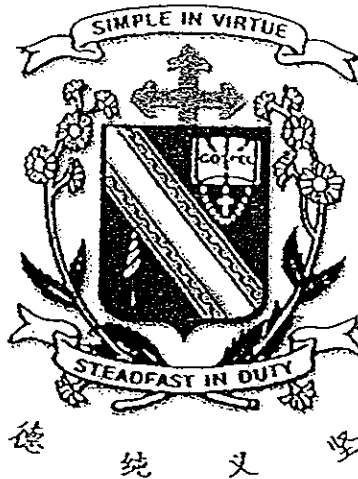


Name : _____ ()

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 5

Semestral Assessment I – 2008

SCIENCE

BOOKLET A

8th May 2008

Total Time for Booklets A and B: 1 hour 45 minutes

30 questions

60 marks

Do not open this booklet until you are told to do so.

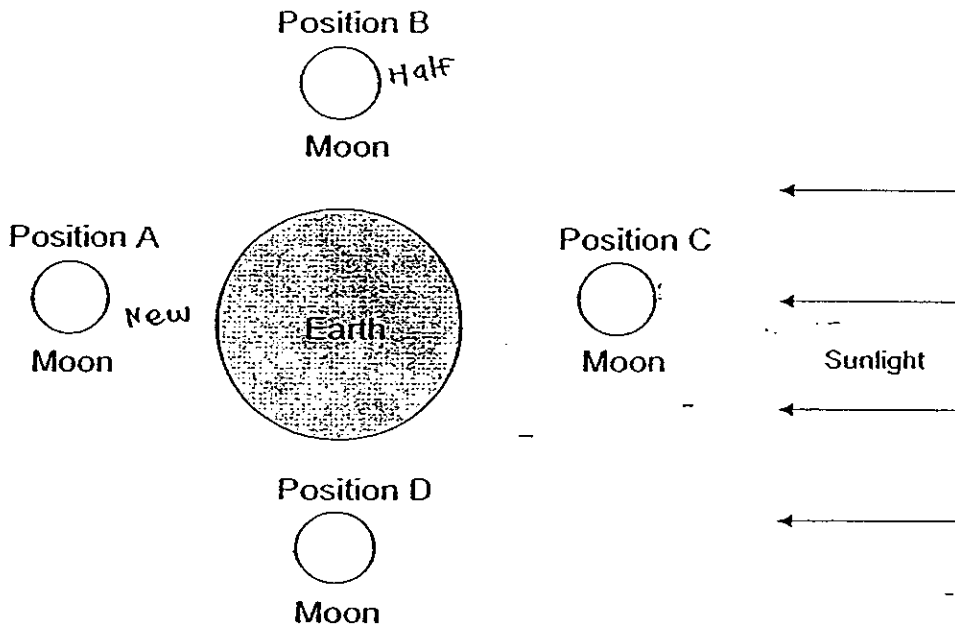
Follow all instructions carefully.

Answer all questions.

Section A : (30 x 2 marks)

For each question from 1 to 30, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. Study the diagram below carefully.



In which position(s) can you observe a half moon?

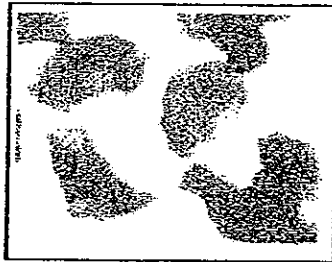
- (1) Position C only
- (2) Position D only
- (3) Positions A and C only
- (4) Positions B and D only

2. When Earth rotates one round about its axis,

- A: the tides will change.
- B: the people on earth will experience one year.
- C: the people on earth will experience day only.
- D: the people on it will experience a complete day and night cycle.

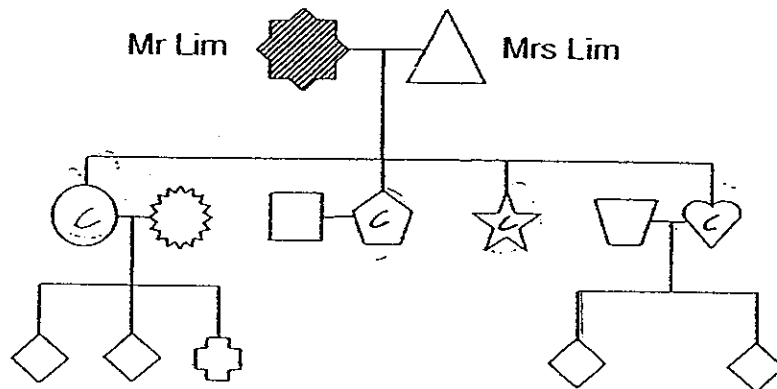
- (1) A only
- (2) C only
- (3) D only
- (4) A and B only

3. Jovita wants to use the microscope to observe her cheek cells. However, the image she sees from the eyepiece is not very clear.



What should Jovita do in order to see the specimen more clearly?

- (1) Adjust the light source to dim the light.
 - (2) Turn the fine focus knob to focus the image.
 - (3) Switch off the microscope and let it cool for a while.
 - (4) Change the objective lenses to one with higher magnification.
4. Study the family tree of Mr Lim as shown below.



Mr and Mrs Lim have four children. They have two sons who are married. One of them has three children while the other has none. One of their daughters is married and has two sons.

Which one of the following symbols represents their son who has no children?

- (1)
- (2)
- (3)
- (4)

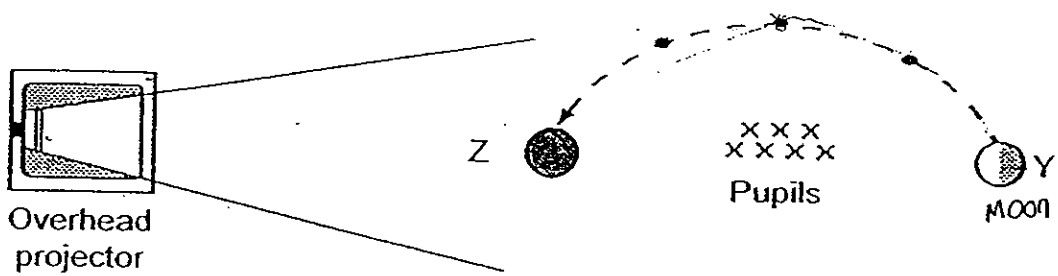
5. Study the table below carefully.

	Revolves around the Sun with the Earth	Is a natural satellite
A	Yes	Yes
B	No	No

What can A and B be?

	A	B
(1)	Mars	Venus
(2)	Venus	Moon
(3)	Moon	Star
(4)	Saturn	Neptune

6. Look at the diagram below.

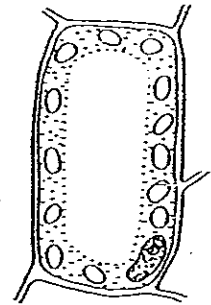
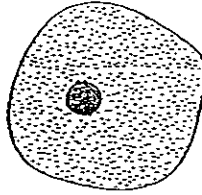
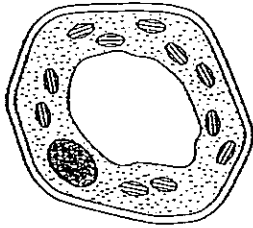


The ball represents the Moon and the pupils represent the people on Earth. Robin is holding the ball at Y and he is going to walk slowly in semi-circular direction from Y to Z.

What will the shape of the Moon be at position Z?

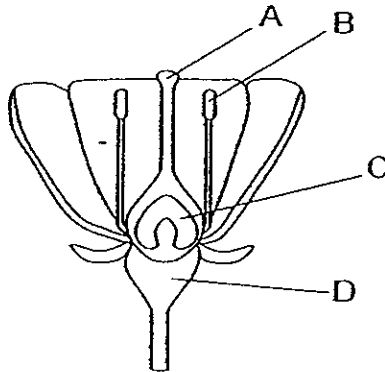
- (1)
- (2)
- (3)
- (4)

7. The diagram below shows three different cells.



Which two parts are found in all the above cells?

- (1) Cell wall and cytoplasm
 - (2) Cytoplasm and chloroplast
 - (3) Cell membrane and cell wall
 - (4) Cell membrane and nucleus.
8. The diagram below shows the flower of a plant.



In which part of the flower does the process fertilisation take place?

- (1) A
 - (2) B
 - (3) C
 - (4) D
9. Yuki's mass was 450g when she was born. Her mass increased to 1000g in two weeks time. Which of the following would have contributed to the increase in mass?

A: Cell damages
 B: Growth of cells
 C: Cell division

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

10. Kelly examined three cells under a microscope and recorded her observations in the table below.

Parts of a cell	Cell A	Cell B	Cell C
Nucleus	Present	Present	Absent
Cell wall	Present	Present	Absent
Chloroplast	Present	Absent	Absent
Cytoplasm	Present	Present	Present

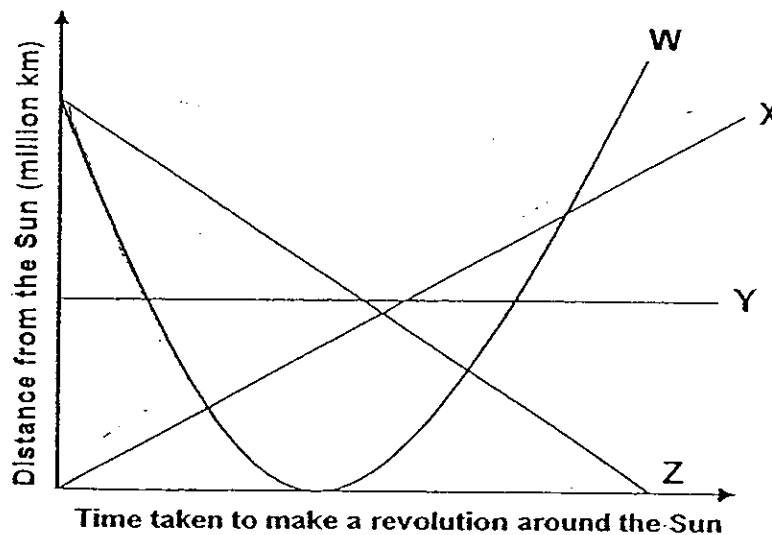
Which of the following matches Cells A, B and C respectively?

	Cell A	Cell B	Cell C
(1)	A leaf cell	A carrot cell	A human's red blood cell
(2)	A leaf cell	A carrot cell	A cheek cell
(3)	A cheek cell	A human's red blood cell	A leaf cell
(4)	A carrot cell	A cheek cell	A white blood cell

11. Look at the table below.

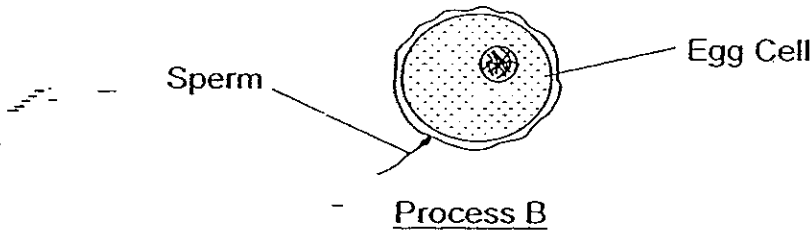
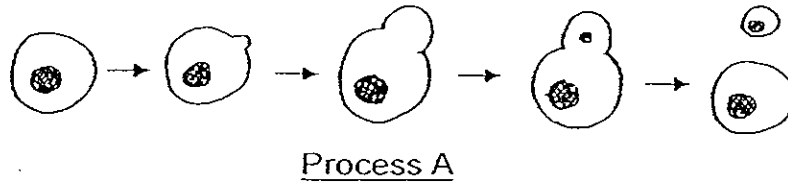
Planet	Earth	Jupiter	Neptune
Distance from the Sun (Million km)	150	778	4500
Time taken to make a revolution around the Sun	365 $\frac{1}{4}$ days	12 years	165 years

Which one of the following line best represents the relationship between the distance from the Sun and the time taken for the planet to make one revolution?



- (1) W
 (2) X
 (3) Y
 (4) Z

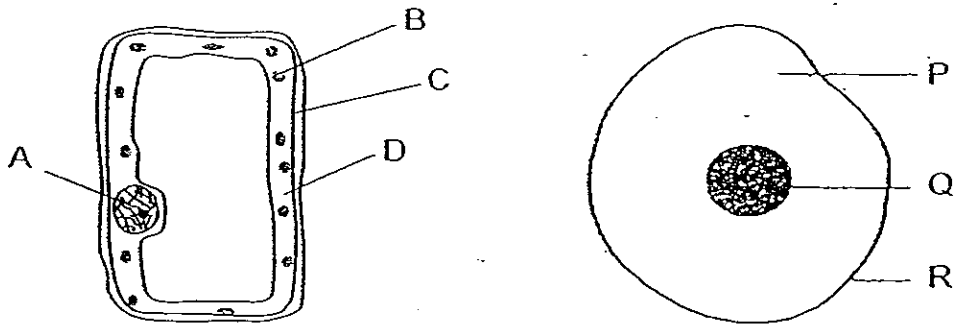
12. Look at the following processes carefully.



What are the two processes taking place in the diagram shown above?

	Process A	Process B
(1)	Budding	Fertilisation
(2)	Fertilisation	Cell division
(3)	Cell division	Budding
(4)	Budding	Cell division

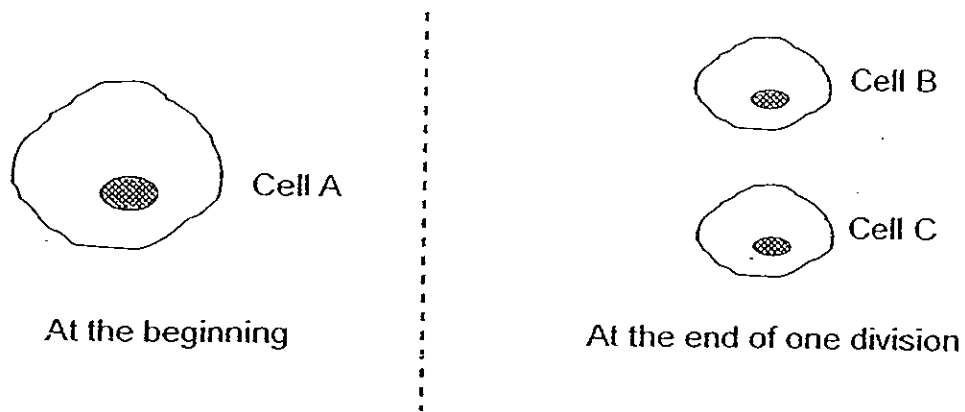
13. The two cells shown below are examined under a microscope.



Which one of the following parts has similar functions?

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

14. In the diagram below, a paramecia cell A divides to form two new cells, B and C.



If there were 4 paramecia at the beginning, how many cell divisions would have occurred if 64 paramecia were observed after some time?

- (1) 3
- (2) 4
- (3) 5
- (4) 6

15. A particular microscope has the following components:

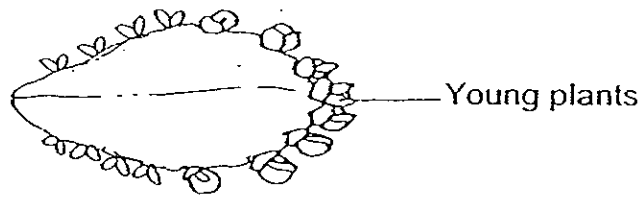
Component	Magnifying Power
Eyepiece A	5 X
Eyepiece B	10 X
Objective Lens P	10 X
Objective Lens Q	20 X
Objective Lens R	100 X

Joryn was given a specimen which can only be viewed fully and clearly between magnifications of 200 X and 300 X.

Which of the following set of eyepiece and objective lens should ^{Joryn} ~~Nicole~~ choose in order to view the specimen clearly?

	Eyepiece	Objective Lens
(1)	A	R
(2)	A	P
(3)	B	Q
(4)	B	P

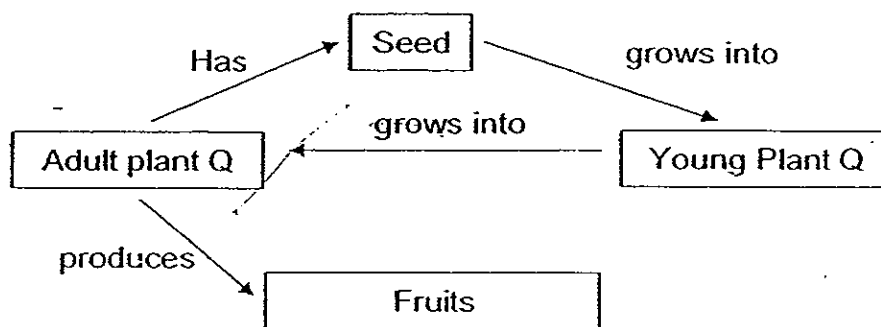
16. Bala plucked a leaf from a life plant as show below.



Based on the diagram of the leaf above, which one of the following statements is true?

- (1) The leaf can only produce one plant at a time.
- (2) The leaf must be fertilised before it can produce young plant.
- (3) All the young plants on the leaf do not have the same characteristics.
- (4) The young plants have the same characteristics as the plant from which the leaf was plucked.

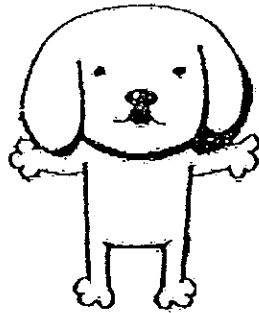
17. Study the concept map of plant Q below.



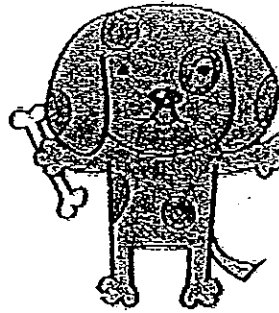
Based on the diagram above, which one of the following statements is definitely correct?

- (1) It is a flowering plant.
- (2) The fruits are in clusters.
- (3) The fruit has many seeds.
- (4) It can reproduce by spores.

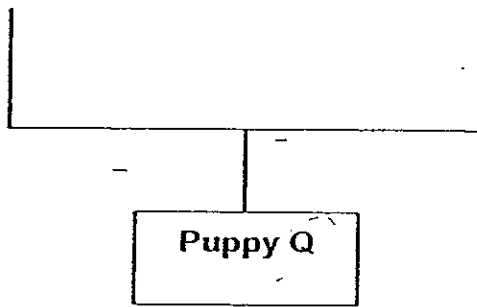
18. Study the picture below.



Mother Dog

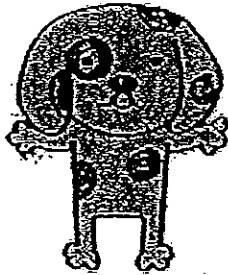


Father Dog

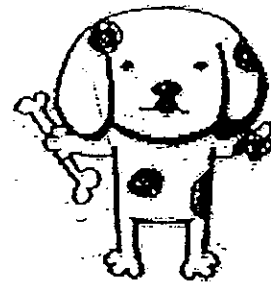


Which one of the following puppy is most probably not puppy Q?

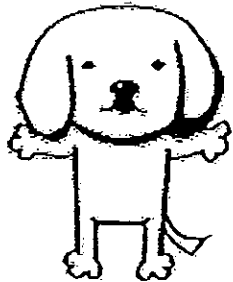
(1)



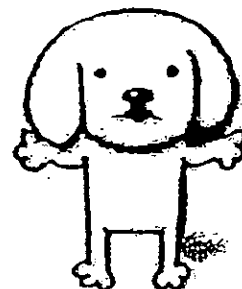
(2)



(3)



(4)



19. Which one of the following animals' method of reproduction is different from the others?

- (1) Turtle
- (2) Rabbit
- (3) Hamster
- (4) Blue Whale

20. Which one of the following fruits or seeds is scattered by water?

- (1) Chilli
- (2) Shorea
- (3) Balsam
- (4) Pong pong

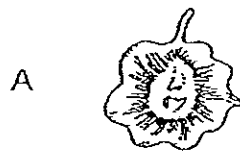
21. Which of the following statements about the reproduction in animals are correct?

- A: Sperms are produced by male animals.
- B: Usually one egg is fertilised by many sperms.
- C: After fertilisation, the egg will grow and develop into young animals.
- D: Fertilisation always takes place while the egg is still inside the body of the female animal.

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

contains seeds → fruit

22. Look at the diagram below.



Angsana



Papaya



Shorea



Chilli

Which of the above plant parts are fruit?

- (1) A and C only
- (2) B and D only
- (3) A, B and D only
- (4) All of the above

23. Sally has a pair of identical twin friends, Ray and Ryan. Sally made some comments about her friends. Which one of the following comments she made is most likely true?

- (1) Their parents are twins too.
- (2) Both of them have blue eyes.
- (3) Both of them will have identical twin offspring too.
- (4) Their parents must have the same hair colour as both of them.

24. Which of the following animals fertilised their egg internally?

A: Toads

B: Cats

C: Bats

D: Molly

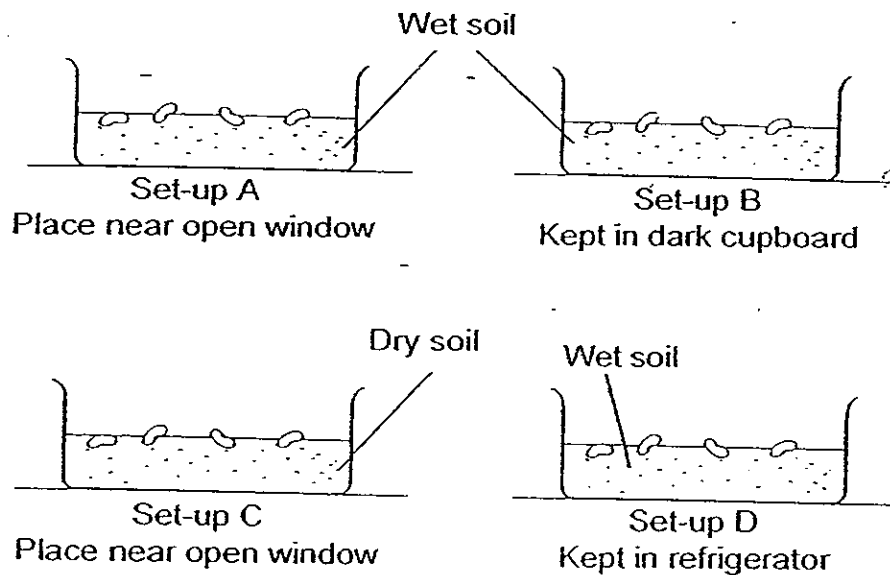
(1) A only

(2) A and C only

(3) B and D only

(4) B, C and D only

25. The following experiments were set up by four groups of children to compare the growth of seeds.



In which of the above set-ups will the seeds germinate?

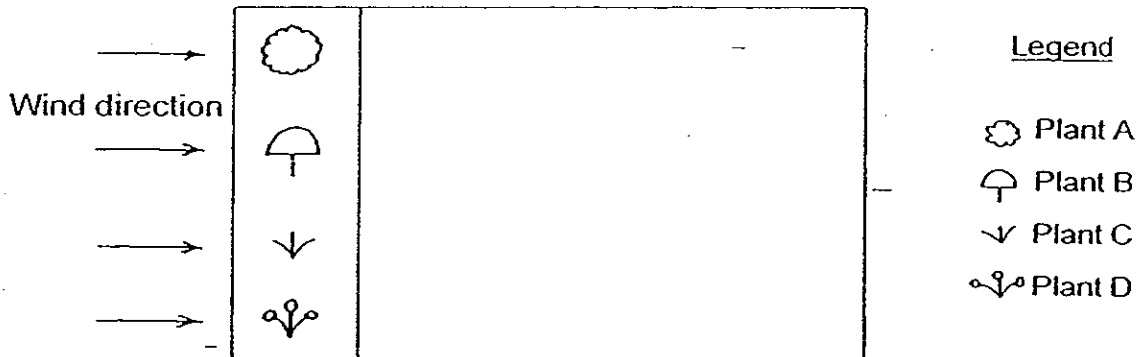
(1) Set-up A only

(2) Set-ups A and B only

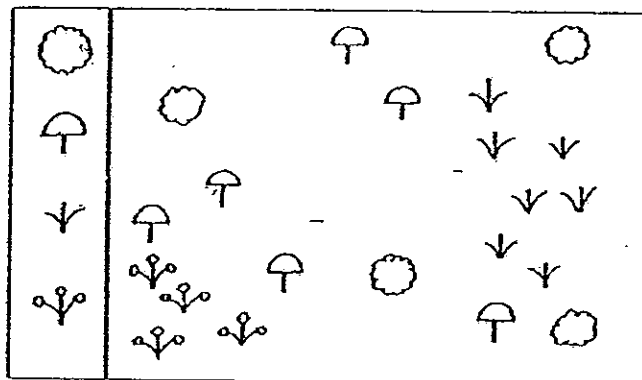
(3) Set-ups A and C only

(4) Set-ups B and D only

26. John weeded the garden at the back of his house and killed all the weeds except for four plants growing on one side of his garden. He was away for a month. During the time he was away, the wind always blew in the direction shown below.



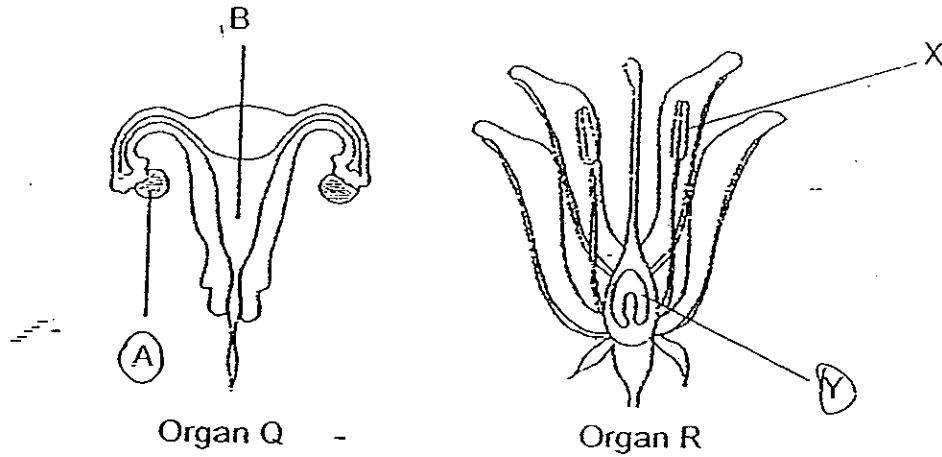
When John returned, he saw some young plants growing in his garden as shown in the diagram below.



Which one of the following plants probably have seeds that are scattered by explosive action?

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

27. Study the diagram below carefully.



Where are the female sex cells of the two reproductive organs?

- (1) A and X
- (2) A and Y
- (3) B and Y
- (4) B and X

28. Which of the following statements about the reproduction of flowering plants and animals is/are correct?

- X: Fertilisation can occur externally for all flowering plants.
- Y: Some flowers contain both male and female sex cells.
- Z: Fertilisation process will take place only in animals and not in flowering plants.

- (1) Y only
- (2) X and Y only
- (3) Y and Z only
- (4) None of the above.

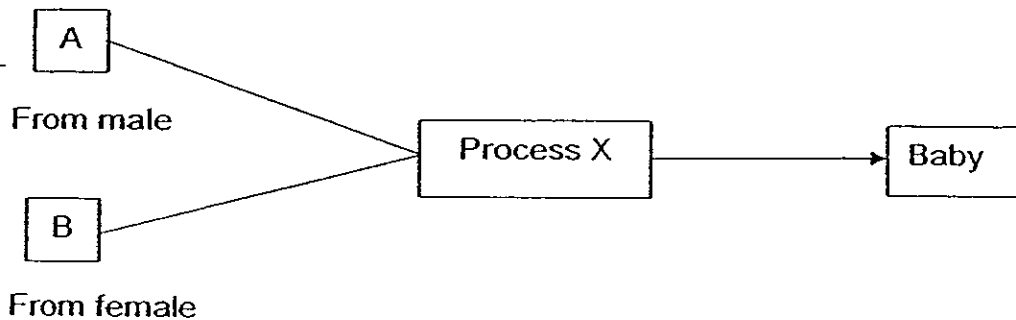
29. The following table shows different parts of the humans and plants.

	Plants	Humans
Female reproductive cell	Ovules	X
Male reproductive cell	Y	Sperm
After fertilisation	Z	Embryo

What are the missing information in the table above?

	X	Y	Z
(1)	Ovum	Style	Seeds are formed
(2)	egg	Pollen grains	Seeds are formed
(3)	Ovary	Anther	Fruits are formed
(4)	Ovum	Stigma	Seeds are formed

30. Study the diagram below.



Which of the following represents A, B and process X correctly?

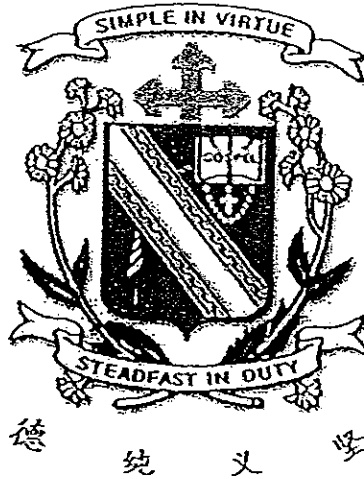
	A	B	Process X
(1)	Sperm	Egg	Gestation in the womb
(2)	Sperm	Egg	Gestation outside the womb
(3)	Ovary	Testis	Fertilisation
(4)	Ovary	Testis	Germination

***** End of Section A *****

Name : _____ ()

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 5 Semestral Assessment I – 2008

SCIENCE

BOOKLET B

8th May 2008

Total Time for Booklets A and B: 1 hour 45 minutes

16 questions
40 marks

Booklet A	60
Booklet B	40
Total	100

Do not open this booklet until you are told to do so.
Follow all instructions carefully.

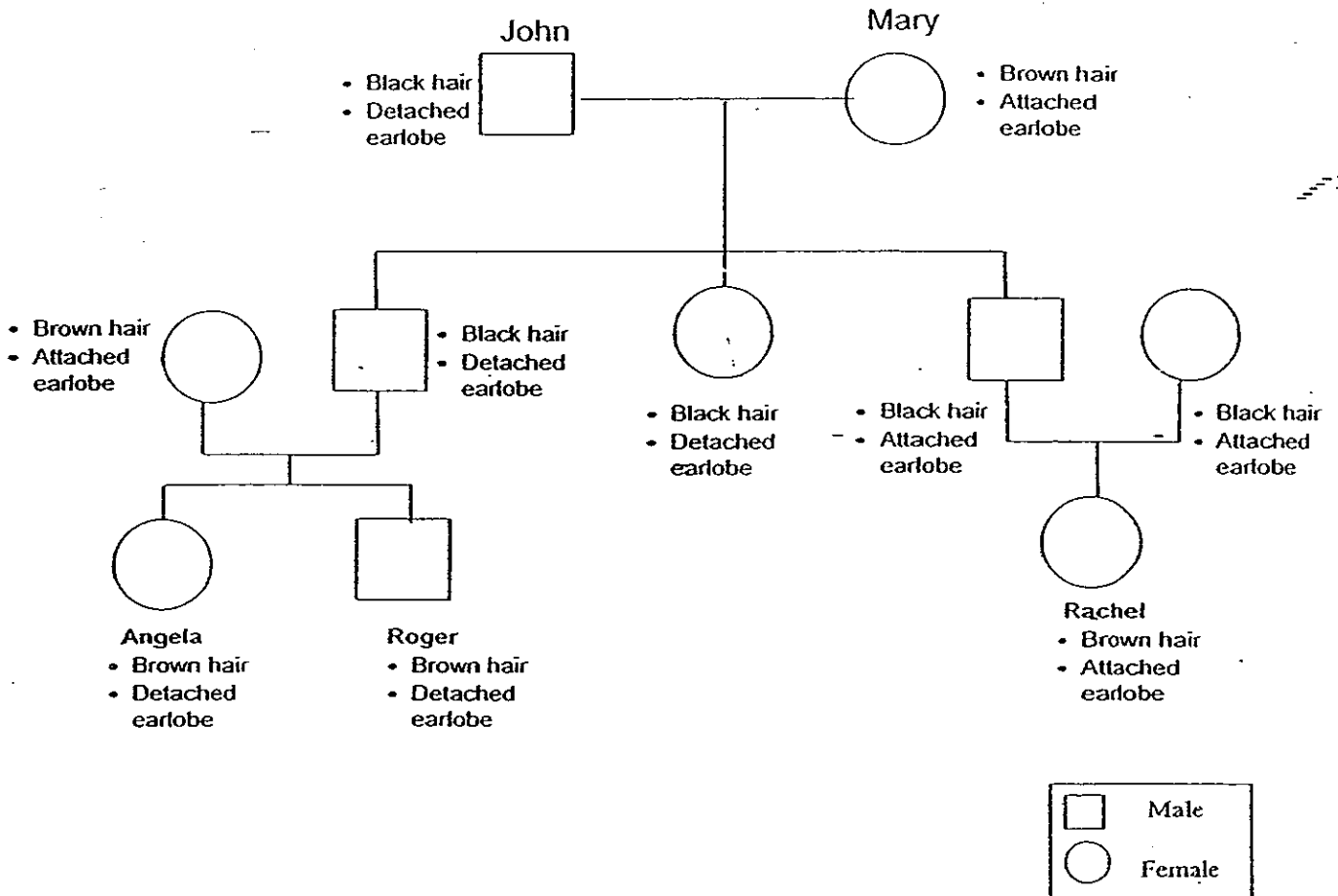
Parent's/Signature/Date

Section B : (40 marks)

For questions 31 to 46, write your answers in this booklet.

The number of marks available is shown in brackets [] at the end of each question or part question.

31. Study the family tree below.



a) How many generations are there shown in the family tree? [½m]

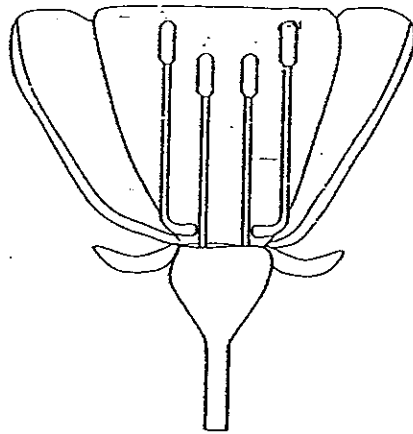
b) Based on the above family tree, who does Rachel inherit her brown hair from? [½m]

c) Which side of Roger's family tree is shown above? [1m]

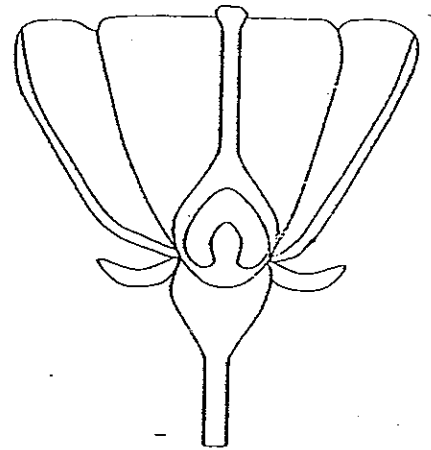


32.

The diagram below shows a cross-section of two flowers of the same species.



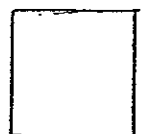
Flower X



Flower Y

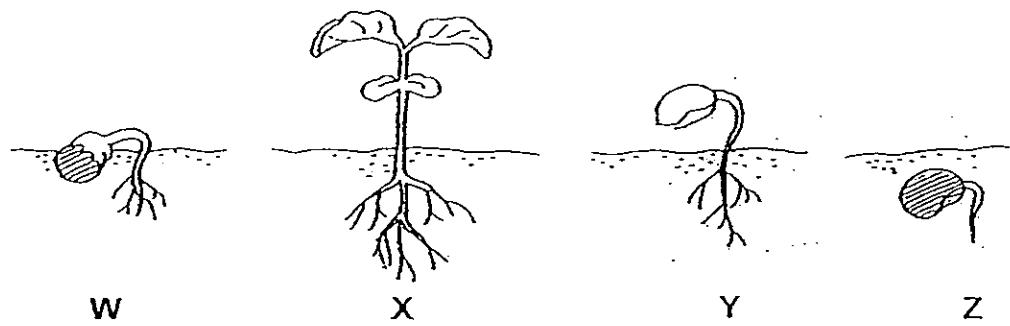
- a) Which cross-section, flowers X or Y, shows a male flower? Explain your choice. [1m]

- b) On the diagram above, draw an arrow to indicate the pollination process and label the parts involved. [2m]

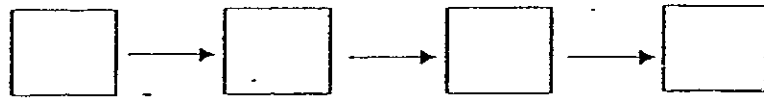


33.

Study the diagram below.



- a) Rearrange the stages (W, X, Y and Z) in the correct order to show how a seed becomes a young plant. [1m]



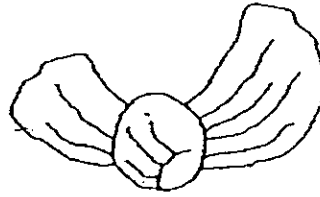
- b) Tracy wanted to grow some green beans. She placed them on some wet cotton wool and left them in a cupboard. She monitors the growth daily and realized that the growth stops at a certain stage.

At which stage W, X, Y or Z do you think she may not be able to observe continuous growth of the seedling? Explain your answer. [1m]

34.

Yusof found the seed below in a park. He sketched it on his note book and found out the mass of the seed.

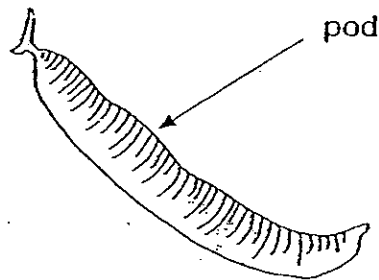
mass
0.6 g



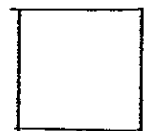
- a) What is the dispersal method of the seed Yusof found? [1m]

- b) List down two characteristics which helped him make this conclusion. [1m]

Yusof picked up another fruit show below.

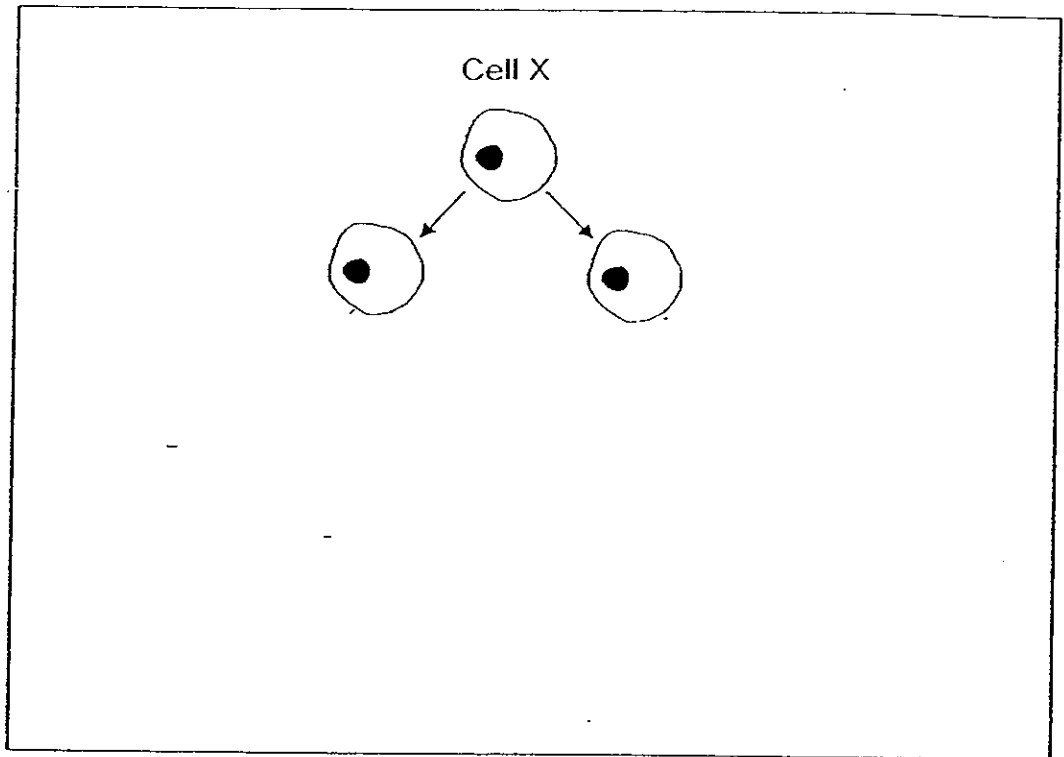


- c) What could be the possible dispersal method of this fruit? Explain your answer. [1m]

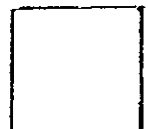


35.

Every 10 minutes, a cell divides to form two new cells as shown in the diagram below.

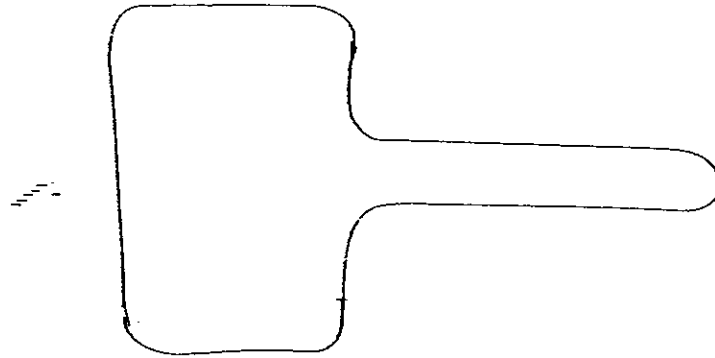


- a) Draw in the diagram above to complete the process at the end of 25 minutes assuming that there is sufficient food and water for all the cells to continue living? [1m]
- b) The cells in our body reproduce continuously. Why must cells reproduce? [1m]
-
-



36.

The diagram below shows the root hair cell of a plant.

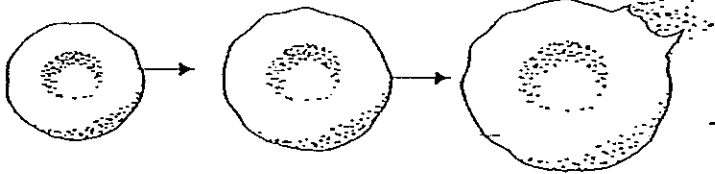
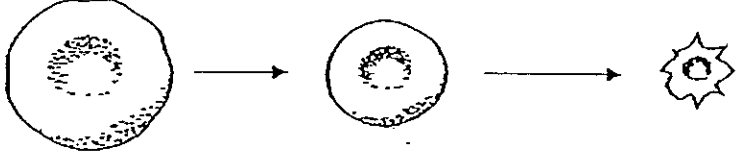


Complete the diagram by drawing and labelling all the parts clearly.
You may choose the correct helping words below to help you label the diagram. [2m]

- Nucleus
- Cytoplasm
- Chloroplast
- Cell wall
- Cell membrane

37.

Ray placed some red blood cells in two different liquids and observes them through the microscope over a period of time.

Liquid	Observation
A	
B	

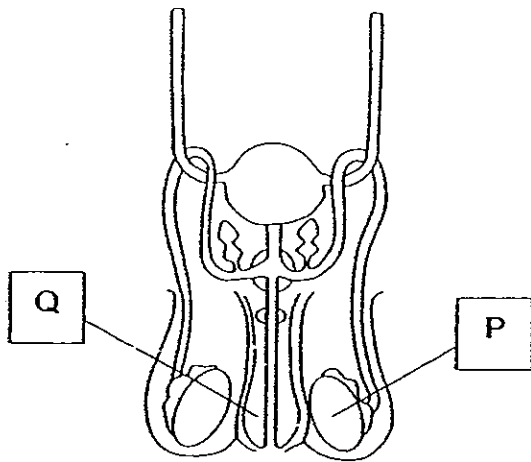
- a) Ray observed that the cells in liquid A have burst. Explain why this happens. [1m]

- b) Ray also observed that the cells in liquid B have shrunk. He concluded that the liquid in the cell came out of the cell. Explain how this is possible. [1m]

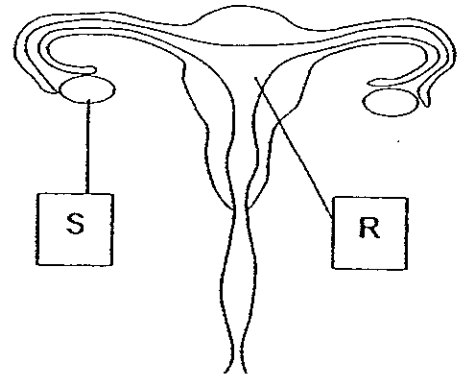


38.

The diagram below shows the female and male human reproductive system.



Front view of the male reproductive system



Front view of the female reproductive system

a) Name the parts labelled P, Q, R and S.

[2m]

P: _____

Q: _____

R: _____

S: _____

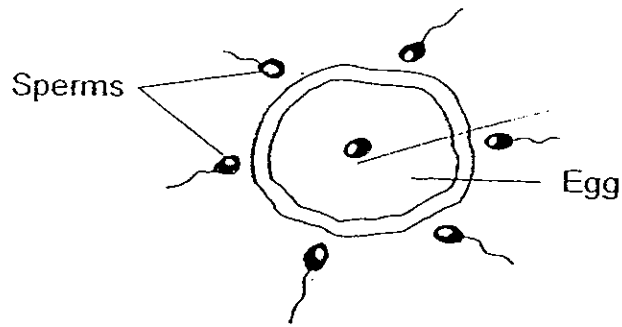
b) Will reproduction happen if both parts of P are removed? Explain your answer.

[1m]



39.

The picture below shows a process that occurs inside a female body.



a) Which part of the female body will this process happen? [1m]

b) How did the sperms enter into the female body? [1m]

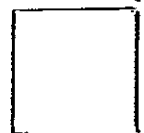
40.

Study the characteristics of 4 students shown in the table below

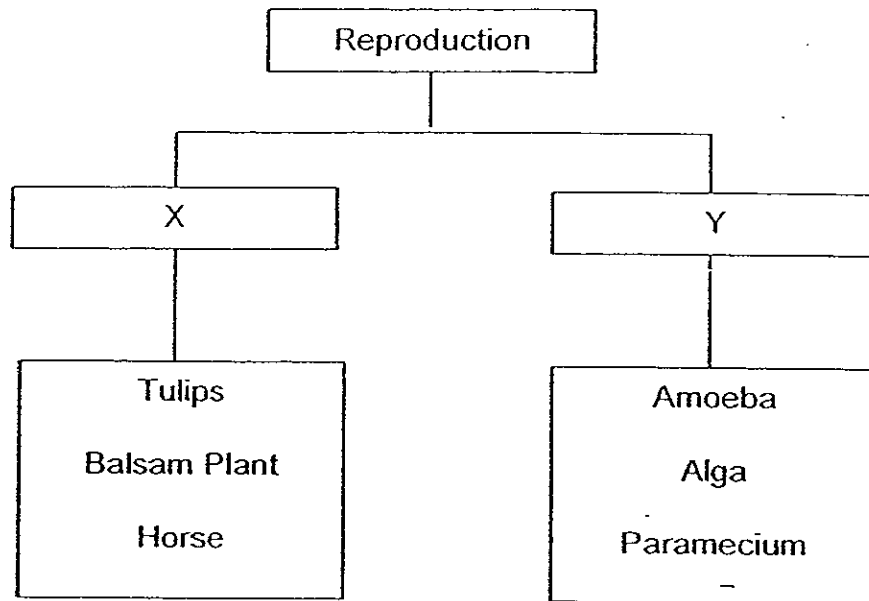
Name	Characteristics
Siti	Has long hair
Bala	Has curly hair
Susan	Has dimples
Jie Ming	Has a charming smile

a) Which student's characteristics are inherited traits? [1m]

b) If Siti perms her hair, will that be considered as a trait? Explain your answer.



41. Study the classification table below carefully.

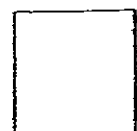


a) Write down a suitable heading for X and Y. [1m]

b) Sally wanted to add the following organisms into the chart above. Under which heading should she put each of them in? [1m]

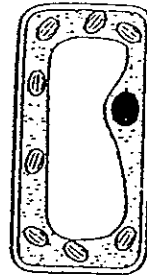
Organism	Heading
Yeast	
Human	
Cheek cell	
Lallang	

c) Different living things have different ways of reproduction. Why must living things reproduce? [1m]

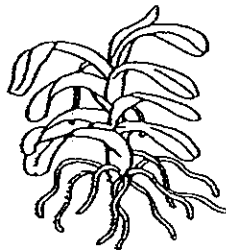


42.

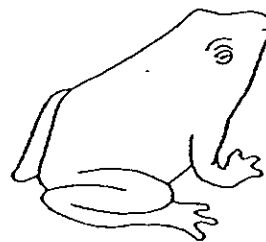
Cell Y shown below comes from one of the two Organisms, A and B.



Cell Y



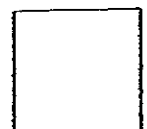
Organism A



Organism B

- a) From which organism does Cell Y come from? [½m]

- b) How did you determine your answer for (a)? [1m]



43. Kelly listed down five different types of fruits or seeds below.

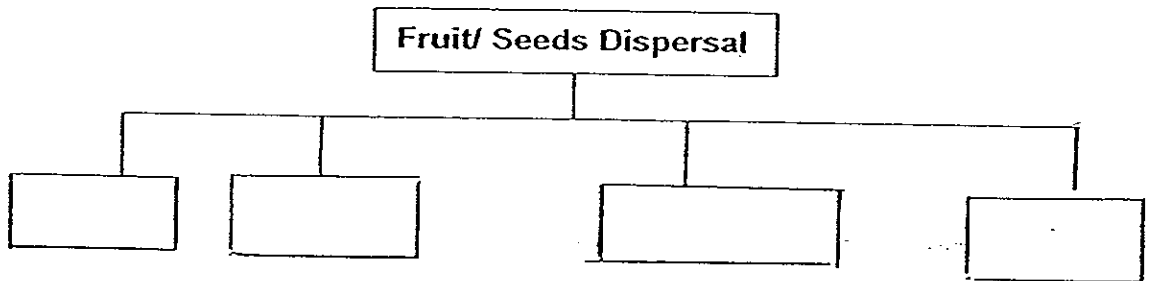
- Lotus
- Lalang
- Rubber
- Durian
- Nipah

Her teacher asks Kelly to classify them accordingly to their methods of dispersal.

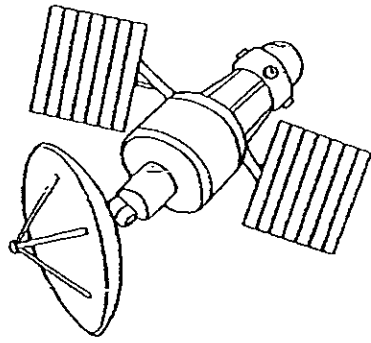
a) How many different dispersal methods will there be? [1m]

b) Why must seeds be dispersed away from the parent plant? [1m]

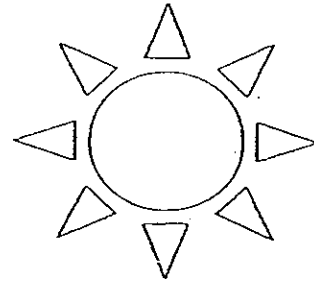
c) Using the fruits or seeds given above to complete the classification chart below. [2m]



44. Study the given object below carefully.



Object A



The Sun

a) What is object A shown in the above picture? [½m]

b) State one difference between object A and the Sun? [1m]

c) Scientist put Object A into orbit around the Earth. Give two reasons why they do so. [1m]

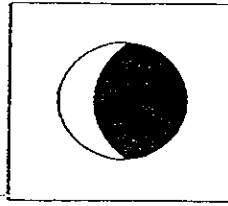
(i) _____

(ii) _____

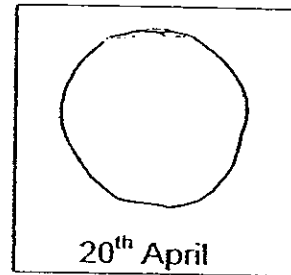
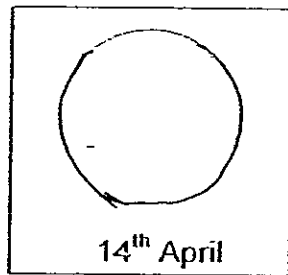


45.

The following moon phase was observed from Earth on 17th April.

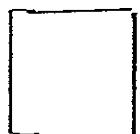


- a) In the boxes below, draw on the outline provided to show the correct sequence of the shape of the Moon observed on 14th and 20th April. [2m]



- b) An astronaut left a pot of plant on Venus and a similar one on Earth. Both plants were not water and were left outdoors. He observed that the plant on Venus dies within 2 days while the one on Earth still survive.

Explain why the plant is unable to survive on Venus but is able to survive on Earth. [2m]

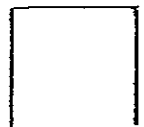


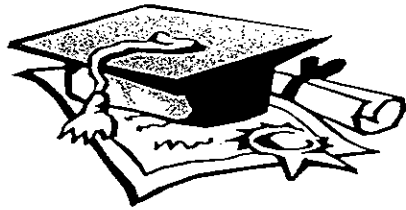
46.

State whether the following statements are true, false or not possible to tell by ticking (✓) in the correct column. [2m]

		True	False	Not possible to tell
a)	The Earth revolves around the Sun.			
b)	Earth rotates on its east-west axis.			
c)	The Sun rises from the East and sets on the West because the Earth is revolving in an anti-clockwise manner.			
d)	The shortest shadow of a lamp-pole is formed at 12 noon.			

***** END OF PAPER*****





ANSWER SHEET

EXAM PAPER 2008

SCHOOL : CHIJ PRIMARY SCHOOL
 SUBJECT : PRIMARY 5 SCIENCE

TERM : SA 1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
4	3	2	4	3	3	4	3	4	1	2	1	4	2	3	4	1
Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30				
4	1	4	1	4	2	4	2	4	2	1	2	1				

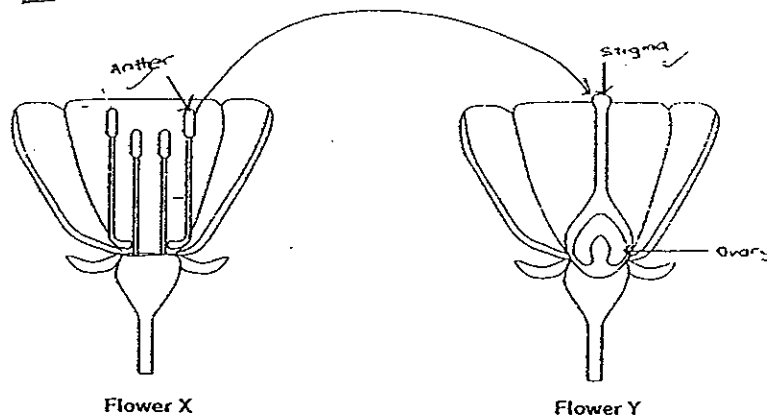
31)a)3.

b)From Mary, her grandmother.

c)Paternal.

32)a)Flower X because it had the anther which contains the reproductive cell.

b)



33)a)Z→W→Y→X

b)At these stages, the seedlings need sunlight to grow as they have leaves to make food.

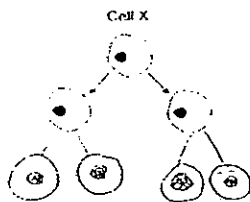
34)a)wind.

b)i)The wind-like structure.

ii)The light weight which enables the plant to float in the air.

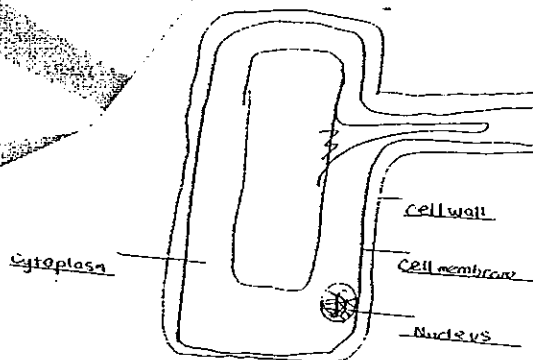
c)It will split open when it dries up.

35)a)



b)To replace old and damaged cell and for growth.

36)



37)a)Liquid A enters the cell membrane causing it to well and burst.

b)The cell membrane is partially permeable and it allows the liquid in the cells to leave.

38)a)P: Testes Q: Penis R: Womb S: Ovary

b)No. Part P is where the reproductive cell sperms is produced so if it is removed, it will not be able to produce any more sperms.

39)a)Womb.

b)The sperm is transferred through the penis to the vagina.

40)a)Susan and Bala.

b)No. If Siti's family do not have natural curly hair, we can conclude that she permed it as it is not inherited by anyone in her family.

41)a)X: Sexual reproduction. Y: Asexual reproduction.

b)Y, X, Y, X

c)To ensure the continuity of their own kind.

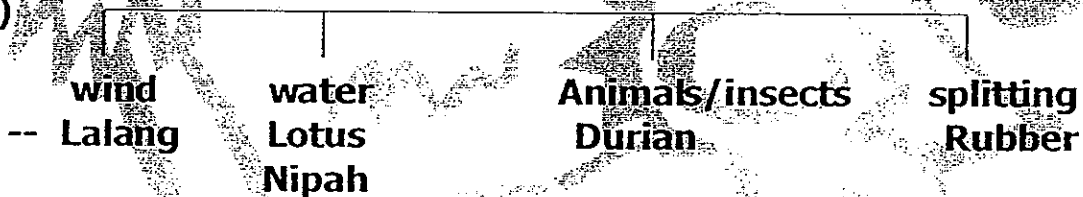
42)a)Organism A.

b)Organism A is a plant and cell Y had cell wall or chloroplast.

43)a)4

b)To prevent overcrowding.

c)



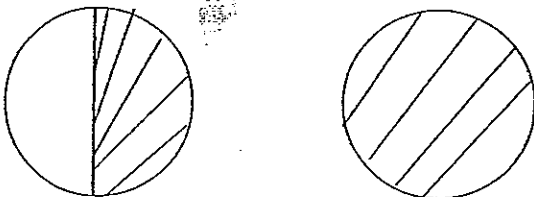
44)a)A man-made satellite.

b)The sun is a star while object A is a man-made satellite.

c)i)For communication.

ii)Space exploration.

45)a)



45)b)There is no atmosphere for the plant to survive and also the temperature will be to hot or cold for the survival of the plant.

46)a)T b)F c)T d)Not