

METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887



CONTINUAL ASSESSMENT 2011 PRIMARY 4 SCIENCE

(BOOKLET A)

Total Time for Booklets A and B: 1 h

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.

Name: _____ ()

Class: Primary 4. _____

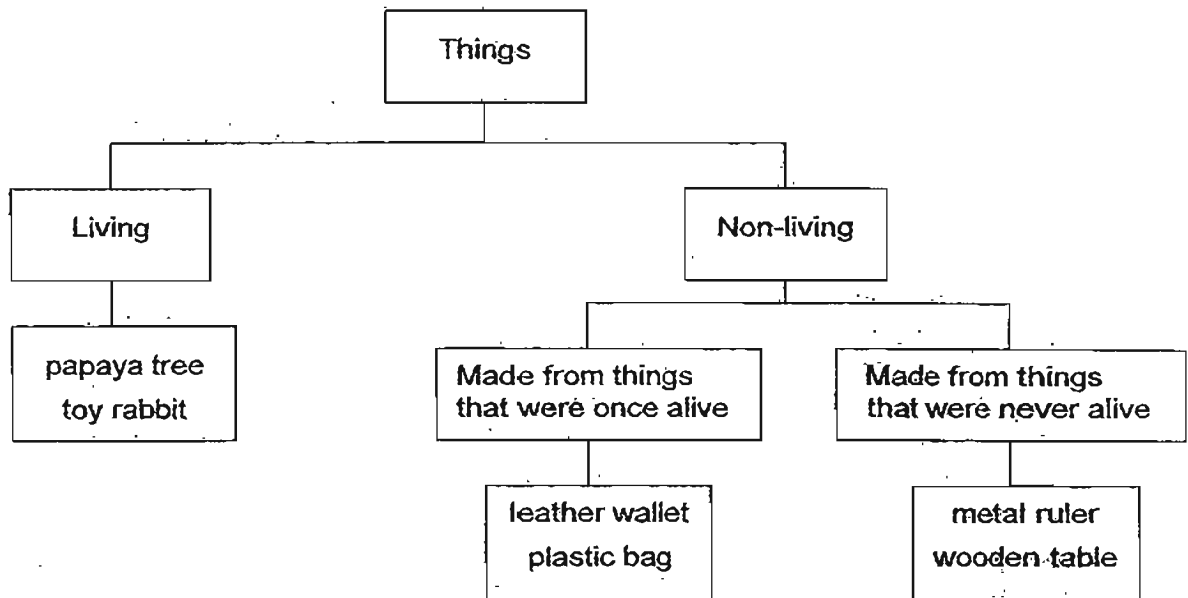
Date: 28 February 2011

This booklet consists of 12 printed pages including this page.

Section A : (30 marks)

For each question from 1 to 15, 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. Susan draws the following classification table to group some of her things.

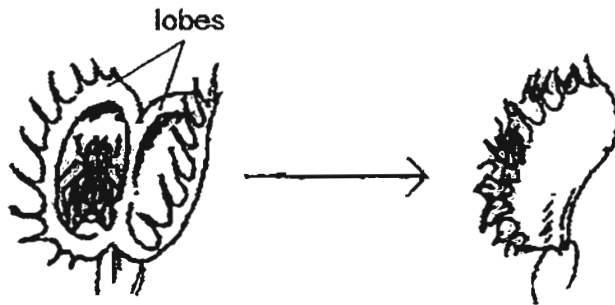


Which of the things are placed in the correct groups?

- (1) papaya tree, plastic bag and metal ruler
- (2) toy rabbit, plastic bag and wooden table
- (3) papaya tree, leather wallet and metal ruler
- (4) toy rabbit, leather wallet and wooden table

(Go on to the next page)

2. The Venus Fly Trap is a plant that captures insects for more nutrients. When a fly lands on its leaf, the two lobes of the leaf will snap shut as shown below.



What characteristics of living things are shown here?

- A : Living things need food to survive.
 B : Living things can move by themselves.
 C : Living things can respond to changes around them.
- (1) B only
 (2) A and B only
 (3) A and C only
 (4) A, B and C

3. The classification table below shows how a penguin, a platypus, a bat and a bear are classified.

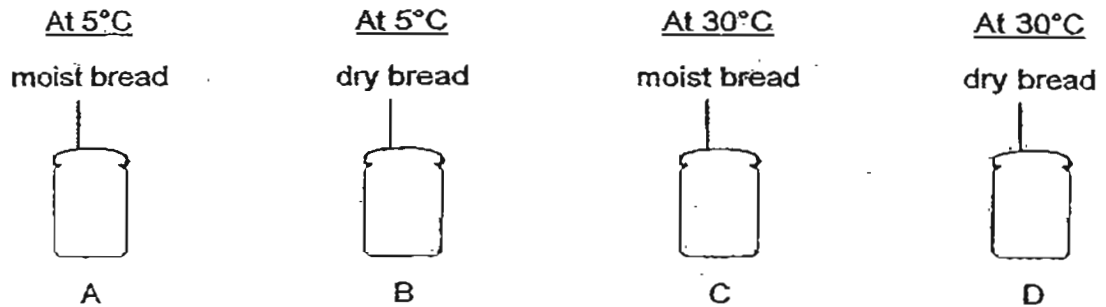
Animals			
Lay eggs		Do not lay eggs	
Has feathers	Has hair	Can fly	Cannot fly
penguin	platypus	bat	bear

One purpose of this classification table is to show that _____.

- (1) a penguin and a bear cannot fly
 (2) a bat and a bear do not reproduce
 (3) a platypus and a bear are mammals
 (4) a penguin lays eggs while a bat does not

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4. An experiment was set up as shown below.
Four pieces of bread, A, B, C and D were placed under different conditions. At the end of the experiment, mould grew on bread A and C, but not on the others.

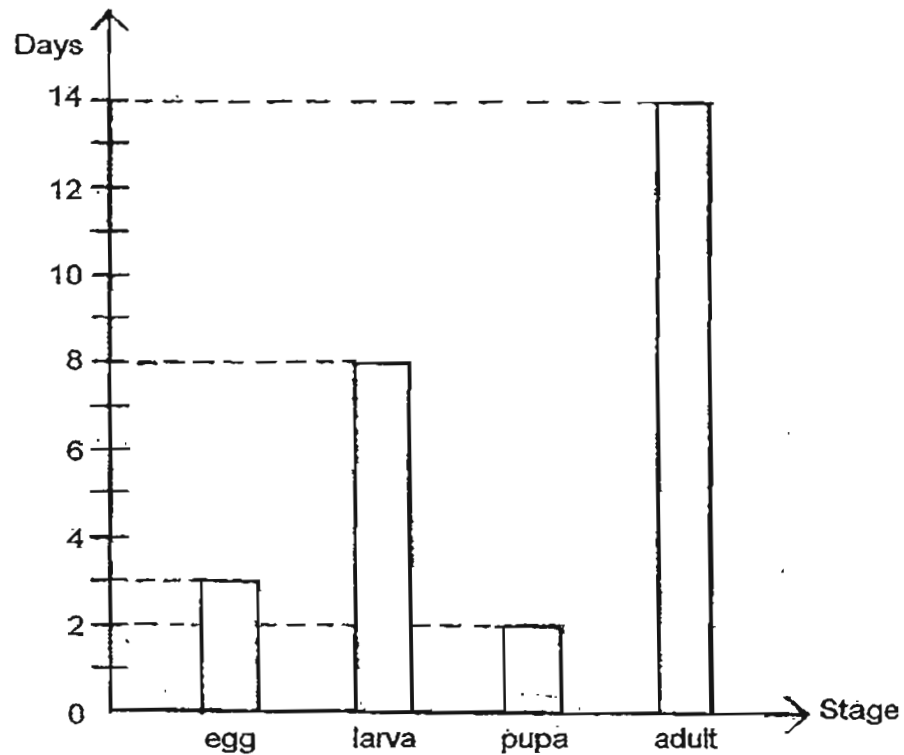


Which one of the following conditions will most likely be the best for keeping the bread non-mouldy?

- (1) At 5°C
- (2) At 30°C
- (3) Dry and at 30°C
- (4) Moist and at 5°C

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5. The graph below shows the number of days at each stage in the life cycle of an insect.

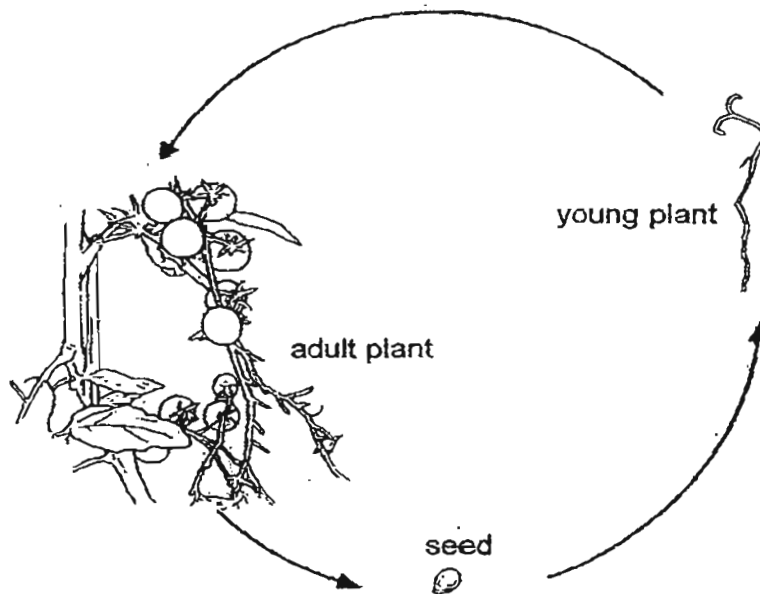


How many days does the young take to become an adult after the egg is hatched?

- (1) 3
- (2) 10
- (3) 13
- (4) 27

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6. The diagram below shows the life cycle of a tomato plant.



Based on this diagram, which one of the following statements is **not true** of the life cycle of the tomato plant?

- (1) Every tomato plant has the same life cycle.
 - (2) The life cycle of the tomato plant is made up of three stages.
 - (3) The life cycle of the tomato plant ensures the continuity of its kind.
 - (4) Sunlight is needed for each stage of the growth of the tomato plant.
7. The diagram below shows Mei Li running a 100-metre race.

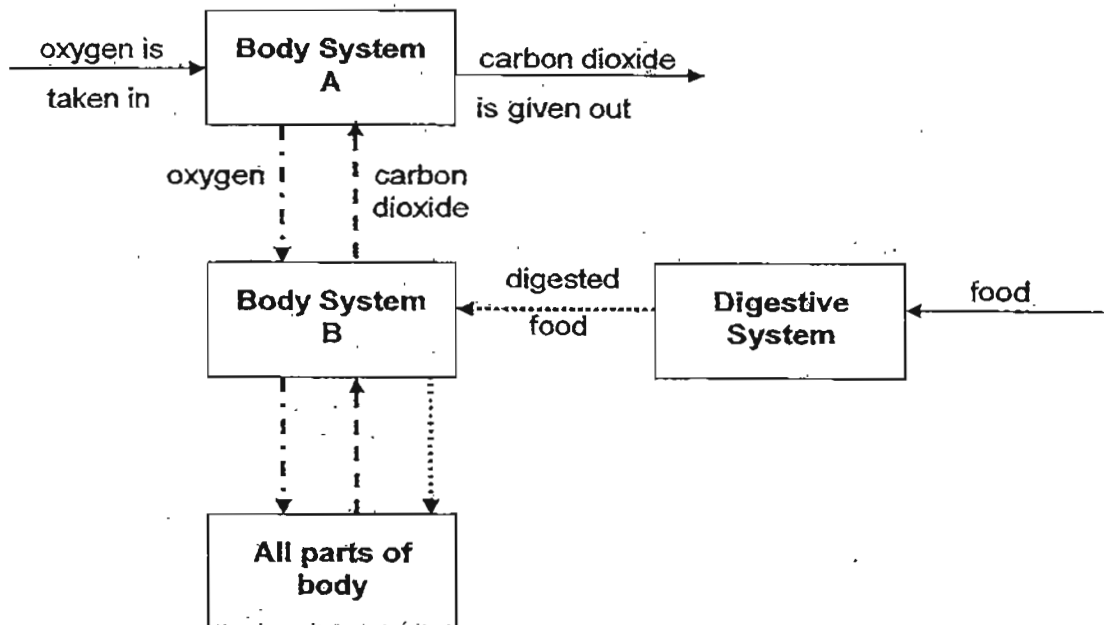


Which of the following body systems work together to enable Mei Li to complete the 100-metre race?

- (1) skeletal and muscular systems only
- (2) muscular and respiratory systems only
- (3) skeletal, muscular and respiratory systems only
- (4) skeletal, muscular, respiratory and circulatory systems

(Go on to the next page)

8. The diagram below shows how two of our body systems, A and B, work closely together with the digestive system to help our body function properly.



Key :

- ←..... Direction of digested food
- ←- - - - - Direction of oxygen
- ←- - - - - Direction of carbon dioxide

What are body systems A and B?

	Body system A	Body system B
(1)	Respiratory system	Circulatory system
(2)	Circulatory system	Respiratory system
(3)	Respiratory system	Muscular system
(4)	Muscular system	Circulatory system

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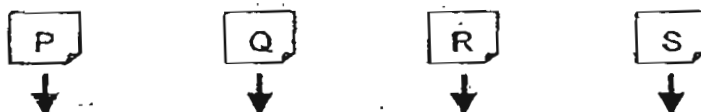
9. Four students, Kim, Leng Leng, Hassan and Tom each made a statement about saliva.

Kim : Saliva is a liquid.
Leng Leng : Saliva helps to digest food.
Hassan : Saliva makes food easier to swallow.
Tom : Saliva helps food to be absorbed in the mouth.

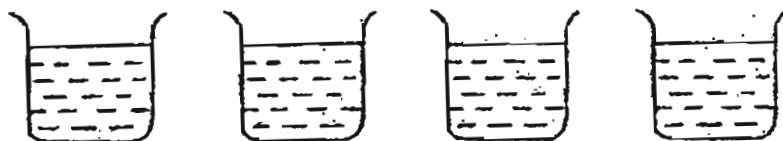
Whose statements are correct?

- (1) Kim and Hassan only
(2) Leng Leng and Tom only
(3) Kim, Leng Leng and Hassan
(4) Kim, Leng Leng, Hassan and Tom
10. An experiment was carried out to find out how absorbent four different types of cloth materials, P, Q, R and S are.

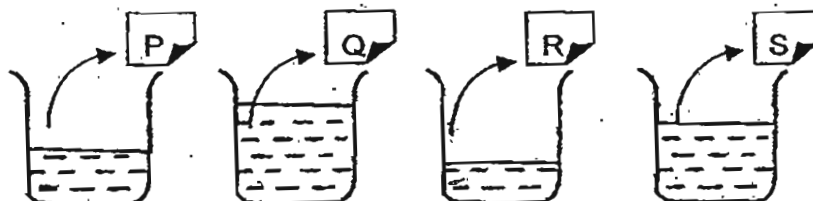
Step 1 : Four different types of cloth materials were cut into the same size.



Step 2 : They were put into four similar beakers each containing the same amount of water.



Step 3 : The four pieces of cloth materials were removed after one minute.

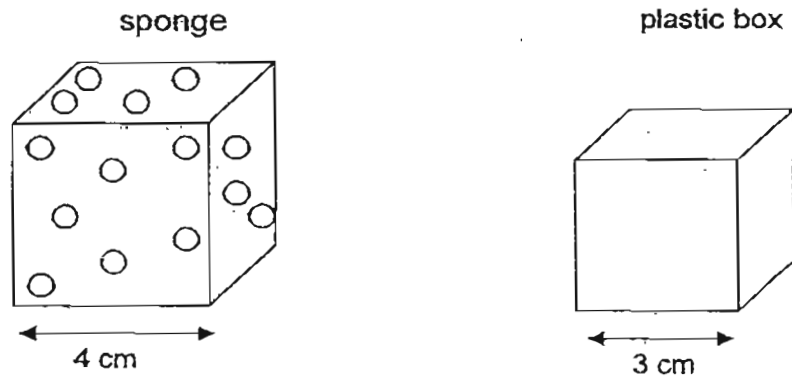


Based on the amount of water left in each beaker, which type of material, P, Q, R or S is the best for wiping a spill?

- (1) P
(2) Q
(3) R
(4) S

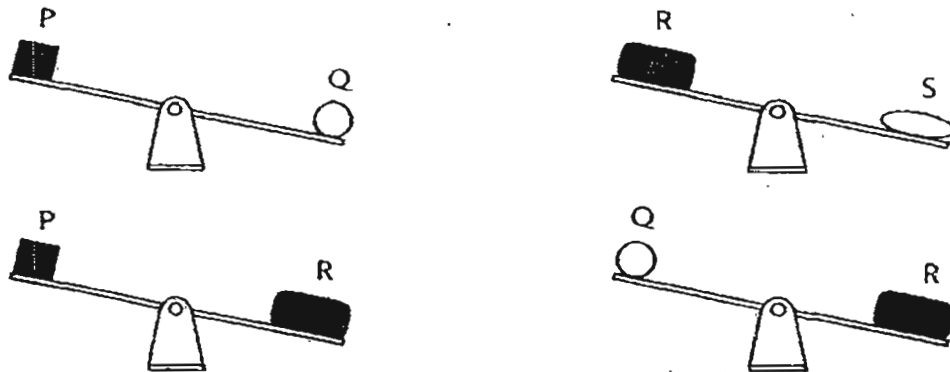
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11. Peter is able to fit a sponge into a plastic box which is smaller in size.



Why is he able to do so?

- (1) The sponge is made of a light material.
 - (2) The sponge does not have a fixed shape.
 - (3) The sponge does not have a fixed volume.
 - (4) The sponge contains air which can be compressed.
12. The diagram below shows the relationships between four objects, P, Q, R and S in terms of their mass.



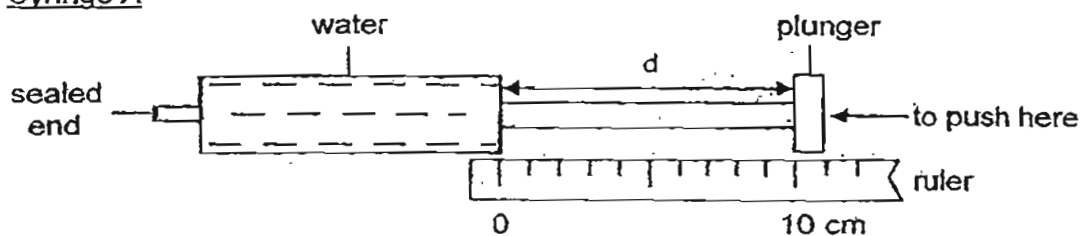
Which one of the following correctly shows the four objects arranged in increasing amount of mass?

	Smallest mass	→			Greatest mass
(1)	P	Q	R	S	
(2)	P	R	Q	S	
(3)	Q	R	S	P	
(4)	S	R	Q	P	

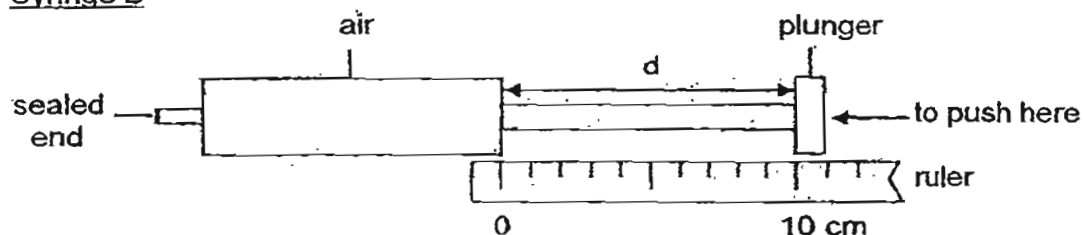
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13. Two identical syringes, A and B, are completely filled with water and air respectively. The diagrams below show the two syringes at the start of the experiment, before the plungers are pushed in.

Syringe A



Syringe B



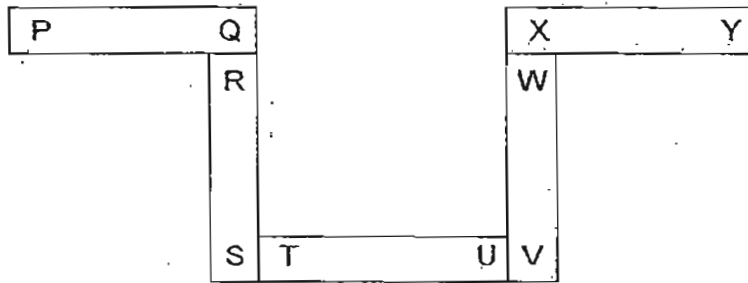
Next, the plunger of each syringe is pushed in as hard as possible. Then the distance d is measured.

Which one of the following shows the correct values of d in syringes A and B?

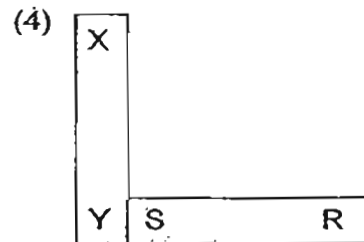
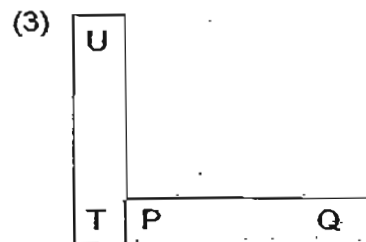
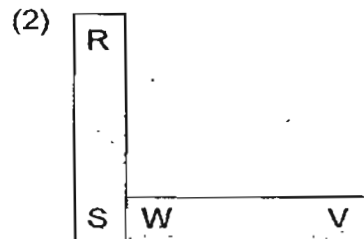
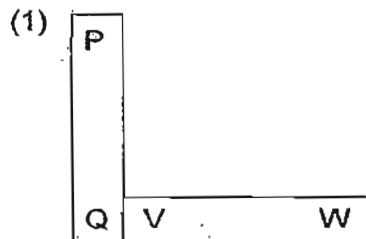
	d (cm)	
	Syringe A	Syringe B
(1)	10	10
(2)	10	5
(3)	10	0
(4)	9	5

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14. Five bar magnets with their ends marked P to Y can be arranged as shown below.



Which one of the following shows correctly the arrangement of two of the magnets?

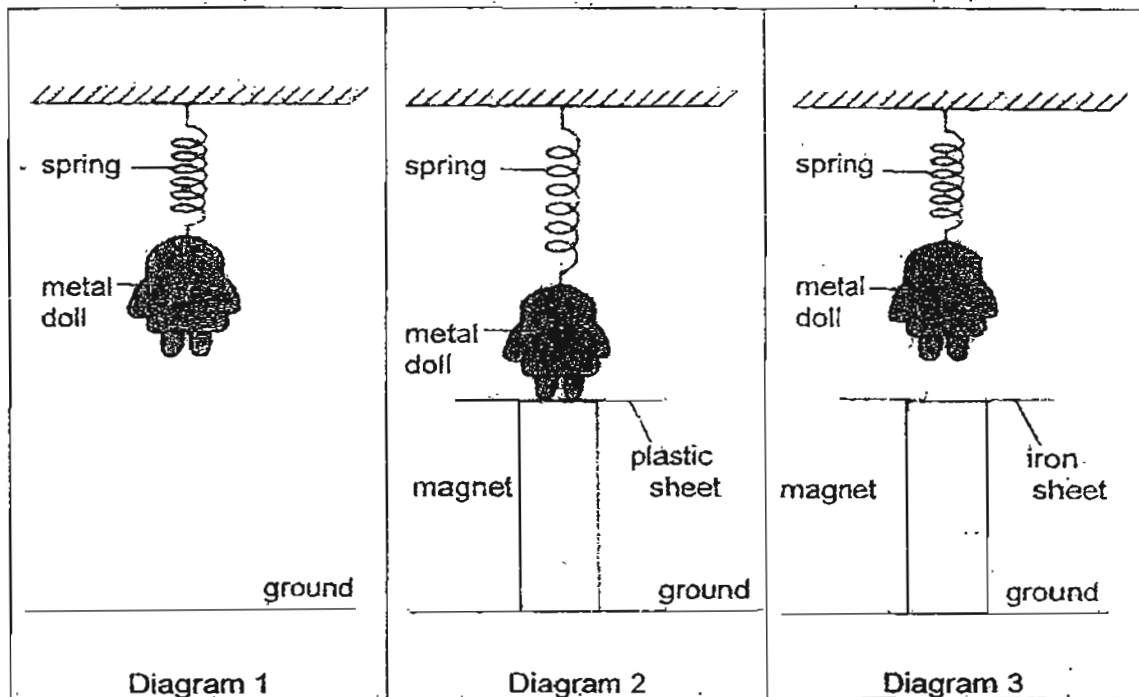


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15. A metal doll was hung on a spring as shown in Diagram 1.

Next, a plastic sheet was put on top of a magnet before placing the magnet on the ground, directly under the metal doll as shown in Diagram 2. It was observed that the metal doll was attracted to the magnet.

Lastly, when the plastic sheet was replaced with an iron sheet as shown in Diagram 3, it was observed that the metal doll returned to its original position.



Which of the following correctly explains what happened in Diagram 3?

- (1) The iron sheet repelled the metal doll.
- (2) The iron sheet prevented the attraction.
- (3) The metal doll was too far from the magnet.
- (4) The metal doll could be made of aluminium.

End of Booklet A

METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887



CONTINUAL ASSESSMENT 2011 PRIMARY 4 SCIENCE

(BOOKLET B)

Total Time for Booklets A and B: 1 h

INSTRUCTIONS TO CANDIDATES

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Answer all questions.

Name: _____ ()

Class: Primary 4. _____

Date: 28 February 2011

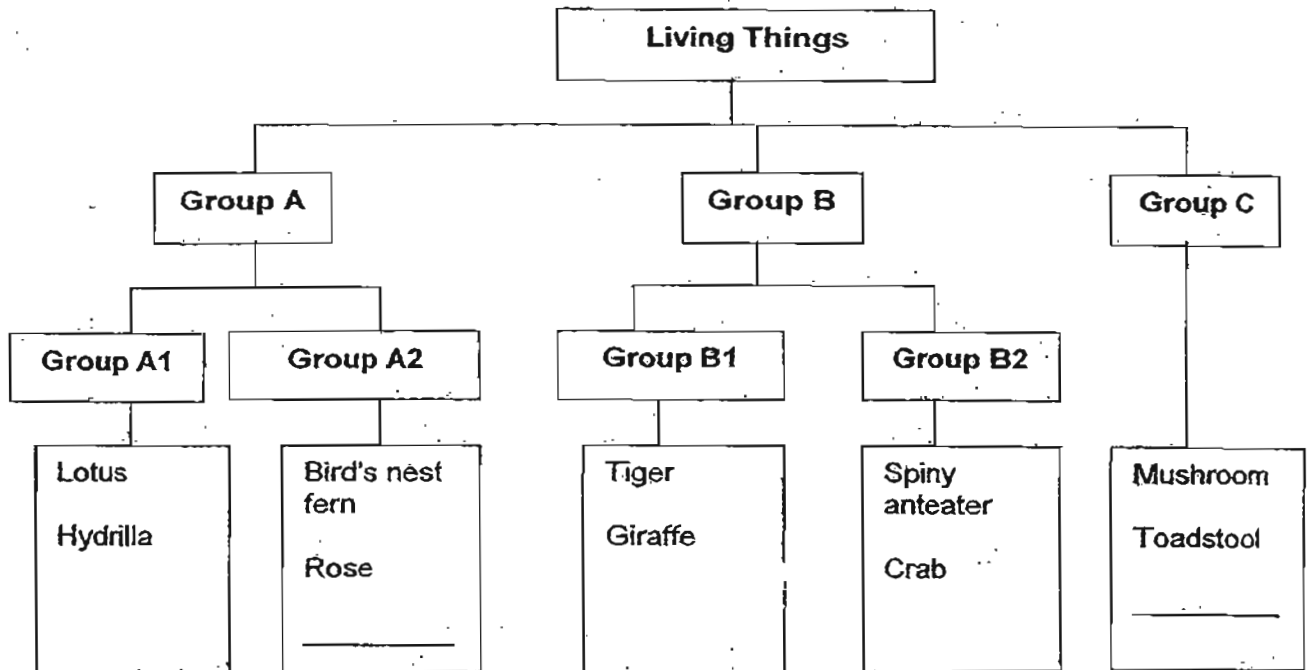
Booklet A	/ 30
Booklet B	/ 20
TOTAL	/ 50

~~This~~ booklet consists of 8 printed pages including this page.

Section B : (20 marks)

For questions 16 to 22, write your answers in the spaces provided.

16. Study the following classification table carefully.



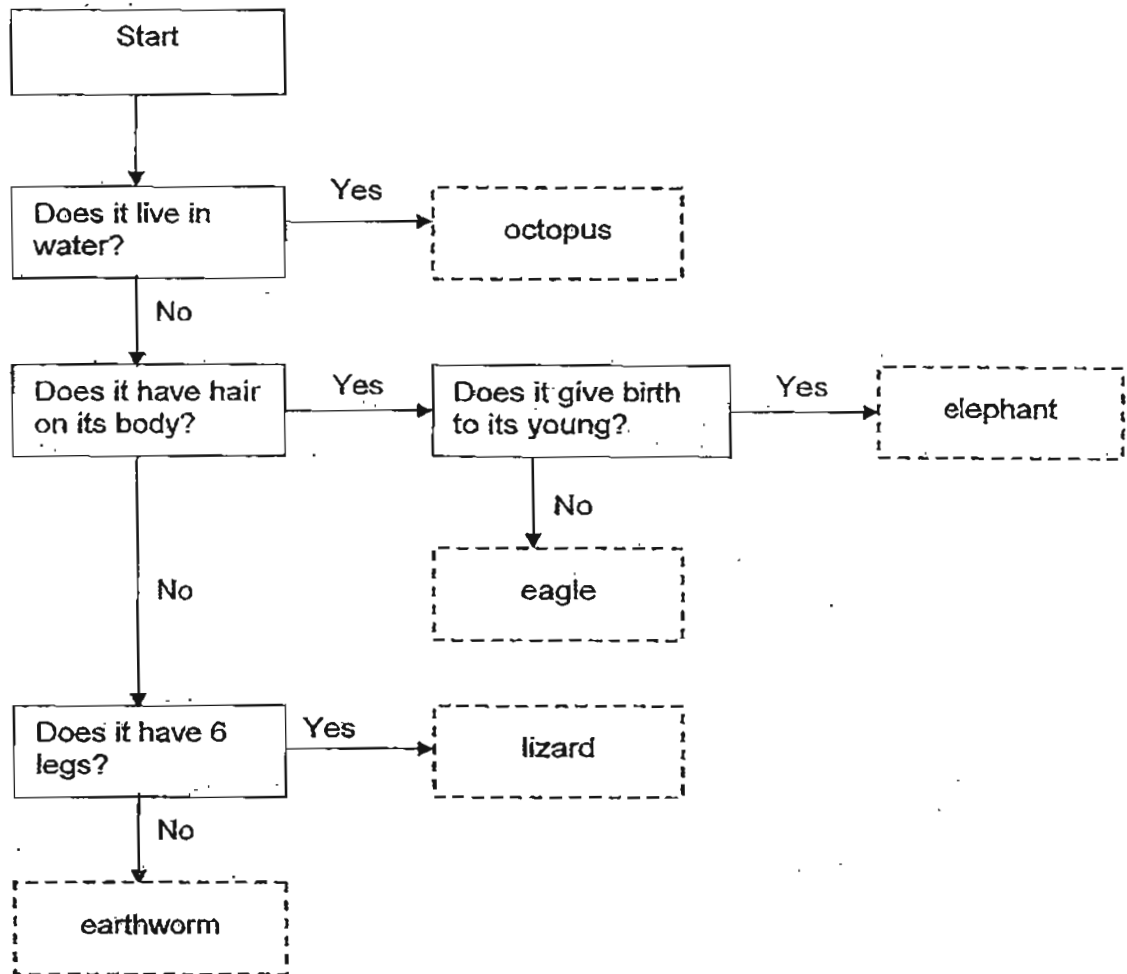
(a) Write down suitable headings for Groups A, B and C. (1 m)

Group A : _____ Group B: _____ Group C: _____

(b) In the classification table above, put ' chicken ' and ' water lily ' in the correct blanks. (1 m)

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17. Study the flow chart below.



Which two animals have been placed **wrongly** in the flow chart? Give a reason why each of these two animals has been placed wrongly. (3 m)

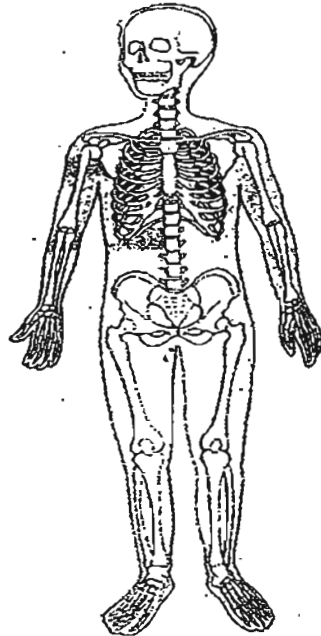
Animal 1

The _____ has been placed wrongly because _____

Animal 2 :

The _____ has been placed wrongly because _____

18. The diagram below shows the human skeletal system.



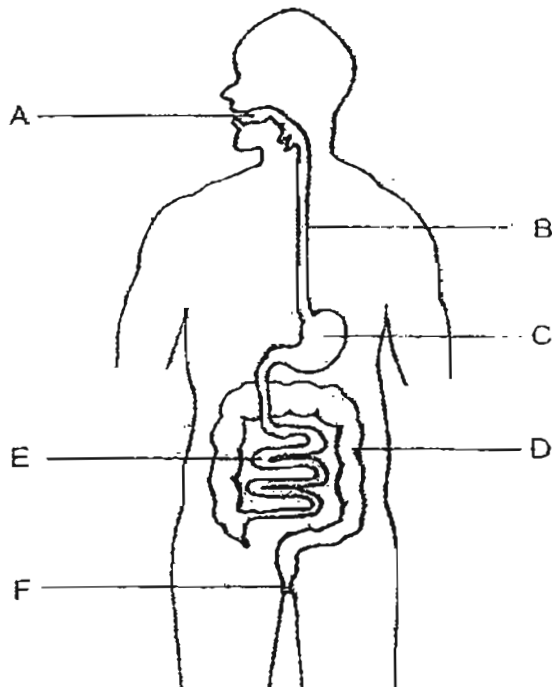
Read the following statements about the skeletal system.

Indicate whether each of the statements is 'True' or 'Not True'. Put a tick(✓) in the correct box. (2 m)

	Statement	True	Not True
(a)	The skeletal system supports our body.		
(b)	The skeletal system gives our body its shape.		
(c)	The skeletal system protects the delicate organs inside our body.		
(d)	The skeletal system enables different parts of our body to move without the help of muscles.		

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19. The diagram below shows the human digestive system.



- (a) In which parts of the digestive system does the digestion of food take place? (1 m)

Parts _____

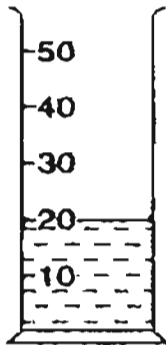
- (b) In which part of the digestive system does absorption of digested food take place? (1 m)

Part _____

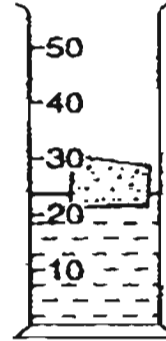
- (c) What is the function of part D of the digestive system? (1 m)

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20. Alice has to find the volume of a cork by using a measuring cylinder. She carries out four steps and records the results for each step as shown below.

Step 1

Volume of water = 20 cm^3

Step 2

Volume of water and cork = 23 cm^3

Step 3

Volume of water, cork and stone = 48 cm^3

Step 4

Volume of water and stone = 41 cm^3

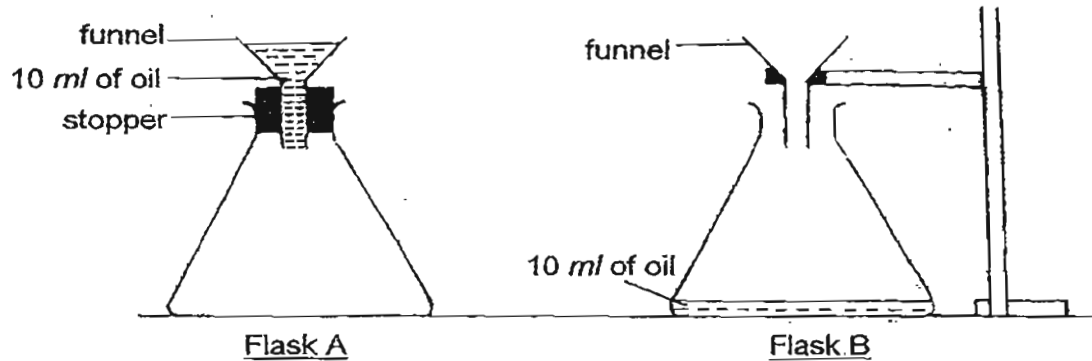
- (a) Why does Alice use a stone in step 3 in order to find the volume of the cork? (1 m)

- (b) Why does the water level rise when the cork and stone are put into the measuring cylinder? (1 m)

- (c) What is the volume of the cork? (1 m)

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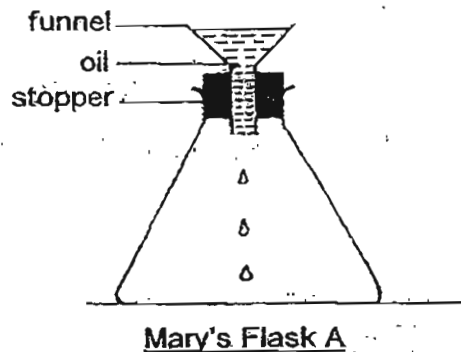
21. During a Science experiment, Siti poured 10 ml of oil into two similar flasks, A and B, respectively.



Siti noticed that the oil did not flow into flask A, but it flowed into flask B.

- (a) Explain why the oil did not flow into flask A, but it flowed into flask B. (2 m)

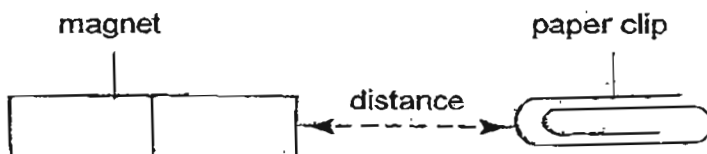
- (b) Siti's classmate, Mary, did the same experiment using the same apparatus and amount of oil. However, her result for Flask A was different from Siti's result. A few drops of oil dripped into her Flask A as shown below.



Which of the following reason(s) likely caused Mary's result to be different from Siti's result? Tick (✓) the appropriate box or boxes. (1 m)

	Reason	Tick (✓)
(i)	Mary used less oil.	
(ii)	Mary's stopper was loose.	
(iii)	Mary poured in the oil more quickly.	

22. Chee Meng carried out an experiment to find out the strength of three magnets, X, Y and Z. A paper clip was placed at different distances from each magnet to see if the paper clip was attracted to it.



The results are shown in the table below.

Magnet	Can the magnet attract the paper clip at this distance?			
	1 cm	2 cm	3 cm	4 cm
X	Yes	Yes	No	No
Y	Yes	No	No	No
Z	Yes	Yes	Yes	No

- (a) Arrange the magnets, X, Y and Z in order of their strength. Begin with the strongest magnet. (1 m)

Strongest		Weakest

- (b) Chee Meng then repeated the experiment by replacing the paper clip with a piece of copper wire. He found that the copper wire was not attracted by any magnet at all the different distances. Explain why this is so. (1 m)

- (c) Besides the method that Chee Meng has used in the above experiment, describe **another** method that he could use to find out which magnet, X, Y or Z, is the strongest magnet. (2 m)

End of Booklet B



ANSWER SHEET

EXAM PAPER 2011

SCHOOL : MGS
SUBJECT : PRIMARY 4 SCIENCE
TERM : CA1



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

16)a)A: Plants B: Animals C: Fungi
b)Water Lily / Chicken

17)Animal 1: The eagle has been placed wrongly because it has no hair, but has feathers.

Animal 2: The lizard has been placed wrongly because it does not have 6 legs, but has 4 legs.

18)a)T b)T c)T d)Not

19)a)A,C and E.

b)E.

c)It is to remove/ absorb water from the undigested food.

20)a)She uses a stone to keep the cork completely in the water.

b)The cork and stone take up. occupy space.

c)The volume of the cork is 7cm³

21)a)Air occupied the space in Flask A as it could not escape because of the stopper, so oil could not flow into A. Air escaped through the mouth of Flask B, so oil flowed in to take its space in B.

b)ii)

22)a)Z, X, Y

b)The copper wire is non-magnetic.

c)Place magnets X, Y and Z at the same distance from some paper clips. The magnet that attracts the most paper clips is the strongest.

