

**Primary Five  
Science  
Semestral Assessment Two**

**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) and write it in the box provided. (60 marks)**

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1. Lisa put her cake mixture in a hot oven. An hour later, she had a vanilla sponge cake. What changes did the cake mixture undergo during baking?

- A size
- B taste
- C colour
- D position
- E substance

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

2. Which of the following is/are part(s) of the process of the water cycle?

- A The evaporation of water from the lakes
- B The loss of water by plants
- C The melting of snow

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

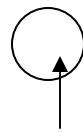
3. A glass of water was left in a freezer for two hours. The water became frozen. How did this happen?

- (1) The glass lost heat to the water.
- (2) The water gained heat from the freezer.
- (3) The water lost heat to the air in the freezer.
- (4) The glass gained heat from the air in the freezer.

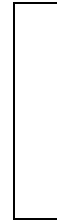
4. The weight of an object is the \_\_\_\_\_ the object.

- (1) size of
- (2) volume of
- (3) pull of gravity on
- (4) push of gravity on

5. A ball of plasticine is thrown hard against a brick wall.



Ball of plasticine



← Wall

The ball will undergo a change in \_\_\_\_\_.

- A size
- B shape
- C weight

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

6. Which of the following statements is true?

- (1) All seeds are edible.
- (2) Every plant produces seeds.
- (3) Every seed contains a baby plant.
- (4) All fruits have a large number of seeds.

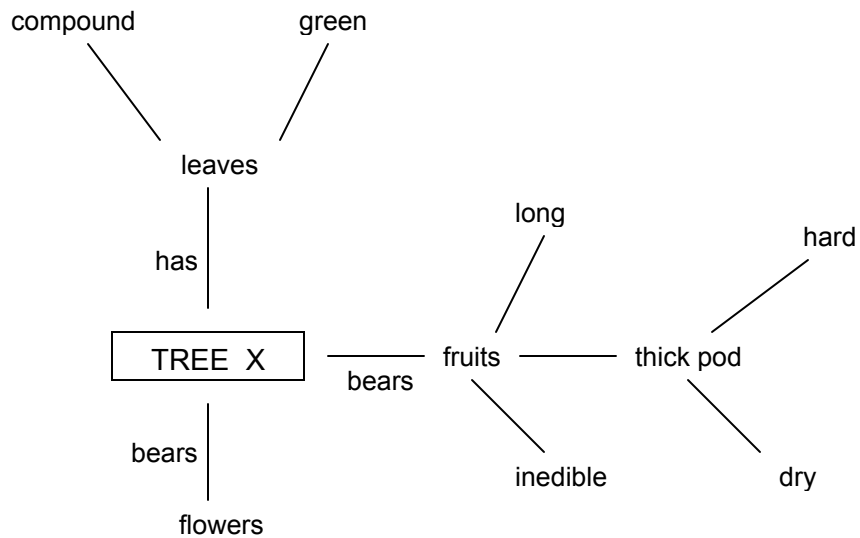
7. Which of the following statements is true about the life cycle of a cockroach?

- (1) The female cockroach takes care of its young
- (2) The egg of cockroach hatches into larva
- (3) The female cockroach lays one egg at a time
- (4) The nymph of cockroach moults to grow bigger

8. Which one of the following organisms do not live in the same habitat as the others?

- (1) starfish
- (2) wriggler
- (3) great diving beetle
- (4) dragonfly nymph

9. Study the concept map below.



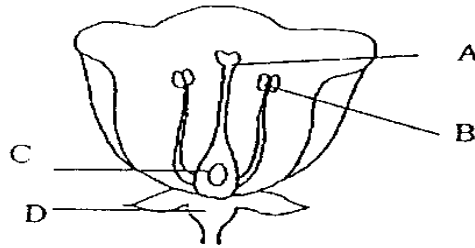
From the information given, the seeds of Tree X are most likely to be dispersed by \_\_\_\_\_.

- (1) wind
- (2) water
- (3) animals
- (4) explosive action

10. Which one of the following animals reproduces differently from the others?

- (1) mouse
- (2) whale
- (3) hawk
- (4) walrus

11. The diagram shows the cross section of a flower.



Which letters show where pollen grains and ovules are produced?

	pollen grains	ovules
(1)	B	C
(2)	B	D
(3)	A	C
(4)	A	D

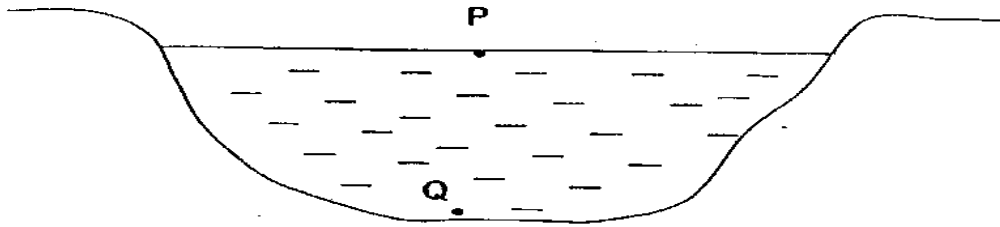
12. Which of the following plants does not reproduce from seeds?

- (1) fern
- (2) durian
- (3) balsam
- (4) coconut

13. While we are chewing food in our mouth, the tongue is used to \_\_\_\_\_.

- (1) digest the food
- (2) mix the food to make it soft
- (3) mix the food and form it into a ball
- (4) cover the windpipe so that the foot will not enter the windpipe

14.



The picture shows the cross-section of a pond. P and Q are plants found at different parts of the pond. Which one of the following pairs is likely to be P and Q?

	P	Q
(1)	Duckweed	Water hyacinth
(2)	Tape grass	Water lily
(3)	Lotus	Cabomba
(4)	Water moss fern	Hydrilla

15. Jinhan was watching a movie about chimpanzees. The chimpanzees were screeching, running up and down the trees and eating bananas. While watching the film, Jinhan used his sense of \_\_\_\_\_.

- A hearing
- B sight
- C taste
- D touch

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

16. Which of the following organs does the rib cage protect?

- A heart
- B lungs
- C stomach

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

17. Below are two groups of fruits. Study them carefully.

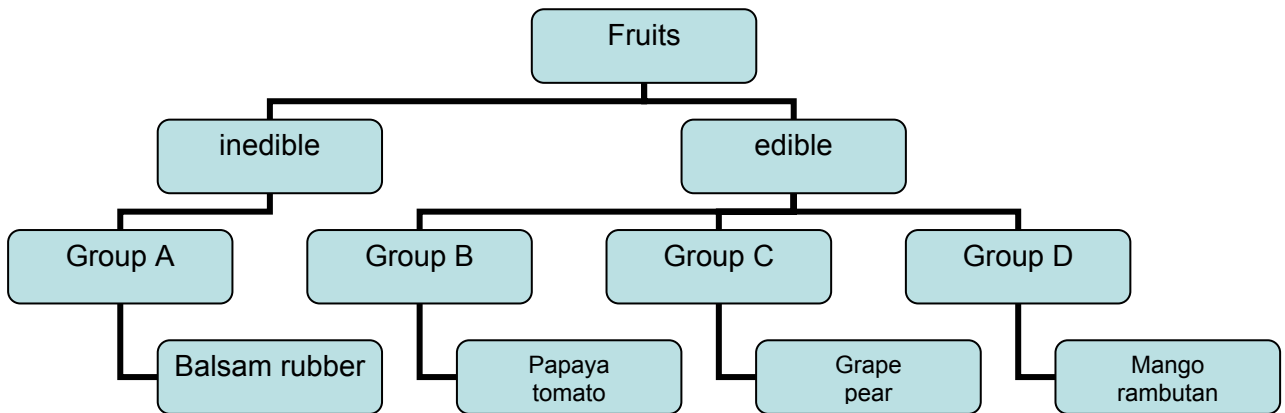
Group A
Durian
Mimosa
Mango

Group B
Angsana
Shorea
Lallang

The fruits are grouped according to \_\_\_\_\_.

- (1) their size
- (2) their texture
- (3) the number of seeds they have
- (4) the way the seeds are scattered

18. Below is a classification table. Study it and answer the question.



Dragon fruit should be classified under Group \_\_\_\_\_.

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

19. The leaves of a mimosa plant respond to \_\_\_\_\_.

- A light
- B heat
- C touch

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

20. The papaya plant in Uncle Bill's garden grows healthily and bears flowers often. However it has not borne fruits even once. The most likely reason is that \_\_\_\_\_.

- (1) the plant bears male flowers only
- (2) the flowers is unable to attract insects to pollinate them
- (3) the flowers always wither before they can develop into fruits
- (4) the plant is grown in a shady place and does not receive enough sunlight

21. Four objects are classified into two groups as shown below.

Group A	Group B
Paper plate	Plastic cup
Balloon	needle

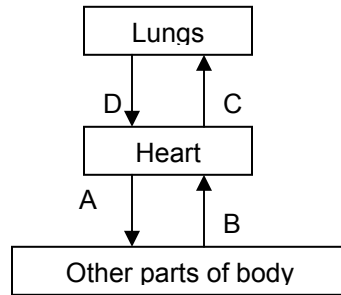
The objects are grouped according to \_\_\_\_\_.

- (1) how hard they are
- (2) whether they are waterproof
- (3) whether they can be recycled
- (4) what materials they are made of

22. The two joints in our skeleton which are most similar in the way they allow movement to take place are the \_\_\_\_\_ joints.

- (1) hip and elbow
- (2) elbow and knee
- (3) shoulder and knee
- (4) shoulder and elbow

23. The arrows A, B, C and D represent blood vessels carrying blood to and from the lungs, heart and other parts of our body.



Which two blood vessels carry blood with less oxygen?

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

24. Which one of the following is not from living things?

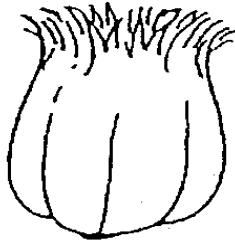
- (1) nail  
(2) silk cloth  
(3) book  
(4) cotton wool

25. In which of the following actions is friction NOT needed?

- (1) stopping a car  
(2) sharpening a pencil  
(3) walking on the road  
(4) melting an ice cube



26. This is a drawing of a fruit.



Betty wants to find out whether the fruit is scattered in the same way as the coconut. She plans to do the following.

- A place it in water
- B measure its weight
- C open it to see if it contains water
- D check to see if it has a fibrous husk

Some of the above actions are usefully for her purposes but some are not. Which are the useful ones?

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

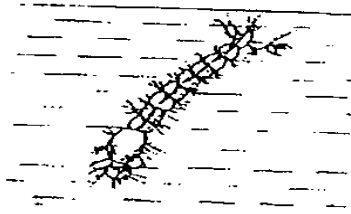
27. The table below shows the length of the shadow of a school flagpole.

Time	0800 h	1000 h	1130 h	1300 h
Length of shadow (m)	8.0	4.5	2.0	1.0

What is the most probable length of the shadow of the flagpole at 1600h?

- (1) 0 m
- (2) 0.5 m
- (3) 7.0 m
- (4) 14.0 m

28. The diagram below shows a stage in the life cycle of a certain insect.



At this stage, it is a/an \_\_\_\_\_.

- (1) adult
- (2) larva
- (3) pupae
- (4) nymph

29. Diagram A shows a beaker containing substance X. Diagram B shows how substance X has changed after a certain process.

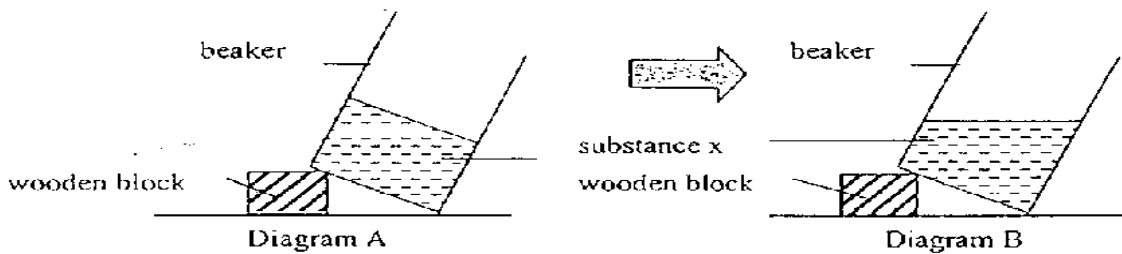


Diagram B shows that \_\_\_\_\_ has taken place.

- (1) freezing
- (2) melting
- (3) condensation
- (4) evaporation

30. Danny did a study on two animals, A and B. He drew a checklist and placed a tick ( ✓ ) in the box when he made the observation. At the end of his study, the completed checklist is as follows:

Observations	Animal A	Animal B
It lays eggs	✓	✓
It has 3 stages in its life cycle	✓	✓
It has 6 legs		✓
It has wings		✓

Which one of the following pairs could represent Animals A and B?

Animal A

Animal B

(1) rat

mosquito

(2) centipede

ant

(3) frog

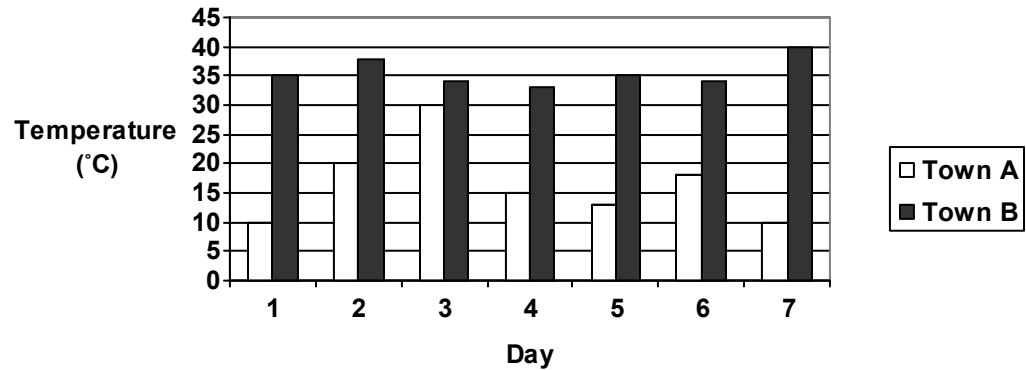
cockroach

(4) lizard

mealworm

For questions 31 to 46, write your answers in the space provided. The number of marks available is shown in the brackets ( ) at the end of each question or part-question. (40 marks)

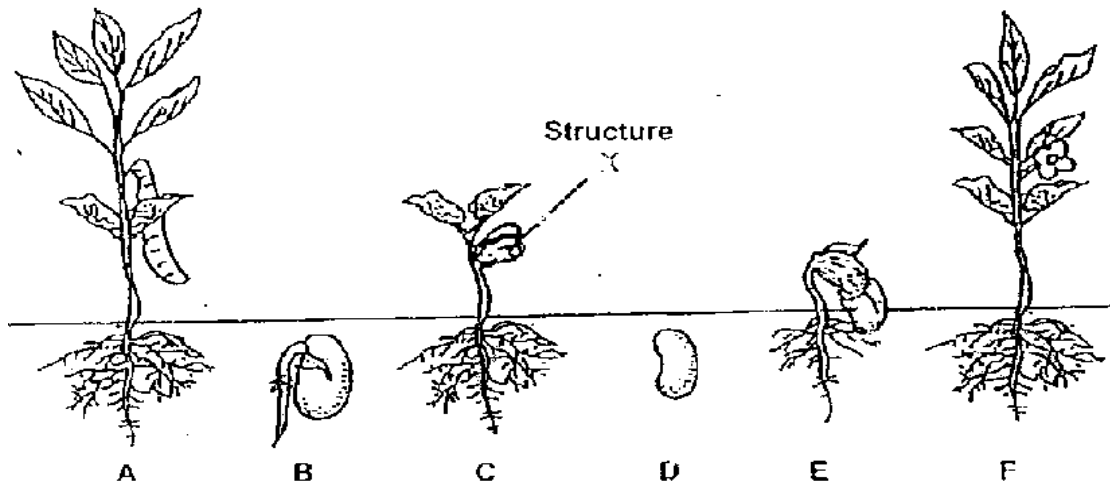
31. The graph below shows the temperature of two towns, A and B, over a period of 1 week.



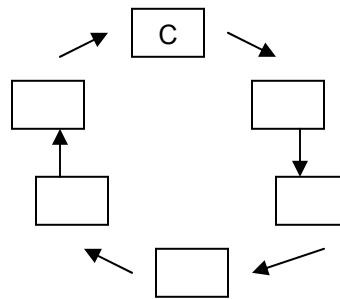
Study the graph carefully and use the information to decide if the following statements is TRUE, NOT TRUE or NOT POSSIBLE TO TELL. Put a tick (✓) in the correct box.

	STATEMENTS	TRUE	NOT TRUE	NOT POSSIBLE TO TELL
a)	It rained on Day 1 in Town B.			
b)	Town A has a higher average daily temperature than Town B.			
c)	Town A and Town B are located in two different countries.			
d)	The difference between the highest and lowest temperature recorded during the week in Town A is 20°C.			

32. The diagrams below show the stages of growth of a bean plant.



a) Arrange these in sequence by writing the corresponding letters in the boxes below. One has been filled in for you. [1]



Life Cycle Of A Bean Plant

(b) Identify the structure X in diagram C. [1]

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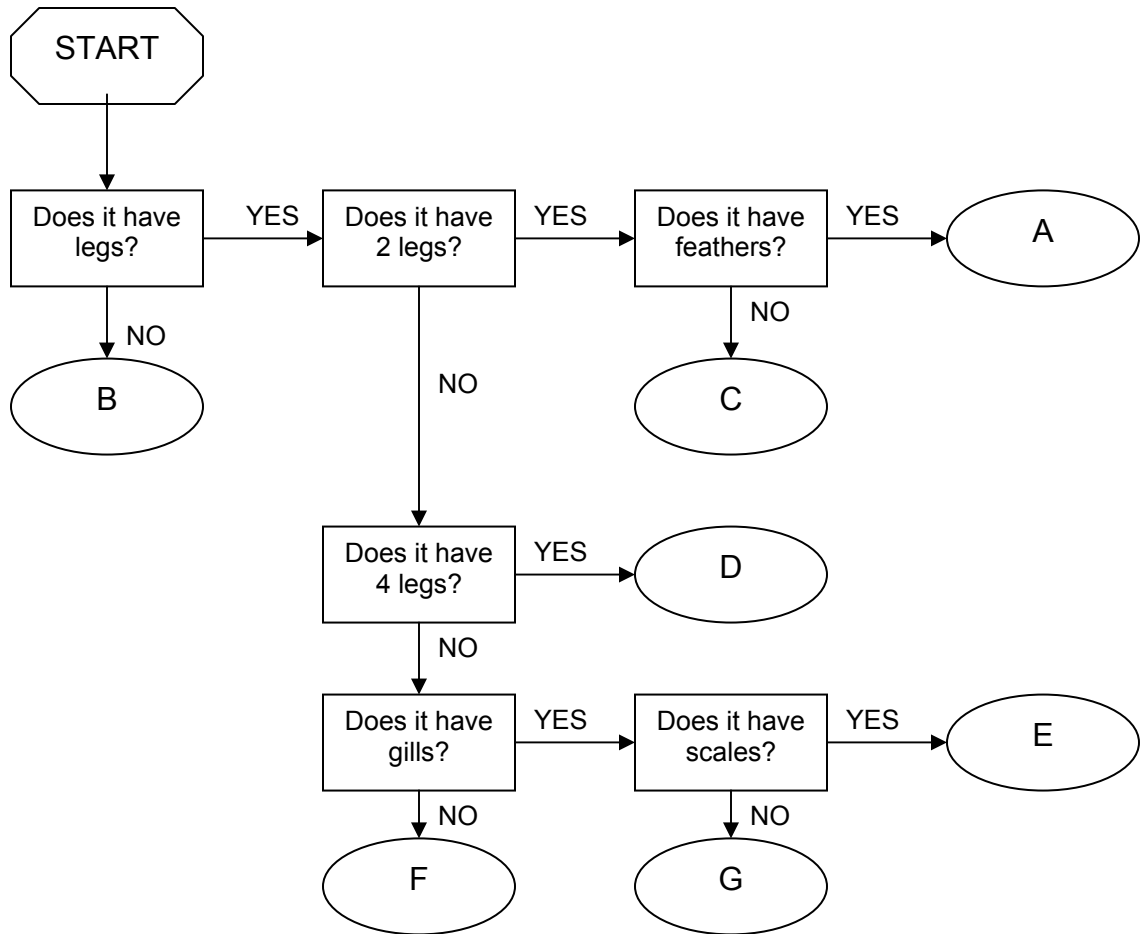
(c) What happens to structure X as the plant continues to grow? [1]

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Give a reason for your answer. [1]

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33. Study the flow-chart below carefully.



Which of the letters (A-G) represents the following animals? Write your answers in the appropriate boxes in the table below. [2]

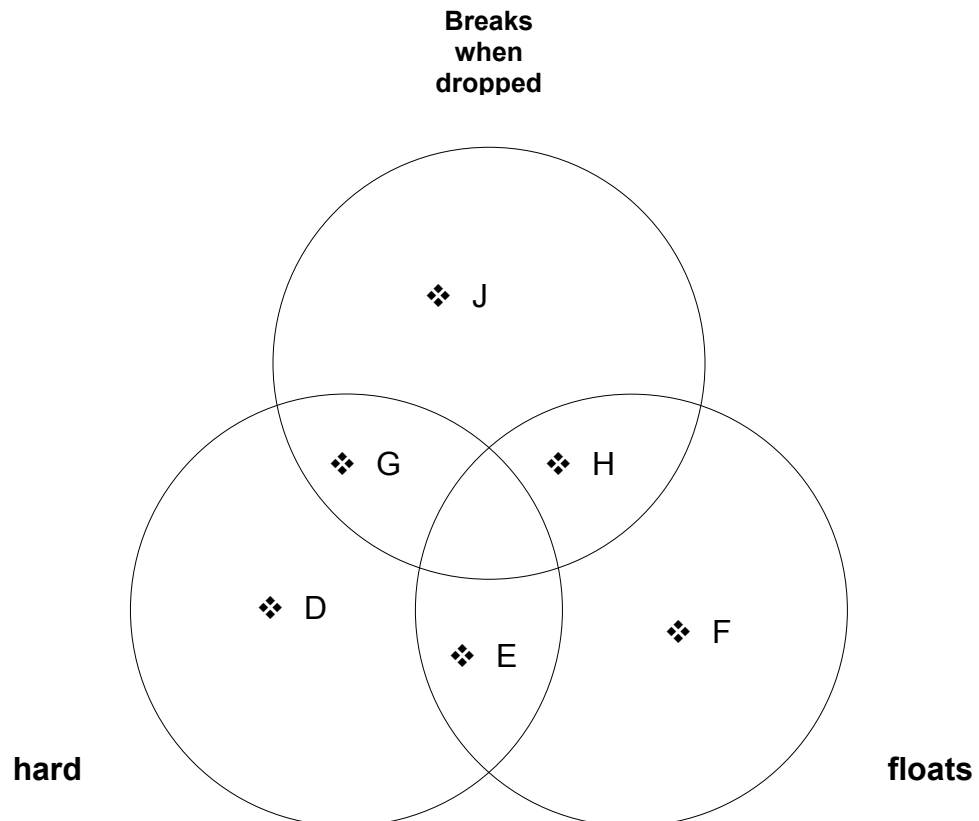
Animal	mosquito	penguin	crab	earthworm
Letter				

34. In the diagram below, the lamp represents the Sun and the ball represents the Earth.



- (a) On the diagram above, shaded the light half of the ball. [1]
- (b) What does this light half represent on Earth? [1]
- 
- (c) How long will a person living at X have to wait before he is able to see the sun directly? [1]
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35. Study the Venn diagram below.



(a) Which of the objects, (D to J), is most likely to be a Styrofoam bowl? [1]

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(b) Describe object H. [1]

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36. Look at the list of animals below:

bat, dog, python, sparrow, toad, whale

(a) Classify the above animals into 2 groups, A and B, such that there are 3 animals in each group. [1]

Group A	Group B

(b) Explain how the animals were classified in (a). [2]

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37. Professor Lee wants to do a scientific research on a certain type of tree in a forest reserve in Thailand. To help him locate the tree, a forest ranger provided him the following descriptions of the tree. Choose 4 descriptions, which would be most useful to Professor Lee in finding the tree. Put a tick ( ✓ ) in the box at the end of each selected description. [2]

- a. The seeds of the fruit are used as a poison to kill fishes.
- b. The flowers are red and grow singly.
- c. The leaves are heart-shaped and have toothed edges.
- d. The roots can be used to make medicine.
- e. The bark is dark brown and smooth.
- f. The tree has an umbrella-shaped crown.
- g. The sap of fruit is poisonous.


38. The plants in the table below are grouped according to how they are usually reproduced.

A	B	C
African Violet Begonia	Ginger Potato	Lady's Finger Chilli

(a) How are the plants in Group B similar in the way they reproduce?[1]

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(b) In which group would you place 'Bryophyllum'? [1]

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39. (a) At which stage of its life cycle is the butterfly considered a pest? [1]

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(b) Give a reason for your answer in (a). [1]

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40. Fill in the blanks with the correct word.

A woodlouse lives in a leaf litter while a dragonfly nymph lives in a pond. The place where an animal makes their home is called its \_\_\_\_\_. All the woodlice in a leaf litter form a \_\_\_\_\_ but all the plants and animals in a pond form a \_\_\_\_\_. In a pond, the animals and plants are often interdependent on one another.

41. Different amounts of water are poured into 5 similar dishes A to E. The dishes are then placed in different places for different periods of time as shown in the table below.

Dish	A	B	C	D	E
Where is it kept?	In the sun	An enclosed room	In the sun	In the sun	An enclosed room
Period of time (days)	5	6	5	6	7
Amount of water	15cm <sup>3</sup>	10cm <sup>3</sup>	5cm <sup>3</sup>	10cm <sup>3</sup>	10cm <sup>3</sup>

(a) Which dishes of water can be used as a FAIR test to compare the effect of temperature on evaporation? [1]

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(b) If only dishes A and C are used for the experiment, what is the aim of the experiment? [1]

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42. The diagram below shows an animal that lives in the pond.



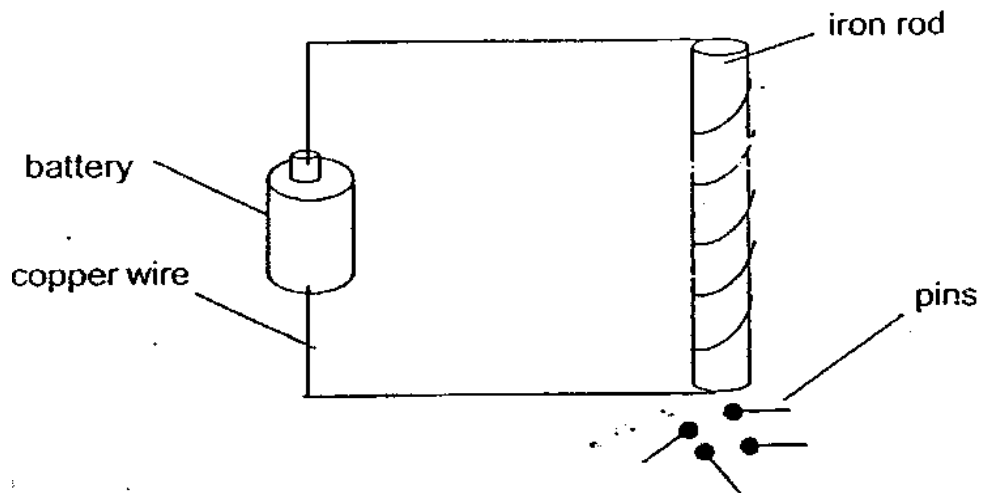
(a) Explain why this animal is found mainly just below the surface of the pond. [1]

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(b) Name another animal that can be found mainly at this part of the pond. [1]

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43. Tom set up the experiment below to find out if the number of turns of a copper wire round an iron rod will affect the strength of the magnetized iron when the electric circuit is closed.



(a) What variable did Tom change in the experiment? [1]

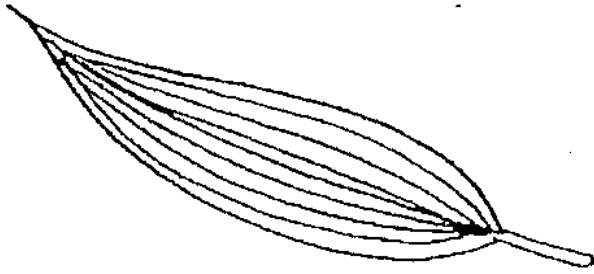
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(b) What must Tom measure to find out if a rod with more turns of wire is stronger than a rod with less turns of wire? [1]

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44. The diagram below shows 2 leaves X and Y.



Leaf X



Leaf Y

Write down 2 differences that you can observe between them. [2]

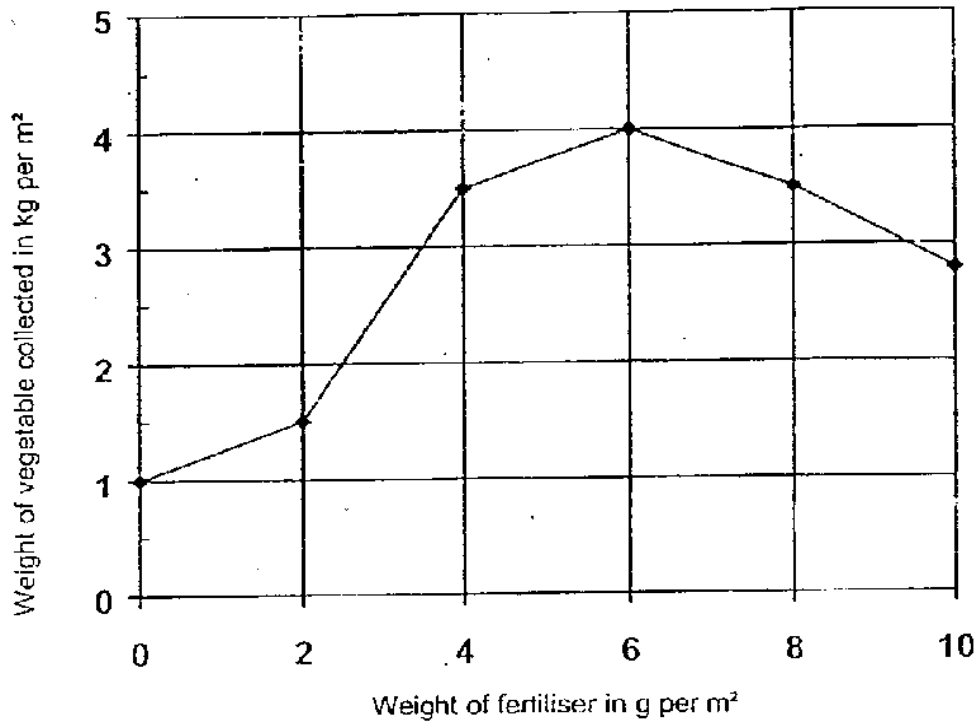
Difference 1: \_\_\_\_\_

\_\_\_\_\_

Difference 2: \_\_\_\_\_

\_\_\_\_\_

45. A farmer did an experiment to find out how a fertilizer affects the growth of a vegetable. He recorded the weight of vegetable collected and fertilizer added for every  $\text{m}^2$  of land. He plotted the results in the graph below.



- (a) What is the relationship between the weight of fertilizer used and the weight of vegetable collected? [2]

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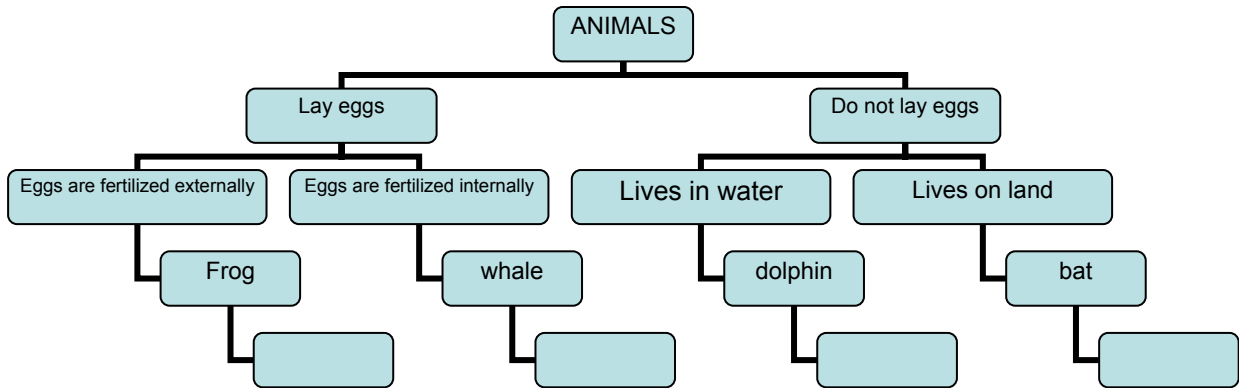
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- (b) How much fertilizer should the farmer use if he wants to get the greatest weight of the vegetable from one  $\text{m}^2$  of land? [1]

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46. Study the classification chart below.



(a) Which one of the animals is classified wrongly? [1]

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(b) Classify “elephant” by putting it in the correct box in the diagram above.

THE END