



NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2017
PRIMARY 3

SCIENCE

BOOKLET A

24 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 _____

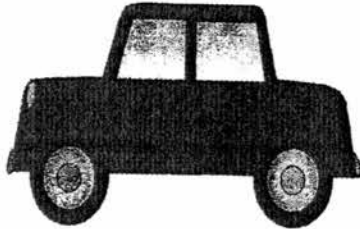
Date : 31 October 2017

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. Mandy saw the following things when she was on her way to school.



car



cat



house



handphone

Mandy wanted to classify the things into living and non-living things.
Which of the above does not belong to the same group as the others?

- (1) Car
- (2) Cat
- (3) House
- (4) Handphone

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



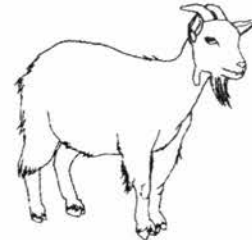
Animal A



Animal B



Animal C

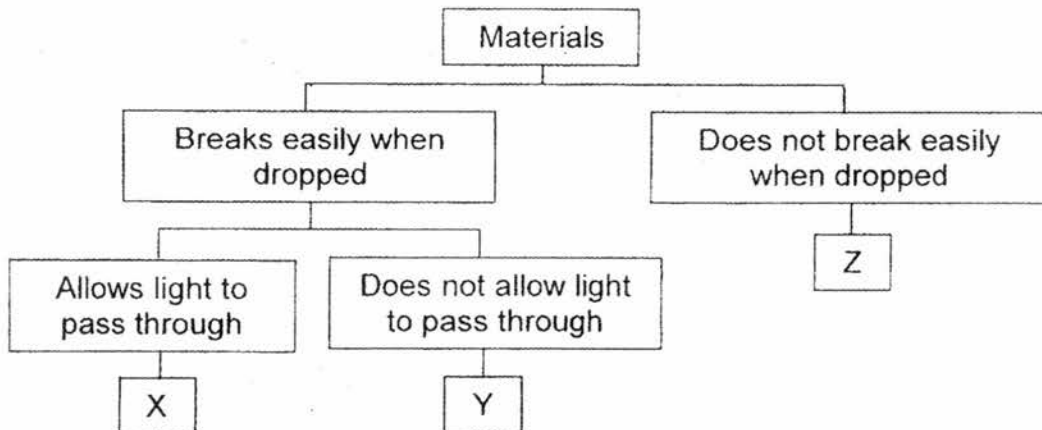


Animal D

The animals belong to the same group because they _____.

- (1) can fly
- (2) live on land
- (3) give birth to young
- (4) have scales as an outer covering

3. Study the classification chart below.



Which one of the following represents X, Y and Z?

	X	Y	Z
(1)	glass	ceramic	metal
(2)	glass	metal	plastic
(3)	plastic	glass	ceramic
(4)	plastic	ceramic	metal

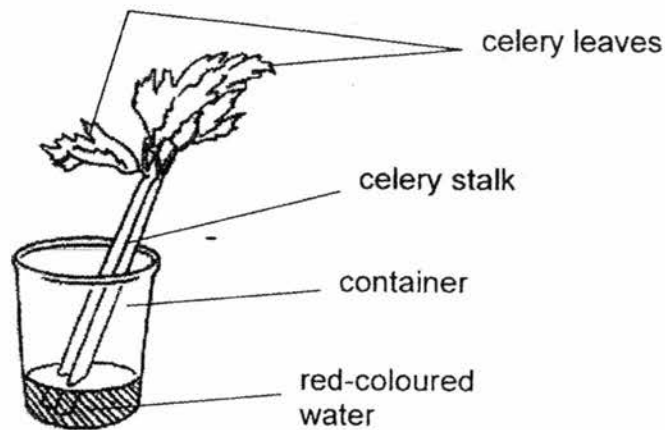
4. The table below shows the properties of four materials, A, B, C and D. A tick (✓) indicates that the material has that property.

Properties	Materials			
	A	B	C	D
Allows light to pass through	✓	✓		
Flexible			✓	✓
Strong		✓	✓	
Waterproof	✓	✓	✓	

Based on the information above, which material is most suitable for making a raincoat?

- (1) A
(2) B
(3) C
(4) D
5. Which of the following statement(s) about root is/are **incorrect**?
- A It makes food for the plant.
B It holds the plant firmly to the ground.
C It takes in water and minerals for the plant.
D It holds the leaves and branches up to get as much sunlight as possible.
- (1) A only
(2) A and D only
(3) B and C only
(4) C and D only

6. Study the diagram below.



A group of children carried out an experiment by putting a stalk of celery into a container of red-coloured water. After a day, the children observed that the celery stalk and its leaves have turned red.

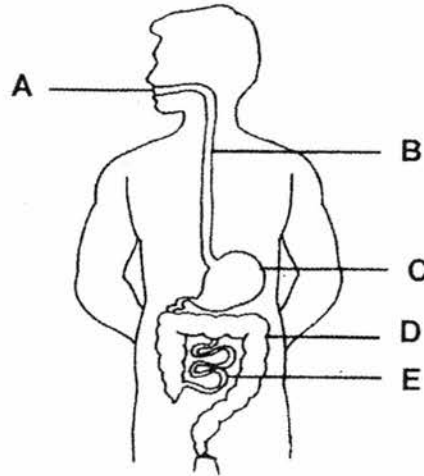
Which of the following statements is true?

- (1) Water does not flow through the stalk and leaves.
- (2) Water is taken in by the stalk and transported to the leaves.
- (3) Water is taken in by the leaves and transported to the stalk.
- (4) Water is taken in by the stalk and leaves directly from the container.

7. Which one of the following systems is **wrongly** matched to its function?

	Human System	Function
(1)	Respiratory System	Helps the body to take in oxygen and remove carbon dioxide.
(2)	Digestive System	Breaks down the food we eat into simple substances.
(3)	Circulatory System	Carries oxygen, digested food and waste materials around the body.
(4)	Muscular System	Protect important organs in the body.

The diagram below shows the human digestive system.
Study the diagram carefully and answer Questions 8 and 9.



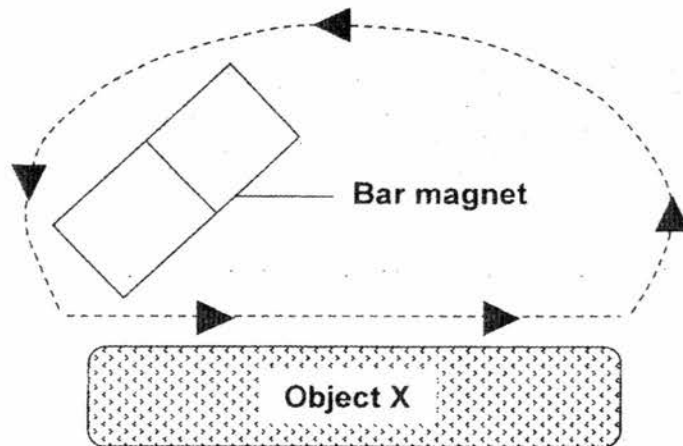
8. Which parts of the digestive system help to digest the food?
- (1) B and D only
 - (2) A, C and E only
 - (3) C, D and E only
 - (4) A, C, D and E only
9. Which parts of the digestive system does absorption takes place?
- (1) D and E only
 - (2) A, B and C only
 - (3) A, C and E only
 - (4) B, C, D and E only
10. Which of the following metals are non-magnetic?
- A Iron
 - B Steel
 - C Copper
 - D Aluminium
- (1) A and B only
 - (2) A and C only
 - (3) B and C only
 - (4) C and D only

11. Four students, Jay, Rene, Melissa and Kee Meng made the following statements about magnets during their Science lesson:

Jay : A magnet can attract all metals.
Rene : Like poles repel, unlike poles attract.
Melissa : Like poles attract, unlike poles repel.
Kee Meng : All metals can be made into magnets.

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

- (1) Jay only
(2) Rene only
(3) Jay and Melissa
(4) Rene and Kee Meng
12. Study the diagram below.



During an experiment, Carol used a bar magnet to stroke Object X repeatedly for 30 times. After that, Object X was able to attract some paper clips. Based on the above experiment, which of the following statements is correct?

- (1) Object X is a magnetic metal.
(2) Object X is a non-magnetic metal.
(3) The magnet lost all its magnetism after it was used to stroke Object X.
(4) The more times Object X was stroked, the less number of paper clips it could attract.

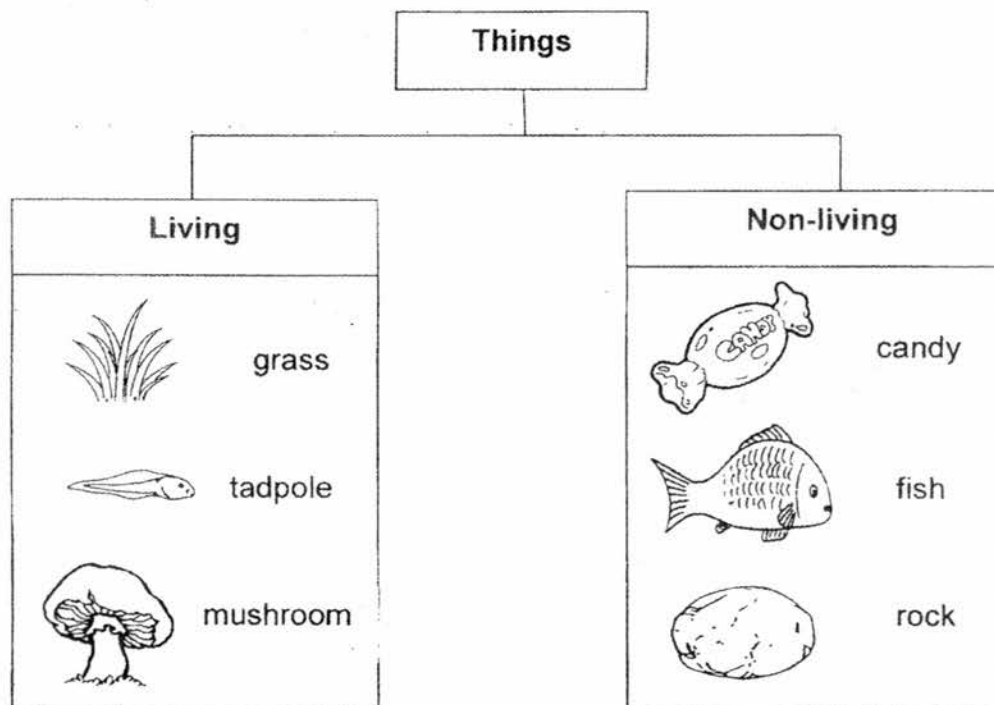
13. The picture below shows a mimosa plant.



The leaves of a mimosa plant close when they are touched. What characteristic of living things does this show?

- (1) It can grow.
- (2) It is making food.
- (3) It can move freely from place to place.
- (4) It can respond to changes in its surroundings.

14. Study the classification table below.



Which one of the above is wrongly grouped?

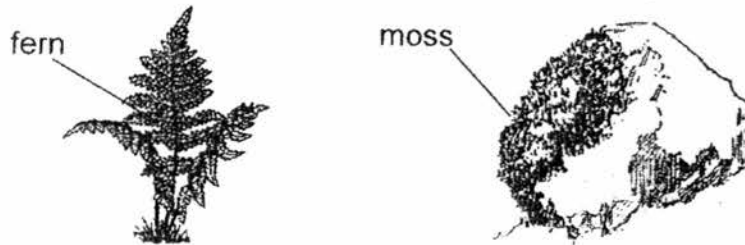
- (1) Fish
- (2) Rock
- (3) Candy
- (4) Mushroom

15. Freddy observed an adult animal X and recorded the following information.

- It can fly.
- It has four legs.
- It does not have feathers.
- It gives birth to young alive.

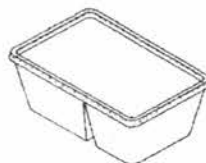
Which group of animal does animal X belong to?

- (1) The animal is a bird.
 - (2) The animal is an insect.
 - (3) The animal is a mammal.
 - (4) The animal is an amphibian.
16. Gladys made some observations about the living things as shown below.



Which one of the following is a similarity between the fern and the moss?

- (1) Both of them are fungi.
 - (2) Both of them cannot make food.
 - (3) Both of them are flowering plants.
 - (4) Both of them are non-flowering plants.
17. The picture below shows a food container that children used to bring their snack to school.

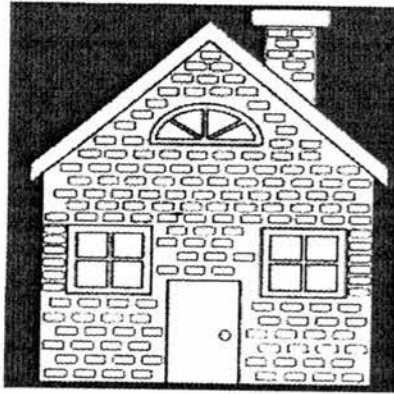


Plastic is suitable for making this food container because _____.

- A plastic is light
- B plastic is waterproof.
- C plastic cannot bend easily
- D plastic allows light to pass through

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

18. Mr Bala and Mr Tan wanted to build a house for their families to stay in. Their friend told them that they should use bricks to build their houses.



brick house

Why is brick a good material for building a house?

- A Brick is strong.
- B Brick is not flexible.
- C Brick sinks in water.
- D Brick is made from clay.

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

19. The table below shows the materials used for making some items and the reasons for choosing those materials. Which reason is **incorrect** in explaining why the material is being used to make the item?

	Items	Materials	Why is the material suitable?
(1)	Shoes	Fabric	It is flexible.
(2)	Plate	Ceramic	It breaks easily.
(3)	Spoon	Metal	It does not bend easily.
(4)	Umbrella	Plastic	It is waterproof.

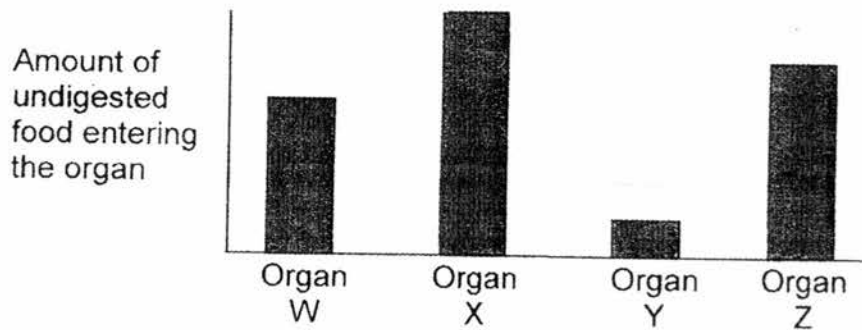
20. Study the diagram below.



Which one of the following functions **cannot** be carried out by the plant in the diagram above?

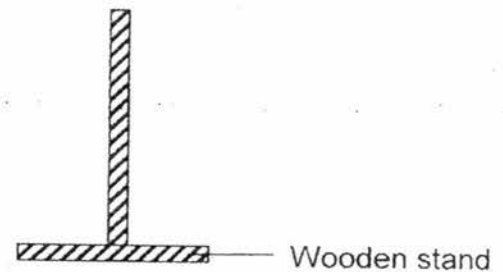
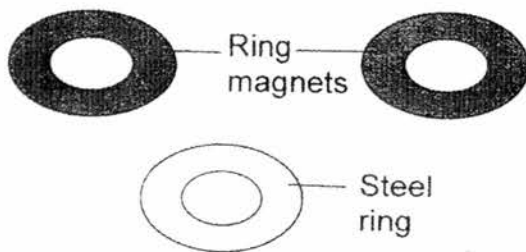
- (1) The plant is not able to make food.
 - (2) The plant is not able to stay upright.
 - (3) The plant is not able to take in water from the soil.
 - (4) The plant is not able to transport food, water and mineral salts to other parts.
21. Kelly likes to play catching with her friends during recess.
Which of the following human systems work together to enable Kelly to run after her friends?
- A Skeletal System
 - B Muscular System
 - C Circulatory System
 - D Respiratory System
- (1) B only
 - (2) A and B only
 - (3) B, C and D only
 - (4) A, B, C and D

22. Peisi just ate a plate of chicken rice during recess. The graph below shows the amount of undigested food entering the mouth, stomach, small intestine and large intestine in her digestive system. The organs are not arranged in order.

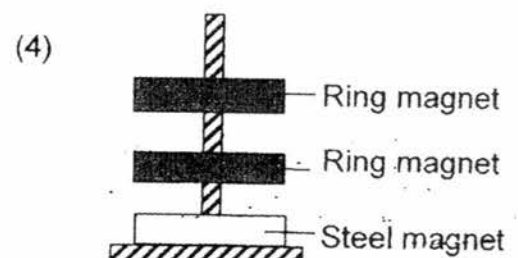
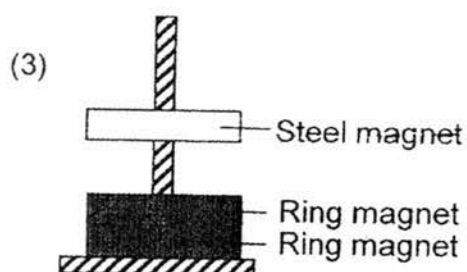
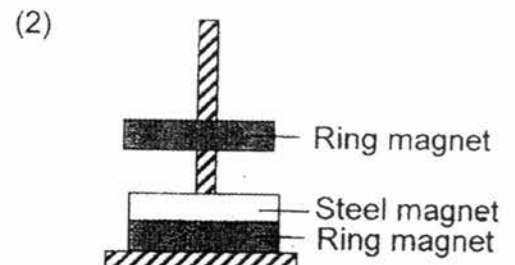
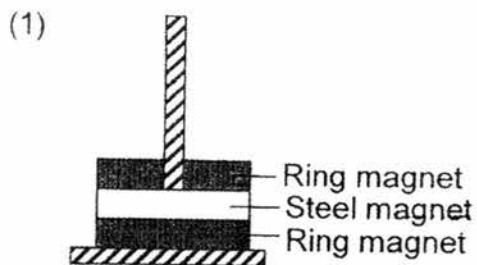


Which organ represents the stomach?

- (1) W
 (2) X
 (3) Y
 (4) Z
23. Two ring magnets and a steel ring were stacked on top of one another through the wooden stand shown below.

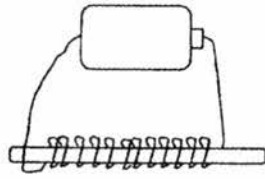


Which one of the following observations is possible?

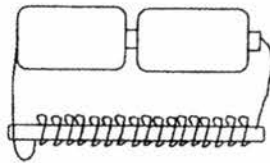


24. The set-ups below show the making of a magnet using the electrical method. Which of the following set-ups will attract the most number of paper clips?

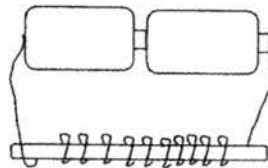
(1)



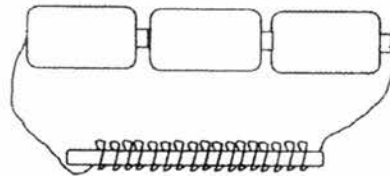
(2)



(3)



(4)





NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2017
PRIMARY 3

SCIENCE

BOOKLET B

10 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
--	------

Name: _____ () Class: P 3 _____

Date : 31 October 2017

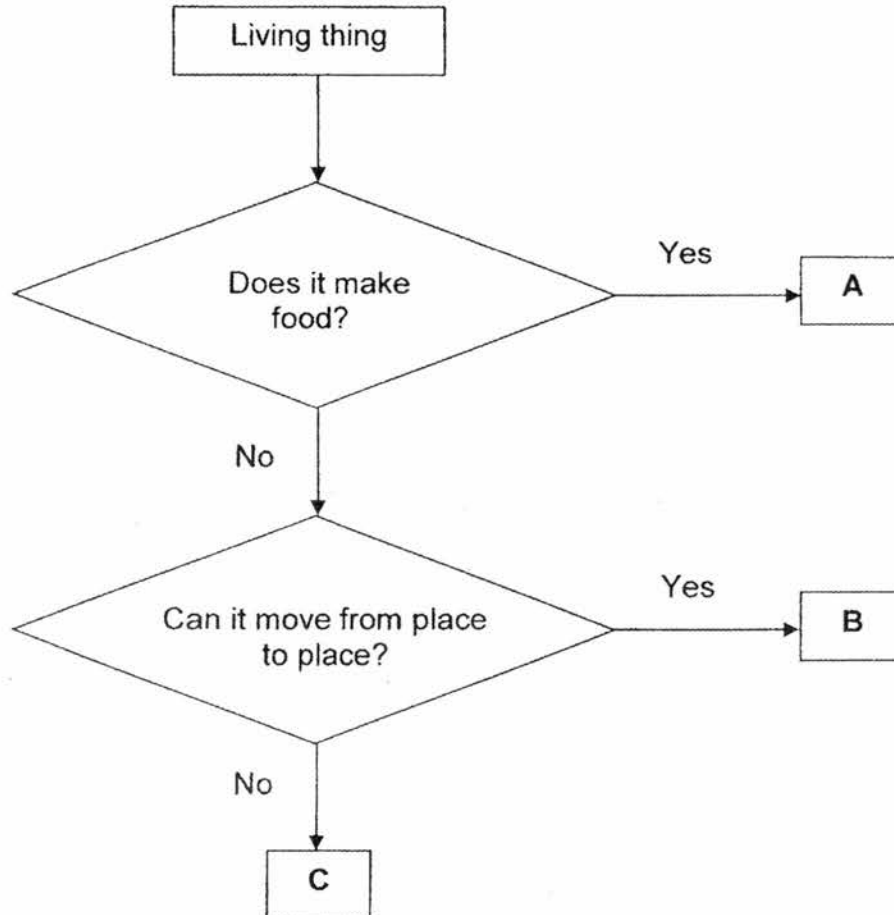
Parent's Signature: _____

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 living things, A, B and C.

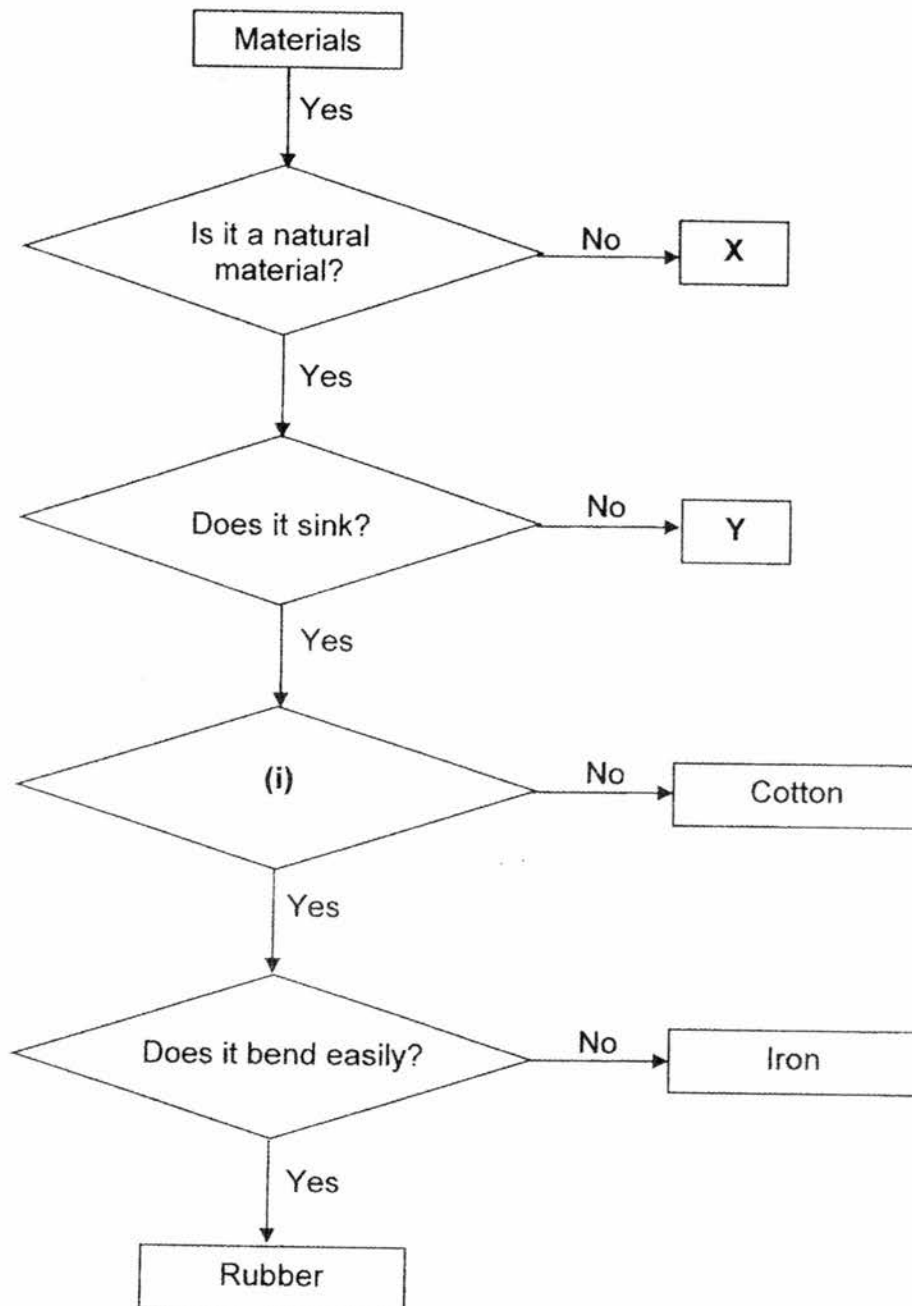


(a) Based on the flowchart above, list two characteristics of living thing B. [2]

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

Score	3
-------	---

26. Study the flowchart below.



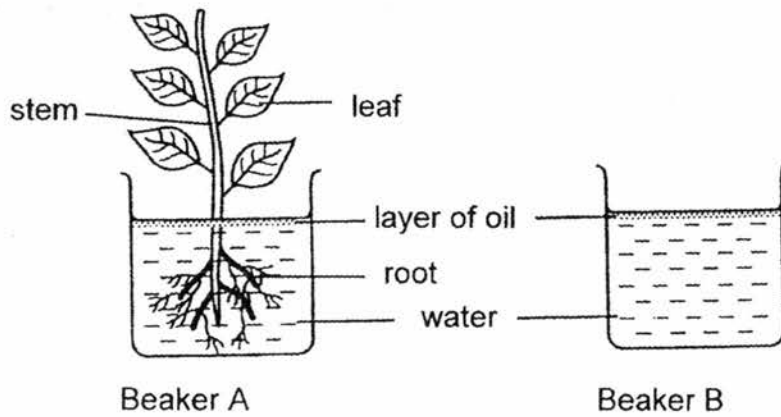
(a) Name materials X and Y. [1]

X: _____

Y: _____

(b) Write a suitable question for (i) in the flowchart. [1]

27. Simon set up an experiment as shown in the diagram below.



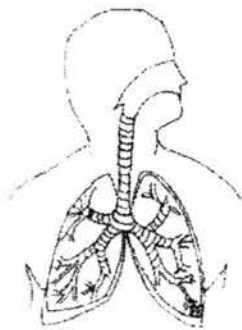
(a) What is the function of the root? [1]

(b) Describe what would happen to the water level in both Beaker A and Beaker B after a week. [2]

Beaker A: _____

Beaker B: _____

28. The diagram below shows three different human systems.



System A



System B

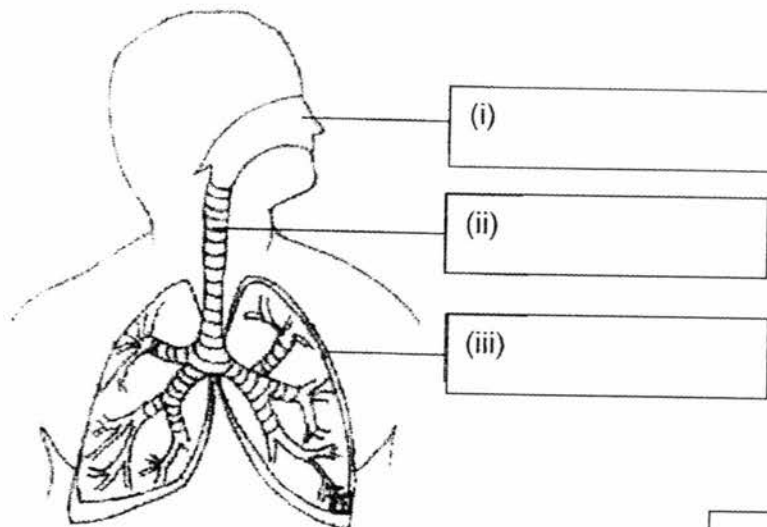


System C

(a) Match the functions below with the correct human system (A, B or C) as shown above. [1½]

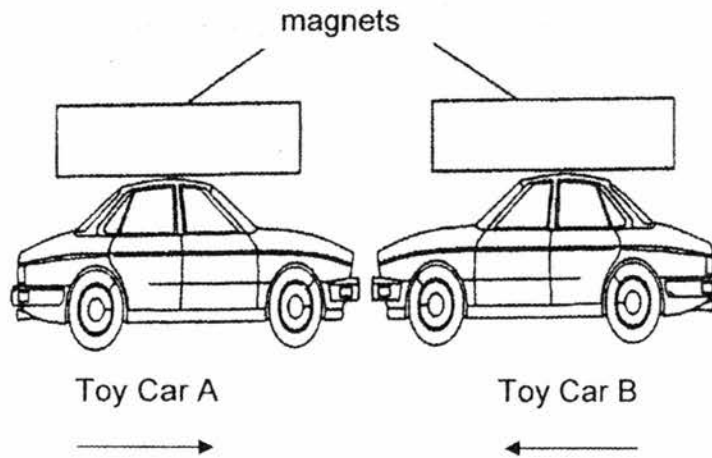
Function	System
Gives the body its shape and protect important organs.	
Transports digested food, oxygen and waste materials around the body.	
Takes in oxygen for the body and removes carbon dioxide from the body.	

(b) Label the parts of System A in the diagram below. [1½]



Score	3
-------	---

29. Jade attached a magnet on the roof of each toy car as shown below.

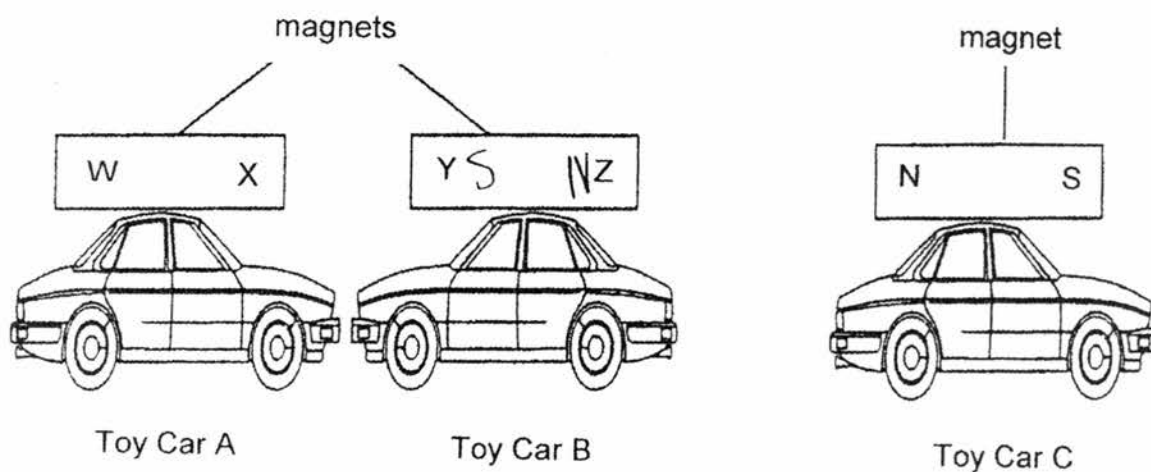


- (a) When Jade brought Toy Car A nearer to Toy Car B, both Toy Car A and Toy Car B came towards each other. Explain why it is so. [1]

- (b) Jade then turned Toy Car B the other way round and the two toy cars moved away from each other. Explain why the two toy cars moved away from each other. [1]

Score	2
-------	---

- (c) Jade took a third car, Car C, with a magnet on its roof. She placed the three cars together and observed that Car C moved away from Car B. At the same time, Car A moved nearer to Car B.

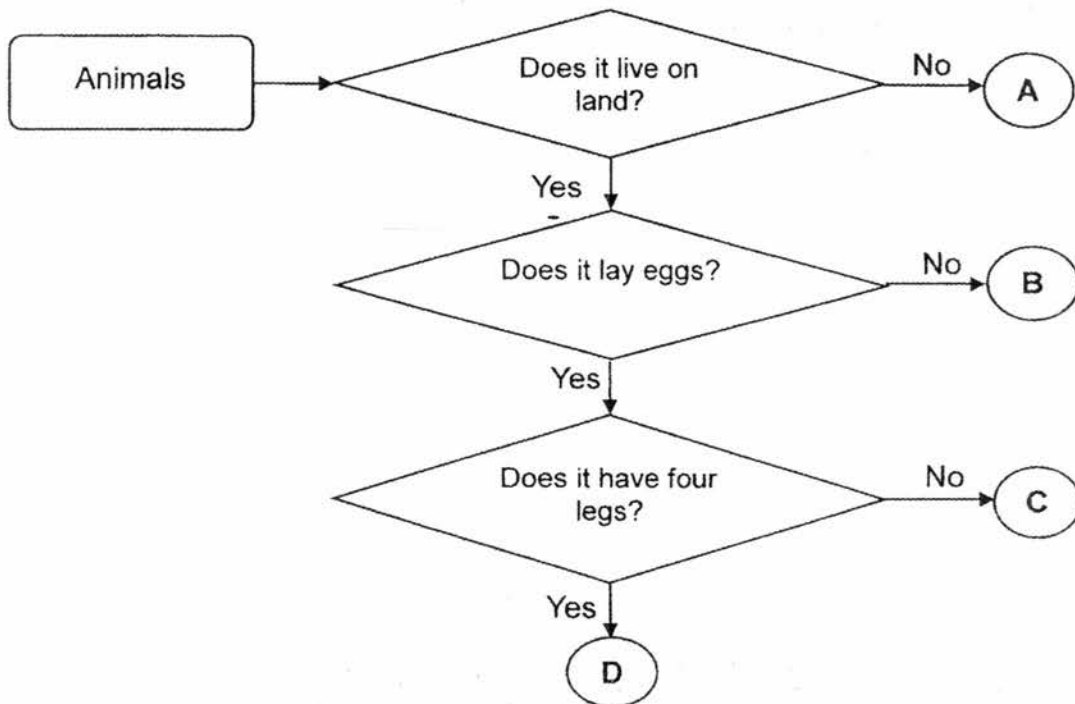


Identify the poles of the magnets.

Write down **North pole** or **South pole** in the blanks provided below. [2]

- i) W: _____
- ii) X: _____
- iii) Y: _____
- iv) Z: _____

30. Study the flowchart below carefully.



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

[2]

mammal	reptile	fish	bird
--------	---------	------	------

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 only on the flowchart above, state one similarity between Animals B and C.

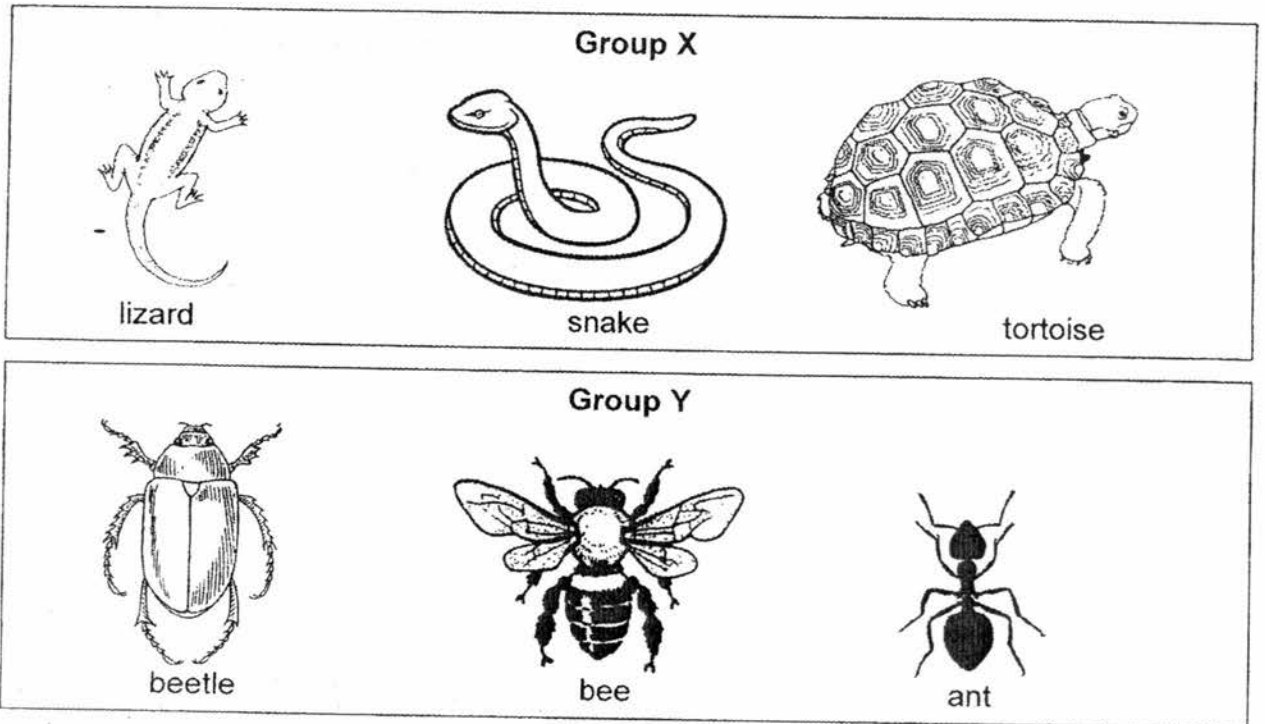
[1]

(c) Based only on the flowchart above, state one difference between Animals C and D.

[1]

Score	4
-------	---

31. Study the two groups of living things shown below.

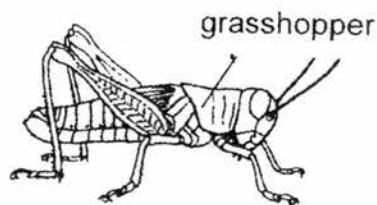


(a) Give a suitable heading for each of the groups above. [1]

Group X: _____

Group Y: _____

(b) Study the picture below.

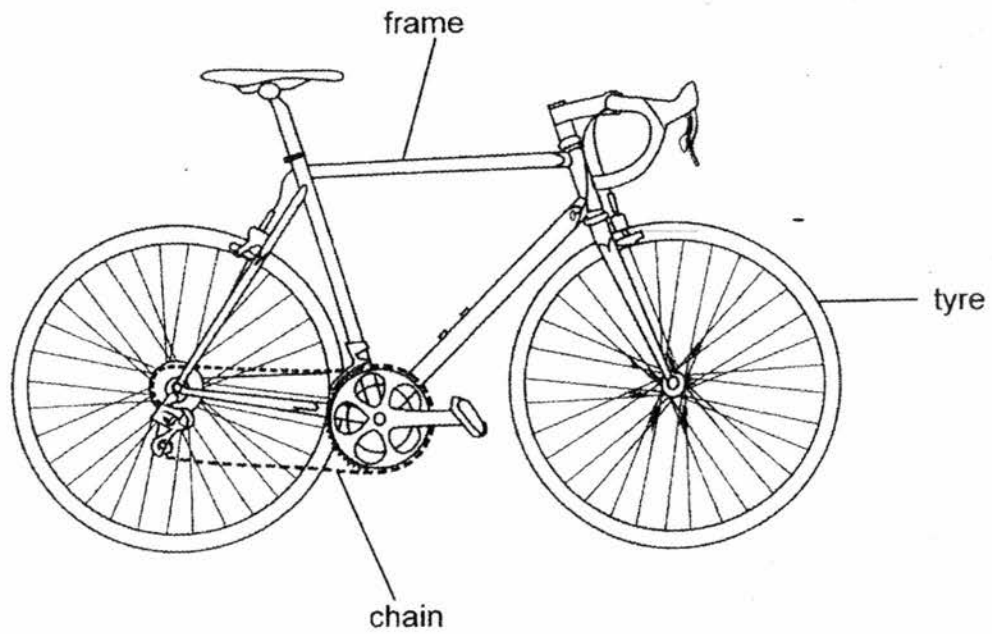


Which group (X or Y) does the grasshopper belong to? [1]

(c) State the difference between the outer coverings of the snake and the ant. [1]

(d) How do the animals in both groups reproduce? [1]

32. Study the picture of a bicycle below carefully.



(a) Name a material suitable for making the bicycle frame and the bicycle tyre above. [1]

Bicycle frame : _____

Bicycle tyre : _____

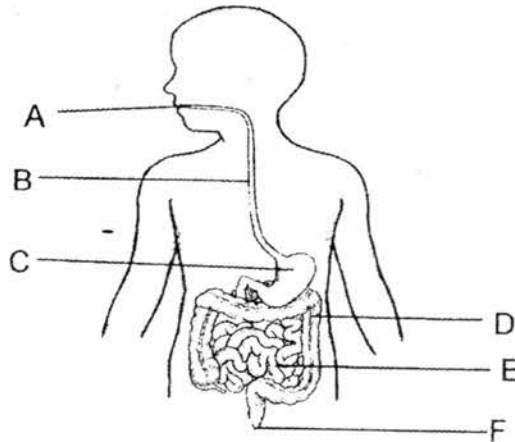
(b) The bicycle chain is made of metal. State two properties of metal that makes it suitable for making a bicycle chain. [1]

(i) _____

(ii) _____

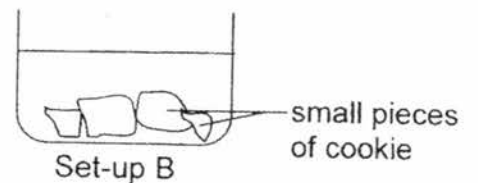
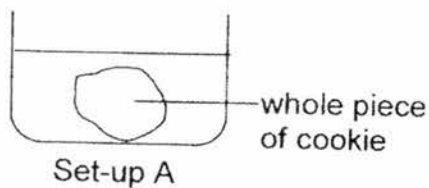
Score	2
-------	---

33. The diagram below shows the human digestive system.



- (a) Based on the diagram above, where (A, B, C, D, E or F) does digestion starts and ends? [1]
 Digestion starts at _____ and ends at _____
- (b) What is the function of Part B in the diagram above? [1]

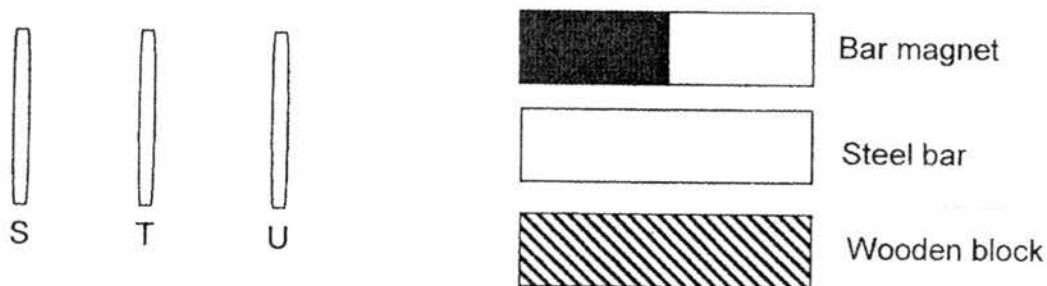
- (c) Peter conducted an experiment using the two set-ups below. Set-up A has a whole piece of cookie in a beaker and Set-up B has a similar piece of cookie broken into small pieces inside another beaker. Same amount of digestive juice was added to both set-ups.



In which set-up will the cookie take a shorter time to be digested? Explain your answer. [2]

Score	4
-------	---

34. Xin Pei tested three rods (S, T and U) with a bar magnet, a steel bar and a wooden block.



She brought each end of the rod close to one end of the bar magnet, steel bar and wooden block. Then she used the same end of the rod and brought it close to the opposite end of the three objects. She recorded her results in the table below.

Rod	Bar magnet	Steel bar	Wooden block
S	Attracts both ends.	Did not attract or repel.	Did not attract or repel.
T	Attracts one end and repel the other end.	Attract both ends.	Did not attract or repel.
U	Did not attract or repel.	Did not attract or repel.	Did not attract or repel.

- (a) Based on the table above, which rod (S, T or U) is a magnet? Give a reason for your answer. [2]

- (b) Based on the table above, what material could Rod U be made of? [1]

~ End of paper ~

Score	3
-------	---

ANSWER KEY

YEAR : 2017
LEVEL : PRIMARY 3
SCHOOL : NAN HUA PRIMARY SCHOOL
SUBJECT : SCIENCE
TERM : SA2

SECTION A (24 x 2marks)

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

SECTION B (32 marks)

Q25.a) B does not make food and can move from place to place.

b) Plants

Q26.a) X: Plastic/Nylon/Glass/Ceramic Y: Wood/Leather

b) Is it waterproof?

Q27.a) The root absorbs water and mineral salts for the plant

b) Beaker A : The water-level will drop
Beaker B : The water level will stay the same

Q28.a) B,C,A

b) i) Nose ii) Windpipe /iii) Lungs

Q29.a) The magnets unlike poles are facing each other, unlike poles attract and thus the two toy cars move towards each other.

b) The like poles of the magnets are facing each other, like-poles repel and thus the two toys move away from each other.

c) i) W: South pole ii) X: North pole iii) South pole iv) Z: North Pole

Q30.a) i) fish ii) mammal iii) bird iv) reptile

b) Animal B and C both live on land

c) Animal D has four legs while animal C does not have four legs.

Q31.a) Group X: Reptile/has scales/does not have six legs
Group Y: Insect/ has exoskeleton/ has six legs

b) Group Y

c) The snake's outer covering is scales while the ant's outer covering is an exoskeleton

d) They reproduce by laying eggs

Q32.a) Bicycle frame: metal

Bicycle tyre: rubber

b) i) It is strong

ii) It does not wear away easily/ waterproof / does not break easily

Q33.a) Digestion starts at A and ends at E

b) It is to transport the food from the mouth to the stomach.

c) Set-up B will take a shorter time. This is because cutting the food into smaller pieces increases the surface area of digestive juices in contact with the food, speeding up digestion.

Q34.a) T, It is the only rod that repels the bar magnet, only like poles of two magnets repel, thus T is a magnet.

b) Plastic

THE END