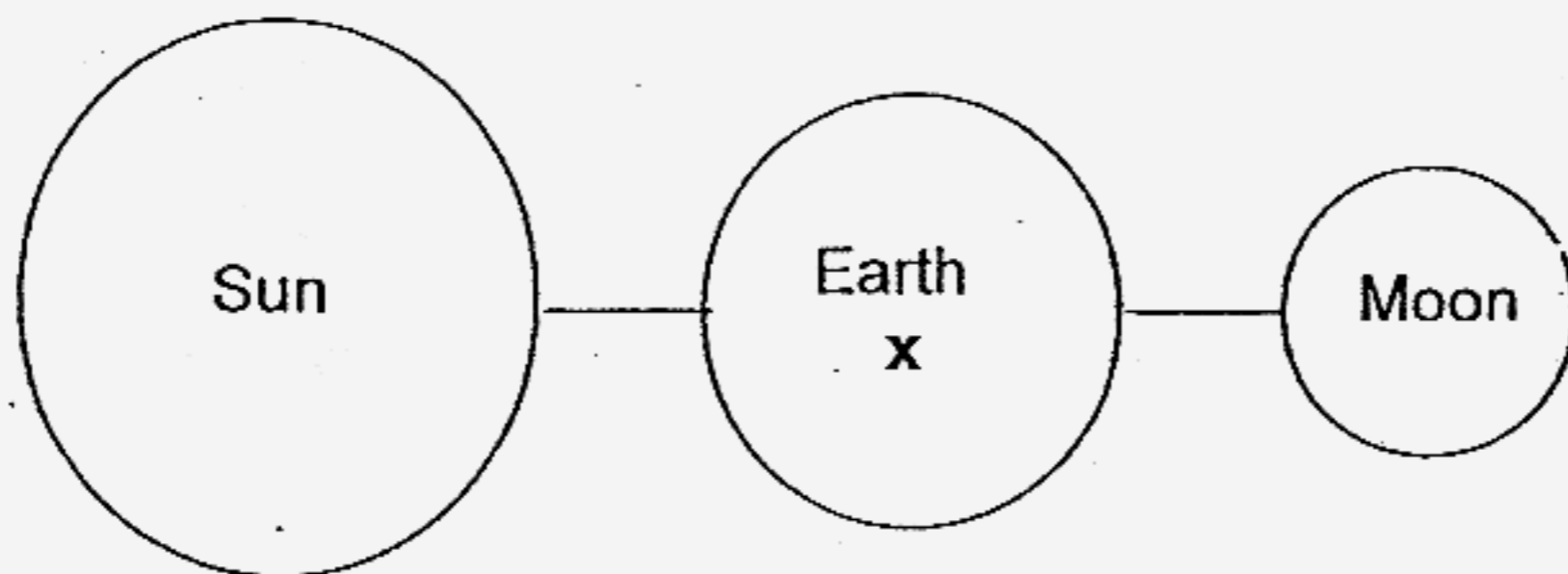
- (1) a only
- (2) b only
- (3) c only
- (4) b and c only

What are the conditions needed for a seed to germinate?

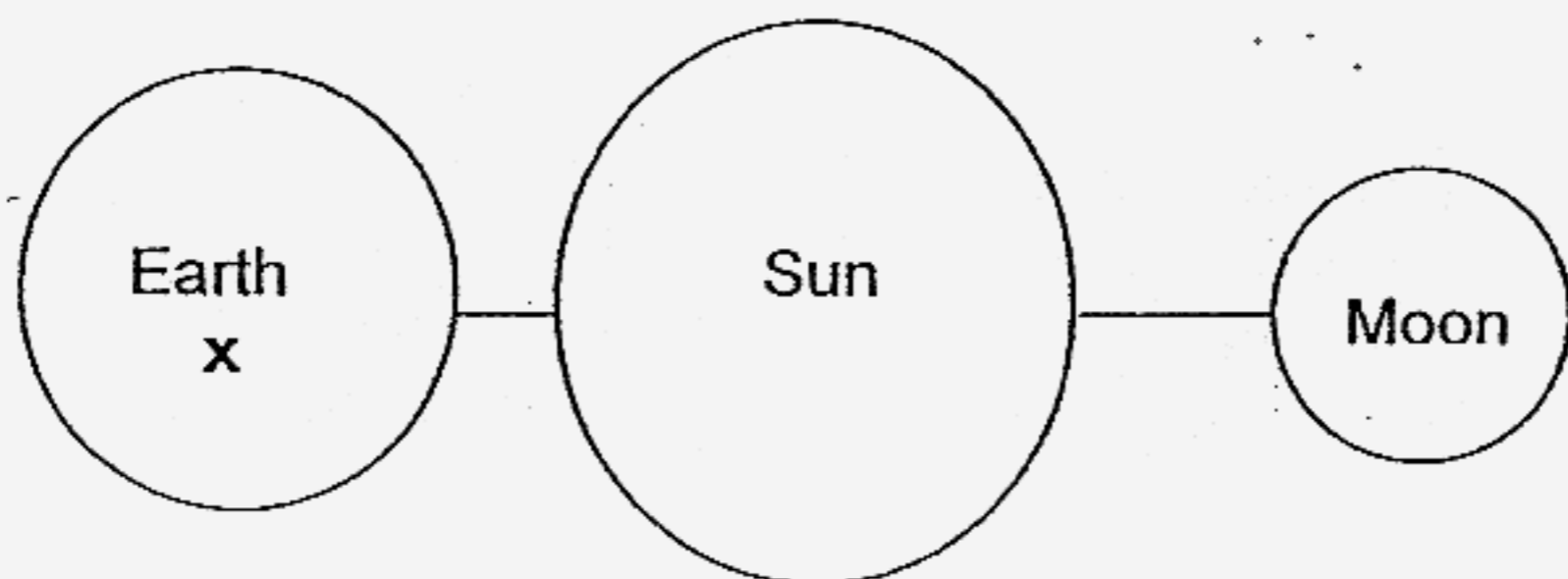
- (1) Air, sunlight and water
- (2) Sunlight, warmth and water
- (3) Air, warmth and water
- (4) Air, sunlight, warmth and water

20. In which of the following arrangements will a new moon be seen from position (x) on Earth?

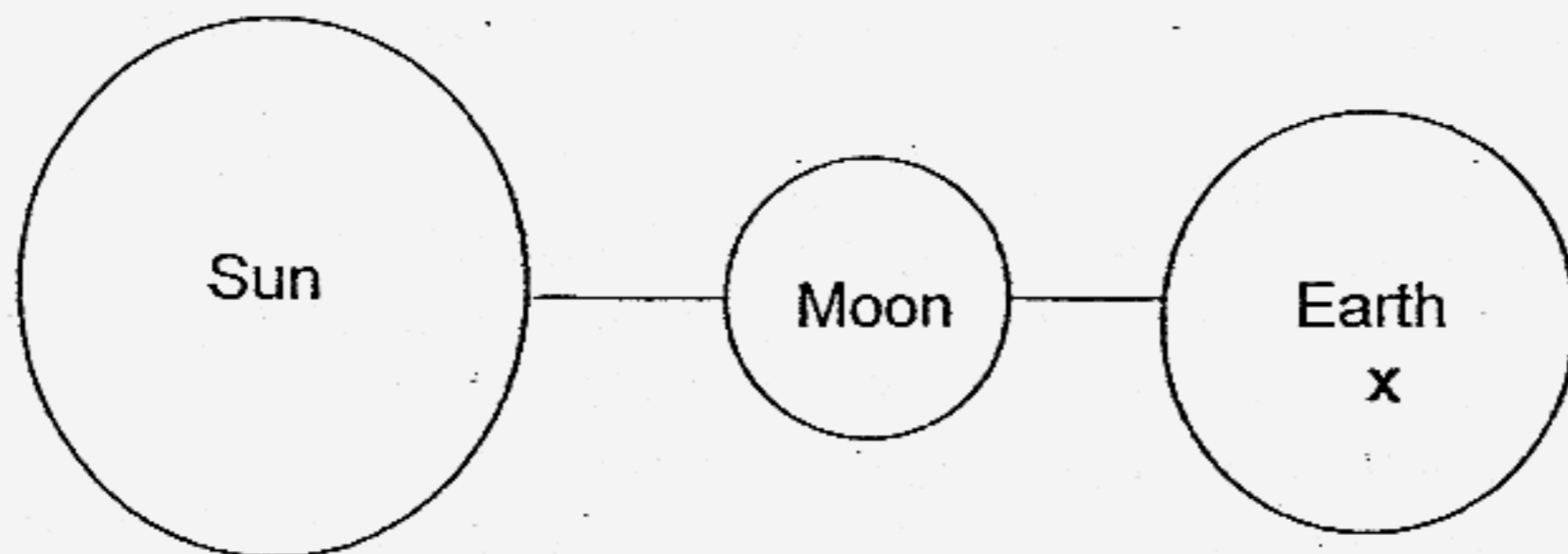
(1)



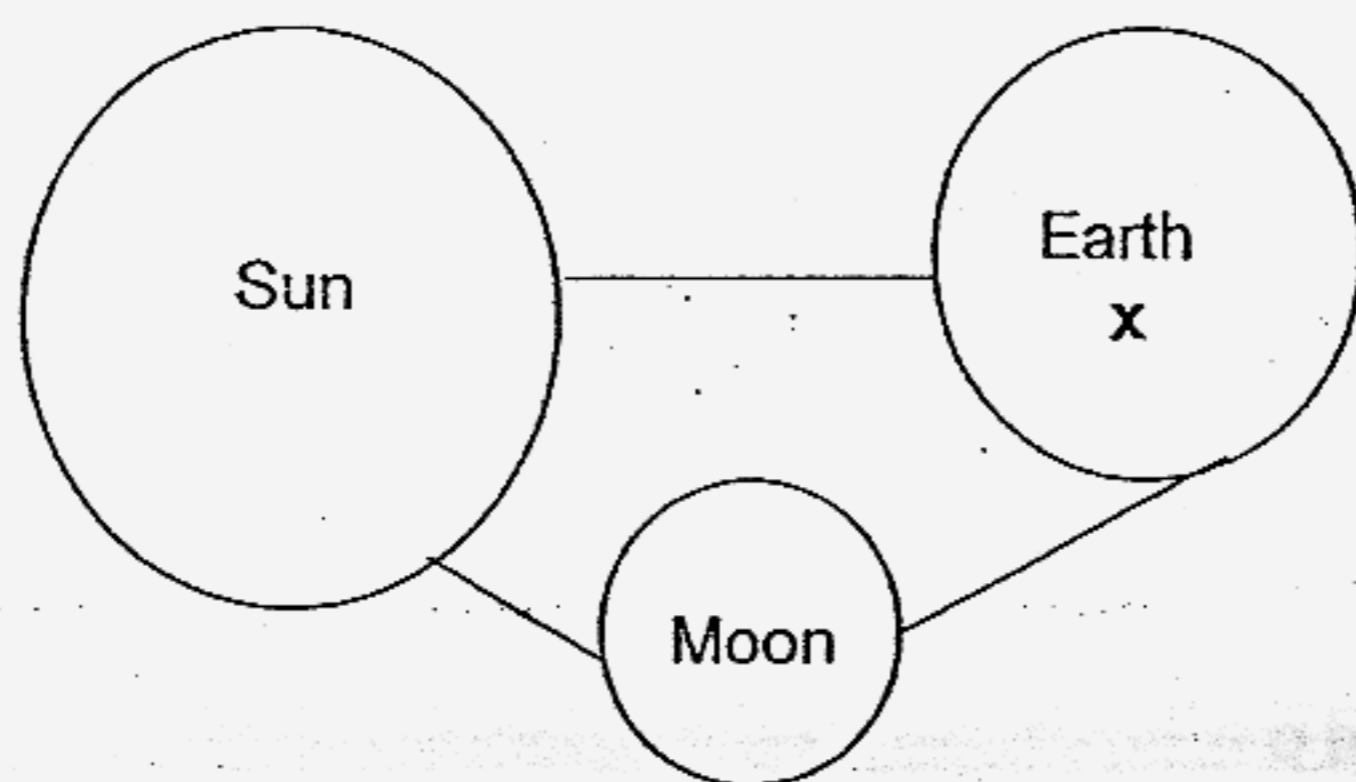
(2)



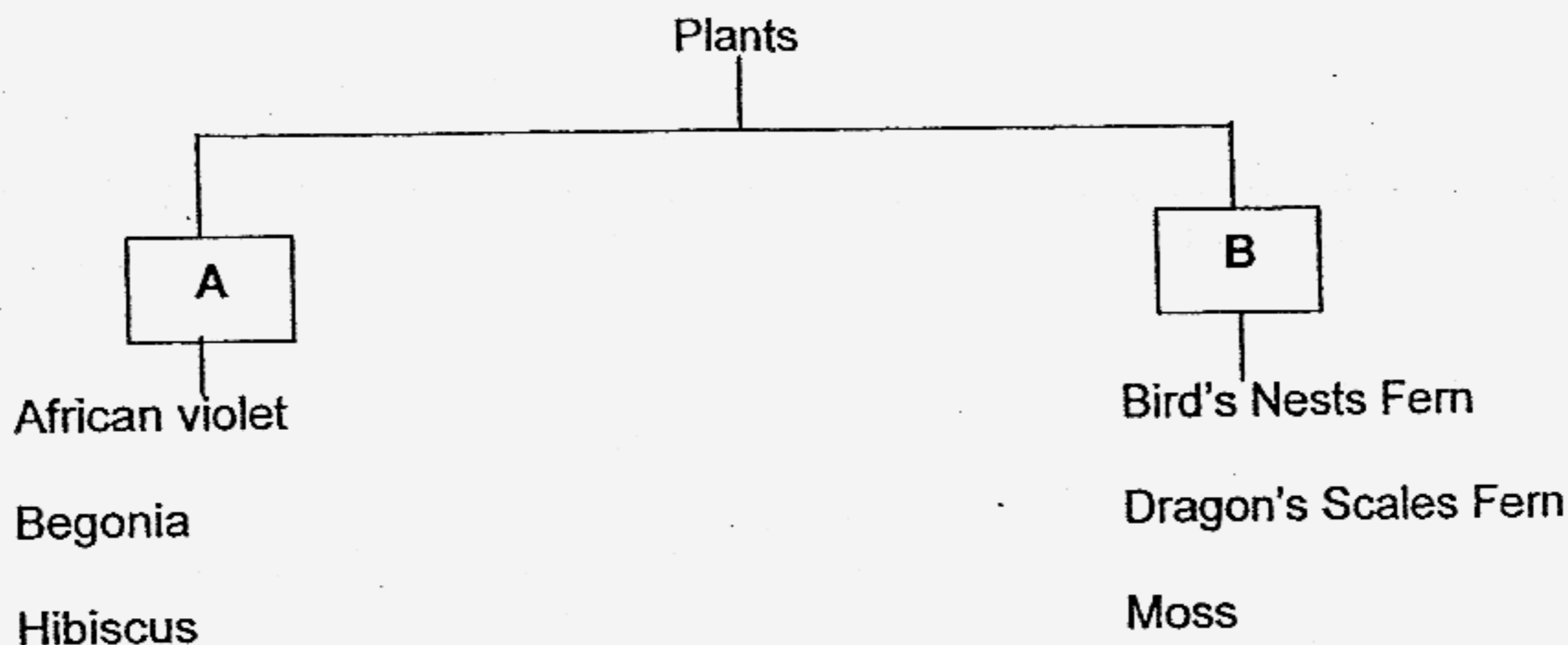
(3)



(4)



21. Study the classification table below.



What are suitable headings for A and B?

	A	B
(1)	Non-green plants	Green plants
(2)	Flowering plants	Non-flowering plants
(3)	Dispersed by animals	Dispersed by wind
(4)	Reproduce by seeds	Reproduce by spores

22. Which of the following statements is false about respiration?

- (1) The process of living things taking in oxygen to break down digested food to produce energy is called respiration.
- (2) The parts of a living thing that help it to exchange gases with its surroundings make up its respiratory system.
- (3) Breathing is not the same as respiration.
- (4) Plants carry out respiration only at night, when they are not photosynthesising.

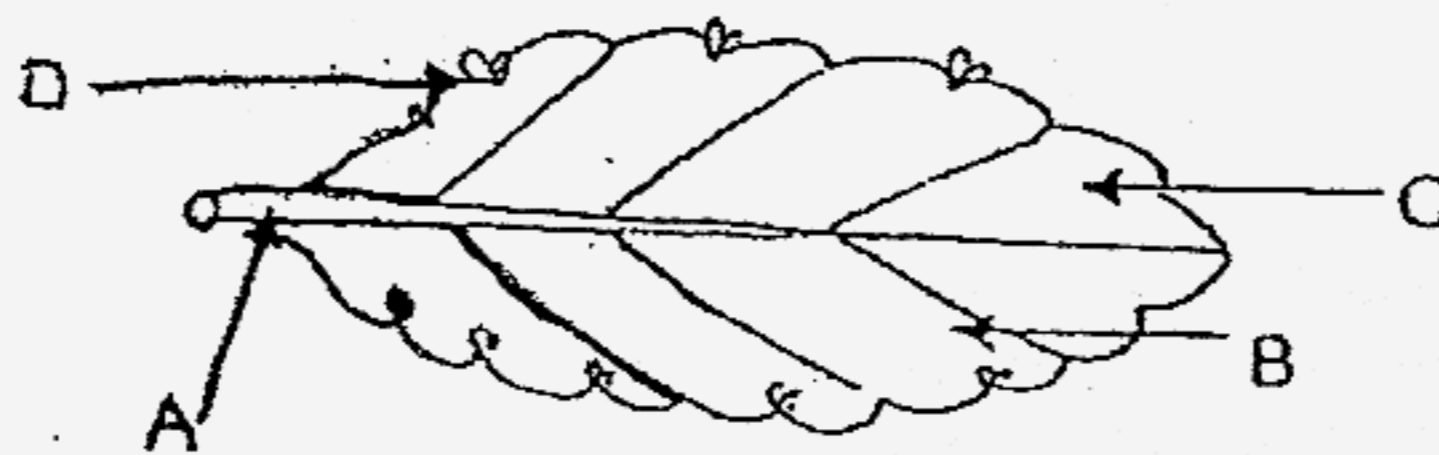
23. Which of these traits are hereditary?

- (a) dimples
- (b) freckles
- (c) length of fingernails
- (d) birthmarks

- (1) a, b and c
- (2) a, c and d
- (3) a, b and d
- (4) b, c and d

24. When Jamie alighted from an air-conditioned bus, her spectacle lenses became misty. Why do you think this happened?
- (1) The water vapour outside the bus had evaporated from her spectacle lenses.
 - (2) The water vapour inside the bus had evaporated from her spectacle lenses.
 - (3) The water vapour inside the bus had condensed on her spectacle lenses.
 - (4) The water vapour outside the bus had condensed on her spectacle lenses.

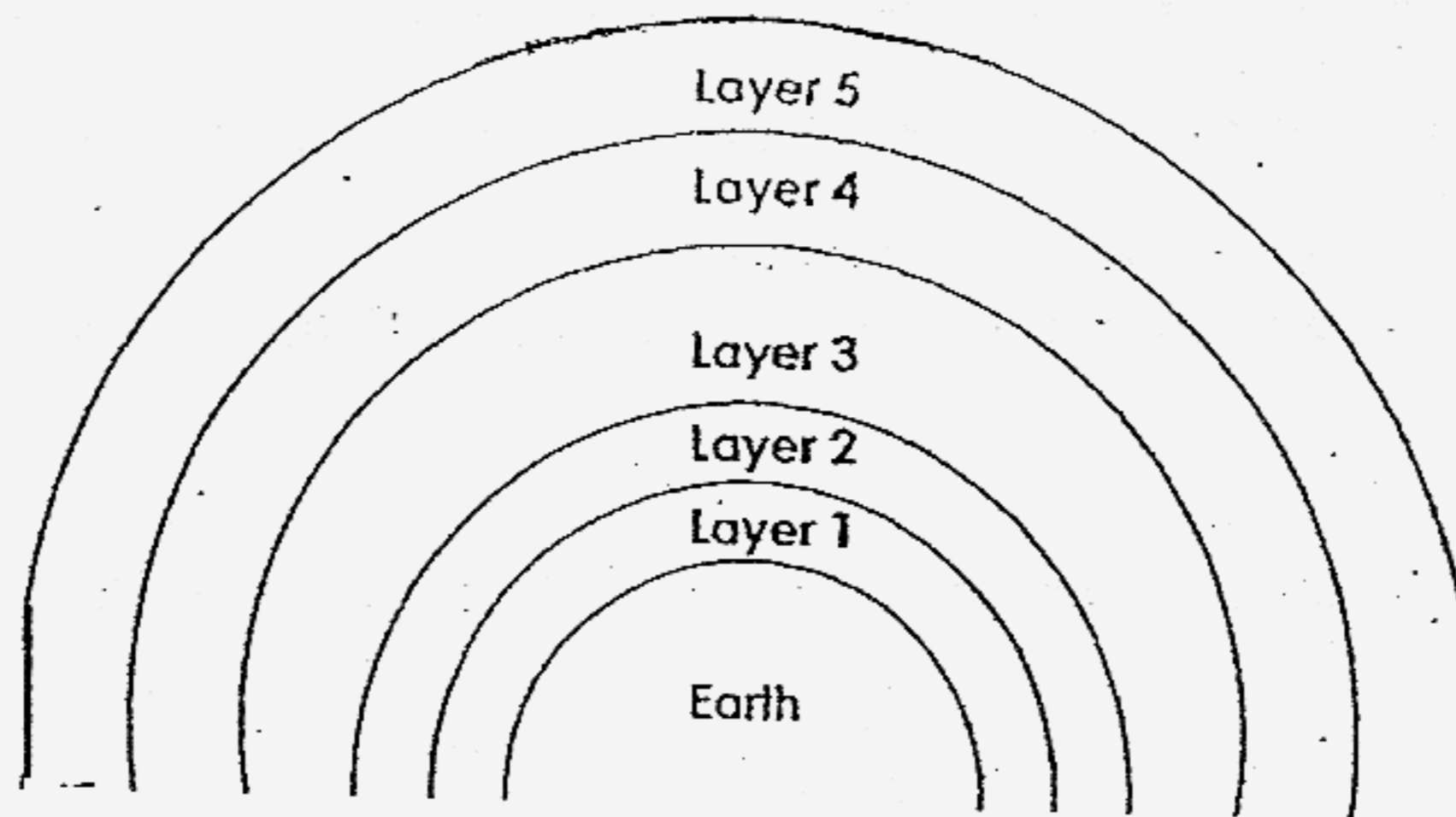
25. The diagram below shows the leaf of a bryophyllum plant.



From which part can a new bryophyllum plant grow?

- (1) A
 - (2) B
 - (3) C
 - (4) D
26. Hassan bought some chicken eggs from the supermarket and put them into an incubator. After 8 weeks, the eggs did not hatch into chicks. What could be the possible reason why the eggs did not hatch?
- (1) The eggs were not ready to be hatched.
 - (2) The eggs were not fertilised.
 - (3) The eggs did not have the warmth from a hen.
 - (4) There was not enough food for the embryo.

27. The diagram below shows the five layers of the atmosphere. If Layers 1 and 2 were missing, what would happen to Earth?



- a) It would be freezing.
- b) Its temperature would increase.
- c) It would not have heat and light.
- d) It would not have the presence of oxygen and carbon dioxide.

- (1) a and b
- (2) c and d
- (3) b and d
- (4) a and d

28. Ahmad put some ice cubes into a plastic bag and tied the mouth of the plastic bag tightly. She weighed the bag of ice cubes. After all the ice cubes had melted, she weighed the bag again. What would she find out about the weight of the bag with the melted ice cubes?

- (1) The weight of the bag remained the same.
- (2) The weight of the bag had increased.
- (3) The weight of the bag had decreased.
- (4) It was impossible to conclude.

29. Plant X, Y and Z were planted on a plot of land as shown in Figure (i) below.

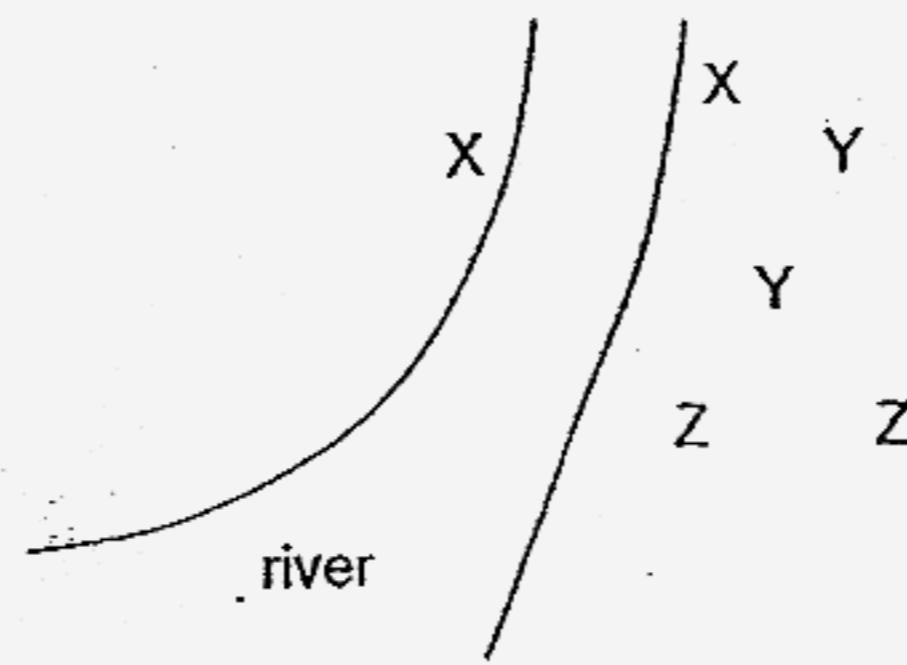


Figure (i)

Figure (ii) shows what happened to the same plot of land after 1 year.

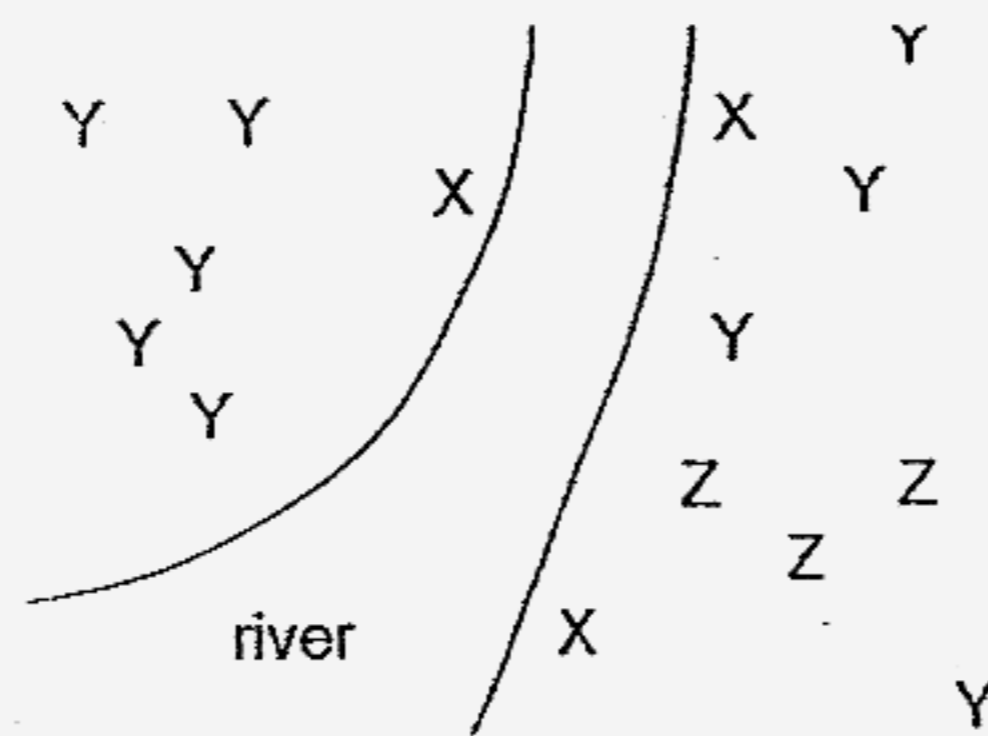
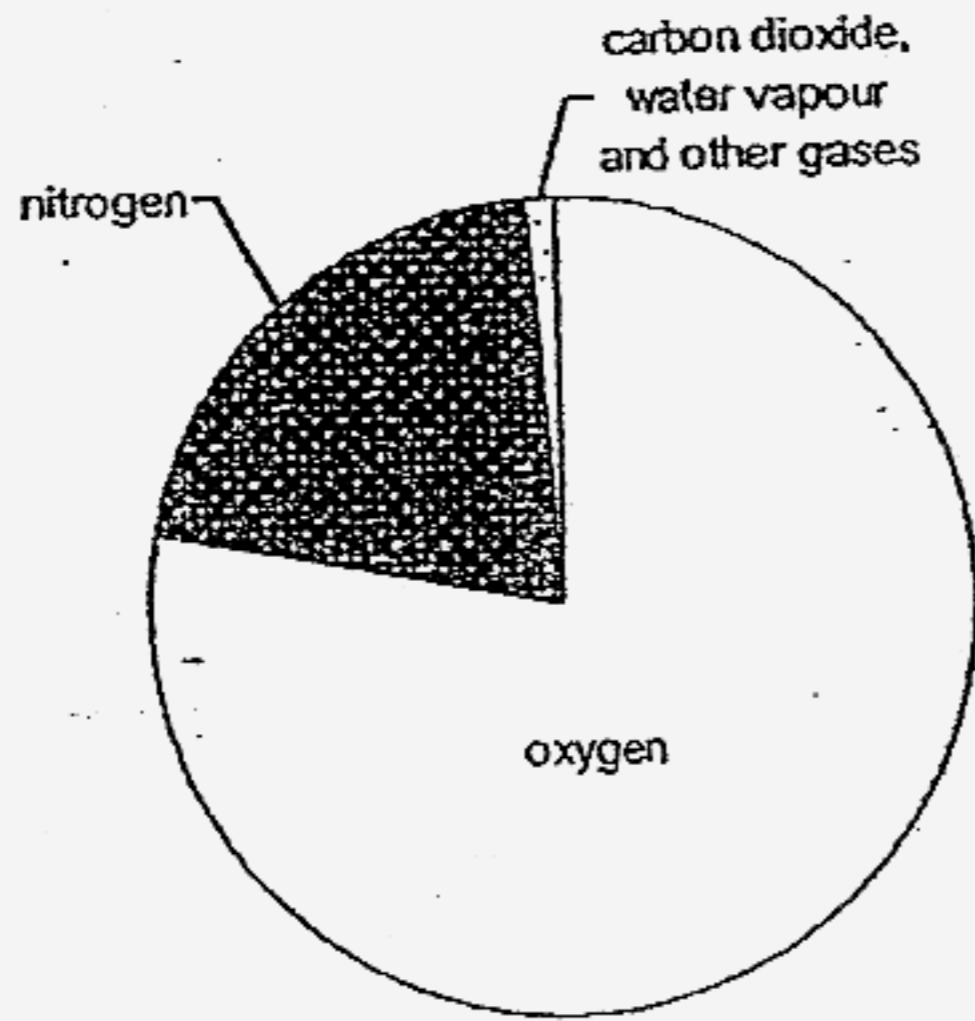


Figure (ii)

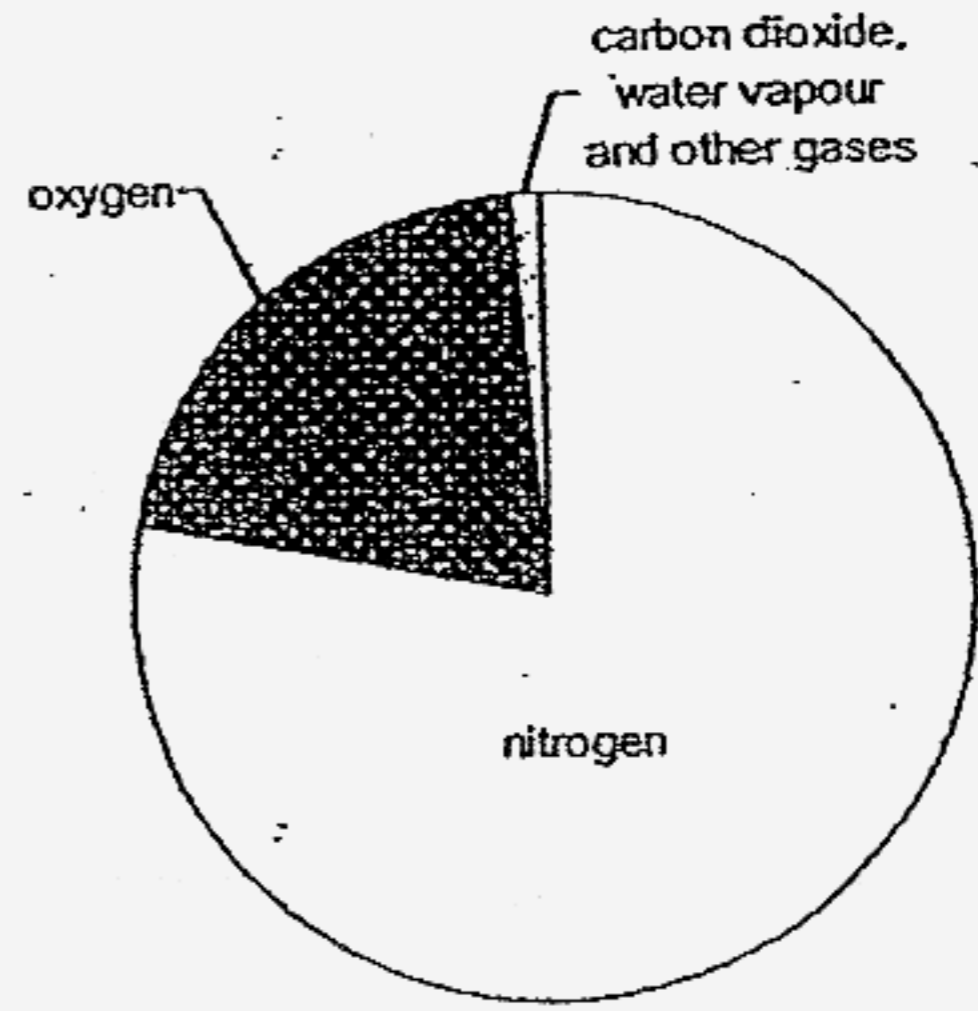
How do plants X, Y and Z disperse their seeds?

	X	Y	Z
(1)	Splitting	Wind	Water
(2)	Splitting	Water	Wind
(3)	Water	Splitting	Wind
(4)	Water	Wind	Splitting

30. Which of the following pie charts represents the composition of the air in the Earth's atmosphere?

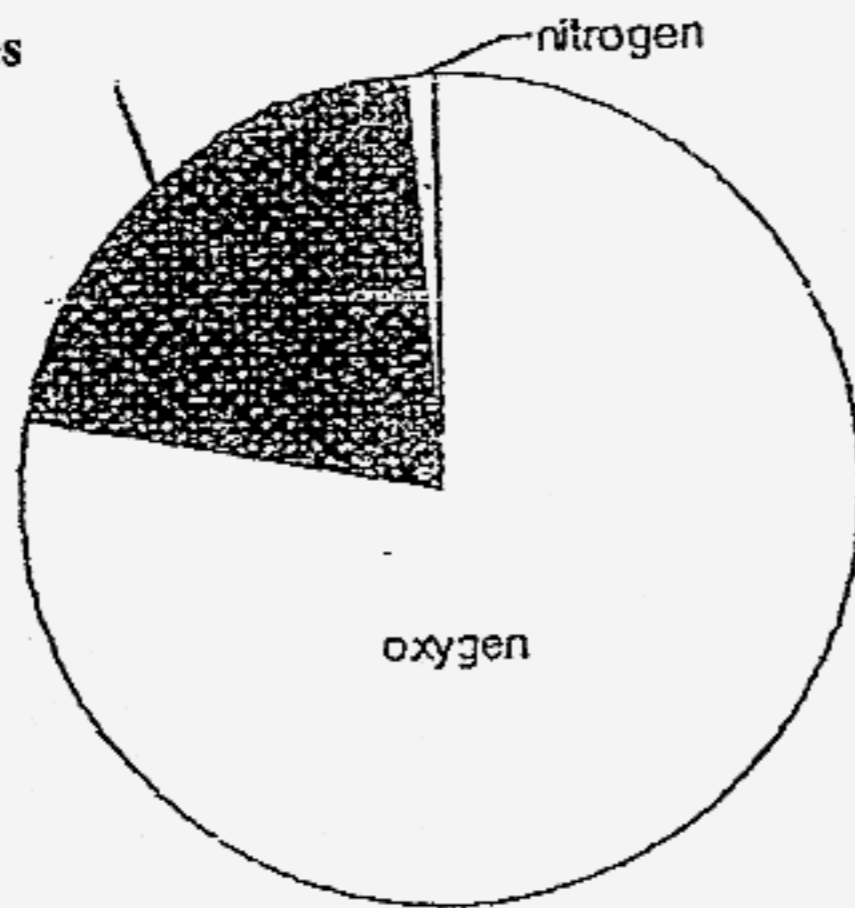


(1)

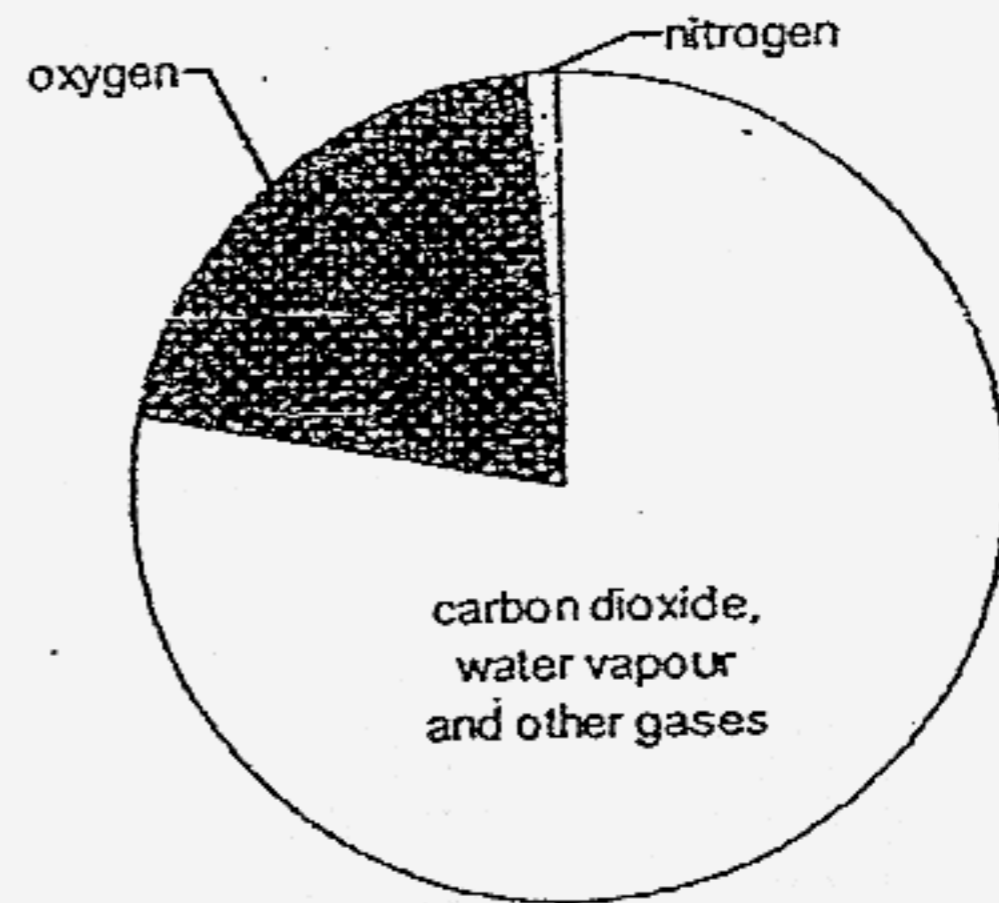


(2)

**Carbon dioxide,
water vapour
and other gases**



(3)



(4)



RED SWASTIKA SCHOOL

RED SWASTIKA SCHOOL

2006 SEMESTRAL ASSESSMENT 1

SCIENCE

Name : _____ ()

Class : Primary 5/ _____

Date : 11 May 2006

BOOKLET B

16 Questions
40 marks

MARKS

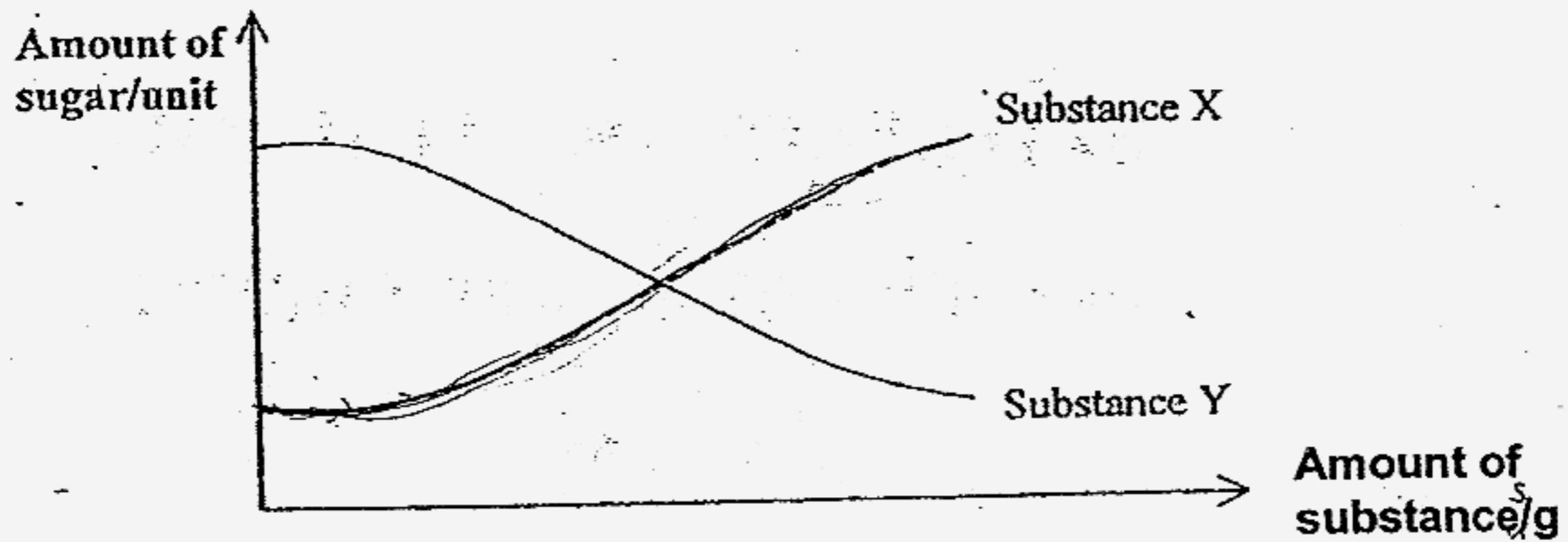
	OBTAINED	POSSIBLE
BOOKLET A		60
BOOKLET B		40
TOTAL		100

Parent's Signature : _____

Section B : Open-ended Questions (16 Questions : 40 marks)

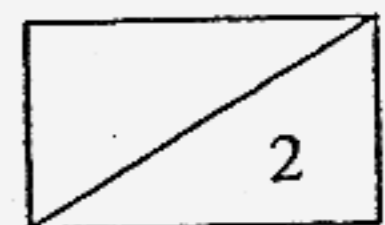
Answer all the questions in the space provided.

31. Two substances, X and Y were added to two similar plants. Both plants were allowed to photosynthesise normally and observations were made. The conditions for photosynthesis were kept the same to ensure a fair test. The amount of sugar produced is measured using special equipment. The graph below shows how the two substances, X and Y, can affect photosynthesis.

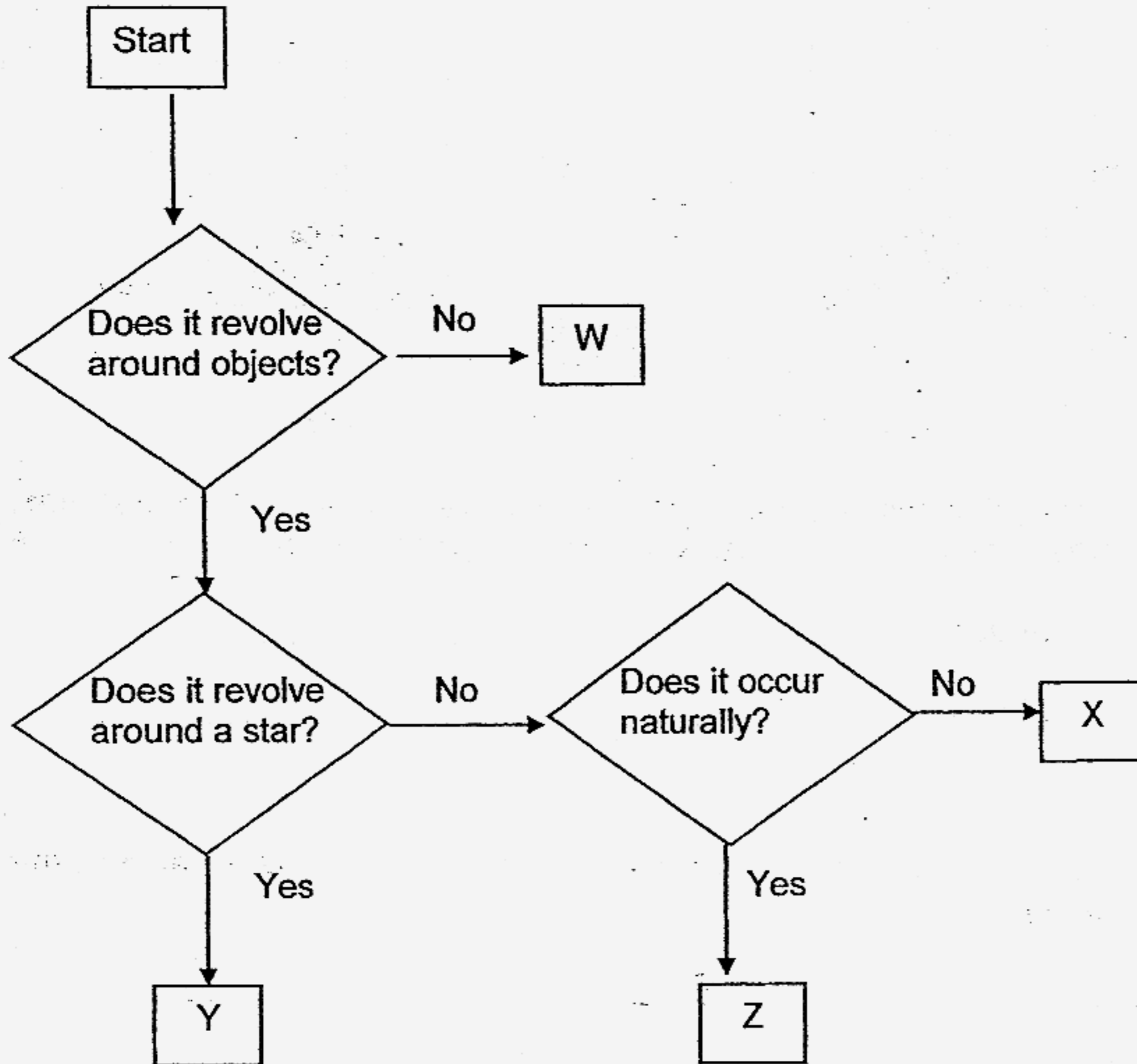


- (a) State **two** variables that should be kept the same for both plants in order to have a fair test? (1 mark)

- (b) What can be concluded about this experiment based on the graph above? (1 mark)



32(a) Study the flow chart below. Identify the objects in the Solar System which are presented by the letters W, X, Y and Z. (2 marks)



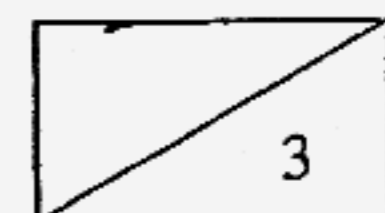
W: _____

X: _____

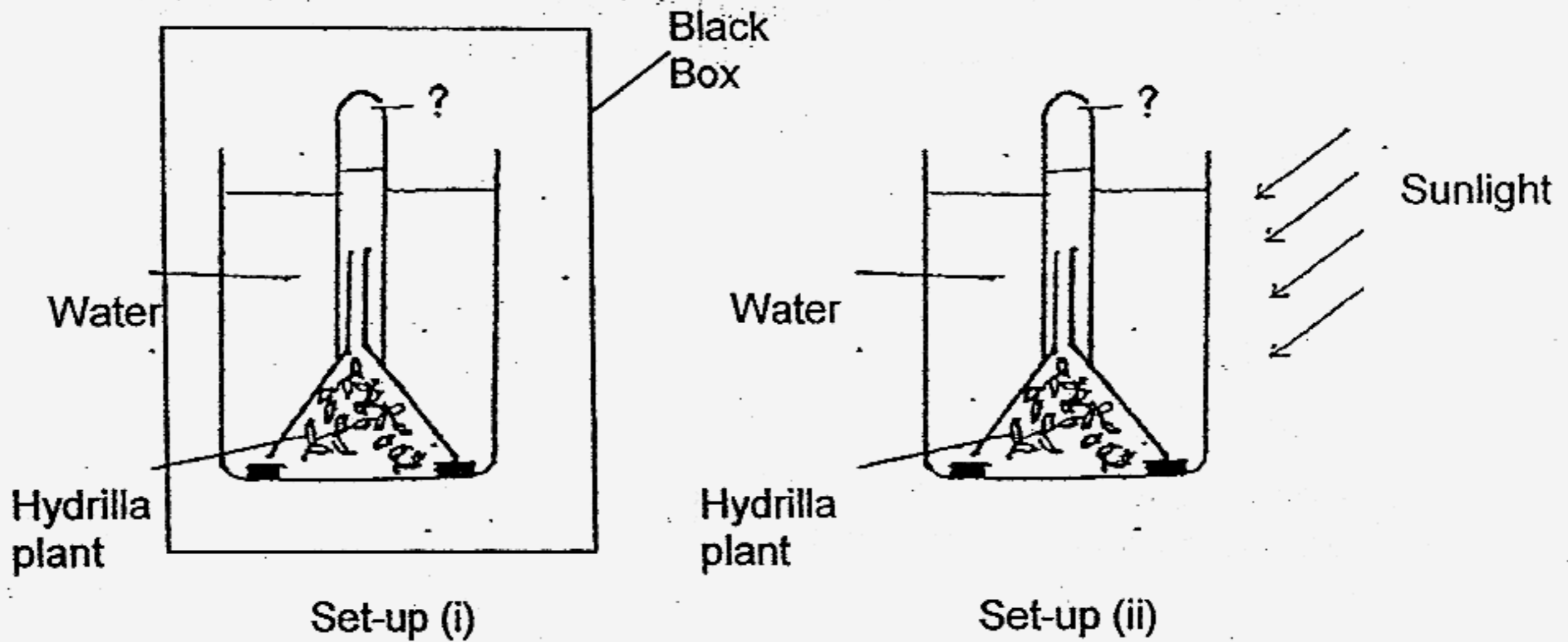
Y: _____

Z: _____

(b) State one use of X in the Solar System. (1 mark)



33. Rahim set up two similar sets of experiments as shown below. Set-up (i) was placed in a black box and Set-up (ii) was placed in the Sun.



- (a) After a day, some gases were collected in the test tubes in the two set-ups (i) and (ii). What are the gases collected in both set-ups? (2 marks)

Set-up (i): _____

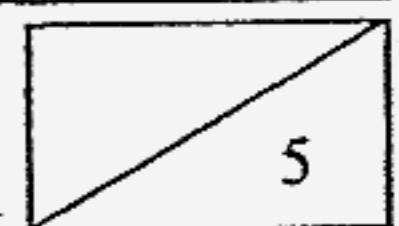
Set-up (ii): _____

- (b) What is the process which both hydrilla plants are carrying out at the same time? (1 mark)

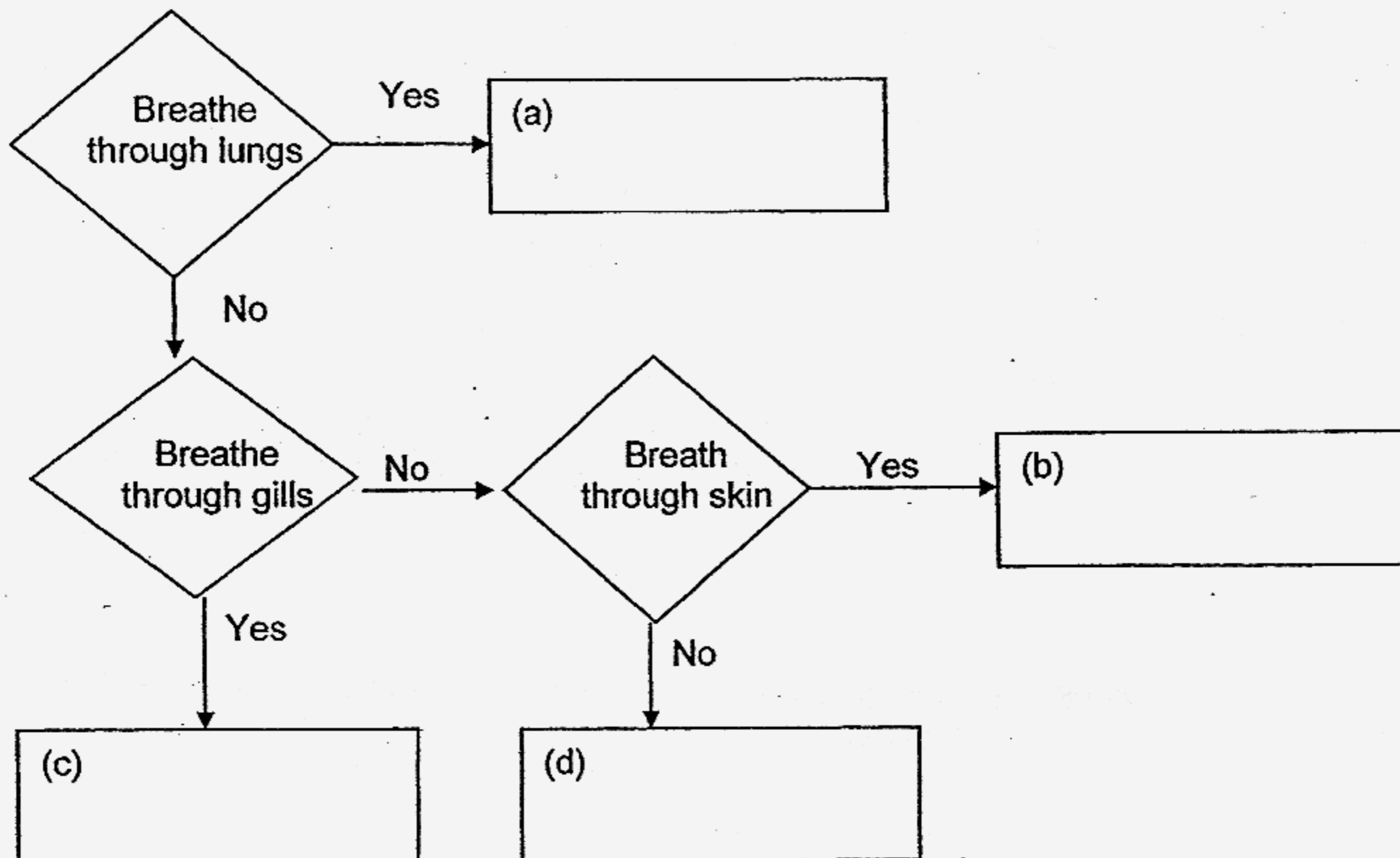
34. State one similarity and one difference between the human and plant circulatory system. (2 marks)

Similarity:

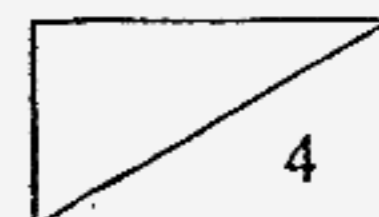
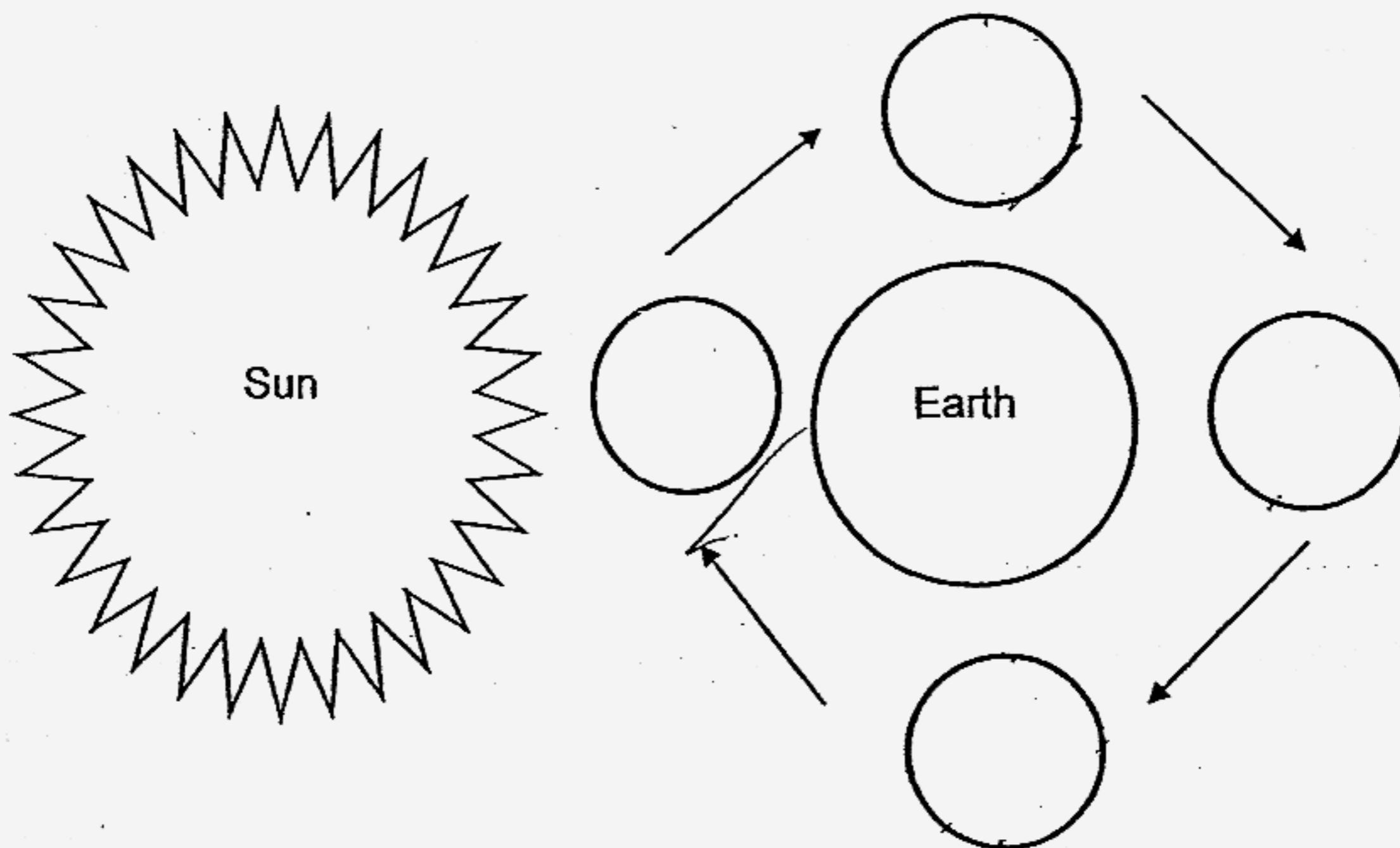
Difference:



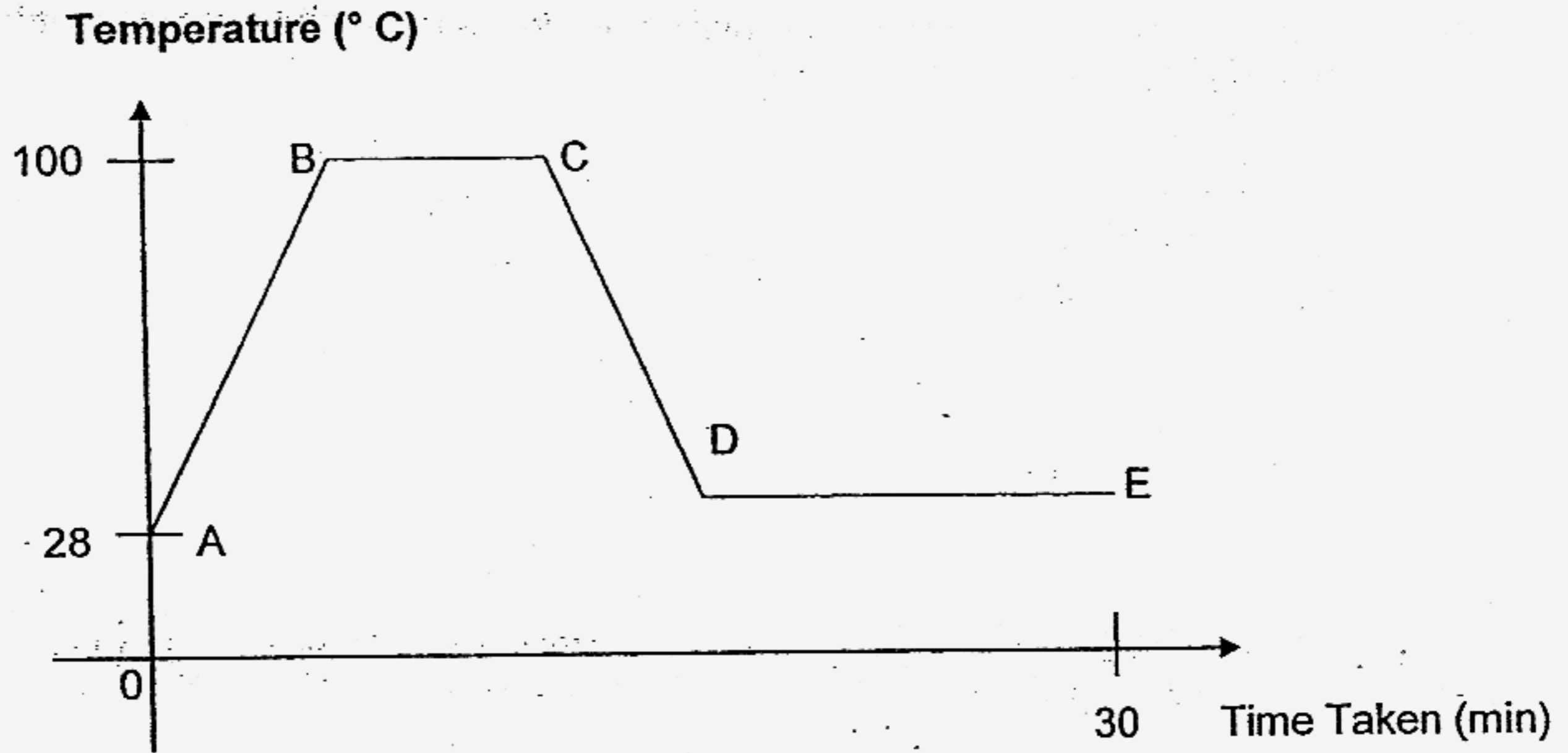
35. Study the flow chart below. Classify **ant**, **elephant**, **earthworm** and **goldfish** into the respective boxes. (2 marks)



36. Shade the phases of the moon which you will see at each stage. (2 marks)



37(a) Ali carried out an experiment using a beaker of water and plotted a graph to show his results.

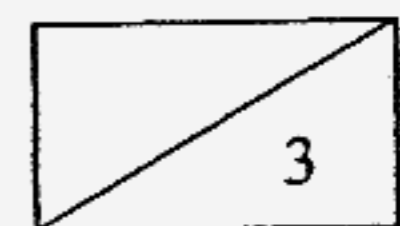


What does the part **AB** on the graph tell us about what Ali was doing to the beaker of water? (1 mark)

(b) List down two conclusions which you can conclude about **BC**. (2 marks)

(i) _____

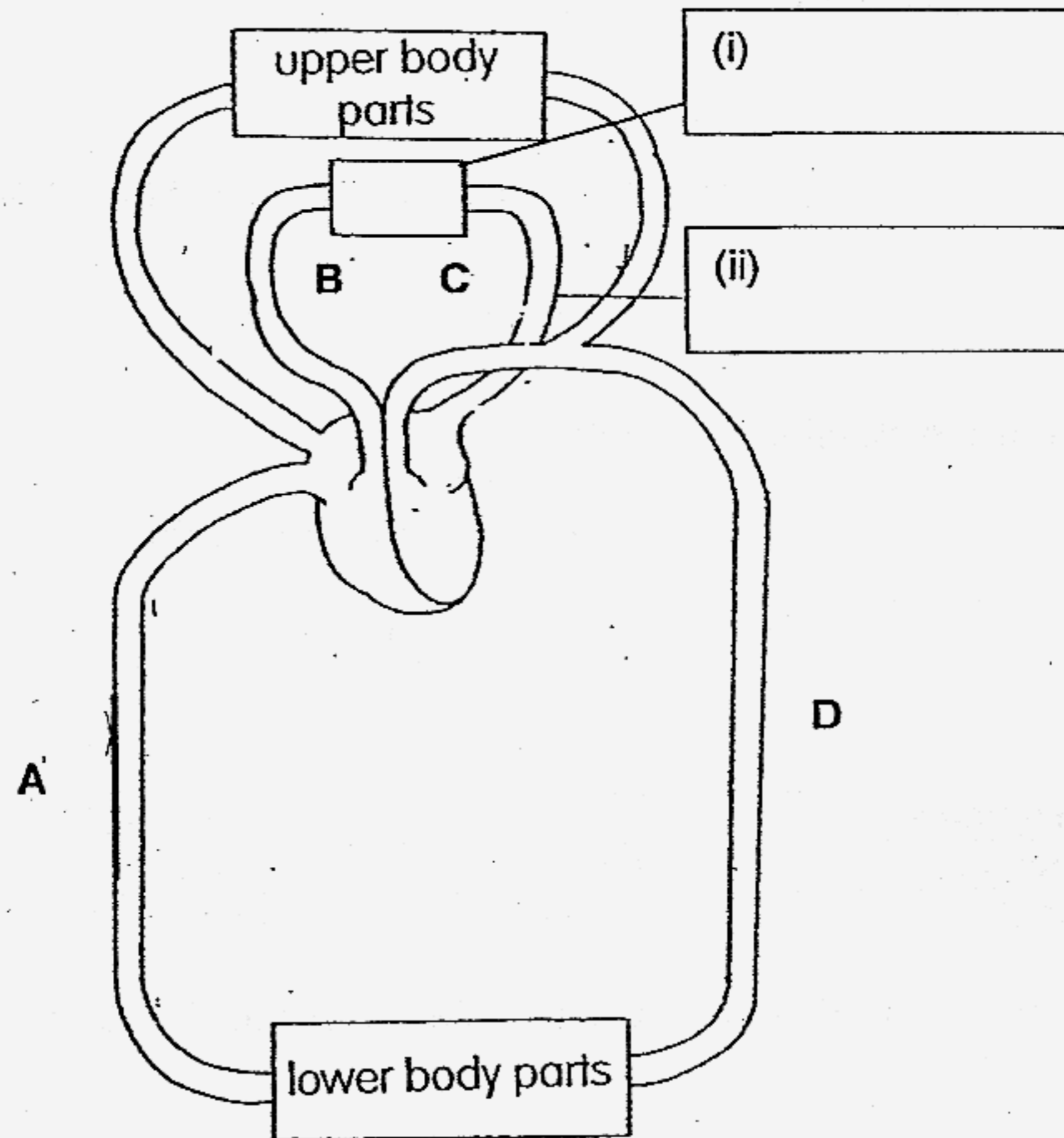
(ii) _____



38. The diagram below shows how our heart is connected by blood vessels to the rest of the organs in our body.

Label part (i) and (ii) (1 mark)

Draw arrows at A, B, C and D to show how blood circulates in our body. (2 marks)



39. Study the table below which shows the traits of Mr and Mrs Samy and their three children.

	Dimples	Curly hair	Able to roll tongue
Mr. Samy	√	√	√
Mrs Samy	x	√	x
Danny	√	√	√
Ramil	√	√	√
Tim	x	√	√

- (a) Which characteristic feature(s) has/have the three children inherited from both parents? (1 mark)

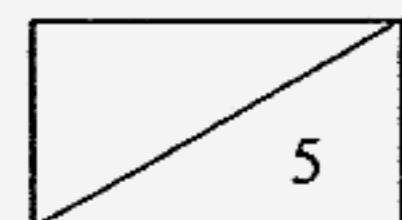
- (b) How do Mr and Mrs Samy pass their traits to their children? (1 mark)

40. Study the classification table below.

Method of Reproduction

(i)	(ii)	(iii)	(iv)
Bean sprouts	Onion	Bryophyllum	Banana
Rambutan	Ginger	Begonia	Pineapple
Apple	Potato	African violet	Heliconia

- (a) Write a suitable heading in the above classification table for each of the group. (2 marks)
- (b) Give another example of a plant which reproduces in the same way as group (ii). (1 mark)



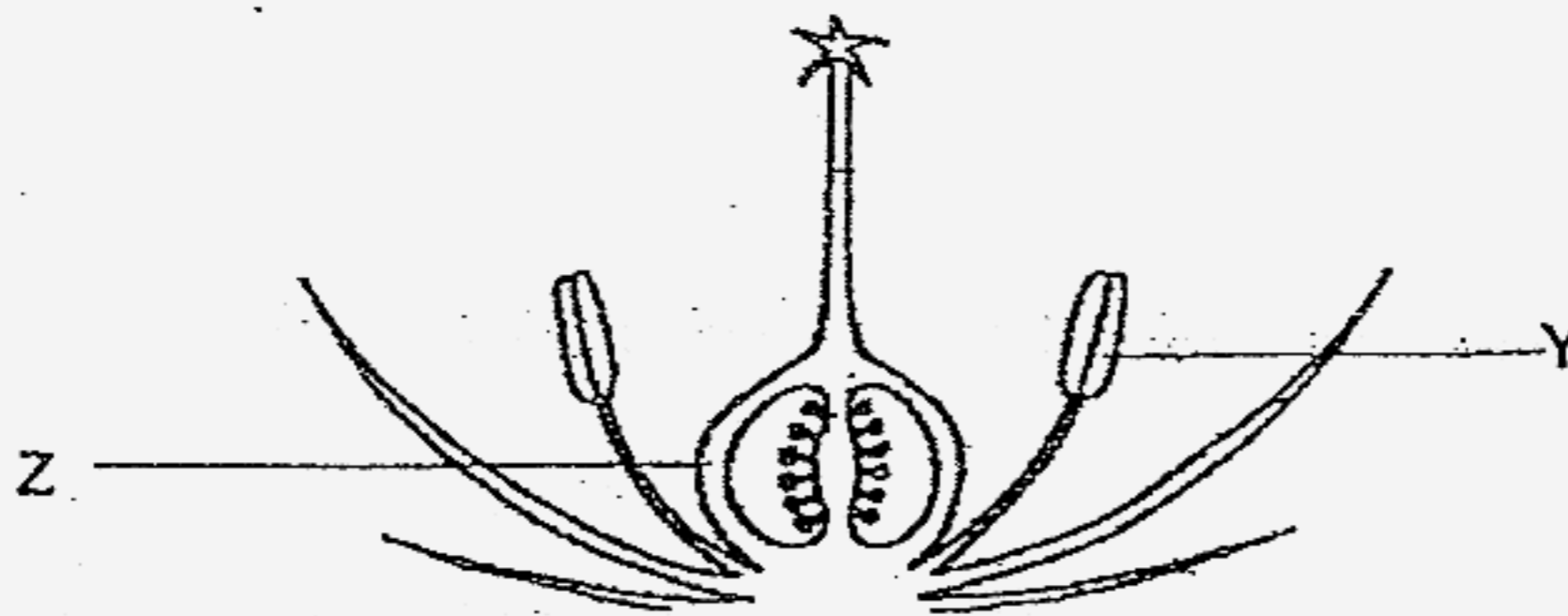
41. Mrs Tan left some potatoes in the kitchen cabinet, away from the sunlight, for 4 weeks. The picture shows what some of the potatoes looked like when they were taken out from the cabinet.



- (a) From which part of the potato plant does Y get its food from? (1 mark)

- (b) What factors are necessary for Y to appear? (1 mark)

42. The diagram below shows a flower.

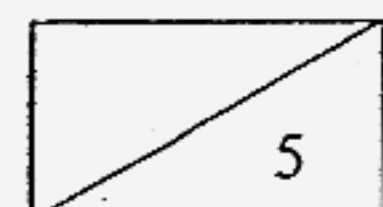


- (a) Which organs in the human reproductive system perform similar functions as Y and Z in the flower? (2 marks)

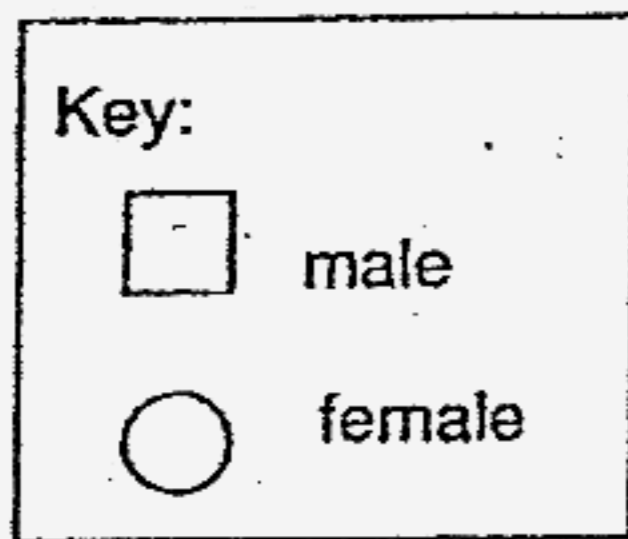
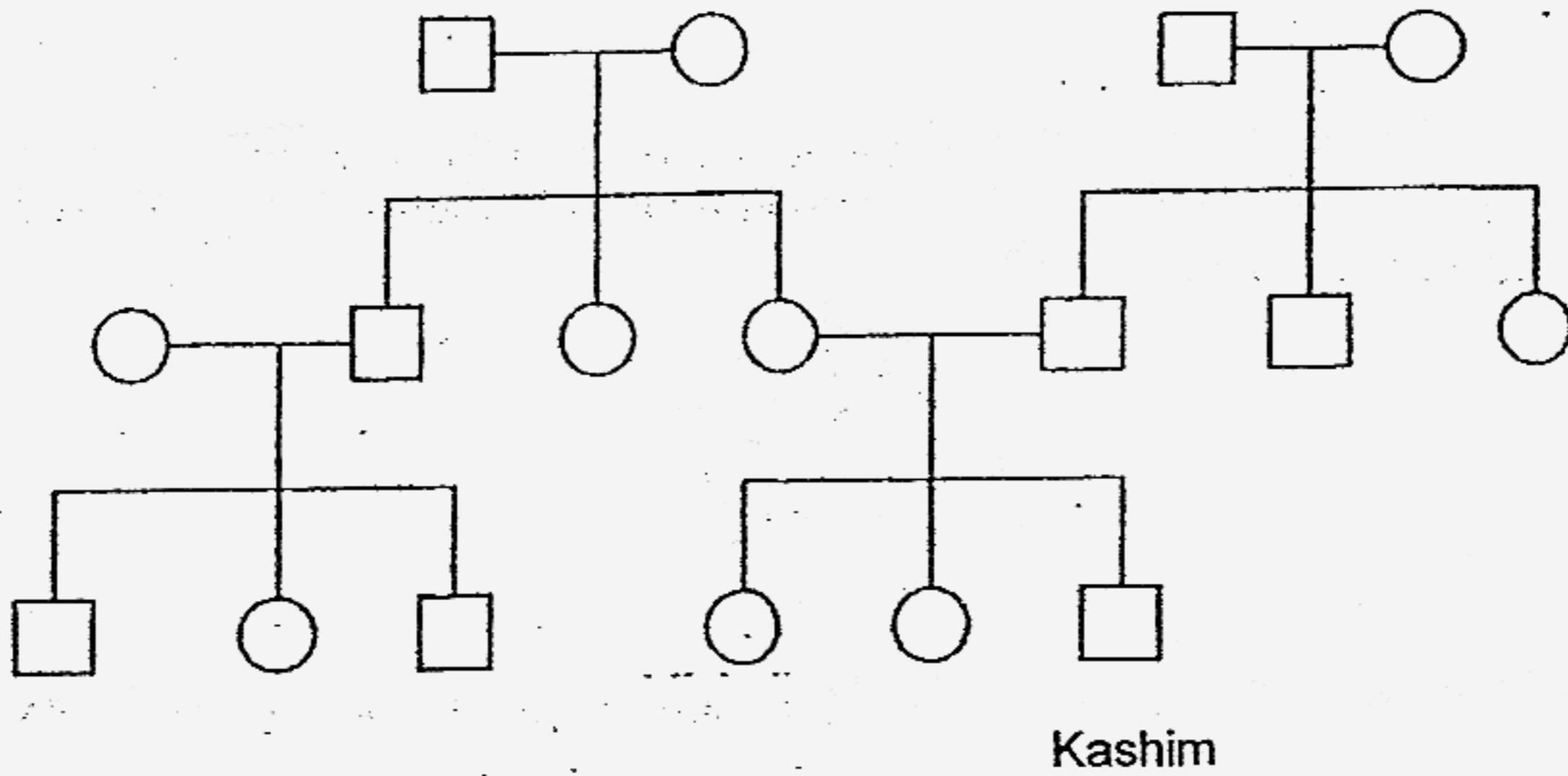
Y: _____

Z: _____

- (b) Which two processes must occur in order for a formation of ^afruit? (1 mark)



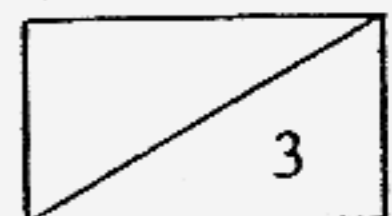
43. Study Kashim's family tree shown below.



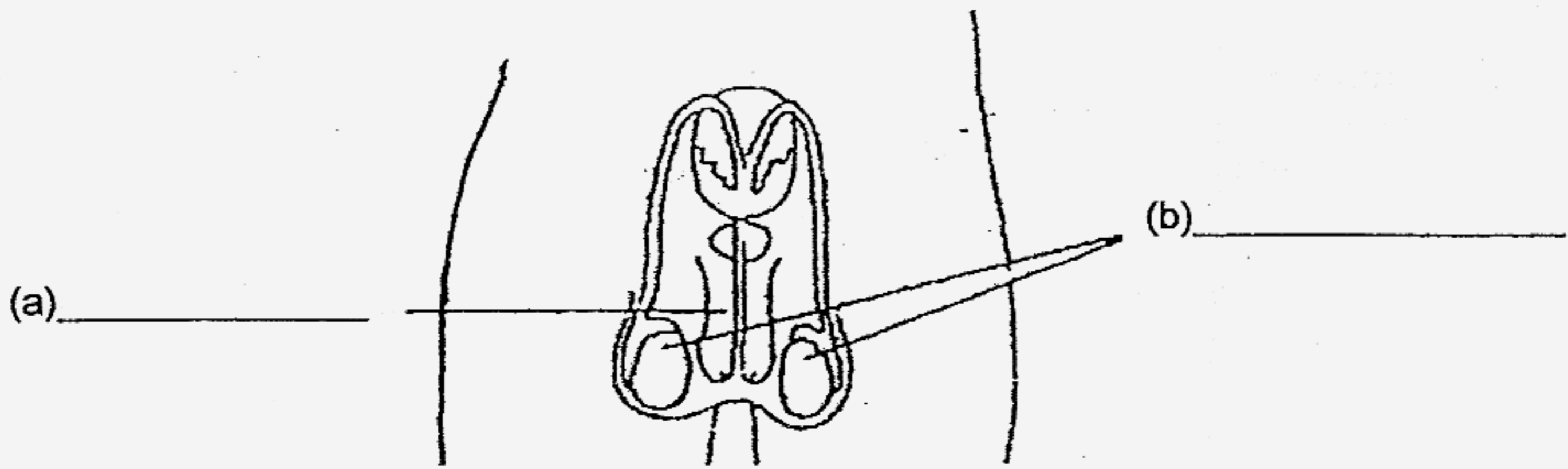
(a) How many aunts does Kashim have on paternal side of the family tree? (1 mark)

(b)(c) How many cousins does Kashim have? (1 mark)

(c)(d) How many siblings does Kashim's mother have? (1 mark)



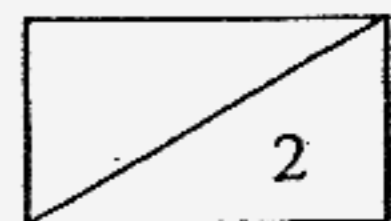
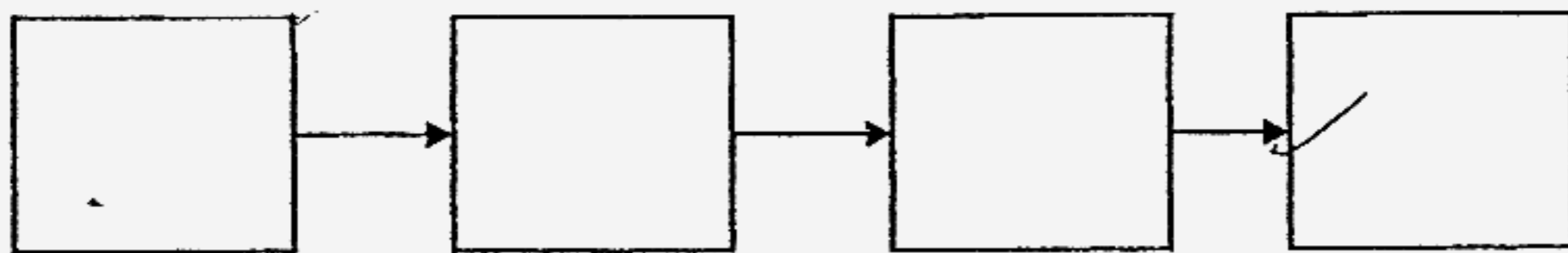
44. The figure below shows the male reproductive system. Label (a) and (b). (1 mark)



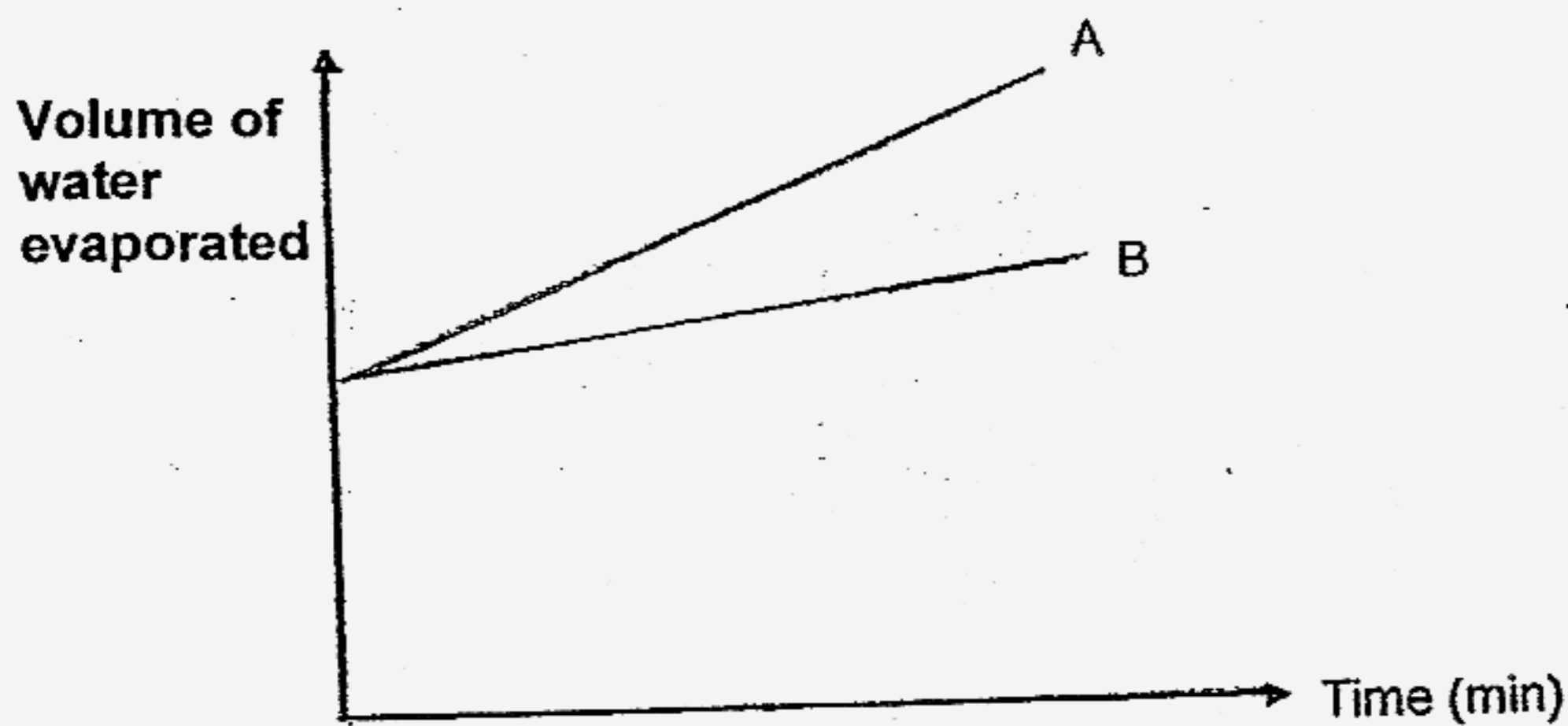
(c) The statements below describe the different stages in the process of fertilisation.

- A Only one sperm enter the egg successfully.
- B The fertilised egg divides.
- C Many sperms try to penetrate the egg.
- D The sperm's nucleus fused with the nucleus of the egg.

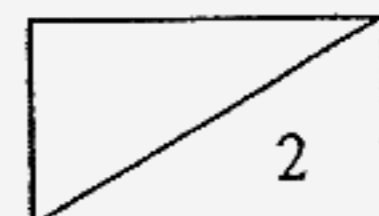
Arrange the above stages of fertilisation in the correct order by writing down the alphabets in the boxes provided below. (1 mark)



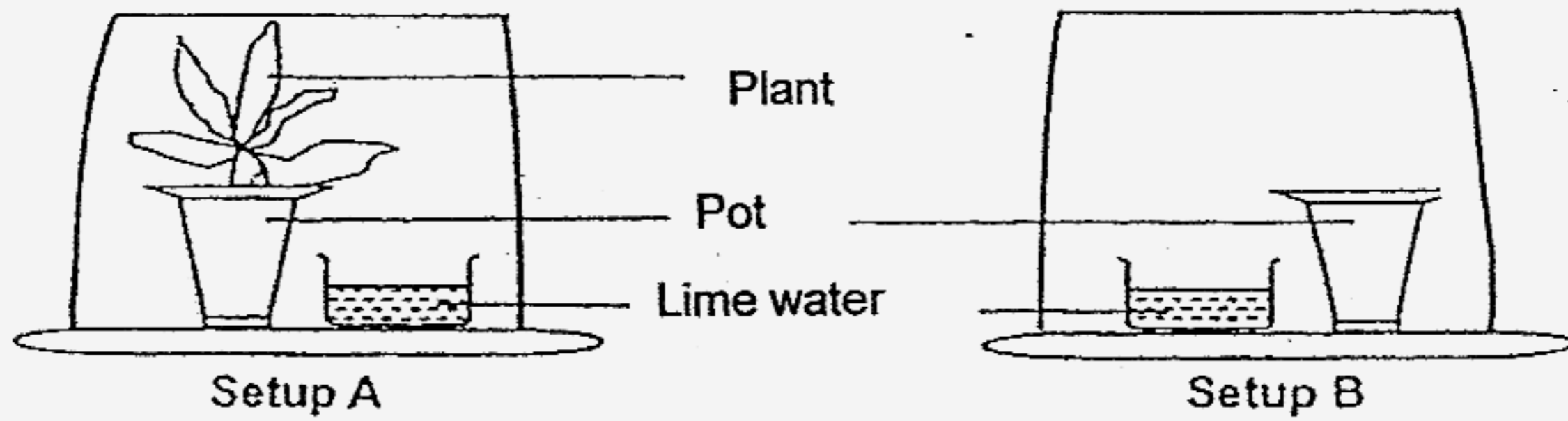
45. The graph below shows the amount of water that has evaporated from 2 identical pieces of cloth, A and B which were placed at 2 different places.



- (a) Which piece of cloth was placed where there was sun and wind? (1 mark)
-
- (b) In another situation, if both pieces of cloth were placed at the same place and the same result was observed. Explain why this was possible. (1 mark)



46 Edwin set up an experiment as shown below. Both setups were left in a dark room for 12 hours.

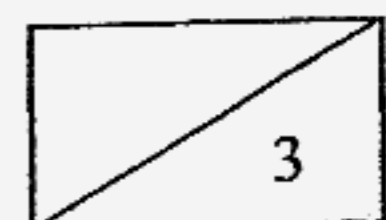


(a) What was the purpose of the limewater? (1 mark)

(b) What would happen to the limewater in Setup A and Setup B after 12 hours? (1 mark)

(c) Why was Setup B necessary for this experiment? (1 mark)

End-of-Paper



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

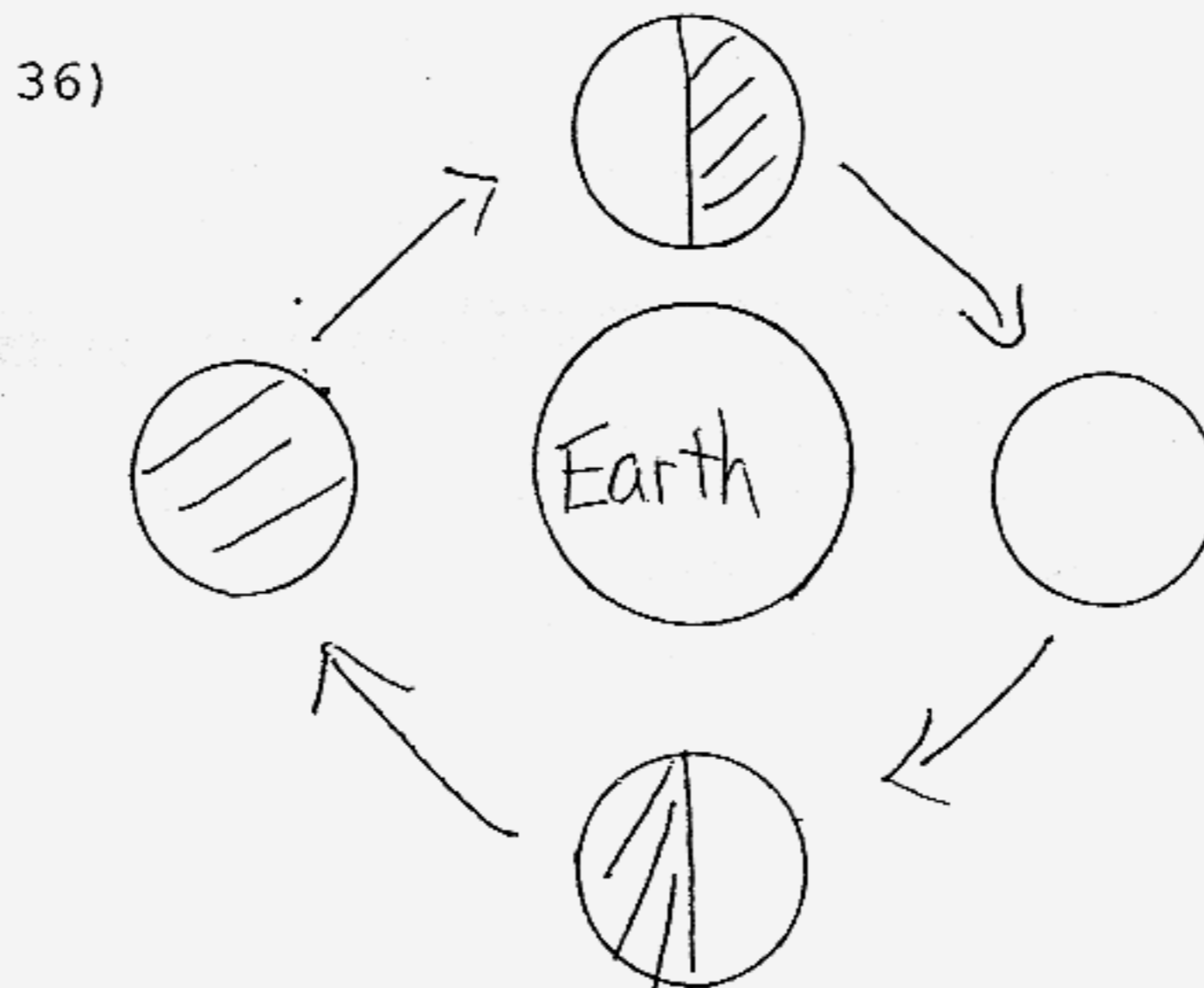
31) a) Amount of time both plant exposed to sunlight
 position of the both plants, temperature of
 the surrounding amount for both plants.
 b) The more substance X is added the better
 the plant can photosynthesis.
 The more substance Y is added the slower the
 plant can photosynthesis.

32) a) W: Sun
 X: Man-made satellite
 Y: Earth
 Z: Moon
 b) The use of x is to let us watch television
 programmer from another country.

33) a) i) Carbon dioxide ii) Oxygen
 b) The process are respiration

34) Similarity: Both circulatory system are used to
 transport water, mineral and nutrients food.
 Difference: Plants have xylem and phloem tubes
 to carry and distributes food through the
 plant respectively, while human circulatory
 system has capillaries and arteries to carry
 blood round human body.

35) a) elephant b) earthworm c) Gold fish
 d) ant



- 37) a) Ali is boiling the beaker of water.
b) i) The water remain at 100c
ii) Ali is still boiling the beaker of water.

38)

- 39) a) The characteristic feature is curly hair.
b) Mr and Mrs Samy passed their traits through genes to their children.

- 40) a) i) Reproduce by seeds
ii) Reproduce by underground stems
iii) Reproduce by leaves
iv) Reproduce by suckers
b) The example is yam.

- 41) a) It gets its food from the underground stem of the potato plant.
b) The factors are warmth water and oxygen.

- 42) a) Y: Testis Z: Ovary
b) The two processes are pollination and fertilization.

- 43) a) Kashim have 1 aunt on paternal side.
b) Kashim have 3 cousins.
c) Kashim mother have 2 siblings.

- 44) a) penis b) testes c) C → A → D → B

- 45) a) Cloth A was placed where there was sun and wind.
b) Cloth B was folded while cloth A was not and cloth's A exposed surface area was larger.

- 46) a) It is to check if the plant produce carbon dioxide.
b) The limewater in setup A will turn chalk, while setup B will remain the same.
c) Edwin wanted to check if the limewater will turn chalky with or without the plant.

---end---

38)

