

Pei Chun Public School
Semestral Assessment 2 – 2010
Science
Primary 3

Name : _____ ()

Date : 29 October 2010

Class : Pr. 3 ()

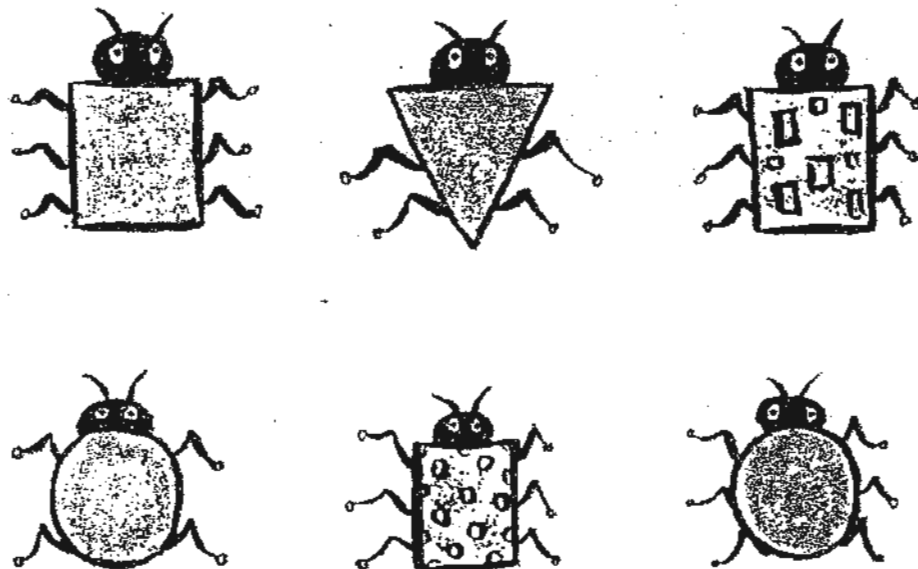
Science Teacher : _____

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. The diagrams below show six different types of imaginary creatures.



Which of the following characteristics could be used to divide these creatures into two equal groups?

- (1) Number of feelers
- (2) Patterns on the body
- (3) Number of pairs of legs
- (4) Body shape with four sides only

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2. Raj found an unknown animal in the school garden. He observed it closely and concluded that it was an insect. Which of the following observation had helped Raj make the correct conclusion?

- (1) It could fly.
- (2) It fed on leaves.
- (3) It had three pairs of legs.
- (4) Its body was divided into parts. ()

3. Study the characteristics of A, B, C and D as shown in the table below.

	Respond to changes	Move from place to place	Produce its own food	Reproduce
A	✓	✓		
B	✓	✓		✓
C	✓		✓	✓
D	✓			✓

How many of them are definitely living things?

- (1) one
- (2) two
- (3) three
- (4) four ()

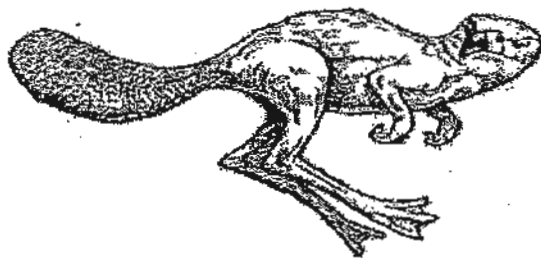
4. The table below shows the living conditions of four identical potted balsam plants.

Plant	Sunlight	Water	Air
J	✓	✓	✓
K	✓	✓	
L		✓	
M	✓		✓

Which of the potted balsam plants will most likely survive after one week?

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

5. The diagram below shows what Ryan found during one of his excursions to the forest.



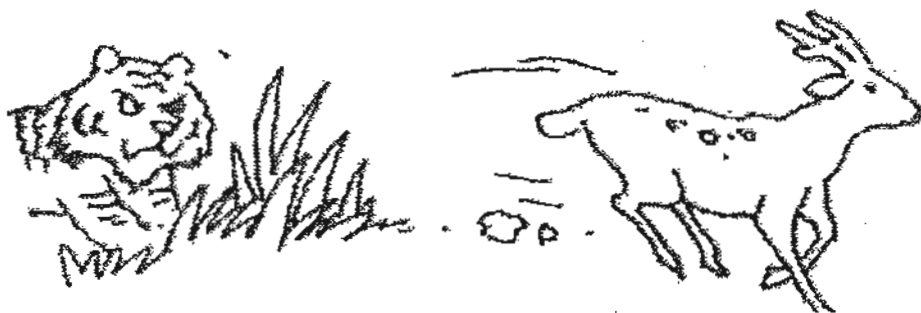
Which of the following characteristics could be used to tell Ryan what he had found was a living thing?

- A : It was grey.
- B : It had mass.
- C : It moved on its own.
- D : It went closer to Ryan when he offered it food.

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

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6. A deer was eating grass. It started running away upon seeing a tiger.

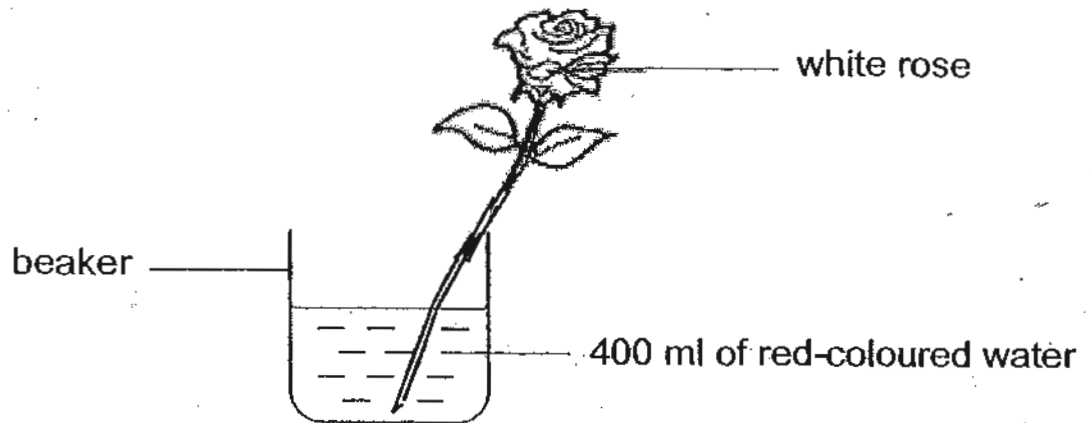


Which of the following characteristics of living things is the deer showing?

- (1) Living things grow.
- (2) Living things reproduce.
- (3) Living things need air, food and water.
- (4) Living things can respond to changes.

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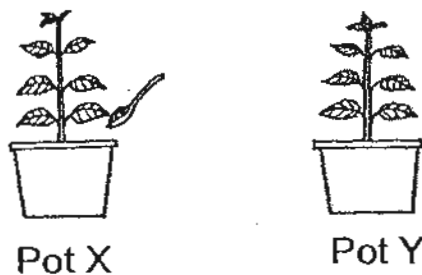
7. Aileen set up an experiment as shown below.



What would she observe after two days?

	Colour of petals	Amount of water left in the beaker (ml)
(1)	remains unchanged	350
(2)	white with red stains	400
(3)	remains unchanged	400
(4)	white with red stains	350

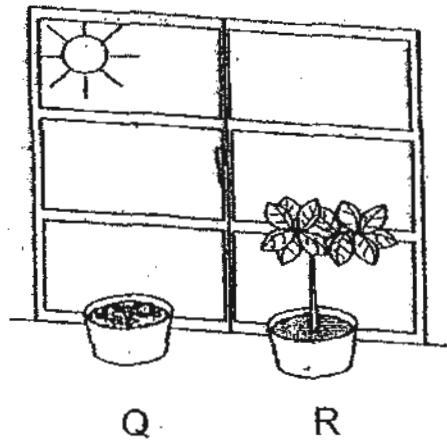
8. Two similar pots of healthy plants were placed side by side in the garden. A spoonful of fertiliser was added to Pot X to nourish the plant. Both plants were given the same amount of water daily.



Mizah recorded the height of the plants over three weeks. She found that the plant in Pot X grew healthier than Pot Y. Which of the following is the most likely record of their growth?

	Pot X			Pot Y		
	Week 1	Week 2	Week 3	Week 1	Week 2	Week 3
(1)	4 cm	4 cm	4 cm	4 cm	4 cm	4 cm
(2)	4 cm	5 cm	6 cm	4 cm	5 cm	6 cm
(3)	4 cm	4 cm	5 cm	4 cm	5 cm	7 cm
(4)	4 cm	5 cm	8 cm	4 cm	4 cm	5 cm

9. In the diagram below, Q are seeds growing in a pot and R is a plant growing in another pot.

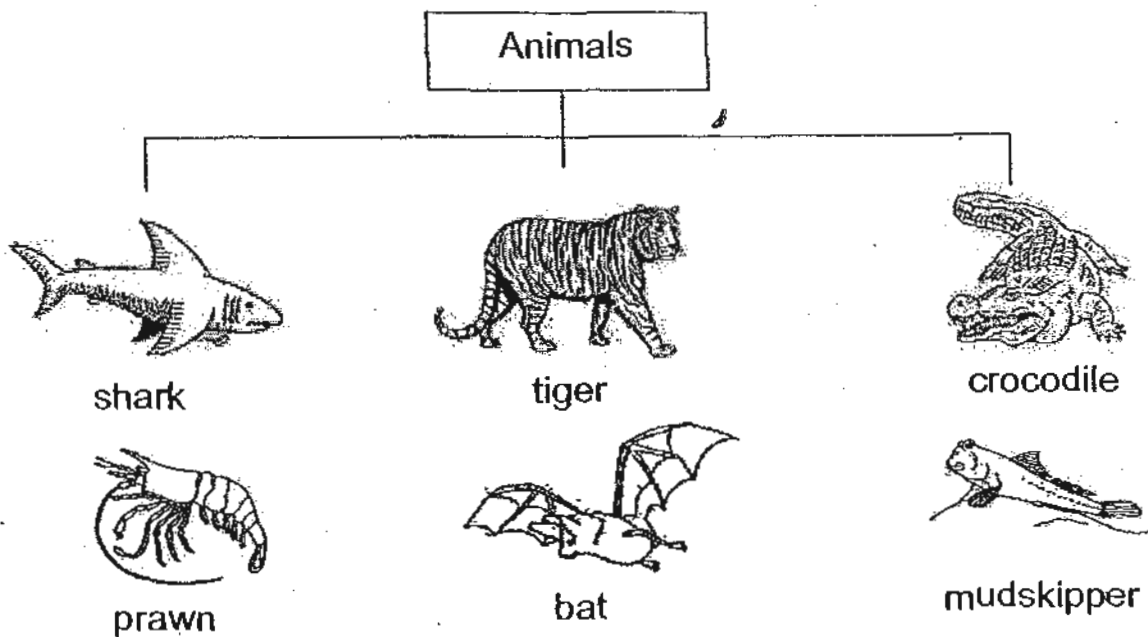


Which of the following statements about Q and R is true?

- (1) R can grow but Q cannot.
- (2) R can make food but Q cannot.
- (3) R can absorb water but Q cannot.
- (4) R can take in oxygen but Q cannot.

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10. Study the three groups of animals below.



The animals are classified according to _____.

- (1) their body covering
- (2) the way they move
- (3) where they live
- (4) what they eat

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11. Four pupils made a statement each about the animal shown in the diagram below.



- Ali : It has a duck's bill.
John : It comes out at night.
Muthu : It lays eggs for reproduction.
Suling : It has webbed feet to help it to swim.

Based on what you see in the diagram, which pupils made a correct statement?

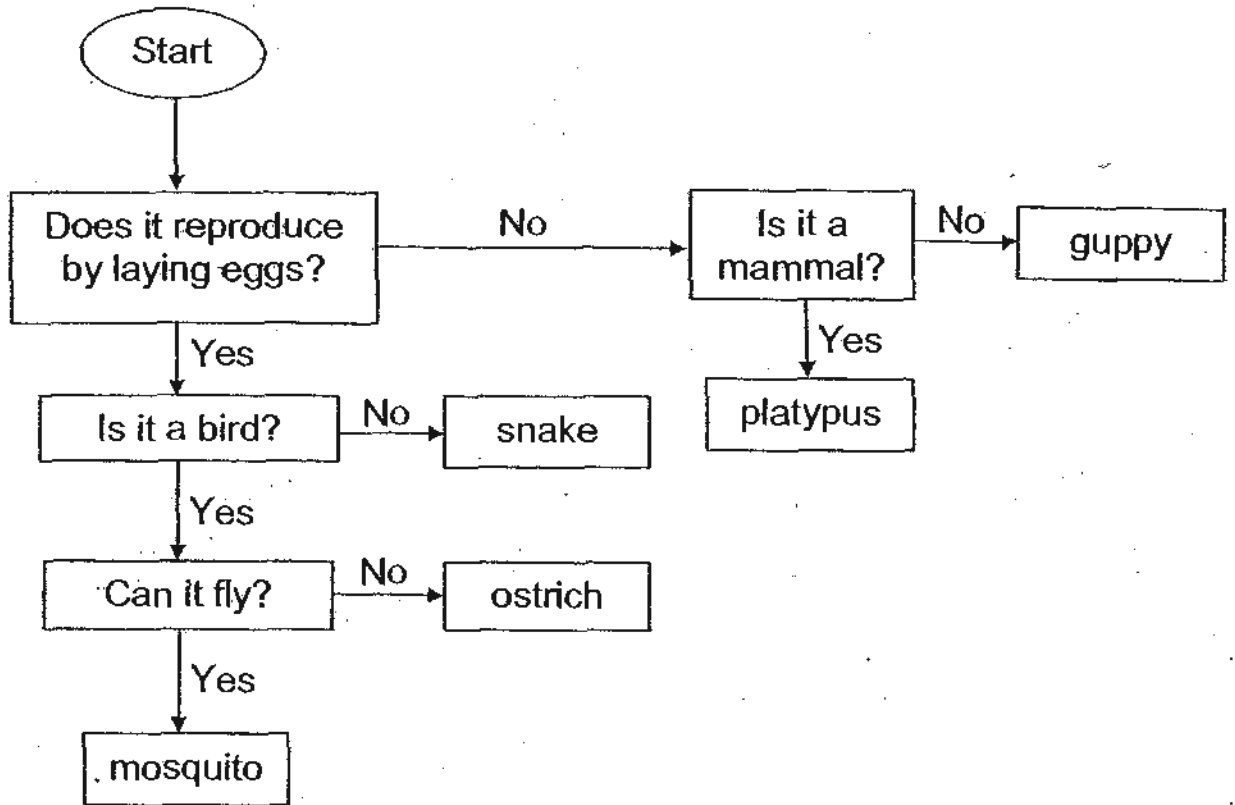
- (1) Ali and Suling
(2) Muthu and Suling
(3) Ali, Muthu and John
(4) Suling, Ali and Muthu
12. Aliff placed six pieces of bread, A to F, under various conditions. One week later, he checked them to see if there was any mould growing.

Bread	Presence of water	Temperature (°C)	Light conditions
A	Yes	10	Dark
B	No	10	Bright
C	Yes	20	Dark
D	Yes	20	Bright
E	No	30	Bright
F	Yes	30	Dark

Which three pieces of bread should Aliff compare to find out temperature affects the growth of bread mould?

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

13. Study the flow chart carefully.



Which of the following animals have been classified wrongly?

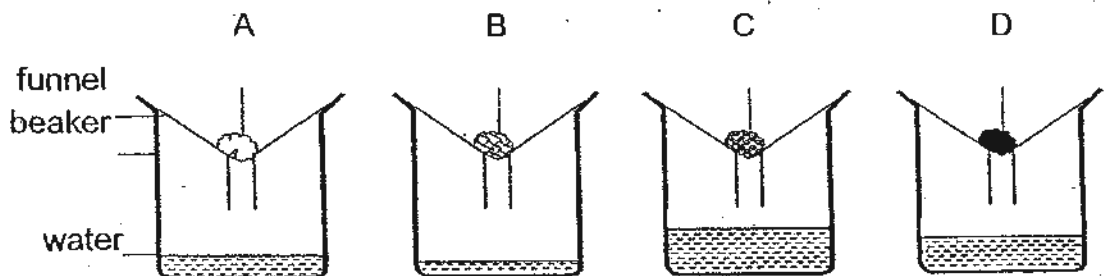
- (1) ostrich and snake
- (2) mosquito and guppy
- (3) platypus and guppy
- (4) platypus and mosquito

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14. The table shows the similarities and differences between bird's nest ferns and mushrooms. Which of the following is correct?

	Similarities	Differences
(1)	Both reproduce by spores.	Bird's nest ferns can make their own food but mushrooms cannot.
(2)	Both are living things.	Bird's nest ferns are poisonous but mushrooms are not.
(3)	Both cannot make their own food.	Bird's nest ferns have leaves but mushroom do not have leaves.
(4)	Both have leaves.	Bird's nest ferns can make their own food but mushrooms cannot.

15. A, B, C and D are four different materials. 100 ml of water was poured into each of the set-ups below and water flowed through the funnel into the respective beakers.



Arrange the materials according to their ability to absorb water.

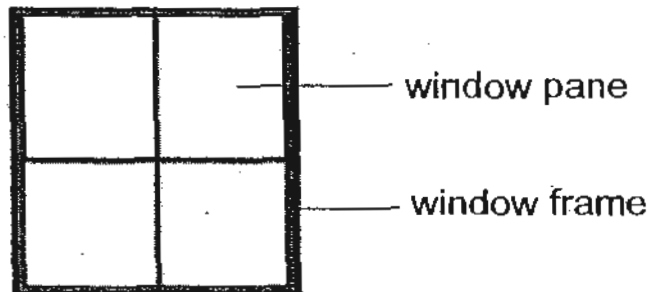
Worst ability \longrightarrow Best ability

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

16. Kexin conducted a series of tests on Materials K, L, M and N. Her results are shown in the table below.

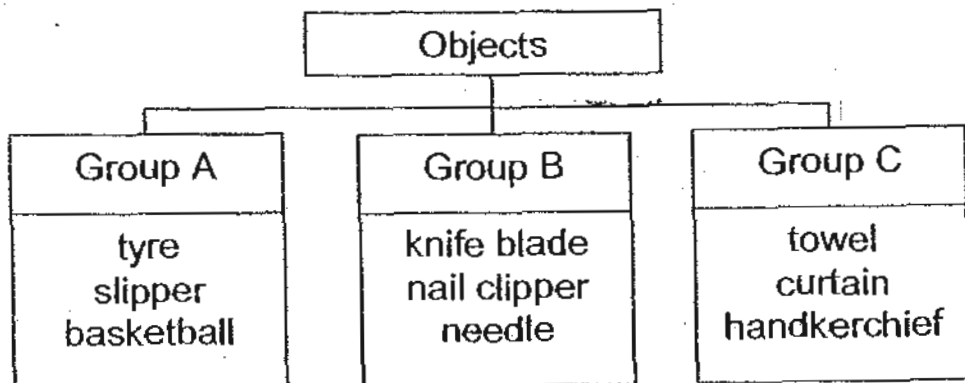
Materials	Flexible	Transparent	Waterproof
K	x	✓	✓
L	✓	x	✓
M	✓	✓	x
N	x	x	✓

Which material is the most suitable for a window frame and a window pane?



	window frame	window pane
(1)	K	N
(2)	L	M
(3)	N	K
(4)	M	K

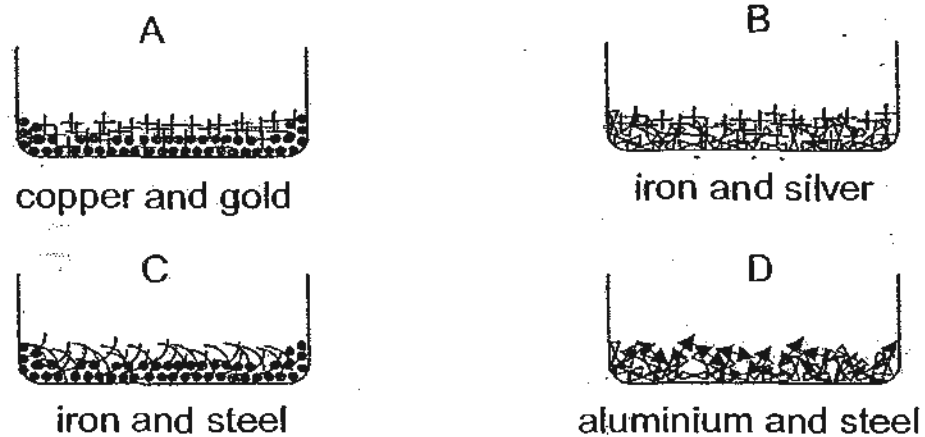
17. Some objects are classified according to their materials as shown in the classification chart below.



Which of the following objects cannot be placed in the chart above?

- (1) scarf
- (2) balloon
- (3) envelope
- (4) thumbtack

18. Randy has some mixtures in four different containers, A, B, C and D, as shown below. He then tried separating them from each other by using a magnet.

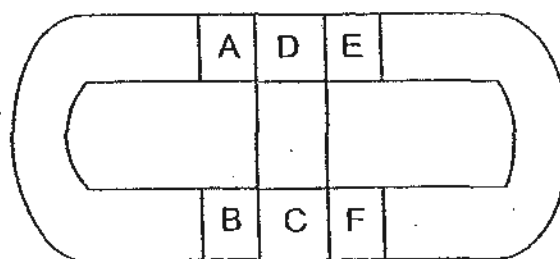


In which of these containers would he be successful in separating the mixtures?

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

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19. The diagram below shows two U-shaped magnets and a bar magnet attracted to one another.

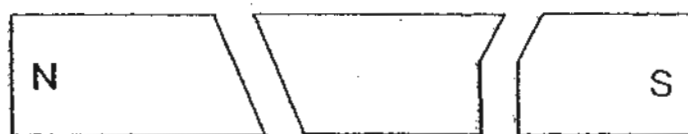


Based on the diagram above, which of the following statements most accurately describes the poles of the magnets?

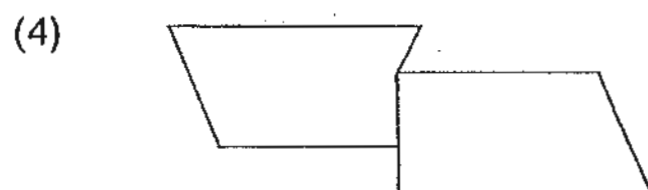
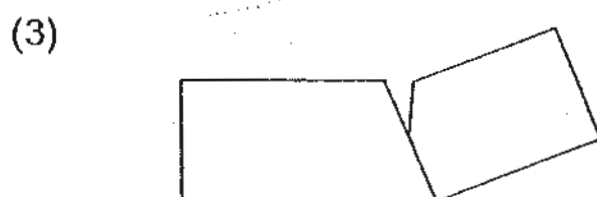
- (1) Poles B and E are like poles.
- (2) Poles A and F are unlike poles.
- (3) Poles C and F will repel each other.
- (4) Poles B and D will attract each other.

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20. Zaki broke a bar magnet into three pieces as shown below.



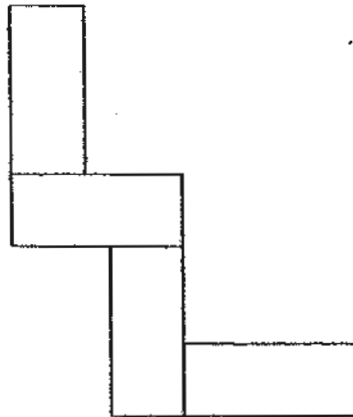
The following diagrams show two of the broken pieces when put together. Which arrangement is not possible?



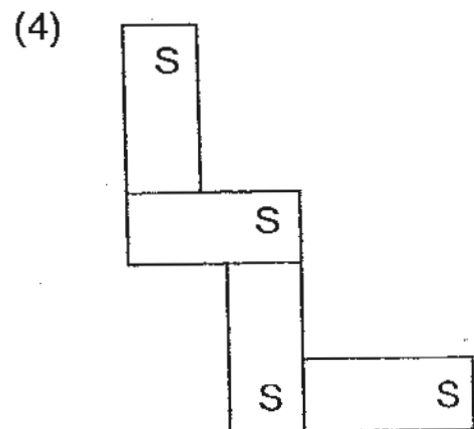
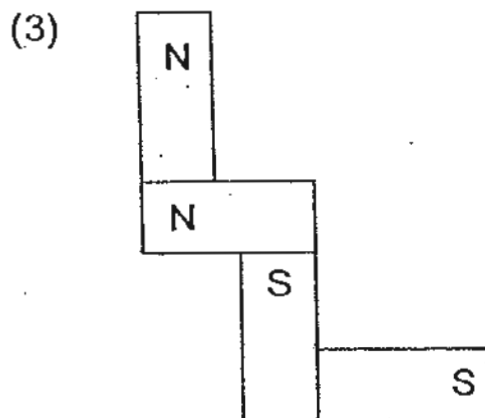
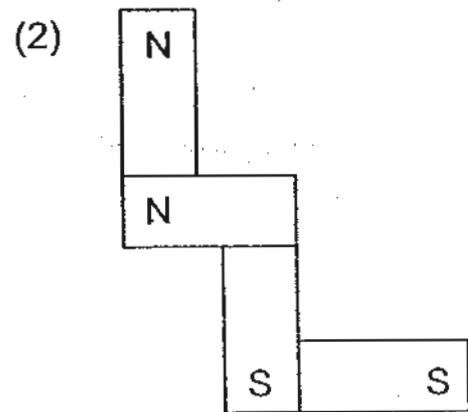
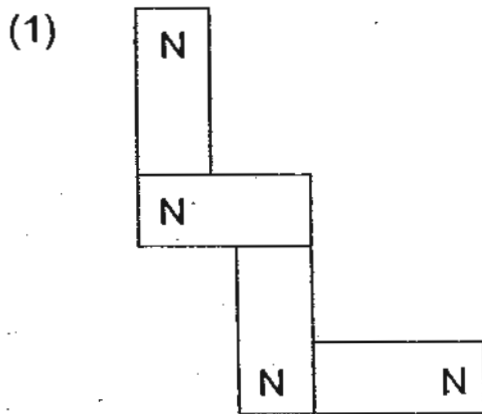
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21. Four pieces of bar magnets are put together in the following manner. The poles of the magnets are not marked.



Which of the following diagrams shows a possible arrangement of their poles?



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22. Bella conducted an experiment using three identical magnets, E, D and F, and paper clips. She recorded the results in the table below.

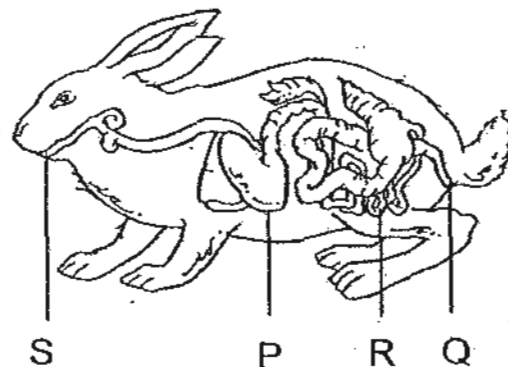
	Number of paper clips attracted		
	E	D	F
Before heating the magnet	10	16	12
After heating the magnet	4	7	5

Based on the results, what could Bella conclude about the effects of heating on magnets?

After being heated, magnets could _____.

- (1) use up their magnetism
- (2) attract six paper clips only
- (3) lose some of their magnetism
- (4) get their magnetism back after some time ()

23. The diagram below shows the digestive system of a rabbit.



Which part is wrongly matched to its function?

	Function	Part
(1)	More digestive juices are added to complete the digestive process.	P
(2)	Pass out the remains from the body.	Q
(3)	Simple food substances pass through its walls and are absorbed by the blood.	R
(4)	Food enters the digestive system through here.	S

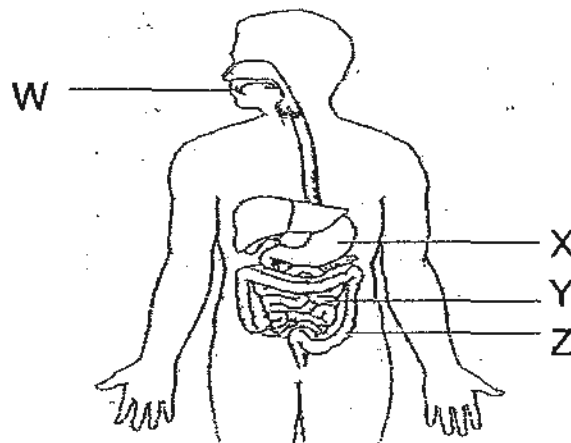
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24. The table shows the functions of some parts of the human digestive system. Which of the following shows the functions of the small intestine?

	Grinding of food into smaller pieces	Digestion of food	Absorption of food into blood
(1)	x	✓	✓
(2)	✓	✓	x
(3)	x	x	x
(4)	x	x	x

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25. The diagram below shows the human digestive system.



Which function(s) correctly describe(s) what happens at parts W, X, Y and Z?

Part	function
W	Digestion starts here.
X	Food is moistened and broken into smaller pieces.
Y	Digested food is absorbed into the bloodstream.
Z	Digestion is completed.

- (1) Z only
 (2) W and Y only
 (3) X and Y only
 (4) W, X and Z only

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

End of Section A

Pei Chun Public School
Semestral Assessment 2 – 2010
Science
Primary 3

Name: _____ ()

Class: Pr. 3 ()

Date: 29 October 2010

Time: 1 h 30 min

Science Teacher: _____

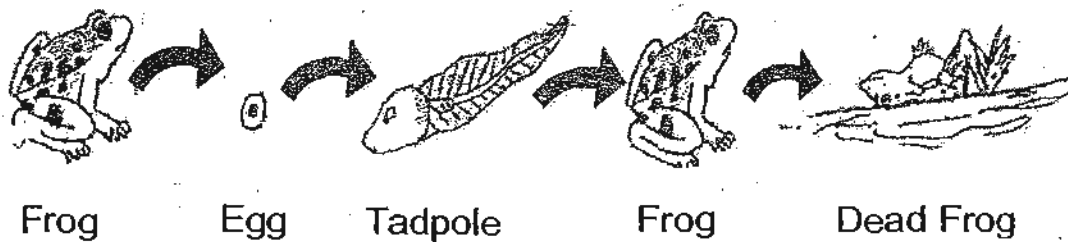
Parent's Signature: _____

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

Section B (40 marks)

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

31. Study the diagrams below.



State two characteristics of living things that you can observe from the diagrams.

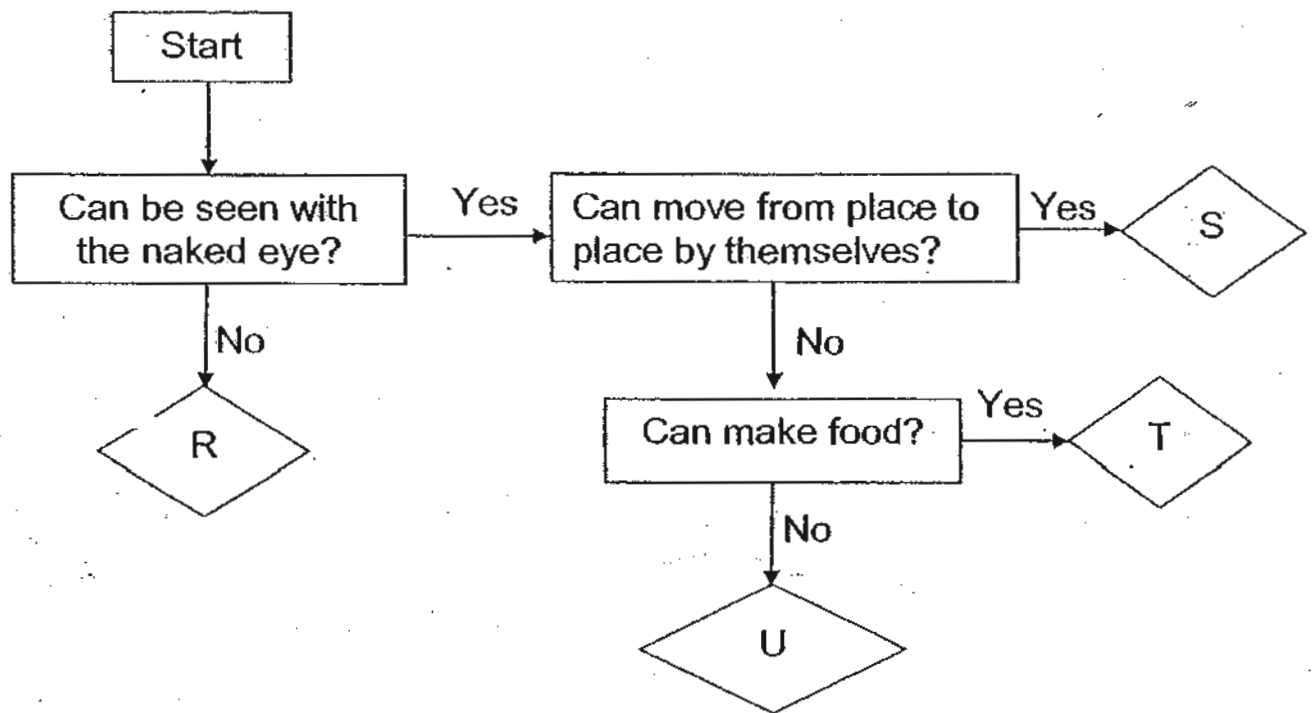
(a) _____ (1 m)

(b) _____ (1 m)

SCORE

15

32. The flow chart below shows the similarities and differences between four living things.



- (a) Based on the flow chart, state one similarity between T and U. (1 m)

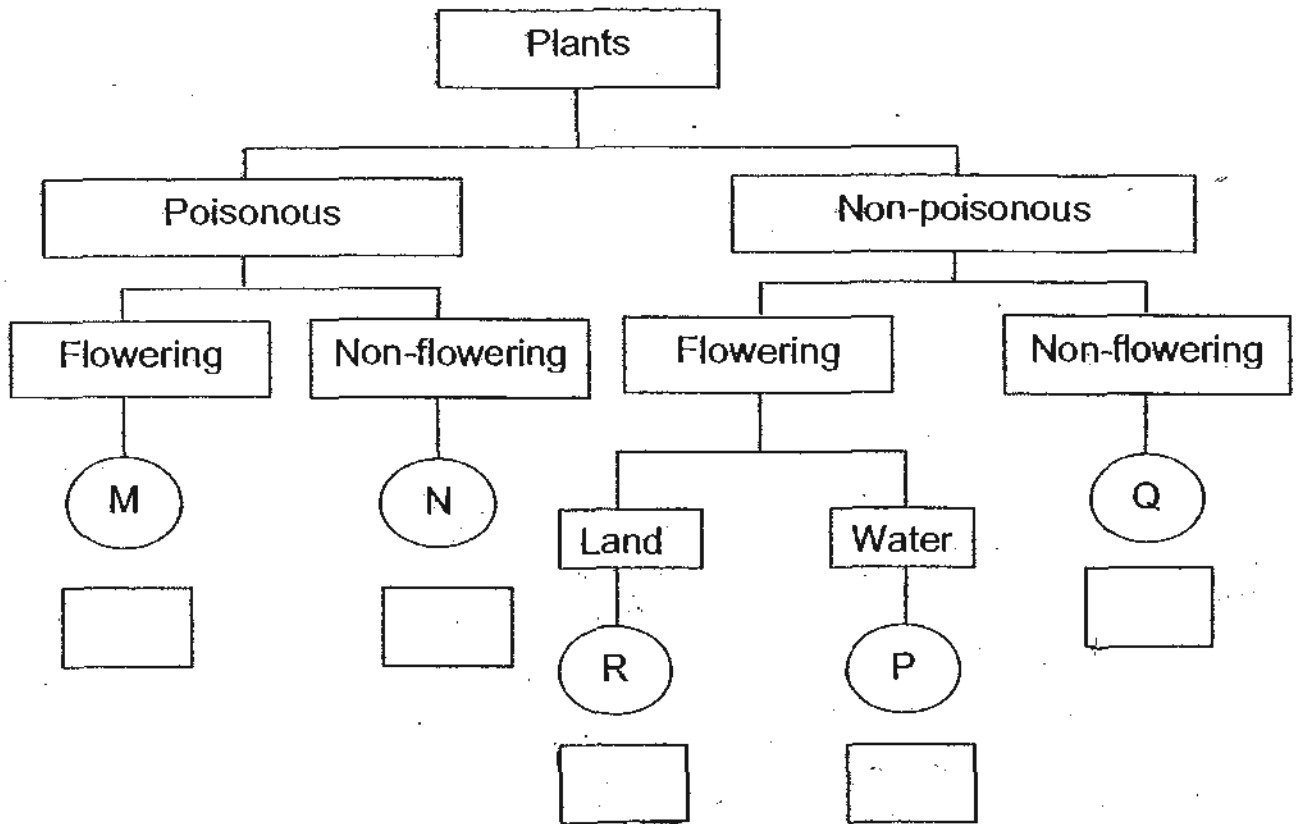
- (b) Based on the flow chart, state one difference between R and S. (1 m)

- (c) Match the following living things with the letters, R, S, T and U. (2 m)

Living things	Letter
emu	
yeast	
heliconia	
toadstool	

SCORE

33. Study the classification chart below. M, N, R, P and Q are five different plants.



(a) Based on the classification chart, what are the characteristics of Plant N? (1 m)

(b) Look at Plant X below.

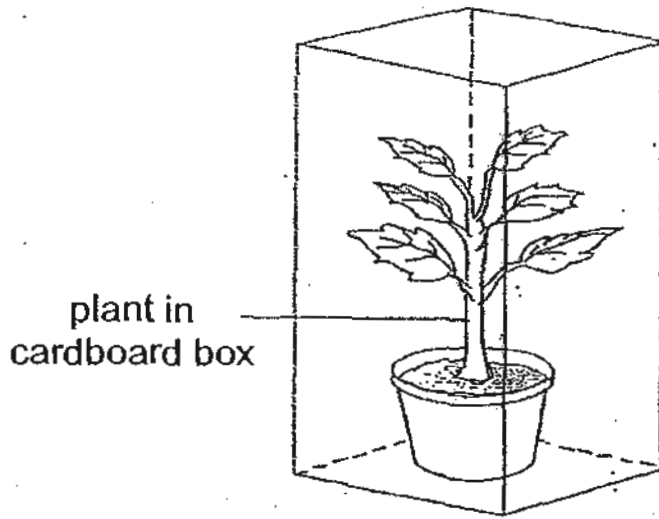
(1 m)



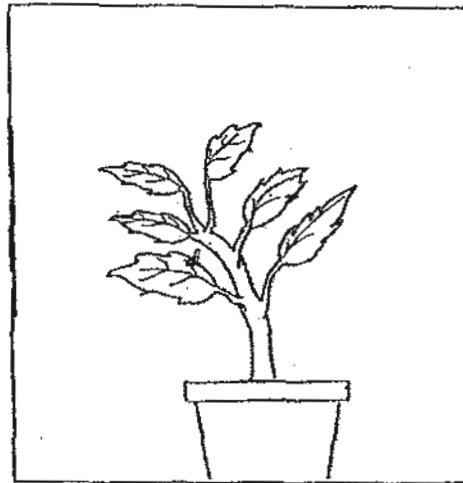
Put a cross, 'X', in the correct box in the classification chart above to show where Plant X should be grouped under.

SCORE

34. Mindy carried out an experiment to see how light would affect the growth of a plant. She watered the plant before leaving it in a sealed cardboard box as shown below.









- (a) Mindy then cut a hole in the cardboard box. After a few days, she observed that the plant had grown towards one side. On the diagram below, draw a cross, 'X', on the box to show the possible position of the hole made by Mindy. (1 m)



- (b) She conducted another experiment using a similar set-up, but this time, she covered the hole with a thin glass sheet. Would her observation be the same? Give a reason for your answer. (1 m)

SCORE

35. Study the classification table below.

X	Y	Z
 eagle	 goat	 mouse
 cobra	 rabbit	 chicken

(a) Give suitable headings for X, Y and Z. (3 m)

X: _____

Y: _____

Z: _____

(b) The table below shows different movements of animals. Put a tick (✓) in the correct boxes. Tick only one box for each animal. (2 m)

Animal	Movement				
	swim	hop	slither	fly	crawl
guppy					
kangaroo					
caterpillar					
snake					

SCORE

36. Xavier carried out an experiment using three identical slices of bread, P, Q and R. The table below shows what was done to them.

Bread	What was done to the bread	Where the bread was left
P	put in a covered container	in the field
Q	toasted and placed on a plate	in the kitchen
R	sprinkled with water and put in a covered container	in the kitchen

He examined P, Q and R daily for a week.

- (a) Which slice of bread, P, Q or R, was most likely to be mouldy first? (1 m)

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

SCORE

37. Four materials, W, X, Y and Z, have different properties as shown in the table.

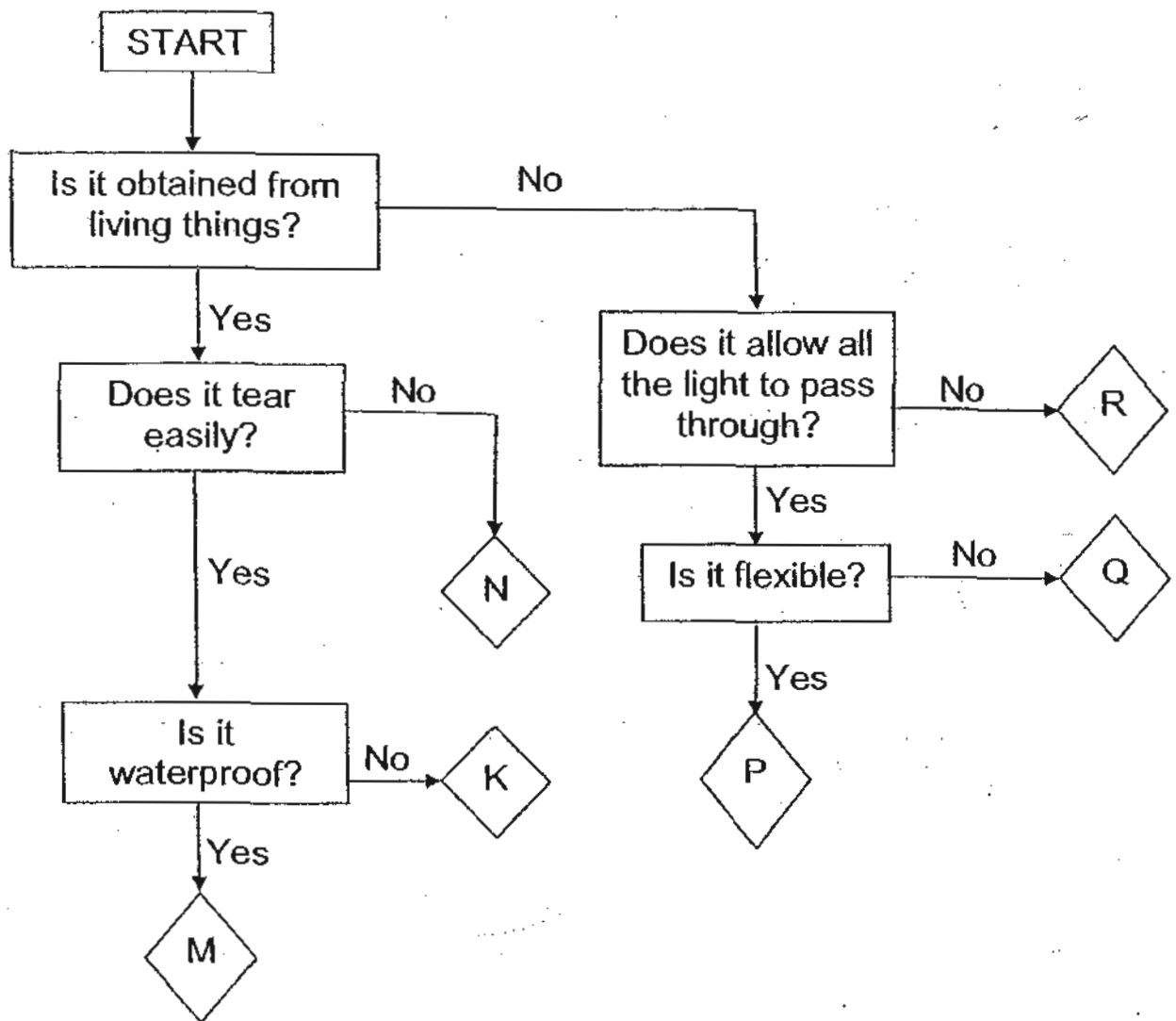
Materials \ Properties	W	X	Y	Z
Is flexible	✓	✓	x	✓
Can be stretched	x	✓	x	✓
Can break easily	x	x	✓	x
Is waterproof	✓	✓	✓	x

Which material, W, X, Y and Z, is likely to be used for making each of the following objects? Do not use each material more than once. (4 m)

Objects	Materials
T-shirt	
rubber band	
raincoat	
toy boat	

SCORE

38. Study the flow chart below.



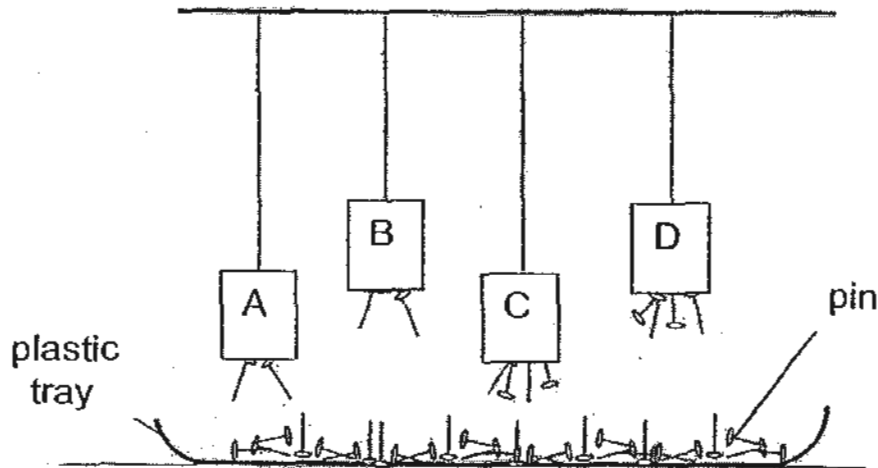
Match the following materials with the letters, M, N, K, P, Q and R.

(3 m)

Materials	Letter
Paper	
Rubber	
Leather	
Glass	
Ceramic	
Plastic	

SCORE

39. A, B, C and D are magnets hanging from strings of different lengths as shown in the diagram. A plastic tray of pins is placed below the magnets.



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)

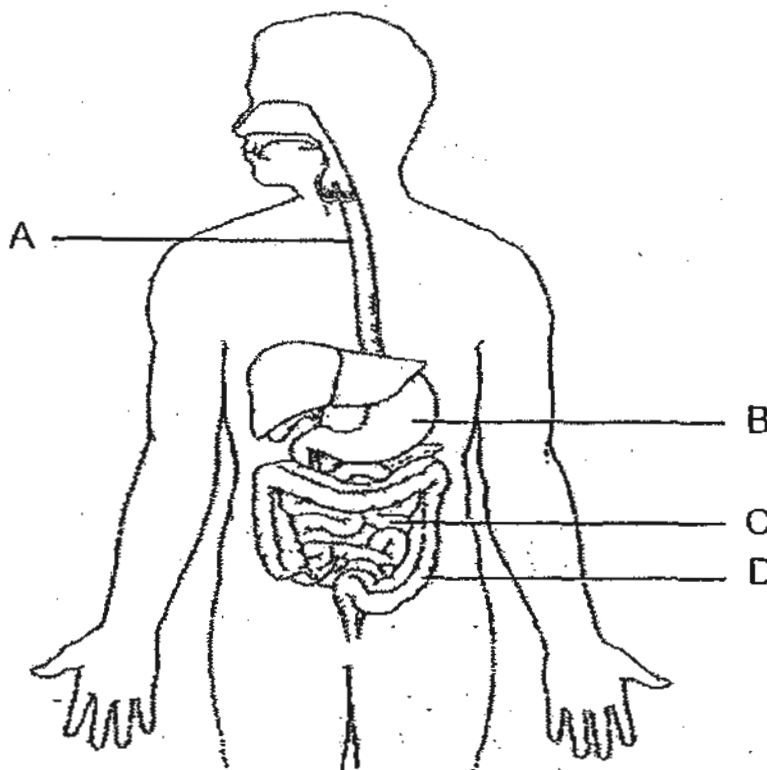
Statements	True	False	Not possible to tell
Magnet C is as strong as Magnet D.			
Magnet D is stronger than Magnet A.			
Magnet B is weaker than Magnet C.			

SCORE

23

40. Look at the diagram of the digestive system as shown below.
Label the missing parts.

(2 m)



A: _____

B: _____

C: _____

D: _____

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

End of Section B

SCORE

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Set by : Ms Norhidayah Bte Ahmad
Vetted by : P3 Science Committee teachers

ANSWER SHEET

EXAM PAPER 2010

SCHOOL : PEI CHUN PRIMARY
SUBJECT : PRIMARY 3 SCIENCE

TERM : SA2

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

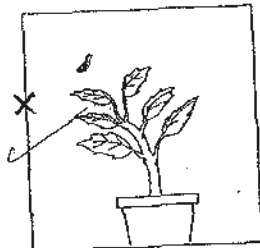
Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
3	2	2	2	3	1	1	2

31)a) Living things die. b) Living things reproduce.

32)a) They cannot move from place to place by themselves.
b) R cannot be seen with the naked eye while S can.
c) S, R, T, U

33)a) Poisonous b) R---X

34)a)



b) Yes. Glass sheet is transparent and it allows light to enter the opening.

35)a) X: carnivore Y: herbivore Z: omnivore
b) Guppy → swim kangaroo → hop caterpillar → crawl snake → slither

36)a) R would be mouldy first. b) R is the only piece of bread that was given moisture.

37) Z, X, W, Y

38) K, M, N, Q, R, P

39) F T Not

40) A: gullet B: stomach C: small intestine D: large intestine