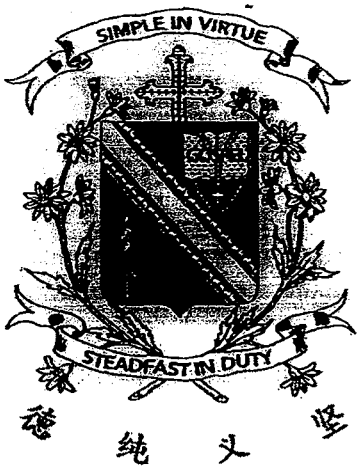
Name : _____ ( )

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 5
Continual Assessment 1 – 2015
SCIENCE

BOOKLET A

5 March 2015

Total Time for Booklets A and B: 1 hour 15 minutes

15 questions
30 marks

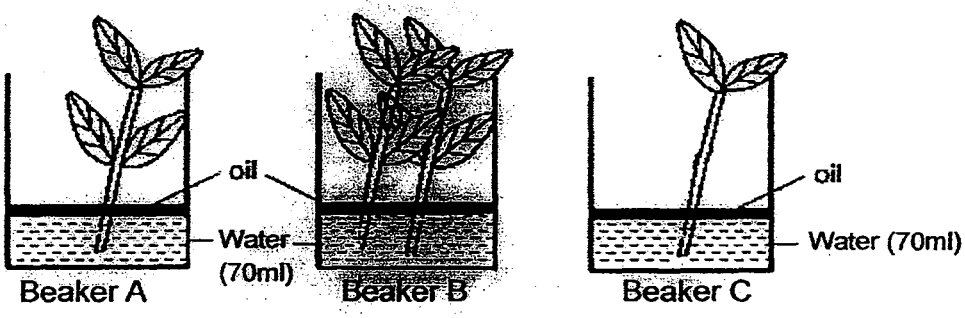
Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Shade your answers in the Optical Answer Sheet (OAS) provided.

This paper consists of 9 printed pages.

Section A (15 x 2 marks = 30 marks)

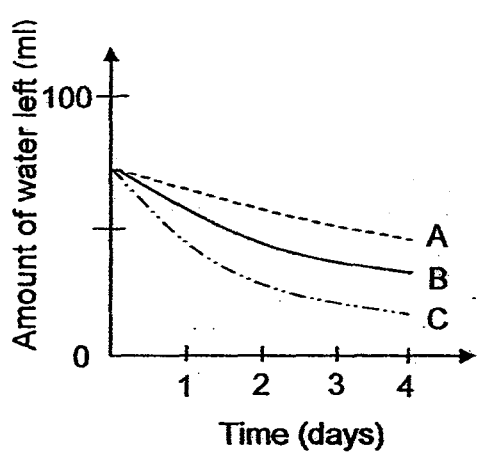
For each question from 1 to 15, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). **Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet provided.**

1. Miss Tan carried out an experiment on similar plants without their roots in the three set-ups, A, B and C, as shown below.

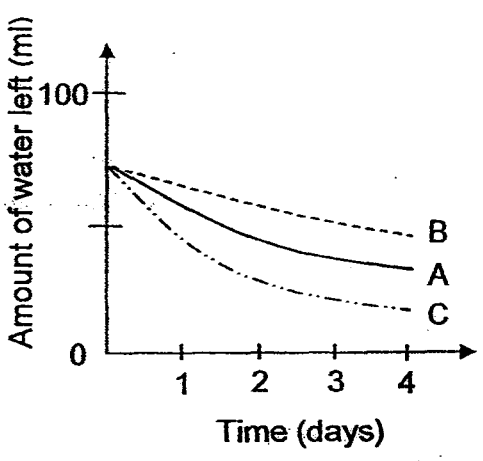


Which graph correctly represents the amount of water left in the beakers after 4 days?

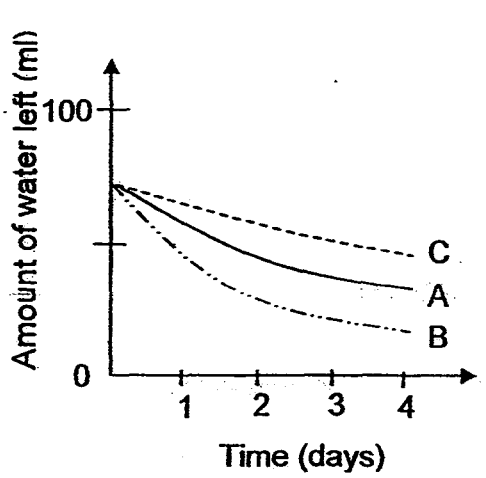
(1)



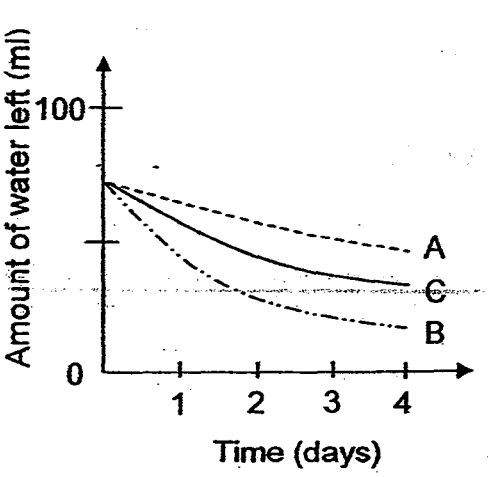
(2)



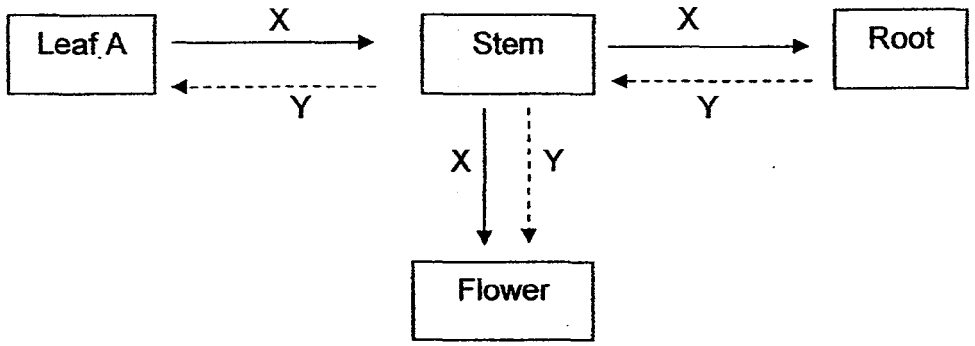
(3)



(4)



2. The diagram below shows the directions in which substances, X and Y, are transported to different parts of a plant.



Which one of the following correctly represents substances X and Y?

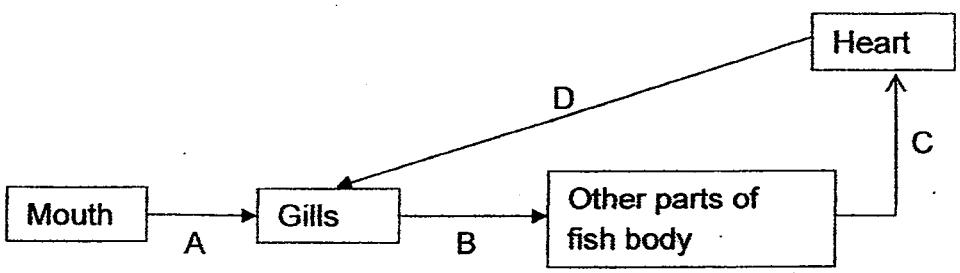
	X	Y
(1)	Food	Carbon dioxide
(2)	Oxygen	Water
(3)	Food	Water
(4)	Carbon dioxide	Mineral salts

3. Which of the following organs belong to the circulatory system?

A heart
B gullet
C lungs
D blood vessels

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

4. The diagram below shows the circulatory system of a fish.



Which part of the system, A, B, C and D contains the highest amount of oxygen?

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

5. Lily wrote down the differences between the air she breathed in and the air that she breathed out in the table below.

	Air she breathed in	**Air she breathed out**
A	Contains more water vapour	Contains less water vapour
B	Contains more oxygen	Contains no oxygen
C	Has a lower temperature	Has a higher temperature
D	Contains less carbon dioxide	Contains more carbon dioxide

Which of her descriptions are true?

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

6. Which is the correct path taken by the blood in our body?

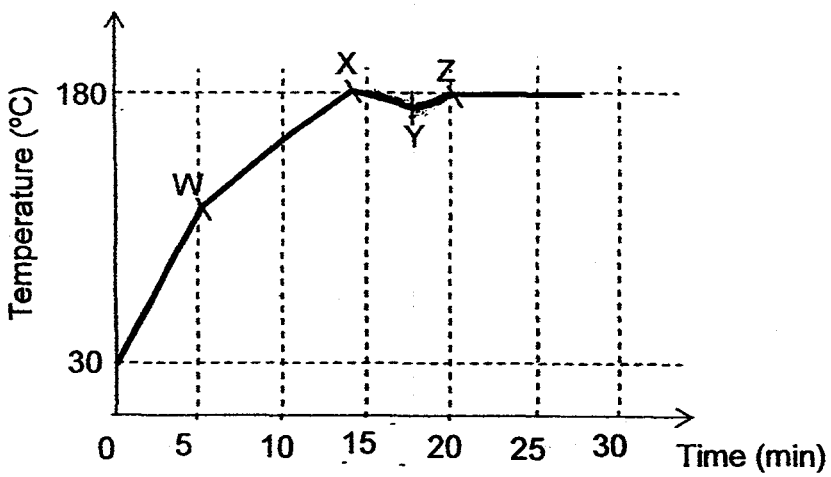
(1) other parts of the body → heart → lungs → other parts of the body
(2) other parts of the body → lungs → heart → other parts of the body
(3) other parts of the body → lungs → heart → lungs → other parts of the body
(4) other parts of the body → heart → lungs → heart → other parts of the body

7. The diagram below shows a boy drinking water from a cup with a straw.

Which one of the following describes what happens to his ribcage and diaphragm when he sucks the water up from the cup into his mouth?

	Ribcage	Diaphragm
(1)	Move in and downwards	Move downwards
(2)	Move in and downwards	Move upwards
(3)	Move out and upwards	Move upwards
(4)	Move out and upwards	Move downwards

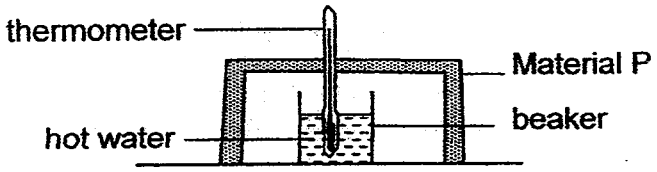
8. The graph below shows the temperature change in an oven before and during the baking of a loaf of bread.



A bread recipe requires the baker to heat the oven to 180°C before putting the dough into the oven. Once the temperature reaches 180°C, the baker has to open the door and put the dough into the oven. At which point on the graph did the baking start?

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

9. Study the diagram below. An experiment was carried out to investigate the heat conductivity of four different materials, P, Q, R and S. Material P is placed over the beaker of hot water and the temperature of water was measured and recorded at regular intervals. The experiment was repeated with material, Q, R and S, which was of equal thickness.



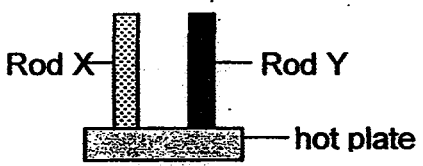
The results of the experiments are shown in the table below.

Time (min)	Temperature of water			
	Material P	Material Q	Material R	Material S
0	100	100	100	100
5	78	80	91	72
10	55	64	80	43
15	32	45	66	25
20	25	33	51	25

Based on the results of the experiment, which one of the following materials is the best conductor of heat?

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

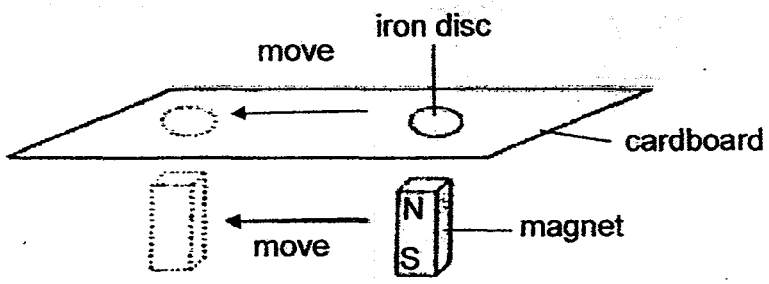
10. Ah Seng conducted an experiment by placing two similar Rods, X and Y, made of different materials on the hot plate as shown below.



Which one of the statements below helped Ah Seng to arrive at the conclusion that Rod Y is a better conductor of heat than Rod X after a specific period of time?

(1) Rod X felt cooler than Rod Y.
(2) Rod X expanded more than Rod Y.
(3) Rod Y had a lower temperature than Rod X.
(4) The mass of Rod Y increased more than the mass of Rod X.

11. Mary placed an iron disc on a cardboard and held a magnet under it as shown in the diagram below. She noticed that when the magnet moved, the iron disc would move in the same direction.

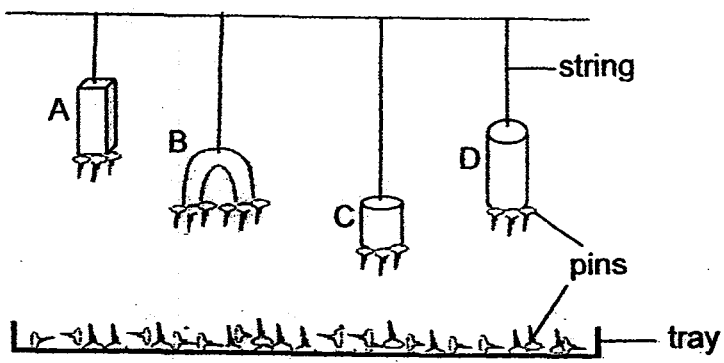


However, when the same experiment was repeated by replacing the cardboard with a sheet of material X, the iron disc did not move with the magnet.

Which of the following correctly explains what happened?

(1) Material X was a magnetic material.
(2) The iron disc was too far from the magnet.
(3) She used the S-pole of the magnet instead of N-pole.
(4) The iron disc did not allow magnetism to pass through.

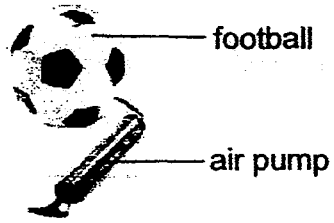
12. Jonathan suspended 4 magnets, A, B, C and D, above a tray of pins. The result is shown below.



What can you conclude from the result of his experiment?

(1) A is weaker than B.
(2) A is stronger than D.
(3) C is stronger than D.
(4) B is the strongest magnet.

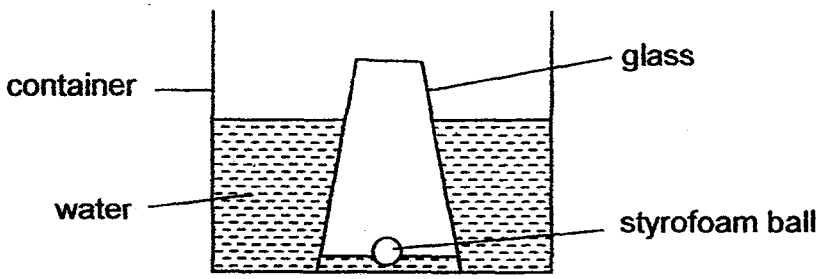
13. Muthu pumped more air into a fully inflated football.



What happened to the mass and volume of the air in the football after more air was pumped in?

	Volume of Air	Mass of Air
(1)	Decreased	Increased
(2)	No change	Increased
(3)	Increased	Increased
(4)	Increased	No change

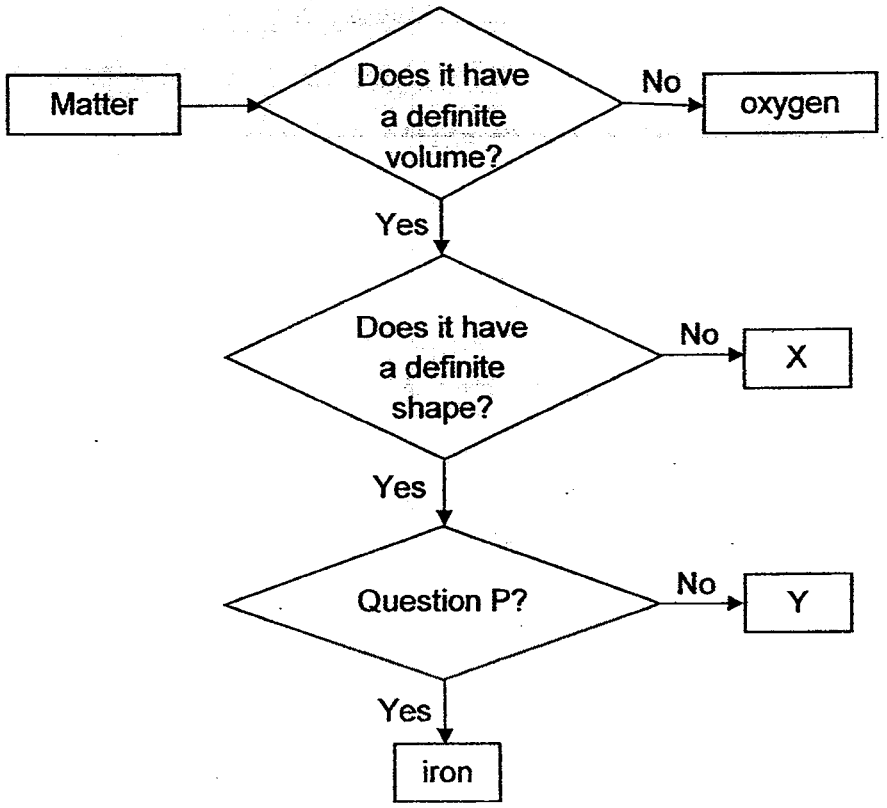
14. Wilson lowered an empty glass with a styrofoam ball into a container of water until it touched the bottom of the container. He observed that the water level inside the glass was not the same as the water level outside as shown in the diagram below.



What could be the main reason for the difference in the water level inside and outside the glass?

(1) The air trapped in the glass occupied space.
(2) The ball pushed the water out from the glass.
(3) The styrofoam ball in the glass occupied space.
(4) The air trapped in the glass dissolved in the water.

15. Study the flow chart below.



Which one of the following correctly states what X, Y and Question P are?

	X	Y	P
(1)	water	steel	Does it conduct electricity?
(2)	air	rubber	Is it a metal?
(3)	oil	copper	Is it a magnetic material?
(4)	water vapour	wood	Does it conduct heat?

~~ End of Section A ~~

Name: _____ ( )

Class: Primary 5_____

CHIJ ST NICHOLAS GIRLS' SCHOOL

SIMPLE IN VIRTUE

STEADFAST IN DUTY

纯 义

Primary 5
Continual Assessment – 2015
SCIENCE

BOOKLET B

5 March 2015

Total Time for Booklets A and B: 1 hour 15 minutes

7 questions
20 marks

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

Booklet A	30
Booklet B	20
Total	50

_____

Parent's Signature/Date

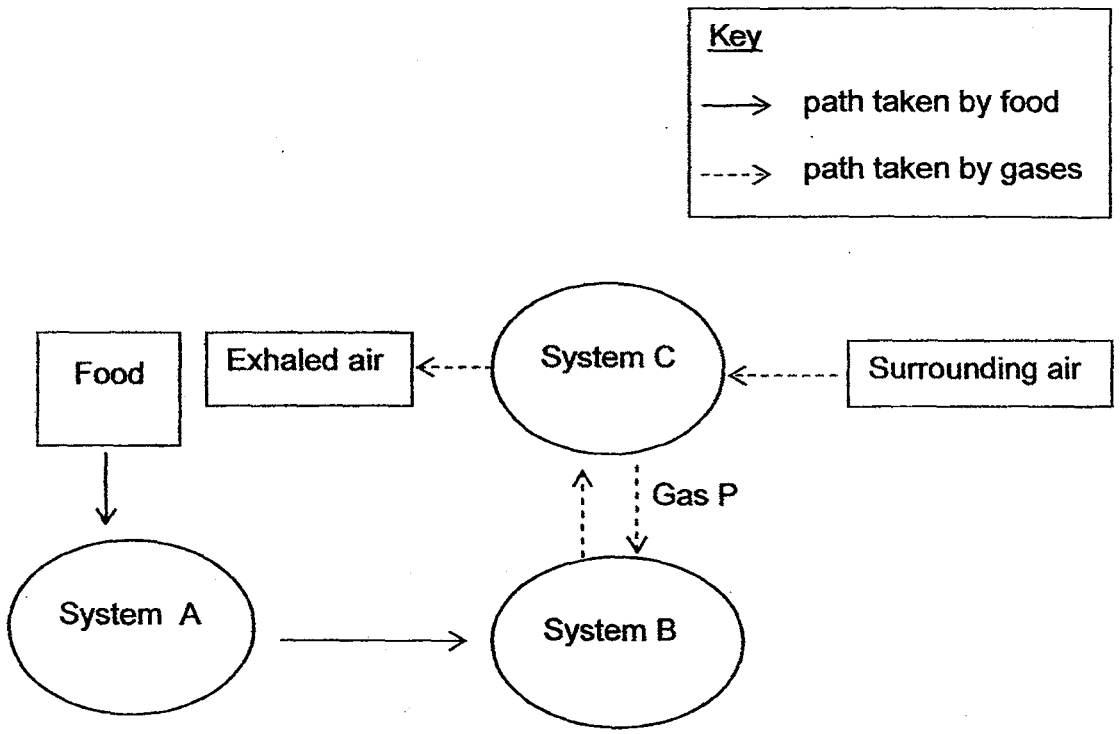
This paper consists of 8 printed pages.

Section B (20 marks)

For questions 16 to 22, write your answers in this booklet.

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

16. The diagram below shows how food and various gases are transported in the human body.



Complete the table below by writing down the names of systems B, C and Gas P. (3m)

System B	System C	Gas P

17. Both the human circulatory system and plant transport system use tubes to transport water and food.

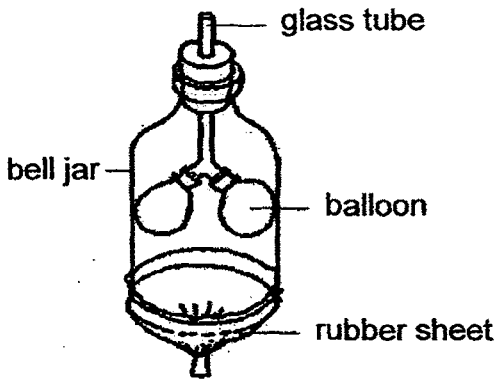
State the difference in the way tubes are used to transport **water** and **food** in these two systems. [2]

_____

_____

_____

18. The diagram below shows a model of the respiratory system.



(a) Which parts of the respiratory system do the glass tube and the balloons represent? [2]

Glass tube: _____

Balloons: _____

(b) The rubber sheet represents the diaphragm of the respiratory system. Explain how the rubber sheet in the model helps to draw air into the balloons.

_____

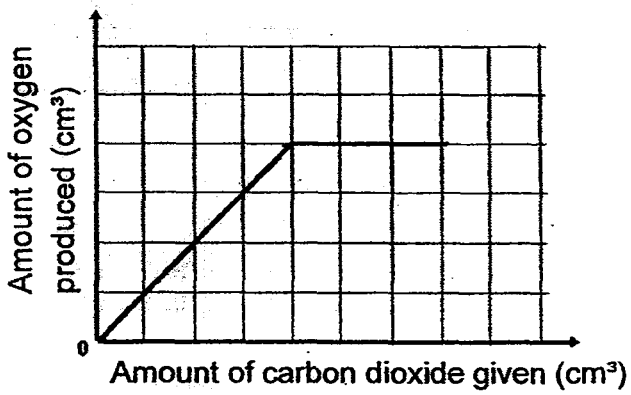
_____

_____

_____

_____

19. The graph below shows how the amount of carbon dioxide given to a plant affects the total amount of oxygen produced by the plant over a period of time.



(a) What is the relationship between the amount of oxygen produced and the amount of carbon dioxide given? [2]

_____

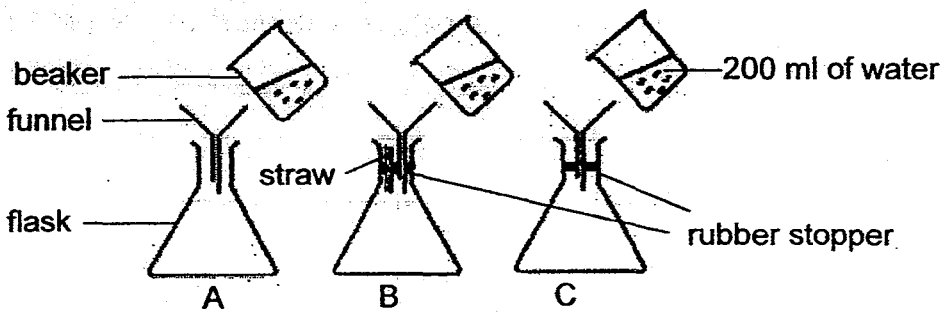
_____

_____

(b) Which part of the leaf enables gaseous exchange during photosynthesis? [1]

_____

20. Richard prepared three set-ups as shown below. He then poured 200ml of water into each flask.



(a) Based on the diagram above, which flask would collect the least amount of water in one minute? Explain your answer. [2]

_____

_____

_____

(b) Based on the experiment above, state two properties of a liquid. [1]

_____

_____

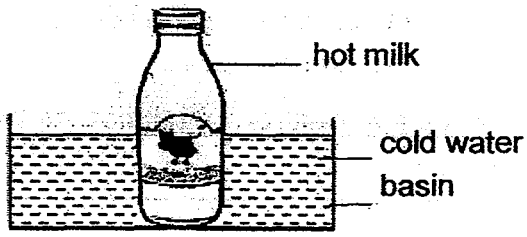
21. Elsa conducted an experiment to find out how the strength of a magnet was affected by the number of times it was dropped. She measured the greatest distance from which the magnet could attract a paper clip after it was dropped. The results are shown in the table below.

Number of times the magnet was dropped	Distance between the magnet and paper clip (cm)
10	6
20	5
30	4
40	3

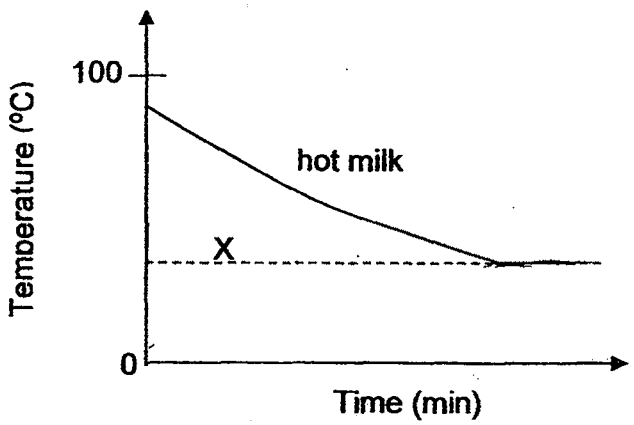
Using the results of her experiment, state whether each of the following statements is true (T), false (F) or not possible to tell (NP). [2]

	Statement	True (T), False (F) or Not possible to tell (NP)
(i)	The magnet could no longer attract the paper clip after 50 drops.	
(ii)	The magnet could attract 10 paper clips before it was dropped.	
(iii)	The magnet could attract an iron nail at a distance of 6cm after it was dropped 10 times.	
(iv)	The magnet could attract the paper clip from a distance of 4cm after it was dropped 25 times.	

22. A bottle of hot milk is placed in a basin of cold water as shown in the diagram below.



The graph below shows the changes in the temperature of the milk after some time.



(a) Using the same grid above, <u>draw</u> a line graph to show the changes in the temperature of the cold water. [1]

(b) Explain what causes the change in the temperature of the hot milk. [1]

_____

_____

(c) What does line X represent? [1]

_____

~~ End of Paper ~

EXAM PAPER 2015
LEVEL : PRIMARY 5
SCHOOL : CHIJ ST NICHOLAS GIRLS SCHOOL
SUBJECT : SCIENCE
TERM : CA1

Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q9	Q 10
3	3	1	1	2	4	4	3	4	1
Q 11	Q 12	Q 13	Q 14	Q 15					
1	2	2	1	3					

Q16. System B – Circulatory System
Q16. System C – Respiratory system
Q16. Gas P – Oxygen

Q17. The human circulatory system uses some tubes to transport food and water but the plant system used separate tubes to transport food and water.

Q18a. Glass tube: windpipe Q18a. Balloons : lungs

Q18b. When the rubber sheet is pulled downwards, there is more space in the bell jar so air enters the glass tube. Thus, the balloon will be inflated.

Q19a. The more carbon dioxide given, the more oxygen the plants produced. After a certain point, the amount of oxygen produced remained the same even when the amount of carbon dioxide given increases.

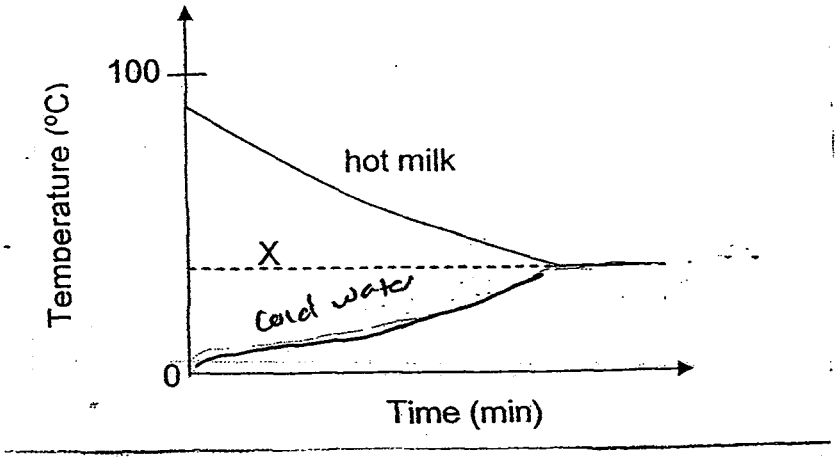
Q19b. Stomata

Q20a. C. Since air in flask C occupies space and the air is unable to escape.

Q20b. Liquid occupies space. Liquid does not have a definite shape.

Q21i) F
Q21ii) NP
Q21iii) NP
Q21iv) T

Q22a. **SEE PICTURE**



Q22b.. The hot milk lost heat to the cold water so it decreased in temperature until it reaches the room temperature.