



# Rulang Primary School

## MINI-TEST 2 SCIENCE 2024

Name: \_\_\_\_\_ (     )

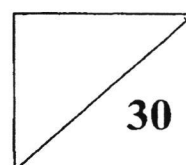
Total Time: 45 minutes

Level: Primary 3

Date: 21 Aug 2024

Class: Primary 3 (     )

Total Marks:



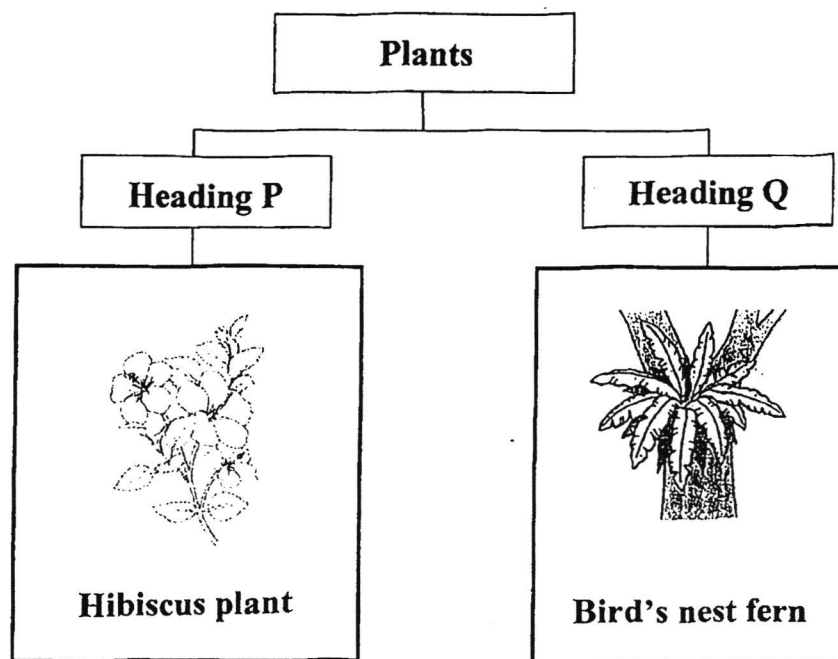
### Instructions to pupils:

1. Do not open this booklet until you are told to do so.
2. You are required to answer **all** the questions in this booklet.
3. This question booklet consists of **15** printed pages, including the cover page.

**Section A (10 x 2 marks)**

For each of the questions from 1 to 10, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade the answers in the Optical Answer Sheet (OAS) provided.

1. Study the classification chart below.



Which of the following best represents headings P and Q?

|     | P                    | Q                    |
|-----|----------------------|----------------------|
| (1) | Makes food           | Does not make food   |
| (2) | Reproduces by seeds  | Reproduces by spores |
| (3) | Does not bear fruits | Bears fruits         |
| (4) | Non-flowering plant  | Flowering plant      |

2. Study the classification table below.

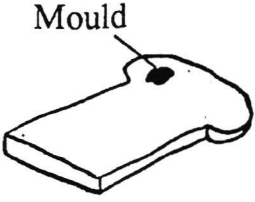
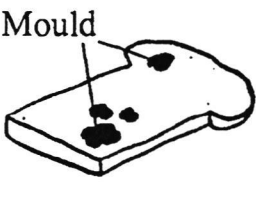
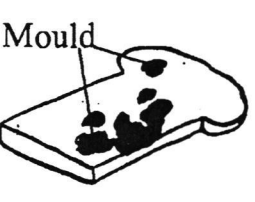
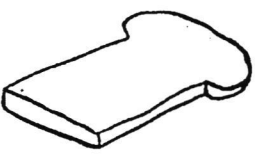
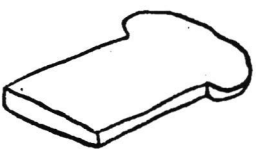
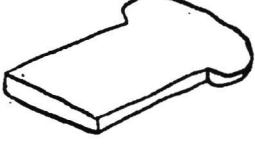
| Living things                                                                                             |                                                                                                              |
|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Group X                                                                                                   | Group Y                                                                                                      |
| <br><b>Papaya plant</b>  | <br><b>Bracket fungus</b> |
| <br><b>Water clover</b> | <br><b>Toadstool</b>     |

Which of the following are suitable headings for groups X and Y?

|     | Group X                                    | Group Y                                       |
|-----|--------------------------------------------|-----------------------------------------------|
| (1) | Can grow                                   | Cannot grow                                   |
| (2) | Reproduce from spores                      | Reproduce from seeds                          |
| (3) | Can make their own food                    | Cannot make their own food                    |
| (4) | Can respond to changes in the surroundings | Cannot respond to changes in the surroundings |

3. An experiment was conducted to find out the condition that is suitable for bread mould to grow. The amount of mould that grew on two slices of bread, C and D, was observed on days 5, 10 and 15.

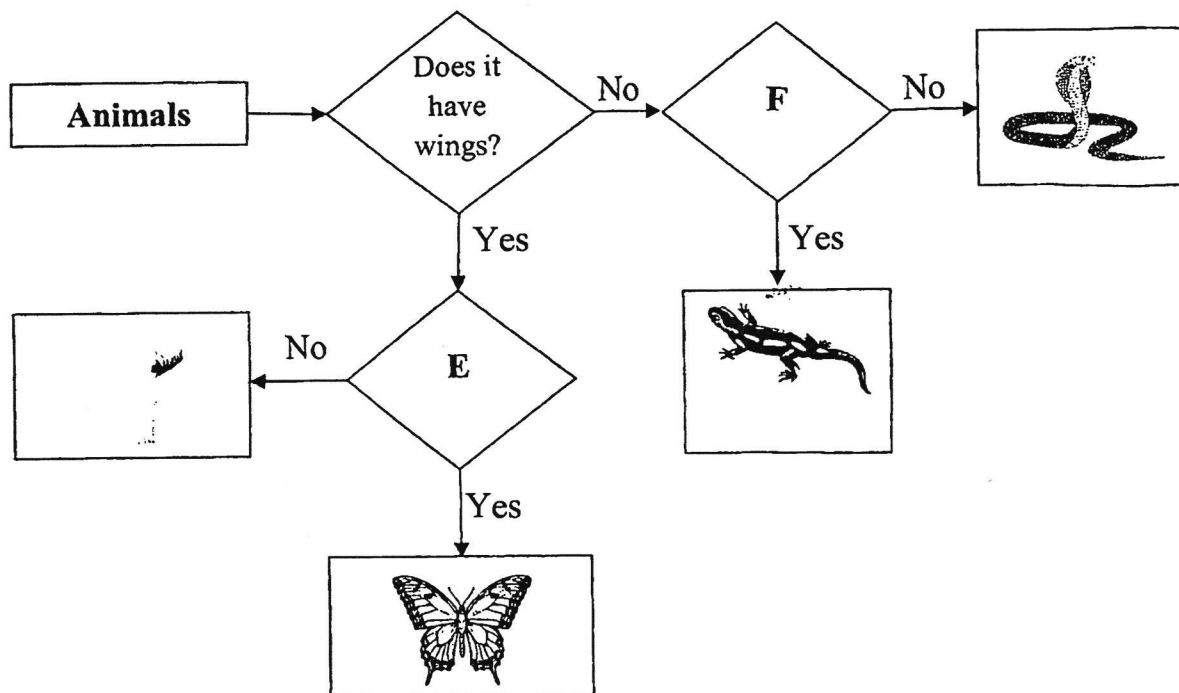
The table below shows the results of the observations.

|                | Day 5                                                                              | Day 10                                                                              | Day 15                                                                               |
|----------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Bread C</b> |   |   |   |
| <b>Bread D</b> |  |  |  |

Which of the following best represents the conditions of the two slices of bread, C and D, before the experiment?

|     | <b>Bread C</b>         | <b>Bread D</b>             |
|-----|------------------------|----------------------------|
| (1) | Sprinkled with water   | Toasted in the oven        |
| (2) | Toasted in the oven    | Sprinkled with water       |
| (3) | Placed in refrigerator | Placed in an air-tight bag |
| (4) | Toasted in the oven    | Placed in refrigerator     |

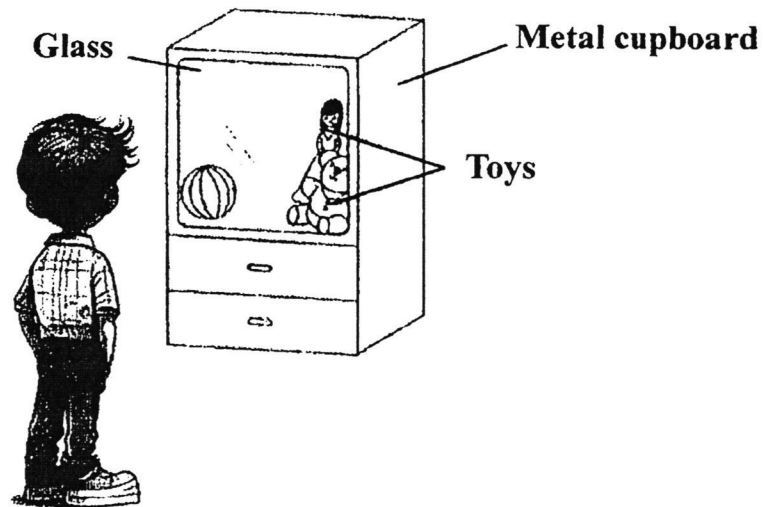
4. Study the flowchart below.



Which of the following best represents questions E and F?

|     | Question E                     | Question F                         |
|-----|--------------------------------|------------------------------------|
| (1) | Does it lay eggs?              | Does it live on land?              |
| (2) | Does it have six legs?         | Does it have scales?               |
| (3) | Does it have feathers?         | Does it live on land and in water? |
| (4) | Does it have three body parts? | Does it have legs?                 |

5. Frank is looking for his toys in his metal cupboard.



Which of the statements explains why he can see the toys that are placed inside the cupboard clearly?

- (1) The glass allows most light to pass through it.
- (2) The toys allow some light to pass through them.
- (3) The glass does not allow light to pass through it.
- (4) The metal cupboard does not allow light to pass through it.

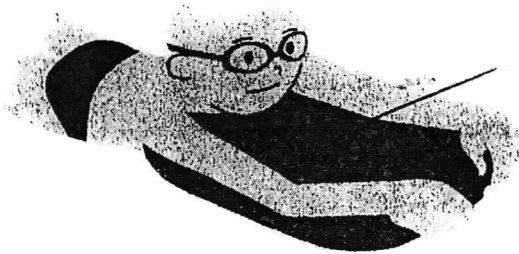
6. The table below shows the property of two objects, J and K. A tick (✓) indicates that the property is present in the object.

| Property of object            | Object |   |
|-------------------------------|--------|---|
|                               | J      | K |
| bends easily without breaking | ✓      |   |
| waterproof                    |        | ✓ |

Which of the following best represents objects J and K?

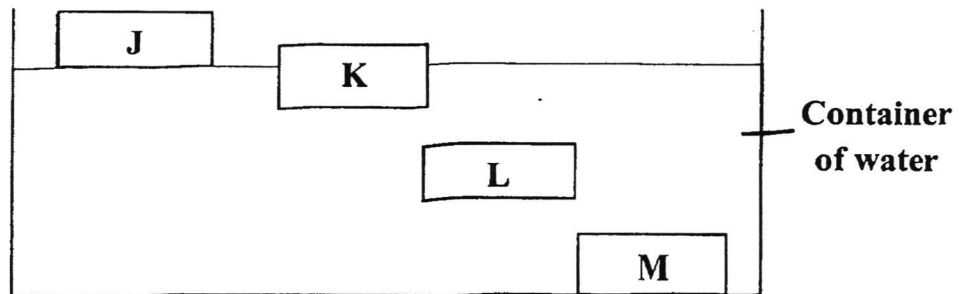
|     | J            | K            |
|-----|--------------|--------------|
| (1) | ceramic tile | paper towel  |
| (2) | paper towel  | ceramic tile |
| (3) | wooden chair | metal table  |
| (4) | metal table  | wooden chair |

7. Ian wanted to find suitable materials to make a swimming kickboard to help him float in the water.



**Swimming  
kickboard**

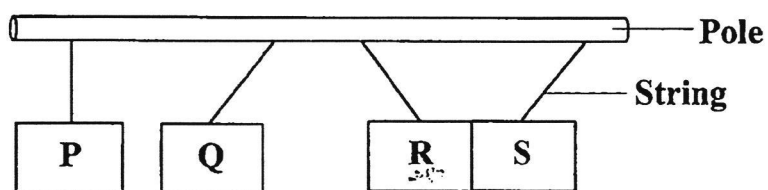
He placed four pieces of different materials, J, K, L and M, into a container of water. He observed the following as shown in the diagram below.



Which of the materials are suitable for making the swimming kickboard?

- (1) J and K only
- (2) K and M only
- (3) L and M only
- (4) J, L and M only

8. George hung four items, P, Q, R and S of the same size and shape on a pole. The diagram below shows their interactions when they are brought near one another.

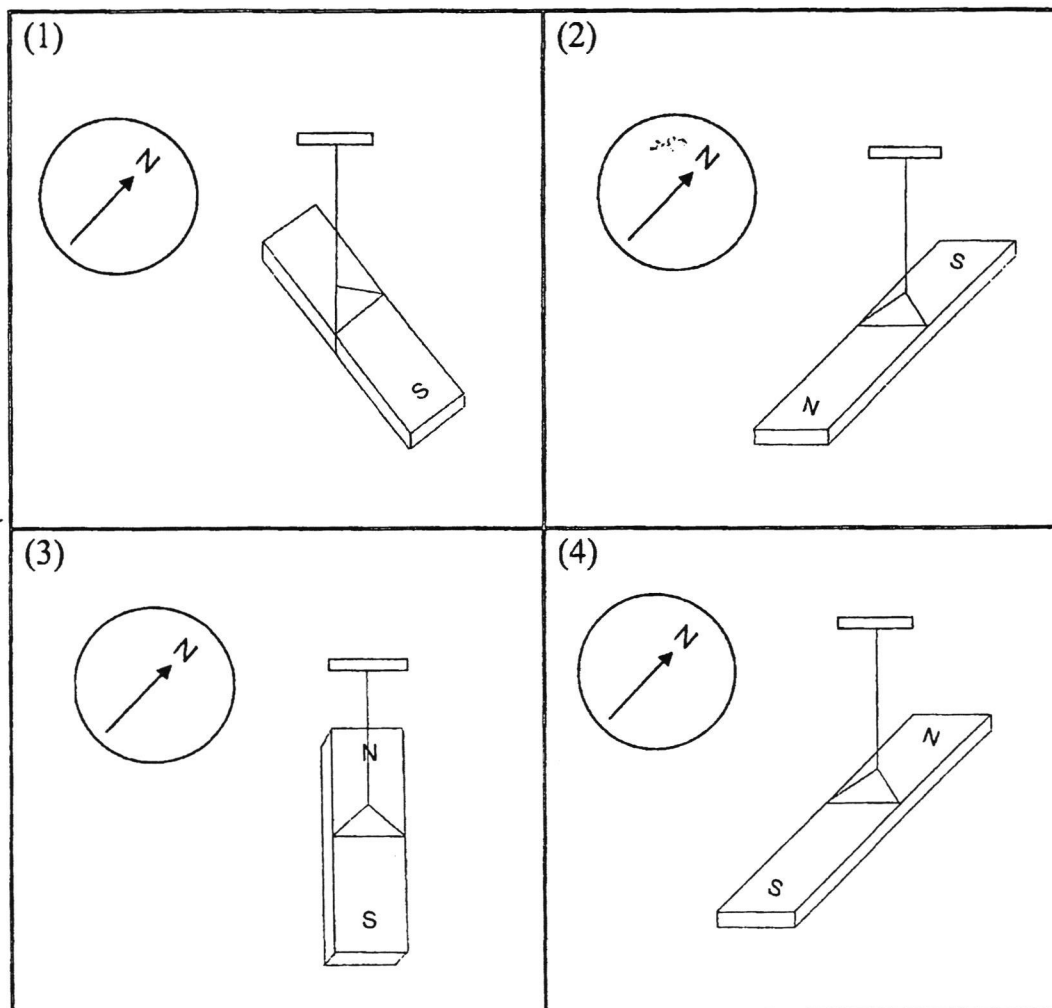


Based on the experiment, which of the statements are true?

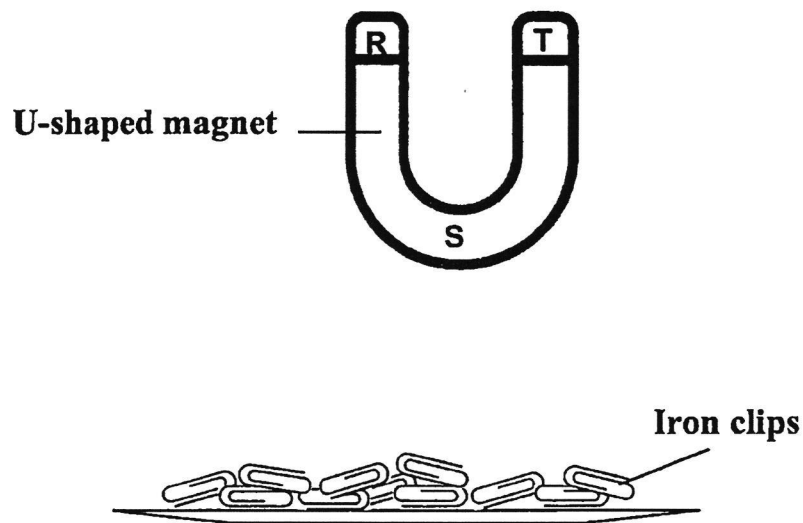
- A: Bar Q is a magnet.
- B: Bar R is made of plastic.
- C: Bar P is made of a magnetic material.
- D: It is not possible to tell if bar S is a magnet.

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

9. John wants to conduct an experiment to find out which direction a magnet will face when it is freely suspended. Which of the following best represents what John will observe?



10. A U-shaped magnet is held above a plate of iron clips as shown below.



Which of the following shows the correct number of iron clips attracted by the different parts of the magnet when the magnet is placed flat on the plate?

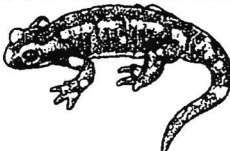
| Number of clips attracted to |        |        |        |
|------------------------------|--------|--------|--------|
|                              | Part R | Part S | Part T |
| (1)                          | 5      | 6      | 5      |
| (2)                          | 15     | 12     | 2      |
| (3)                          | 12     | 4      | 11     |
| (4)                          | 3      | 10     | 4      |

**Section B: (10 marks)**

**For questions 11 to 14, write your answers in this booklet.**

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

11. The diagram below shows two animals, X and Y. The characteristics of each animal are stated in the table below.

| Animals                                                                                               | Characteristics                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Animal X</b>  | <ul style="list-style-type: none"><li>• has a beak</li><li>• has feathers</li><li>• reproduces by laying eggs</li></ul>                                       |
| <br><b>Animal Y</b> | <ul style="list-style-type: none"><li>• has moist skin</li><li>• reproduces by laying eggs</li><li>• breathes through its skin as well as its lungs</li></ul> |

- (a) Which animal group does animal Y belong to? [1]

\_\_\_\_\_

- (b) Based on the characteristics in the table above, state a similarity between the two animals. [1]

\_\_\_\_\_

\_\_\_\_\_

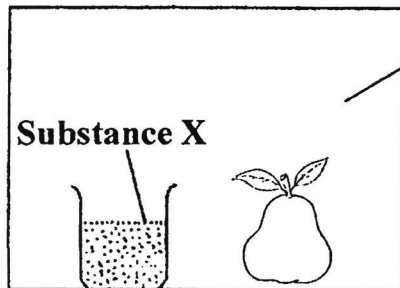
- (c) Based on the characteristics in the table above, state a difference between the two animals. [1]

\_\_\_\_\_

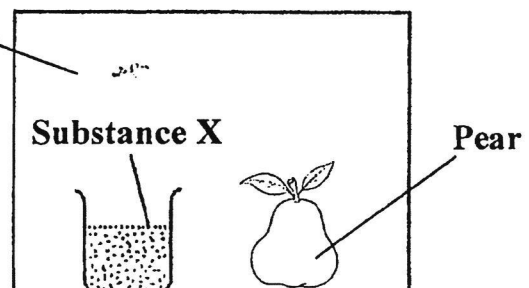
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12. Roger placed four pears in four identical containers. Containers A and C were placed in a room of temperature  $4^{\circ}\text{C}$  while containers B and D were placed in a room of temperature  $30^{\circ}\text{C}$ . Substance X absorbed water from the surroundings.

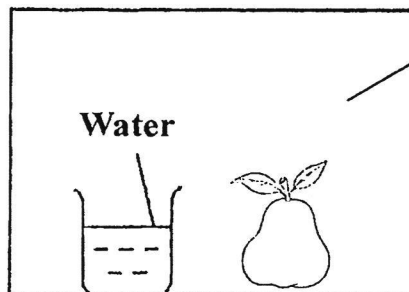
Container A ( $4^{\circ}\text{C}$ )



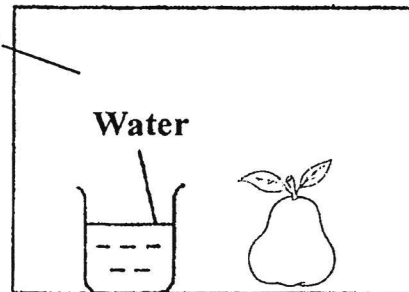
Container B ( $30^{\circ}\text{C}$ )



Container C ( $4^{\circ}\text{C}$ )



Container D ( $30^{\circ}\text{C}$ )



Roger noticed that mould first appeared on the pear in container D. Explain why mould first appeared on the pear in container D. [2]

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13. Paul set up an experiment using four strips, W, X, Y and Z, made of different fabrics. They were hung from a stand such that the end of each strip was dipped into a container of coloured water.

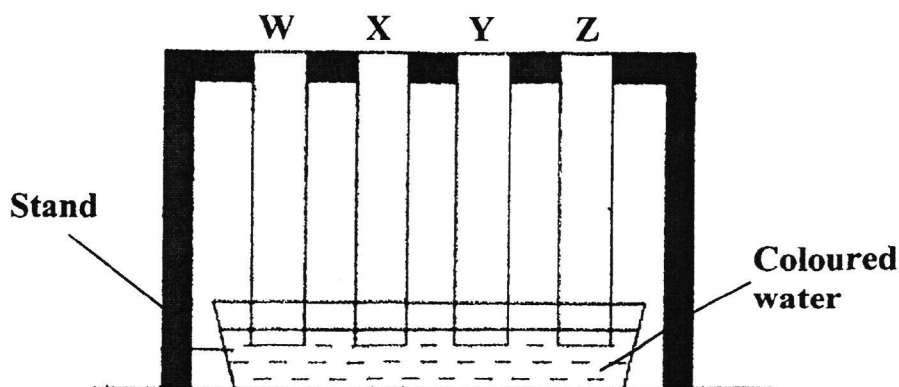
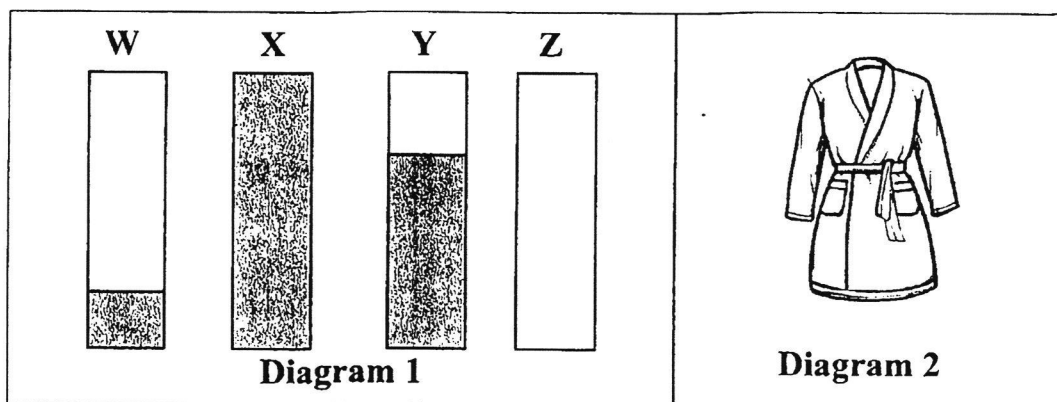


Diagram 1 below shows the four strips of fabric after four minutes. The shaded parts show the absorption of coloured water by the four strips of fabric.



Paul wants to make a bathrobe (diagram 2) for his sister so that she can dry herself when she comes out of the swimming pool.

- (a) Based on the results of his experiment, which fabric should he use to make the bathrobe? Explain why. [1]

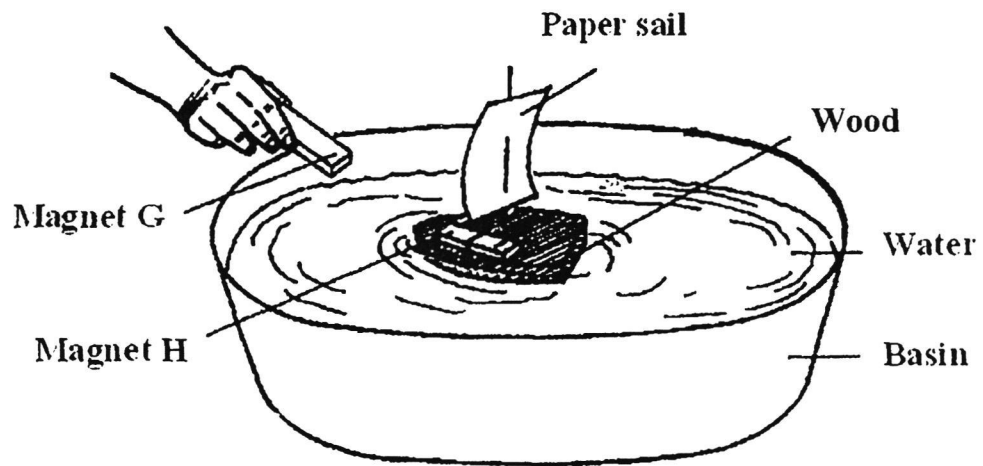
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- (b) Based on the results of his experiment, what could he conclude about the property of material Z? [1]

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14. June made a small toy boat with a piece of wood. She attached magnet H to it and placed it in a basin of water. When she held magnet G near magnet H on the toy boat, the boat began to move towards magnet G.



- (a) Suggest what June could do to make the toy boat move away from magnet G without touching it. [1]

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- (b) Magnet H was replaced by a metal bar. When June held magnet G near the metal bar on the toy boat, the toy boat did not move towards magnet G. Explain why the toy boat did not move. [2]

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**END OF PAPER**

SCHOOL : RULANG SCHOOL  
LEVEL : PRIMARY 3  
SUBJECT : SCIENCE  
TERM : 2024 WA2

CONTACT : 011-2222-1234

|      |                                                                                                                                                                                                                     |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q1)  | 2                                                                                                                                                                                                                   |
| Q2)  | 3                                                                                                                                                                                                                   |
| Q3)  | 1                                                                                                                                                                                                                   |
| Q4)  | 4                                                                                                                                                                                                                   |
| Q5)  | 1                                                                                                                                                                                                                   |
| Q6)  | 2                                                                                                                                                                                                                   |
| Q7)  | 1                                                                                                                                                                                                                   |
| Q8)  | 2                                                                                                                                                                                                                   |
| Q9)  | 4                                                                                                                                                                                                                   |
| Q10) | 3                                                                                                                                                                                                                   |
| Q11) | a) Amphibian<br>b) Animal X and Y both reproduce by laying eggs.<br>c) Animal X has feathers while animal Y has moist skin.                                                                                         |
| Q12) | Substance X wasn't in container D. Although substance X wasn't in container C, the temperature is higher than container D. Mould needs warmth and water in order to grow.                                           |
| Q13) | a) He should use material X as it absorbs the most water, and when his sister comes out of the swimming pool, she will be wet. A bathrobe should absorb water.<br>b) He can conclude that material Z is waterproof. |
| Q14) | a) Flip the magnet around so that the like poles of the magnets are facing one another.<br>b) It is made of a non-magnetic material and the material cannot be attracted to the magnet.                             |

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