

Anglo-Chinese School (Junior)



CONTINUAL ASSESSMENT (2019)
PRIMARY 5

SCIENCE

BOOKLET A

Tuesday

27 August 2019

50 minutes

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 50 minutes.

This question paper consists of 11 printed pages (inclusive of cover page).

Booklet A

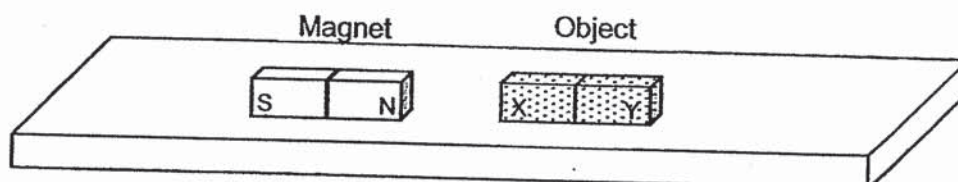
For each question from 1 to 14, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet.
(28 marks)

1. A group of pupils made the following statements about the digestive system.

Ali : The gullet connects the mouth to the stomach. T
 Beth : No digestion of food takes place in the mouth. F
 Cory : Undigested food is absorbed into the bloodstream. F
 Dewei : Digested food from the small intestine is passed to the large intestine. F

Who made the correct statement?

- (1) Ali
 (2) Beth
 (3) Cory
 (4) Dewei
2. Each end of two objects, E and F, are brought very near the north-seeking pole of a magnet. The ends of the objects are marked as X and Y.



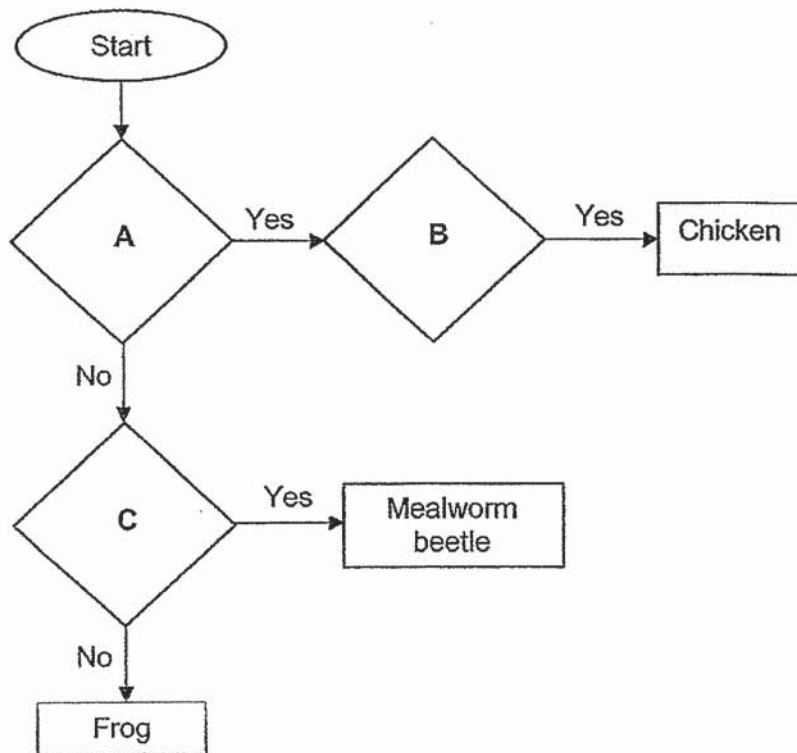
The table shows the results of the experiment.

Object	End	Attracted to the magnet	Repelled by the magnet
E	X	Yes	No
	Y	Yes	No
F	X	No	Yes
	Y	Yes	No

Which of the following is correct?

- (1) E is a magnet.
 (2) F is made of a magnetic material.
 (3) End X of object F is a north-seeking pole.
 (4) End Y of object E is a south-seeking pole.

3. Study the flowchart.

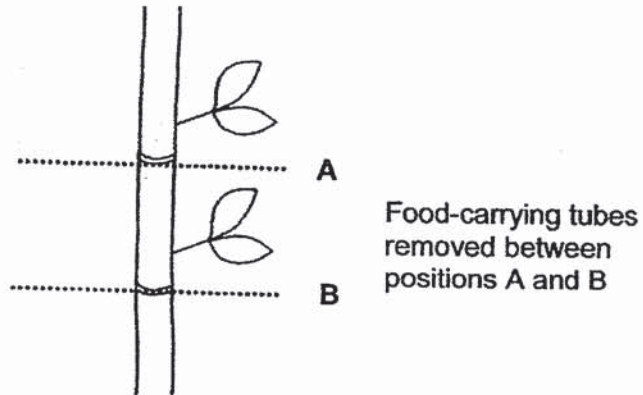


What are A, B and C?

	A	B	C
(1)	Does it give birth to its young?	Does the young resemble the adult?	Does it have a 3-stage life cycle?
(2)	Does it have a 3-stage life cycle?	Does it give birth to its young?	Does the young resemble the adult?
(3)	Does it have a 4-stage life cycle?	Does the young resemble the adult?	Does it lay eggs?
(4)	Does the young resemble the adult?	Does it lay eggs?	Does it have a 4-stage life cycle?

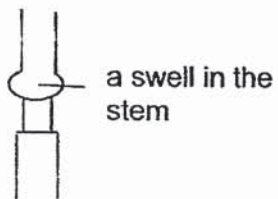
4. An outer ring of a stem between positions A and B of a plant is removed as shown in the diagram.

Only the food-carrying tubes between positions A and B are removed.

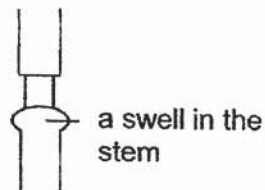


Which of the following diagrams represents the appearance of the stem, after some time?

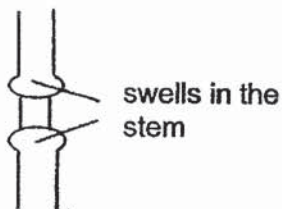
(1)



(2)



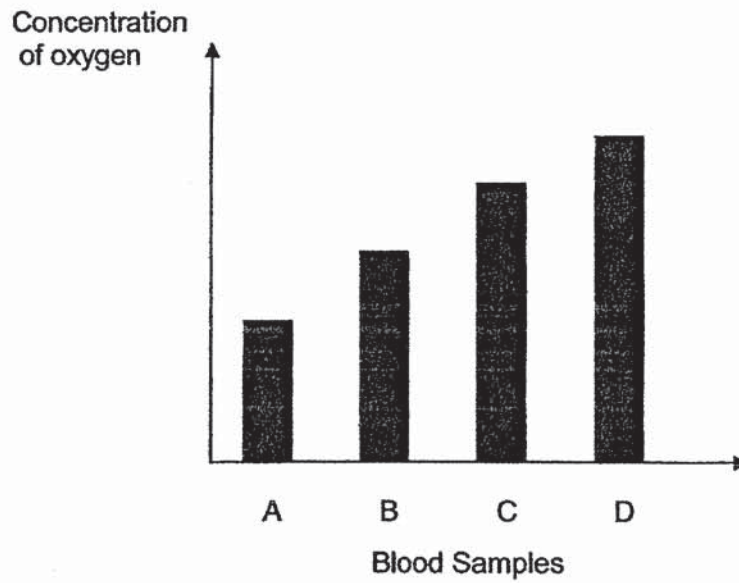
(3)



(4)



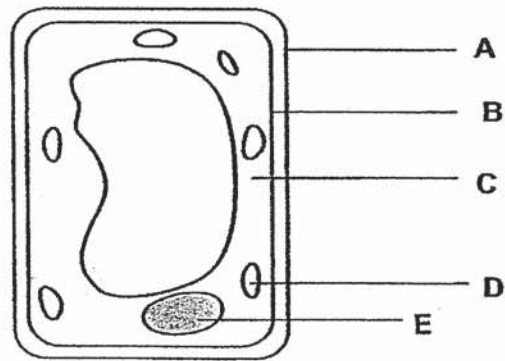
5. The graph shows the concentration of oxygen in four blood samples taken from four different blood vessels in the human circulatory system.



Which sample is most likely to be taken from the blood vessel which carries blood from the heart to the lungs?

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

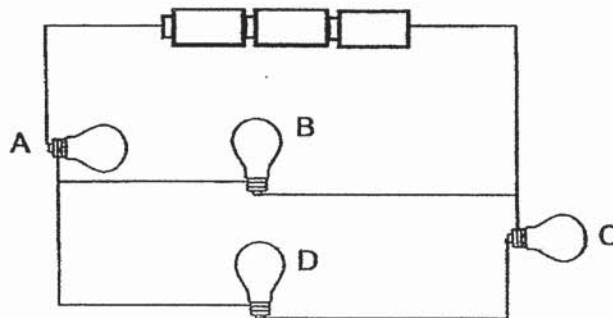
6. The diagram shows the labelled parts of a cell.



Which of the cell parts, A to E has been correctly matched to the information given?

	Contains the genetic information	Controls the movement of substances in and out of the cell	Maintains shape of the cell	Traps light energy
(1)	D	C	B	A
(2)	E	A	B	D
(3)	D	E	C	B
(4)	E	B	A	D

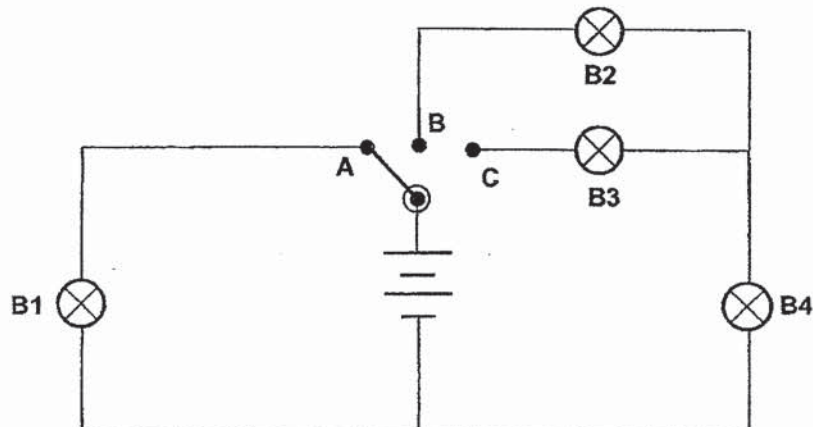
7. Study the circuit.



When one of the bulbs fused, the other three bulbs remained lit.
Which of the bulbs fused?

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

8. Adrian set up an electric circuit as shown.



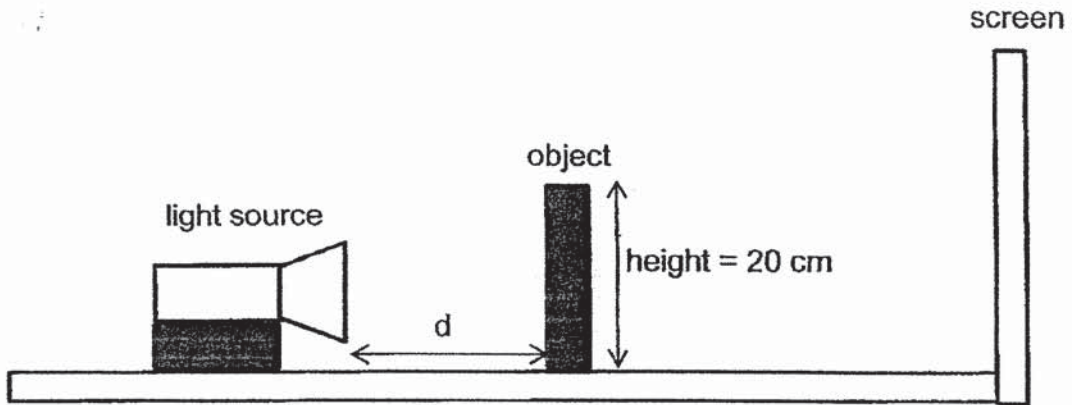
He recorded his results in the table to show the bulbs that lit up when he changed the position of the switch from A to B to C. A tick (✓) shows that the bulb lit up when the switch was connected to the different positions.

Switch position	Bulb			
	B1	B2	B3	B4
A	✓ ✓	✓	✓	✓
B ✓		✓ ✓		✓ ✓
C ✓			✓ ✓	✓ ✓

Based on the table above, which of the following switch position(s) show the correct corresponding bulbs that will light up?

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

9. Huiling carried out an experiment as shown to find out how the distance between the light source and an object could affect the height of the shadow of an object on a screen.)



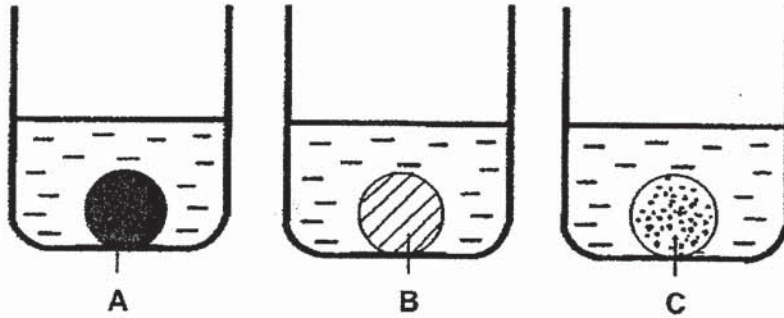
She recorded her results as shown in the table below.

Distance, d, between the light source and the object (cm)	10	20	30	40
Height of the shadow casted on the screen (cm)	34	22	17	11

Based on Huiling's experiment, the height of the shadow is _____.

- (1) smaller when the light source is nearer the object
- (2) unchanged when the light source is nearer the object
- (3) bigger when the light source is further away from the object
- (4) smaller when the light source is further away from the object

10. Ephraim had three balls, A, B and C, of different materials but of the same size. He placed the balls which were of room temperature into identical beakers of hot water of 80°C as shown.



The temperature of the water in the beakers at the end of fifteen minutes was recorded in the table.

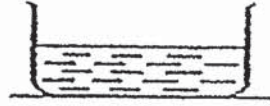
Temperature ($^{\circ}\text{C}$) of Water with Ball		
A	B	C
65°C	78°C	72°C

Ephraim arranged the materials according to how well they conduct heat, from the poorest to the best conductor of heat. Which of the following shows the correct order?

- (1) A, C, B
- (2) B, A, C
- (3) B, C, A
- (4) C, B, A

11. The diagram shows four basins of water at different temperatures. When Farhan puts his hand into one of the basins of water and then under a tap of running water at room temperature, his hand felt cold. Which basin did he put his hand into?

(1)



15°C

(2)



50°C

(3)



25°C

(4)



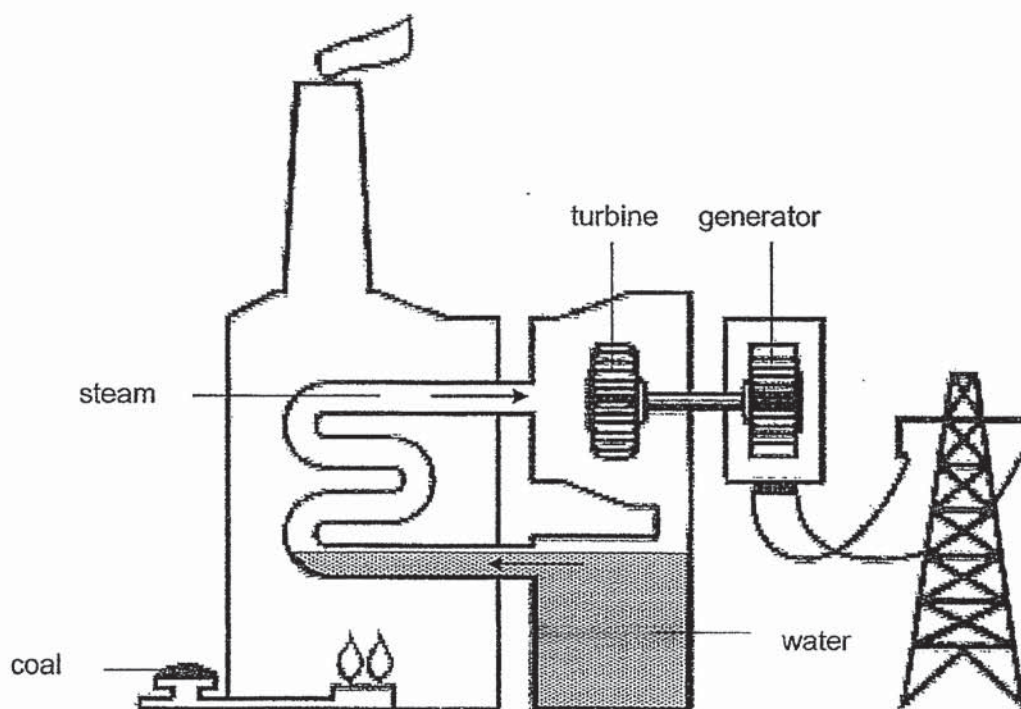
5°C

12. Bob gets his energy from the _____.



- (1) air
- (2) Sun
- (3) soil
- (4) food

13. The diagram shows the main parts of a power station. Coal is burned to change water into steam which is then used to turn the turbine.



Which of the following correct shows the energy changes in the power station shown?

- (1) chemical potential energy \rightarrow heat energy \rightarrow electrical energy \rightarrow kinetic energy
 - (2) heat energy \rightarrow kinetic energy \rightarrow kinetic energy \rightarrow electrical energy
 - (3) chemical potential energy \rightarrow electrical energy \rightarrow kinetic energy \rightarrow heat energy
 - (4) heat energy \rightarrow kinetic energy \rightarrow chemical potential energy \rightarrow electrical energy
14. Which of the following are renewable sources of energy?
- A Sun
 - B Coal
 - C Moving air
 - D Running water
- (1) A and B only
 - (2) B and C only
 - (3) C and D only
 - (4) A, C and D only

End of Booklet A

Anglo-Chinese School (Junior)



CONTINUAL ASSESSMENT (2019) PRIMARY 5

SCIENCE

BOOKLET B

Tuesday

27 August 2019

50 minutes

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 50 minutes.

This question paper consists of 8 printed pages (inclusive of cover page).

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

Booklet B

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. (22 marks)

15. Edwin wanted to investigate the properties of matter.

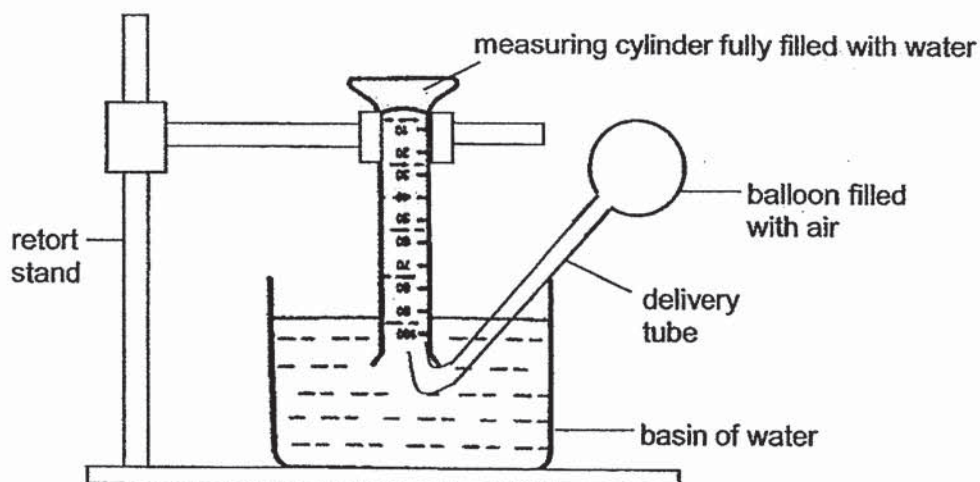
(a) He conducted an experiment with a rubber ball.



(a) Edwin squeezed the rubber ball with his hand. How will the mass and shape of the ball be affected? Write your answer in the space provided. [1]

Mass of rubber ball	Shape of rubber ball

(b) Edwin conducted another experiment. He set up the apparatus as shown and held a balloon filled with air near the mouth of the measuring cylinder.

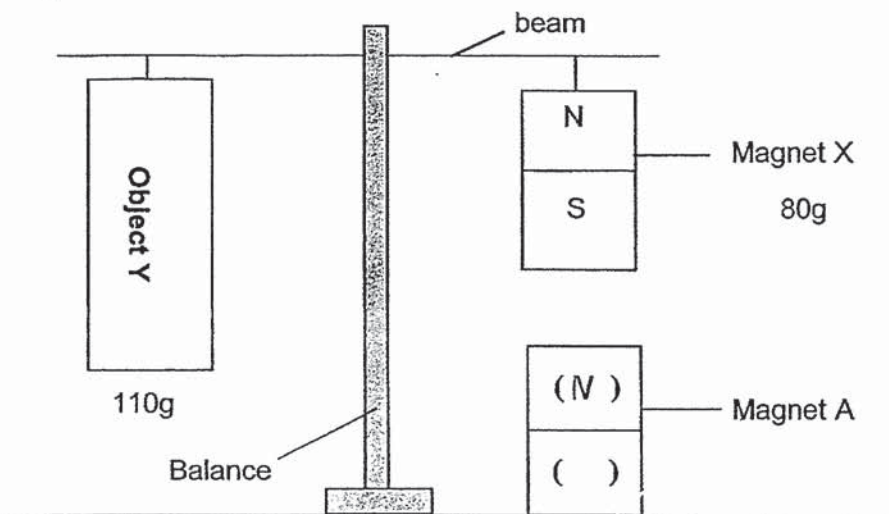


What would happen to the water level in the measuring cylinder when Edwin releases the air from the balloon into the measuring cylinder? Explain your answer. [2]

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SCORE	3
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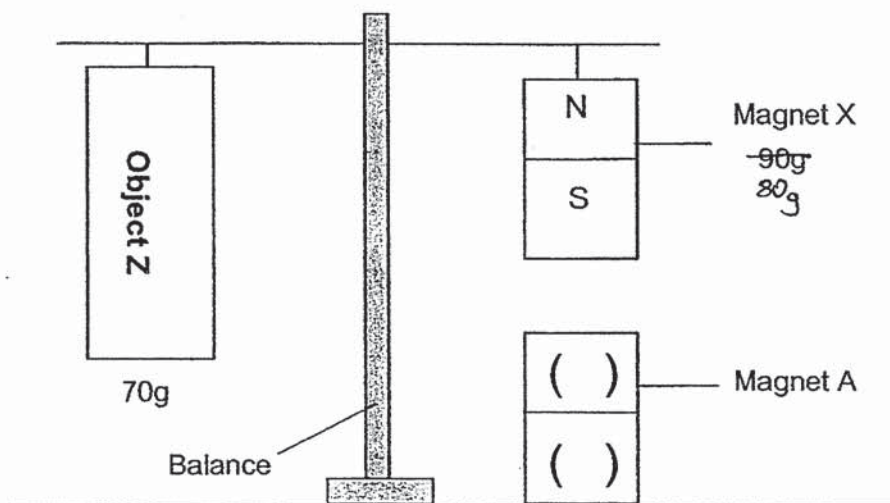
16. Elliott set up the experiment as shown where Object Y and Magnet X are on a balance. The masses of Magnet X and Object Y are 80g and 110g respectively. Magnet A is fixed to the table.



- (a) In the diagram above, fill in "N" for North pole or "S" for South pole to show the poles of Magnet A. [1]
- (b) Explain how Object Y is balanced by Magnet X. [2]

- (c) Object Y is replaced by a similar-sized Object Z with a mass of 70g. [1]

Identify the poles of Magnet A such that the beam is balanced as shown in the diagram. Fill in the brackets with "N" for North pole and "S" for South pole to show the poles of Magnet A.



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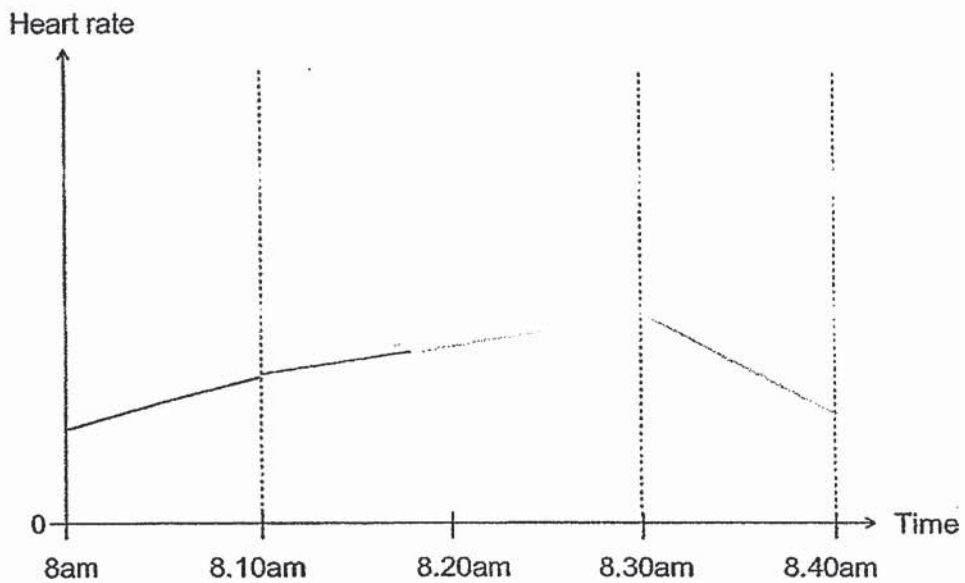
SCORE	4
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17. Emma recorded some of her morning activities in a table as shown.

Activity	Time
Walking from home to the park	8am to 8.10am
Running around the park	8.10am to 8.30am
Walking back home from the park	8.30am to 8.40am

Emma also measured her heart rate during the activities mentioned in the table above.

- (a) Complete the line graph to represent Emma's heart rate from 8.10 am to 8.40 am. Use a ruler and pencil to do this. [1]



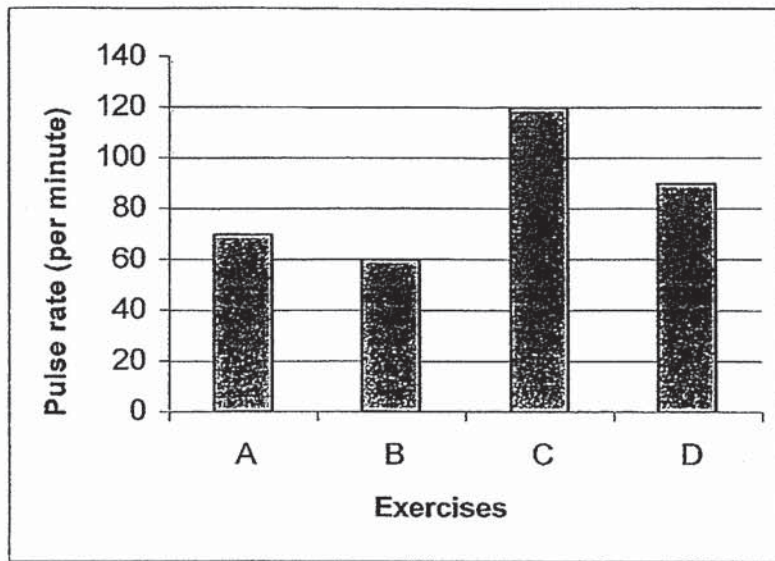
- (b) State two substances that are being transported in Emma's blood to her muscles to help her in the activities mentioned above. [1]

- (c) State the relationship between the type of activity and Emma's heart rate. [1]

(Go on to the next page)

SCORE	
	3

18. Zhenwei carried out an experiment to find out the change in his pulse rate after doing different exercises. After each exercise, he measured and recorded his pulse rate in a graph as shown.



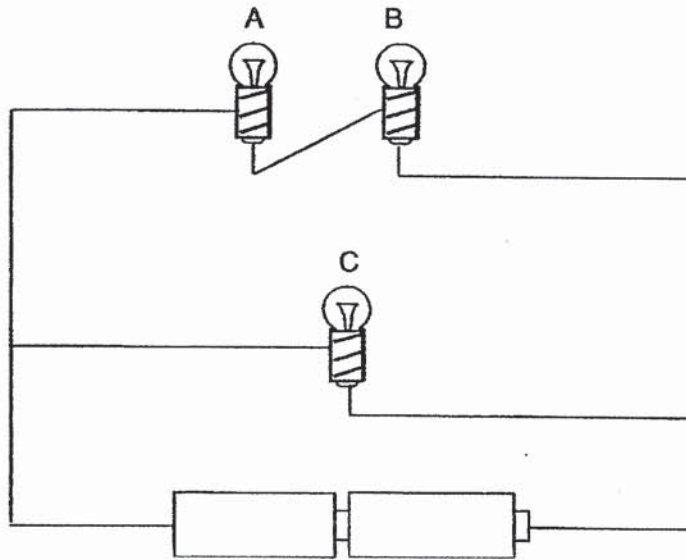
- (a) Arrange the exercises, starting with the least vigorous to the most vigorous. [1]

- (b) Explain why his heart beats faster after each vigorous exercise. [2]

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SCORE	
	3

19. Study the diagram carefully.



(a) What will happen to bulbs A and C if bulb B fuses? [1]

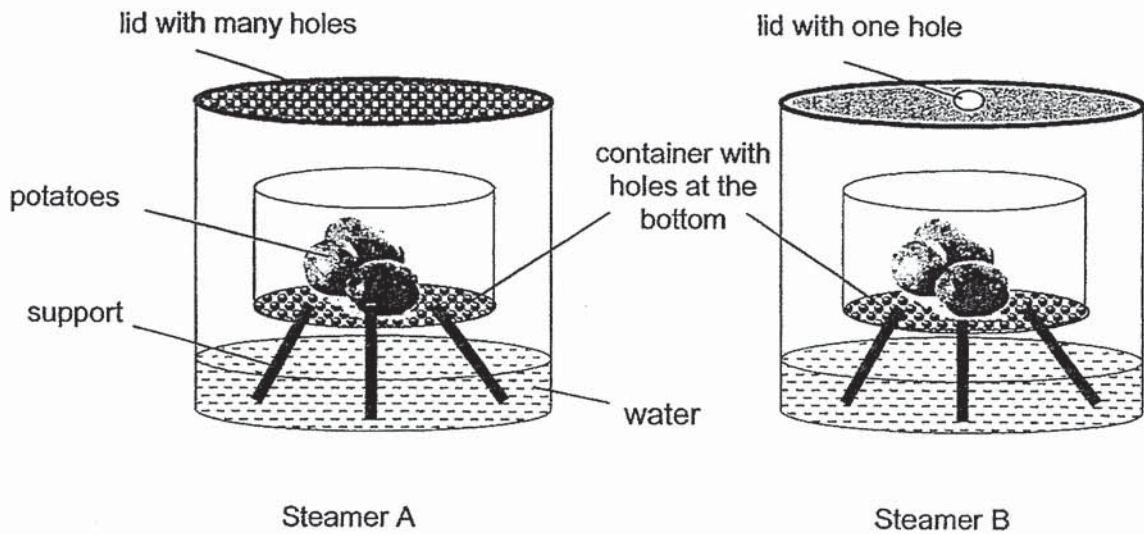
(b) Explain your answer in (a). [1]

(c) Without adding or removing any of the circuit components, suggest a way to make the bulbs brighter. [1]

(Go on to the next page)

SCORE	3
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20. Divya wanted to cook some potatoes using steamer A and B as shown.



She placed both steamers over a heat source.

- (a) Divya observed that she needed to refill one of the steamers with water after some time.

Which steamer, A or B, did she refill with more water? Give a reason for your answer.

[2]

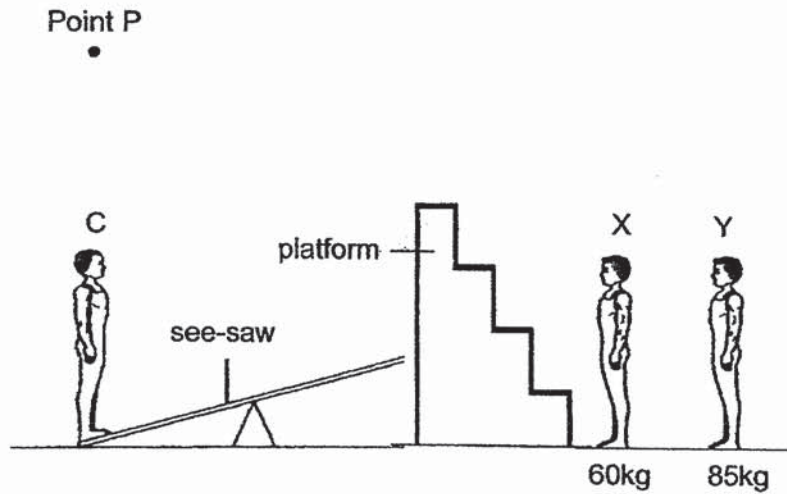
- (b) Suggest what Divya can do to steam the potatoes faster in both steamers, without changing any part of the steamer.

[1]

(Go on to the next page)

SCORE	
	3

21. The diagram shows three acrobats. When an acrobat steps onto the platform and jumps onto the see-saw, Acrobat C will be lifted.



- (a) In order for Acrobat C to be lifted to Point P, Acrobat Y should be the one jumping onto the see-saw. Explain why. [2]

- (b) If Acrobat X is chosen, what can he do to ensure that Acrobat C is lifted to Point P using the same see-saw? [1]

End of Paper

SCORE	
	3

ANSWER KEY

YEAR : 2019
LEVEL : PRIMARY 5
SCHOOL : ANGLO-CHINESE SCHOOL
SUBJECT : SCIENCE
TERM : CA2

BOOKLET A

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

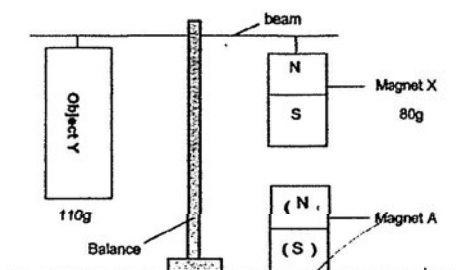
BOOKLET B

Q15 (a)

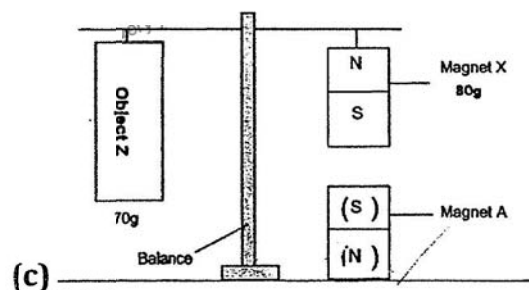
Mass of rubber ball	Shape of rubber ball
Remains the same	changed

(b) It will go down. Air from the balloon would enter the measuring cylinder and occupy space taken up by water pushing it out of the measuring cylinder into the basin.

Q16 (a)

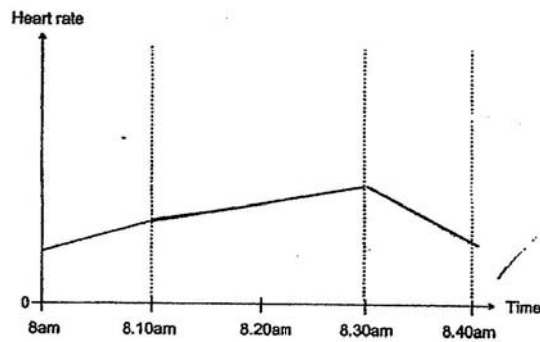


(b) As magnet X is light than object and needs to be pulled down to balance object Y and the magnet was attracted as their unlike poles were facing each other.



(c)

Q17 (a)



(b) Oxygen and digested food

(c) The more vigorous the activity is the higher Emma's heart rate.

Q18 (a) The least vigorous exercise is exercise B, followed by exercise A then exercise D and exercise C is the most vigorous activity.

(b) Zhen wei's heart pump faster after each vigorous exercise to pump blood to his muscles faster to transport more oxygen and digested food faster for his muscles to undergo respiration faster to release more energy that is needed for each vigorous exercise.

Q19 (a) When a closed circuit is formed bulb A will not light up while bulb C will light up.

(b) Electricity cannot flow through A, but it can flow through C.

(c) Rearrange the bulbs in parallel.

Q20 (a) Steamer A. Because it has more hole but B has only one.

() Add hot water to steamer A and B.

Q21 (a) Acrobat Y has more mass so it has more gravitational potential energy when he jumping onto the see-saw. When Acrobat Y landed on the see-saw, it have more kinetic energy to be converted to more gravitation potential energy causing Acrobat C fly up and reach point C.

(b) Acrobat X can climb up the platform and when he can jump higher and land on the see-saw and acrobat C will reach point C.

2
END.

