METHODIST GIRLS' SCHOOL

Founded in 1887

PRIMARY 3
SCIENCE
WEIGHTED ASSESSMENT 2 2024

Total Time for Paper: 45 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 3._____

Date : _____ May 2024

Parent's signature: _____

Section A	18
Section B	12
Total	30

This paper consists of 11 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]

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1 Which statement is correct about the fern and mushroom?

(1) Both reproduce from seeds.

(2) Both reproduce from spores.

(3) Both are non-flowering plants.

(4) Both cannot make their own food. ( )

2 The table below gives some information on three living things, S, T and U. A tick (√) shows the characteristic of the living thing.

Characteristics	S	T	U
Has scales	√		
Cannot bear fruits	√	√	√
Lives in water	√	√	
Can make its own food			√

Which of the following correctly represents living things, S, T and U?

	S	T	U
(1)	fish	whale	yeast
(2)	whale	fish	yeast
(3)	fish	whale	moss
(4)	whale	fish	moss

( )

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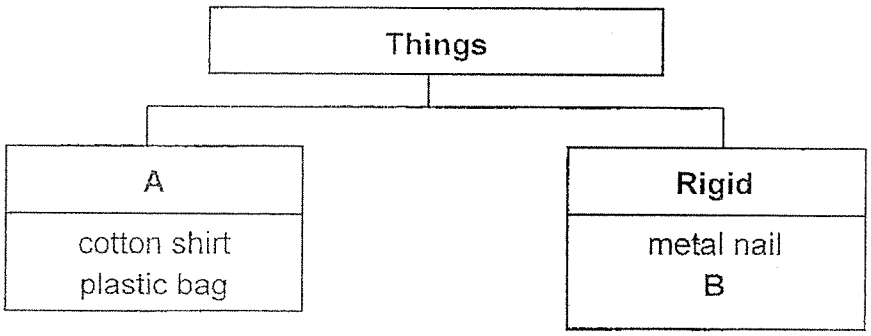
3 Study the classification diagram below.

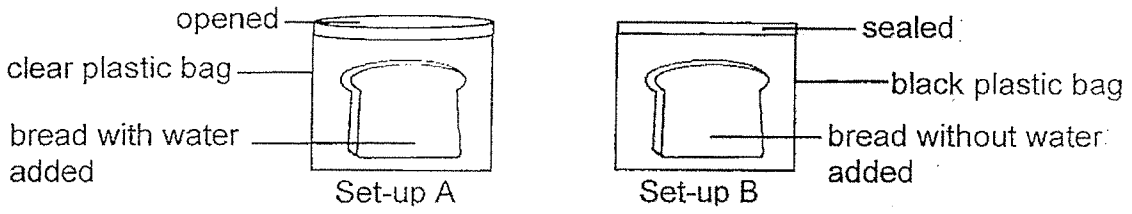


Which one of the following options correctly represent A and B?

	A	B
(1)	Breaks easily	plastic fork
(2)	Bends easily	rubber glove
(3)	Bends easily	wooden spoon
(4)	Breaks easily	ceramic plate

( )

4 Jen wanted to find out if bread mould need sunlight to grow. She set up an experiment using similar bread as shown below and placed them in the garden for seven days.



Why was the experiment not fair?

A Only one of the bags was sealed.

B The bread had different amount of water.

C The duration of the experiment was too long.

D The bags allow different amount of light to pass through.

(1) A and B only

(2) A and C only

(3) B and D only

(4) C and D only ( )

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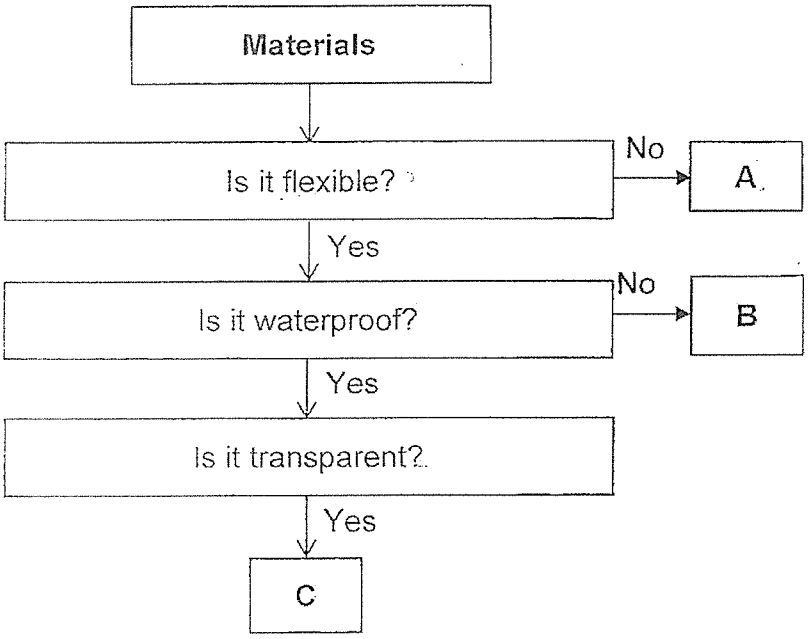
5 Study the flowchart below.



Which of the following could material A, B, and C be made of?

	A	B	C
(1)	rubber	cotton	wood
(2)	ceramic	cotton	clear plastic
(3)	ceramic	rubber	clear plastic
(4)	rubber	rubber	wood

( )

6 Which of the following statement about bacteria and fungi is correct?

	Bacteria	**Fungi**
(1)	Does not reproduce	Can reproduce
(2)	Can grow	Cannot grow
(3)	Cannot make food	Can make food
(4)	Can only be seen with a microscope	Some can be seen without a microscope

( )

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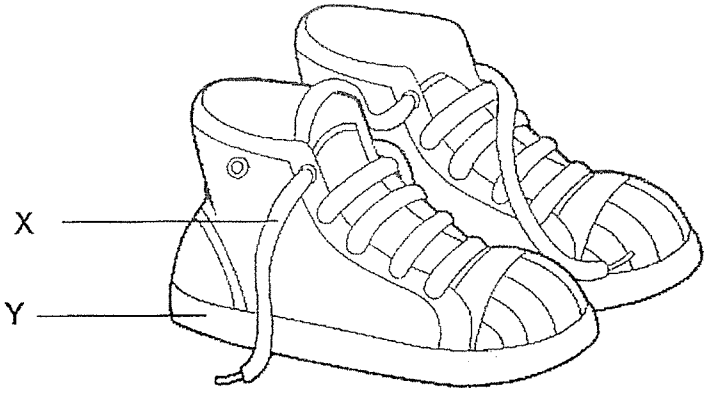
7 Lindy observed the properties of three materials, A, B and C and recorded her observations in the table below.

Properties	A	B	C
flexible	✓		✓
waterproof	✓	✓	
strong	✓	✓	✓

The diagram below shows a pair of shoes.



Which of the following materials, A, B and C are most suitable to make parts **X** and **Y** of the shoe?

	Part X	Part Y
(1)	A	C
(2)	B	A
(3)	A	B
(4)	C	A

( )

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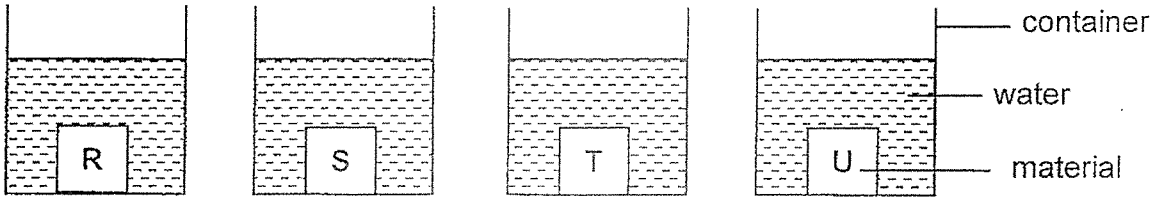
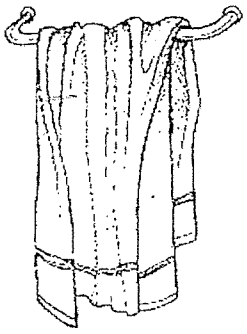
8 Wen Han measured the mass of four different materials, R, S, T and U, of the same size before putting each of them into a container containing the same amount of water for 10 minutes as shown below.



He then measured the mass of the materials after removing them from the water. The table below shows the results of his experiment.

Materials	Mass of the materials (g)	
	Before soaking in water	After soaking in water
R	60	90
S	90	90
T	100	150
U	150	180

Which of the following material, R, S, T or U, is most suitable for making a towel as shown below?



(1) R

(2) S

(3) T

(4) U ( )

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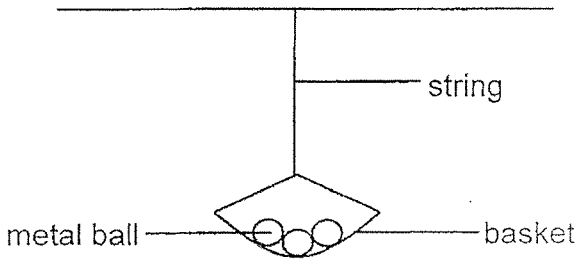
9 David wanted to compare the strength of three different strings made of different materials. He used the set-up below and recorded the greatest number of metal balls that the basket could hold before each string broke.



Which of the following variable should David keep the same to ensure a fair test?

A Thickness of strings

B Length of the strings

C Number of metal ball

D Material of the strings

(1) A and B only

(2) A and D only

(3) B and C only

(4) A, C and D only ( )

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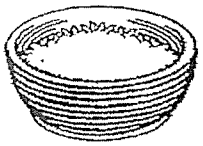
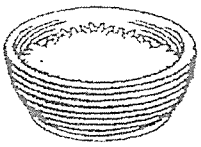
Section B

For questions 10 to 13, write your answers in the space provided. [12 marks]

10 Dalah conducted an experiment in the kitchen using two bowls of rice, A and B, as shown below.



bowl A
(cooked rice with 2 drops of water added)



bowl B
(cooked rice with 10 drops of water added)

(a) What is the changed variable in this experiment? [1]

(b) A week later, Dalah noticed patches of mould growing on the rice. In which bowls of rice would more mould grow? Explain your answer. [1]

(c) Dalah told her mother that mould make its own food. Do you agree with her? Explain your answer. [1]

3

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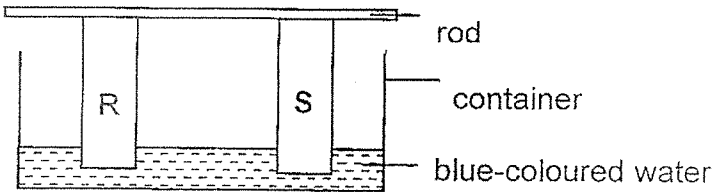
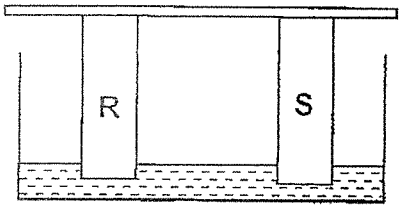
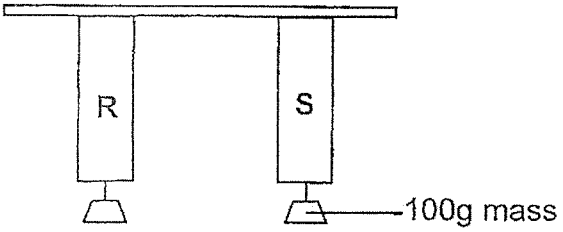
11 Two different materials, R and S, of similar size were placed into a container of blue-coloured water as shown below.



The diagram below shows the observation of the materials after 30 minutes.



The materials were then removed from the container. Some 100g mass were then hung on both materials as shown below.



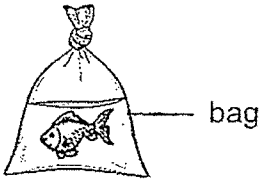
The number of 100g mass that hung before each material tear was recorded in the table below.

	R	S
Number of 100g mass hung on the material before it tears.	10	1

(a) State the properties that were tested on the experiments above. [1]

_____

(b) Based on the results above, which material, R or S, is more suitable for making the bag shown below. Explain your answer. [2]



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_____

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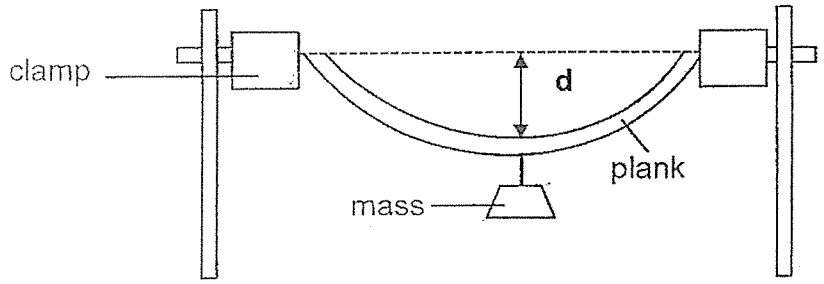
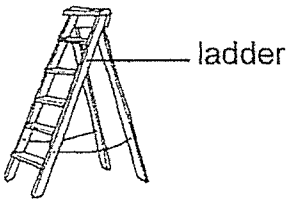
12 Ali set up an experiment to compare four similar planks made of different materials, J, K, L and M.



For each material, distance d was measured. The results are as shown.

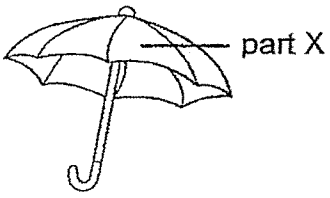
Material	Distance, d (cm)
J	4
K	12
L	7
M	0

(a) The diagram below shows a ladder.



Based on Ali's results, which material, J, K, L or M, is most suitable for making a ladder? Explain your answer. [2]

Ali found that material K could be used to make part X of an umbrella.



(b) State one important property of material K which will protect Ali from the sun. [1]

3

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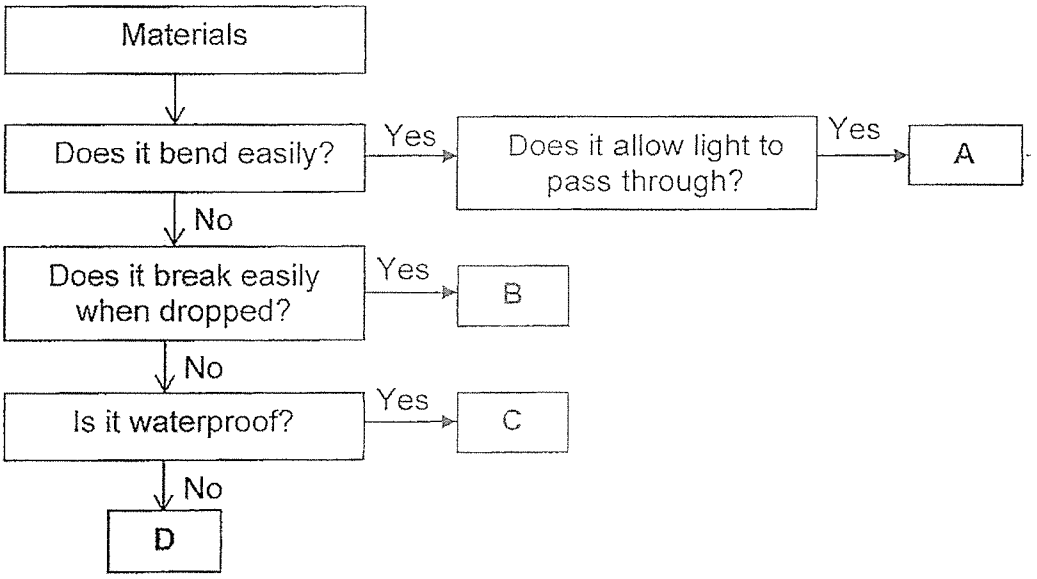
13 Study the flowchart below.



(a) Based on the flowchart, state the difference between materials A and C. [1]

_____

_____

(b) Based on the flowchart, state the properties of B. [1]

_____

_____

(c) Which one of the materials, A, B, C or D, is most suitable for making a fork? [1]

Material _____

3

End of Paper

Methodist Girls' School (Primary)
P3 Science WA2 2024
Student's Copy

Section A:

No	Answer	Explanation
1	**2**	Fern is a non-flowering plant and mushroom is a fungi and they both reproduce from spores.
2	**3**	S is a fish since it has scales. W is a whale which is a mammal that lives in water. U is moss which is a non-flowering plant that can make its own food. It cannot be yeast which is fungi and cannot make food.
3	**3**	A is the reverse of "rigid" (cannot bend) so it should be "bends easily". B must be rigid so it should be the wooden spoon.
4	**1**	The changed variable in the experiment is the presence or absence of sunlight. The use of a clear plastic bag will allow light to pass through and the black plastic bag will not allow light to pass through. This should be the only changed variable for a fair experiment. Other conditions in the experiment should be kept the same, such as keeping both bags sealed and adding water to both slices of bread.
5	**2**	A is not flexible so it should be ceramic. B is not waterproof so it should be cotton which can absorb water. C is transparent so it is clear plastic.
6	**4**	All bacteria can only be seen with a microscope. Some fungi such as mushroom and bracket fungus can be seen without a microscope. Both bacteria and fungi are living things so they both can reproduce and grow. Only plants can make food so both bacteria and fungi cannot make their own food.
7	**4**	X is the shoelace and it has to be flexible and strong. The shoelaces need not be waterproof as it can still serve its function. Y is the sole and it has to be flexible, waterproof and strong.
8	**3**	Material T is most suitable to make into a towel as it absorbs the most amount of water (150 ml - 100 ml = 50 ml).
9	**1**	The only changed variable in the experiment is the different types of material. The number of metal balls is the measured variable since David recorded the greatest number of metal balls that the basket could hold before each string broke. For a fair experiment, the other conditions in the experiment should be kept the same. Therefore, the thickness and length of strings should be controlled.

Section B:

Q.	Suggested Answers
10a	The amount of water/ moisture / drops of water in the rice.
10b	Bowl B, as there was a greater/ more amount of water/ moisture / drops of water added to the rice.
10 c	No, as mould is *fungi* and *cannot make its own food/ breaks down living or dead things into simpler substances and absorbs them as food.*
11 a	*Strength* and *waterproof / ability to absorb water.*
11 b	Material R is stronger than material S as it was able to *hold/ hang/ support/ withstand* the *greater/ more/ most number of (100g) mass before tearing.*
12a	Material M as it *did not bend* so it is the most *rigid/ not flexible* and is suitable to make the ladder.
12b	It allows *some or no* light to pass through.
13a	Material A is flexible/ bends easily, but C not flexible/ stiff/ rigid /does not bend easily.
13b	Material B is not flexible/ stiff/ rigid /does not bend easily and is weak/ break easily/ not strong/ fragile/ brittle.
13c	Material: C

2

END