

Name : _____ ()

Class : Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment II – 2009

SCIENCE

BOOKLET A

2nd October 2009

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

30 questions
60 marks

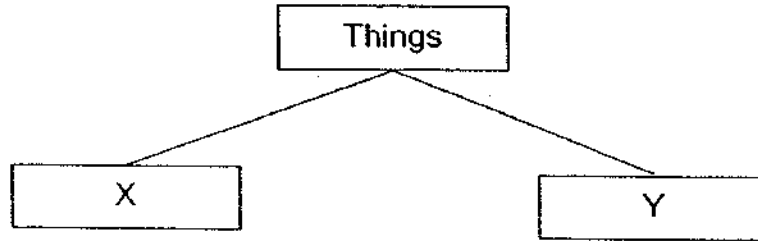
Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

This booklet consist of 16 printed pages.

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 answer (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. We can use the following chart to group all the things around us into two broad groups, X and Y.



What do X and Y represent?

	X	Y
(1)	Animals	Plants
(2)	Living things	Non- living things
(3)	Live on land	Live in water
(4)	Things that are smooth	Things that are rough

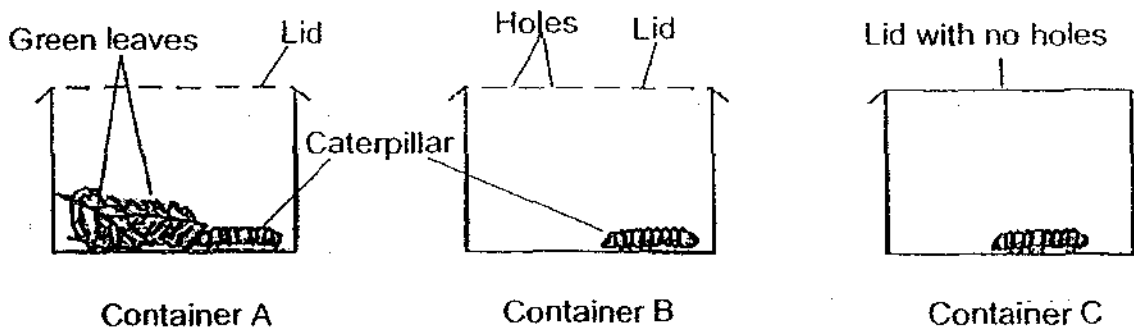
2. Study the table below carefully.

Group A	Group B
<ul style="list-style-type: none"> • Need food • Move away when touched • Increase in mass and size 	<ul style="list-style-type: none"> • Do not need food • Do not respond to touch • Do not increase in mass or size

Which one of the following sets of grouping ~~represents~~ Groups A and B?

	Group A	Group B
(1)	Crow	Butterfly
(2)	Towel	Water bottle
(3)	Land animals	Sea animals
(4)	Earthworm	Storybook

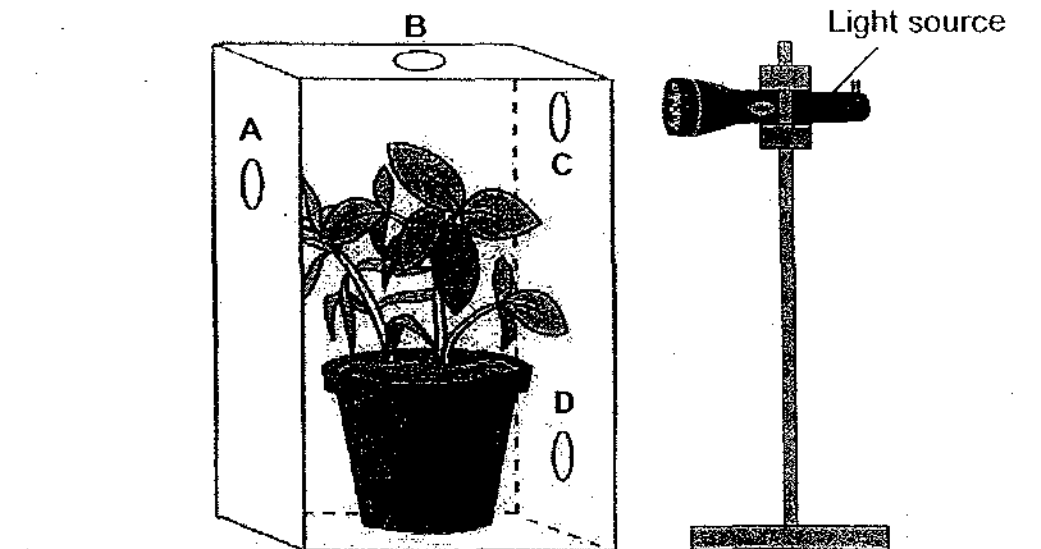
3. Prachi put a caterpillar into each of the three containers A, B and C and left them near an open window as shown below.



Which container(s) will have a caterpillar that would still be alive after one week?

- (1) Container A only
 (2) Container B only
 (3) Containers A and B only
 (4) Containers B and C only
4. Which of the following statements best explain why plants **do not** need to move around much or quickly?
- A They ~~need air, food and water.~~
 B They ~~take in oxygen and food.~~
 C They ~~are able to respond to changes in their environment.~~
 D They are ~~able to obtain some of their needs from the soil.~~
- (1) D only
 (2) A and B only
 (3) A and C only
 (4) B and D only




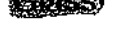
5. A potted plant was placed in a thick cardboard box with four holes at the sides with a light source at one of the holes as shown in the diagram. The cardboard box was then placed in a dark room. Which one of the holes would the plant most likely grow towards after one week?



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

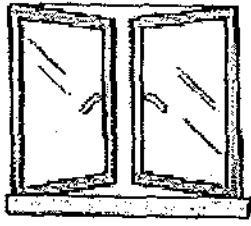
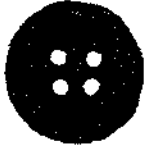


6. Which of the following materials are **not** commonly used for making school bags for young children?



- A 
 B 
 C 
 D 

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

7. Which of the following objects are made with more than two types of materials?

<p>(A)</p>  <p>Window pane</p>	<p>(B)</p>  <p>Button</p>
<p>(C)</p>  <p>Rain boots</p>	<p>(D)</p>  <p>Umbrella</p>

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

8. The picture below shows a raincoat.

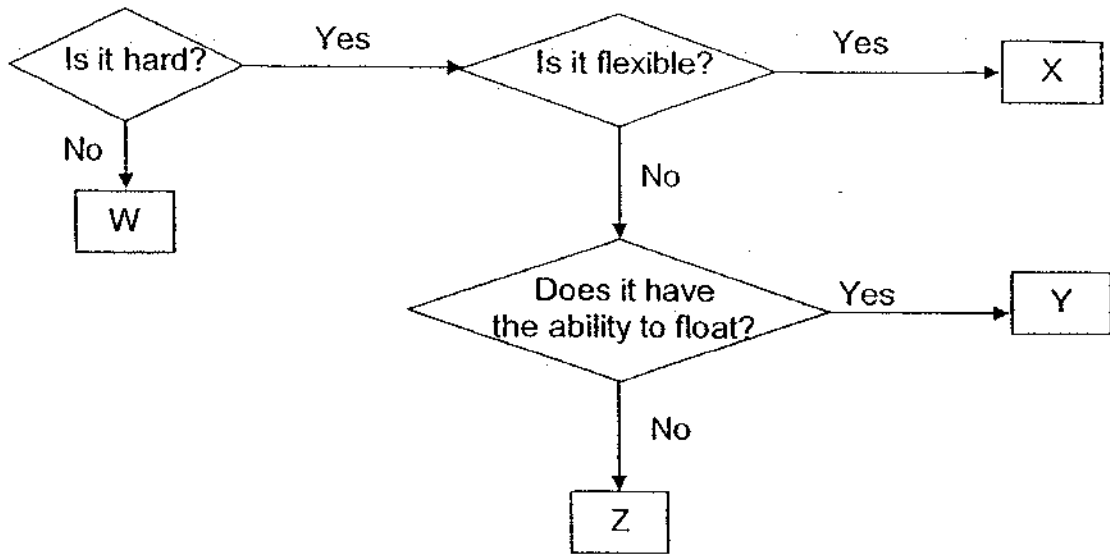


What properties must be considered when choosing a suitable material to make the part labelled X?

- A ~~Flexibility~~
- B ~~Waterproof~~
- C ~~Ability to see through~~
- D ~~Ability to hold in water~~

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

9. Study the flow chart carefully.



Which one of the following objects can be placed at 'Y'?

- (1) A ~~skateboard~~
- (2) A ~~ceramic plate~~
- (3) A ~~block of wood~~
- (4) A ~~piece of paper~~

10. Abigail observed that a kettle is made up of a few different types of materials. She made some comments on the reasons why these materials are used.



Which one of the following comments Abigail made is correct?

	Handle of Kettle	Body of Kettle
X	It is made of rubber as it will not feel hot when you hold it.	It is made of metal as metal is waterproof
X	It is made of plastic as plastics can withstand heat.	It is made of metal as metal can heat up the water faster.
X	It is made of ceramics as ceramics can withstand heat.	It is made of metal as metal is waterproof.
X	It is made of metal as metal can heat up the water faster.	It is made of ceramics as ceramics is waterproof and can withstand heat.

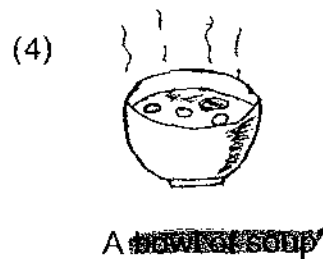
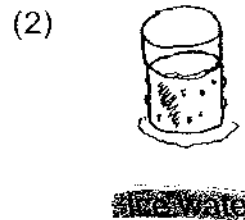
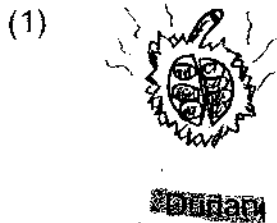
11. Which of the following parts belong to the skeletal system only?

- (1) ~~Ribs, bones, skull~~ ✓
- (2) ~~Muscle, bone, skull~~ ✗
- (3) ~~Skull, stomach, teeth~~ ✗
- (4) ~~Muscle, stomach, gutlets~~ ✗✗

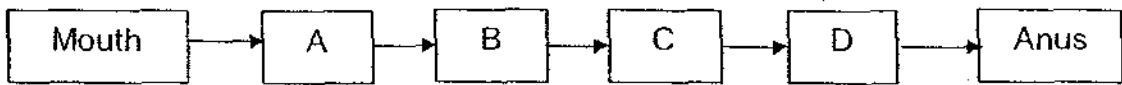
12. Juanita was blindfolded to do a smell test. Some objects were placed in front of her.



Which one of the following objects will she **not** be able to know if she is not allowed to touch and taste?



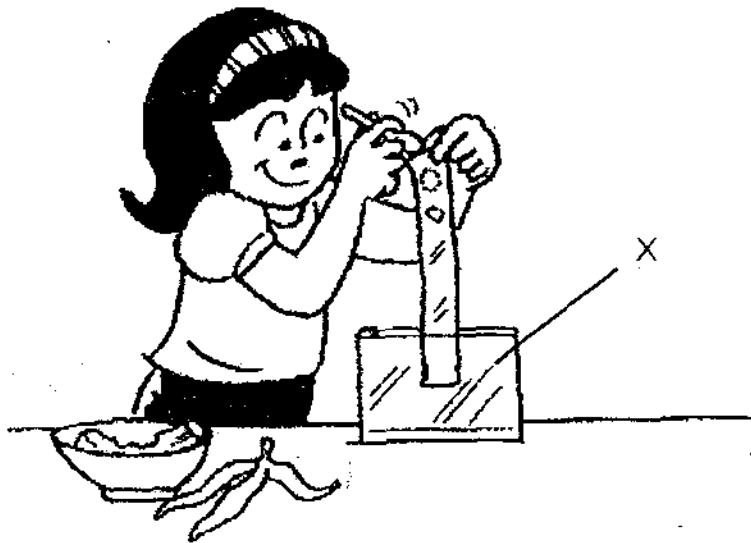
13. Karen ate a hamburger for lunch. The burger she ate would take the following pathway.



Which one of the following groups of organs could A, B, C and D be respectively?

	A	B	C	D
(1)	Gullet	Stomach	Large Intestine	Small Intestine
(2)	Gullet	Stomach	Small Intestine	Large Intestine
(3)	Windpipe	Stomach	Small Intestine	Large Intestine
(4)	Windpipe	Small Intestine	Stomach	Large Intestine

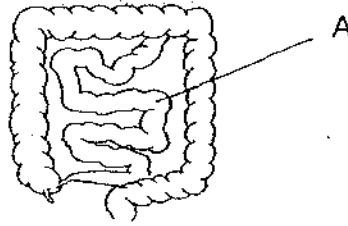
14. Nadia set up the following to simulate the digestive system.



What does the part labelled 'X' represent?

- (1) ~~Esophagus~~
 (2) ~~Intestine~~
 (3) ~~Stomach~~
 (4) ~~Stomach~~

15. The diagram below shows part of the human digestive system. Which of the following activities take(s) place in A?



- A ~~Storage of undigested food.~~
- B ~~Breakdown of food into simple substance.~~
- C ~~Absorption of water from the undigested food.~~
- D ~~Absorption of digested food into the blood stream.~~

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

16. The table below shows the characteristics displayed by four animals, A, B, C and D.

Animals	Has 4 legs	Body covered with hair	Can live in the water	Give birth to young alive
A	Yes	No	Yes	Yes
B	No	No	Yes	No
C	Yes	Yes	No	Yes
D	Yes	No	Yes	No

Which one of the animals, A, B, C or D, is a turtle?

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

17. The picture below shows a sweet corn.

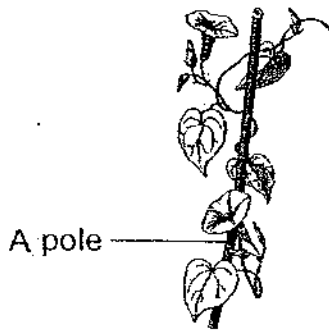


Which of the following statements correctly describe the sweet corn?

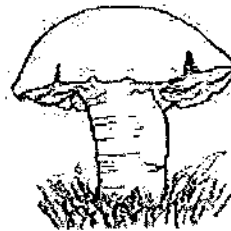
- A It is a ~~fruit~~
- B It ~~grows~~ on leaves around it
- C It needs ~~sunlight to make food~~
- D It ~~grows from a flowering plant~~

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

18. The pictures below show 2 organisms, X and Y.



Organism X



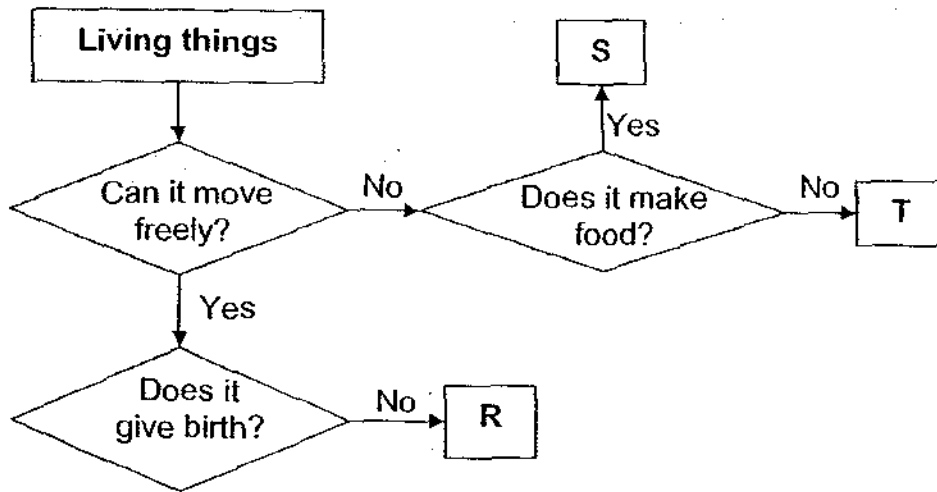
Organism Y

Which of the following correctly describe the difference between X and Y?

	Organism X	Organism Y
A	can bear flowers	can bear flowers
B	can make food	can make food
C	stands on its own	stands on its own
D	grows in a vertical position.	Can grow from place to place

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

19. Study the flow chart below carefully.



Which one of the following groups of organism best represents the letters, R, S and T respectively?

	Organism R	Organism S	Organism T
(1)	Molly	Ixora	Fern
(2)	Guppy	Coconut tree	Mushroom
(3)	Lizard	Ginger	Toadstool
(4)	Crocodile	Toadstool	Bread mould

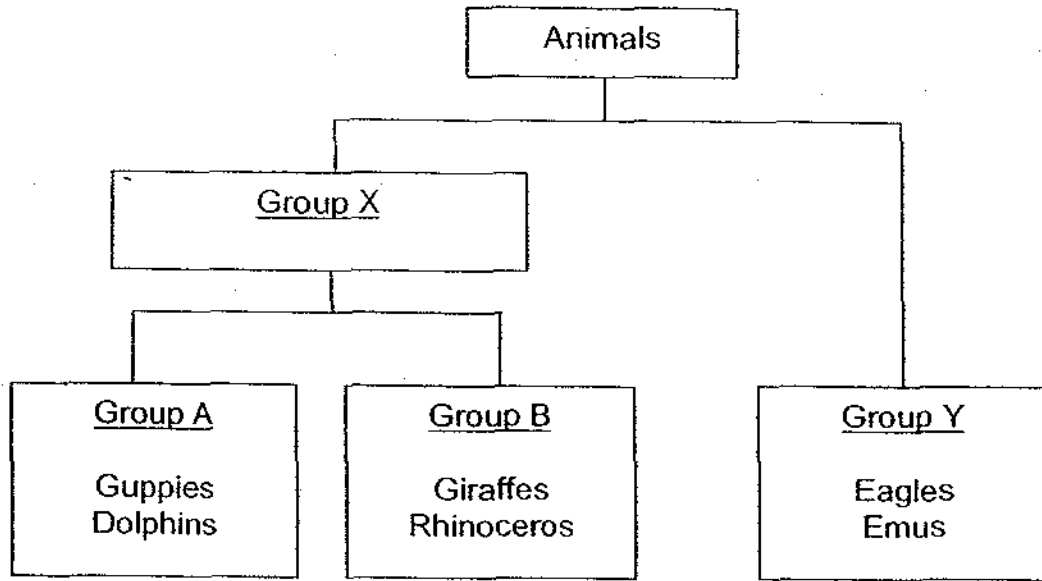
20. Michael observed two animals, P and Q from ^{his} garden. He drew a checklist and placed a tick (✓) in the box when he made the observation. The completed checklist is as follows:

Observation	Animal P	Animal Q
It has long legs .	✓	
It is a mammal .		✓
It can fly .	✓	✓

Which one of the following statements is likely to be false?

- (1) Animal Q is a ~~bird~~.
- (2) Animal P has ~~long legs~~.
- (3) Animal P is an ~~insect~~.
- (4) Animal Q does ~~not fly~~.

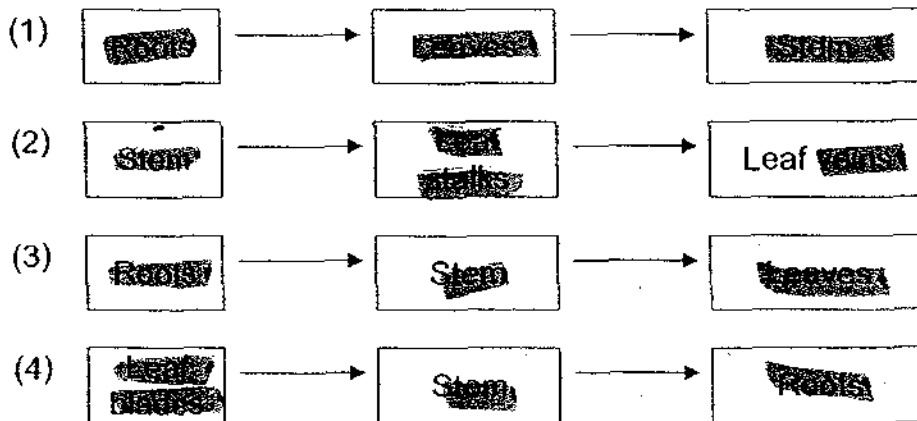
21. Study the classification chart below carefully.



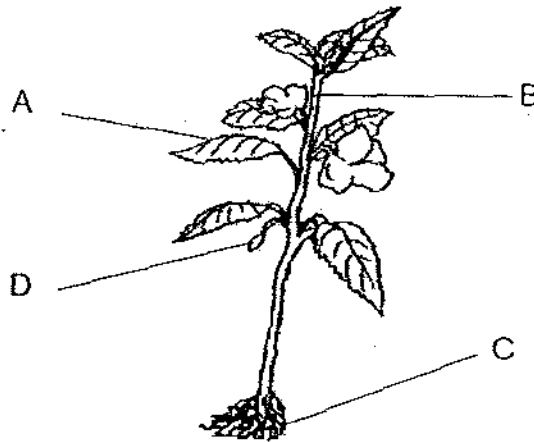
Animals under Group Y lay eggs. Which one of the following is the correct set of headings for Groups X, A and B respectively?

	Group X	Group A	Group B
(1)	Give birth to young	Body covered with scales	Body covered with hair
(2)	Give birth to young	Body covered with scales	Give birth to young
(3)	Give birth to young	Live in water	Live on land
(4)	Have scales	Can swim	Can swim

22. Which one of the following is the correct path taken by the water in the plant?



23. The picture shows a plant that has been uprooted from the ground. A, B, C and D are the different parts of the plant.



Which one of the following sets of plant parts represents A, B, C and D respectively?

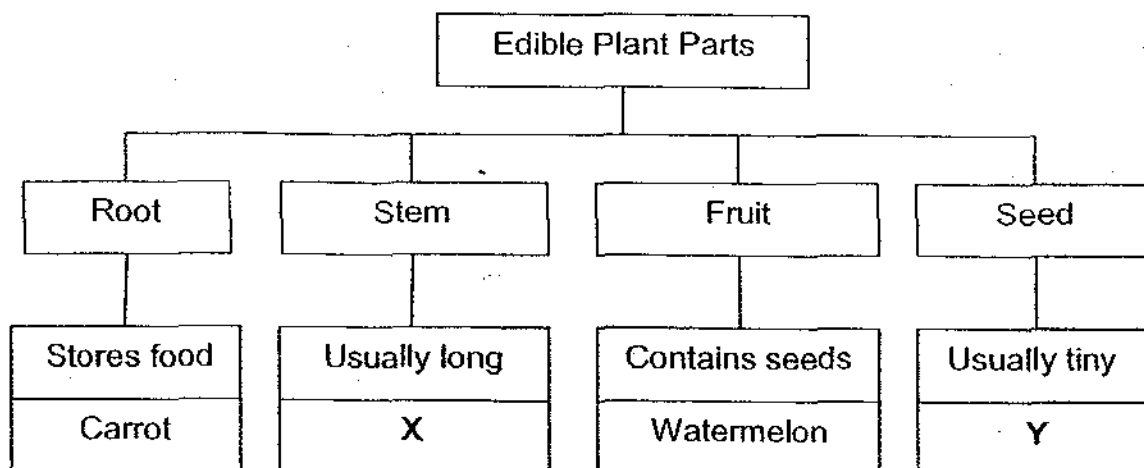
(1)	Roots	Bud	Leaves	Stem
(2)	Stem	Roots	Flower	Leaves
(3)	Flower	Leaves	Stem	Roots
(4)	Leaves	Stem	Roots	Bud

24. Which of the following statements show(s) the function(s) of the roots?

- A It anchors the plant in the ground.
 B It supports the plant so it can stand upright.
 C It spreads out underground to absorb water.
 D It carries water and nutrients to all parts of the plant.

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

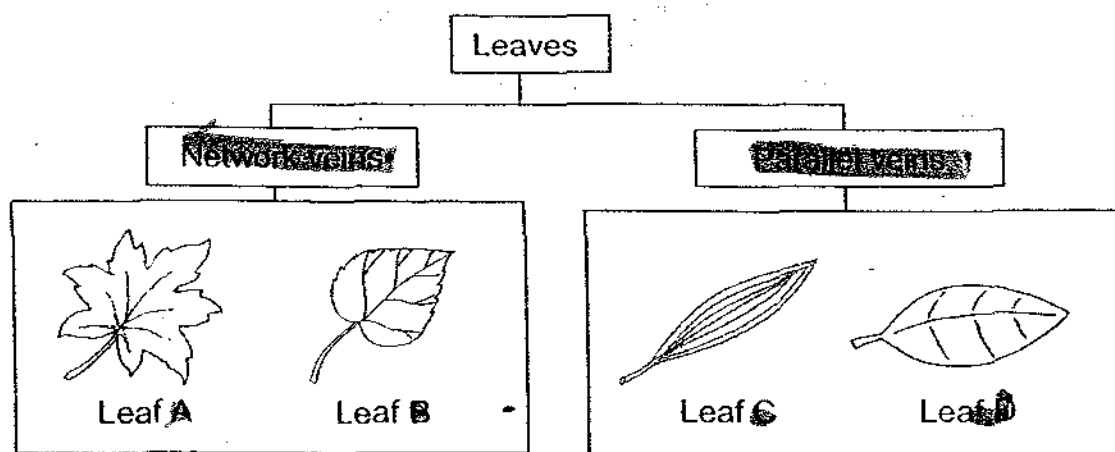
25. Study the classification chart below.



Which one of the following could be X and Y respectively?

(1)	Tomato	Red chili
(2)	Sugar cane	Peas
(3)	Watermelon	Cashew
(4)	Carrot	Groundnut

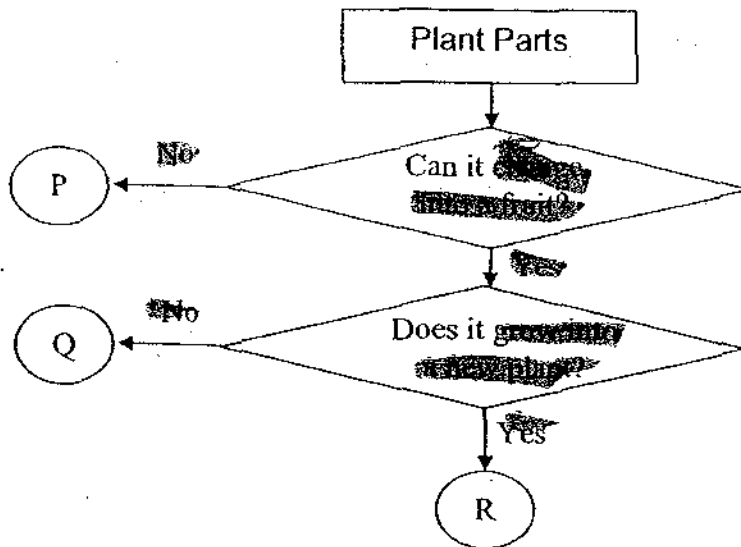
26. Study the classification chart below.



Which one of the above leaves is placed in the wrong group?

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

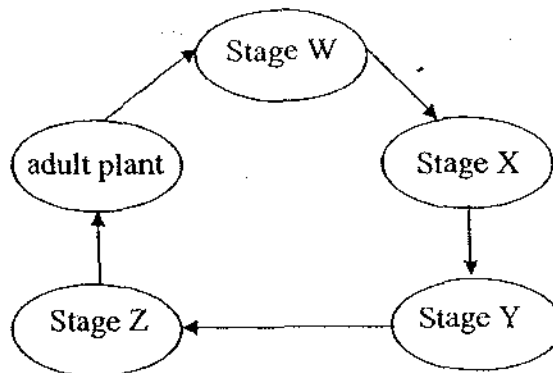
27. In the flow chart below, P, Q and R represent three plant parts.



Which one of the following best represents P, Q and R respectively?

	P	Q	R
(1)	Stem	Leaf	Flower
(2)	Stem	Flower	Seed
(3)	Leaf	Flower	Flower
(4)	Stem	Fruit	Bud

28. The diagram below shows the life cycle of a green bean plant.



Which one of the following correctly shows stages W, X, Y and Z respectively?

	Stage W	Stage X	Stage Y	Stage Z
(1)	Seed	Seedling	Flower	Fruit
(2)	Fruit	Flower	Seed	Seedling
(3)	Seedling	Seed	Fruit	Flower
(4)	Flower	Fruit	Seed	Seedling

29. Which of the following conditions are needed for a seed to start growing into a young plant?

- A ~~Soil~~
- B ~~Water~~
- C ~~Water~~
- D ~~Sunlight~~

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

30. Heather wants to find out how fast similar seeds grow under two different conditions. She puts a seed each into two similar pots of soil, labelled pot A and pot B. She then places Pot A in a room and Pot B in the garden. She waters the seeds in both pots with 100 ml of water daily.

She records the growth of the seed every 2 days for 8 days. The table below shows the height of each seedling.

Pot	Height of seedlings (cm)				
	Day 0	Day 2	Day 4	Day 6	Day 8
A	0	2	3	5	8
B	0	0	1	2	4

Which one of the following statements explains the result shown in the table above?

- (1) Seedling in pot A is sheltered from rain and wind.
- (2) Seedling in pot A has to reach out to get sunlight.
- (3) Seedling in pot B is not sheltered from rain and wind.
- (4) Seedling in pot B does not get enough sunlight in the garden.

-- END OF SECTION A --

Name : _____ ()

Class : Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3
Semestral Assessment II – 2009
SCIENCE
BOOKLET B

2nd October 2009

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

14 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

This booklet consist of 13 printed pages.

Section B : (40 marks)

For questions 31 to 45, 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. Kumar placed four things, one in each cage. He placed a container of water together with 300g of meat and 300g of leaves each day. He recorded the amount of meat and leaves left behind in each cage daily for five days. The table below shows his findings:

Day	Cage A		Cage B		Cage C		Cage D	
	Meat (g)	Leaf (g)	Meat (g)	Leaf (g)	Meat (g)	Leaf (g)	Meat (g)	Leaf (g)
1	20	300	300	90	300	300	300	10
2	18	300	300	70	300	300	300	9
3	19	300	300	75	300	300	300	8
4	20	300	300	60	300	300	300	9
5	17	300	300	87	300	300	300	11

(a) From the table above, which cage did Kumar most likely place a non-living thing in? Explain your answer. [2]

(b) Kumar made some conclusions after the experiment. However, only some are correct.

Put a tick (✓) in the box below to indicate any correct statement Kumar had made. [1]

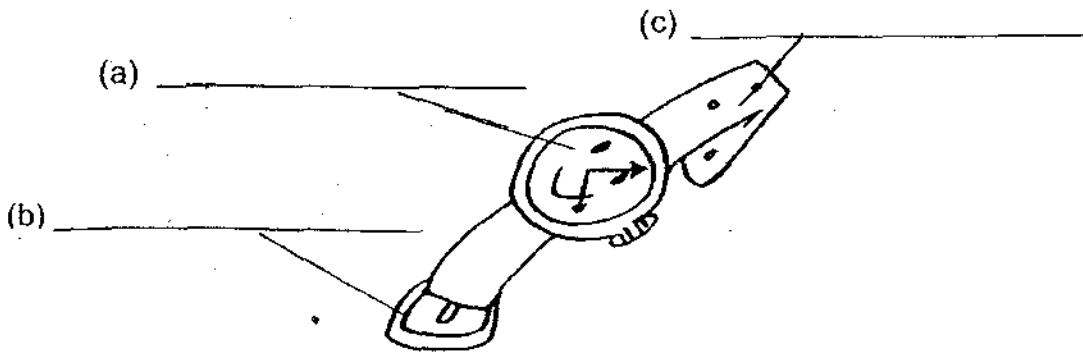
Statements Kumar made	Tick if correct
The animal in Cage A is a meat-eater.	<input type="checkbox"/>
Air is not needed for the things in the four cages.	<input type="checkbox"/>
All living things need meat and leaves to survive?	<input type="checkbox"/>



32. Below shows a watch that has the following properties.

- Its strap is waterproof.
- Its strap is light and flexible.
- Its buckle is strong and hard.
- Its face is covered with a hard and transparent material.

Write down suitable material as described above that can be used to make each part of the watch as shown below. [1½]



33. Study the table below carefully.

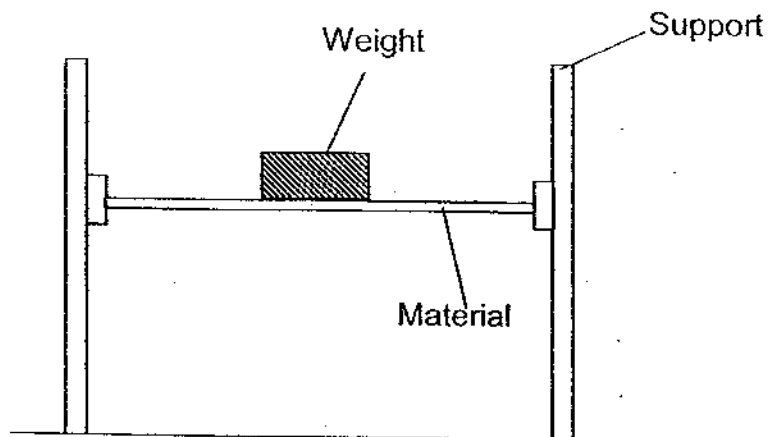
a) Write down the correct material that match each set of properties given in the table below. [2]

Materials	Property		
	Breaks easily when dropped	Able to float on water	Able to see through
(i)			
(ii)			

b) Which one of the materials above is suitable for making a toy boat? Explain your answer. [1]



34. Shawn wanted to test the strength of four materials, W, X, Y and Z. He placed different weights on the materials and noted the minimum weight needed to cause the material to break.



Materials	Minimum weight that caused material to break (kg)
W	4
X	8
Y	2
Z	10

- (a) Which material is the weakest? [1]

- (b) Which of the material(s) above can be used to make a bookshelf that can withstand a maximum load of up to 7 Kg? Explain your answer. [2]



35. Mother put some heavy things into a carrier bag. However, after carrying it for a few minutes, the base of the carrier bag tore.



- a) What is the material that the carrier bag is likely to be made of? [1]

- b) Is it advisable for Mother to use a carrier bag that is made of metal? Explain your answer. [1]

- c) If Mother wanted to put some wet vegetables into the carrier bag, what material should the carrier bag be made of? Give a reason for your answer. [2]



36. Steve is eating a bowl of hot dumpling noodles. He uses a pair of chopsticks to hold the dumpling.



- a) Name the body system(s) that is/are involved when Steve uses his hand to pick up the dumpling from the bowl with a pair of chopsticks. [1]

- b) Steve talked to his friend while he is eating his noodles. Suddenly, he choked and coughed continuously.

Put a tick in the box below to indicate the part of the body which the noodles have travelled to cause Steve to choke? [1]

Body part	Tick (✓) if it is correct
(i) Nose	
(ii) Gullet	
(iii) Lungs	
(iv) Stomach	
(v) Windpipe	



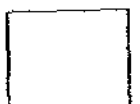
37. Mrs Choong is seen blending some solid food for her 5-month-old baby with a food processor.



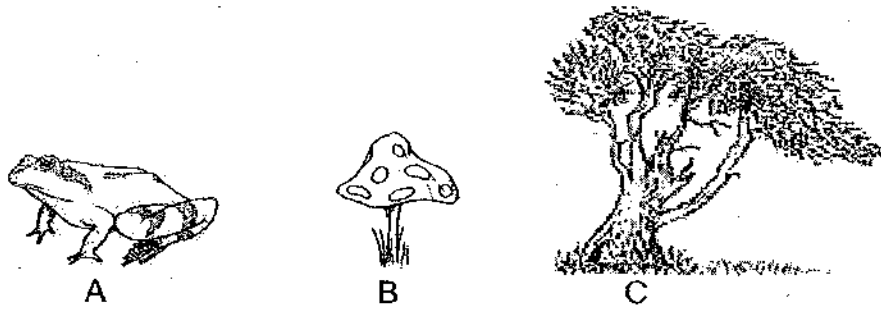
- a) Why does Mrs Choong blend the food before feeding her baby? [1]

- b) In which part of the digestive system does digestion first begin? [1]

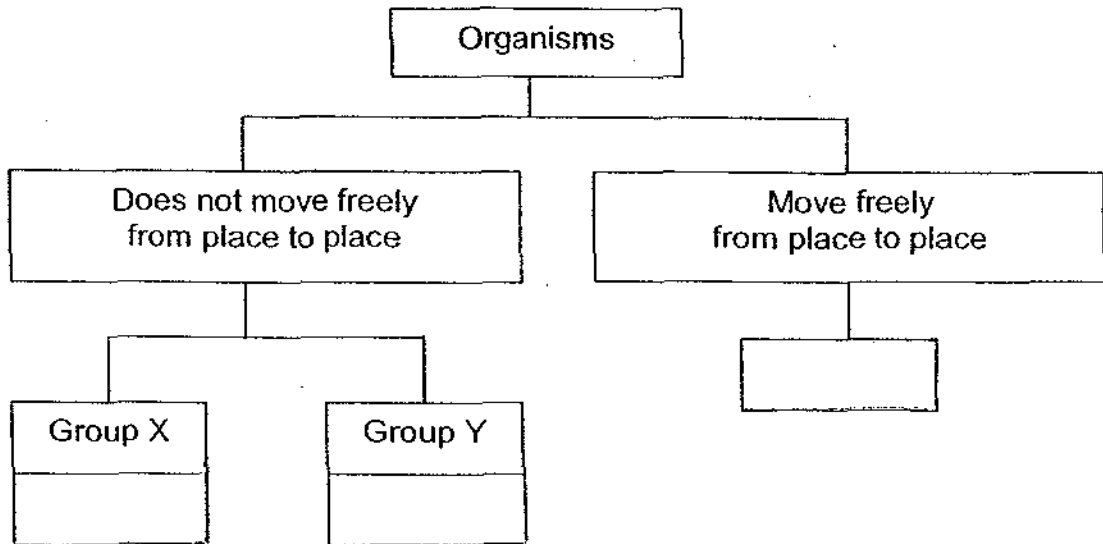
- c) What is the substance that helps to break down the food in the part in (b) above known as? [1]



38. Look at the pictures of organisms A, B and C as shown below.



(a) Classify organisms A, B and C using the classification diagram below. [1½]



(b) The organisms that do not move freely from place to place are further grouped according to the way they reproduce. Write down the suitable headings for Groups X and Y. [1]

Group X: _____

Group Y: _____

(c) Hannah compared their characteristics and claimed that organism C is different from organism A and B. Is she correct? Explain your answer. [2]

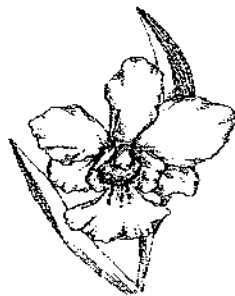


39. Minah and her mother wanted to test the conditions needed for bread mould to grow. They sprinkled the same amount of water onto 2 slices of bread before putting each of them into an air-tight plastic bag. They placed one bag into a drawer and the other bag into the freezer compartment.

(a) They observed some moulds on the bread that is placed in the drawer. What are the conditions that have helped moulds to grow? [1]

(b) Will mould grow on the bread in the freezer compartment? Explain your answer. [1]

40. The diagram below shows 2 plants, orchid plant and bird's nest fern.



Orchid plant



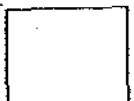
Bird's nest fern

(a) **Based on what you can see**, state two differences between the orchid plant and the bird's nest fern. [2]

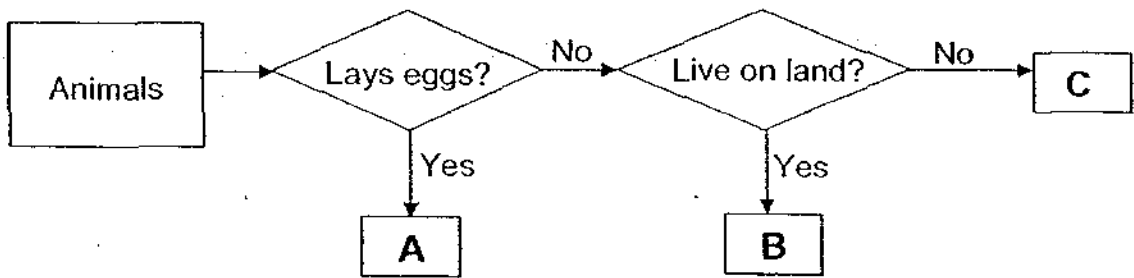
(i) _____

(ii) _____

(b) Both the orchid plant and the bird's nest fern are green and they need air, food and water to grow. State one other way in which they are alike. [1]



41. Study the flow chart below.



a) What is the difference between A and C? [1]

b) David said that C can be a swordtail. Is David correct? Explain your answer. [1]

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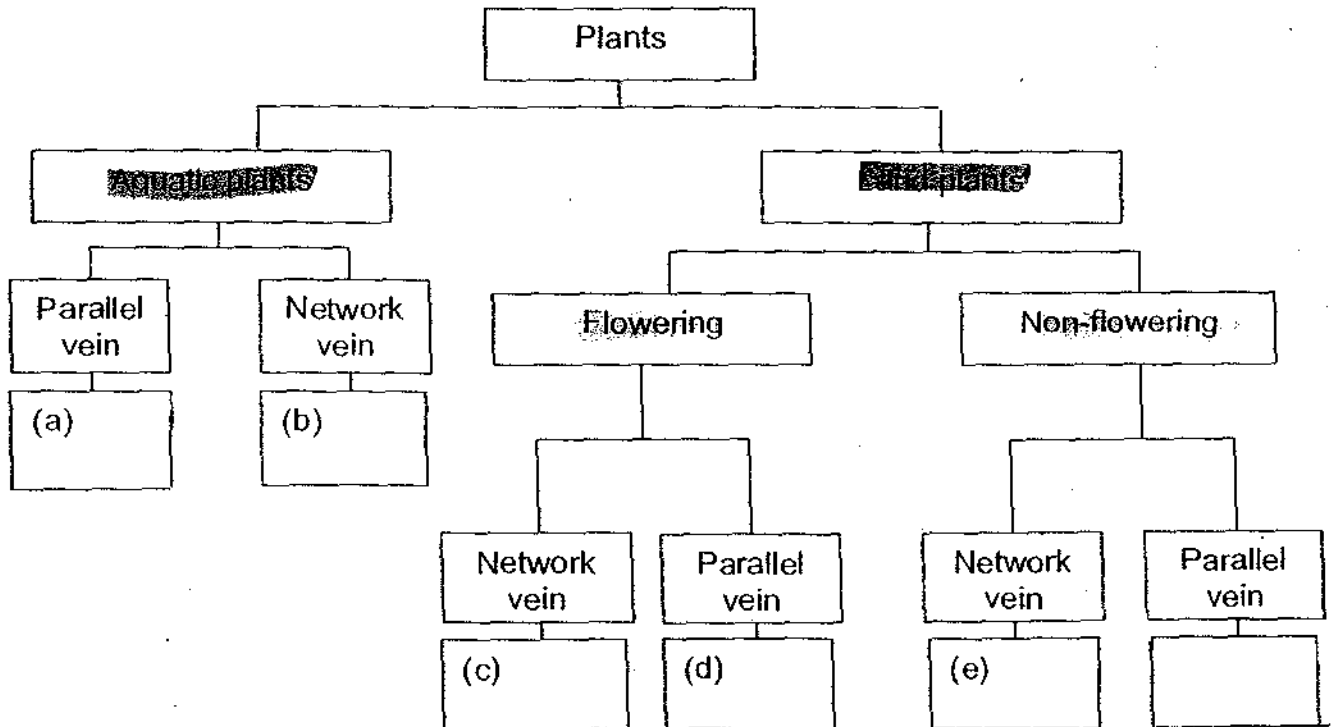
c) If A is a mammal, give an example for A. [1]



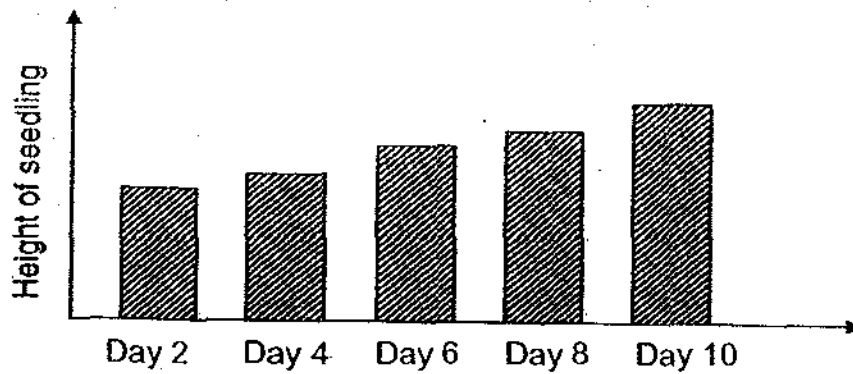
42. Fauziah observed some plants in her school's eco-garden and recorded her observations in the table below.

Plant	Does it bear flowers?	How is the leaf vein like?	Where is it found?
A	Yes	Network	Land
B	Yes		
C			Land
D	Yes	Parallel	Land
E			Land
F	Yes		

Based on the observations given in the table above, classify all the plants by placing the letters (A to F) in the boxes provided below. [3]



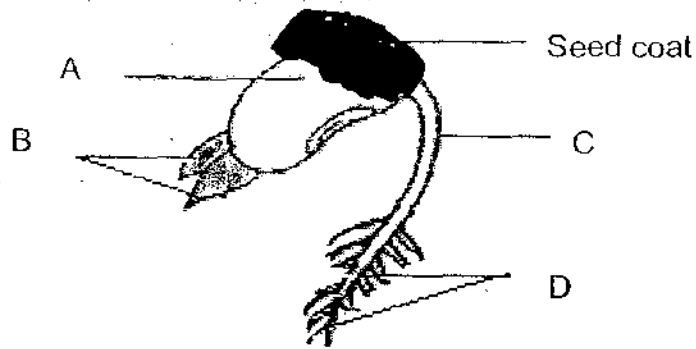
43. Louis recorded the height of a green bean seedling over 5 days and drew a bar graph as shown below.



- (a) Based on the graph above, state all the conditions needed for the seedlings to grow after Day 6? [1]
-
- (b) What would happen to the stem if Louis did not water the seedling for two weeks? [1]
-



44. The diagram below shows a seedling that has just sprouted.



(a) Which part of the seedling, A, B, C or D, will first appear? How does it grow? [1]

(b) Write down the functions of part A and part B in the blanks below. [1]

Part A _____

Part B _____

(c) What will happen to the seedling if it is pulled out from the soil? Explain your answer. [1]

-- END OF PAPER --



ANSWER SHEET

EXAM PAPER 2009

SCHOOL : CHIJ PRIMARY
SUBJECT : PRIMARY 3 SCIENCE

TERM : SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
2	4	1	4	3	4	1	2	3	2	1	2	2	4	3	4	2

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
1	2	4	3	3	4	2	2	4	2	4	3	2

31)a)Cage C. It is because the thing in cage C did not eat any meat or leaves but the things in cage A,B and D did.

b)The animal in Cage A is a meat-eater

32)a)Glass b)metal c)Rubber

33)a)i)Glass ii)Wood

b)Wood. It does not break easily and it floats on water.

34)a)material Y.

b)material X and Z. They can hold weights that are more than 7kg.

35)a)Paper

b)No. It is heavy and it is not flexible.

c)plastic. It is waterproof.

36)a)Muscular and skeletal System.

b)V

37)a)It is because a 5-month-old baby does not have teeth to grind the food so the baby can only eat small and soft food.

b)Mouth.

c)Saliva.

38)a)A Group X: B Group Y: C

b)X: Reproduce by spores

Y: Reproduce by seeds

c)Yes. It is because organism C can make food but A and B cannot.

39)a)Water and warmth.

b)No. The bread in the freezer is cold and hard so mould cannot grow on the bread.

40)a)i)The orchid plant has flowers but the birds nest fern does not.

ii)The orchid plant has two leaves but the bird's nest fern has many leaves.

b)They can reproduce.

41)a)A lays eggs but C does not.

b)Yes. A swordtail gives birth to young alive.

c)The spiny anteater.

42)a)B b)F c)A d)D e)E f)C

43)a)Air, water and sunlight.

b)Soft.

44)a)D. It grows down wards.

b)A: Provide food for the seeding.

B: Help the plant to make food.

c)It will die. It will not be able to get water and mineral salts from the soil.