

METHODIST GIRLS' SCHOOL

Founded in 1887



PRIMARY 4 SCIENCE WEIGHTED ASSESSMENT 2 2024

Total Time for Paper: 40 min

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Name: _____ ()

Class: Primary 4. _____

Date : _____ May 2024

Parent's signature: _____

Section A	18
Section B	12
Total	30

This paper consists of 10 printed pages including this page.

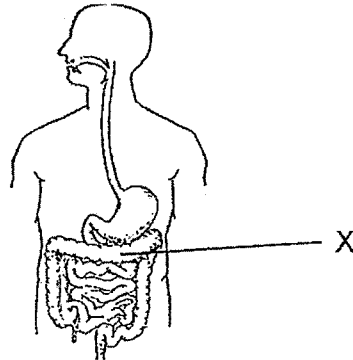
Section A

For each question from 1 to 9, four options are given. One of them is the correct answer.

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

[18 marks]

- 1 The diagram below shows a human digestive system.

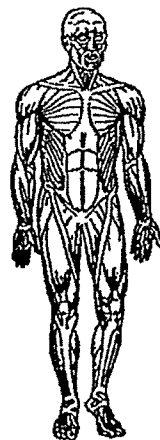


Which of the following takes place in the part labelled X?

- (1) Digested food is cut into smaller pieces.
- (2) Digested food is absorbed by the blood.
- (3) Water is absorbed from undigested food.
- (4) More digestive juices is added to the undigested food.

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- 2 The diagram shows a human system.



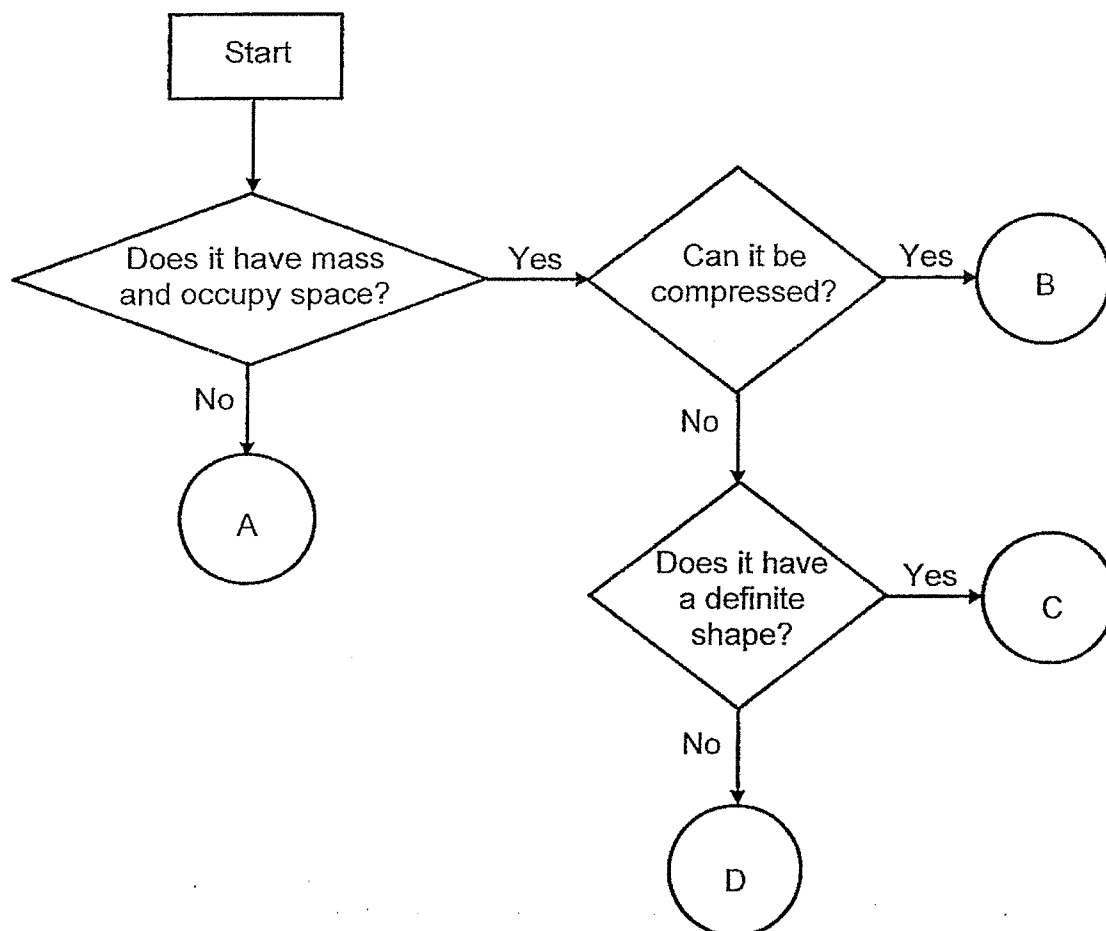
Name the system.

- (1) Skeletal system
- (2) Muscular system
- (3) Circulatory system
- (4) Respiratory system

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- 3 The flowchart below shows the properties of four substances A, B, C and D.

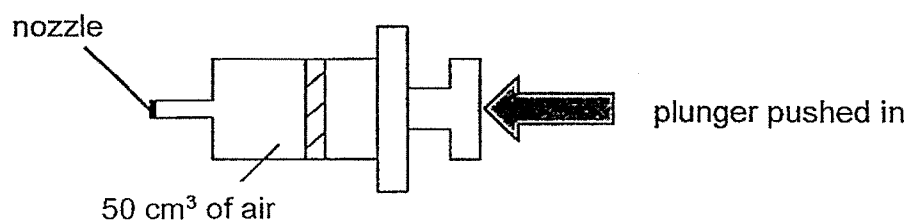


Which of the following could substances A, B, C and D represent?

	A	B	C	D
(1)	light	coin	air	water
(2)	wind	air	coin	water
(3)	heat	air	coin	water
(4)	sound	air	water	coin

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- 4 The diagram below shows a syringe filled with 50 cm^3 of air. The end of the syringe is sealed by a nozzle so no air could enter or escape.

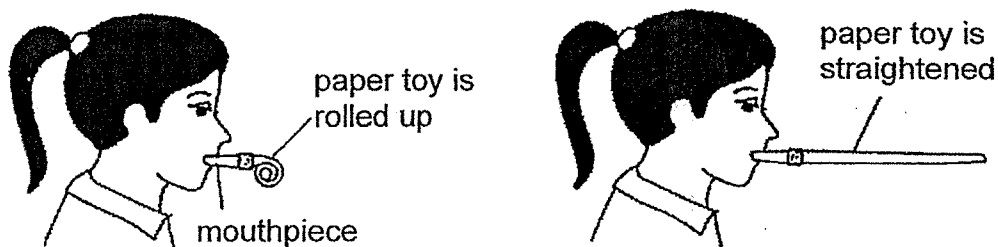


What will happen to the volume and mass of air after the plunger is pushed in?

	volume	mass
(1)	no change	decrease
(2)	decrease	no change
(3)	increase	no change
(4)	decrease	decrease

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- 5 Jodie blew air into a rolled paper toy and it straightened as shown below.



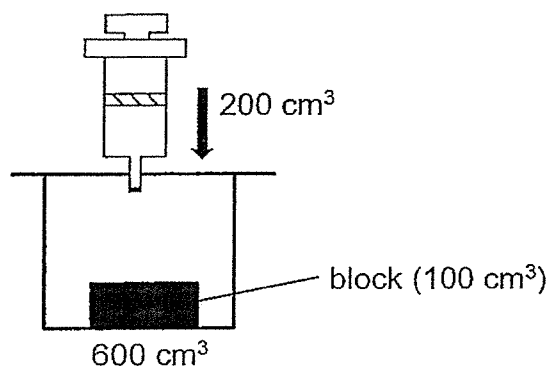
Which of the following best explains why the paper toy is straightened?

- (1) Air has mass.
- (2) Air occupies space.
- (3) Air cannot be seen.
- (4) Air can be compressed.

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- 6 The container below has a volume of 600 cm^3 and the block has a volume of 100 cm^3 . Siti then pumped 200 cm^3 of air into the container.

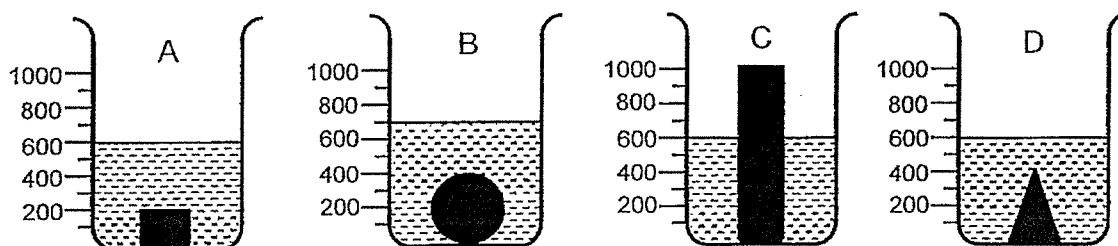


What will be the volume of air in the container?

- (1) 500 cm^3
- (2) 600 cm^3
- (3) 700 cm^3
- (4) 800 cm^3

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- 7 Ali conducted an experiment as shown below. He poured 400 ml of water into four similar beakers. He then placed four different objects A, B, C and D gently into each container of water.



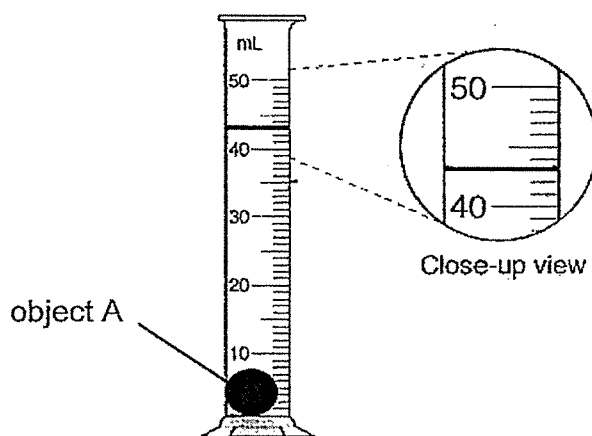
Based only on the above observations, which one of the following statements is definitely correct?

- (1) Object A has the smallest mass.
- (2) Object B has the greatest volume.
- (3) Object C has a volume of 200 cm^3 .
- (4) Objects A and D have the same volume.

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- 8 There was 35 ml of water in the measuring cylinder at first.
Jane then dropped object A into the measuring cylinder as shown below.



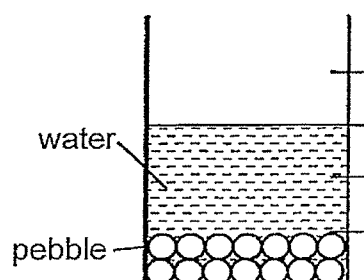
What is the volume of the object in the measuring cylinder?

- (1) 5 ml
- (2) 8 ml
- (3) 40 ml
- (4) 43 ml

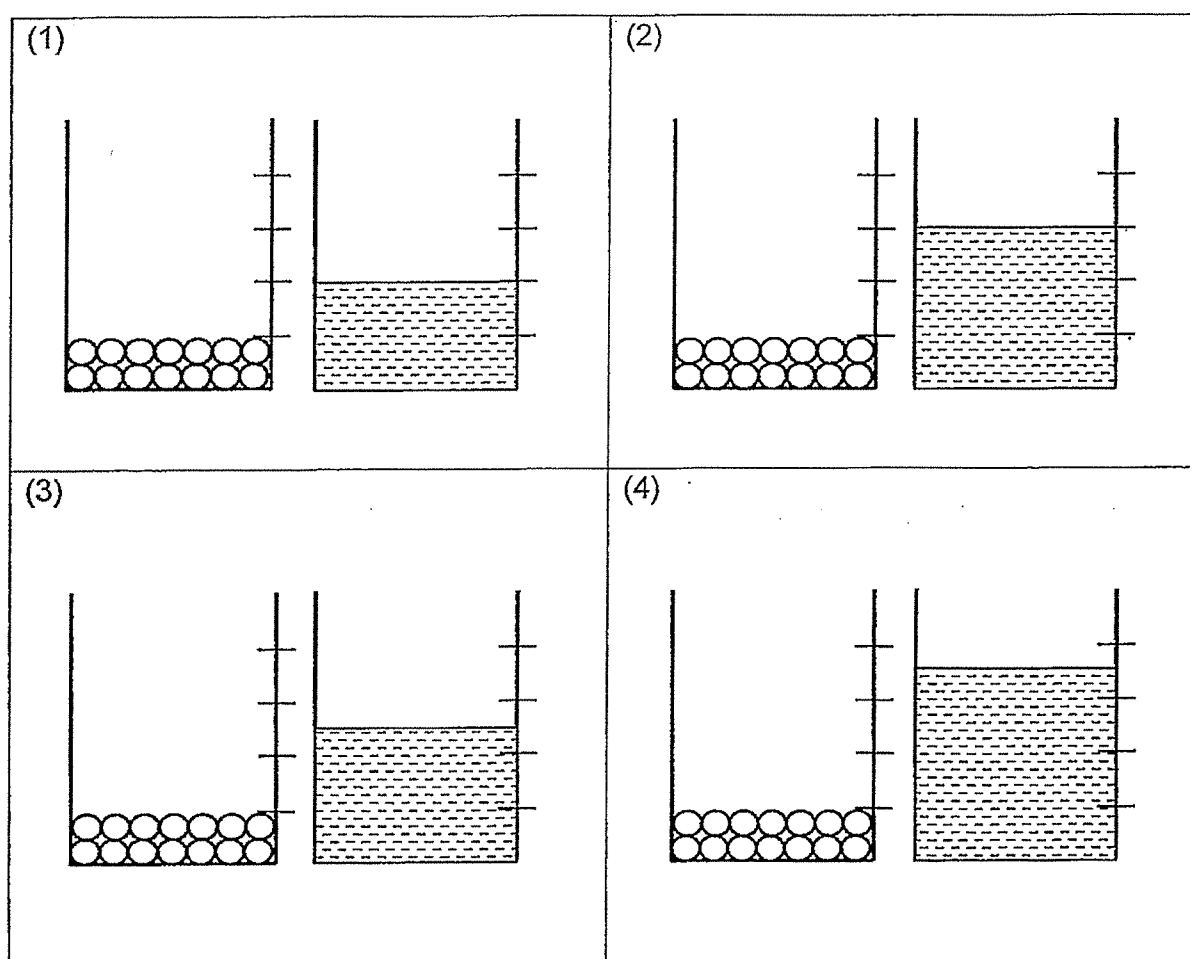
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- 9 Mrs Khoo made use of pebbles and water to set up an aquarium as shown below.



Which of the following most likely shows the amount of water and pebbles used by Mrs Khoo in her aquarium?



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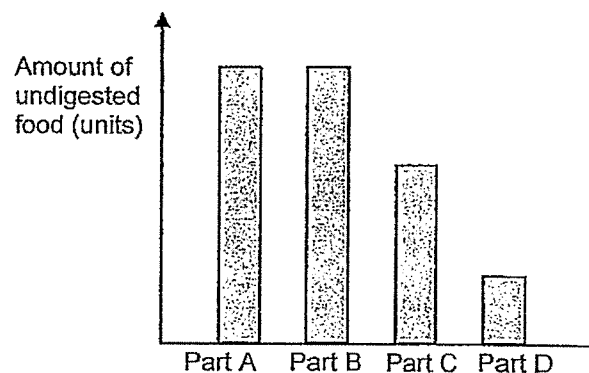
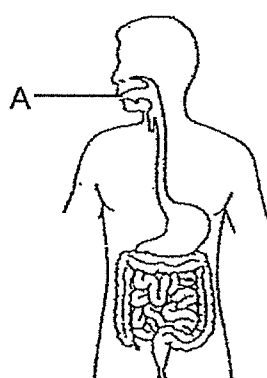
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Section B

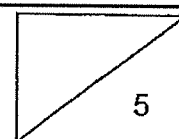
For questions 10 to 13, write your answers in the space provided.

[12 marks]

- 10 The graph shows the amount of (undigested food) in four parts (A, B, C and D) of the digestive system.

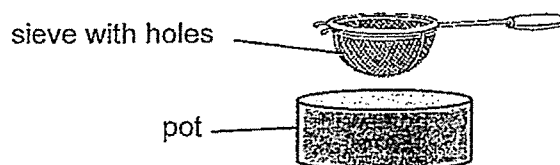


- (a) State the function of the digestive system. [1]
- _____
- _____
- (b) Explain clearly how the teeth in part A helps to digest food faster. [2]
- _____
- _____
- (c) Based on the graph, which part of the digestive system represents the small intestine? Explain why. [1]
- _____
- _____
- (d) Which part of the digestive system is Part B most likely to be? Explain why. [1]
- _____
- _____



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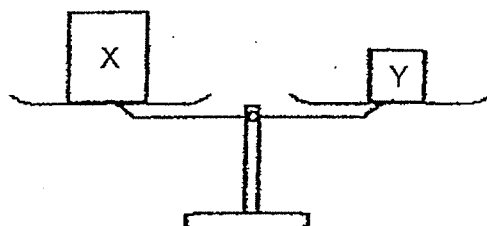
- 11 Mrs Chan wanted to make tea for herself. She used a sieve, as shown below, to separate the tea leaves and tea. The tea that passes through the holes will be collected in the pot.



In terms of properties of state of matter, fill in the table below to explain why the tea was able to pass through the sieve into the pot but not the tea leaves. [2]

	State of matter	Property
Tea		
Tea leaves		

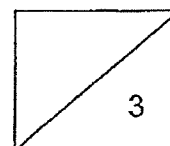
- 12 Two waterproof blocks, X and Y, are placed on a balance. The balance did not tilt as shown below.



- (a) Based on the diagram above, what can you conclude about the mass and volume of blocks X and Y? [1]

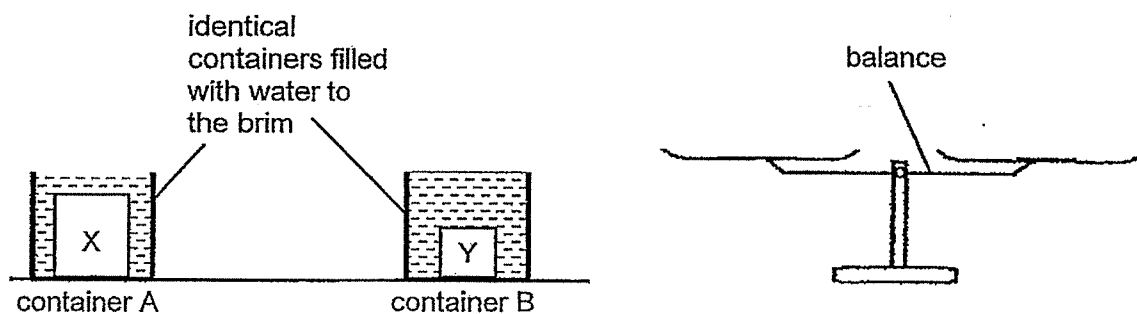
Mass: _____

Volume: _____



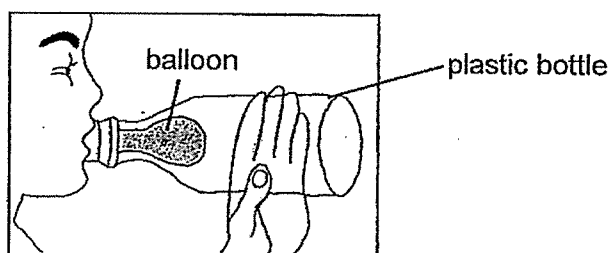
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Both blocks X and Y are then placed into identical containers filled with tap water to the brim as shown below.



- (b) If the two containers are placed on the balance, will container A move up, move down or remain in the same position on the balance? Explain your answer. [2]

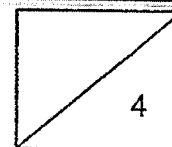
- 13 Ahmad tried to inflate a balloon in a plastic bottle as shown. He could inflate the balloon slightly but not fully.



- (a) Explain why Ahmad could inflate the balloon slightly but not fully. [1]

- (b) Suggest what Ahmad can do to the bottle so that the balloon can be inflated more. [1]

End of paper



METHODIST GIRLS' SCHOOL (PRIMARY)
SCIENCE WEIGHTED ASSESSMENT 2 2024
PRIMARY 4 ANSWER KEY

Section A (9 X 2m = 18 marks)

1.	3	4.	2	7.	4
2.	2	5.	2	8.	2
3.	3	6.	1	9.	3

Section B (12 marks)

Qn	Acceptable Answers
10a	The human digestive system breaks down the food into simple substances / we eat so that the food can be used/ absorbed by the body.
10b	The teeth cut/ chew/ break food into smaller pieces so there is more surface area in contact with the digestive juices for faster digestion.
10c	D. The amount of undigested food is the least in the small intestine as digestion ends in the small intestine.
10d	Gullet as the gullet does not digest food/ produce digestive juices.
11a	Tea: liquid Liquid / Tea has no definite shape. Tea leaves: solid Solid/ Tea leaves have a definite shape.
12a	Blocks X and Y have the same mass. The volume of block X is greater/ more than block Y.
12b	Container A will move up. Container A has less water and will have less mass.
13a	The balloon could be inflated slightly as air in the bottle can be compressed. OR The balloon cannot be inflated fully as the air in the bottle occupies space.
13b	Poke / Make a hole in the plastic bottle.