RAFFLES GIRLS' PRIMARY SCHOOL
WEIGHTED ASSESSMENT 1
PRIMARY FOUR
2024

SCIENCE

Name: _____ ( ) Date : _____ May 2024

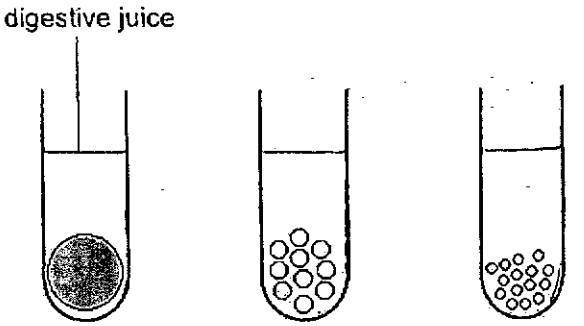
Class: P4 _____ Total Time: 50min

INSTRUCTIONS

1. Write your name, class and index number in the spaces provided above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For questions 1 to 5, write your answers clearly in the spaces provided.
6. The number of marks is shown in brackets [ ] at the end of each question or part question.

Your score **out of 25**	
Parent's signature	

1. (a) Priya wants to find out if breaking undigested food into smaller pieces helps in digestion. The diagram shows three set-ups, R, S and T, with the same amount of identical biscuit and equal amount of digestive juice. Each biscuit is broken into different number of pieces in each set-up as shown in the diagram.



The results are shown in the table.

Set-up	R	S	T
Time taken for biscuit to be broken into simpler substances completely (min)	25	18	13

(i) Based on the results, which set-up, R, S or T, has the fastest rate of digestion? [1]

(ii) Give a reason for your answer in part (a)(i). [1]

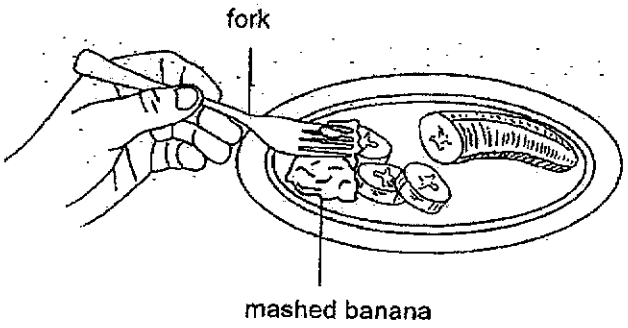
(iii) List all parts of the digestive system which produce digestive juices. [1]

Score	/3

Continue on page 2

Continued from page 1

Priya uses a fork to mash some bananas as shown in the diagram.



(b) (i) Which of the following part of the digestive system has the same function as the fork?

Put a tick (✓) in the correct box. [1]

☐ tongue

☐ teeth

☐ saliva

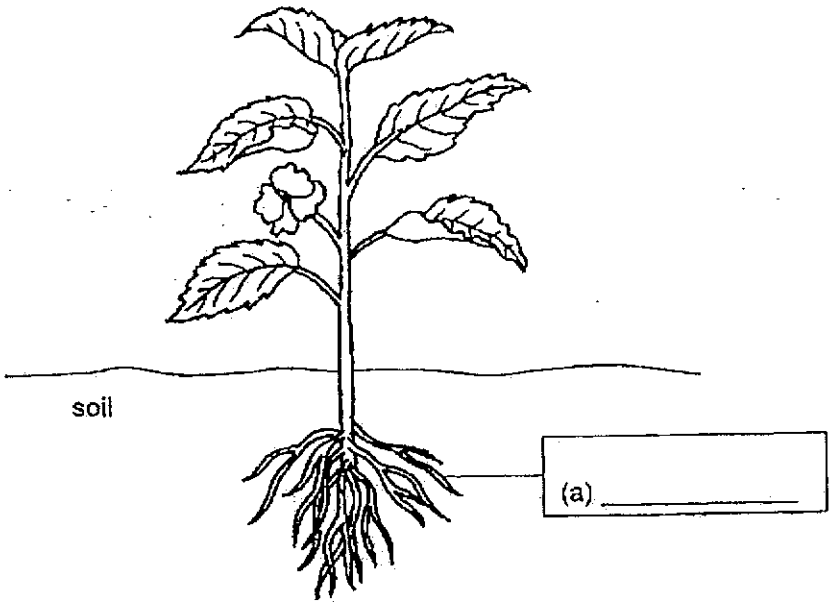
(ii) Give a reason why the part you choose in (b)(i) has the same function as the fork. [1]

_____

_____

Score	2

2. The diagram shows a plant.



(a) On the diagram, identify and write the name of the plant part in the box. [1]

(b) State two functions of the plant part identified in (a) [2]

1. _____

_____

2. _____

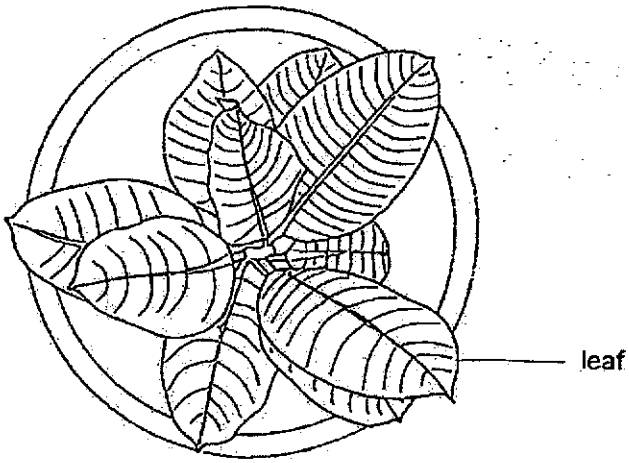
_____

Score	/ 3

Continue on page 4

Continued from page 3

(c) The diagram shows a plant from the top view.

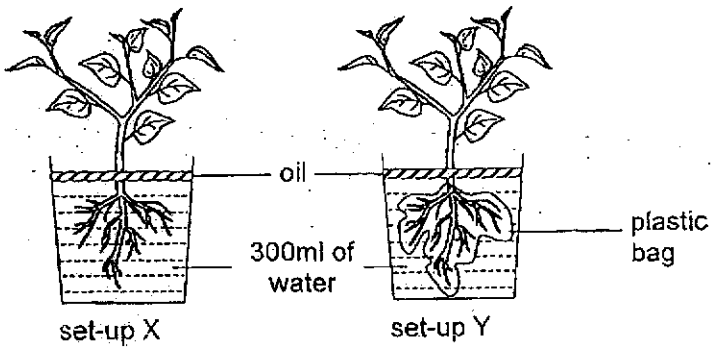


(i) State the function of the leaf. [1]

(ii) Give a reason why the leaves are spread out as much as they can from one another. [1]

Score	/2

3 (a) Susan prepared two set-ups, X and Y, using identical plants and amount of water. She wrapped the roots of the plant in set-up Y in a plastic bag as shown in the diagram. She placed both set-ups near the window.



After two days, she measured the amount of water left in each set-up.

(i) Which of the following shows the amount of water left in set-up X after two days?

Put a tick (✓) in the correct box. [1]

☐ 300ml

☐ More than 300ml

☐ Less than 300ml

(ii) State the amount of water left in set-up Y after two days.
Explain your answer. [2]

_____

_____

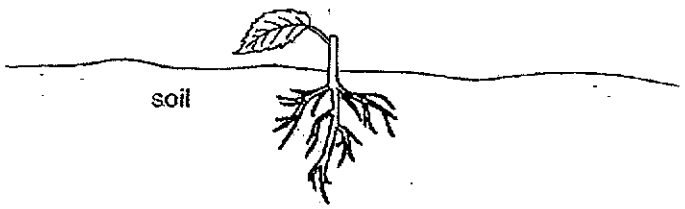
_____

Score	/3

Continue on page 6

Continued from page 5

A cut was made on a plant as shown in the diagram.



(b) Can the plant continue to survive? Give two reasons for your answer. [2]

_____

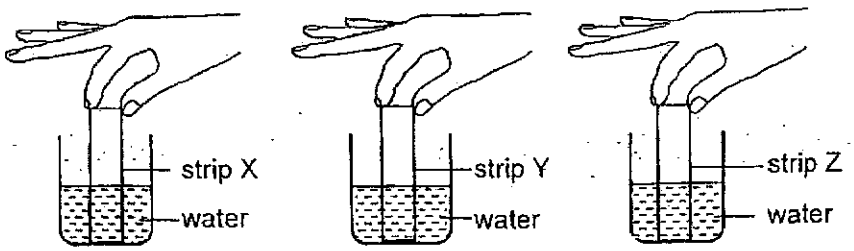
_____

_____

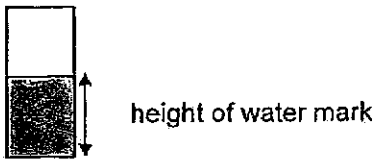
ive

Score	2

4. Ali set up an experiment as shown below to compare a property of the three different strips of material, X, Y and Z, which were of the same thickness.



He placed the three strips into three beakers of water for one minute and recorded the height of the water mark on the strips as shown in the table.



Material	Height of water mark (cm)
X	2
Y	0
Z	8

(a) Identify the independent (changed) variable, dependent (measured) variable and constant variables in the experiment.
Put a tick (✓) in the correct boxes in the table. [2]

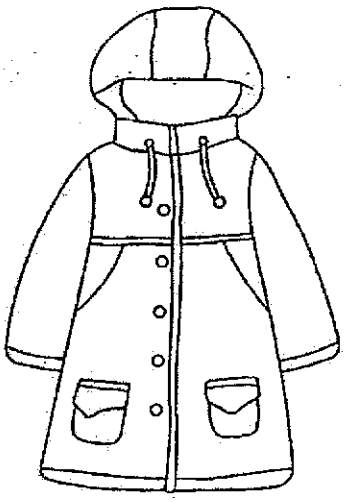
Variable	Independent (changed) variable	Dependent (measured) variable	Constant Variable
Type of material			
Length of material			
Thickness of material			
Height of water mark on the strip			

Score	2

Continue on page 8

Continued from page 7

A raincoat is used on rainy days.

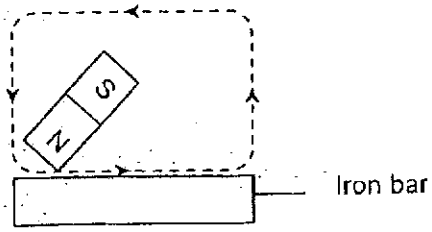


(b) Based on the information in the table, which material, X, Y or Z would be most suitable to make the raincoat? Explain your answer [2]

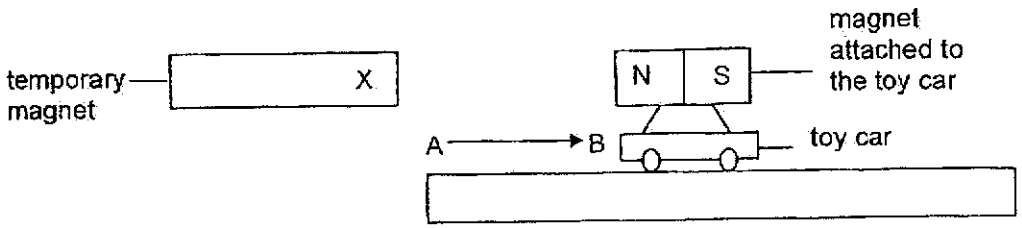
(c) State ANOTHER property that the raincoat should have in order to allow the user to move around comfortably. [1]

Score	/3

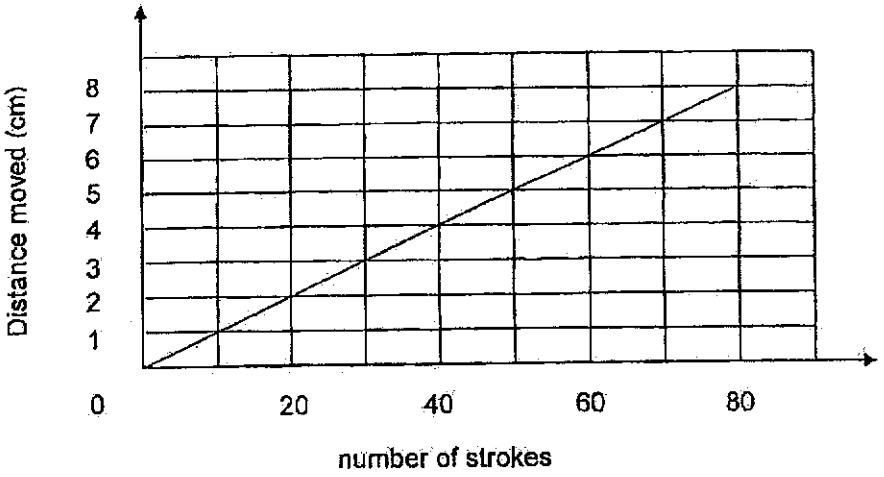
5. Ahmad made a temporary magnet by stroking an iron bar with a permanent magnet many times.



To test the strength of the temporary magnet, he first placed a toy car at point A. Then he brought the magnet towards point A. He observed that it moved away from point A to B as shown by the arrow in the diagram.



He repeated the experiment by increasing the number of strokes on the iron bar and recorded the distance moved by the toy car.



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Based on the information provide on page 9, answer the following questions:

(a) Name pole X of the temporary magnet. [1]

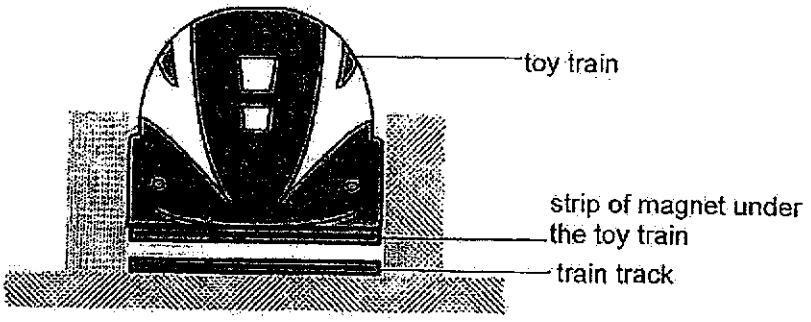
_____

(b) If Ahmad stroked the iron bar 100 times, would the distance travelled by the toy car be equal to, less than or more than 8 cm? Explain your answer. [2]

_____

_____

Ahmad created a "floating" toy train. He stroked the iron rod and then made it into the train track as shown in the diagram.



(c) Explain why the toy train was able to "float" on the train track. [2]

_____

_____

End of Paper

Score 5

SCHOOL : RAFFLES GIRLS' SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCINECE
TERM : 2024 WA1

Q1)

a)i)Set-up T
ii)biscuit in set-up T is broken into the smallest pieces, so it has the most exposed surface area in contact with digestive juices.
iii)Mouth, stomach and small intestine.

b)i)teeth
ii)The teeth help us chew food into smaller pieces like the fork mashing the banana.

Q2)

a) roots
b) 1)Help anchor the plant firmly to the ground
2)Help absorb water and mineral salts from the ground.
c) i)The leaves help make food.
ii)It is so that the leaves can take in more sunlight to make more food.

Q3)

a)i)Less than 300ml
ii)The amount of water left in set-up Y will still be 300ml. The roots were covered in a plastic bag thus, it is not able to absorb water.
c) Yes, the plant will survive because there is still a leaf which can make food and roots which can absorb water for the plant.

Q4)

a)

Variable	Independent (changed) variable	Dependent (measured) variable	Constant Variable
Type of material	✓		
Length of material			✓
Thickness of material			✓
Height of water mark on the strip		✓	

b)Material Y. it did not absorb any water ,it is waterproof. Using is to make a raincoat will user dry.
c)Fleability.

Q5)	a) North pole b) More than 80m. As the number of strokes increase, the distance travelled by the toy increases. The strength of the temporary magnet increases, the toy is repelled further. c) The like poles of the strips of magnets under the train and the train tracks were facing each other. So they repelled.