Name: _____( )

Class: Primary 5_____

Primary 5
CONTINUAL ASSESSMENT 1
SCIENCE

BOOKLET A

2 March 2017

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

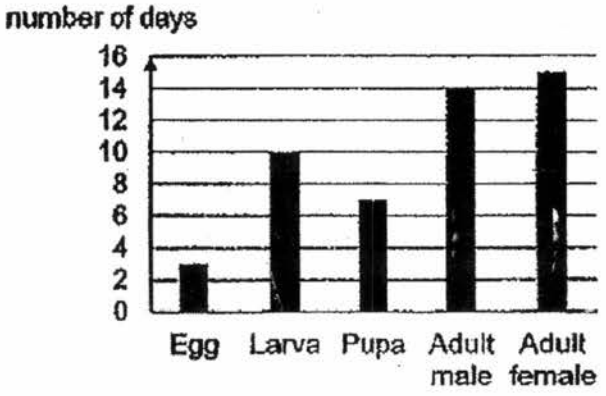
15 questions
30 marks

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

This booklet consists of 11 printed pages.

Section A (15 x 2 marks = 30 marks)
For each question from 1 to 30, 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. The graph below shows the number of days each stage in the life cycle of an organism lasts.



Based on the graph above, which of the following statement(s) is/are definitely true?

A The young looks like the adult.
B The longest stage is the adult stage.
C There are four stages in the life cycle of the organism.
D It takes 20 days for the organism to become an adult after hatching.

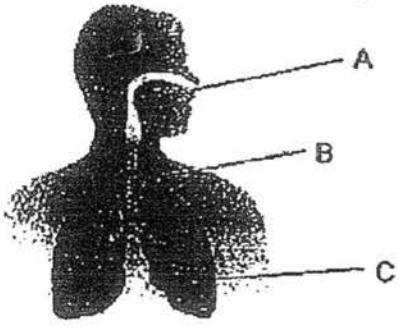
(1) A and D only
(2) B and C only
(3) C and D only
(4) B, C and D only

2. Study the diagram below.

Which one of the following describes what happens to his ribcage and diaphragm when the boy is blowing into his trumpet to produce a sound?

	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

3. The diagram below shows the human respiratory system.

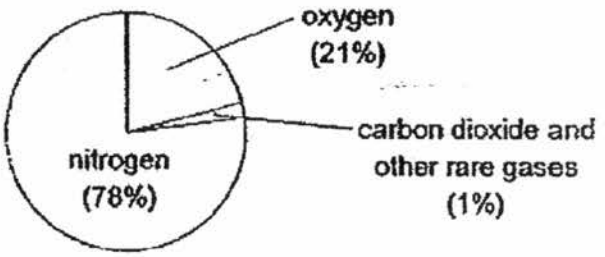


Based on the diagram above, which of the following statements are correct?

A Part A allows air to enter and leave the body.
B Part B allows the passage of air to the lungs.
C Part B traps the dust from entering the lungs.
D Part C contains air sacs which are covered with many blood vessels.

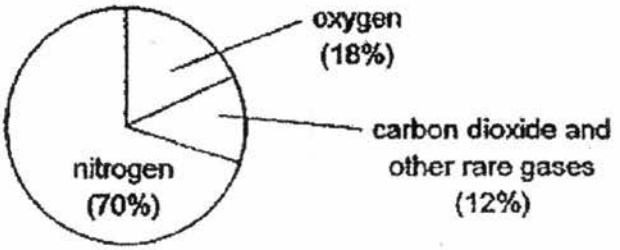
(1) A and B only
(2) A, B and D only
(3) A, B and C only
(4) A, B, C and D

4. The pie chart below shows the composition of air in the atmosphere.

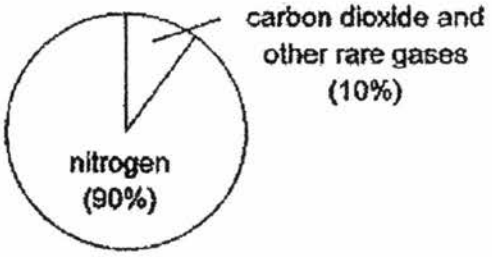


Which one of the following shows the composition of exhaled air?

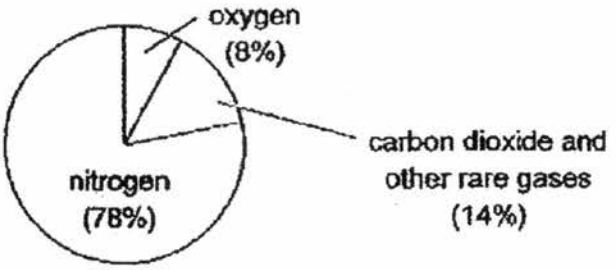
(1)



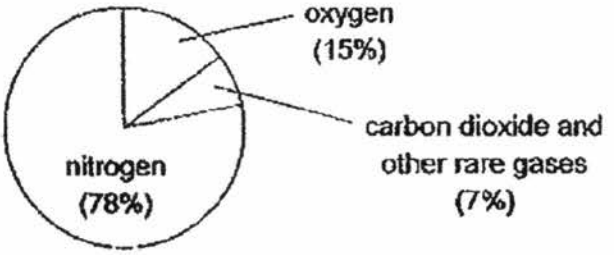
(2)



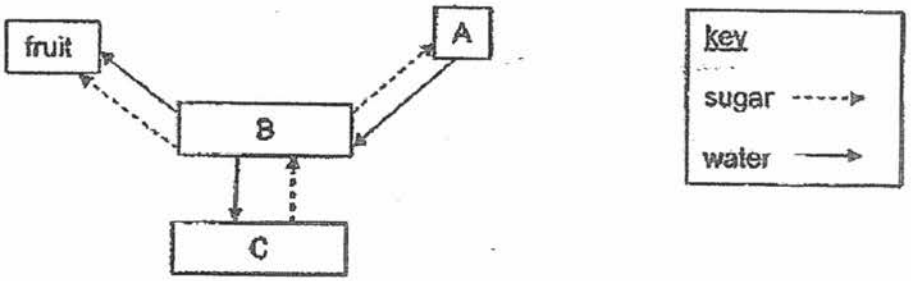
(3)



(4)



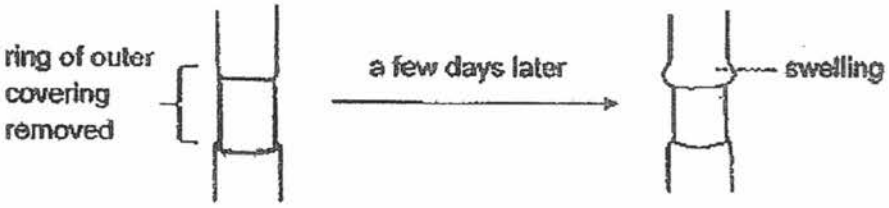
5. The diagram below shows how sugar and water are transported to different parts of a plant.



Which one of the following correctly shows the parts of the plant that are represented by A, B and C?

	A	B	C
(1)	leaves	stems	roots
(2)	stems	roots	leaves
(3)	roots	stems	leaves
(4)	roots	leaves	stems

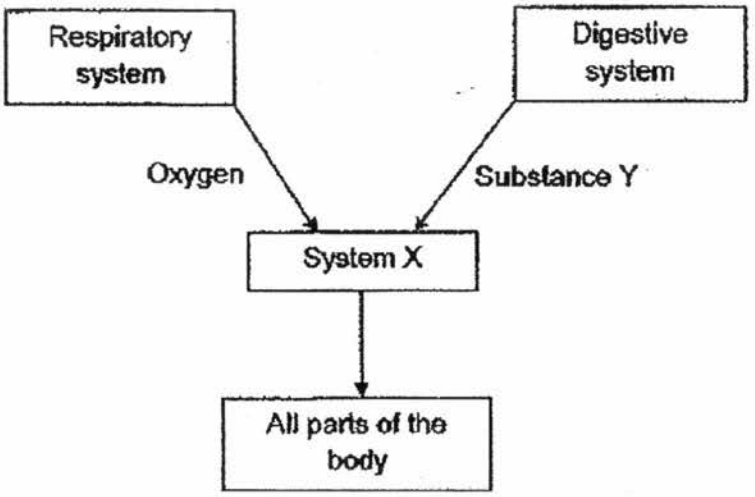
6. A small, thin outer ring from the stem of a plant growing in an open field was removed. A few days later, there was a swelling above the cut.



Which of the following correctly explains the presence of the swelling on the stem?

(1) Food travelling up the stem was trapped above the ring.
(2) Water travelling up the stem was trapped above the ring.
(3) Food travelling down the stem was trapped above the ring.
(4) Water travelling down the stem was trapped above the ring.

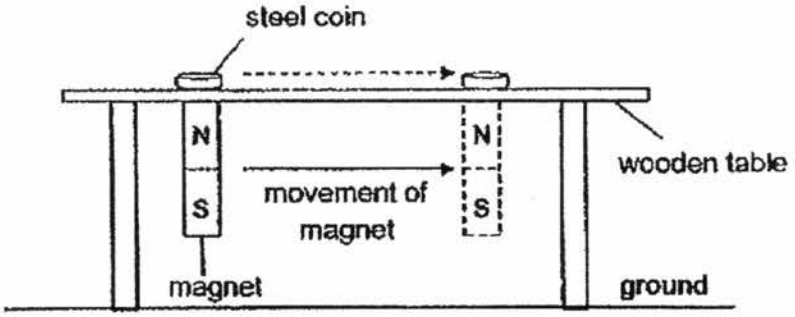
7. Study the diagram below.



Which one of the following best represents System X and Substance Y?

	System X	Substance Y
(1)	Muscular	Digested food
(2)	Circulatory	Digested food
(3)	Muscular	Undigested food
(4)	Circulatory	Undigested food

8. Jacob set up an experiment as shown below. As he slid the magnet along the underside of the table, he noticed that the steel coin moved along the direction shown below.



What was the aim of Jacob's experiment?

(1) To find out if the magnet can attract different kinds of metals.
(2) To find out if different poles of the magnet can attract the steel coin.
(3) To find out if magnetic force can pass through non-magnetic materials.
(4) To find out if the North pole of the magnet attracts or repels the steel coin.

9. Which of the following does not weaken the strength of a magnet?

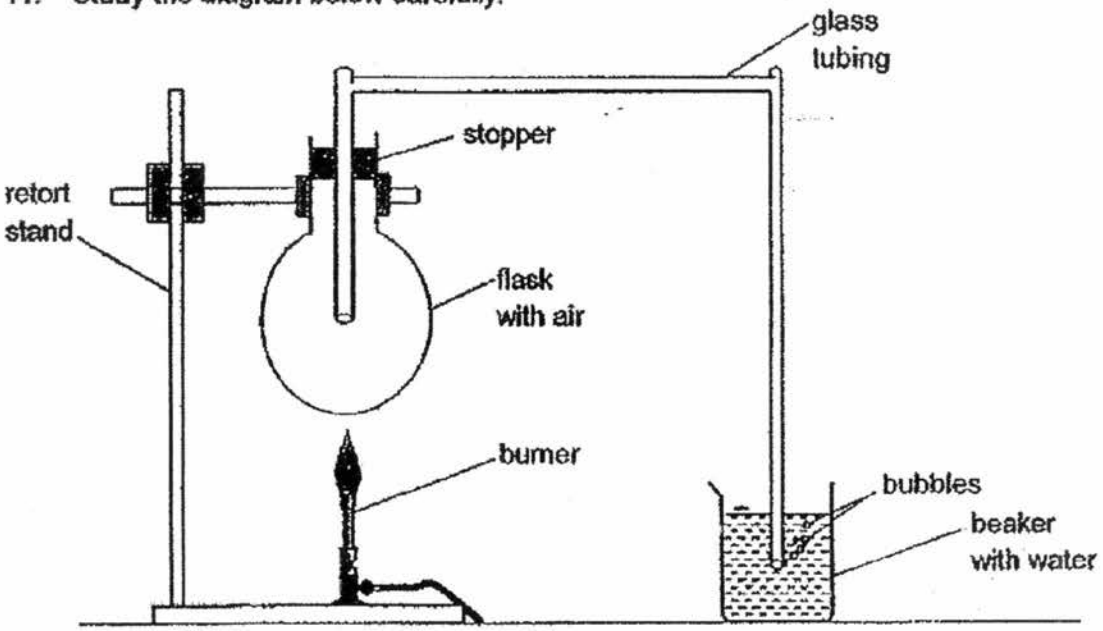
(1) Boiling it in a kettle of hot water.
(2) Dropping it several times from a desk.
(3) Using it to stroke an iron nail repeatedly.
(4) Hammering it continuously for two minutes.

10. Felix placed some ice cream into a metal bowl as shown below. He noted that the ice cream started to melt very quickly. The side of the bowl also felt cold when he touched it with his hands.

Which one of the following statements best explains Felix's observations?

	Melting of ice cream	Bowl felt cold to touch
(1)	The ice cream lost heat to its surroundings.	The bowl lost heat to the ice cream.
(2)	The ice cream lost heat to the bowl.	The bowl gained heat from the ice cream.
(3)	The ice cream gained heat from its surroundings.	The bowl gained heat from Felix's hands.
(4)	The ice cream gained heat from the bowl.	The bowl lost heat to Felix's hands.

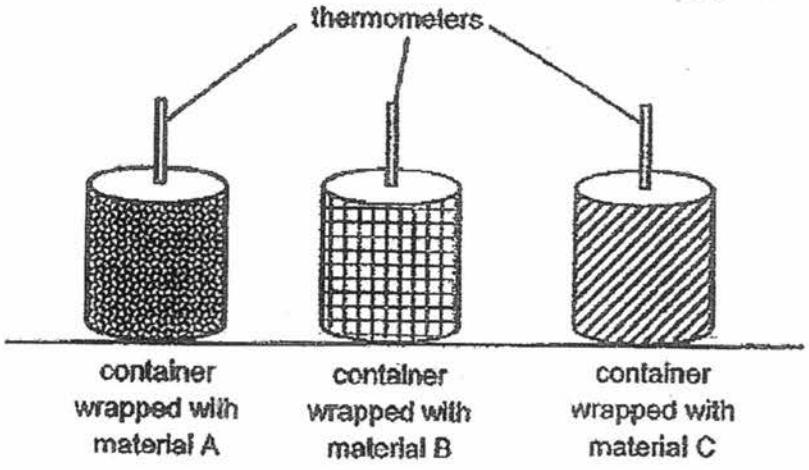
11. Study the diagram below carefully.



When the flask is warmed, bubbles appear at the mouth of the glass tubing in the beaker of water. Which one of the following is the reason for the observation?

(1) The flask loses heat to the air and contracts.
(2) The flask gains heat from the flame and expands.
(3) The air in the flask loses heat to the flask and contracts.
(4) The air in the flask gains heat from the flame and expands.

12. Ravi conducted an experiment using the set-ups shown below. The containers were filled completely with an equal amount of boiling water and left on a table. He recorded the temperature of the water in each container at intervals of 2 minutes for 30 minutes.

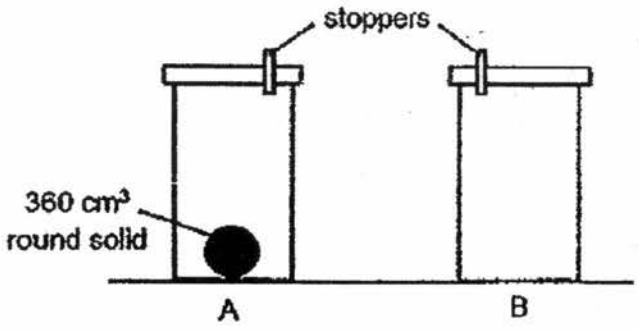


Which of the following could be possible aim(s) of his experiment?

A To find out which container is a better conductor of heat.
B To find out how fast boiling water loses heat to its surroundings.
C To find out which material can best keep the water warm for a longer time.
D To find out whether the number of layers of the different materials would affect the time taken for the water to cool.

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

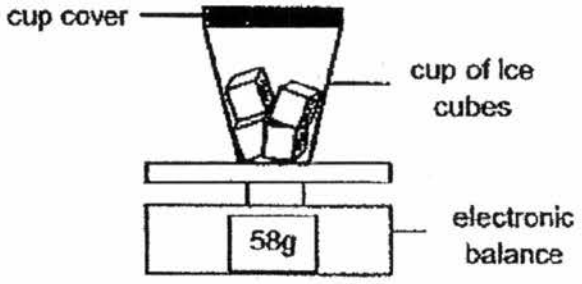
13. Kim set up an experiment using two glass containers, A and B, as shown below. Each container has a capacity of 1000 cm^3.



The stoppers were removed and 600 cm^3 of air was pumped into container A while 450 cm^3 of air was pumped into container B.
What would the final volume of the air in each glass container be?

	Container A	Container B
(1)	1360 cm^3	1450 cm^3
(2)	1000 cm^3	1450 cm^3
(3)	1000 cm^3	1000 cm^3
(4)	640 cm^3	1000 cm^3

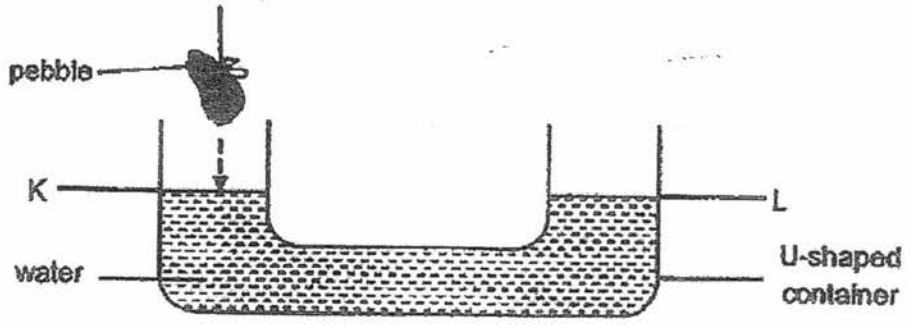
14. A sealed styrofoam cup of ice was placed on an electronic balance as shown below. The mass of the cup of ice is 58g.



Assuming that any water droplets formed on the cup is insignificant, what would the reading on the scale be when all the ice cubes in the cup had melted?

(1) 58g
(2) More than 58g
(3) Less than 58g
(4) Not possible to tell

15. The diagram below shows a U-shaped container filled with water. The water level at points K and L are the same.



Which one of the following statements best describes the water level at points K and L when the pebble is carefully lowered into the container as shown above?

(1) The water level at K and L will increase.
(2) The water level at K will increase more than the water level at L.
(3) The water level at L will increase more than the water level at K.
(4) The water level at L will decrease but the water level at K will increase.

End of booklet A

Primary 5

CONTINUAL ASSESSMENT 1

SCIENCE

BOOKLET B

2 March 2017

NAME: _____ ( )

CLASS: Primary 5_____

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.

This paper consists of 8 printed pages.

Booklet A	30
Booklet B	20
Total	50

_____

Parent's Signature/Date

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. Amanda planted four similar bean seeds in different positions in a container of soil as shown in diagram A.

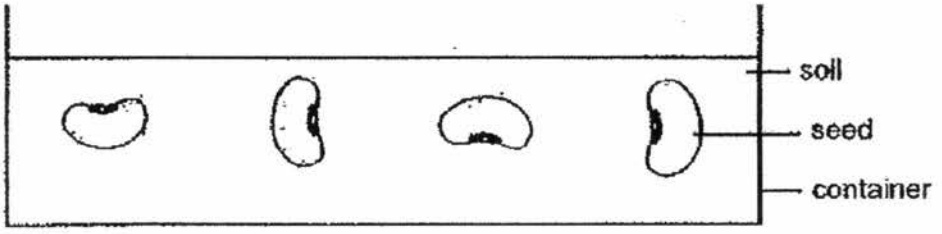


diagram A

Within a week, she made the following observations as shown in diagram B.

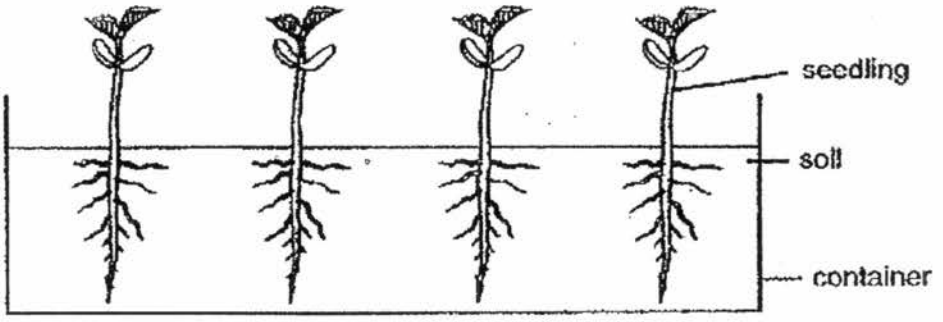
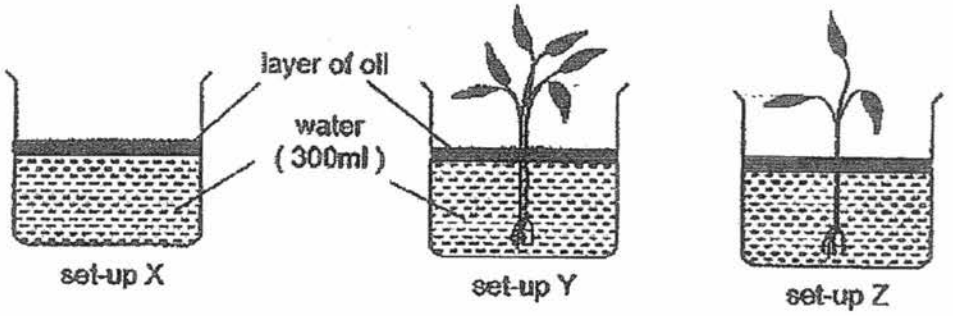


diagram B

a) Based on Amanda's observation, does the position in which the bean seed was planted affect the way the seedling grows? Explain your answer. [1]

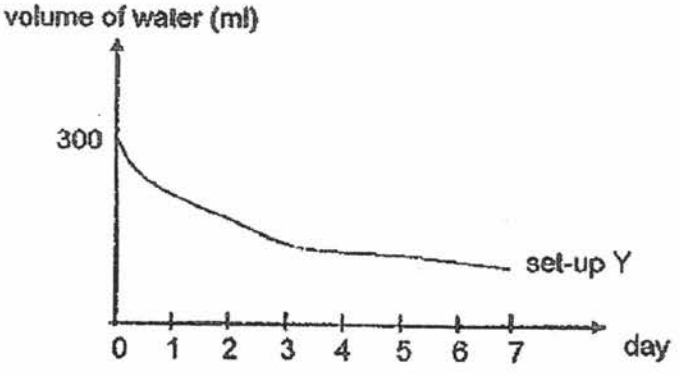
b) State one difference between the life cycle of the bean plant and the life cycle of a fern. [1]

17. Danny set up an experiment as shown below. He wanted to find out whether the roots of the plant absorb water. The water levels in the beakers X, Y and Z were recorded at the end of each day over a period of one week.

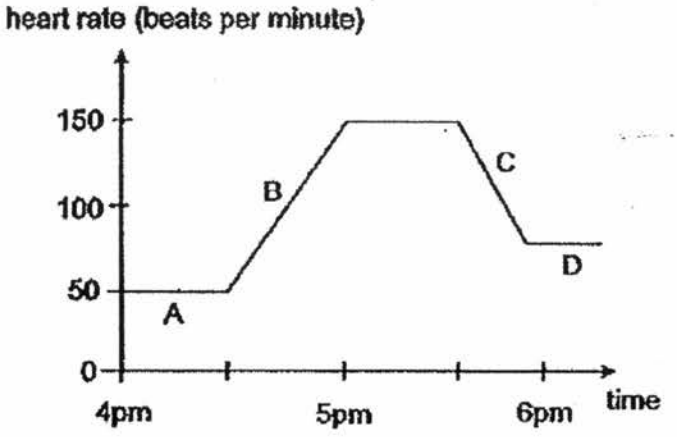


a) What is the purpose of set-up X? [1]

b) The graph below shows the changes to the water level for set-up Y over a period of a week. Draw and label the graphs for set-up X and set-up Z. [2]



18. The graph below shows Damien's heart rate from 4pm to 6pm on an afternoon.

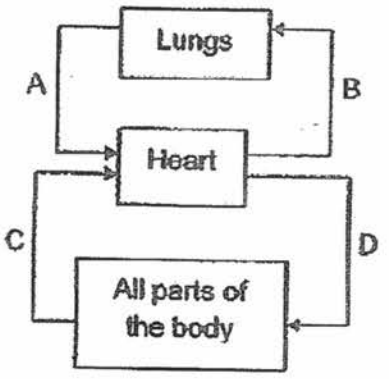


a) Match Damien's activities shown in the table below according to his heart rates at A, B, C and D in the graph above. [1]

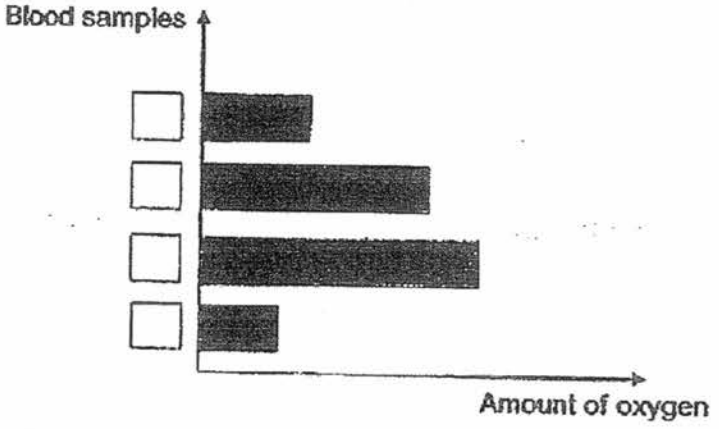
	Activity	Write A, B, C or D
(i)	cooling down	
(ii)	sprinting	
(iii)	walking	
(iv)	at rest	

b) Explain your answer for (aii). [2]

19. The diagram below shows the flow of blood in our circulatory system.



Blood samples are taken from A, B, C and D and the amount of oxygen present in each sample is recorded in the graph shown below.



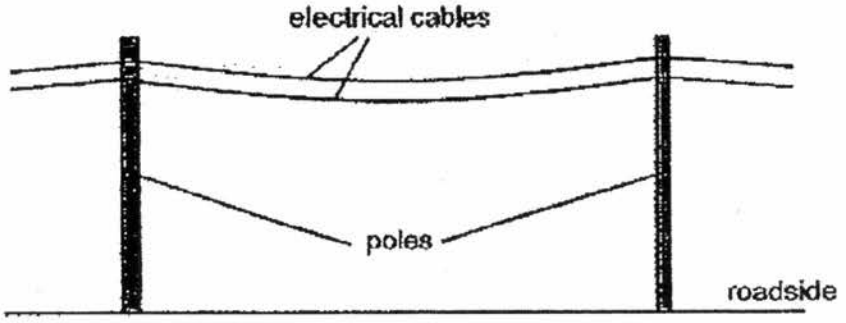
a) In the graph above, label the blood samples by writing the letters A, B, C or D in the boxes provided. [2]

b) Besides gases, name <u>two</u> other substances our blood transports in the body. [1]

20. **Lenice conducted an experiment using two inflated balloons, A and B, of the same size. She placed balloon A in a freezer and balloon B on a table at room temperature. After 45 minutes, she noticed that balloon A had shrunk but the size of balloon B remained the same. Removing balloon A from the freezer, she then left it on the same table as balloon B. After some time, she noted that balloon A had regained its original size.**

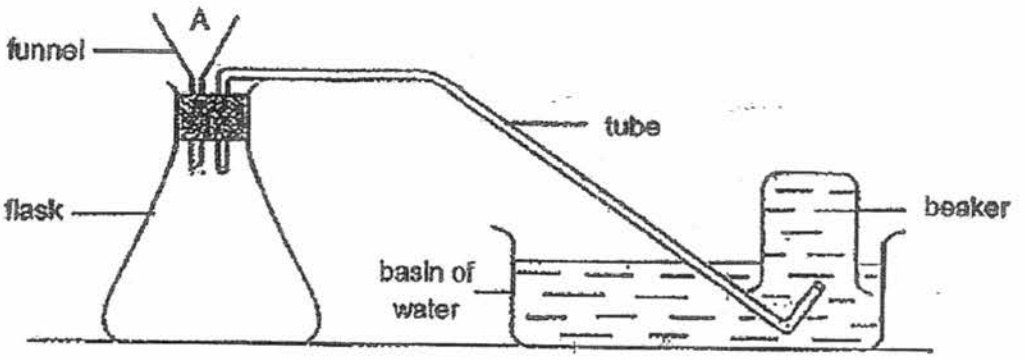
a) What could have happened to result in Lenice's observations of balloon A? [2]

b) The diagram below shows some electrical cables hung between some poles beside a busy road.



Suggest a reason why the cables are allowed to hang loosely between the poles. [1]

21. Harry set up an experiment as shown below. He poured some water into the flask at point A. He observed that water was able to enter the flask through the funnel smoothly.

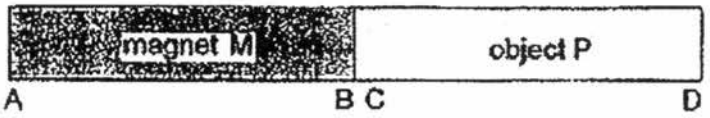


a) As water was entering the flask through the funnel, state one other possible observation Harry would make. Give a reason for your answer.

[2]

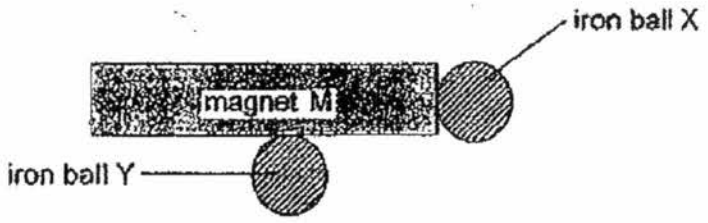
b) What property of air does Harry's experiment show? [1]

22. Jessie observed that magnet M and object P were attracted as shown below.



a) Based on her observation, Jessie could not conclude whether object P is a magnet or not. Using only magnet M and object P, what should Jessie do to conclude whether object P is a magnet or not? Explain your answer. [2]

b) Jessie placed magnet M on a table. She then placed two similar iron balls, X and Y, next to magnet M as shown below.



When she lifted magnet M, ball X remain attached to the magnet but ball Y did not. Explain why ball Y did not remain attached to the magnet. [1]

End of Paper

EXAM PAPER 2017 (P5)

SCHOOL :CHIJ ST

SUBJECT : SCIENCE

TERM : CA1

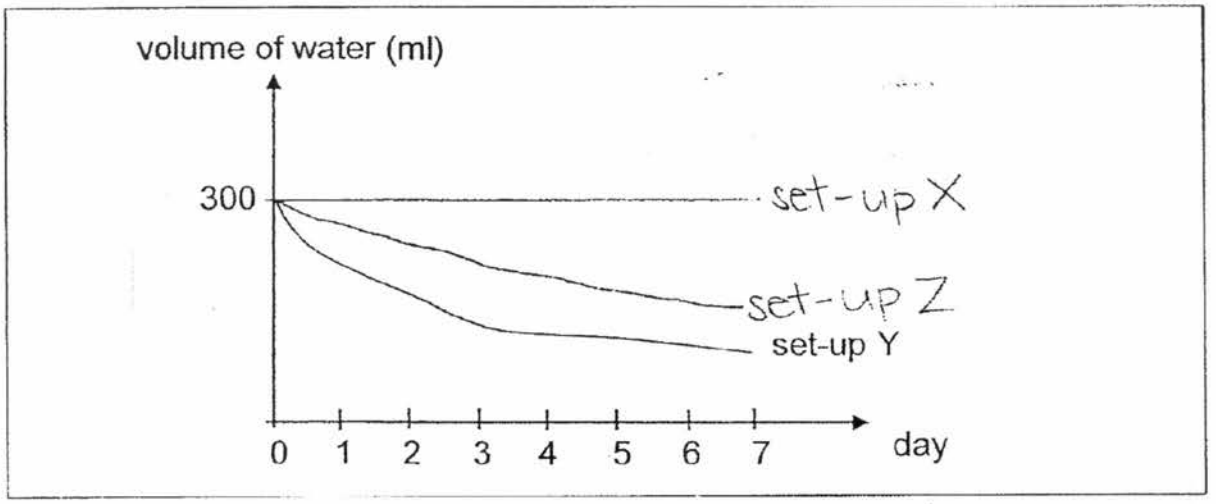
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	2	2	4	3	3	2	3	3	3
Q11	Q12	Q13	Q14	Q15					
4	1	4	1	1					

16)a)No.The roots of a plant will always grow downwards and the shoots will grow upwards even if the position is not the same.

b)The life cycle of the bean plant reproduce by seeds but the life cycle of a fern reproduce by spores.

17)a)It acts as a control set-up to show that any decrease in the water level is due to the presence of the plant's roots absorbing water.

b)



18)a)i)C

ii)B

iii)D

iv)A

b)Damien's heart rate increase as he needed more energy when he exercise.His heart pumps faster to transport more blood with oxygen and digested food for higher rate of respiration.

19)a)C

D

A

B

b)Digested food and water

20)a)When balloon A was placed in the freezer,the air in the balloon lost heat and contracted causing the balloon to shrink.When the balloon was removed from the freezer and placed on the table,the air in the balloon gained heat and expanded causing it to regains its original size.

b)When it is a cold day,the electrical cables will lose heat to its surroundings and contract and it will break if they are hung too tightly between the poles.

21)a)Bubbles will be seen coming out from the glass tube in the beaker.Water entered the flask and displaced the air into the beaker.

b)Air occupies space

22)a)She should place end D of the object P near to the magnet M.If D repels end B of the magnet,then object P is a magnet.

b)The magnet strength of the magnet is the strongest at its poles.The magnetism in the middle of Magnet M is not strong enough to attract iron ball B.