



RED SWASTIKA SCHOOL

RED SWASTIKA SCHOOL

2008 CONTINUAL ASSESSMENT 1

SCIENCE

Name : _____ ()

Class : Primary 6/ ____

Date : 28 February 2008

BOOKLET A

30 Questions

60 Marks

Duration of Paper : 1 hour 45 minutes

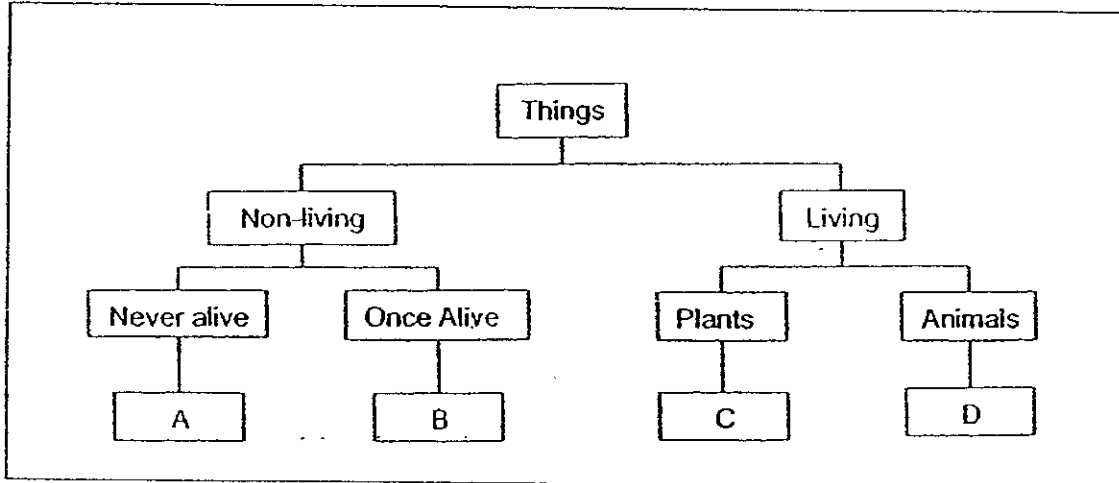
Note:

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.

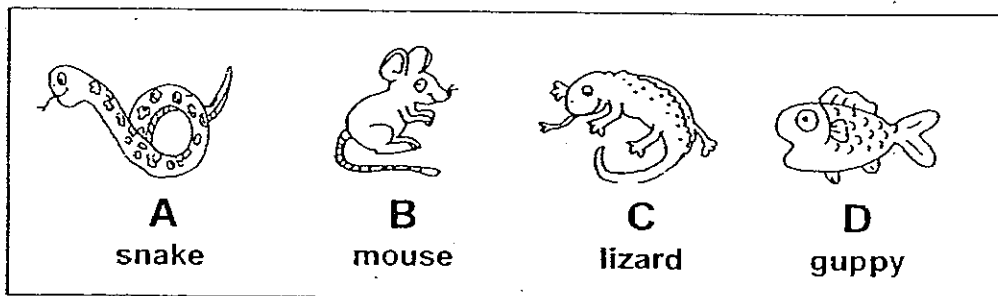
1. The classification table below groups some things according to their characteristics and properties.



Which one of the following correctly identifies A, B, C and D?

	A	B	C	D
(1)	silk cloth	cotton wool	hibiscus	venus flytrap
(2)	nickel coin	cotton wool	coconut	tadpole
(3)	silk cloth	book	mushroom	tadpole
(4)	nickel coin	book	mould	venus flytrap

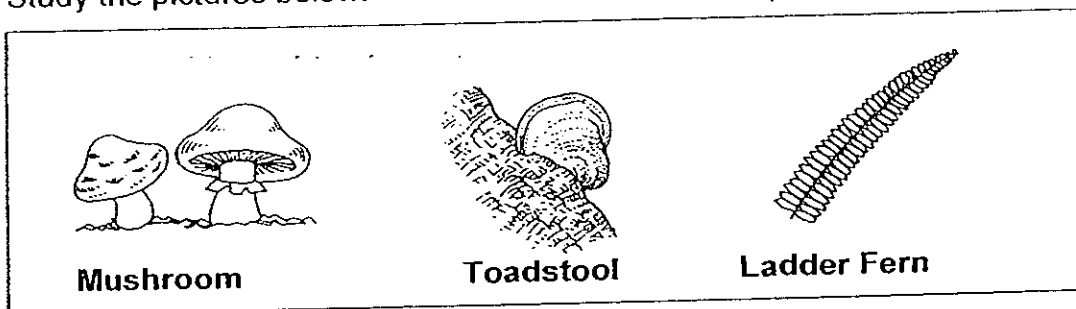
2. Study the animals shown in the box below.



Which of the animals above have been classified correctly?

	Fish	Mammal	Reptile
(1)	A and D	B	C
(2)	D	A and B	C
(3)	D	B	A and C
(4)	B	C	A and D

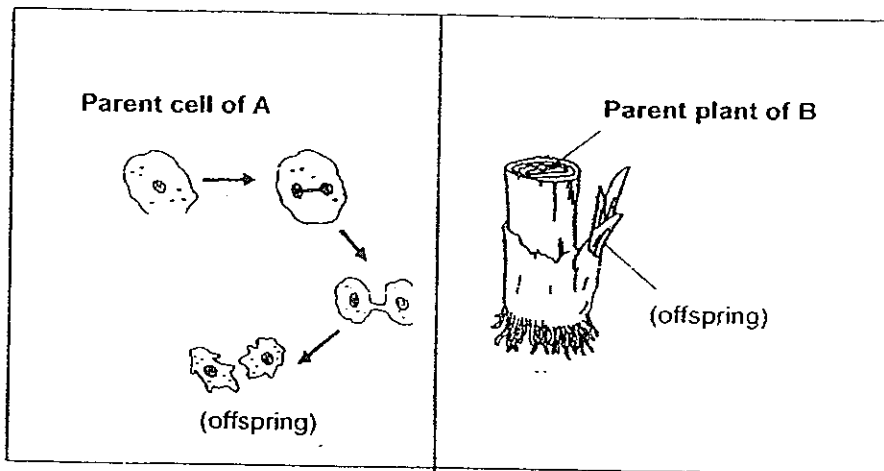
3. The shorea is small, light and possesses wing-like structures. It is dispersed by _____.
- (1) wind
 - (2) water
 - (3) animals
 - (4) splitting open forcefully
4. What is the advantage when plants reproduce from other plant parts?
- (1) The plants can self-pollinate.
 - (2) The off-spring grow at a slower rate.
 - (3) The off-spring are pest-resistant.
 - (4) There is no need for fertilisation to take place.
5. Study the pictures below.



In terms of reproduction, what do these organisms above have in common?

- (1) They contain chlorophyll.
 - (2) They reproduce by spores.
 - (3) They feed on decaying matter.
 - (4) They are non-flowering organisms.
6. Danny wanted to find out whether light is an essential factor for seed germination. While keeping other conditions favourable for germination, he placed container A in a cupboard and container B near the window of a room. What would the results be?
- (1) Only the seeds in container A will germinate
 - (2) Only the seeds in container B will germinate.
 - (3) The seeds in both containers will germinate.
 - (4) The seeds in both containers will not germinate.

7. Three students studied the reproduction methods of organisms A and B as shown below.



The three of them recorded their observations in their Science workbooks. Which of these students made the correct statement(s)?

- A : The offspring have better resistance against bacteria than their parents.
- B: The offspring of organism B is not likely to produce better fruits than its parents.
- C: Both the offspring of organisms A and B are genetically identical to their parents.

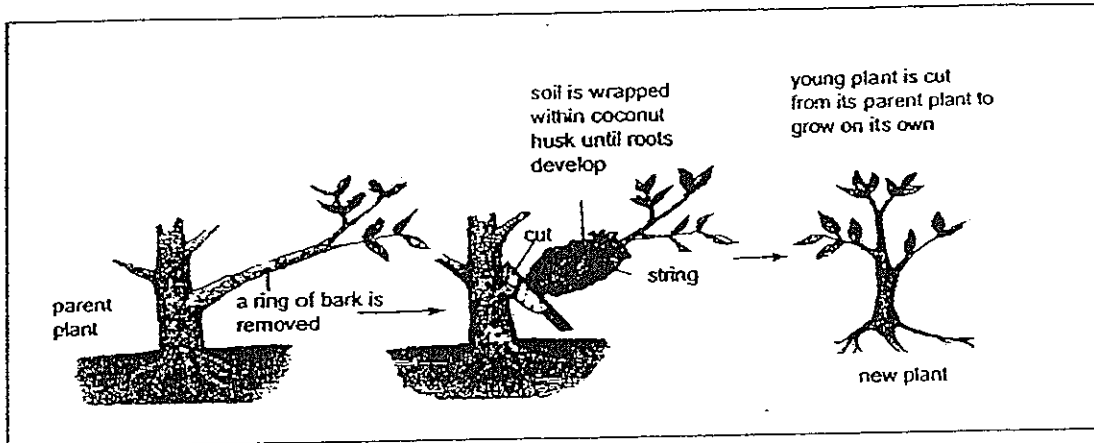
- (1) A only
- (2) B only
- (3) A and B only
- (4) B and C only

8. The table below records some of the characteristics of Mindy's parents. Which of the following characteristics can Mindy inherit from her parents?

Characteristics	Mother	Father
Height	Short	Tall
Hair	Straight and black	Wavy and Brown
Dimples	No dimples	No dimples
Skin Tone	Fair	Dark
Nose	Flat	Flat

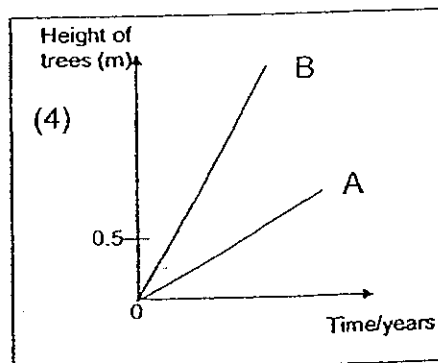
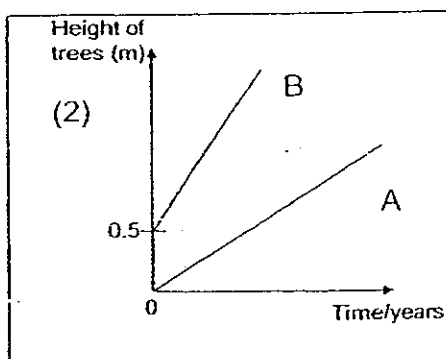
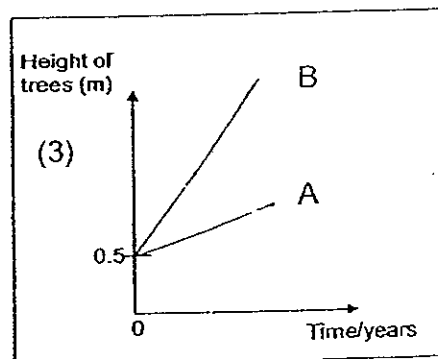
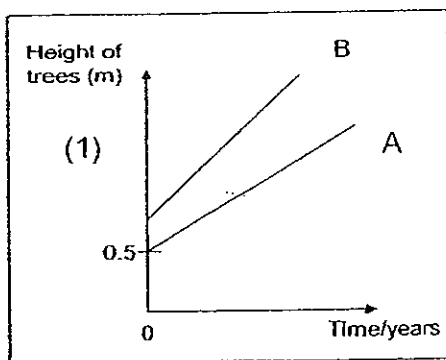
- (1) Tall, dark and short hair.
- (2) Short, dark with sharp nose.
- (3) Tall, fair and wavy black hair.
- (4) Tall, sharp nose and with dimples.

9. The pictures show how some trees are reproduced from a method known as 'stem-cutting'.

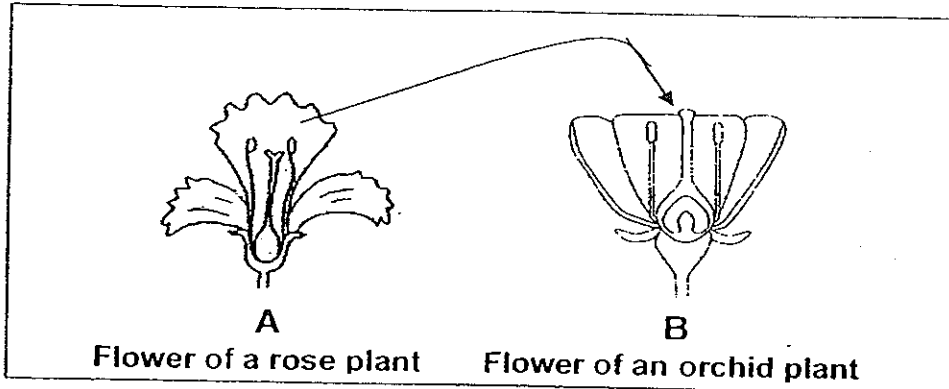


Three years ago, Mrs Goh planted two rambutan trees A and B. She grew A from a seed. Tree B was grown from a 'stem-cutting' with a height of 0.5 m. A graph was plotted to show the growth of these two trees, A and B from the time they were planted till they flowered.

Which one of the graphs most likely shows the growth of trees A and B?

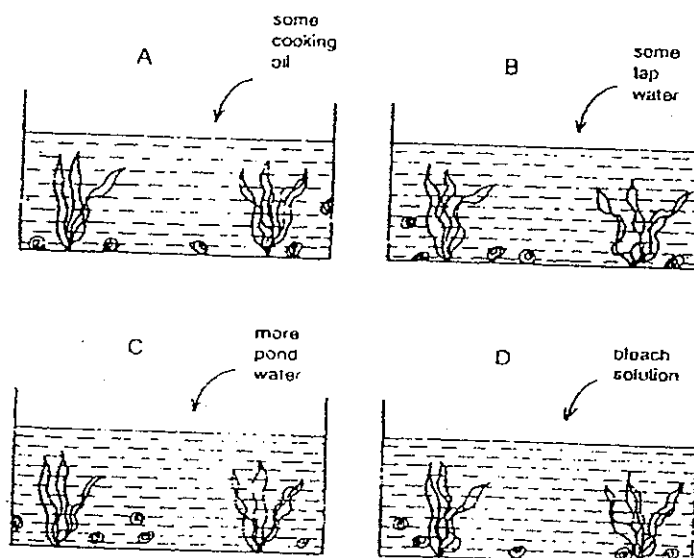


10. These are two flowers A and B. They belong to different species. A pollen grain from flower A lands on the stigma of flower B as shown.



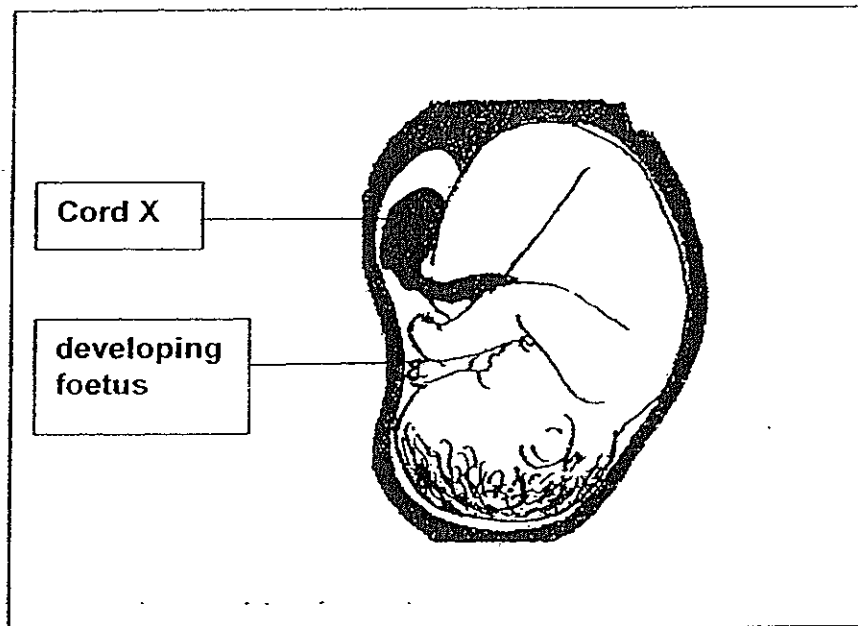
What will happen after a week?

- (1) A pollen tube will grow down the style of flower B.
 - (2) The petals of flower B will wither.
 - (3) No changes to the petals of B.
 - (4) The ovary of flower B will be swollen.
11. Suling wanted to find out the conditions of water on the population of water snails. She poured different types of water into four aquariums and recorded her observations over a week. Which tank would have the most number of water snails after one week?



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

12. This is a picture of a developing foetus in a mother's womb.

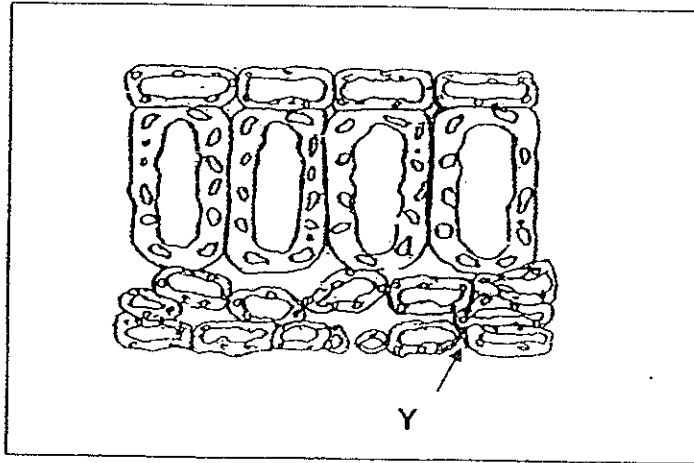


Which of the following statements about cord X are correct?

- A: It connects the foetus to the mother.
- B: Fertilisation takes place at the cord X.
- C: Waste from the foetus is passed out through the cord.
- D: It carries food and oxygen from the mother to the foetus.

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

13. The picture below shows the cross-section of a leaf during photosynthesis.

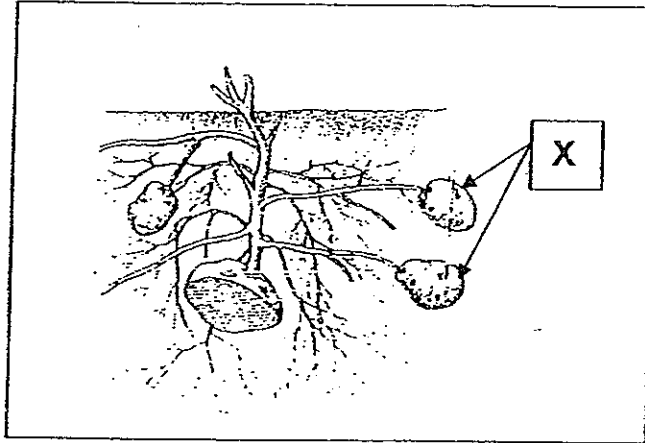


Which one of the following is/are the function(s) of the tiny opening, Y, found in the leaf?

- A: It allows oxygen to be given out.
- B: It helps to trap sunlight.
- C: It allows carbon dioxide to be taken in.
- D: It allows water to be absorbed.

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

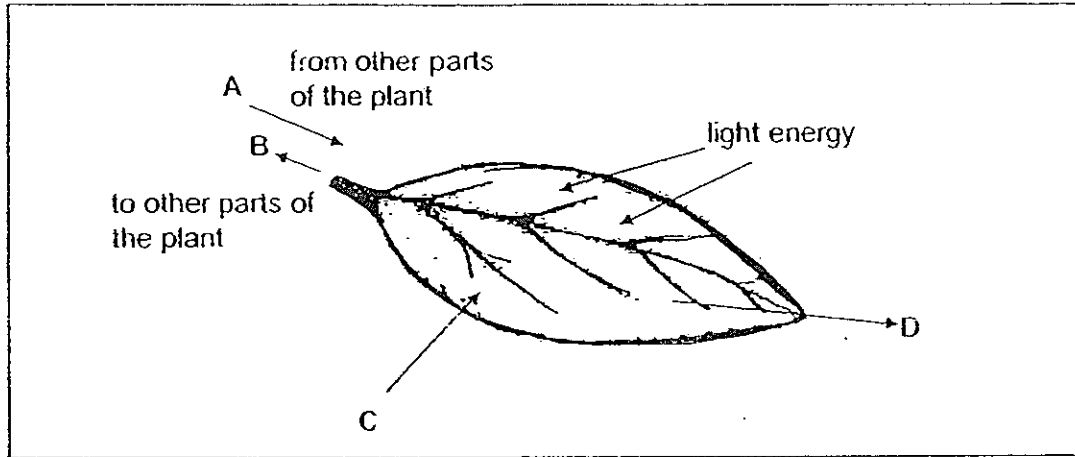
14. The picture shows a part of the potato plant.



Which of the following are the functions of part X?

- A: To take in water for the plant.
 - B: To help the plant to reproduce.
 - C: To take in nutrients from the soil.
 - D: To store excess food made by the plant.
- (1) A and C only
(2) B and C only
(3) A and D only
(4) B and D only

15. The picture below shows how the leaf of a balsam plant carries out photosynthesis.

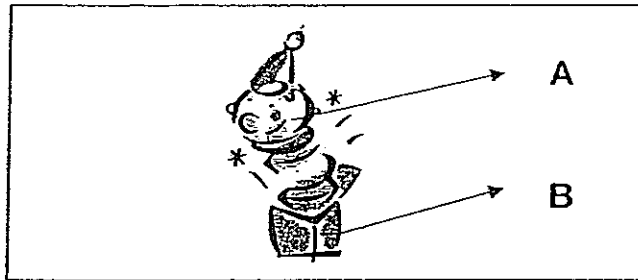


The arrows indicate the movement of different substances entering and leaving the leaf.

What do the different arrows A, B, C and D represent?

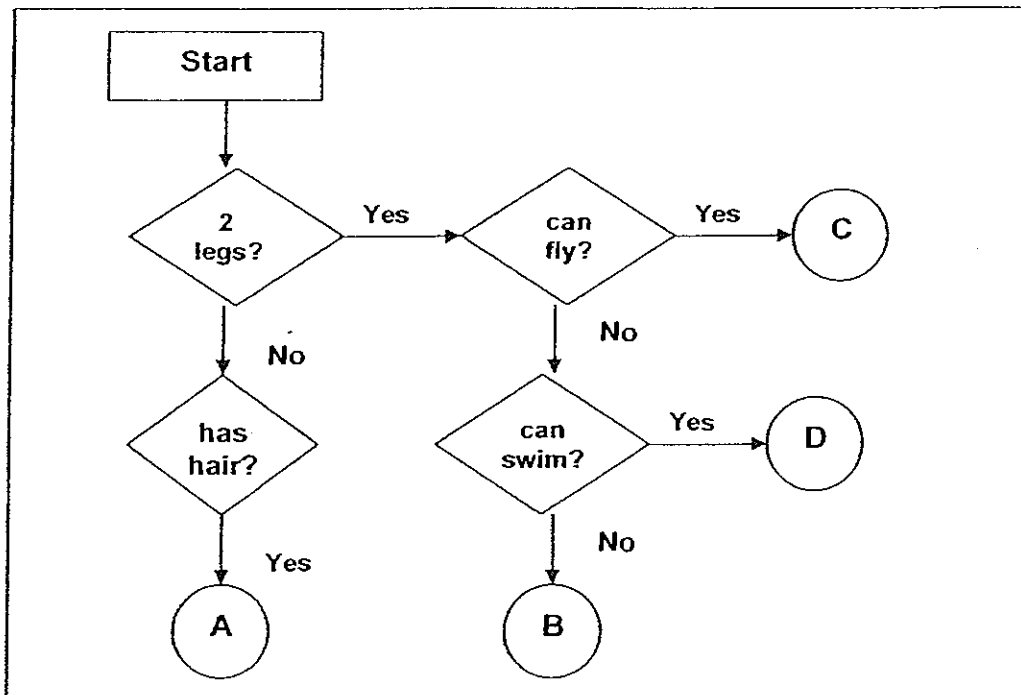
	A	B	C	D
(1)	sugar	water	oxygen	carbon dioxide
(2)	sugar	carbon dioxide	water	oxygen
(3)	carbon dioxide	oxygen	sugar	water
(4)	water	sugar	carbon dioxide	oxygen

16. Lynn wants to make a toy for her one-year-old brother to play. Can you help her to choose the most suitable materials?



	A	B
(1)	Plastic	Plastic
(2)	Glass	Plastic
(3)	Wood	Glass
(4)	Glass	Glass

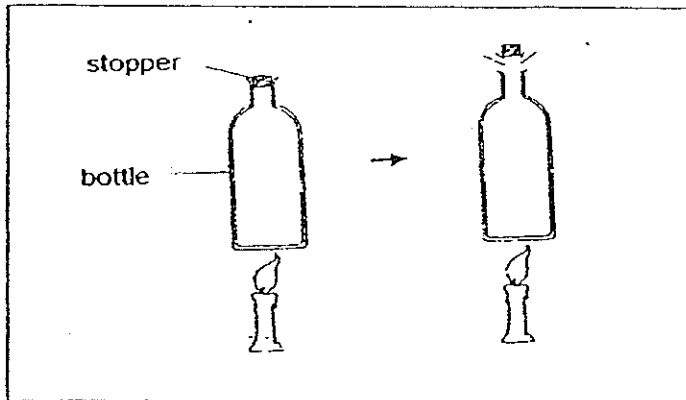
17. Study the flow chart carefully.



What do animals A, B, C and D represent?

	A	B	C	D
(1)	bear	ostrich	crow	penguin
(2)	dog	emu	parrot	crocodile
(3)	goat	kiwi	sparrow	lizard
(4)	rat	penguin	owl	turtle

18. Study the diagram below carefully.



The _____ and causes the stopper to pop out.

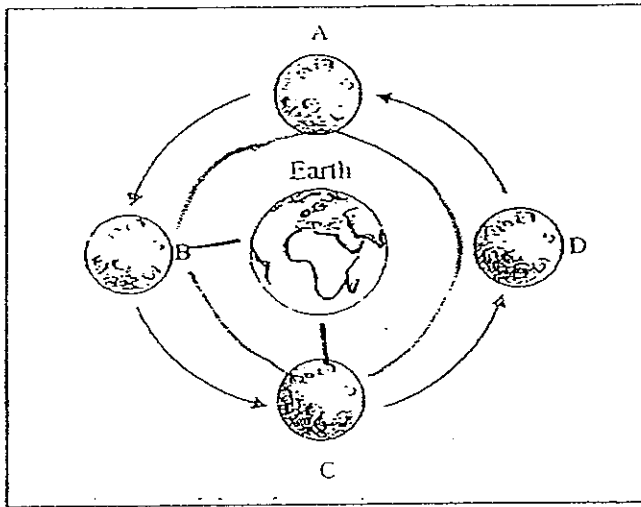
- (1) bottle expands upon heating
- (2) bottle contracts upon heating
- (3) air in the bottle contracts upon heating
- (4) air in the bottle expands upon heating

19. The table below shows the time and temperature of pure water when it is heated. What is the temperature of pure water at the 25th minute?

Time (Minutes)	Temperature (°C)
5	30
10	50
15	70
20	90
25	?

- (1) 90 °C
- (2) 100 °C
- (3) 110 °C
- (4) 120 °C

20. On 7th Jan 2008, the moon is at position C.
The moon will be at position ____ after 21 days has passed.



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

Study the classification table below carefully and use the information given to answer Questions 21 and 22.

Matter		
rice	seawater	sand
cotton wool	milk	water vapour
cloth	soy sauce	carbon monoxide
A	B	C

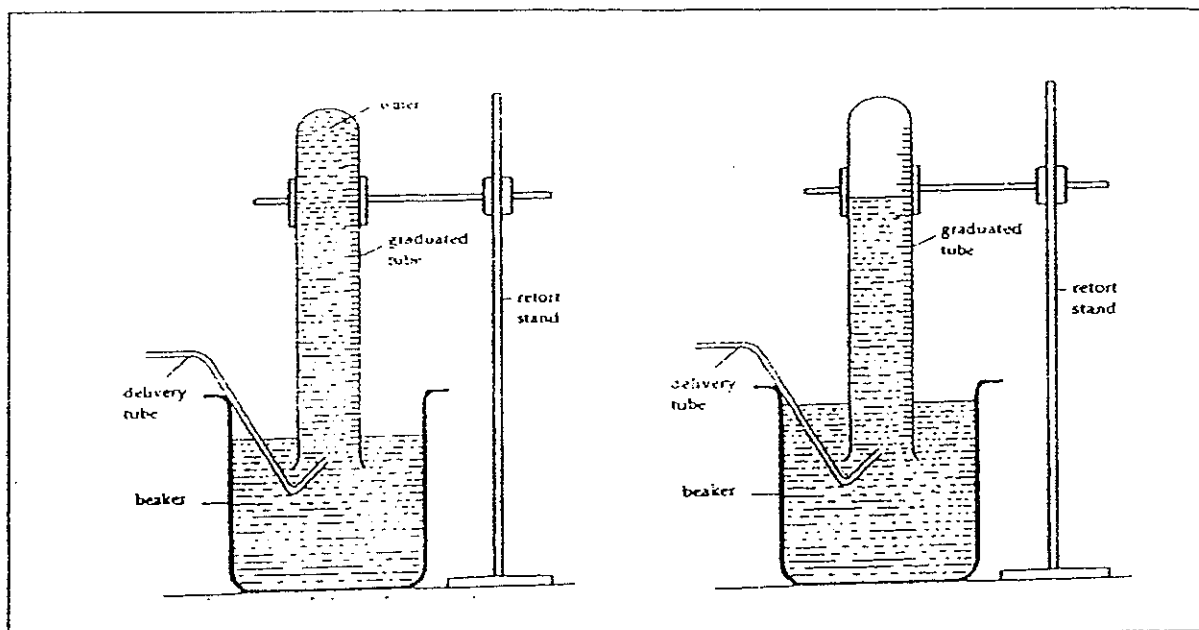
21. _____ has been wrongly classified.

- (1) Sand
- (2) Rice
- (3) Seawater
- (4) Carbon monoxide

22. Which of the following can represent A, B and C respectively?

- (1) paper, blood, oxygen
- (2) lemon juice, shower gel, nitrogen
- (3) sponge, orange, ice-cube
- (4) oxygen, shampoo, jelly

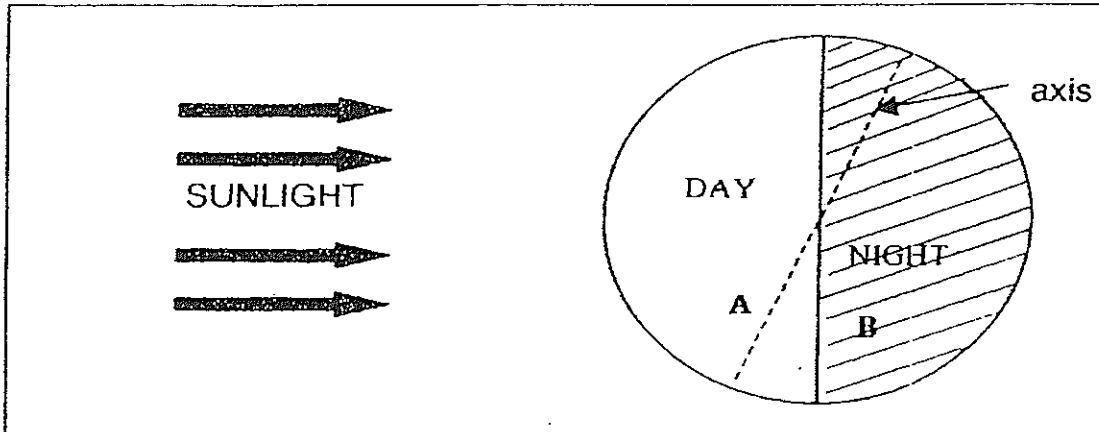
23. Eric filled a graduated tube with water and placed it into a beaker of water. Then, he exhaled into the delivery tube as shown in the diagrams below.



Eric was trying to find out _____.

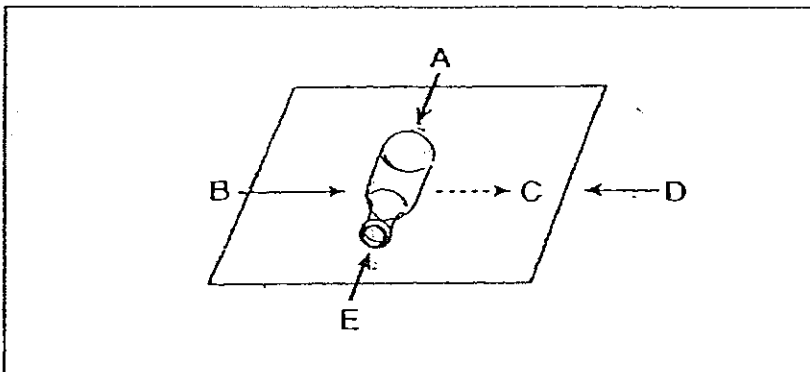
- (1) if water takes up space
 - (2) if oxygen takes up space
 - (3) the amount of gas he breathed out
 - (4) the amount of oxygen he breathed out
24. Which of the following are examples of reusing water?
- A: Using rinsing water from the washing machine to wash the floor.
 - B: Doing the laundry when the load is full.
 - C: Removing waste materials from water and using the purified water to cool machines in factories.
 - D: Watering plants with water that had been used to rinse rice.
- (1) A and B only
 - (2) A and D only
 - (3) B and C only
 - (4) A, B, C and D

25. People living at A will experience night approximately _____ later.



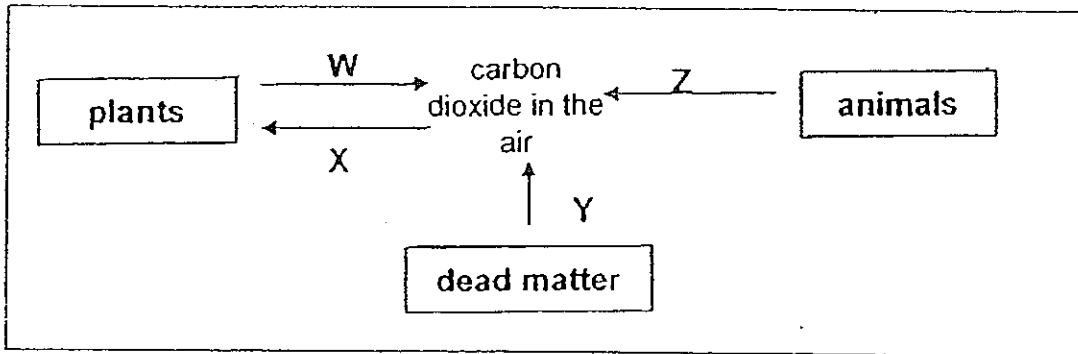
- (1) one month
- (2) 12 hours
- (3) 24 hours
- (4) 12 days

26. A bottle is rolling in the direction C. To make it move faster in the same direction, a force has to be applied from _____.



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

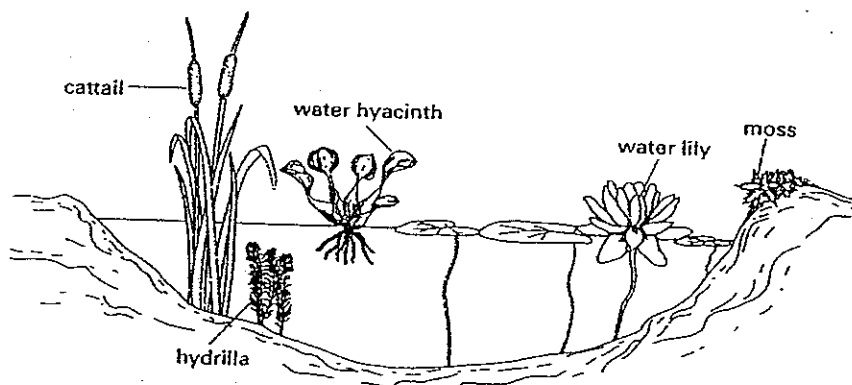
27. Carbon dioxide can be added or removed from the surroundings during the processes W, X, Y and Z as illustrated below.



Which one of the following correctly identifies processes Y and X?

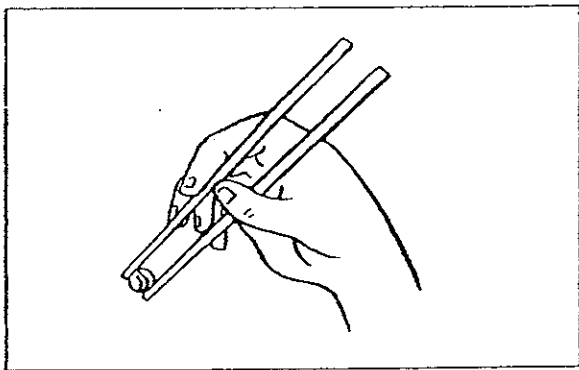
	Y	X
(1)	photosynthesis	respiration
(2)	decomposition	respiration
(3)	respiration	photosynthesis
(4)	decomposition	photosynthesis

28. If there is overcrowding of water hyacinth on the pond shown below, which one of the following aquatic plants will not grow well in such a situation?



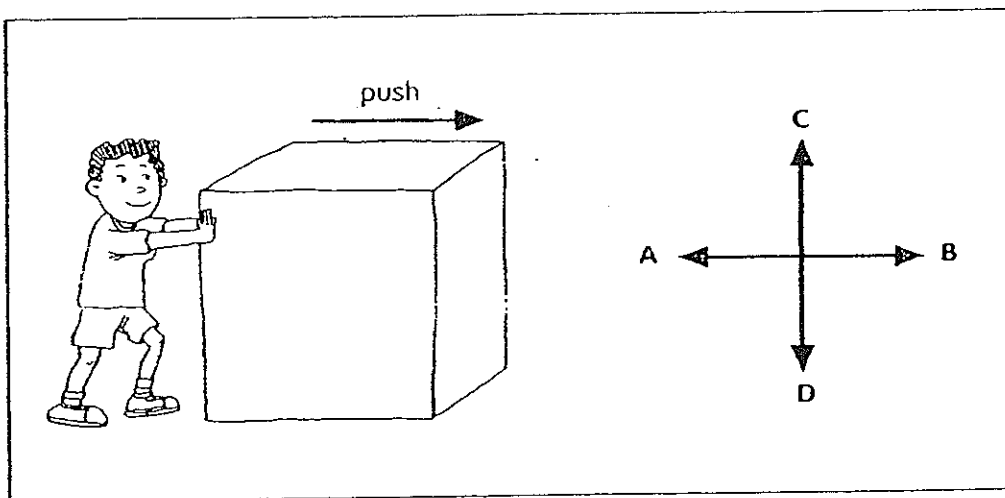
- (1) moss
 (2) cattail
 (3) hydrilla
 (4) water lily

29. Which one of the following forces helps to pick up a marble with chopsticks as shown below?



- (1) friction
- (2) gravity
- (3) magnetic force
- (4) elastic spring force

30. What is the direction of the frictional force acting on the box?



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



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2008 CONTINUAL ASSESSMENT 1

SCIENCE

Name : _____ ()

Class : Primary 6/

Date : 28 February 2008

BOOKLET B

16 Questions
40 marks

MARKS

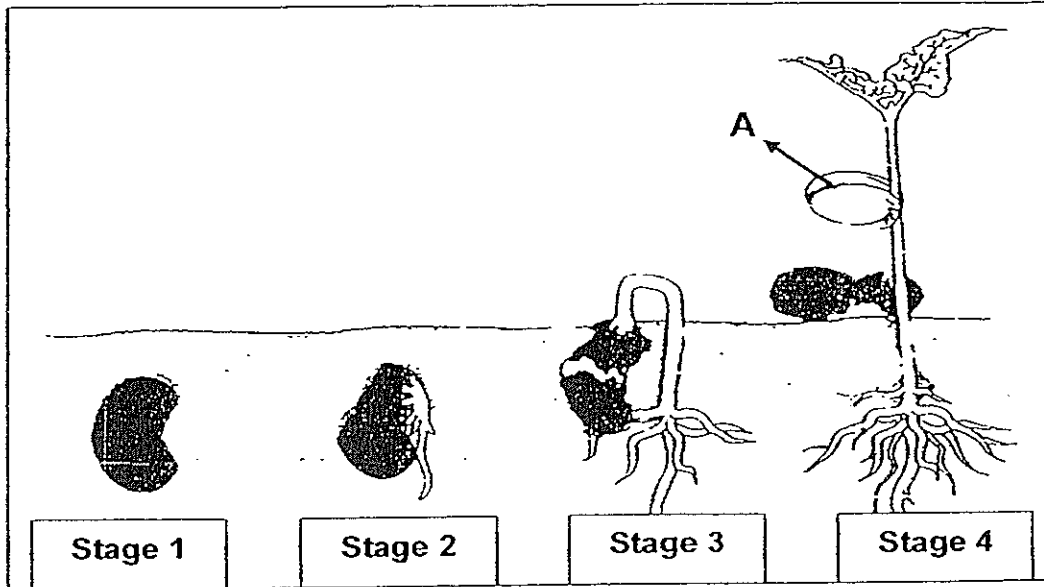
	OBTAINED	POSSIBLE
BOOKLET A		60
BOOKLET B		40
TOTAL		100

Parent's Signature : _____

SECTION B : (40 marks)

Read the questions carefully and write the answers in the space provided.

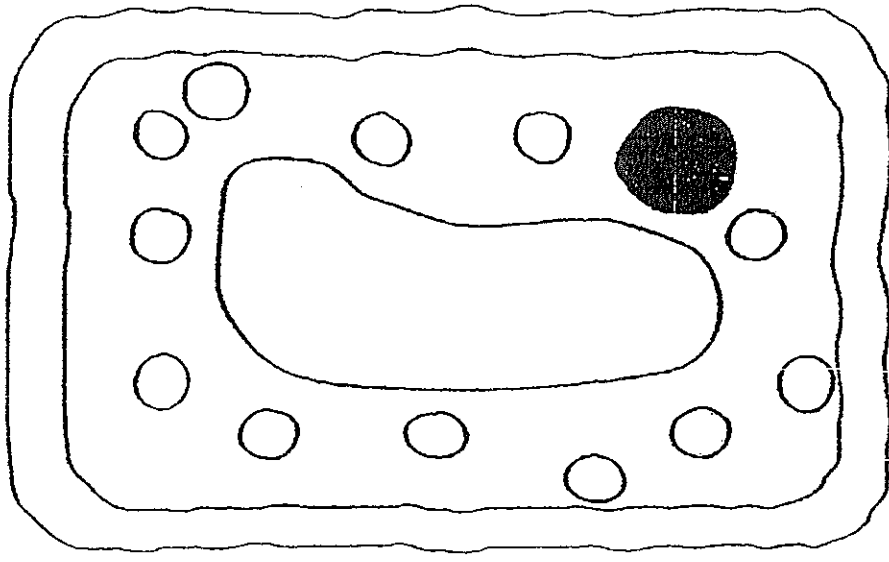
31. The diagram below shows the stages of the growth of a green bean seedling.



Stage	Stage 1	Stage 2	Stage 3	Stage 4
Amount of starch present	0.25g	0.20g	0.15g	0.20g

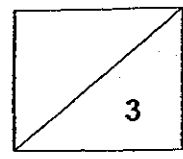
Do you think the part labelled 'A' is important to the plant at stage 4?
Please explain your answer. (2m)

32. This is a picture of a plant cell.



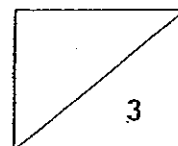
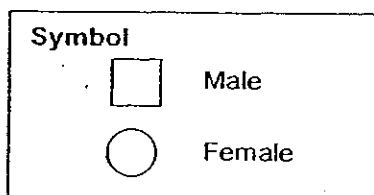
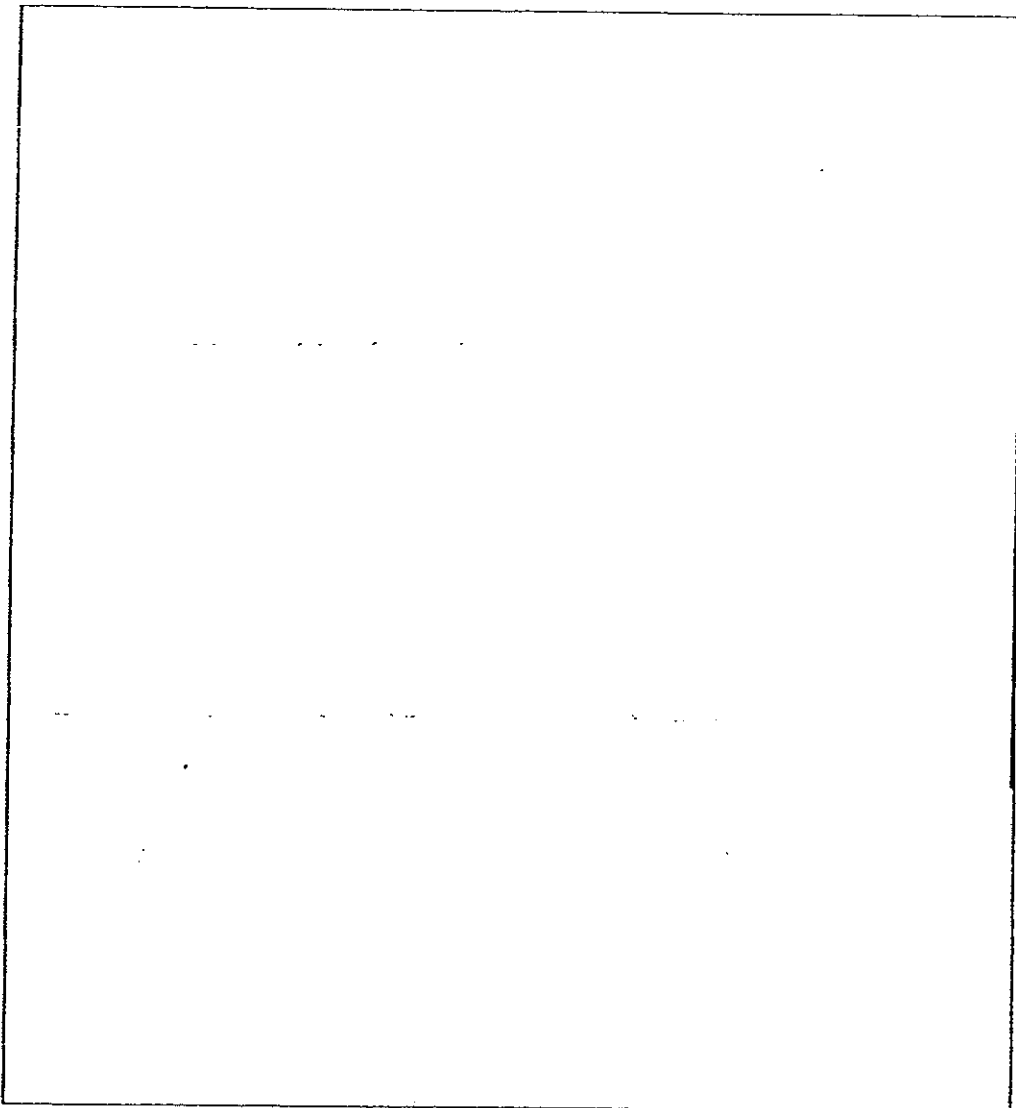
(a) Identify the part of the plant cell which helps the plant to carry out photosynthesis and label it 'A' in the picture above. (1m)

(b) Peter said that this plant cell came from an onion. Do you agree with Peter? Explain your answer. (2m)

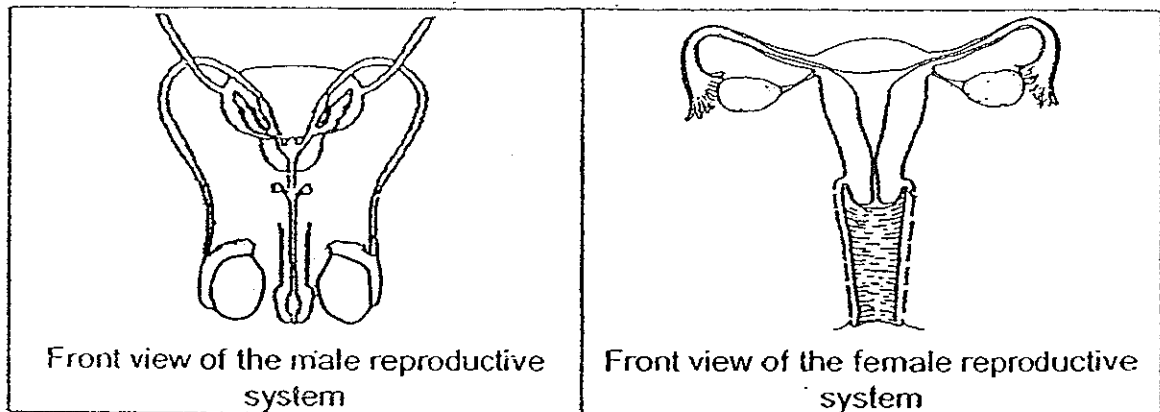


33. Please study the information given below.
Complete the family tree of David Lim using the symbols given. (3m)

Name: David Lim (drawn)
Wife : Mabel Choo (drawn)
Siblings: Edmund Lim, May Lim
Children : Alicia Lim, Bernard Lim
Parents: June Lim, Joe Lim



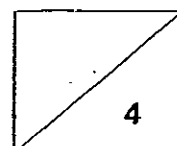
34. The diagrams below show the male and female human reproductive systems.



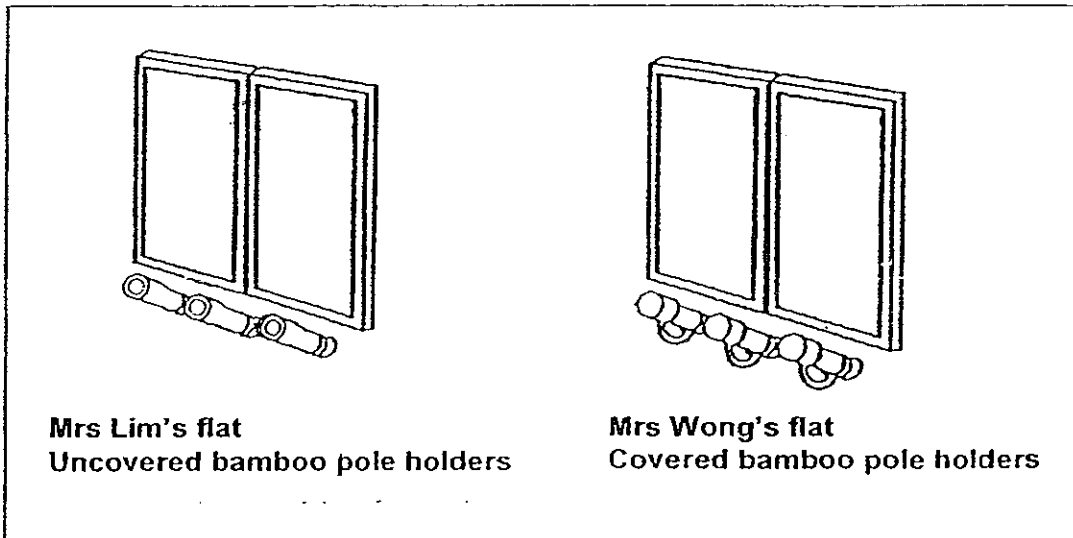
- (a) Use a pencil to shade the parts that produce the male reproductive cells. (1m)
- (b) Mark a 'X' at the place where a foetus develops. (1m)
35. The human blood is classified into four main groups – A, AB, B and O. The table below displays the suitable blood groups for blood donors as well as blood recipients.

Blood type of donors	Blood type of person receiving blood			
	A	AB	B	O
A	Yes	Yes	No	No
AB	No	Yes	No	No
B	No	Yes	Yes	No
O	Yes	Yes	Yes	Yes

Dayan's blood group is B. He needs a blood transfusion urgently. Write down the blood group(s) he can receive blood from. (2m)

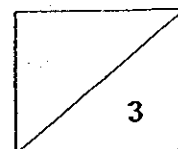


36. Dengue fever is a common mosquito-borne viral disease which is transmitted by the Aedes mosquito. The diagrams below show examples of uncovered and covered bamboo pole holders.

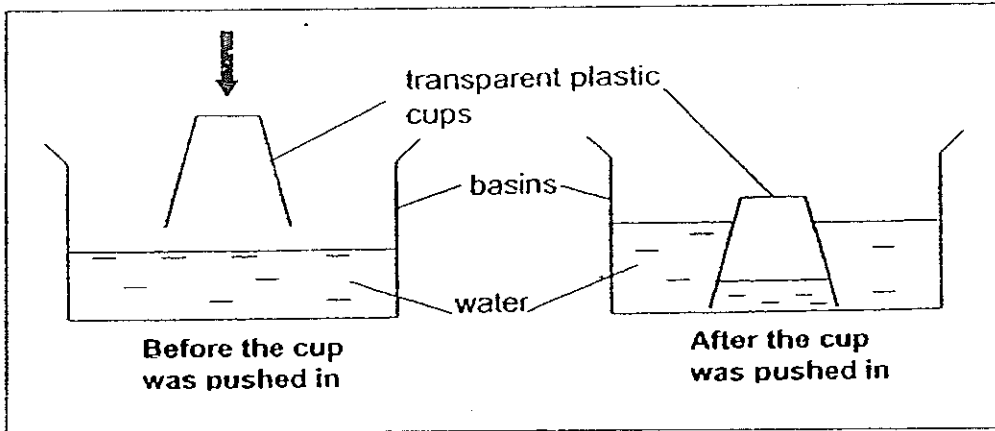


- (a) Officers from National Environment Agency (NEA) fined one of the flat-owners for encouraging the breeding of mosquitoes. Who was fined? (1m)

- (b) Explain your choice in (a). (2m)

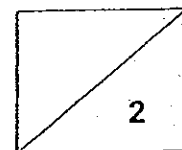


37. May did an experiment as shown below.
She inverted a plastic cup and pushed it slowly into the basin of water.

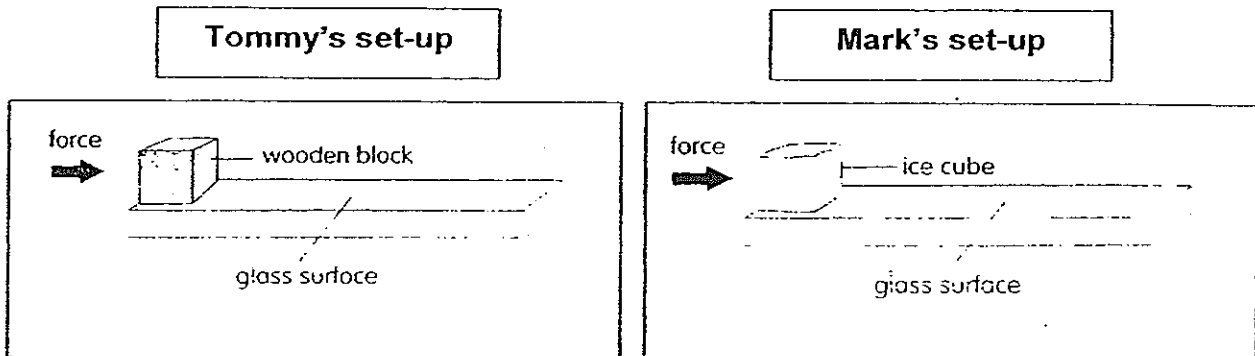


- (a) May observed that water did not enter the cup completely.
Explain why this is so. (1m)

- (b) Suggest a way how May can fill the inverted cup completely with water
without lifting it out of the basin. (1m)



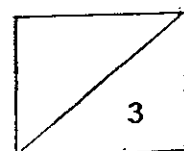
38. Two students, Tommy and Mark, investigated the lubricant effects of 3 liquids, A, B and C. They did their experiments and recorded their observations as shown below.



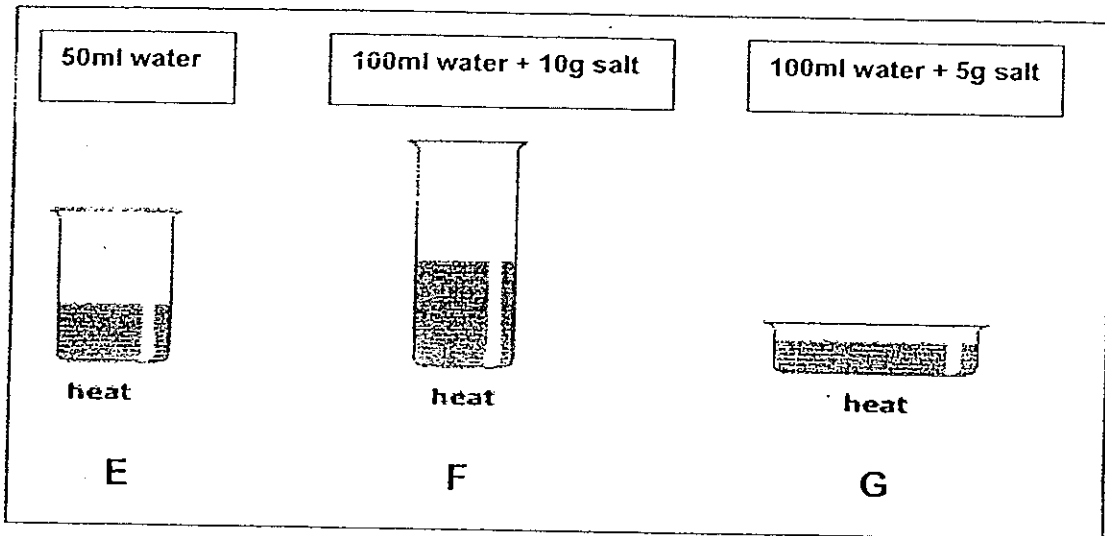
Tommy's observations		Mark's observations	
Liquid	Distance moved by the wooden block (cm)	Liquid	Distance moved by the ice-cube (cm)
Nil	15	Nil	20
A	20	A	25
B	25	B	30
C	30	C	35

- (a) Why did the two students measure the distance moved by the objects without the lubricant? (1m)

- (b) The teacher commented that one of the set-ups was not a fair test. Whose set-up was not a fair test? Why? (2m)

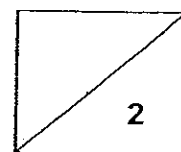


39. Dylan and Simon wanted to find out which set-up of water would take the longest time to boil. They conducted the experiment with three set-ups as shown below.

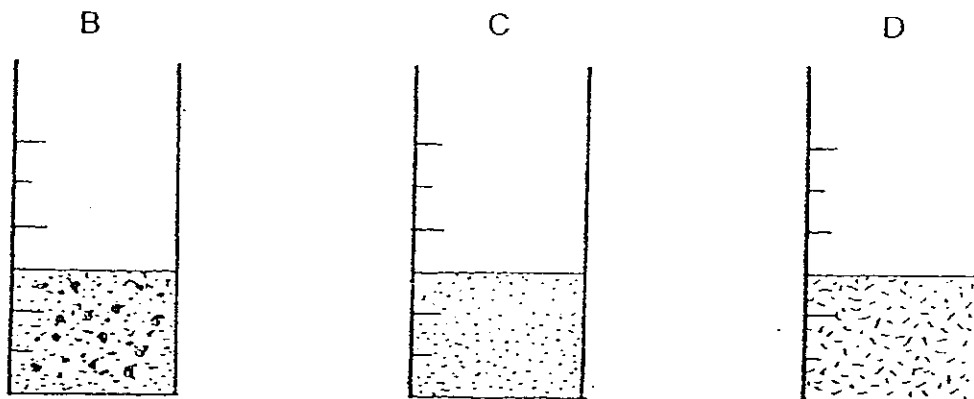


(a) Which set-up took the longest time to boil? (1m)

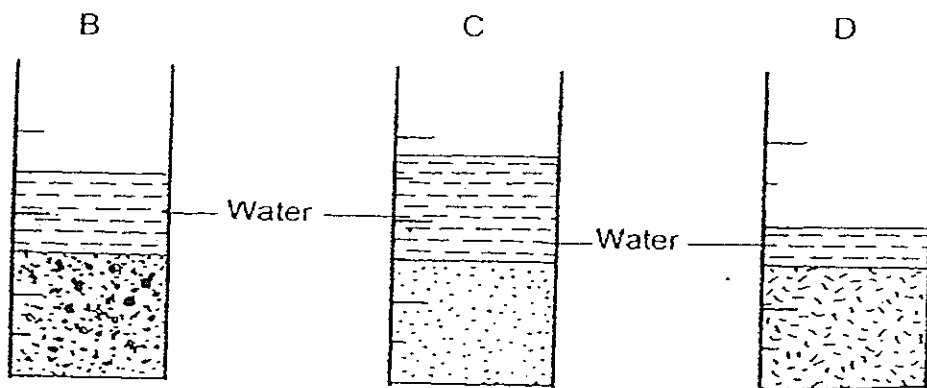
(b) Joey pointed out that it was not a fair test. Why? (1m)



40. Ryann wanted to find out the amount of air retained by different types of soil. He went to obtain three different types of soil; B, C and D from the school garden, Botanical Garden and the beach at East Coast respectively. He poured one cupful of soil into the cylinders as shown.

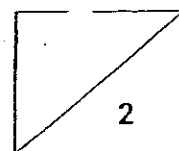


Next, a cupful of water was poured into the cylinders at the **SAME** time. The diagrams show Ryann's initial observations of the 3 set-ups after the water was poured into the cylinders.

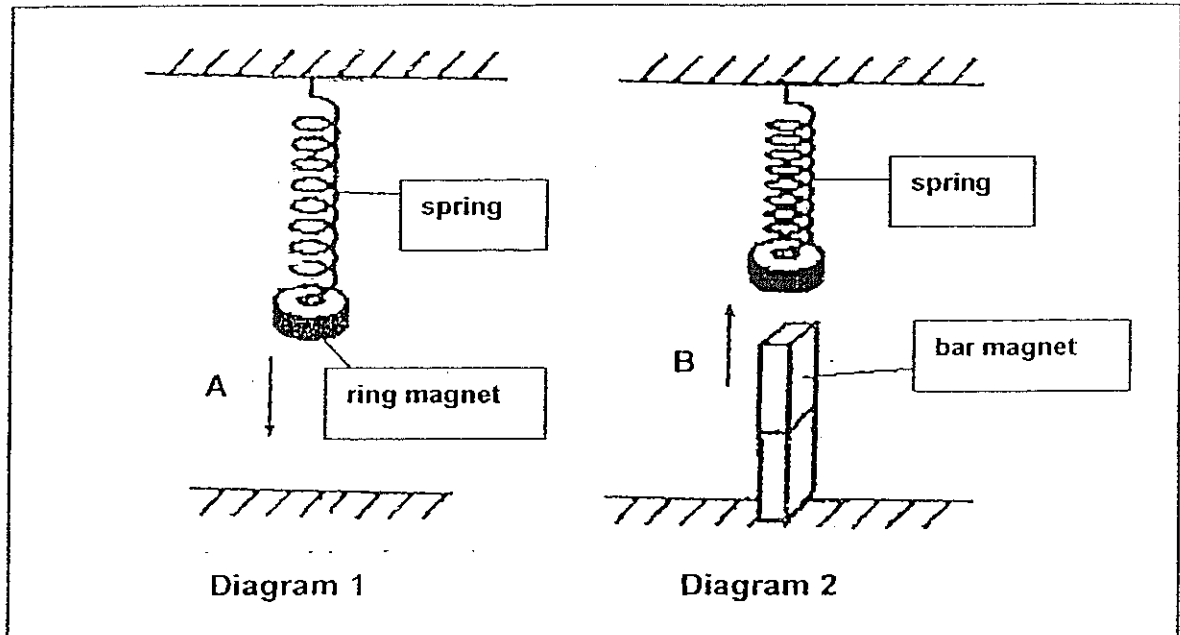


- (a) Which soil contained the most amount of air in it? (1m)

- (b) Give an explanation for your answer in (a). (1m)



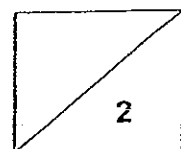
41. Diagram 1 shows a ring magnet being attached to a spring and it hangs freely.
A different observation was made when a bar magnet was placed under the ring magnet in diagram 2.



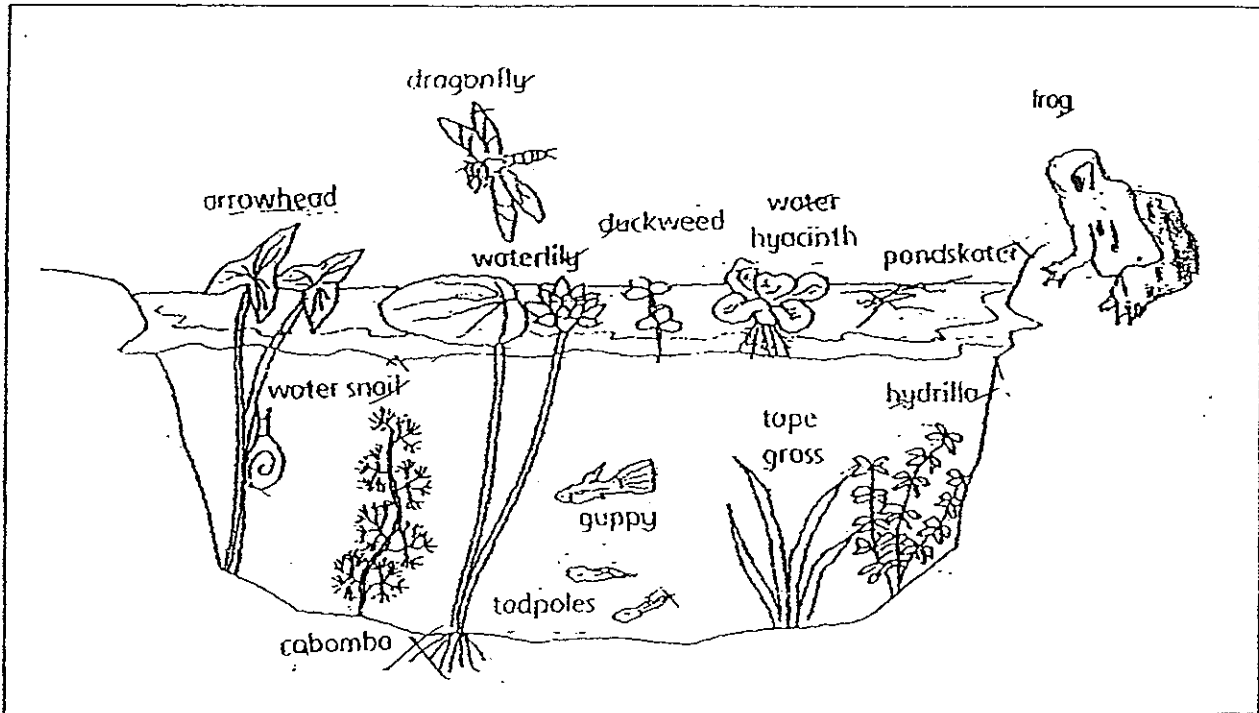
Identify the forces acting at positions A and B. (2m)

(a) _____ is present at position A.

(b) _____ is present at position B.

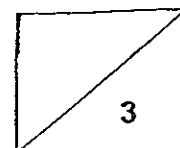


42. This is a picture of an Eco-pond.

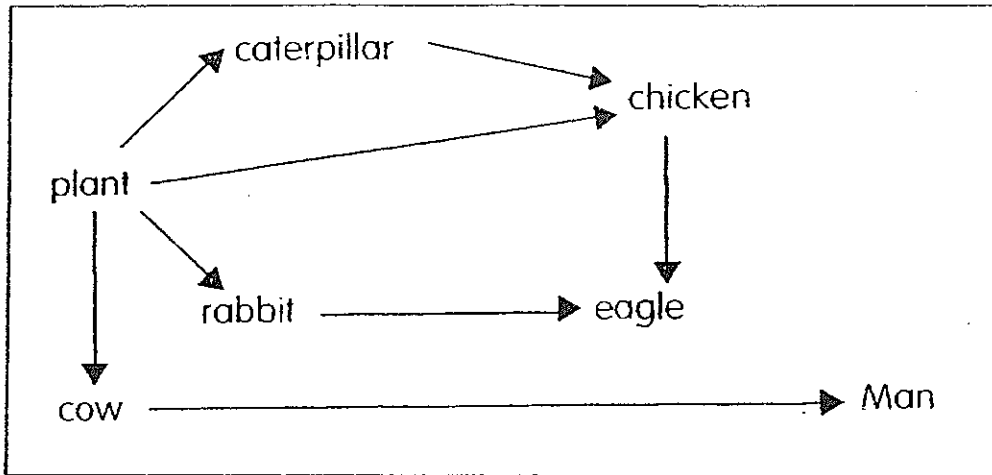


(a) How many populations of organisms can you find in the picture above? (1m)

(b) Describe the interdependence of the guppy and hydrilla found in this habitat (2m)

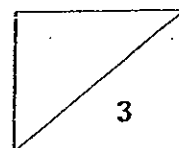


43. The following organisms are living in a community near a farm.
Use the information in the food web to answer questions 43a and 43b.

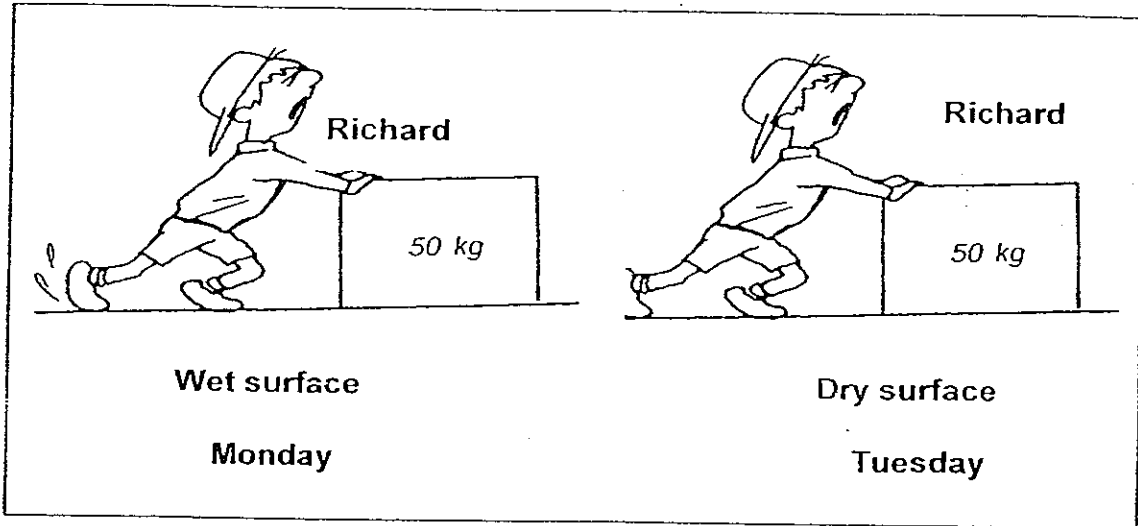


(a) State one predator – prey relationship found in the community. (1m)

(b) ~~(a)~~ If the population of caterpillar was destroyed by a disease, explain the effect on the population of chickens. (2m)

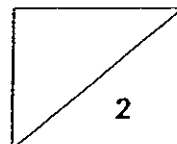


44. Richard pushed a box with the same mass two metres across a room on Monday and Tuesday as shown below.

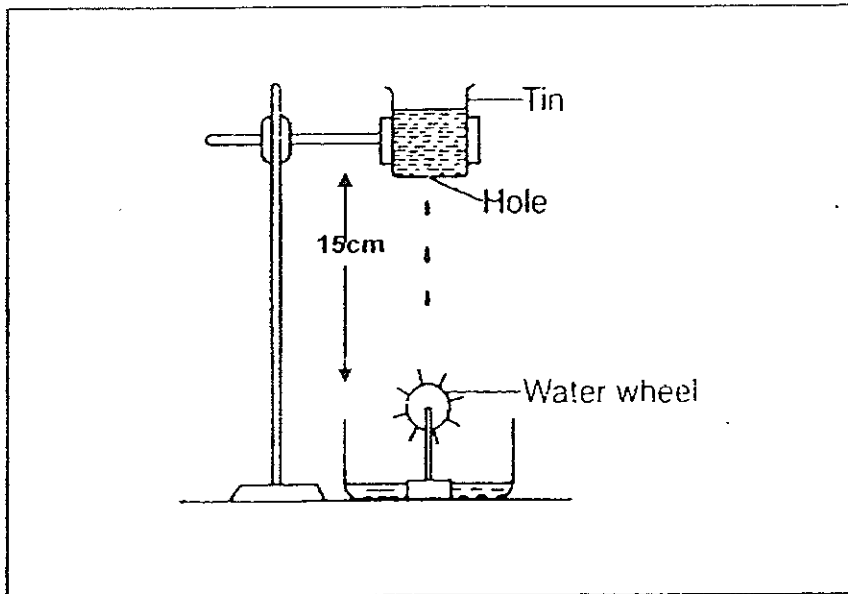


On which day will Richard apply lesser force to move the box?
Please explain your choice.

(2m)



45. Jennifer set up an experiment as shown below.
She recorded the time taken for the water wheel to spin ten rounds.

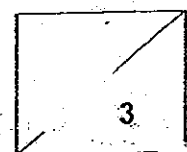


Her results are tabulated below.

Height of tin (cm)	15	20	25	30
Time taken (s)	20	15	10	5

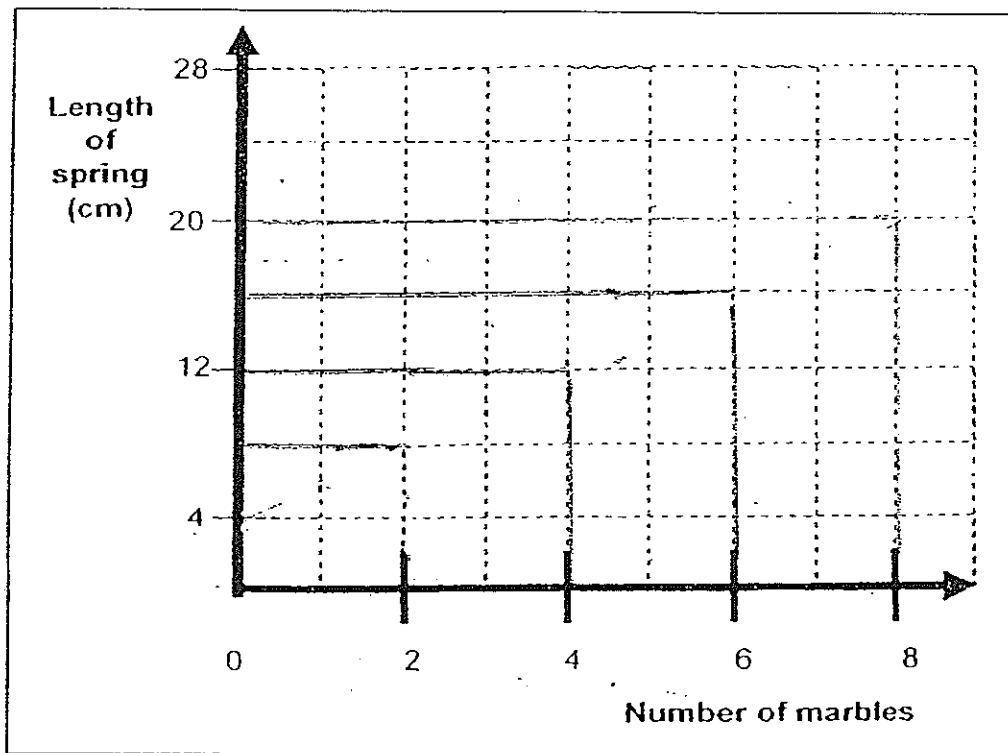
- (a) What is the relationship between the height of the tin and the time taken for the water wheel to spin ten rounds? (1m)

- (b) Give an explanation for her tabulated results. (2m)



- 46 Jasmine did an experiment to investigate about the relationship between the extension of a spring with different number of marbles. She measured the extension of the spring each time she placed different number of marbles on the pan. Her results are tabulated as shown below.

Length of spring (cm)	?	8	12	16	?
Number of marbles	0	2	4	6	8



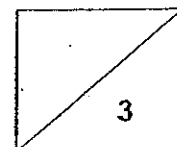
- (a) What was the original length of the spring? (1m)

The original length of the spring was _____ cm.

- (b) Based on the graph plotted, what was the length of the spring when there were 8 marbles on the pan? (1m)

The length of the spring was _____ cm.

- (c) Use the information given in the table above to plot a graph in the grid provided. (1m)



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Answer Keys

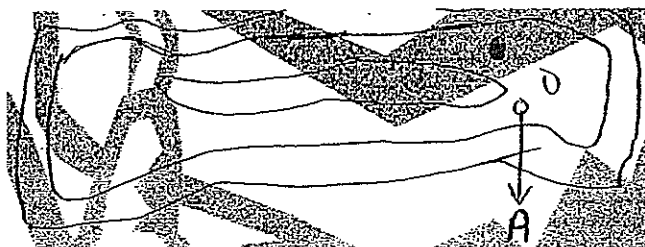
Qo.	Ans
1	2
2	3
3	1
4	4
5	2
6	3
7	4
8	3
9	2
10	3

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

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

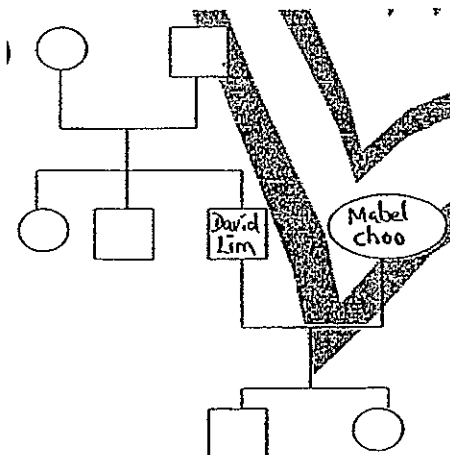
31. No, the plant has its leaves to make food.

32.

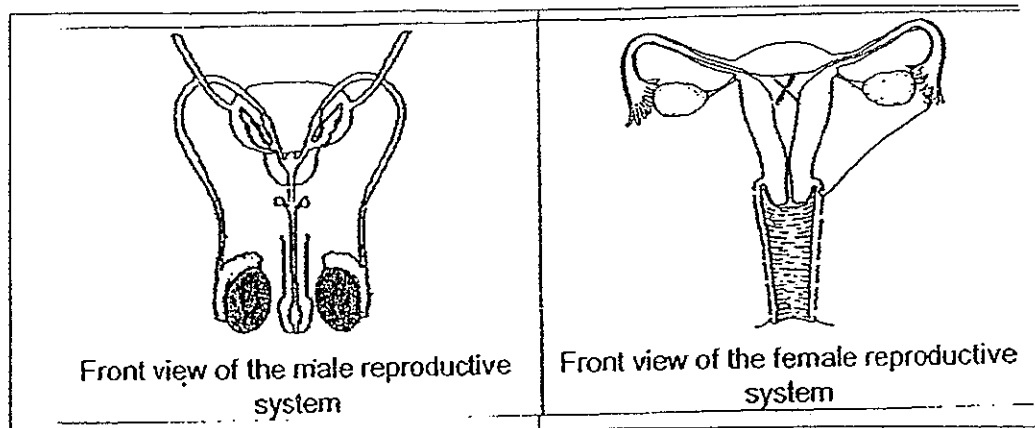


32b. No, this cell cannot be from an onion as the cell contains chloroplasts but an onion cell does not contain chloroplast because it is underground stems.

33.



34.



35a. B and O

36a. Mrs. Lim's flat

36b. She was fined as she did not cover the bamboo pole holders. When it rained, water could get into the pole holders allowing mosquitoes to breed.

37a. There is air in the cup and air occupies space

37b. Poke a hole on the bottom of the cup so that air can escape allowing the water to go in.

38a. They did that to measure the differences in distance with and without his lubricants.

38b. Mark's set up. Water reduces friction.

39a. F

39b. In a fair test only one variable should be changed. He should use the same type of container and the same amount of water.

40a. Soil D

40b. Most water enters D.

41a. Gravitational force.

41b. Repulsion force

42a. 12 populations

42b. The guppy depends on the hydrilla for oxygen to respire while the hydrilla depends on the guppy for carbon dioxide to photosynthesize.

43a. The chicken is being eaten up by the eagle.

43b. The population of chickens would decrease as it would have less food to eat.

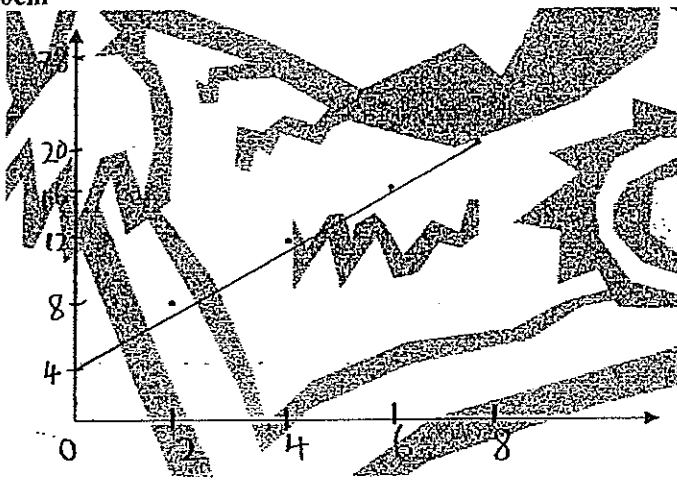
44. On Monday. He pushed the box on a wet surface so the water acts as a lubricants and reduced friction.

45a. The higher the height of the tin, the shorter is the time taken for the water wheel to spin ten rounds.

45b. When the water drops from a greater height, it has more potential energy causing the water wheel to spin faster. Hence the time taken for the water wheel to spin ten round is shorter.

46a. 4cm

46b. 20cm



46c.