METHODIST GIRLS' SCHOOL

Founded in 1887

Weighted Assessment 3 2025
PRIMARY 5
SCIENCE

Total Time: 45 minutes

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 5.____

Date: _____

Parent's Signature: _____

Section A	18
Section B	12
Total	30

This booklet consists of 9 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 shade your answer accordingly below. [18 marks]

1	4	7
2	5	8
3	6	9

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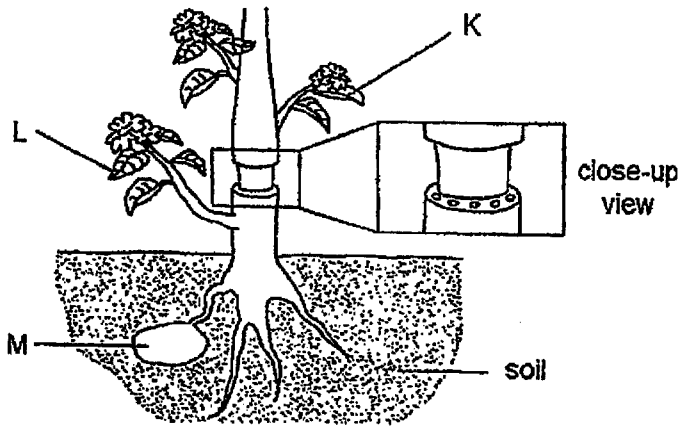
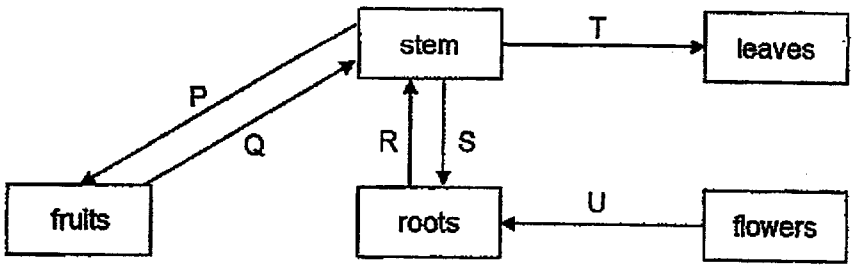
1 Tina removed an outer ring of the stem of a plant as shown below. The food-carrying tubes and water-carrying tubes were removed.



Tina observed that M grew bigger after some time. Which one of the following best explains her observation?

(1) Food is made by M itself.
(2) Food is transported from L to M.
(3) Food is transported from K to M.
(4) Food is absorbed by M from the soil.

2 Study the diagram.



Which arrows show the correct direction in which water is transported in a plant?

(1) P, R and T only
(2) R, S and T only
(3) Q, T and U only
(4) R, T and U only

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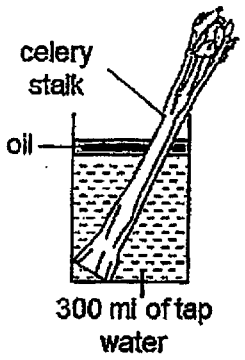
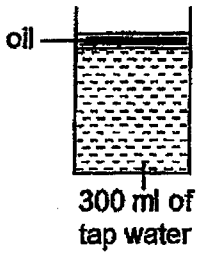
3 Ravi wanted to find out if celery stalk absorbs water. He set up the experiment as shown below.

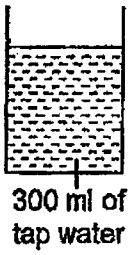


Which one of the following should he use as a control?

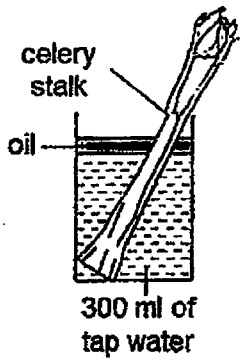
(1)



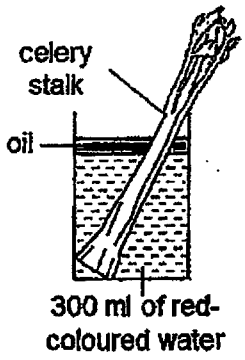
(2)



(3)



(4)



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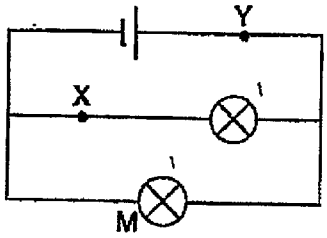
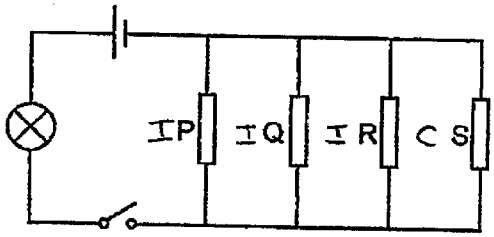
4 Bella connected a circuit as shown.



What electrical parts can she connect at X and Y of the circuit without changing the brightness of bulb M?

	X	Y
(1)		
(2)		
(3)		
(4)		

5 Xiaoming wanted to investigate whether four rods, P, Q, R and S were electrical conductors or insulators. He set up the circuit as shown.



The table below shows what happened when the switch was closed and certain rod(s) was/were removed.

Rod(s) removed from circuit	Did the bulb light up?
P	yes
Q and R	yes
P, Q and R	no
P, R and S	no

Which one of the following shows the properties of rods Q, R and S?

	Q	R	S
(1)	conductor	conductor	insulator
(2)	conductor	insulator	conductor
(3)	insulator	conductor	insulator
(4)	insulator	insulator	conductor

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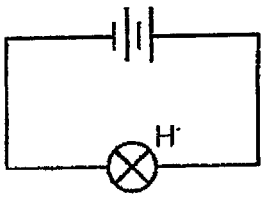
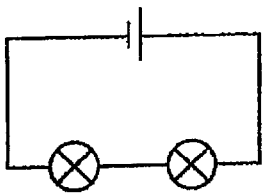
Use the information below to answer Questions 6 and 7.

Amil set up circuit G using two identical batteries and bulb H.

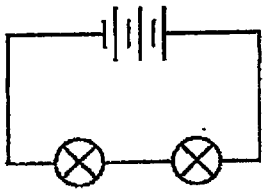


Circuit G

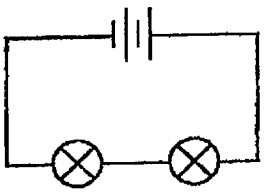
He set up four other circuits, J, K, L and M, using identical batteries and bulbs.



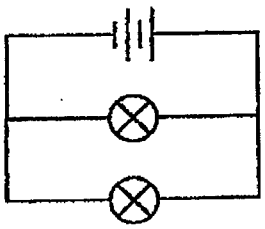
Circuit J



Circuit K



Circuit L



Circuit M

6 In which circuit, J, K, L or M, will the bulbs have the same brightness as bulb H?

(1) J
(2) K
(3) L
(4) M

7 Amil wanted to investigate how the number of bulbs connected in series affect the brightness of the bulb.

Which circuits should Amil, together with circuit G, use for this investigation?

(1) J
(2) K
(3) L
(4) M

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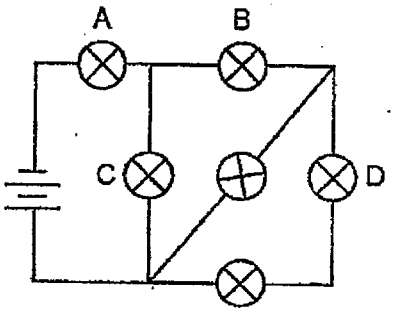
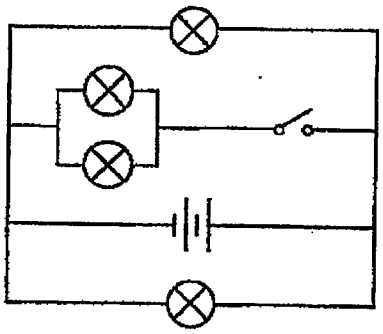
8 Study the circuit below.



When one of the bulbs had blown, one other bulb did **not** light up.
Which one of the bulbs had blown?

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

9 Four bulbs are connected in a circuit as shown.



How many more bulbs will light up when the switch is closed?

(1) 1
(2) 2
(3) 3
(4) 4

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Section B: For questions 10 to 12, write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part question.

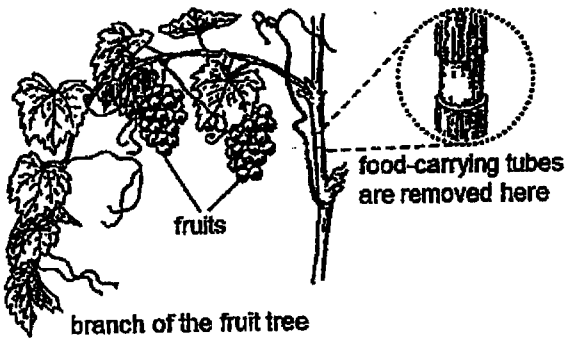
[12 marks]

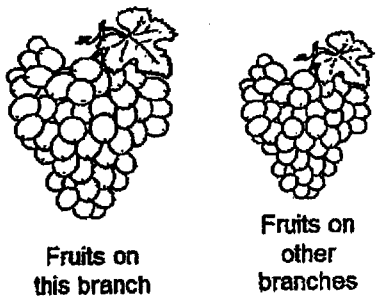
10 Some parts of a plant are shown below.

flowers	stem	roots
leaves	fruits	

(a) Draw arrows ⟶ in the diagram above to show how food is transported in a plant. [2]

A farmer removed the outer ring from a branch of a fruit tree as shown below. The food-carrying tubes were removed while the water-carrying tubes remained.





(b) After one month, the fruits on this branch grew bigger when they were compared to fruits on other branches. Explain this observation. [2]

4

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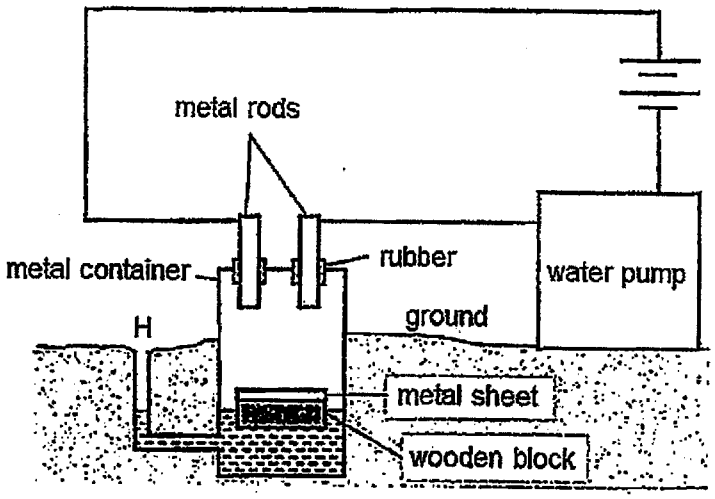
11 Ms Aileen wants to remove water from the ground using a water pump when it rains heavily. She uses the set-up as shown below to turn on the water pump.



Rainwater enters the metal container through a hole at H.

(a) State a property of rubber that allows the set-up to work as described. [1]

(b) Describe and explain how the water pump is turned on when it rains heavily. [2]

(c) Without using different apparatus, suggest one way to turn on the water pump when it rains less heavily. Explain your answer. [1]

4

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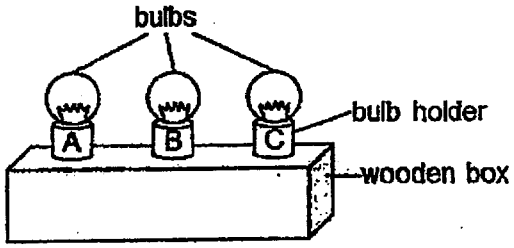
12 Mr Li set up a simple circuit with 2 batteries, wires and 2 light bulbs.

When one bulb fused, the other bulb did not light up.

(a) What was the arrangement for the 2 bulbs in this circuit? Explain your answer. [1]

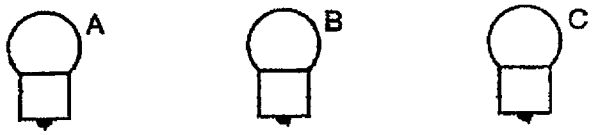
Next, Mr Li constructed a puzzle circuit with 2 batteries, 3 bulbs and bulb holders. The batteries and wires were hidden in a wooden box such that only the bulbs and bulb holders can be seen. All the bulbs light up at first.



Mr Li removed a bulb one at a time from its bulb holder and observed its effect on the other 2 bulbs. His observations are as shown.

Bulb removed	Bulb(s) remain lit
A	none
B	A and C
C	A and B

(b) The diagram below shows part of Mr Li's puzzle circuit. Complete the circuit so that it will work as described. [3]



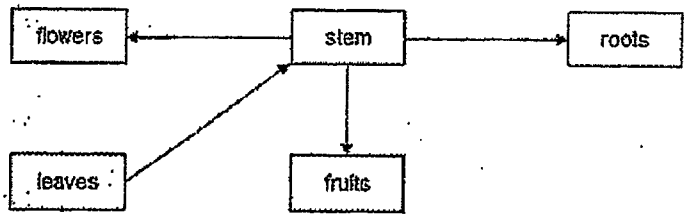
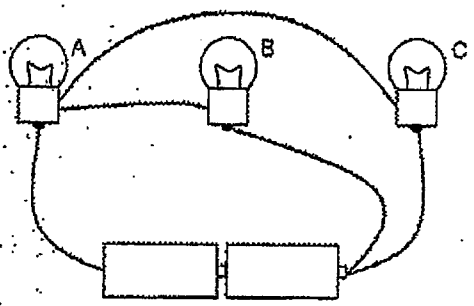
4

Methodist Girls' School (Primary)
P5 Science WA 3 2025

Section A:

Qn	Ans	Qn	Ans	Qn	Ans
1	2	4	4	7	3
2	1	5	3	8	4
3	1	6	4	9	2

Section B: [3 questions - 12 marks]

Q.	Acceptable Answers
10a	
b	Food made by the leaves cannot be transported by the food-carrying tubes to below the cut (and other parts of the plant), more food is transported to the fruits on this branch making them grow bigger.
11a	Rubber is an electrical insulator/ does not conduct electricity.
b	When the rainwater enters the container through the hole at H, the water level in the container rises, the wooden block floats on the water and rises and the metal sheet touches the metal rods and formed a closed circuit and the water pump will turn on.
c	Method: Adjust the metal rods downwards/ lowering the metal rods. Reason: (Note: The water level will be lower when it rains less heavily.) The metal sheet will need to rise less before it can touch the metal sheet to form a closed circuit./ For the same period of time, it will close the circuit earlier.
12a	They were connected in series (arrangement). When one bulb fused, it caused an open circuit, the other bulb would not light up / electric current would not be able to flow through.
b	

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