

Pei Chun Public School  
Semestral Assessment 2 – 2013  
Science  
Primary 3

Name : \_\_\_\_\_ (     )     Date : 29 October 2013

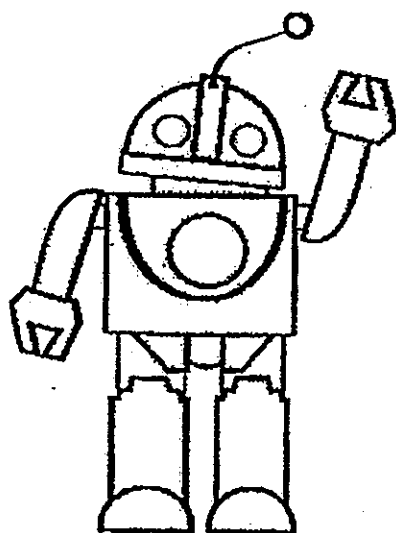
Class : Pr. 3 (     )

Science Teacher : \_\_\_\_\_     Time : 1h 30 min

**Section A (25 × 2 marks)**

For questions 1 to 25, choose the most suitable answer and shade its number (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. Three children made the following statements about Toy A and Boy B as shown below.



Toy A



Boy B

- Yi Min:     Boy B can reproduce but not Toy A.  
Kumar:     Both need air, water and food.  
Terence:    Both can respond to changes around them.

Which of the children made the correct statement(s)?

- (1) Yi Min only  
(2) Terence only  
(3) Yi Min and Terence only  
(4) Kumar and Terence only

(     )

2. Which of the following statements are examples of living things responding to changes in the surroundings?

K: A girl's hair flies in the wind.  
L: A snail hides in its shell when it is touched.  
M: A squirrel runs up a tree when it sees a cat.  
N: A mimosa plant closes its leaves after being touched.

- (1) K, L and M only  
(2) K, M and N only  
(3) L, M and N only  
(4) K, L, M and N ( )

3. Wei Ling placed four different things W, Y, X and Z in four similar cages. She then placed 800 g of food and some water in each cage. At the end of five days, she recorded the amount of food left in each cage in the table below.

Thing	Amount of food left in each cage (g)
W	800
X	250
Y	125
Z	60

Based on her results, which of the things is most likely a non-living thing?

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

4. Ravi observed some plants in his school garden. Which of the following observations did he make to conclude that the plants were non-flowering?

- (1) The plants had big leaves.  
(2) The plants had weak stems.  
(3) There were fruits on the plants.  
(4) Spores were found on the underside of the leaves. ( )

5. Study the table showing characteristics of E, F and G below.

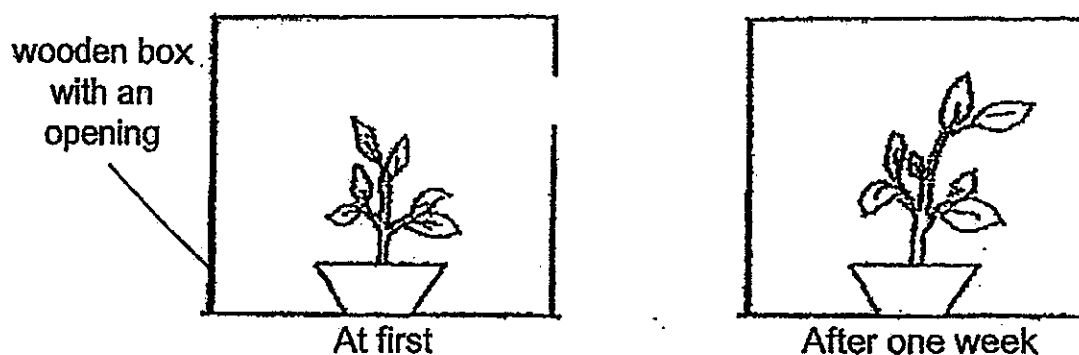
	E	F	G
Can grow		✓	✓
Can reproduce		✓	✓
Has legs	✓	✓	
Can respond to changes around it		✓	✓

Which of the following best represents E, F and G?

	E	F	G
(1)	chair	dolphin	giraffe
(2)	giraffe	orchid plant	doll
(3)	giraffe	chair	dolphin
(4)	doll	giraffe	orchid plant

( )

6. Caili placed a potted plant in a wooden box with an opening near a window. She watered it daily. After one week, she observed that the plant grew towards the opening in the wooden box as shown below.



Based on her observation, she concluded that the plant

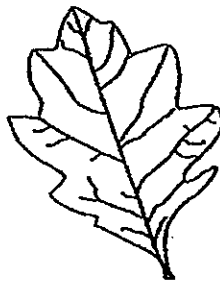
- (1) needs air
- (2) takes in water
- (3) makes its own food
- (4) grows towards light

( )

7. Study the leaves P, Q and R below.



P



Q



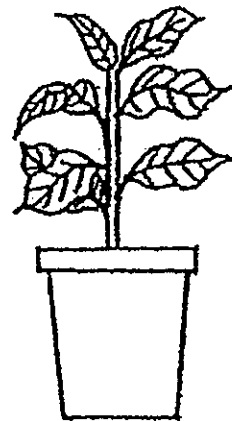
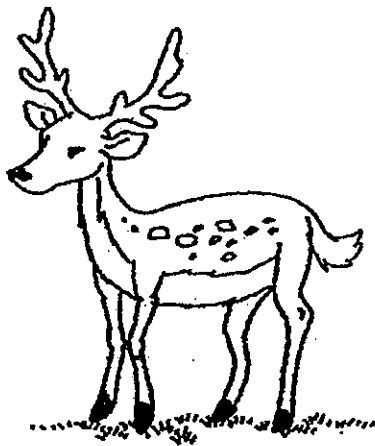
R

Melanie grouped the leaves according to their leaf edges. Which of the following classification is correct?

	Lobed Edges	Smooth Edges	Jagged Edges
(1)	P	R	Q
(2)	R	Q	P
(3)	Q	R	P
(4)	Q	P	R

( )

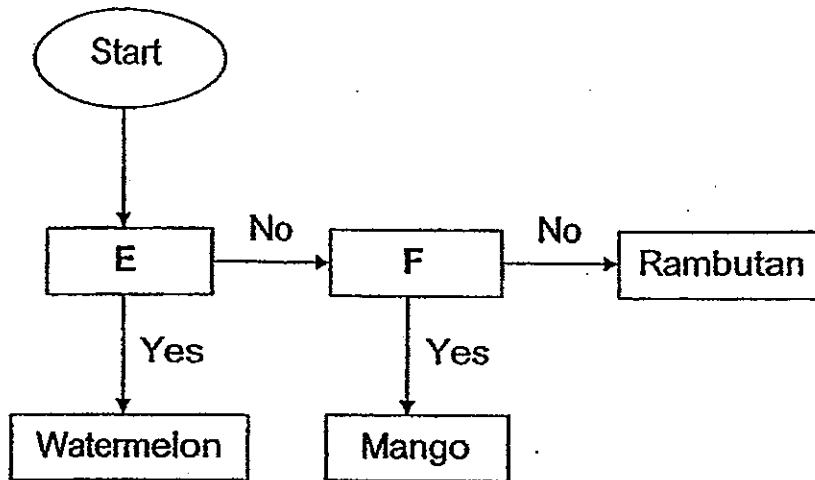
8. The diagrams below show a deer and a plant.



Which of the following statements about the deer and the plant is definitely true?

- (1) The plant cannot reproduce but the deer can.
  - (2) The deer needs food to survive but the plant does not.
  - (3) The deer can respond to changes but the plant cannot.
  - (4) The plant can make its own food but the deer cannot.
- ( )

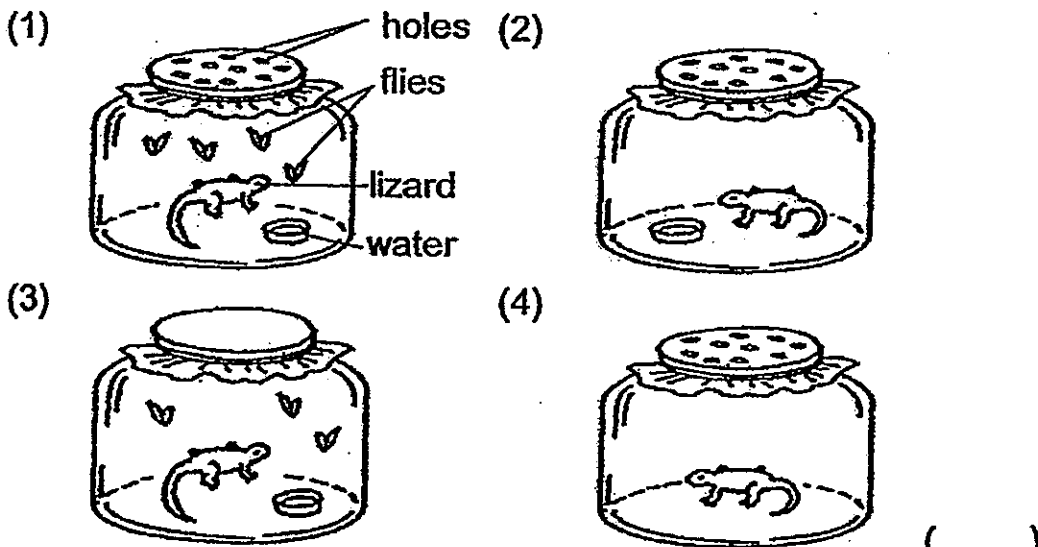
9. Study the flow chart of some fruits below.



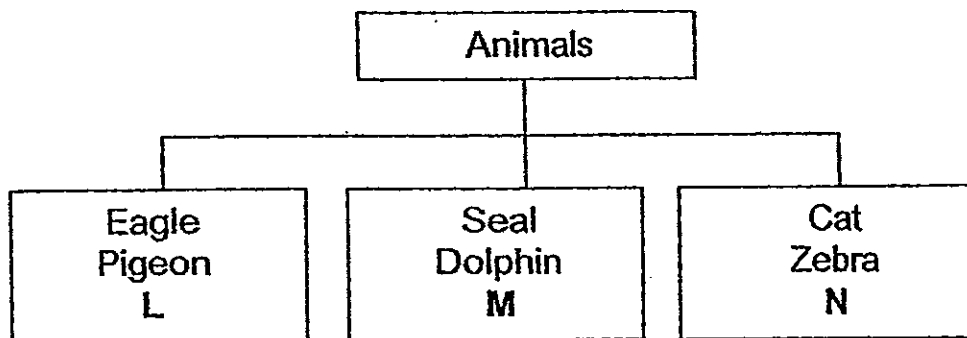
Which of the following are suitable characteristics for E and F?

	E	F
(1)	Does it have one seed?	Does it have rough skin?
(2)	Does it have many seeds?	Does it have smooth skin?
(3)	Does it have rough skin?	Does it have one seed?
(4)	Does it have smooth skin?	Does it have many seeds?

10. Devi set up four jars as shown in the diagrams below. After a few weeks, only one of the lizards was still alive. Which of the lizards was most likely to be alive?



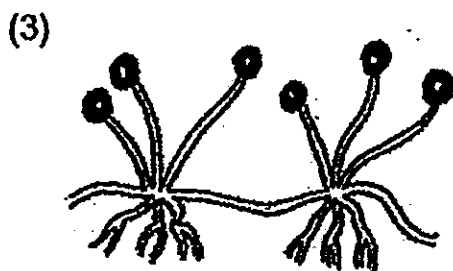
11. Study the classification chart below.



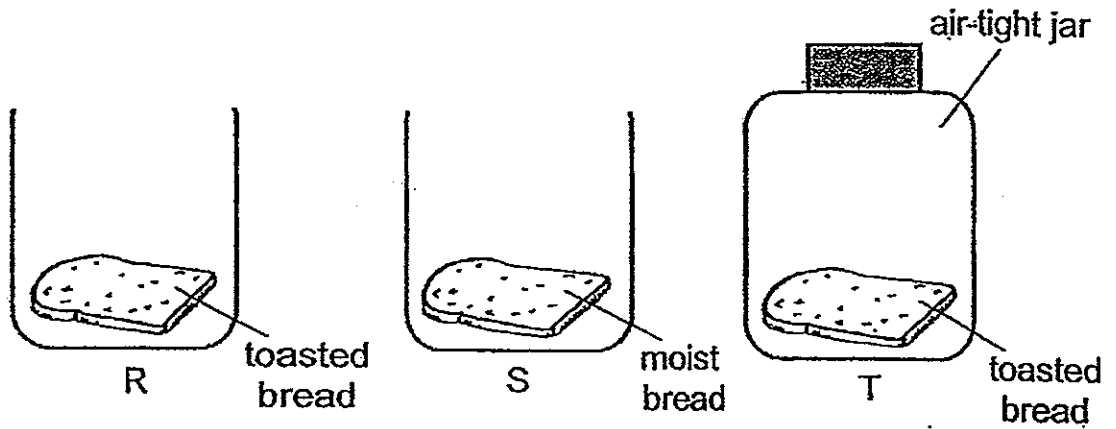
Which of the following most likely represent L, M and N?

	L	M	N
(1)	Earthworm	Seagull	Penguin
(2)	Ostrich	Tiger	Dragonfly
(3)	Dragonfly	Penguin	Ostrich
(4)	Seagull	Earthworm	Tiger

12. John classified the following living things into the same group according to how they reproduce. Which of them does not belong to the group?



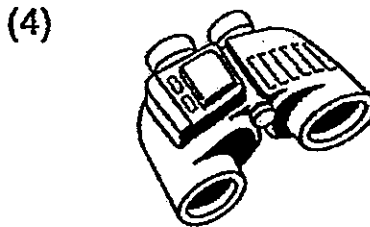
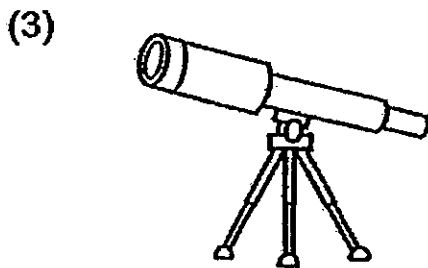
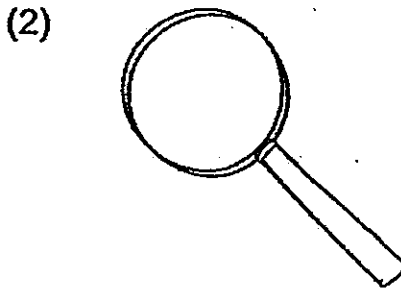
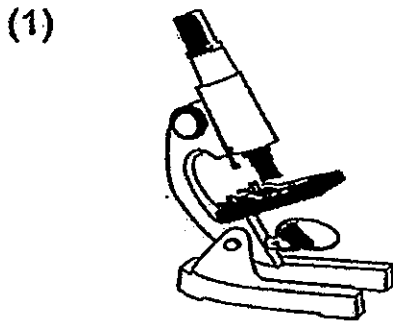
13. Gita left three slices of bread as shown below.



After five days, she noticed mould growing on the slices of bread. Arrange the order in which the three slices of bread started turning mouldy.

- |     | first | →  | last |     |
|-----|-------|----|------|-----|
| (1) | R,    | S, | T    |     |
| (2) | S,    | R, | T    |     |
| (3) | S,    | T, | R    |     |
| (4) | T,    | S, | R    | ( ) |

14. Which of the following is used for viewing micro-organisms?



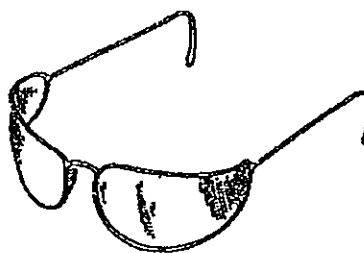
( )

15. Which of the following objects is made of only one material?

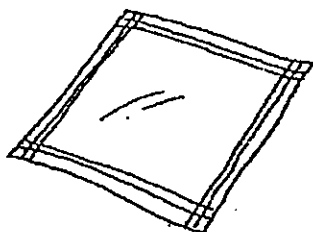
(1)



(2)



(3)



(4)



( )

16. Study the table below.

Object	Material	Weight (g)	Floats
L	Metal	3	x
M	Plastic	3	✓
N	Plastic	18	x
P	Wood	20	✓

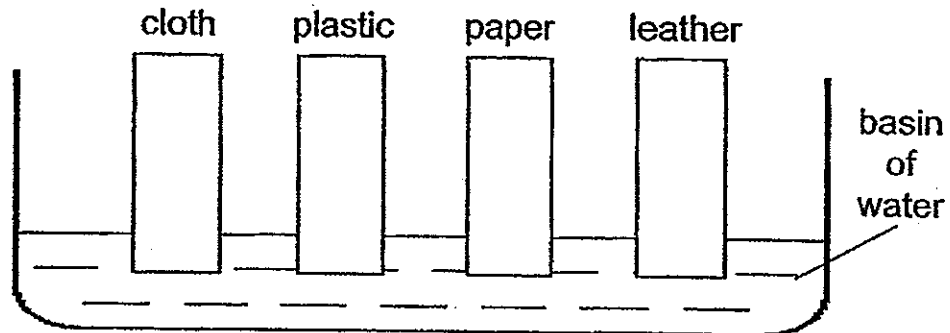
Based on the table, which of the following statements is correct?

- (1) All heavy objects sink.
- (2) Object P is the heaviest.
- (3) Object L is heavier than Object M.
- (4) All of the objects that are made of plastic float. ( )



17. Ahmad set up an experiment to find out which material absorbs water the most.

He tied four similar strips made of different materials on a string and lowered them into a basin of water as shown below.



Which two of the above materials are likely to be completely wet after a few hours?

- (1) cloth and plastic
- (2) cloth and paper
- (3) paper and plastic
- (4) paper and leather

( )

18. Meera wanted to find out the effect of heating on magnets. She conducted an experiment using three similar magnets, P, Q and R, and some pins. She recorded her results in the table below.

	Number of pins attracted		
	P	Q	R
Before heating	13	11	20
After heating	6	5	9

Based on the above results, she concluded that magnets \_\_\_\_\_ after being heated.

- (1) become non-magnets
- (2) use up their magnetic strength
- (3) lose some of their magnetic strength
- (4) remain as non-magnetic materials

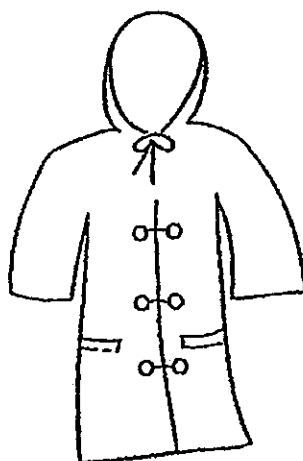
( )

19. Study the properties of materials A, B, C and D as shown in the table below.

Property	Material A	Material B	Material C	Material D
Strong	✓	x	✓	x
Flexible	x	✓	x	✓
Lightweight	x	✓	✓	✓
Waterproof	✓	x	x	✓

The most suitable material for making the raincoat below is

\_\_\_\_\_.

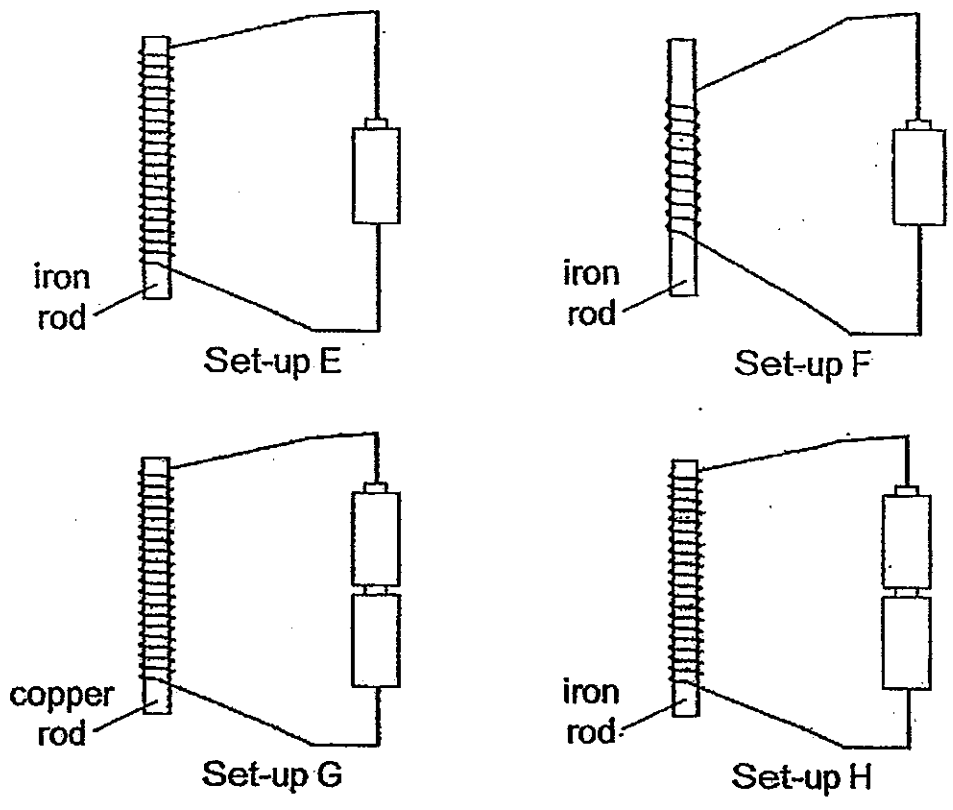


raincoat

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

( )

20. Linda conducted an experiment to form electromagnets as shown below.



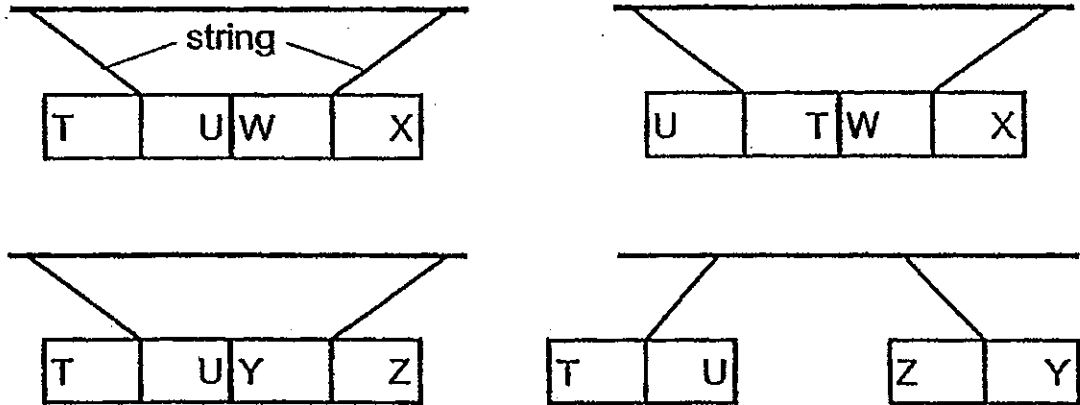
In which set-up would the electromagnet be the strongest?

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

( )

21. Shazi carried out an experiment to find out which of the three metal bars TU, WX and YZ were magnets. He hung each bar from a string and brought their ends close to each other.

The diagrams below show his results.



Which of the following is/are magnet(s)?

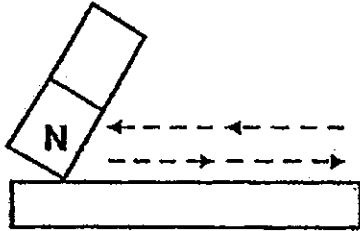
	TU	WX	YZ
(1)	magnet	not a magnet	magnet
(2)	magnet	magnet	not a magnet
(3)	not a magnet	magnet	magnet
(4)	magnet	not a magnet	not a magnet

( )

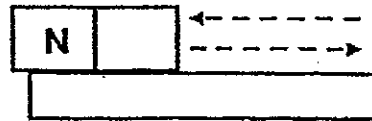
22. Jia Ying wanted to magnetise an iron rod by stroking it with a bar magnet.

Which of the following diagrams shows the correct way of magnetising an iron rod?

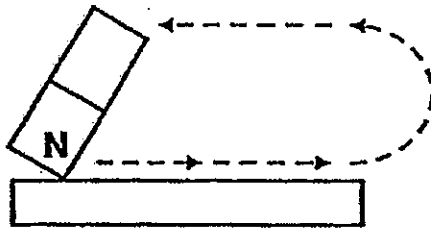
(1)



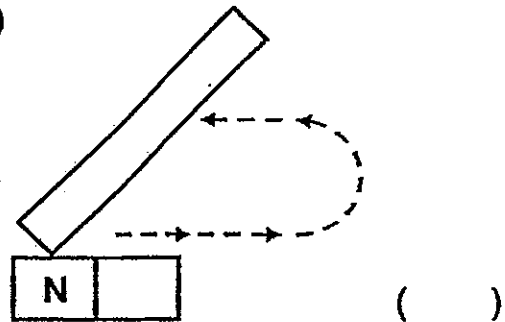
(2)



(3)



(4)



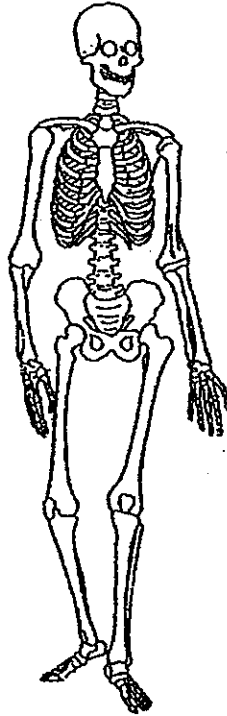
23. Which of the following is NOT a use of magnets?

- (1) Opening a key lock
- (2) Closing a refrigerator door
- (3) Storing information in ATM cards
- (4) Showing directions in compasses ( )

24. What is the function of the large intestine in the human digestive system?

- (1) It digests the food.
- (2) It passes the digested food to the blood.
- (3) It passes the undigested food out of the body.
- (4) It takes away water from the undigested food. ( )

25. Four children made the following statements about the human system below.



- Priya: Supports the body  
Lionel: Gives the body shape  
Rizwan: Takes oxygen into the body  
Shu Hui: Protects the nose and mouth

Which of the children made the correct statements?

- (1) Lionel and Priya only  
(2) Priya and Rizwan only  
(3) Priya and Shu Hui only  
(4) Lionel and Shu Hui only

( )

For Questions 26 to 30, please refer to Booklet K.

End of Section A

Pei Chun Public School  
Semestral Assessment 2 – 2013  
Science  
Primary 3

Name: \_\_\_\_\_ ( )

Class: Pr.

Date: 29 October 2013

Time: 1 h 30 min

Science Teacher: \_\_\_\_\_

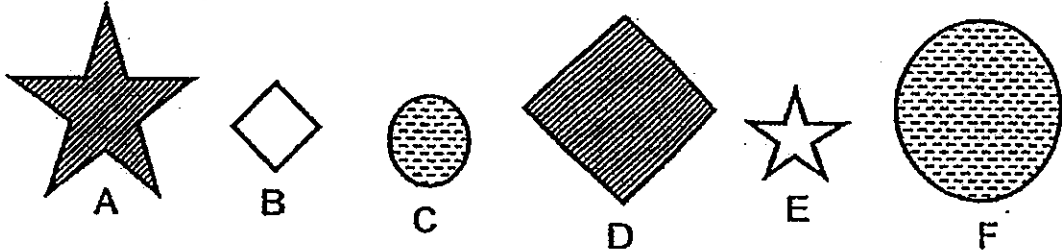
Parent's signature: \_\_\_\_\_

Section A (includes Booklet K MCQs)	60
Section B	30
Booklet K (excludes MCQs)	10
Total	100

**Section B (30 marks)**

For questions 31 to 40, write your answers in the spaces provided.

31. Study the objects below.

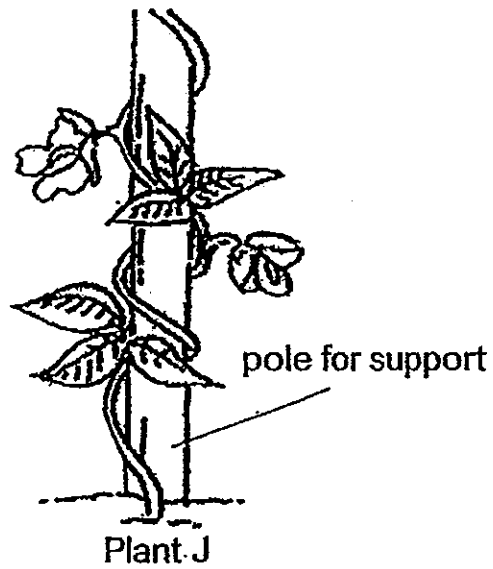


(a) Classify the objects into two equal groups by writing the letters in the table below. (1 m)

Group 1	Group 2

(b) Based on your answer in (a), what characteristic of the objects did you use to classify them? (1 m)

32. Study the diagrams below.



(a) State one common function of the stems of plants J and K. (1 m)

---

---

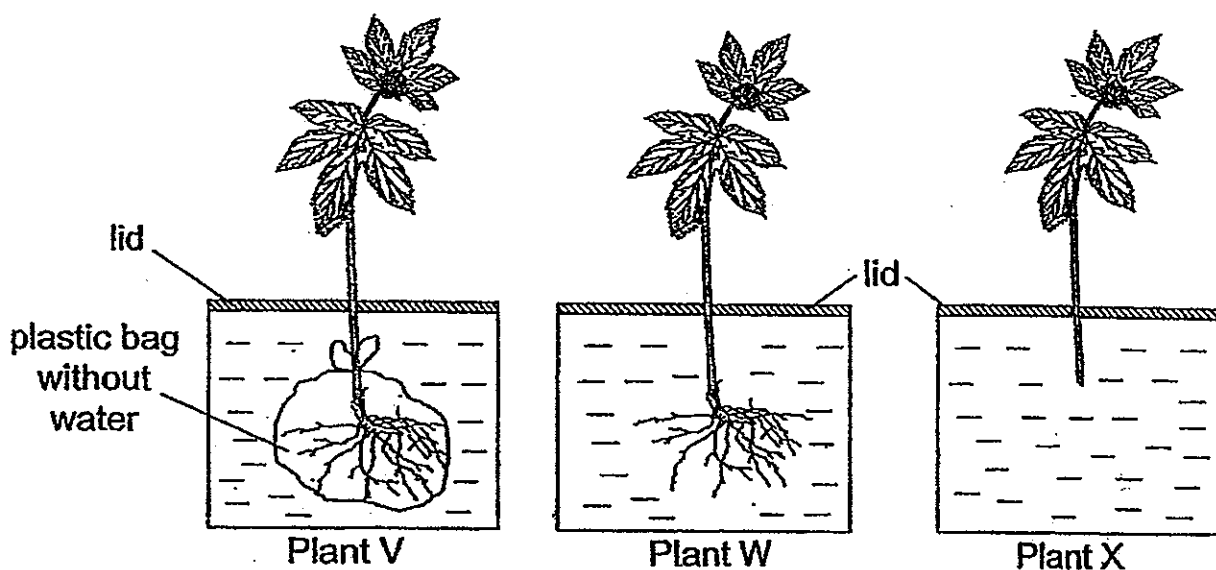
(b) State one difference between the stems of plants J and K. (1 m)

---

---



33. Roy placed three healthy plants, V, W, and X, in identical containers, with the same amount of water as shown below.



He then placed the above set-ups near the window for a week.

(a) Which plant would most likely continue to grow well after a week? (1 m)

---

(b) Explain your answer in (a). (2 m)

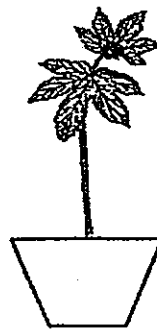
---

---

(c) Roy transferred plants W and X to two similar pots and placed them in his garden.



Plant W



Plant X

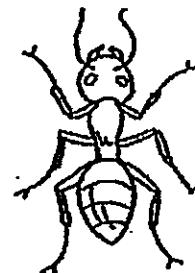
On a windy day, he observed that plant W remained upright but plant X fell.

What function of roots explains why plant W did not fall? (1 m)

---

---

34. Study the diagrams below carefully.



Based on the diagrams, write down two characteristics which show that both animals are insects. (Do not compare shape or size.)

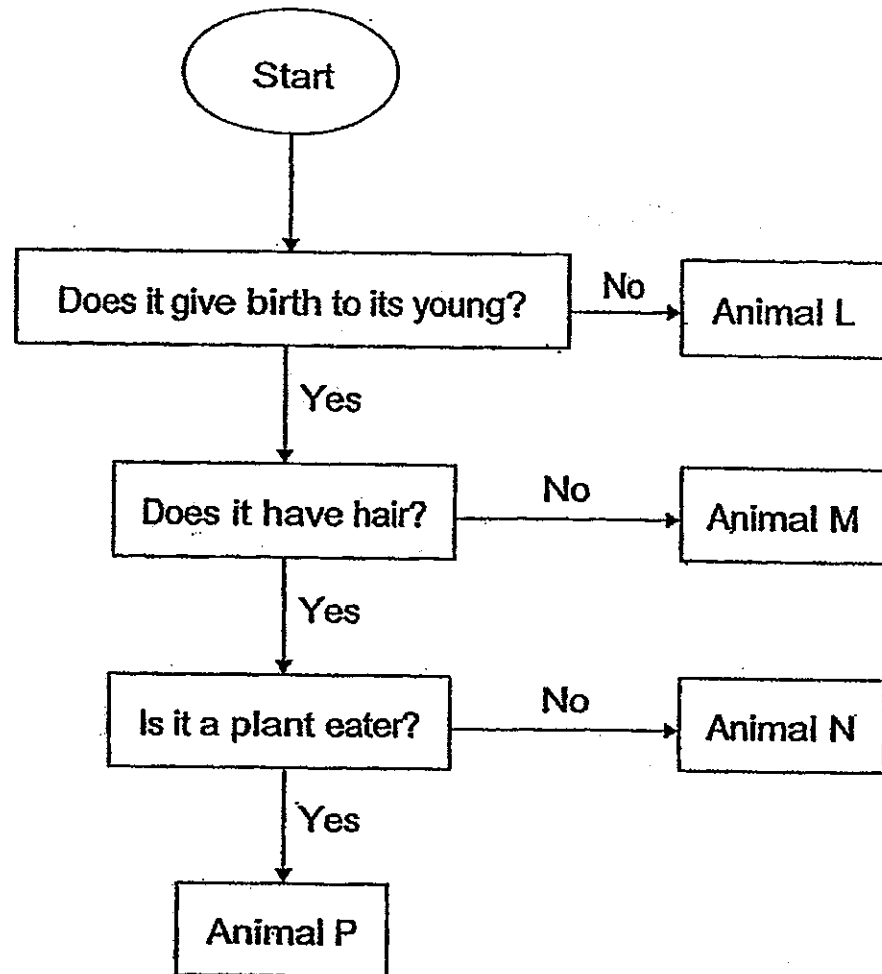
Characteristic 1: (1 m)

---

Characteristic 2: (1 m)

---

35. Study the flow chart of animals L, M, N and P below.



(a) State one similarity among animals M, N and P. (1 m)

---

(b) State one difference between animals M and P. (1 m)

---

(c) Identify the living things given below by writing the letters L, M, N and P. (2 m)

(i) Guppy: \_\_\_\_\_

(ii) Snake: \_\_\_\_\_

(iii) Giraffe: \_\_\_\_\_

(iv) Cheetah: \_\_\_\_\_

36. Wee Kiat conducted an experiment to compare three materials, P, Q and R. He used one material to scratch the other two materials.

He recorded his observations in the table below.

		Material scratched		
		P	Q	R
Material used to scratch	P		Yes	Yes
	Q	No		Yes
	R	No	No	

- (a) What property of materials was Wee Kiat trying to compare? (1 m)

---

---

- (b) Wee Kiat's knife left some scratches on his new chopping board. If the chopping board is made of material Q, which of the materials is the knife likely to be made of? (1 m)

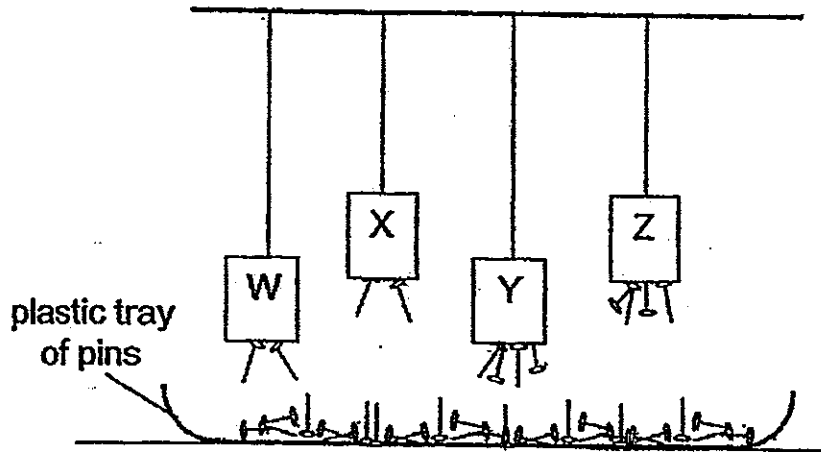
---

- (c) Based on the table, give a reason for your answer in (b). (1 m)

---

---

37. Magnets W, X, Y and Z are hung from strings of different lengths. A plastic tray of pins is placed below the magnets as shown in the diagram.



Based on your observations, put a tick (✓) in the correct boxes to show whether the following statements are 'True', 'False' or 'Not possible to tell'. (3 m)

Statements	True	False	Not possible to tell
Magnet Y is as strong as Magnet Z.			
Magnet X is weaker than Magnet Y.			
Magnet Z is stronger than Magnet W.			

38. Reena made a toy shark using magnets R and S. The magnets enabled the shark to 'float' above the plastic base as shown in diagram 1.

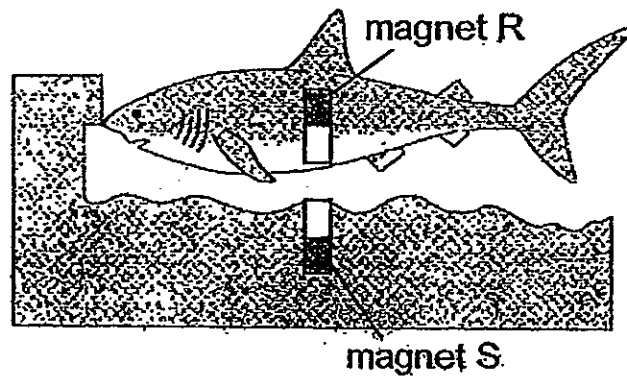


Diagram 1

- (a) Explain why the shark was able to 'float' above the plastic base.

---

---

Reena turned the magnet S in the plastic base the other way up as shown in diagram 2.

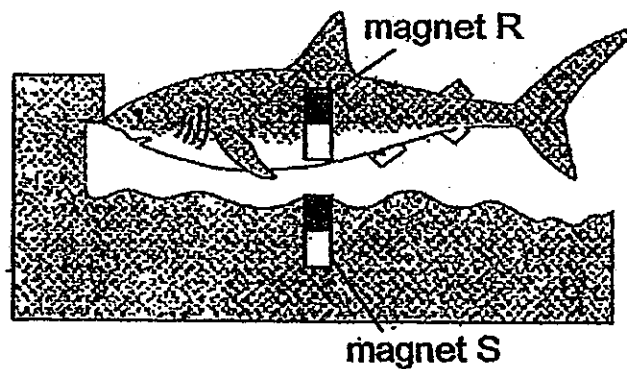


Diagram 2

- (b) State what she would observe about the toy shark. (1 m)

---

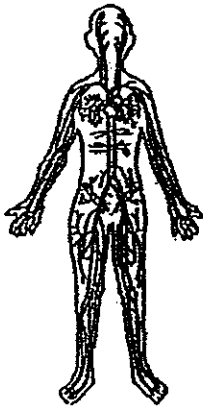
---

- (c) Explain your answer in (b).

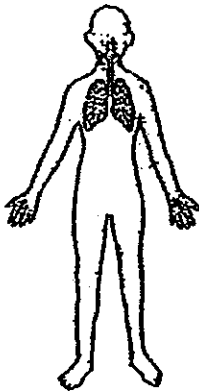
---

---

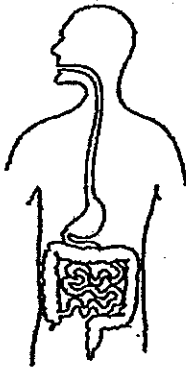
39. Match the following body systems to their correct functions. (4 m)



- Removes carbon dioxide from the body



- Protects the delicate organs in the body

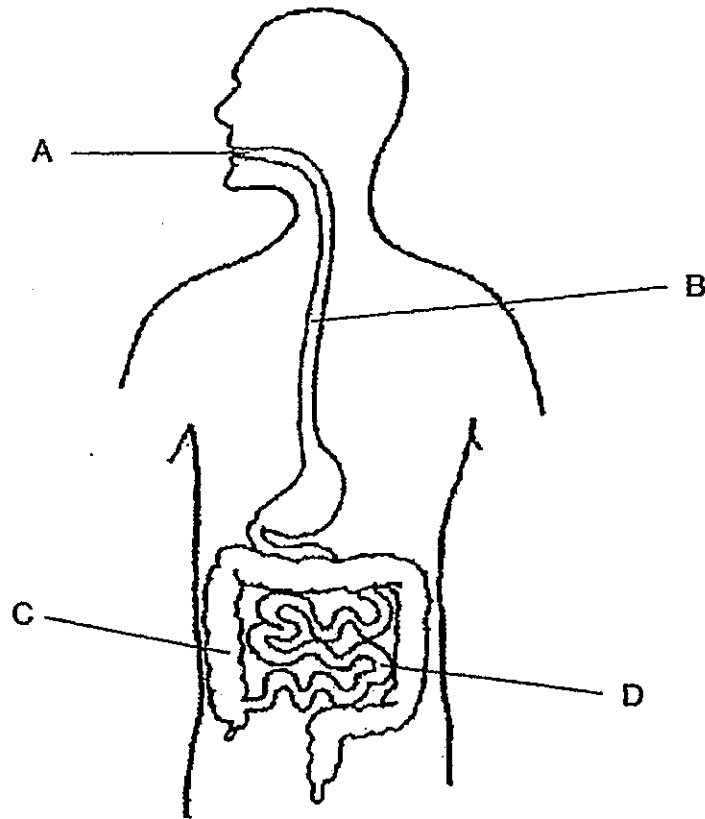


- Absorbs the simple food substances so that they can be used by the body



- Carries food, water and oxygen to all parts of the body

40. Study the diagram of digestive system below.



- (a) Digestion starts in Part \_\_\_\_\_. (1 m)
- (b) Food is completely digested in Part \_\_\_\_\_. (1 m)
- (c) Part C is called the \_\_\_\_\_. (1 m)

For Questions 41–44, please refer to Booklet K.

End of Section B



# ANSWER SHEET

**EXAM PAPER 2013**

**SCHOOL : PEI CHUN PUBLIC SCHOOL**

**SUBJECT : PRIMARY 3 SCIENCE**

**TERM : SA2**

---

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

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

Section B

Q31

a)

Group 1	Group 2
A	B
D	C
F	E

b) Size

Q32

- a) The stems transports water and mineral salts from the roots to the leaves and it also transports the food from the leaves to all other parts of the plant  
b) Plant J have weak stem while plant K have strong stems

Q33

- a) Plant W  
b) Only plant W takes in water from through the roots  
c) The roots held the plant firmly to the soil

Q34) Characteristic 1: They have six legs  
Characteristic 2: They have a pair of feelers

Q35

- a) They give birth to live young
- b) Animal M does not have hair while animal P has hair
- c) i) M  
ii) L  
iii) P  
iv) N

Q36

- a) Hardness
- b) Material P
- c) Only material P can scratch material Q and R

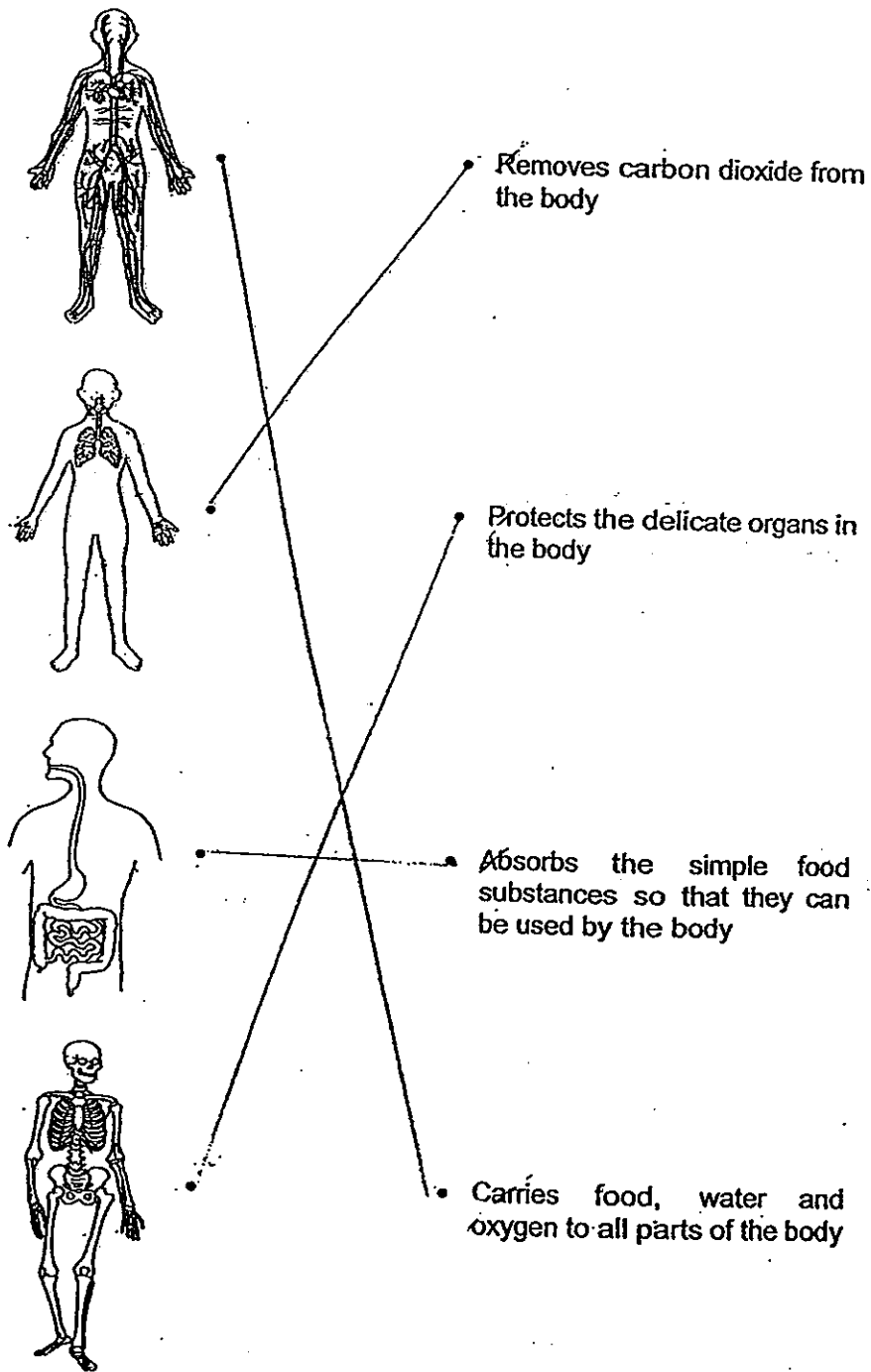
Q37

Statements	True	False	Not possible to tell
Magnet Y is as strong as Magnet Z		√	
Magnet X is weaker than Magnet Y			√
Magnet Z is stronger than Magnet W	√		

Q38

- a) The like poles of magnet R and S are facing each other and therefore repelling each other
- b) The toy shark dropped
- c) The unlike poles of magnet R and S are facing each other and thus being attracted causing the shark to drop

Q39



Q40

a) A

b) D

c) large intestine

