Anglo-Chinese School
(Primary)
A Methodist Institution
(Founded 1886)

SCIENCE WEIGHTED ASSESSMENT 4 2021
SCIENCE
PRIMARY THREE

Name: _____ ( ) **Class: Primary 3** ____

Date: 28 October 2021 **Total time: 40 min**

INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the spaces provided
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.

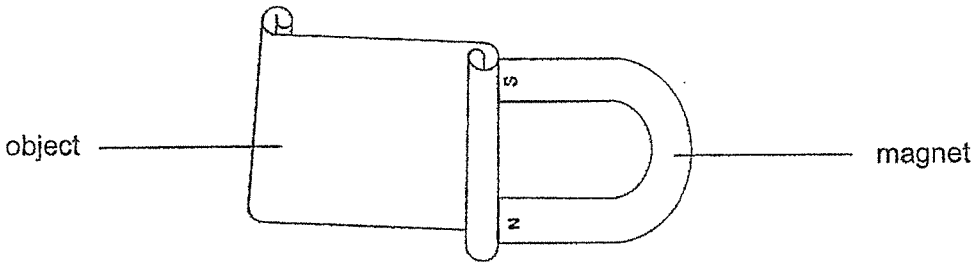
TOTAL	/30
Parent's Signature	

This question paper consists of 13 printed pages including this cover page.

Section A: (16 marks)

Make your choice (1, 2, 3 or 4) and write your answer in the brackets provided.

1 The diagram shows an object being attracted to a magnet.



Which of the following could the object be made of?

(1) ceramic

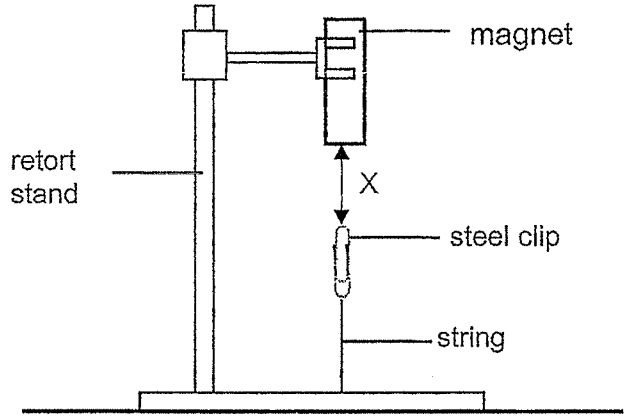
(2) copper

(3) paper

(4) iron

( )

2 Shang Qi measured and recorded distance X between the magnet and the steel clip as shown.



He tested magnets A, B, C and D. The results are shown in the table.

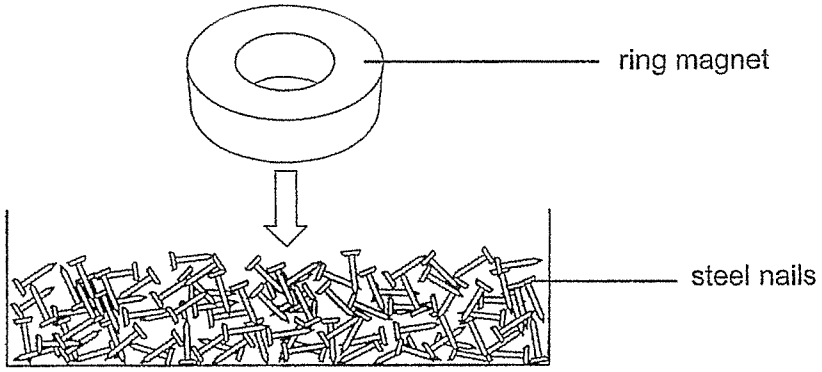
Magnet	Distance X when the steel clip drops (cm)
A	5
B	5
C	1
D	1

Based on the results above, which conclusion about the strength of the magnet is **not** correct?

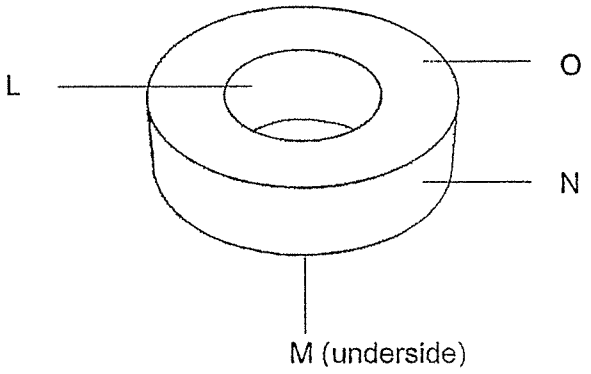
(1) Magnets A and B have equal magnetic strength.
(2) Magnets C and D have equal magnetic strength.
(3) Magnets A and B are stronger than magnets C and D.
(4) Magnets C and D are stronger than magnets A and B.

( )

3 Boolean lowered a ring magnet in a box of steel nail as shown.



He then took it out carefully and counted the number of steel nails attracted to each side, L, M, N and O, of the ring magnet. He recorded his observations in the table.



Side	Number of steel nail(s) attracted
L	2
M	8
N	1
O	9

Based on the results, which sides of the ring magnet are most likely its poles?

(1) L and M

(2) M and O

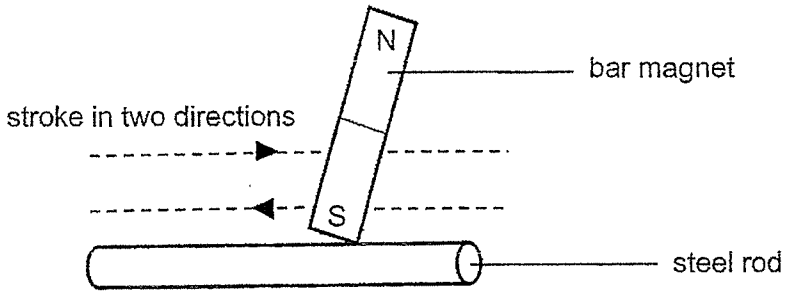
(3) N and M

(4) N and O

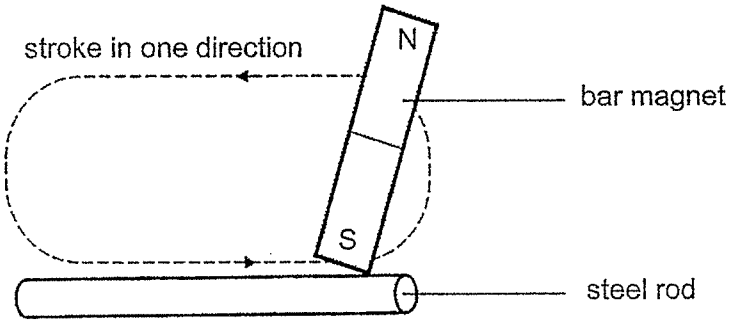
( )

4 Temporary magnets can be made using the stroke method. Which of the following stroke methods will form the strongest temporary magnet?

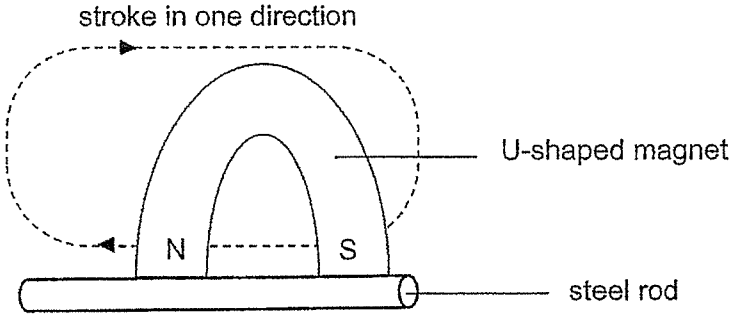
(1)



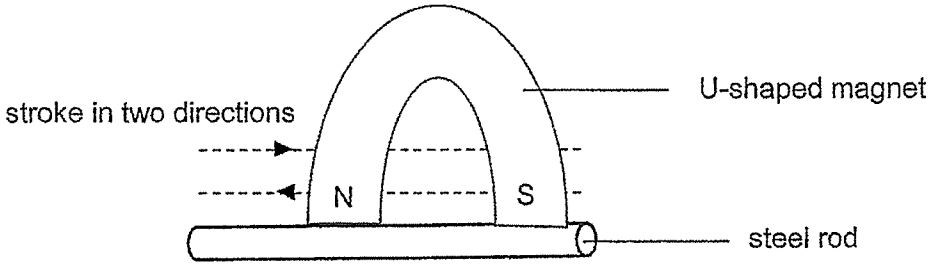
(2)



(3)



(4)



( )

5 Harley stroked a steel nail and used it to attract some metal pins. She repeated this test by changing the number of strokes and recorded the results below.

Number of strokes	10	20	30	40	50
Number of metal pins attracted	1	2	5	?	9

When the steel nail was stroked 40 times, the number of metal pins attracted could be _____.

(1) 2 or 3

(2) 4 or 5

(3) 6 or 7

(4) 9 or 10

( )

6 Which of the following lab safety action(s) should you follow when handling and making temporary magnets?

A Do not touch the bare wires.

B Connect the battery to the wire for a long time.

C Some magnets are very small and should not be placed near the mouth.

(1) A only

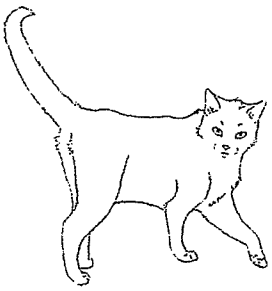
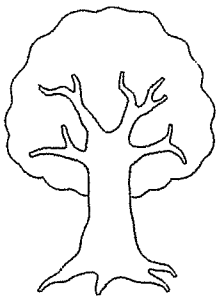
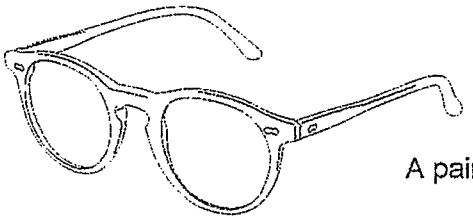
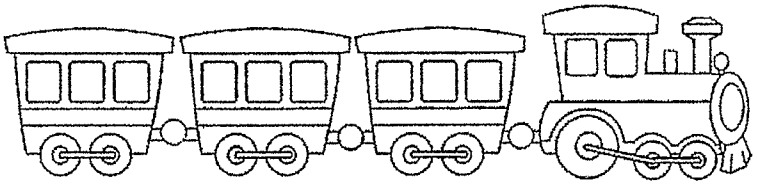
(2) B only

(3) A and B only

(4) A and C only

( )

7 Which of the following are correct examples of systems?

A	 A cat
B	 A tree
C	 A pair of spectacles
D	 A toy train

(1) A and B only

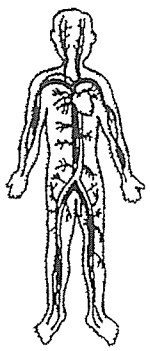
(2) C and D only

(3) A, C and D only

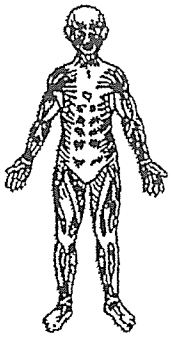
(4) A, B, C and D

( )

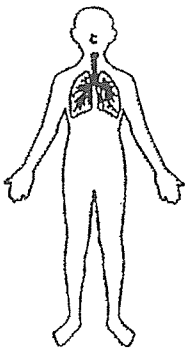
8 The diagrams show some organ systems of the human body.



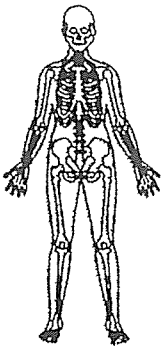
A



B



C



D

Which organ system transports digested food to all parts of the body?

(1) A

(2) B

(3) C

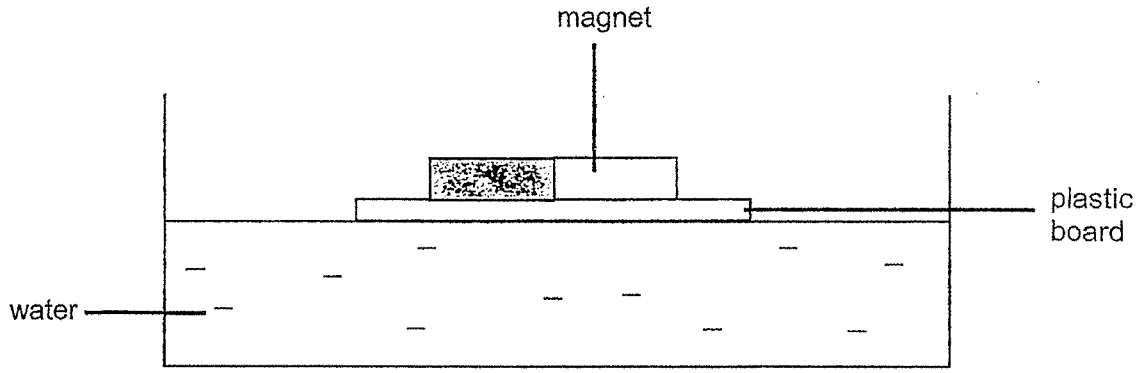
(4) D

( )

Section B: (14 marks)

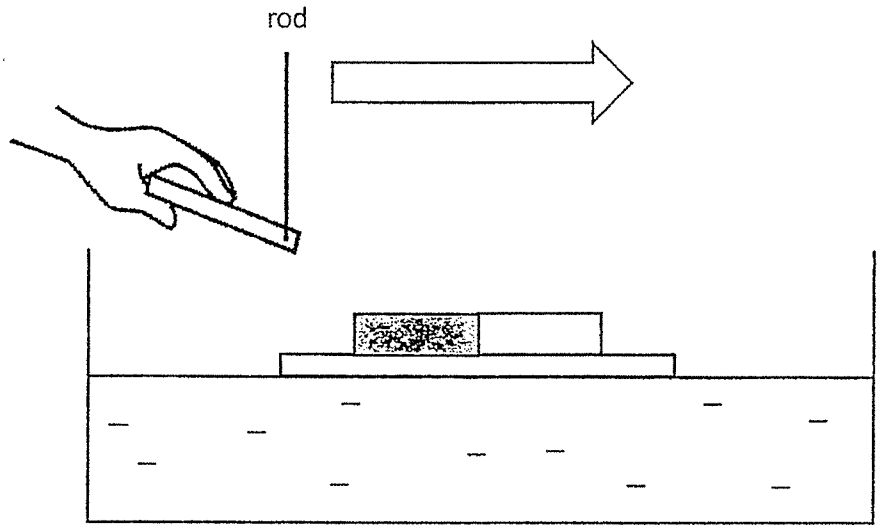
Read each question carefully and write your answer in the spaces provided.

9 Aisyah placed a magnet on a plastic board and left them in water as shown.



(a) State the direction which the magnet will rest in. [1]

When Aisyah brought a rod near the magnet, the magnet on the plastic board floated away as shown below.



(b) Give a reason why the magnet on the plastic board floated away. [1]

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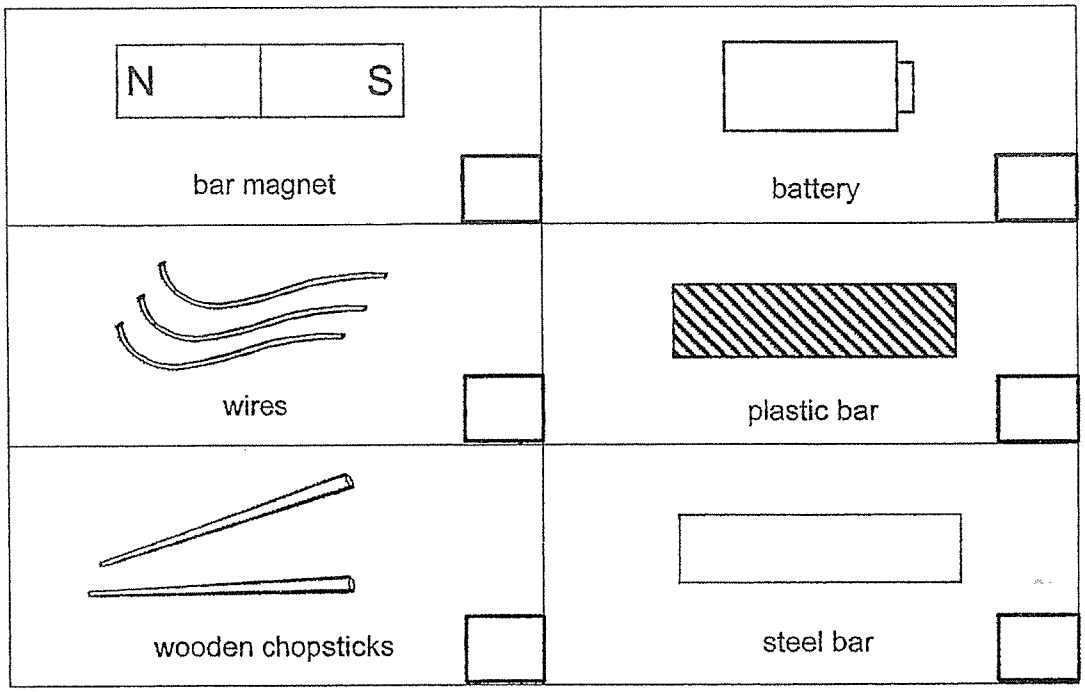
Score	/2

10 Vanem wants to make an electromagnet using some items.

(a) Tick (✓) in the boxes below to show which items are needed to make an electromagnet. [2]



(b) Vanem tested the electromagnet made in part **(a)**. The electromagnet attracted several steel clips, but stopped working after five minutes.

Which **one** of the above items should be replaced for the electromagnet to work again? [1]

_____

(c) State one way for Vanem to increase the strength of the electromagnet. [1]

_____

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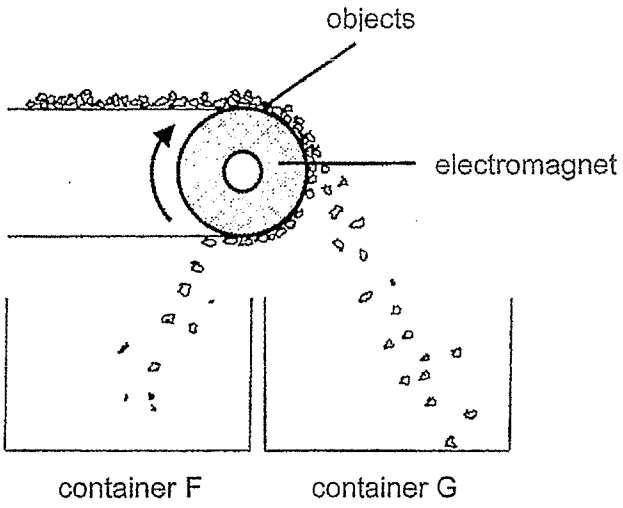
Score	/4

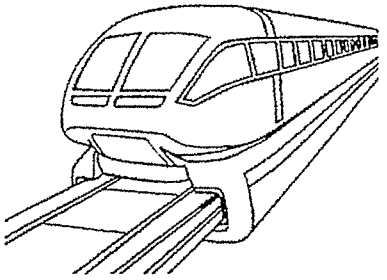
11 This diagram shows how magnetic and non-magnetic objects are separated. As the electromagnet spins, the objects are separated into containers F and G.

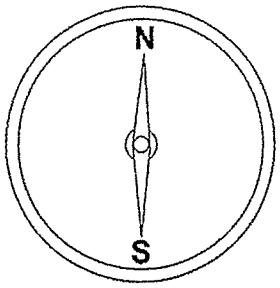


(a) Based only on observations, which container, F or G, contains magnetic objects? [1]

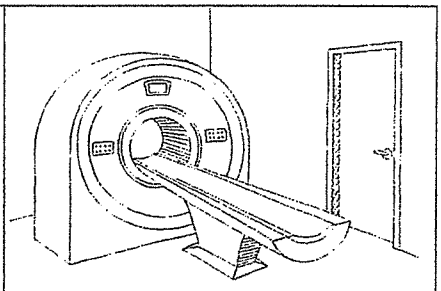
_____

(b) Tick (✓) the box(es) to show other uses of **electromagnets.** [1]


Maglev train ☐



compass ☐


hospital equipment ☐

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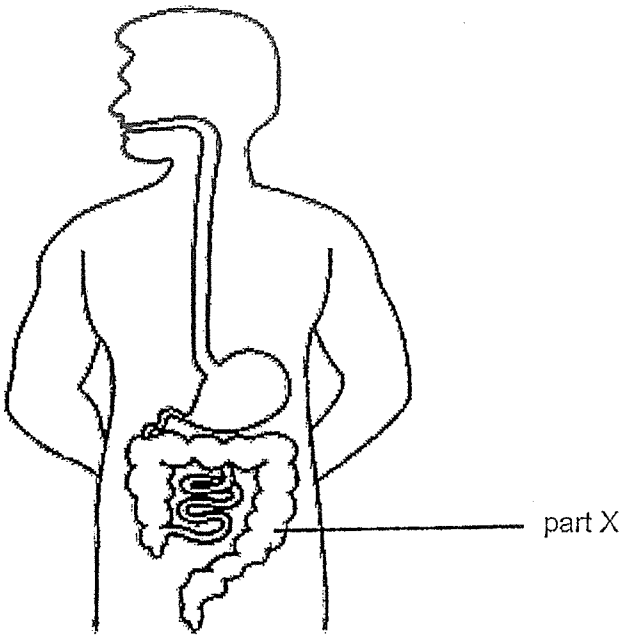
Score	/2

12 Study the diagram of the human organ system carefully.

(a) Using pencil and ruler, label the **stomach** in the diagram below. [1]



(b) Which part of the digestive system connects the mouth to the stomach? [1]

_____

(c) Name part X. [1]

_____

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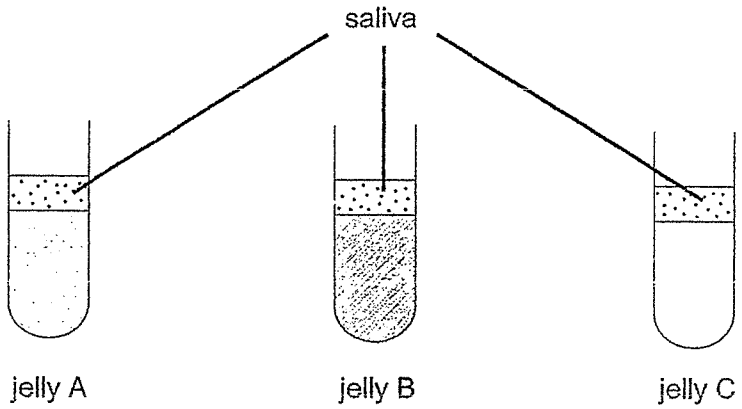
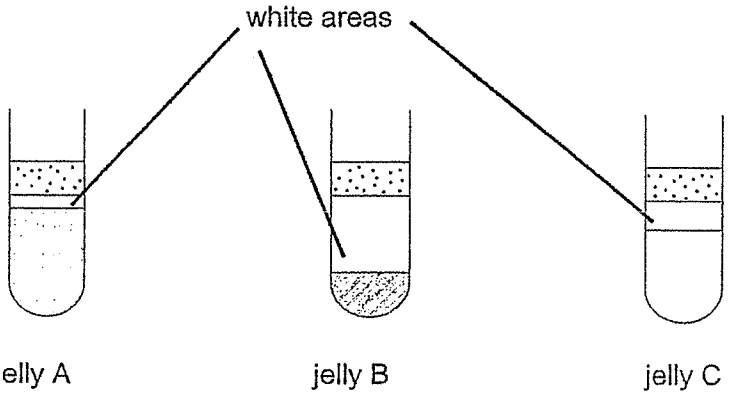
Score	/ 3

13 Gupta wished to find out which type of jelly will be digested fastest by the saliva. He prepared three tubes of different jellies, A, B and C. Same amount of saliva was poured onto each tube as shown.



The diagram below shows the results after 24 hours. The white areas represent jelly that had been digested by the saliva.



(a) Based on the length of the white areas in the diagram above, which jelly, A, B or C, was digested fastest by the saliva? [1]

_____

(b) What substance found in saliva helped in the digestion of the jelly? [1]

_____

(c) What can Gupta do to make his results more reliable? [1]

_____

End of Paper

Score	/3

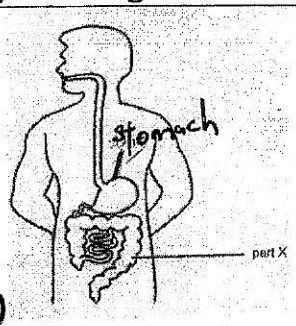
ANSWER KEY

YEAR : 2021
LEVEL : Primary 3
SCHOOL : Anglo-Chinese School (Primary)
SUBJECT : SCIENCE
TERM : Weighted Assessment 4

Section A

Q1	4	Q2	4	Q3	2	Q4	2	Q5	3
Q6	4	Q7	4	Q8	1				

Section B

Q9	(a) The North-South direction. (b) The rod could have been a magnet and their like poles repelled.
Q10	(a) Tick battery, wires and steel bar (b) The battery should be replaced. (c) She could add more batteries.
Q11	(a) Container F (b) Tick Maglev train and hospital equipment
Q12	 (a) (b) The gullet. (c) The large intestine.
Q13	(a) Jelly B (b) Digestive juices in the saliva helped in the digestion of the jelly. (c) He could repeat the experiment several times.

END