



NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2015
PRIMARY 3

SCIENCE

BOOKLET A

30 Multiple Choice Questions (48 marks)

Total Time for Booklets A and B : 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.

Marks Obtained

Booklet A		/ 48
Booklet B		/ 32
Total		/ 80

Name: _____ () Class: P 3

Date : 30 October 2015

Parent's signature: _____

Section A: (24 x 2 marks = 48 marks)

For each question from 1 to 24, 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. Jacky saw the following things in his neighbourhood.



Bird



Slide



Rubbish bin



Car

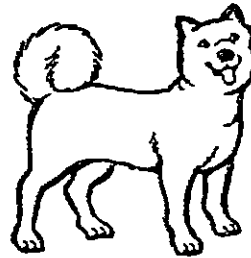
Jacky classified these things using the characteristics of living and non-living things. Which of the above does not belong to the same group as the others?

- (1) Car
- (2) Bird
- (3) Slide
- (4) Rubbish bin

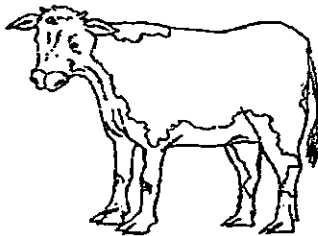
2. The four animals shown in the diagrams below were placed in the same group.



Animal A



Animal B



Animal C

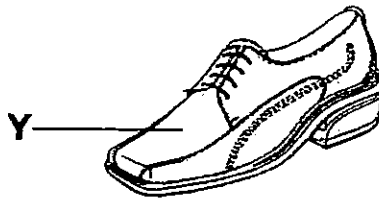


Animal D

The animals belong to the same group because _____.

- (1) they can fly
- (2) they lay eggs
- (3) they live on land and in water
- (4) they have hair as an outer covering

3. The diagram below shows a pair of shoes.

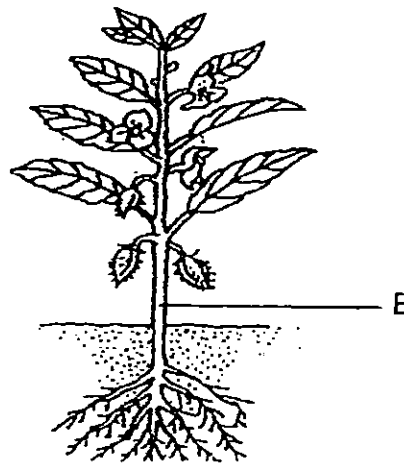


Which one of the following materials is suitable for making part Y?

- (1) Glass
- (2) Metal
- (3) Paper
- (4) Leather

4. Metal is a suitable material for making a key because it _____.
- (1) is strong
 - (2) is flexible
 - (3) sinks in water
 - (4) does not allow light to pass through

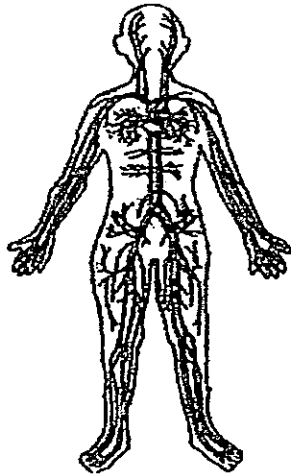
The picture below shows a balsam plant. Please answer Questions 5 and 6 based on the diagram below.



Balsam plant

5. What is the function(s) of part B of the plant?
- A Anchors the plant firmly to the ground
 - B Transports food from the leaves to the rest of the plant
 - C Transport water from the roots to the other parts of the plant
 - D Supports the leaves in order to get as much sunlight as possible
- (1) A only
 - (2) A and D only
 - (3) B and C only
 - (4) B, C and D only
6. Some water containing red dye was poured into the soil of the balsam plant above. After a few hours, some parts of the flowers and leaves turned red. Which of the following statements correctly explains the observation?
- (1) Water does not flow to the flowers and the leaves.
 - (2) Water is taken in by the leaves and transported to the flowers.
 - (3) Water is taken in by the roots and transported to the flowers and leaves.
 - (4) Water is taken in by the leaves and flowers and is transported to the roots.

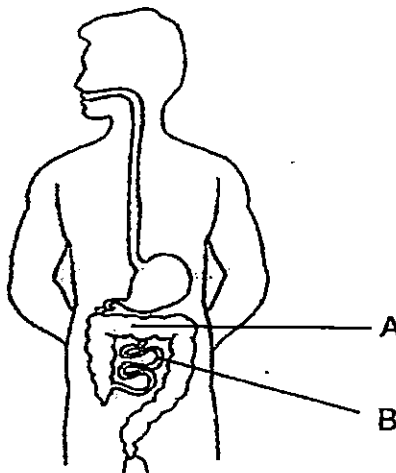
7. The diagram below shows the circulatory system found in the human body.



Which of the following statements about the circulatory system is correct?

- (1) It takes in oxygen for the body.
- (2) It breaks food down into simple substances.
- (3) It is made up of the heart, lungs and blood vessels.
- (4) It carries digested food, water and oxygen to different parts of the body.

8. The diagram below shows a system found in the human body.



Which of the following takes place at the part labelled A and B?

	A	B
(1)	Removal of water from undigested food	Digestion is partially completed
(2)	Absorption of digested food	Removal of water from undigested food
(3)	Removal of water from undigested food	Absorption of digested food
(4)	Digestion is partially completed	Digestion is fully completed

9. Which of the following organs **does not** secrete digestive juices?

- A: Mouth
- B: Gullet
- C: Stomach
- D: Small intestine
- E: Large intestine

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

10. A group of students made the following statements during their Science lesson:

Aaron: A magnet can exert a push or a pull.

Belle: Like poles attract, while unlike poles repel.

Carl: As long as it is a magnet, it can attract metals.

Which of the following student(s) is/ are correct?

- (1) Aaron only
- (2) Belle only
- (3) Aaron and Belle only
- (4) Aaron, Belle and Carl

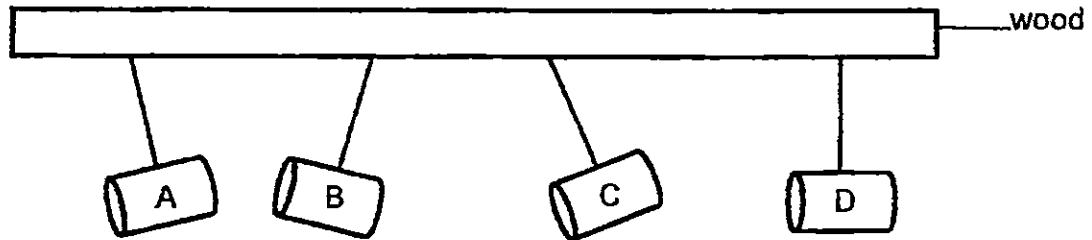
11. The table below shows two groups of objects.

Group X	Group Y
Wine cork	Glass marble
Styrofoam plate	Metal spoon

Which one of the following sets of headings for Groups X and Y is correct?

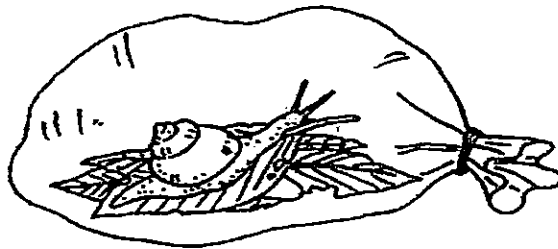
	Group X	Group Y
(1)	Inflexible	Flexible
(2)	Not waterproof	Waterproof
(3)	Float on water	Sinks in water
(4)	Does not allow light to pass through	Allows light to pass through

12. Tom hung four metal rods (A, B, C and D) tied with identical strings from a piece of wood as shown below. Then he observed that they had moved and remained at the positions as shown below.



Which of the metal rods are definitely magnets?

- (1) A and B
 - (2) A and D
 - (3) B and C
 - (4) C and D
13. Karen caught a snail in her garden. She kept her snail in a sealed plastic bag as shown below.



After a few hours, Karen found that the snail had died.

Which of the following is most likely the reason for the snail's death?

- (1) The snail did not have enough air.
- (2) The snail did not have enough food.
- (3) The snail did not have enough space.
- (4) The snail did not have enough sunlight.

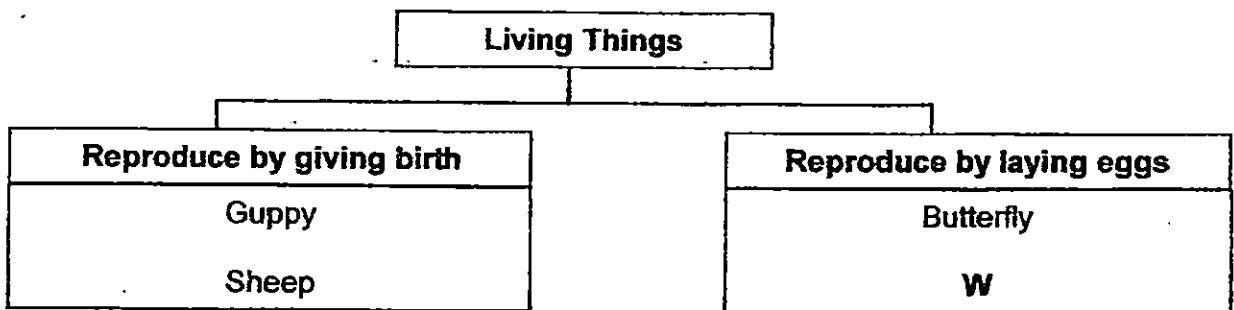
14. Yongli observed an animal in his school garden for a week and made the following notes.

It lays eggs.
It has no legs.
It breathes through gills.

The animal that Yongli observed is most likely a/an _____.

- (1) fish
- (2) bird
- (3) insect
- (4) reptile

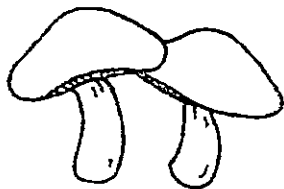
15. Study the classification chart below carefully.



What could "W" be?

- (1) Cow
- (2) Frog
- (3) Horse
- (4) Monkey

16. Samy made some observations about two organisms as shown below.



Mushroom



Fern

Which one of the following is a similarity between the two organisms?

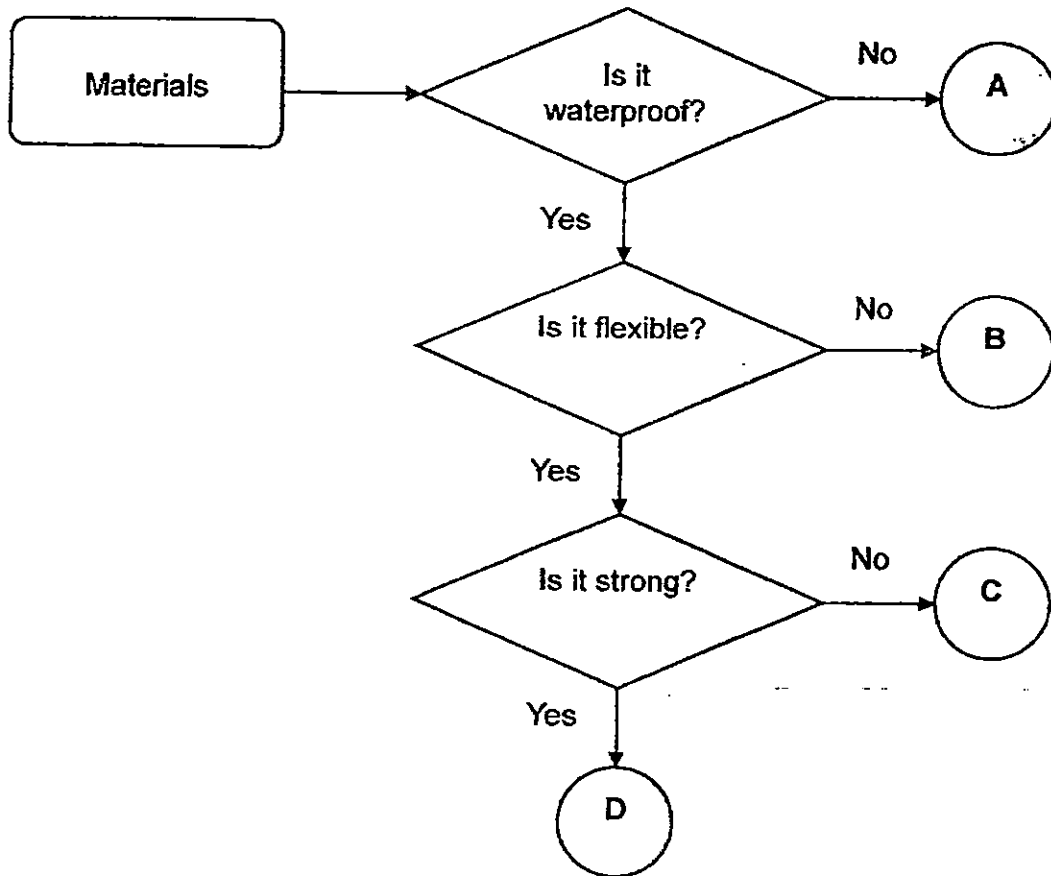
- (1) Both of them are fungi.
 - (2) Both of them reproduce by spores.
 - (3) Both of them are non-flowering plants.
 - (4) Both of them need sunlight to make food.
17. Mr Tan tested four materials (W, X, Y and Z) to find out how much water each material can absorb. He weighed each piece of material at the start of the experiment. He then pushed each material into a pail of water for 1 minute. He recorded the mass of each material after he removed them from the water. His results are shown in the table below.

Material	Mass at the start of the experiment	Mass after it was removed from the water
W	100g	180g
X	150g	200g
Y	200g	205g
Z	130g	160g

Which of these materials (W, X, Y or Z) is most suitable for making a raincoat?

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

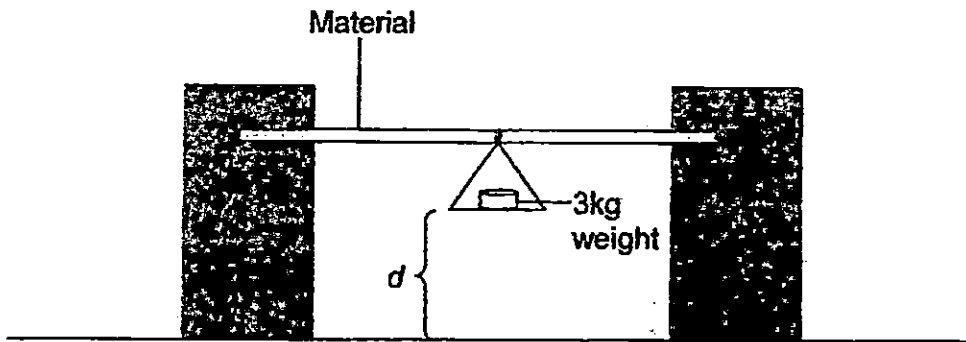
18. Study the flowchart below.



Which of the following letters will most likely represent ceramics?

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

19. Hui Ping wanted to test the flexibility of materials D, E, F and G. She attached a 3kg weight to each material and measure distance " d " as shown in the set up below.



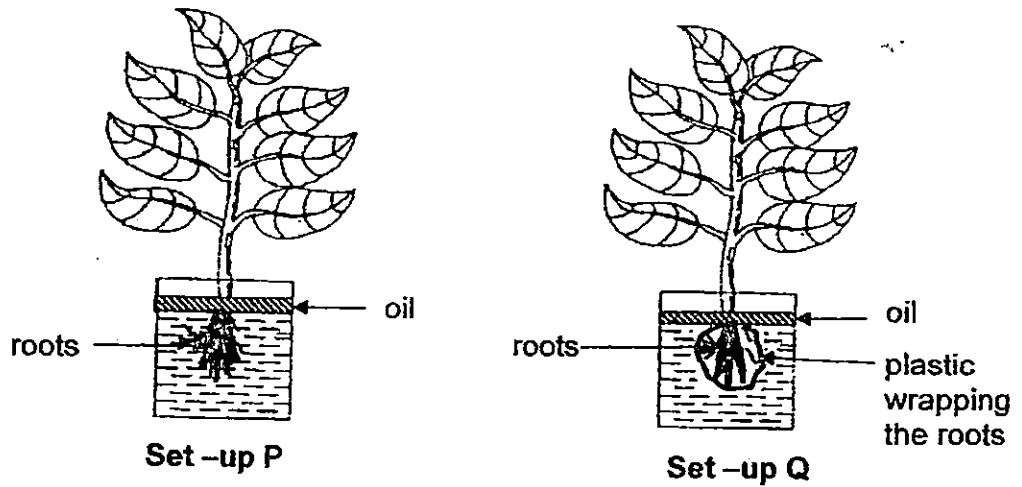
She recorded her results as shown in the table below.

Material	d (in cm)
D	3
E	5
F	8
G	4

From the results, which material is the most flexible?

- (1) D
- (2) E
- (3) F
- (4) G

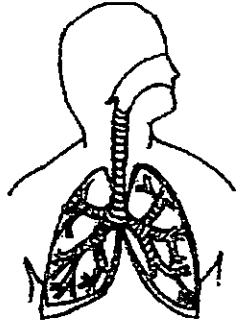
20. Sam placed two similar plants in identical beakers, each containing equal amount of water in the garden during the day. The set-ups are labelled P and Q.



Which of the following correctly identifies the aim of the experiment and the water level in Set-up Q after 4 days?

	Aim of experiment	Water level in Set-up Q
(1)	To find out if the roots of the plant take in water.	Goes down
(2)	To find out if the roots of the plant take in water.	Remains unchanged
(3)	To find out if the number of leaves will affect the amount of water absorbed by the plant.	Remains unchanged
(4)	To find out if the number of leaves will affect the amount of water absorbed by the plant.	Goes down

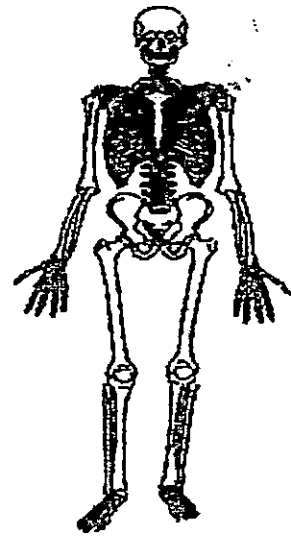
21. The diagrams below show three body systems (A, B and C).



System A



System B



System C

Which system(s) enable(s) John to skip?

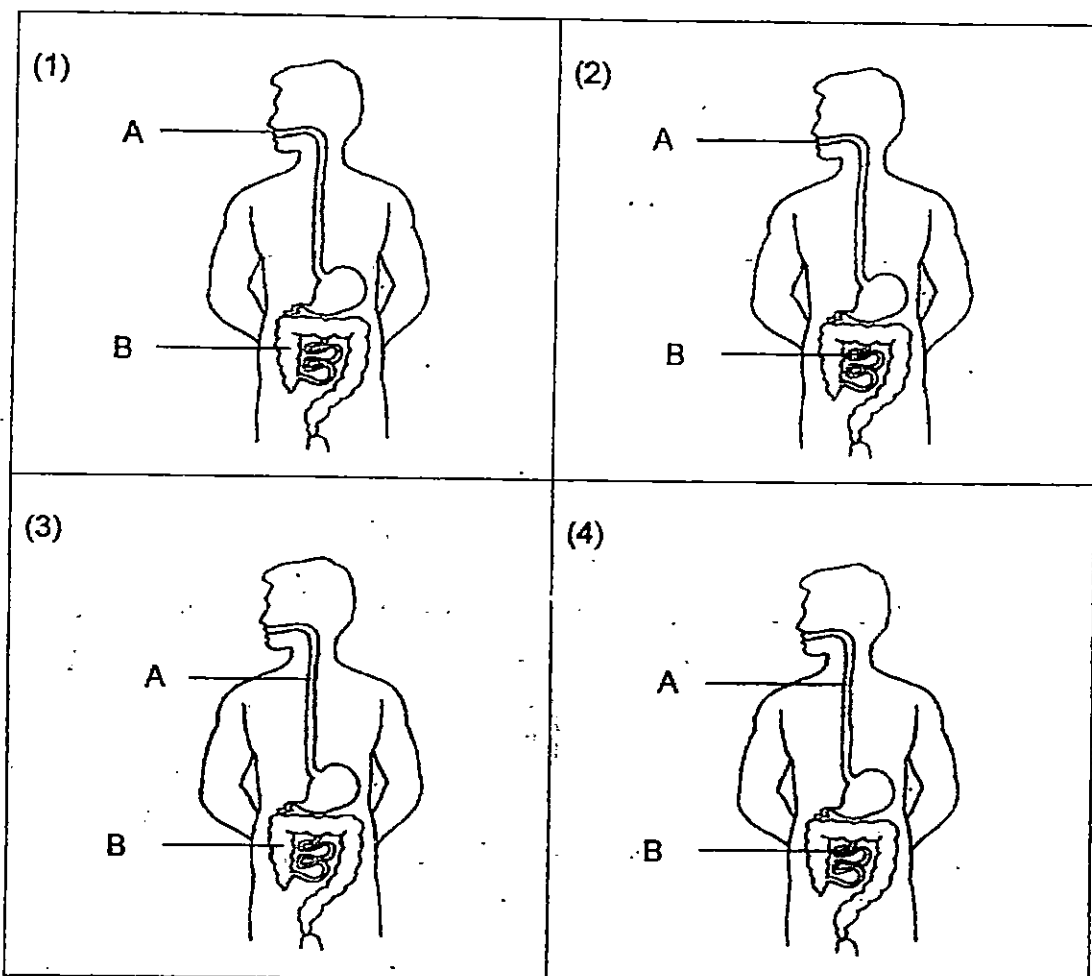


- (1) B only
- (2) C only
- (3) A and C only
- (4) A, B and C

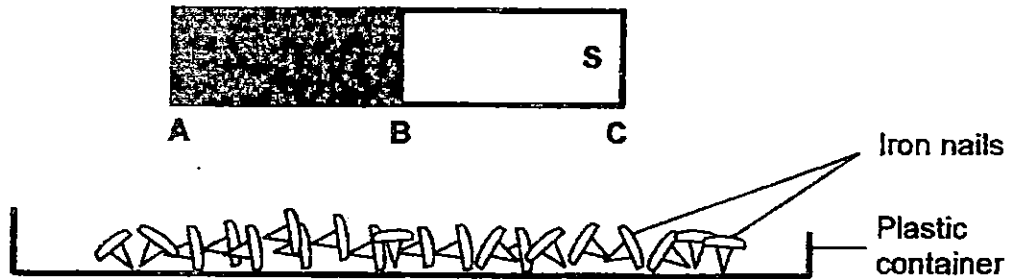
22. Tom has just eaten a plate of chicken rice during recess. However, Parts A and B of his digestive system are not working properly.

Parts that are not working properly	Problems
A	Bigger pieces of food have gone into his stomach.
B	Digested food is not absorbed completely into his bloodstream.

Which diagram below correctly shows Parts A and B of his digestive system that are not working properly?



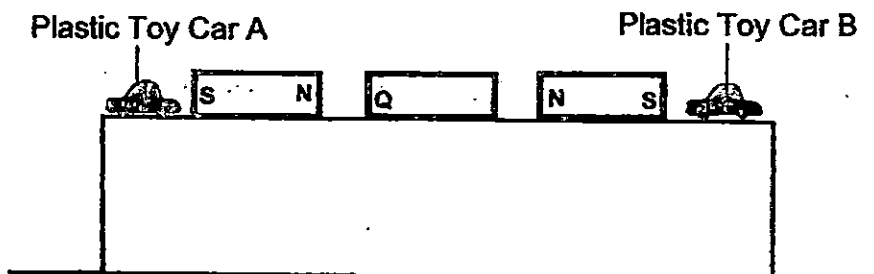
23. Alice has a bar magnet as shown below. She wants to attract some iron nails in a container.



Which of the following shows the likely results for the number of iron nails attracted by parts A, B and C of the bar magnet?

	A	B	C
(1)	8	8	4
(2)	4	8	8
(3)	4	2	14
(4)	8	4	8

24. Three magnets are placed next to one another as shown. If Q is the South pole of the magnet, what will most likely happen to Toy Car A and Toy Car B?



	Toy Car A	Toy Car B
(1)	It will stay where it is.	It will stay where it is.
(2)	It will stay where it is.	It will be knocked off the edge of the table.
(3)	It will be knocked off the edge of the table.	It will stay where it is.
(4)	It will be knocked off the edge of the table.	It will be knocked off the edge of the table.



**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2015
PRIMARY 3**

SCIENCE

BOOKLET B

14 Open-ended questions (32 marks)

Total Time for Booklets A and B : 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

Marks Obtained

Section B

	/ 32
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Name: _____ () **Class: P 3** _____

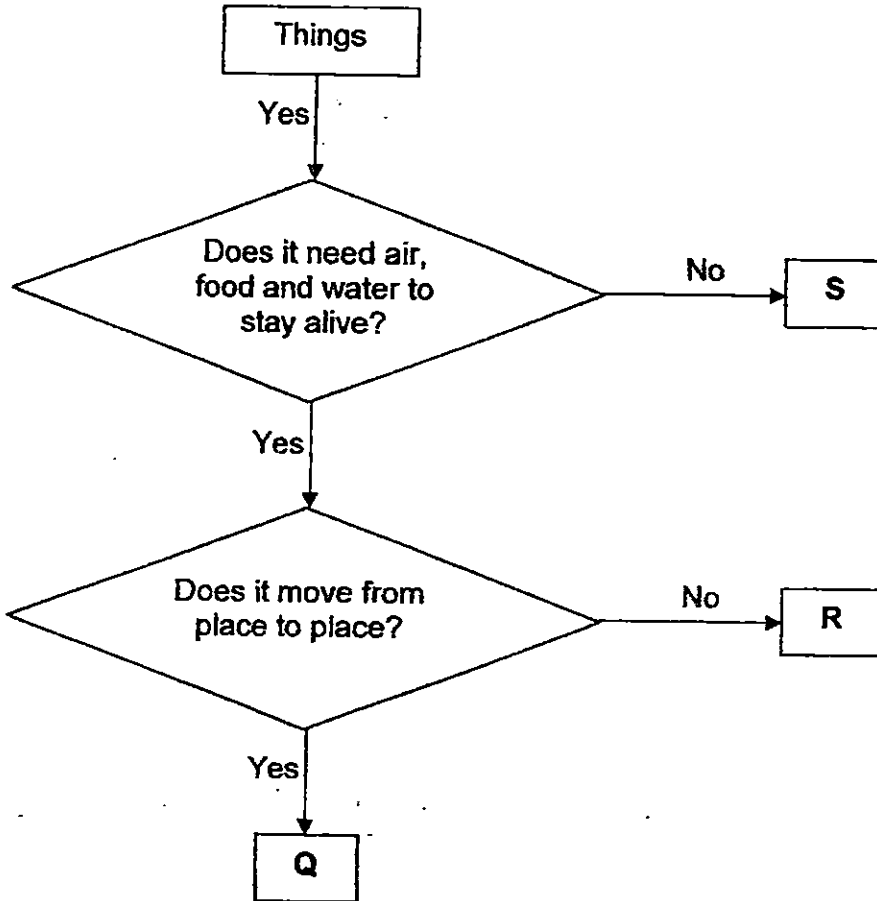
Date : 30 October 2015 **Parent's Signature:** _____

Section B: (32 marks)

Write your answers to questions 25 to 34 in the space provided.

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

25. The flowchart below shows the characteristics of three things (Q, R and S).

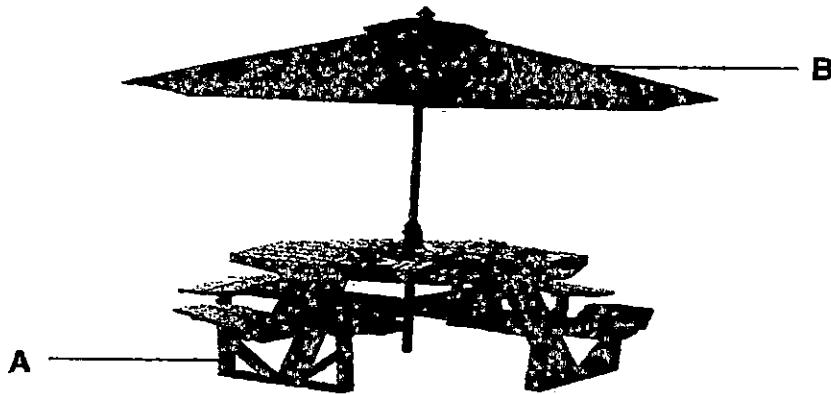


(a) Based on the flowchart above, list one characteristic of Thing R. [1]

(b) Based on the flowchart above, which group of living things does "Q" belong to? [1]

Score	2
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26. Mr Chan wanted to build a picnic bench with a foldable umbrella to be placed in his garden as shown in the picture below.



He investigated some properties of three materials (D, E and F). The table below shows the properties of these materials.

Material	Properties
D	<ul style="list-style-type: none">• Strong• Waterproof• Not flexible
E	<ul style="list-style-type: none">• Strong• Not waterproof• Flexible
F	<ul style="list-style-type: none">• Strong• Waterproof• Flexible

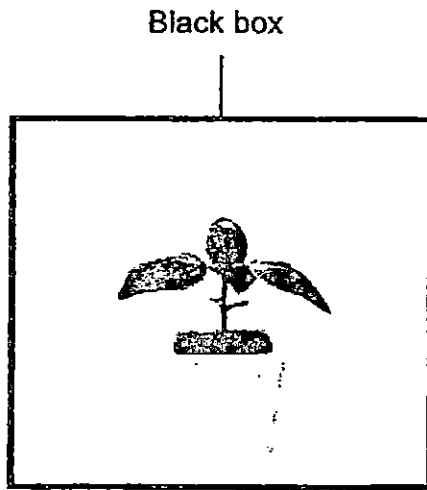
- (a) Which materials are suitable for making parts A and B of the picnic bench?
Circle the material.

[2]

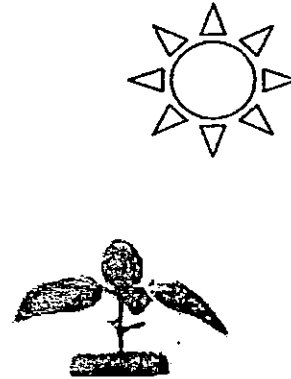
(i) Part A: Material D / Material E / Material F

(ii) Part B: Material D / Material E / Material F

27. Study the two set-ups A and B below. Both are similar plants which are given the same amount of water and garden soil. Set-up A was placed in a black box while Set-up B was placed in the open under bright light.



Set-up A



Set-up B

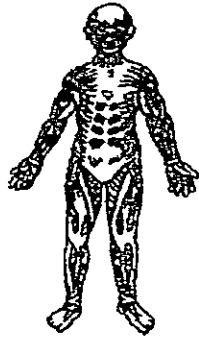
(a) What will happen to Set-up A and B after a few days?

[1]

(b) Besides carrying out gaseous exchange for the plant, what is another main function of the leaf?

[1]

28. The diagram below shows two types of human body systems, W and X.



Body System W



Body System X

(a) Identify the two human body systems above. [2]

W : _____ System

X : _____ System

(b) Human system W and human system X work together to enable us to

[1]

29. Javier is given a bar magnet and the following objects listed in the box below. He wants to find out which objects are made of magnetic materials.

steel rod	copper wire	aluminium foil	iron nail
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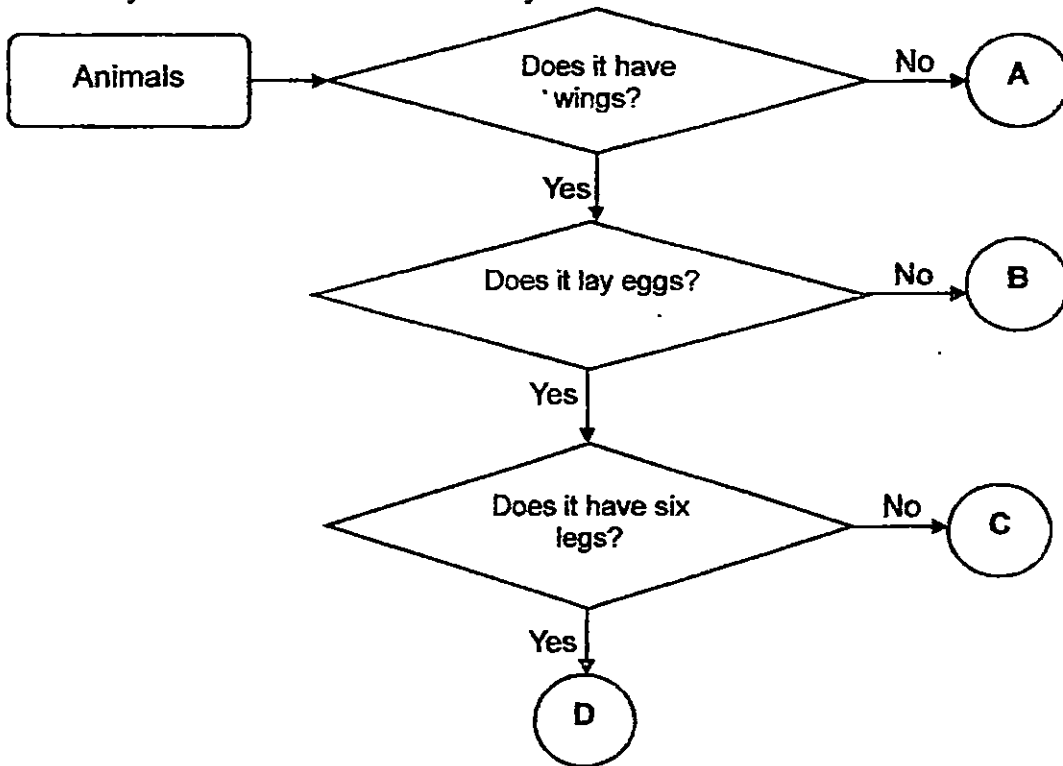
(a) Describe how Javier can find out which objects are made of magnetic materials. [2]

(b) Put a tick (✓) in the correct boxes below to show if the object is magnetic or non-magnetic.

[2]

Object	Magnetic	Non-magnetic
Steel rod		
Copper wire		
Aluminium foil		
Iron nail		

30. Study the flowchart below carefully.



(a) Use the helping words in the box below to fill in each blank.

[2]

mammal	fish	insect	bird
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According to the flowchart,

(i) A is most likely a _____

(ii) B is most likely a _____

(iii) C is most likely a _____

(iv) D is most likely a _____

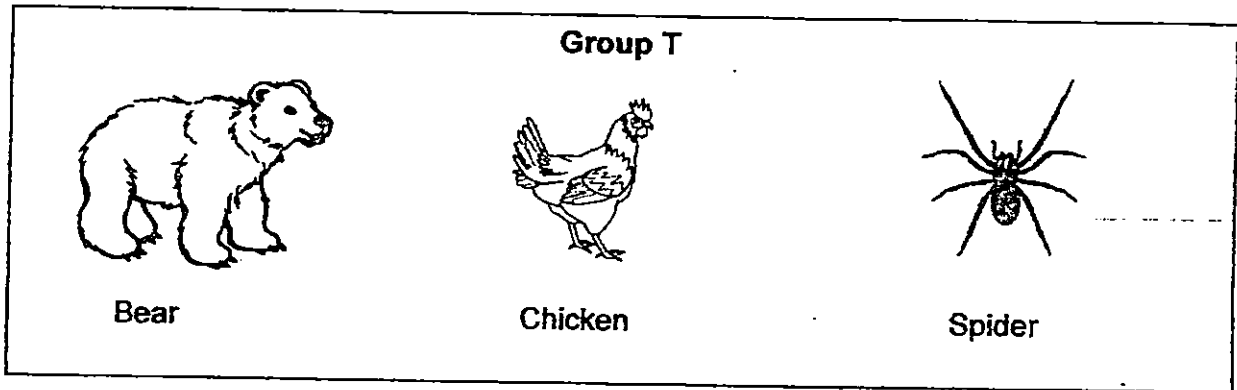
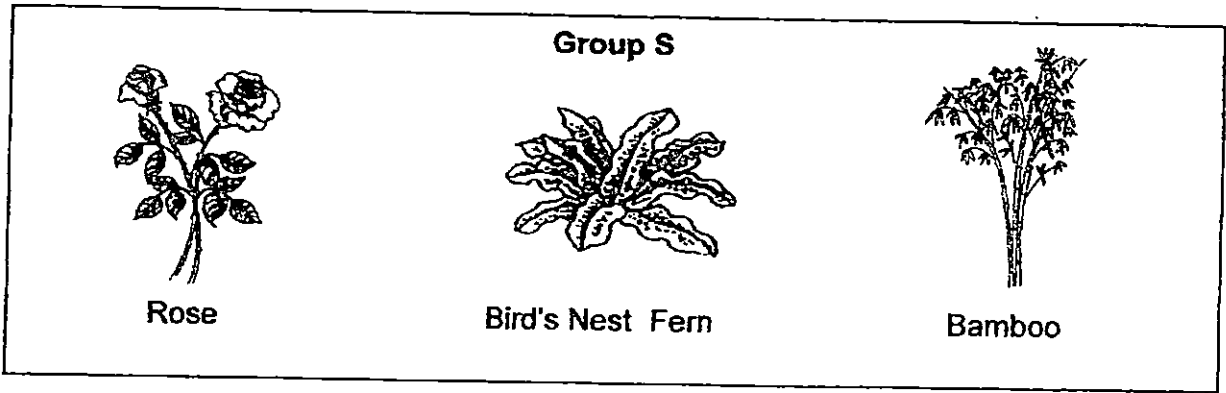
(b) Based on the flowchart above, state one difference between Animals A and B.

[1]

(c) Based on the flow chart above, state one similarity between Animals C and D.

[1]

31. Study the two groups (S and T) of living things shown below.



(a) Give a suitable heading for each of the groups above. [2]

Group S : _____

Group T : _____

(b) Which group (S or T) does the butterfly belong to? [1]

(c) State one difference between the Rose and the Bird's Nest Fern. [1]

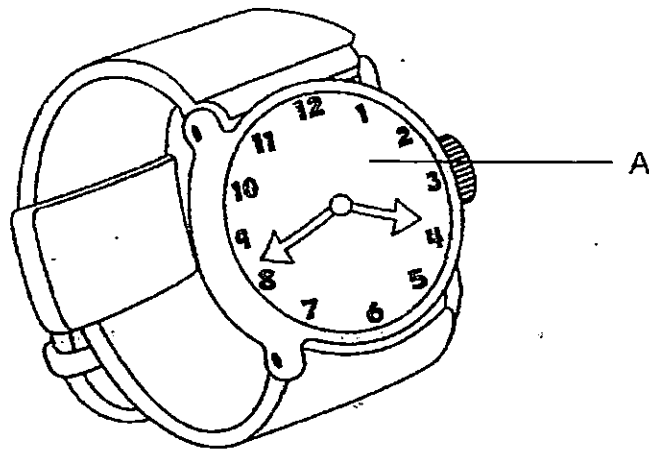
32. Lisa conducted some tests on materials W, X, Y and Z. The results of the tests are shown in the table below. A tick (✓) indicates that the material has the property.

Property	Materials			
	W	X	Y	Z
Strong		✓		
Flexible			✓	
Waterproof	✓	✓		✓
Transparent	✓			
Floats on water				✓

(a) Based on the table above, state two properties of Material Y.

[1]

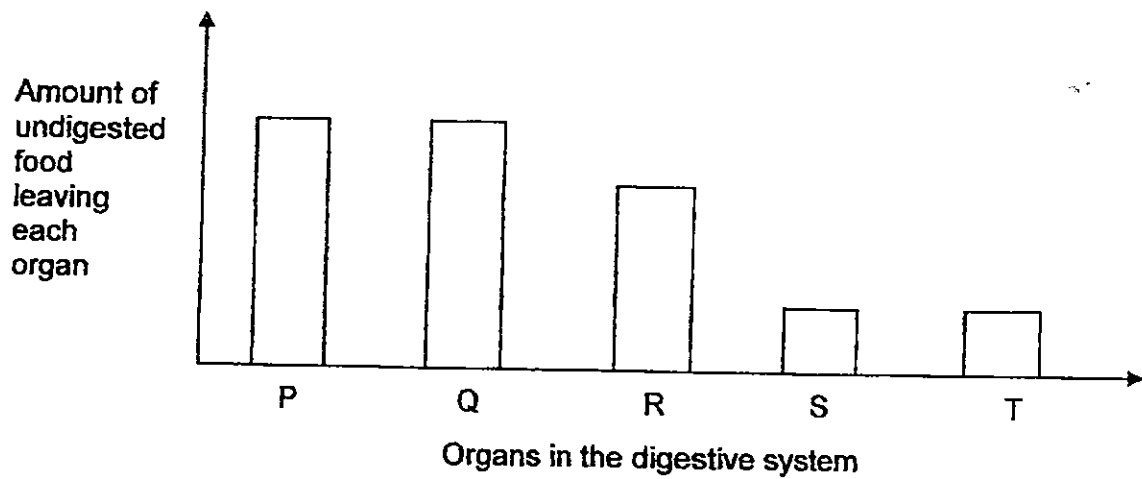
(b) Study the diagram below. Part A of the watch, which is above the watch face, protects the face and hands of the watch.



Which material (W, X, Y or Z) is suitable for making part A? Explain your answer clearly.

[2]

33. The graph below shows the amount of undigested food leaving each organ in the human digestive system.



(a) Based on the graph above, what does part R represent?

[1]

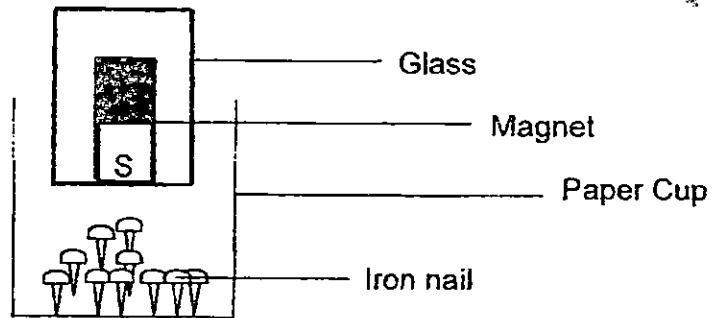
(b) Based on the graph above, what happens to the amount of undigested food in part Q? Explain your answer

[2]

(c) Based on the graph above, which part of the digestive system (P, Q, R, S or T) is digestion completed?

[1]

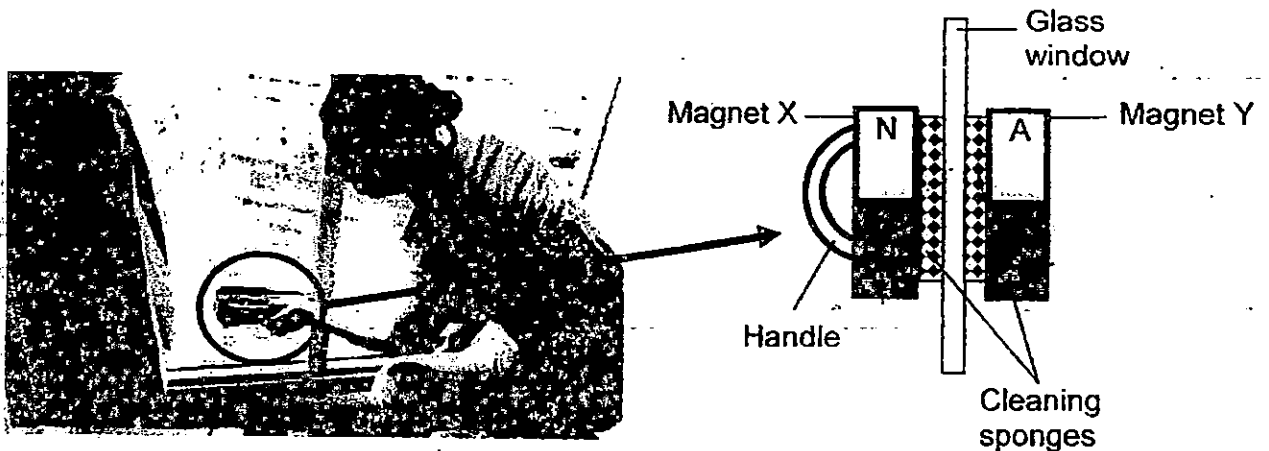
34. Tom has been told by his teacher that magnetism can pass through non-magnetic materials. He set up the following apparatus. He placed a magnet in a glass box and a few iron nails into a paper cup.



(a) What will happen to the iron nails?

[1]

The picture below shows a woman using a window cleaner to clean her windows. She is holding the handle of the cleaner which is on the inside of the window and slide it up and down in order to use the cleaning device. The two cleaning sponges will move together.



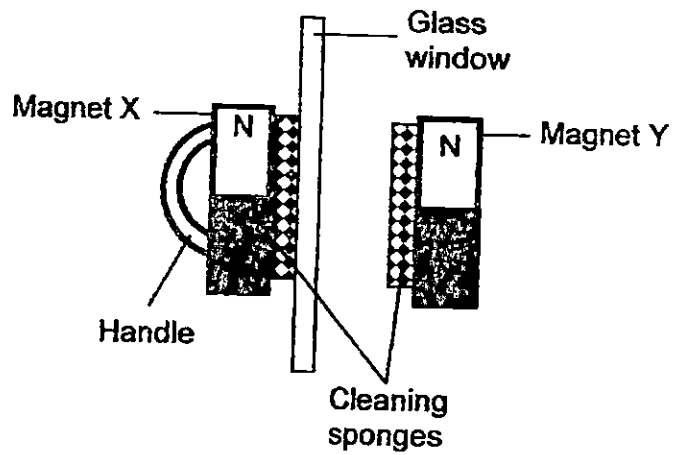
(b) Identify the poles of Magnet Y. [1]

A : _____

B : _____

Score	2
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(c) Mrs Lim bought the same cleaning device and set it up as shown below. However, Mrs Lim's cleaning device does not work.



Explain why Mrs Lim's device does not work if she set it up as shown above.

[2]

~ End of Paper ~

Score	2
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EXAM PAPER 2015

LEVEL : PRIMARY 3

SCHOOL : NAN HUA PRIMARY SCHOOL

SUBJECT : SCIENCE

TERM : SA2

Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
2	4	4	1	4	3	4	3	2	1
Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20
3	3	1	1	2	2	3	2	1	2
Q 21	Q 22	Q 23	Q 24						
4	2	4	2						

Q25a. R need air, food and water to stay alive. Thing R does not move from place to place.

Q25b. Animals.

Q26a. (i) Part A : Material D - (ii) Part B: Material F --

Q27a. The plants in Set up A will die, but the plants in set up B will stay alive.

Q27b. The leaf will absorb sunlight to make food for the plant.

Q28a. W: Muscular X: Skeletal system

Q28b. Move

Q29a. Javier can place a magnet near the objects and see which object get attracted.

Q29b. Steel rod: Magnetic / Copper wire: Non - magnetic

Q29b. Aluminium foil : Non - magnetic / Iron nail : Magnetic

Q30a (i) A - fish (ii) B - mammal (iii) C - bird (iv) D - insect

Q30b. B has wings while A does not.

Q30c. They both lay eggs.

Q31a. Group S: plants Group T: Animals

Q31b. Group T Q31c. Bird's nest fern reproduce by spores while rose does not.

Q32a. Material Y sinks in water and is flexible.

Q32b. Material W, because it is transparent, so we can see what time the watch is showing through it, and it is waterproof, so that it will not spoil when we spill water on it.

Q33a. The stomach Q33b. The amount of undigested food will remain unchanged because part Q pushes the food down to part R.

Q33c. The amount of food remains constant as there is no digestion taking place at Q.

Q34a. The magnetic force will pass through the glass and the iron nail will get attracted.

Q34b. A: South B: North

Q34c. The like poles of Magnet X and Y were facing each other. Thus the two magnets will repel each other and the cleaning device will not work.