



MAHA BODHI SCHOOL
2023 WEIGHTED ASSESSMENT 2
SCIENCE REVIEW
PRIMARY FIVE

Name : _____ () Date : 23 August 2023

Class : Primary 5 _____

Duration : 50 min

Marks: _____ / 30

Parent's signature : _____

Section A : [8 x 2 marks = 16 marks]

For each question from 1 to 8, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Write your answer in the bracket.

1. Study the table below.

| Solid | Liquid | Gas |
|-------|--------------|-------|
| snow | water | cloud |
| ice | water vapour | steam |

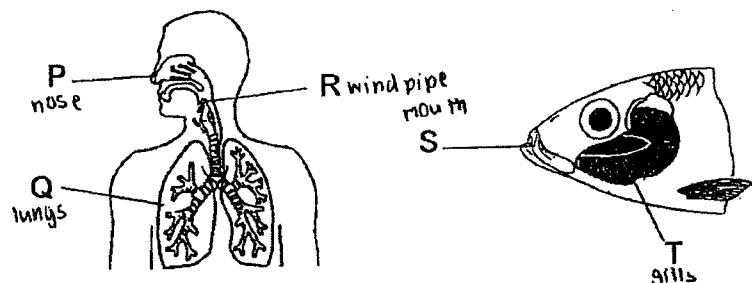
Which of the following is/are grouped wrongly?

- (1) water vapour only
- (2) water and snow only
- (3) steam and cloud only
- (4) water vapour and cloud only

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Marks: _____ / 2

2. The diagrams below show a fish and a human respiratory system.

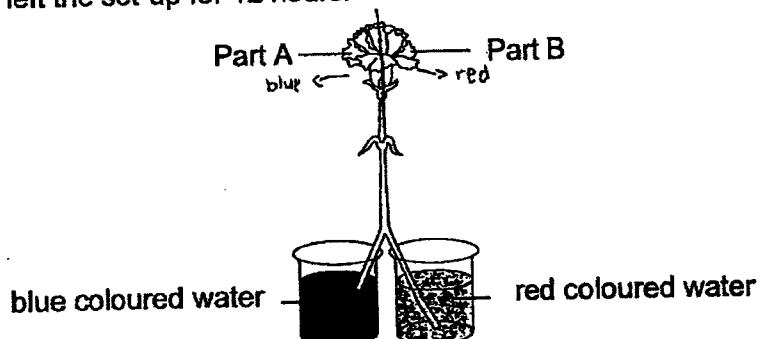


At which parts of the fish and human respiratory system is oxygen absorbed into the bloodstream?

| Human | Fish |
|-------|------|
| (1) Q | S |
| (2) P | T |
| (3) R | S |
| (4) Q | T |

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3. Josh cut the stalk of a white flower into two halves and placed each end into separate beakers containing blue and red coloured water as shown below. He then left the set-up for 12 hours.



Which of the following would he observe after 12 hours?

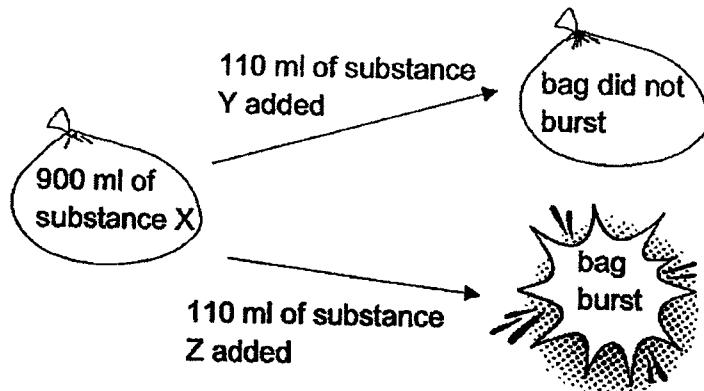
- (1) Both parts A and B turned red.
- (2) Both parts A and B turned blue.
- (3) Both parts A and B remained white.
- (4) Part A turned blue while part B turned red.

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Marks:

/ 4

4. An inflatable bag with a capacity of 1000 ml was first filled with 900 ml of substance X. The same bag was then filled with an additional 110 ml of substance Y and the bag did not burst.
The experiment was repeated but substance Z was used instead of substance Y and the bag burst.



- Which of the following statements below is true?
- (1) Substance Y is a gas.
(2) Substance Z is a gas.
(3) Substance X and Y are gases.
(4) Substance X, Y and Z are liquids. ()
5. The table below shows the melting point and boiling point of three substances.

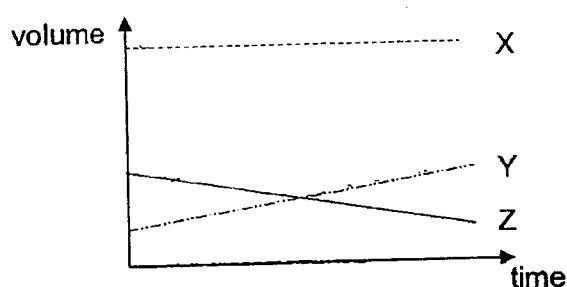
| Substance | Q | R | S |
|--------------------|-----|----|-----|
| Melting point (°C) | 20 | 10 | 30 |
| Boiling point (°C) | 140 | 50 | 170 |

- Which of the following statement below is true?
- (1) Substance Q, R and S are all liquids at 90 °C.
(2) At 40 °C, only substance R can be compressed.
(3) Substance Q and R can be compressed at 150 °C.
(4) Substance Q, R and S do not have a definite shape at 15 °C. ()

Marks: / 4

6. Eight adults were trapped in a lift for about an hour.

The graph below shows the volume of gases X, Y and Z in the lift.

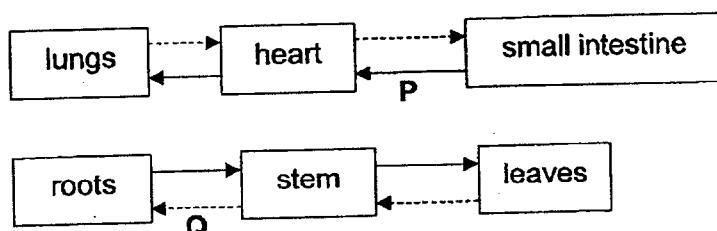


Which of the following correctly identifies gases X, Y and Z?

| | X | Y | Z |
|-----|----------------|----------------|----------------|
| (1) | nitrogen | oxygen | carbon dioxide |
| (2) | carbon dioxide | water vapour | nitrogen |
| (3) | nitrogen | carbon dioxide | oxygen |
| (4) | oxygen | carbon dioxide | water vapour |

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7. The diagrams below show a human circulatory system and a plant transport system. The arrows represent the movement of substances in both systems.



Which of the following correctly represents P and Q?

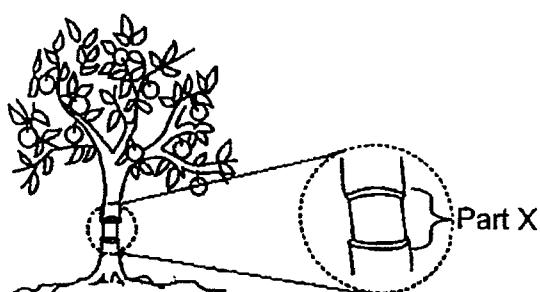
| | P | Q |
|-----|---------------|--------|
| (1) | digested food | oxygen |
| (2) | digested food | food |
| (3) | water | water |
| (4) | oxygen | food |

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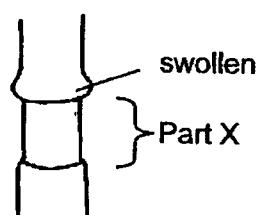
Marks:

/ 4

8. Lilian removed the outer ring of the stem of a plant as shown in the diagram below.



After one week, she observed a swell above part X.



Which tube was removed to cause the swell above part X and what was the correct explanation for her observation?

| | Tube removed | Explanation |
|-----|---------------------|--|
| (1) | food-carrying tube | Food made by the leaves could not be transported below part X so it was stored above part X. |
| (2) | water-carrying tube | Water absorbed by the roots could not be transported above part X and so the water is stored above part X. |
| (3) | food-carrying tube | Food made by the leaves could be transported below part X and some of the food was stored above part X. |
| (4) | water-carrying tube | Water absorbed by the roots could be transported below part X and some of the water was stored above part X. |

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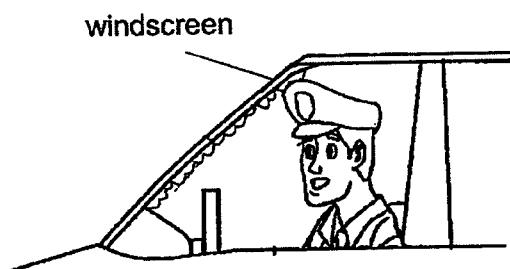
Marks : / 2

SECTION B : [14 marks]

For questions 9 to 12, write your answers in this booklet.

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

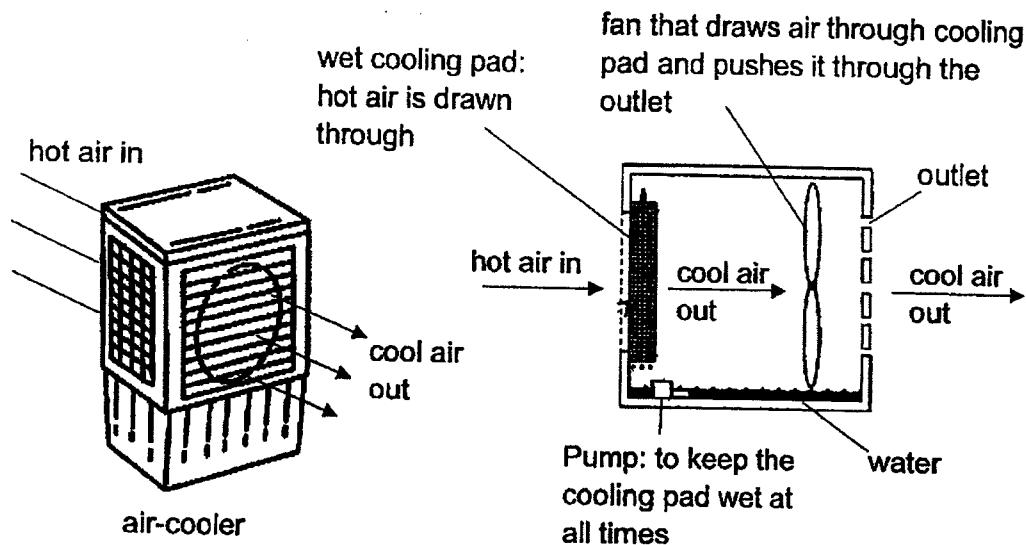
9. On a cold day, the driver switched off the air-conditioner in his car and continued driving. After a while, he noticed a layer of water droplets forming on his windscreen.



- (a) **Draw** in the diagram above, to show clearly where the layer of water droplets is forming on his windscreen. [1]
- (b) Explain how the water droplets are formed on his windscreen. [2]

Marks: / 3

10. The diagram below shows the cross-sectional side view of the air-cooler system that uses water to help cool the surrounding temperature.



- (a) Explain how the air-cooler system helps to produce cool wind to cool the surrounding. [2]

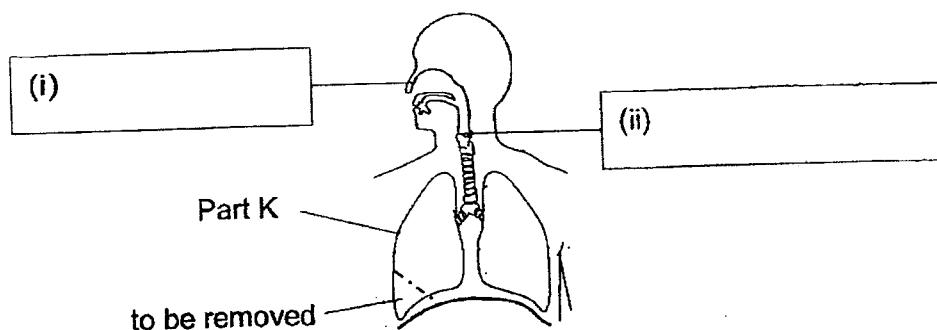
- (b) The table below shows the rate of evaporation of water and two different liquids X and Y at room temperature.

| | Rate of evaporation (units) |
|----------|-----------------------------|
| water | 10 |
| liquid X | 7 |
| liquid Y | 12 |

Which liquid, X or Y, is a better choice to be use for the air-cooler to keep the room cooler? Explain your answer. [2]

Marks: / 4

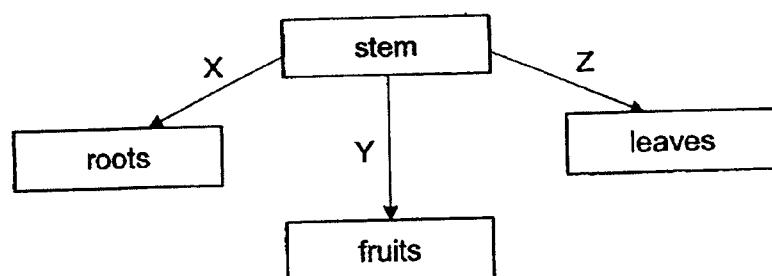
11. The diagram below shows a human respiratory system.



- (a) Label the parts of the respiratory system in the boxes above. [1]
- (b) State the function of the respiratory system. [1]

- (c) Explain how the rate of respiration will change when a small section of Part K is removed. [2]

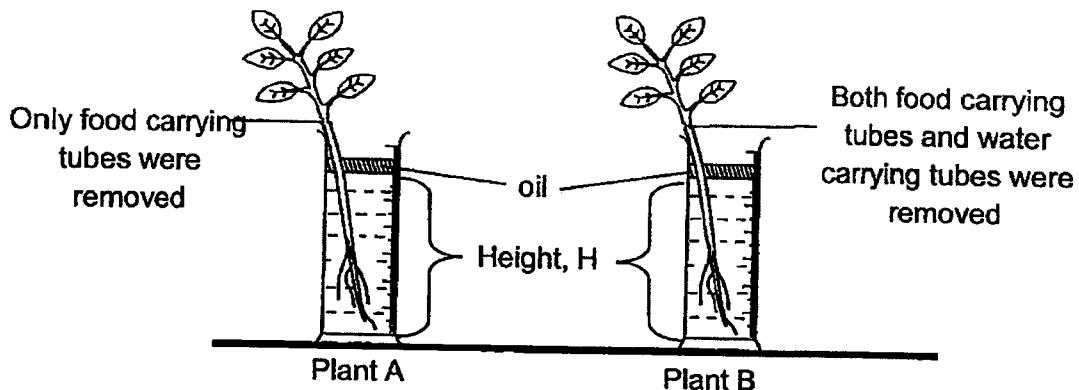
12. (a) The diagram below shows four parts of a flowering plant. Arrows X, Y and Z show the direction how food is transported in a plant.



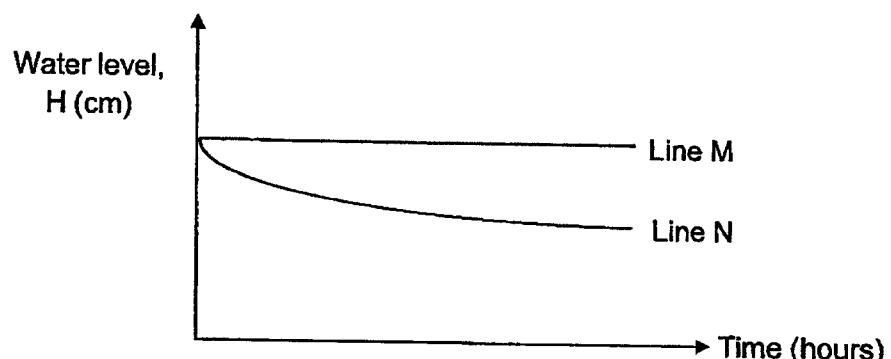
Which arrow X, Y or Z is wrong? Explain why. [1]

Marks: / 5

- 12 (b) Lily conducted an experiment using the set-ups as shown below. She removed the food carrying tubes in plant A. For plant B, she removed the water carrying tubes and food carrying tubes. She recorded the water level H at regular intervals. The layer of oil prevents the water from evaporating.



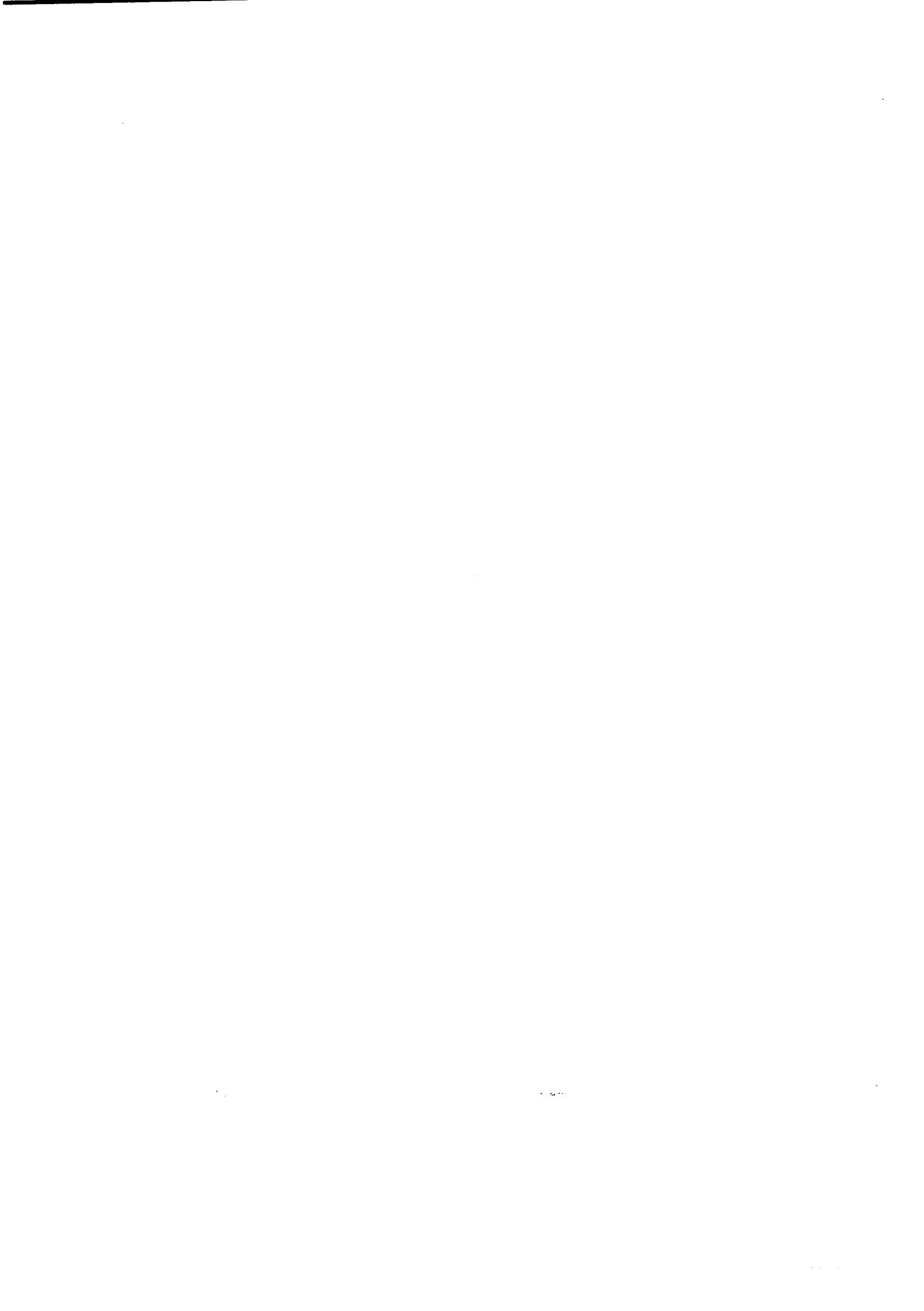
The results obtained are shown on the graph below.



Which line, M or N, represent the results obtained for the stem which has only the food carrying tubes removed? Explain your answer. [2]

Marks: / 2

~ END OF PAPER ~



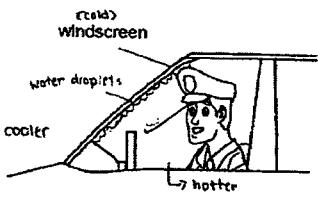
SCHOOL : MAHA BODHI PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : WA2 (2023)

CONTACT :

SECTION A

| Q 1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 |
|-----|----|----|----|----|----|----|----|
| 4 | 4 | 4 | 1 | 3 | 3 | 2 | 1 |

SECTION B

| | |
|------|--|
| Q9) | <p>a)</p>  <p>b) The warm water vapour in the car came into contact with the cooler windscreens, lost heat, and condensed into water droplets.</p> |
| Q10) | <p>a) The water in the cooling pad will gain from the hot air to evaporate. Hot air loses heat to the water and its temperature decreased.</p> <p>b) Liquid Y as it evaporates at a higher rate compared to liquid X, allowing more heat a to be absorbed by liquid Y in the air.</p> |
| Q11) | <p>a)i)nose ii)windpipe</p> <p>b)Allows oxygen to be taken in and carbon dioxide to be taken out.</p> <p>c)The rate of respiration will increase. When a small section of part K is removed, less oxygen will be taken in so the person needs to breath faster to get the same amount of oxygen.</p> |

Q12)

- a) Arrow Z. Food is made in the leaves and transported to other parts of the plants.
- b) Line N as the amount of the water decreases at the end of the experiment. Water can still be absorbed by the roots and transported to all parts of the plant.