CONTINUAL ASSESSMENT 1 (2017)
PRIMARY 5

SCIENCE

BOOKLET A

THURSDAY **23 February 2017** **1 HOUR**

Name : _____ ( )

Class : P5 _____

INSTRUCTIONS TO PUPILS

DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO

Follow all instructions carefully.

There are 14 questions in this booklet.

Answer **ALL** questions.

INFORMATION FOR PUPILS

The total marks for this booklet is 28.

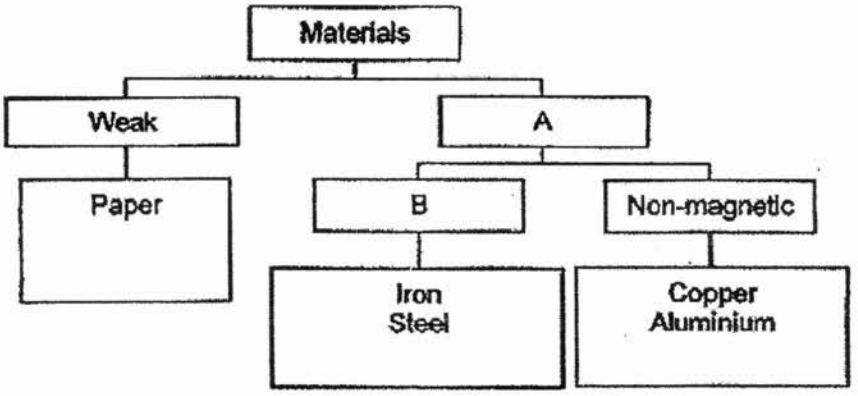
The total time for Booklets A and B is 1 hour.

This question paper consists of 9 printed pages (inclusive of cover page).

Booklet A (28 marks)

For each question from 1 to 14, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet. (14 x 2 marks)

1. The classification chart shows how some things can be classified according to certain characteristics.



Which of the following clearly represents letters A, B ~~and C~~?

	A	B
(1)	Flexible	Strong
(2)	Not flexible	Magnetic
(3)	Strong	Magnetic
(4)	Strong	Flexible

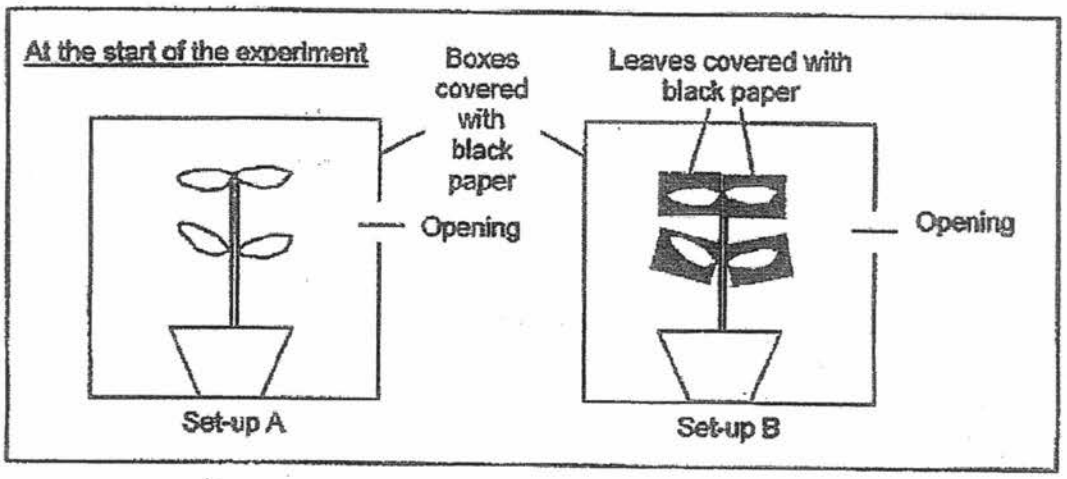
2. Jeremy studied and made some observations on two animals, X and Y. He recorded his observations in the table below.

	Animal X	Animal Y
Can the adult fly?	Yes	Yes
Does it lay its eggs in water?	Yes	No
Does the young look like its adult?	No	No
Does it have a larval stage in its life cycle?	Yes	Yes

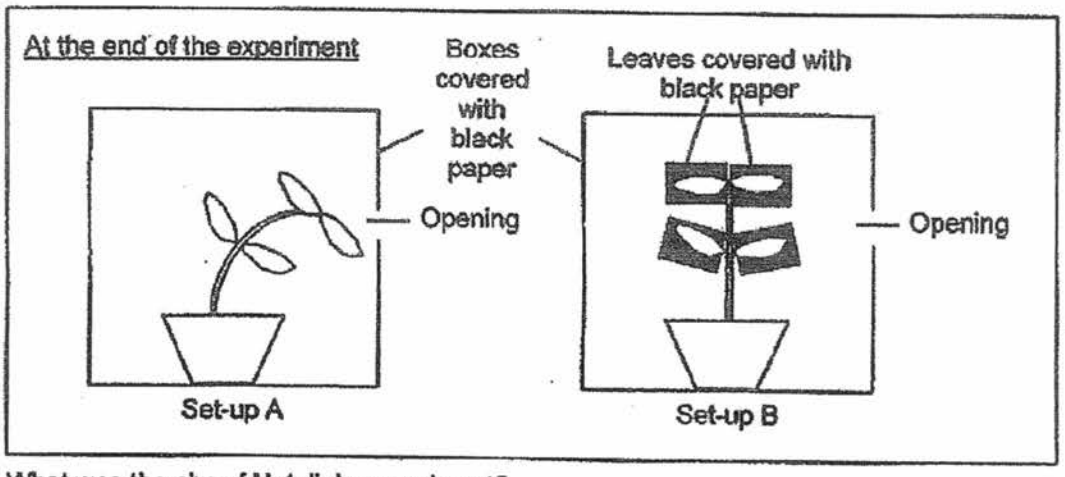
Which of the following pair of animals can be Animal X and Animal Y?

	Animal X	Animal Y
(1)	Chicken	Grasshopper
(2)	Mosquito	Beetle
(3)	Butterfly	Mosquito
(4)	Cockroach	Chicken

3. Natalie carried out an experiment for 3 sunny days as shown below. She placed two identical type of plants in the boxes covered with black paper. She covered the leaves of the plant in Set-up B and placed both set-ups in a garden. She watered both plants with the same amount of water every day.



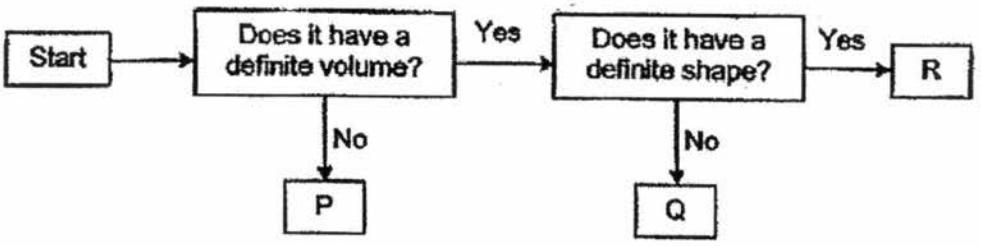
After 3 days, this is what she observed:



What was the aim of Natalie's experiment?

(1) To find out if plants need air to survive.
(2) To find out if plants need water to survive.
(3) To find out if plants need leaves to make food.
(4) To find out if plants respond to changes around them.

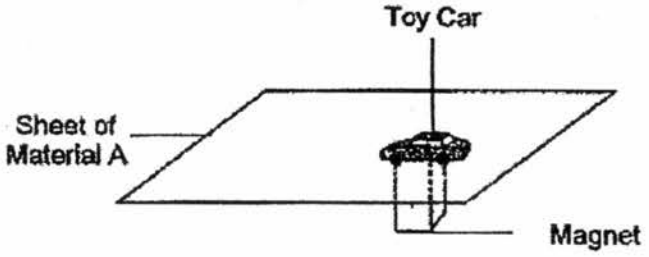
4. Study the flow chart below.



Which of the following correctly represents P, Q and R?

	P	Q	R
(1)	Water vapour	Coffee	Magnet
(2)	Magnet	Water	Book
(3)	Coffee	Book	Water vapour
(4)	Water vapour	Magnet	Book

5. John placed a toy car on a sheet of Material A and held a magnet under the sheet of Material A as shown in the diagram below.



The toy car moved when John moved the magnet under the sheet of Material A. What conclusions can you make based on John's experiment?

P Material A can be made of plastic.
Q The magnet has lost its magnetism.
R The toy car is made of magnetic material.

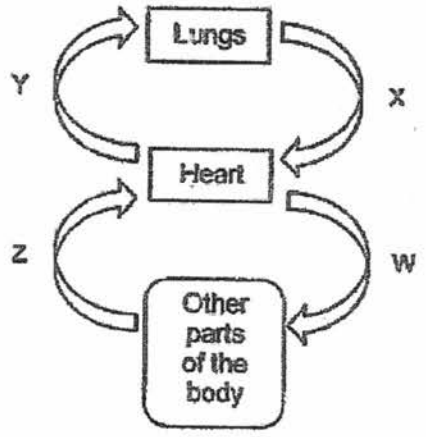
(1) Q only
(2) P and R only
(3) Q and R only
(4) P, Q and R

6. Which of the following substance(s) is/are present in the plant transport system?

A blood
B water
C glucose
D minerals

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

7. The diagram below shows the human circulatory system. The arrows, W, X, Y and Z, represent the flow of blood.



Which arrow(s) represent(s) the transport of blood rich in oxygen in the human circulatory system?

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

8. Gideon conducted an experiment to find out how much light could pass through four different materials, P, Q, R and S. He used a light sensor connected to a datalogger to measure the amount of light that passed through each material. The table below shows the amount of light that passed through each material.

Material	Amount of light (lux)
P	500
Q	0
R	300
S	600

Based on the table above, which one of the following statements is true?

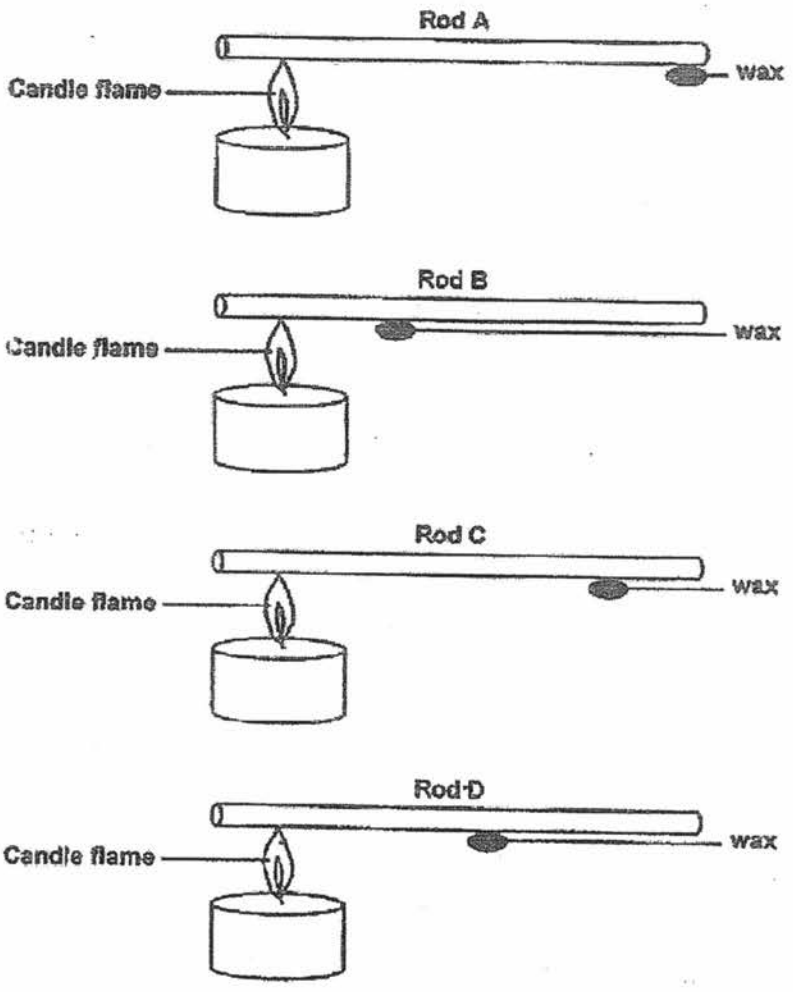
(1) Material R allows all the light to pass through it.
(2) Material Q does not allow any light to pass through it.
(3) Material S allows the least amount of light to pass through it.
(4) Material P allows the most amount of light to pass through it.

9. Which of the following statements about the heart is/are true?

A The heart pumps blood to the lungs only.
B The heart stops beating when we are tired.
C The heart receives blood rich in oxygen from the lungs.
D The heart beats at the same rate when we sleep or run.

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

10. Rachael conducted an experiment. 4 identical pieces of wax were attached onto 4 rods, A, B, C and D, made of different materials as shown in the diagram below. The rods had the same length and diameter. Next, the four rods were placed at equal distance above a candle flame of same heat intensity at the same time.

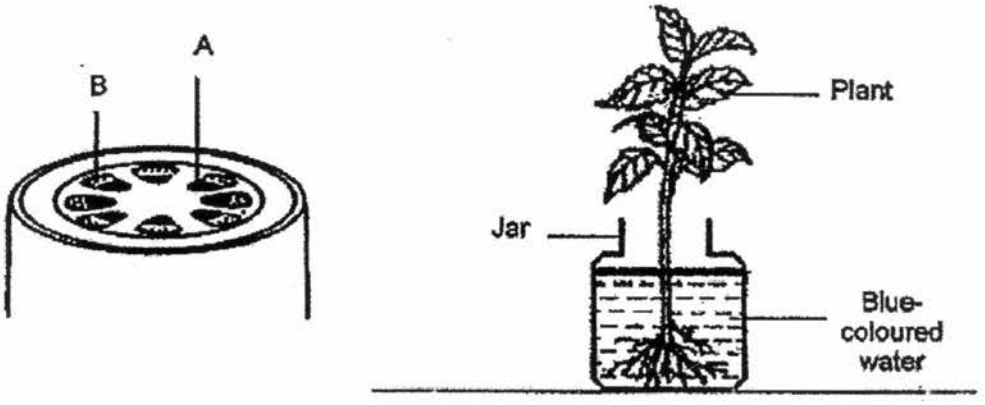


Later, Rachael observed that all the four pieces of wax melted at the same time.

Which of the following could Rachael conclude from this experiment?

(1) Material of Rod A is the best conductor of heat.
(2) Material of Rod B is the best conductor of heat.
(3) Material of Rod C is the worst conductor of heat.
(4) Material of Rod D is the worst conductor of heat.

11. The diagram below shows the cross-section of the stem of a plant. The stem of the plant was placed inside a beaker of blue-coloured water for 1 day as shown below. Tube A is coloured blue.



Which of the following statement(s) is/are correct?

W Tube A is the food-carrying tube.
X Tube B transports air to all parts of the plant.
Y Tube B is stained blue by the blue-coloured water.
Z Tube A transports the blue-coloured water to all parts of the plant.

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

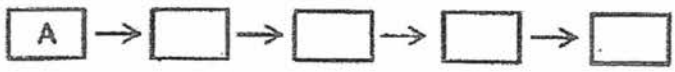
12. Which of the following statement(s) about inhaled air is/are correct?

A It contains only oxygen.
B It is usually cooler than exhaled air.
C It contains less water vapour than exhaled air.

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

13. Read the following description of the human breathing process below.

A Air enters the body through the nose.
B Air leaves the body through the nose.
C Blood transport carbon dioxide to the lungs.
D Air travels through the windpipe and the lungs take in oxygen.
E Oxygen passes into the blood and is transported to other parts of the body



Arrange the description in the correct order to describe what happens when a person breathes in and out.

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

14. Which of the following statement(s) is/are true of all plants?

J Only water-carrying tubes can be found in the stem.
K Excess food is stored only in the fruits and roots of the plant.
L Food-carrying tubes are found in the different parts of the plant.

(1) J only
(2) L only
(3) J and K only
(4) K and L only

End of Booklet A

CONTINUAL ASSESSMENT 1 (2017)
PRIMARY 5

SCIENCE

BOOKLET B

THURSDAY **23 February 2017** **1 HOUR**

Name : _____ ( )

Class : P5 ____

INSTRUCTIONS TO PUPILS

DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO

Follow all instructions carefully.

There are 7 questions in this booklet.

Answer **ALL** questions.

INFORMATION FOR PUPILS

The number of marks is given in brackets [ ] at the end of each question or part question.

The total marks for this booklet is 22.

The total time for Booklets A and B is 1 hour.

This question paper consists of 9 printed pages (inclusive of cover page).

BOOKLET A	**/ 28**
BOOKLET B	**/ 22**
TOTAL	**/ 50**
Parent's signature/ Date:	

Booklet B (22 marks)

For questions 15 to 21, write your answers in this booklet.
The number of marks available is shown in brackets [ ] at the end of each question or part question.

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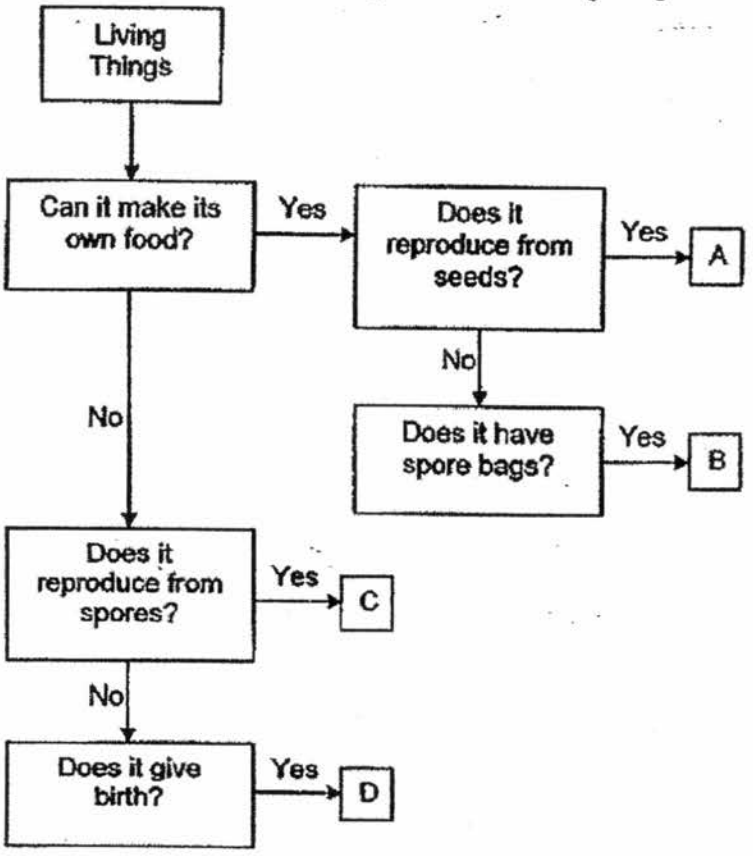
15. (a) The flow chart shows the descriptions of four living things.



(i) Which letter (A, B, C or D) represents mushroom and rabbit? [1]

Mushroom :_____

Rabbit :_____

(ii) Based on the flowchart, what is the difference between living things A and B? [1]

_____

_____

(Go on to the next page)

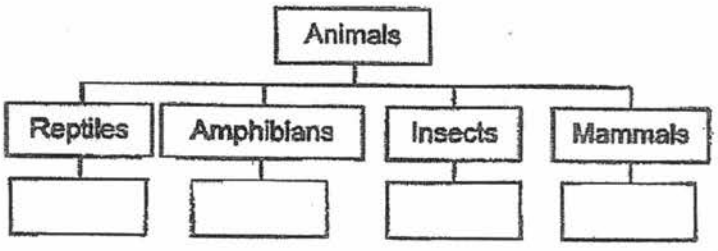
SCORE	/ 2

15(b). The table below gives information about four animals, P, Q, R and S, based on some characteristics. A tick (✓) shows that the animal has the characteristic and a cross (×) shows that the animal does not have that characteristic.

	Animals			
Characteristics	**P**	**Q**	**R**	**S**
Has hair on its body	✓	×	×	×
Needs air, water and food	✓	✓	✓	✓
Breathes through moist skin	×	✓	×	×
Has dry skin covered with scales	×	×	✓	×
Has six legs and 3 body segments	×	×	×	✓

(i) Fill in the boxes with one of the letters, P, Q, R or S, in the classification table below. Use each letter once only.

[1]



(ii) Based on the information from the table and chart, give an example of an animal that has the same characteristics as Animal P. [1]

_____

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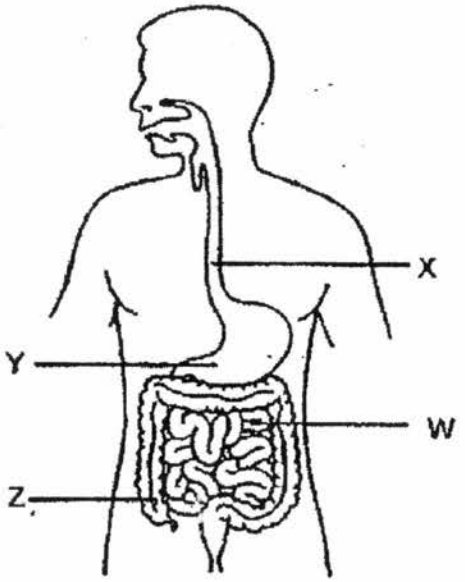
SCORE	
	2

16. The diagrams below show the human digestive system.



(a) Name parts W and X. [1]

W: _____

X: _____

(b) What happens to the food at part Y? [1]

_____

_____

(c) Where does digestion start and end in the digestive system? [1]

_____

_____

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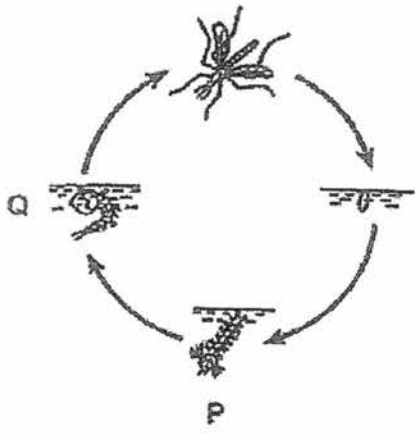
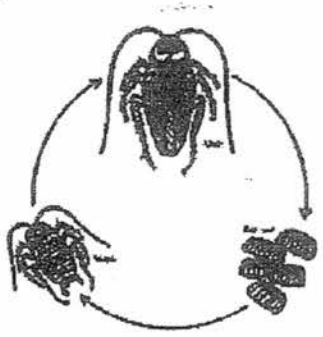
SCORE	3

17. The diagrams below shows the life cycles of two different organisms, A and B.

Organism A



Organism B



(a) Identify the two stages, P and Q, in the life cycle of Organism A. [1]

P : _____

Q : _____

(b) State a difference between the young and the adult of organism B. [1]

_____

_____

(c) State a similarity in the life cycles of the two organisms, A and B, shown above. [1]

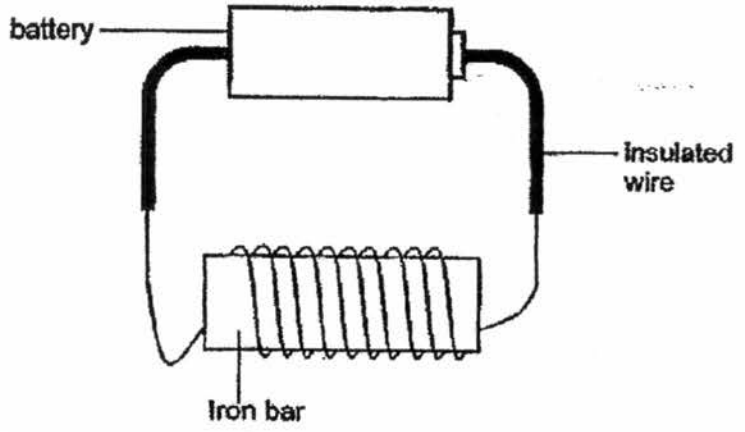
_____

_____

(Go on to the next page)

SCORE	/ 3

18. Janice wanted to find out if the number of batteries connected to the coil of wire would affect the strength of an electromagnet. An iron bar becomes an electromagnet when it is placed in a coil of wire connected to batteries. She carried out her experiment using four arrangements, W, X, Y and Z.



Arrangement	Number of batteries	Number of turns of coil of wire around iron bar
W	4	20
X	2	30
Y	3	30
Z	4	40

(a) Which two arrangements should she set up to carry out her experiment? [1]

_____

(b) Janice placed the same number of identical paper clips below each electromagnet to test its strength. However, Janice observed that none of the paper clips was attracted to the electromagnets even when the batteries were working well. Explain why. [1]

_____

_____

(c) Janice would also like to find out if the number of coils of wire around an electromagnet would affect the strength of the electromagnet.

Tick the variable(s) to be kept constant to ensure a fair test in this experiment. [1]

Number of batteries	
Number of coils of wire	
Size of iron bar	

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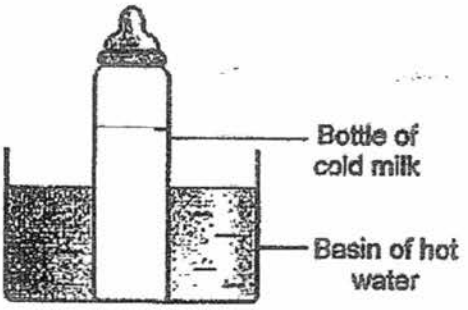
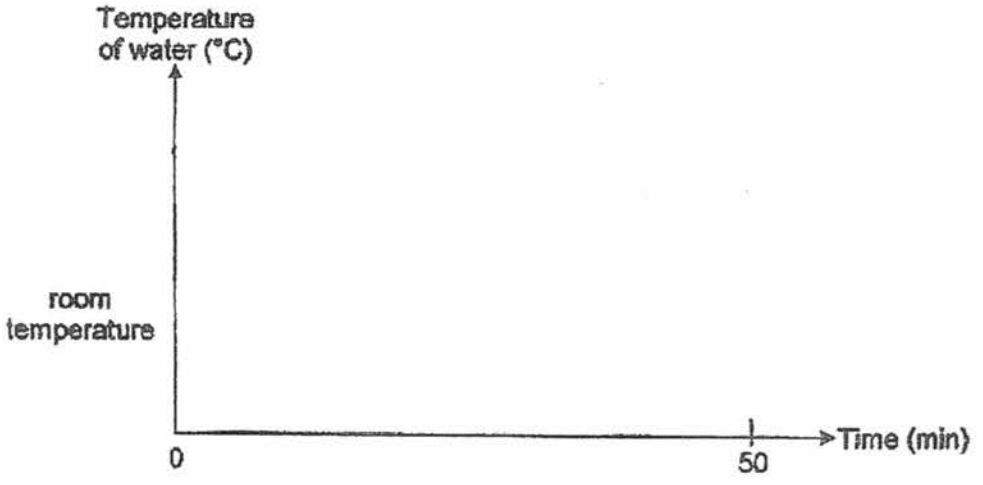
SCORE	/ 3

19. Mrs Lim wanted to warm up a bottle of cold milk for her baby to drink. She placed the bottle of cold milk in a basin of hot water.



(a) What happened to the temperature of the cold milk and the hot water after one minute? Explain your answer clearly. [2]

(b) After Mrs Lim removed the bottle of milk from the basin of water, she left the basin of water on the table for 50 minutes. Draw a line graph to show the change in temperature of the hot water during the 50 minutes. [1]



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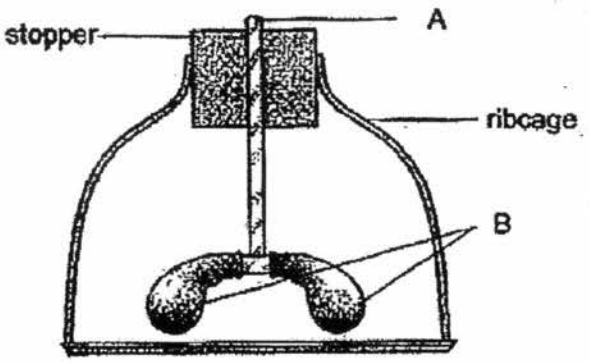
SCORE	
	3

20. The diagram below shows a model of the human respiratory system.



(a) What do parts A and B represent in the human respiratory system? [1]

A: _____

B: _____

(b) Explain the gaseous exchange that takes place in our lungs when we breathe in and out. [1]

_____

_____

(c) What is the function of the windpipe? [1]

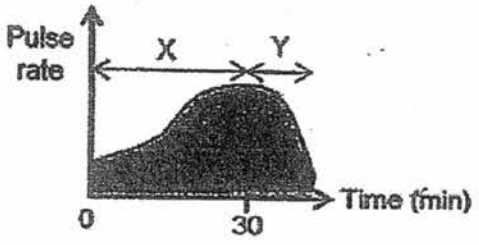
_____

_____

(Go on to the next page)

SCORE	/ 3

21. Sam jogged for 30 minutes in a park. He recorded his pulse rate before he started jogging to the moment he cooled down with a heart rate monitor. His pulse rate is shown in the graph below.



(a)(i) Based on the graph above, describe how the pulse rate changes from the beginning of Period X to the end of Period Y in the graph. [1]

(ii) Explain your answer for Period X in (a)(i). [1]

(b) The heart muscles will contract and relax continuously. What is the purpose of this action? [1]

End of Booklet B

SCORE	
	3

EXAM PAPER 2017 (P5)

SCHOOL : ACS

SUBJECT : SCIENCE

TERM : CA1

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

15)a)i)C , D

ii)A reproduces from seeds while B does not reproduce by seeds.

b)i)R , Q , S , P

ii)Rabbit

16)a)W: small intestine X: gullet

b)To food will be mixed with digested juices.

c)Digestion starts from the mouth and ends in the small intestine.

17)a)P : larva Q; pupa

b)The young cannot fly while the adult can fly.

c)Both have egg stage.

18)a)X and Y.

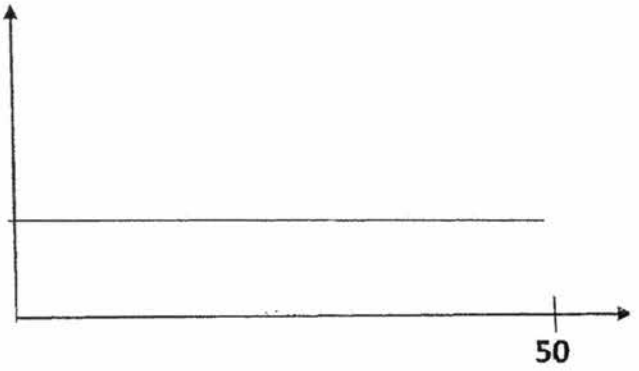
b)The paper clips were not made of magnetic materials.

c)Number of batteries

Size of iron bar

19)a)The temperature of the cold milk will increase while the temperature of the water will decrease. The cold milk had gained heat from the hot water and the hot water and lost heat from the cold milk.

b)



20)a)A : Windpipe B : Lungs

b)When we breath in the air, oxygen will be absorbed by the lungs, carbon dioxide and water vapour will be given out.

c)To transport air from mouth to lungs or lungs to mouth.

21)a)i)When he jogged the heart rate will increase and when he cooled down, the heart rate will decrease.

ii)When we run, our body will use up more blood, oxygen and digested food, therefore the heart needs to pump faster in order for the body to have sufficient blood.

b)The purpose is to pump blood to all parts of the body.