



RED SWASTIKA SCHOOL

SA1

RED SWASTIKA SCHOOL

2004 SEMESTRAL ASSESSMENT 1

SCIENCE

Name : _____ ()

Class : Primary 6/ ____

Date : 13 May 2004

BOOKLET A

30 Questions

60 Marks

Duration of Paper : 1 hour ⁴⁵30 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.

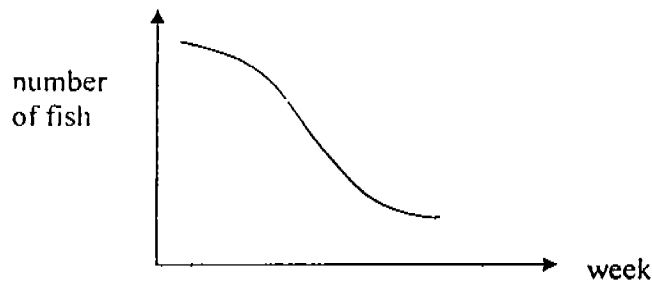
1. Populations of several kinds of organisms can be found in a habitat. Which one of the following is not a habitat?

- (1) A mangrove swamp
- (2) A leaf litter
- (3) A drain
- (4) An empty box

2. Which one of the following forms a population?

- (1) All the plants in a pond.
- (2) All the caterpillars, pupas and adult butterflies of the same species in a garden.
- (3) The five guppies and seven goldfish in a fish tank.
- (4) All the female lions and female tigers in a zoo.

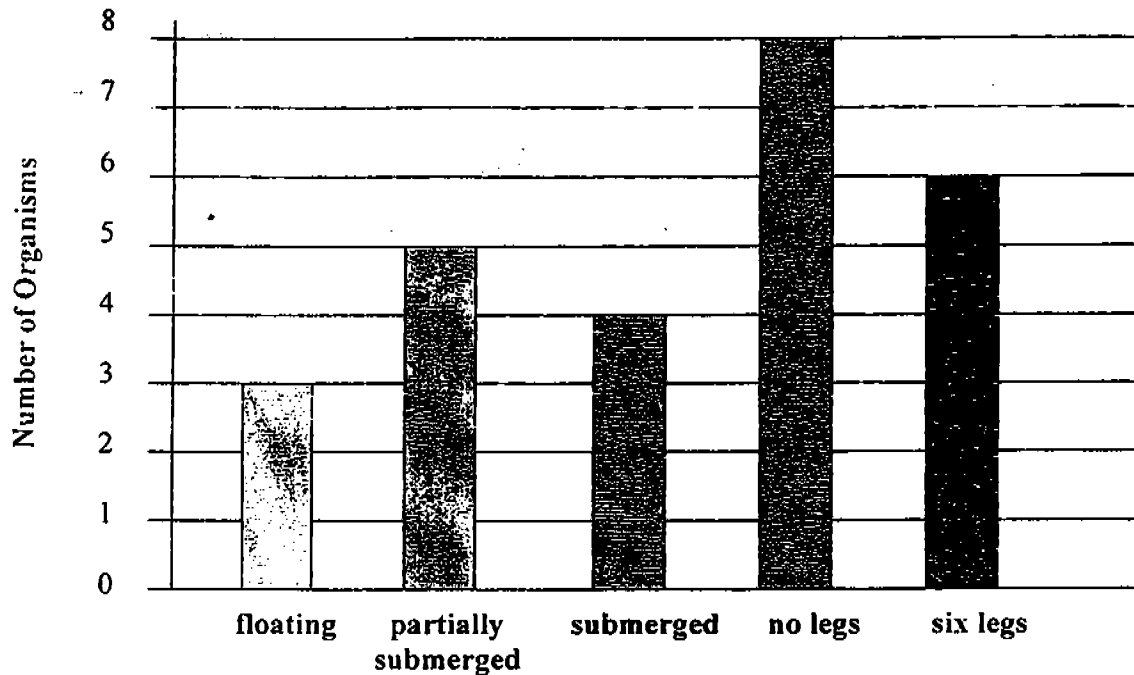
3. Study the graph below carefully. There is a change in the fish population in a pond.



Which of the following is not a possible cause for the change?

- ~~(1)~~ A significant decrease in the water level of the pond
- ~~(2)~~ A significant increase in the plants growing in the pond.
- ~~(3)~~ A significant decrease in the number of water beetles and dragonfly nymphs in the pond.
- ~~(4)~~ The presence of disease-causing organisms that kill the prey of fish.

4. Aminah counted the plants and animals found in her pond outside her home. The results are shown below.



Which of the following statements about the plants and animals in the pond is/are definitely correct?

- A - There are two pond communities.
 - B - There are 14 populations of animals
 - C - There are at least five populations of plants and animals.
- (1) A only
(2) C only
(3) A and B only
(4) A and C only
5. Which is the most appropriate instrument that can be used to collect data on the characteristics of an environment?
- (1) Thermometer
 - (2) Spring balance
 - (3) Compass
 - (4) Dataloggers

6. There has been a decrease in the population size of sea turtles around the world. What are the possible causes to the decrease?

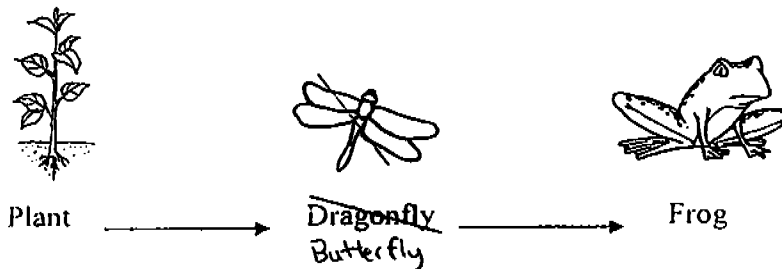
- A - People collecting turtle eggs.
- B - People killing turtles for food and to make souvenirs
- C - Turtles migrating from one place to another.
- D - Turtles died from choking or being entangled with rubbish and fishing nets.

- A and B only
- C and D only
- A, B and C only
- A, B and D only

7. Herbivores, carnivores and omnivores are all _____.

- (1) producers
- (2) consumers
- (3) decomposers
- (4) predators

8. Look at the following food chain.



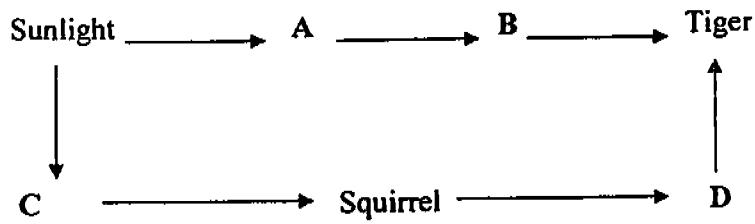
The frog is the _____.

- (1) prey
- (2) predator
- (3) killer
- (4) hunter

9. What will be affected when there is an increase or decrease in the number of predators or prey in a food chain?

- (1) The number of predators or prey.
- (2) The number of other organisms.
- (3) The populations of all producers.
- (4) The populations of all consumers.

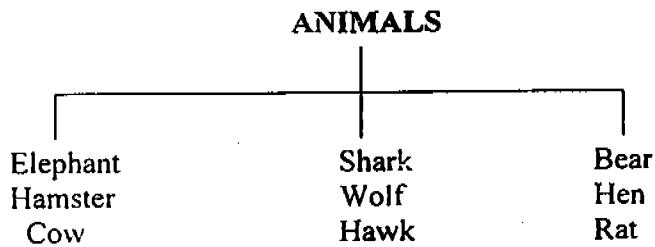
10. The food web below has some missing plants or animals.



Which one of the following groups would complete the food web correctly?

	A	B	C	D
(1)	Papaya	Sparrow	Sunflower	Rabbit
(2)	Grass	Goat	Hazelnut	Crocodile
(3)	Banana	Monkey	Mango	Lion
(4)	Carrot	Rabbit	Walnut	Fox

11. The diagram below shows three groups of animals.

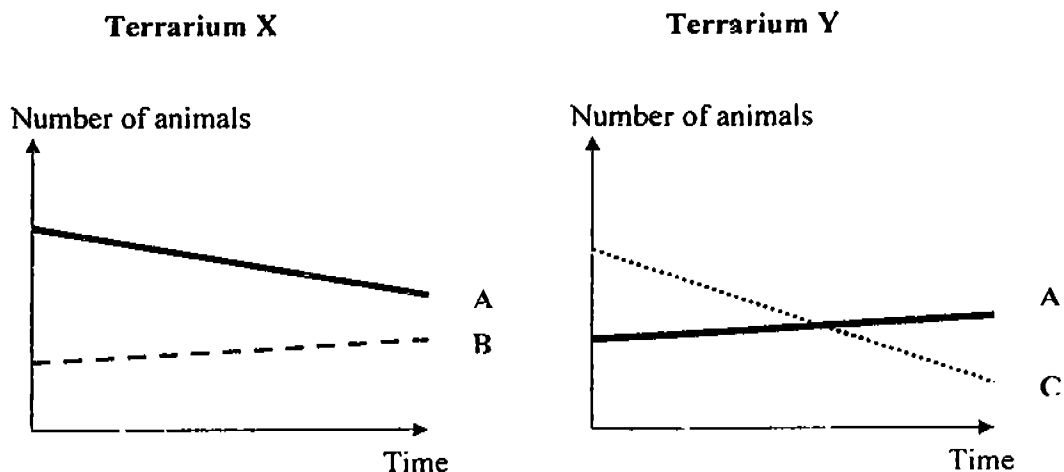


These animals are classified according to their _____.

- (1) nutrition
- (2) movement
- (3) body forms
- (4) breathing parts

12. Jia Rong bought three different types of animals A, B and C from an aquarium shop and put them in two terrariums X and Y. He put animals A and B in Terrarium X and animals A and C in Terrarium Y. He also put some plants, sands and rocks in both terrariums.

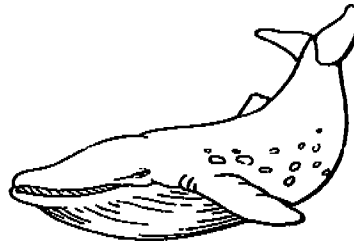
He counted the number of animals in the terrariums every week for a month. His results are shown in the graphs below. He did not see any dead animals in the terrariums.



From the graphs above, which one of the following shows correctly the food chain linking these three animals?

- (1) A → B → C
 - (2) B → A → C
 - (3) C → A → B
 - (4) C → B → A
13. Which one of the following animals does not have a streamlined body shape?
- (1) penguin
 - (2) shark
 - (3) monkey
 - (4) Eagle
14. What do animals which breathe oxygen in water usually have?
- ^
in dissolved
- (1) gills
 - (2) air tubes
 - (3) blowholes
 - (4) nostrils

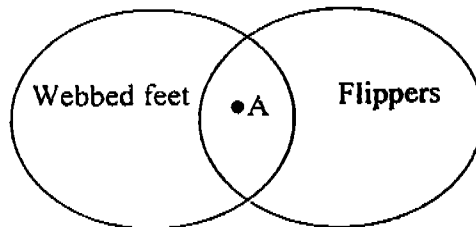
15. The picture below shows a whale.



Which one of the following is **not** an adaptation of whales?

- (1) They have blow holes to remove water.
- (2) They have special muscles to shut nostrils when diving.
- (3) Their muscles and blood are able to store lots of oxygen.
- (4) They have air bubbles on their body.

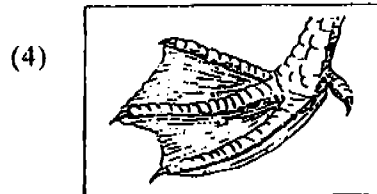
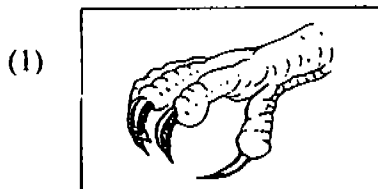
16. Look at the Venn diagram below.



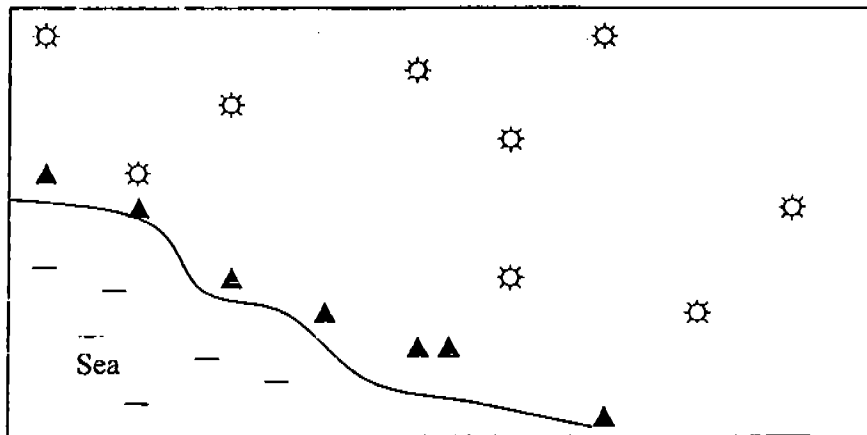
Which one of the following is an example of animal A?

- (1) Frog
- (2) Duck
- (3) Turtle
- (4) Penguin

17. Raju saw a bird ~~catching~~ a mouse with its feet and ~~flew~~ away. Which type of feet would the bird have? catch fly

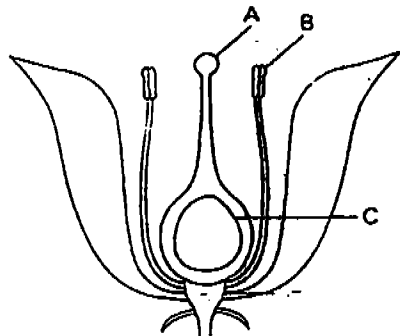


18. The diagram shows part of an island. (☼, ▲) represent two types of plants found growing on the island.



Which one of the following is not likely to be a characteristic of the fruit or seed of plant ☼ ?

- (1) The seed has hooks.
 - (2) The fruit is fibrous.
 - (3) The seed has wing-like structure.
 - (4) The fruit is fleshy and juicy with big seeds.
19. The diagram below shows the flower of a plant.



Which of the following has been labeled correctly?

	A	B	C
(1)	anther	stigma	ovary
(2)	ovary	anther	style
(3)	stigma	anther	ovary
(4)	style	stigma	anther

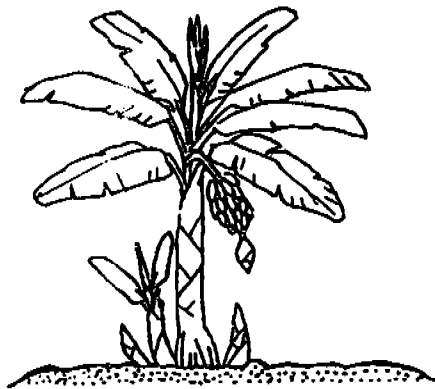
20. Which one of the following has been wrongly classified?

Dispersal of Fruits and Seeds			
By wind	By water	By animals	By splitting
(1) Angsana	Coconut	Mango	Rubber
(2) Love Grass	Pong pong	Rambutan	Saga
(3) Shorea	Lotus	Banana	African tulip
(4) Lalang	Mangrove	Mimosa	Cotton

21. How are ferns and mushrooms similar in the way they reproduce themselves?

- (1) They both reproduce from leaves.
- (2) They both reproduce from seeds.
- (3) They both reproduce from spores.
- (4) They both reproduce from underground stems.

22. The diagram below shows a banana plant.



Which of the following statements are correct?

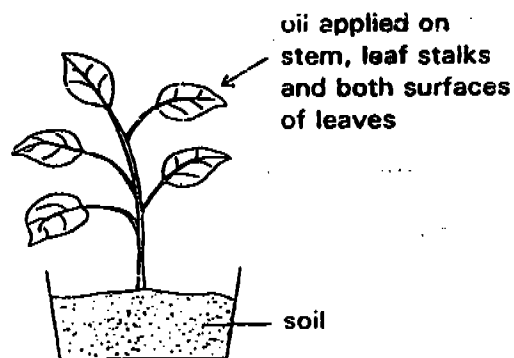
- A : They reproduce from suckers growing from the base of the parent plant.
- B : The younger plants would grow very close to the parent plant.
- C : The parent plant has to compete with the younger plants for space, air, light, water and nutrients.
- D : They can also produce new plants by stem cutting.

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

23. In the forest, the rain tree obtains energy from _____.

- (1) rain
- (2) fungi
- (3) leaf litter
- (4) sunlight

24. Kala spread a layer of oil on the stem, leaf stalks and both surfaces of the leaves of a plant. The plant was then placed in the sun and watered every day.



After a week, the plant wilted.

Which of the following processes ~~will not be able to take place?~~
could

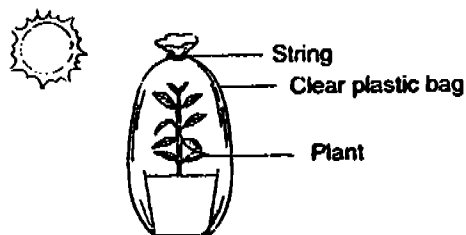
- A: Photosynthesis
- B: Respiration
- C: Transpiration

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

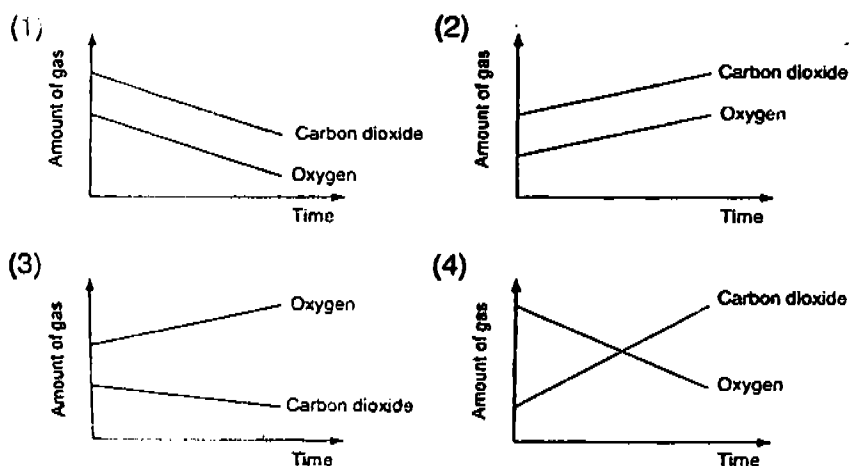
25. What is the process of removing dissolved salt from the seawater to get fresh water?

- (1) Recycling
- (2) Deforestation
- (3) Desalination
- (4) Pollution

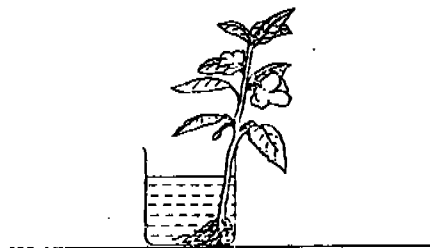
26. Latha **put a plant** into a clear plastic bag. He tied the bag with a string and placed it under the sun for several hours. The plant used by Latha was well-watered.



Which **of the following** graphs below shows the changes in the amount of carbon dioxide and **oxygen** in the **plastic** bag during that period of time?



27. Wei Wei put a **balsam** plant into a beaker of water in which some red ink had been added.



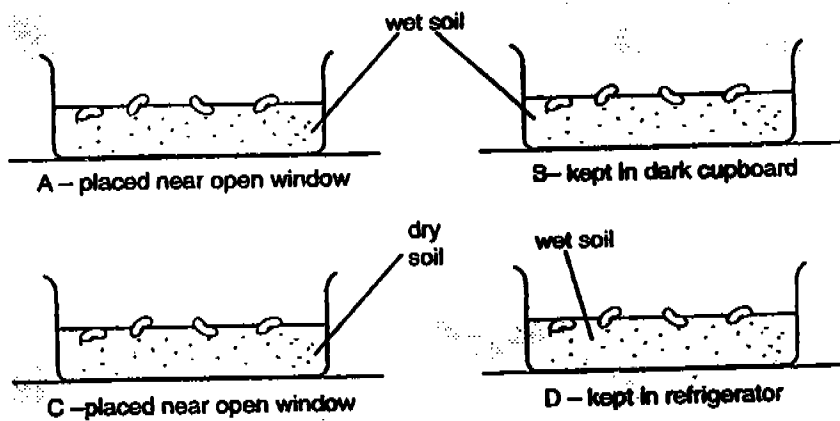
The next day, she observed that _____.

- (1) the **flowers turned** from white to red.
- (2) the **flowers turned from white** to blue
- (3) the **water turned** from red to blue.
- (4) the **flowers** withered.

28. Yeast is a very unusual form of _____ because it is single-celled and is able to reproduce by budding.

- (1) bacterium
- (2) fungus
- (3) microorganism
- (4) plant

29. The following dishes were set up to compare the growth of seeds.



In which of the above set-ups, A, B, C or D will the seeds grow best?

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

30. Which of the following statement is **false**?

- ~~(1)~~ The stomach mixes food with digestive juices and break food pieces into smaller pieces.
- ~~(2)~~ Blood vessels in the walls of the small intestine absorb digested food into the blood.
- ~~(3)~~ Digestive juices are absorbed from whatever is passing through the large intestine.
- ~~(4)~~ The anus removes unwanted materials from the body.



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2004 SEMESTRAL EXAMINATION 1

SCIENCE

Name : _____ ()

Class : Primary 6/ ____

Date : 13 May 2004

BOOKLET B

16 Questions

40 marks

MARKS

	OBTAINED	POSSIBLE
BOOKLET A		60
BOOKLET B		40
TOTAL		100

Parent's Signature : _____

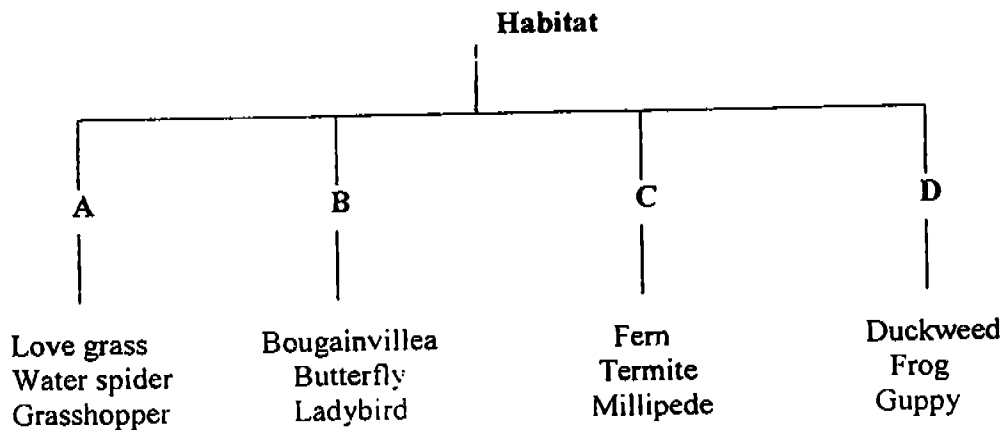
Section B: (16 Questions : 40 Marks)

Answer all the questions in the space provided.

31. Fill in each blank with the most suitable word.

- (a) A _____ is a group of organisms of the same kind that live together and reproduce in a particular place. (1m)
- (b) A _____ consists of many populations living together in a habitat. (1m)

32. In the diagram below, Hui Min has classified 8 organisms according to their habitat.



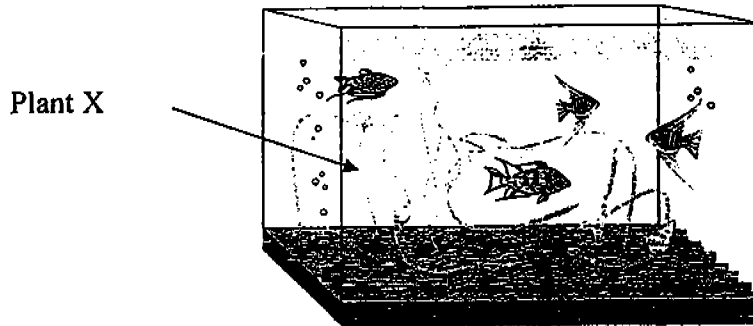
(a) One living thing in the diagram has been classified wrongly. Name the animal. (1m)

(b) In which group (A, B, C or D) should this living thing be classified? (1m)

33. Draw a food chain in the space below with all the living things given in the box. (2m)

Caterpillar snake sparrow leaf

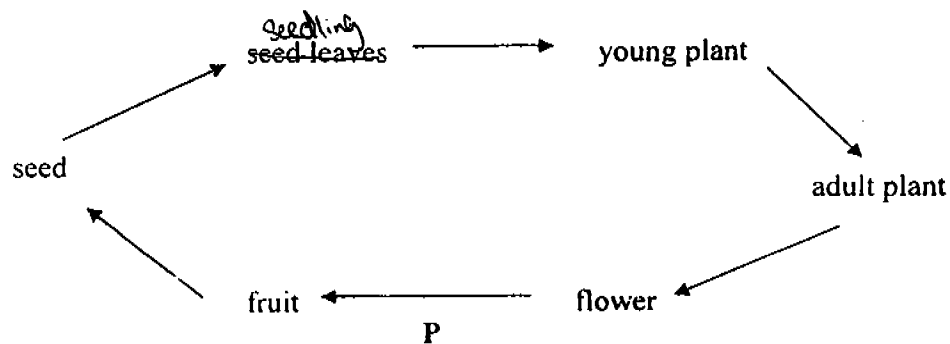
34. The diagram below shows a small community in a fish tank.



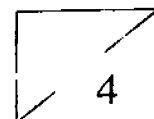
(a) Where does plant X get most of its carbon dioxide to make food? (1m)

(b) State one way in which plant X is helpful to the aquatic animals living in the fish tank. (1m)

35. The diagram below shows the cycle of reproduction of a flowering plant.



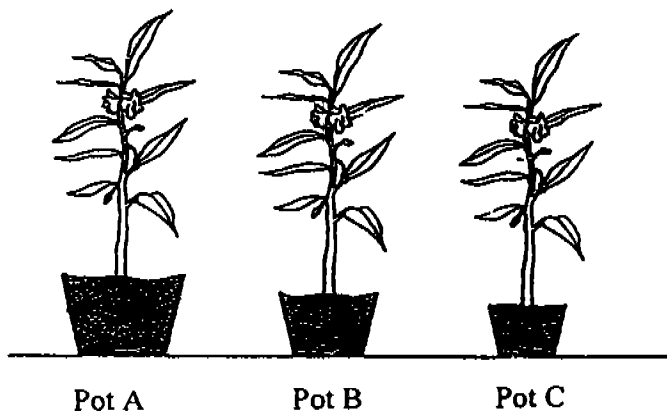
Name the two processes taking place at P. (2m)



36. A group of pupils wanted to find out what type of soil was suitable for growing balsam plants. They planted 3 balsam plants of similar size in three pots, A, B and C. The rest of the details are shown in the table below.

	Pot A	Pot B	Pot C
Material of Pot	Clay	Clay	Clay
Type of Soil	Garden soil	Clayey Soil	Sandy Soil
Amount of Soil	1200 cm ³	1000 cm ³	600 cm ³

The three plants were placed in their school garden as shown below and received the same amount of sunlight.

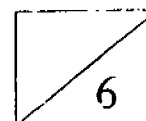


- (a) Was it a fair test? Why? (2m)

- (b) Which one other important variable must they control during the experiment? (2m)

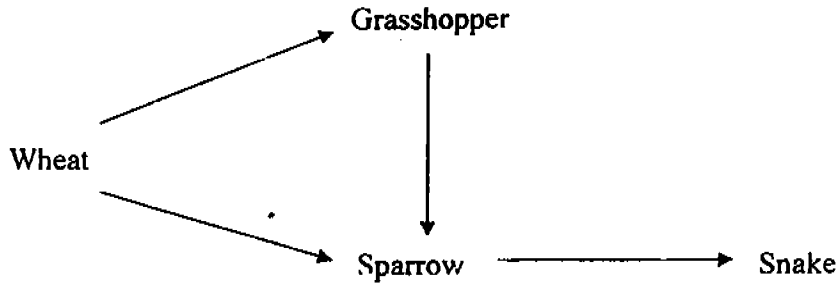
37. Fill in each blank with the most suitable word. (2m)

_____ are organisms that break down dead matter and animal waste into simple substances such as mineral salts and _____.



40

38. Look at the food web below.



(a) Name the producer in the food web. (1m)

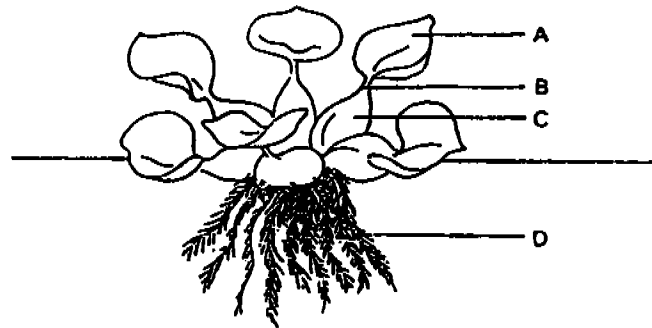
(b) Which animals are the preys? (1m)

(c) *Why will the wheat population decrease when there are more snakes*
~~Why do the wheat grow better when there are a lot of snakes?~~ (2m)

39. Fill in each blank with the most suitable word. (2m)

A/ an _____ is a characteristic that helps an organism to survive in its _____ habitat.

40. The picture below shows a water hyacinth plant.

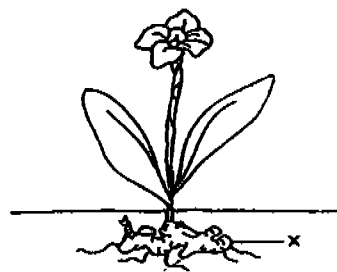


(a) Which part of the plant, A, B, C or D is adapted for floating? (1m)

(b) Explain your answer in (a). (1m)

(c) State one main reason why many aquatic plants adapt by floating or sticking their leaves out of the water surface? (2m)

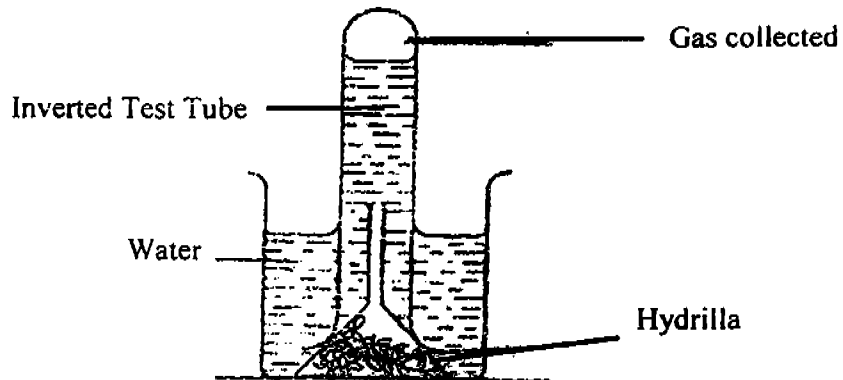
41. This is a picture of a Canna plant.



(a) Name the part of the plant marked X. (1m)

(b) What will happen to the size of the part marked X as the plant grows? (1m)

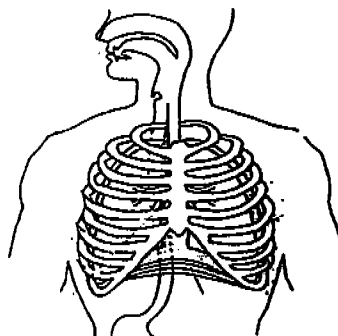
42. Ratna set up the apparatus for her experiment on hydrilla plants as shown below. She conducted the whole experiment in a dark room.



- (a) Name the gas collected in the inverted test tube after a few hours. (1m)

- (b) What would she use to confirm the gas in (a)? (1m)

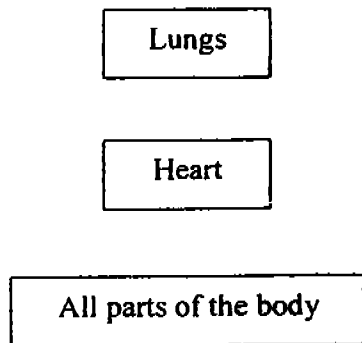
43. The diagram shows the human respiratory system.



- (a) Where does gaseous exchange take place in our body? (1m)

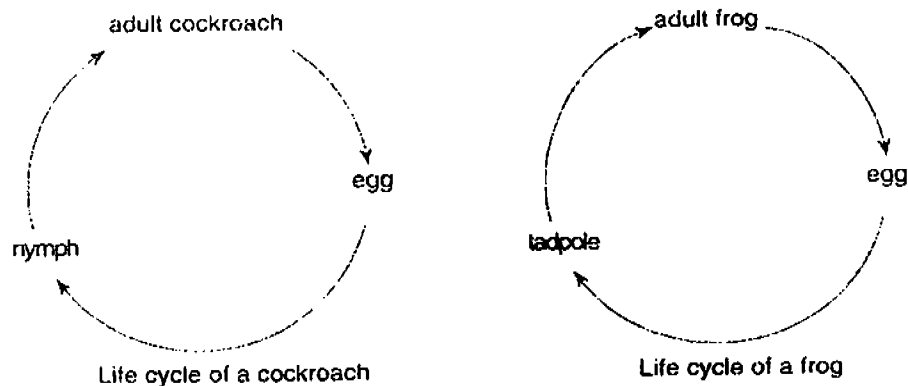
- (b) What is the function of the ribs? (2m)

44. The diagram is a simplified way of showing how our blood travels in the body.



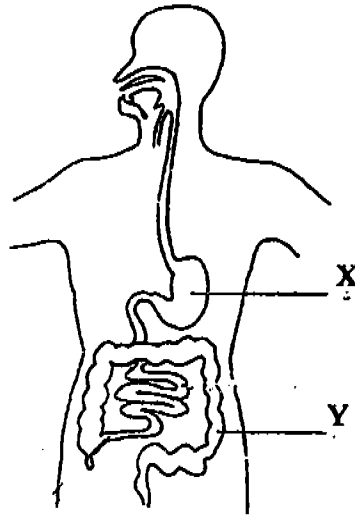
- (a) Indicate the lines with arrowheads to show the movement of blood. (2m)
- (b) State one similarity between the circulatory system of a Man and that of a fish. (1m)

45. The diagram below shows the life cycles of a cockroach and a frog.



- (a) State one similarity between the two life cycles. (1m)
-
- (b) How is the young cockroach different from the adult? (1m)
-

46. The diagram below shows the human digestive system.



(a) Name the organs which X and Y represent. (1m)

X: _____

Y: _____

(b) Indicate on the diagram a 'Z' to show where digestion is completed. (1m)

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

RED SWASTIKA SCHOOL
2004 SEMESTRAL ASSESSMENT 1
SCIENCE
PRIMARY SIX

SA1

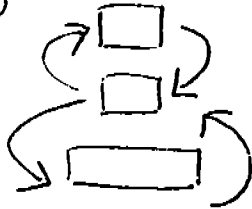
- 1) 4 29) 1
- 2) 2 30) 3
- 3) 2 31) a) population
 b) community
- 4) 2 32) a) Spider
 b) The living thing should be classified in Group D.
- 6) 4 33) Leaf --- Caterpillar --- Sparrow --- Snake
- 7) 2 34) a) Plant X get most of its carbon dioxide from the
 aquatic animals in the fish tank.
- 8) 2 b) Plant X provide oxygen during photosynthesis.
- 9) 2
- 10) 4 35) Fertilization, pollination
- 11) 1 36) No, it was not a fair test. All the pots is in
 different sizes, that is why it wss not a fair
 test.
- 12) 3 b) The amount of water.
- 13) 3
- 14) 1 37) Decomposers
 Carbon dioxide
- 15) 4
- 16) 4 38) a) Wheat
 b) Grasshopper, sparrow
- 17) 1 c) When there are more snakes, the population of
 the sparrow will decrease. The population of
 the grasshopper will then increase as there
 are fewer predators to feed on them. This will
 result in a decrease of wheat population when
 they are eaten by the grasshoppers.
- 18) 2
- 19) 3
- 20) 2
- 21) 3 39) adaptation
- 22) 1 natural
- 23) 4
- 24) 4 40) a) C
 b) Part C is contained with air so it acts like
 a float to keep it floating.
- 25) 3 c) To get as much sunlight as possible to
 photosynthesis.
- 26) 3
- 27) 1

- 41) a) Underground stem
b) Get smaller, shrink

- 42) a) Carbon dioxide
b) She could use limewater

- 43) a) In our lungs
b) To protect the heart and the lungs.

- 44) a)



- b) They both have artery to carry blood rich in oxygen to all parts of our body and veins to carry blood rich in carbon dioxide to the lungs.

- 45) a) They both have three stages.

- b) A young cockroach does not have wings but the adult cockroach has wings.

- 46) a) X : Stomach

Y : Large intestine

