

W A 3



Rosyth School
Term 3 Weighted Assessment 2025
SCIENCE
Primary 4

Name: _____ () **Class:** _____

Date: _____

Total Time: 40 minutes

Performance Task

	Maximum Marks	Marks Obtained
Part I	10	
Part II	10	
Total	20	

Instructions to Candidates:

1. Do not turn over the booklet until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.

This booklet consists of 9 printed pages (including this cover page).

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Part I (10 marks)

Read the instructions and carry out the investigation.

Task 1: You are given two bags, A and B, containing two balls each. The balls in bag A are made of plastic while the balls in bag B are made of wood.

[Aim]

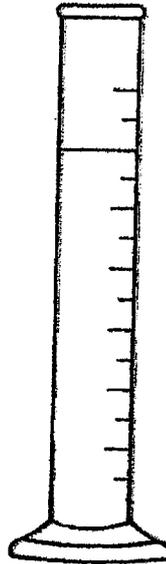
To find out if the material of the ball affects its ability to float on water or sink in water.

[Procedure]

1. Check that the measuring cylinder contains 70 ml of water.
2. Gently lower 2 balls from bag A into the measuring cylinder.
3. Observe the position of the balls in the measuring cylinder and answer (a).
4. Read the water level and record it in (b).

[Results]

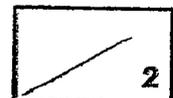
- (a) Draw the observed position of the balls from bag A when added to the measuring cylinder. [1]



- (b) Record the volume of the water when the balls from bag A are added. [1]

Volume: _____ ml

Score

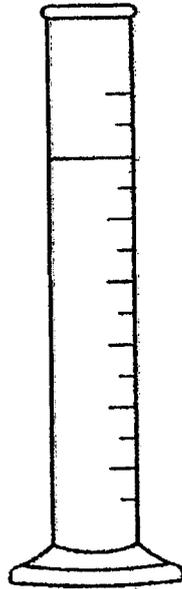


[Procedure]

1. Without removing any balls from the measuring cylinder, gently lower 2 balls from bag B into the measuring cylinder.
2. Observe the position of the balls in the measuring cylinder and answer (c).
3. Read the water level and record it in (d).

[Results]

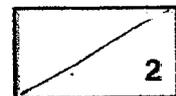
- (c) Draw the observed position of the balls from bag B when added to the measuring cylinder. [1]



- (d) Record the volume of the water when the balls from bag B are added. [1]

Volume: _____ ml

Score

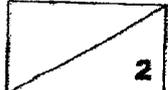


(e) Complete the table below with "changed", "measured" or "kept the same" to identify the type of variables in the experiments conducted. [1]

Variables	Changed / Measured / Kept the same
Size of the balls	Kept the same
Final volume of water	
Number of each type of balls	

[Conclusion]

(f) Based on your observations, what can be concluded about the materials of the balls and their ability to float or sink in water? [1]

Score 

Task 2: To calculate the volume of the balls from bags A and B

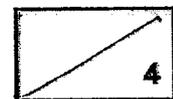
- (g) Using your results recorded in **Task 1**, calculate the volume of the 2 balls from bags A and B. [2]

Starting volume of water (cm ³)	70
Volume of the 2 balls from bag A (cm ³)	
Volume of the 2 balls from bag B (cm ³)	

- (h) Lowering the balls gently into the measuring cylinder allows the volume of the balls from bag A to be more accurately measured. Give a reason. [1]

- (i) The volume of the balls from bag B cannot be accurately found in this experiment. Explain why. [1]

Score

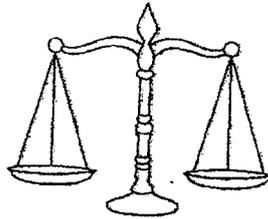


Part II (10 marks)

For questions 1 to 3, four options are given. One of them is the correct answer. Write your answer in the given bracket. Each question carries 2 marks.

1. Which of the following is most suitable to measure 5 ml of water accurately?

(1)



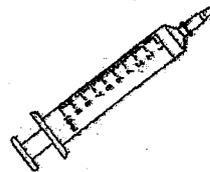
(2)



(3)

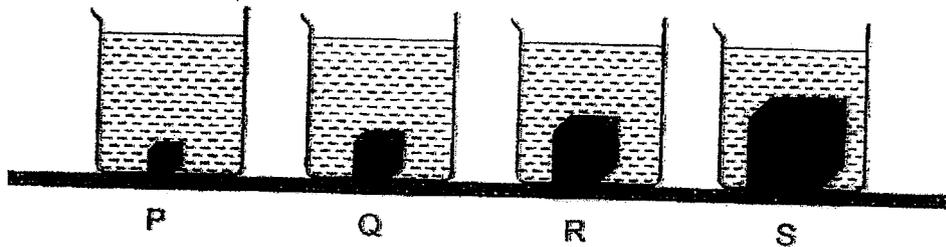


(4)



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2. Andy placed metal objects of different sizes into each of the beakers, P, Q, R and S. He then added water into the beakers until the water levels are the same.



Which beaker contained the greatest volume of water?

- (1) P
- (2) Q
- (3) R
- (4) S

()

Score



3. Lee Lin wanted to find out the volume of an irregular object X. She was given the following apparatus to carry out her experiment.



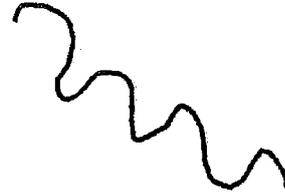
measuring
cylinder



object X



bottle of
water



string

She came up with the following steps to carry out her experiment

- A. Calculate the increase in volume
- B. Record the total volume of water and object X
- C. Pour 50 ml of water into the measuring cylinder
- D. Tie a string around object X and lower it into the water in the measuring cylinder

Which of the following shows the correct order of steps Lee Lin should take?

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

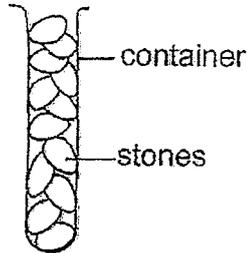
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Score



Read questions 4 and 5 carefully. Write the answers in the space provided.

4. Siti filled a container completely with 100 cm^3 of stones as shown below.



- (a) Put a tick (\checkmark) in the box that shows the correct volume of the container. [1]

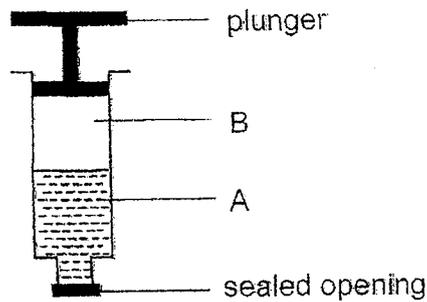
Volume of container	Tick (\checkmark)
Less than 100 cm^3	
100 cm^3	
More than 100 cm^3	

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

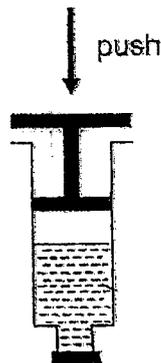
Score



5. Sam filled a syringe with equal volume of substances A and B. He sealed the opening after that, as shown below.



He pushed the plunger in and recorded his observation as shown in the diagram below.

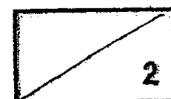


- (a) Identify the state of matter of B. [1]

- (b) Based on Sam's observation, state a difference between the property of A and B. [1]

END OF PAPER

Score



YEAR : 2025
 LEVEL : PRIMARY 4
 SCHOOL : ROSYTH SCHOOL
 SUBJECT : SCIENCE
 TERM : TERM 3 WEIGHTED ASSESSMENT

Part I

<p>Task 1</p>	 <p>a) b) volume : 74ml</p>  <p>c) d) volume : 76ml e) final volume of water : measured number of each type of balls : kept the same f) wooden balls float on water but plastic balls sink in water.</p>
<p>Task 2</p>	<p>g) volume of the 2 balls from bag A (cm^3) : 4 volume of the 2 balls from bag B (cm^3) : 2 h) so that water will not splash out. i) they only took up some space in the water.</p>

Part II

1.	4
2.	1
3.	2
4.	<p>a) more than $100cm^3$ b) there are gaps between the stones that are occupied by air.</p>
5.	<p>a) gas b) substance A cannot be compressed while substance B can be compressed.</p>

1
END

