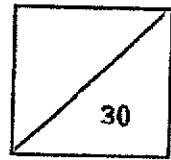


**Red Swastika School**  
**Primary 5 Science 2024**  
**Class Test 1**



Name: \_\_\_\_\_ ( ) Parent's Signature: \_\_\_\_\_

Class: Pr. 5 \_\_\_\_\_

Date: \_\_\_\_\_

Total time for sections A and B: 45 minutes

**Section A: Multiple – Choice Questions (9 x 2 = 18 marks)**

Choose the most suitable answer and shade its number in the OAS provided.

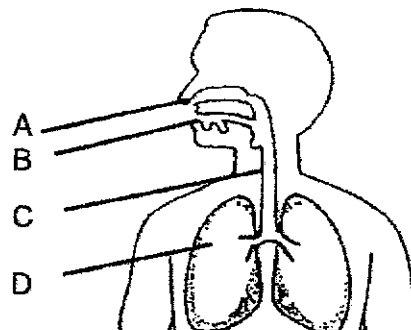
1. In the table below, A, B and C represent the characteristics of the given animals. A tick (✓) shows that the characteristic is present.

| Animal    | Characteristics |   |   |
|-----------|-----------------|---|---|
|           | A               | B | C |
| eagle     | ✓               | ✓ | ✓ |
| snake     |                 | ✓ |   |
| butterfly |                 | ✓ | ✓ |

Which of the following characteristics do A, B and C represent?

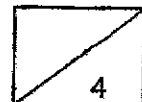
|     | A            | B         | C         |
|-----|--------------|-----------|-----------|
| (1) | Has scales   | Can fly   | Has legs  |
| (2) | Has scales   | Lays eggs | Can fly   |
| (3) | Has feathers | Can fly   | Lays eggs |
| (4) | Has feathers | Lays eggs | Can fly   |

2. The diagram below shows some organs in a human body.



In which part, A, B, C or D, does oxygen enter the blood?

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



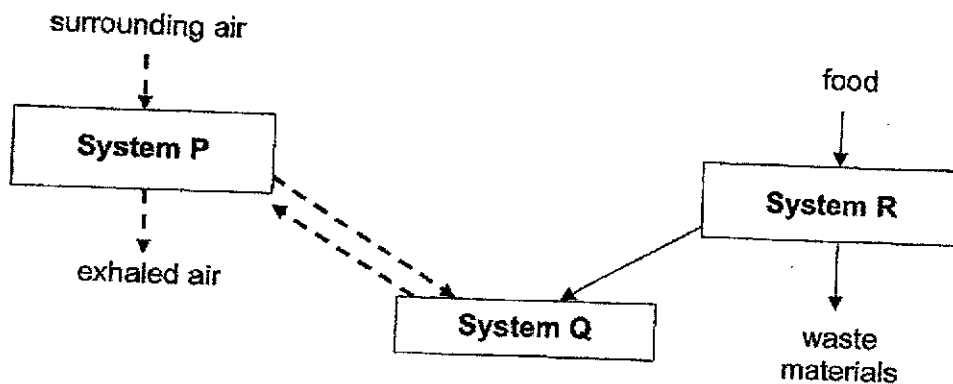


3. The pie chart shows the composition of gases in air that are taken in by a child.

| Gas            | Air taken in (%) | Air given out (%) |
|----------------|------------------|-------------------|
| Nitrogen       | 78               | 78                |
| Oxygen         | 21               | 16                |
| Carbon dioxide | Less than 1      | 4                 |
| Water vapour   | Less than 1      | 2                 |

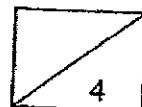
Based on the information above, which statement is correct?

- (1) More oxygen is given out by the body.  
 (2) Some oxygen is taken in by the body.  
 (3) All the nitrogen is taken in by the body.  
 (4) Carbon dioxide is not produced by the body.
4. The diagram below shows how food and various gases are transported in the human body.

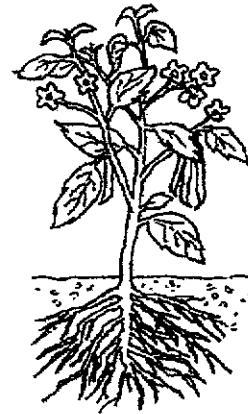
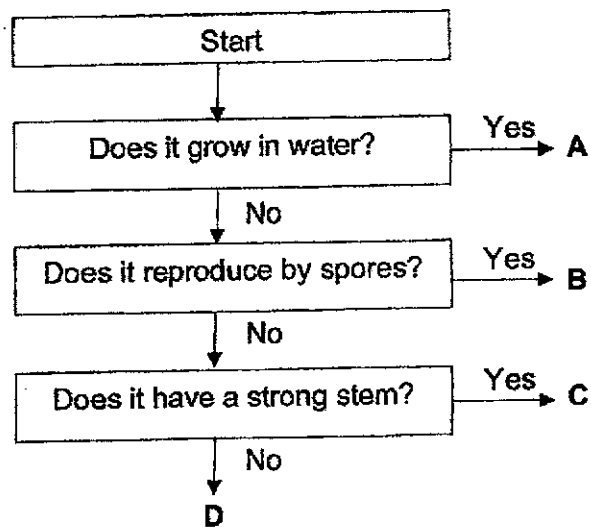


Which of the following best identifies P, Q and R?

|     | System P    | System Q    | System R    |
|-----|-------------|-------------|-------------|
| (1) | respiratory | circulatory | digestive   |
| (2) | respiratory | digestive   | circulatory |
| (3) | circulatory | digestive   | respiratory |
| (4) | digestive   | respiratory | circulatory |



5. Study the flow chart and plant Y shown below.

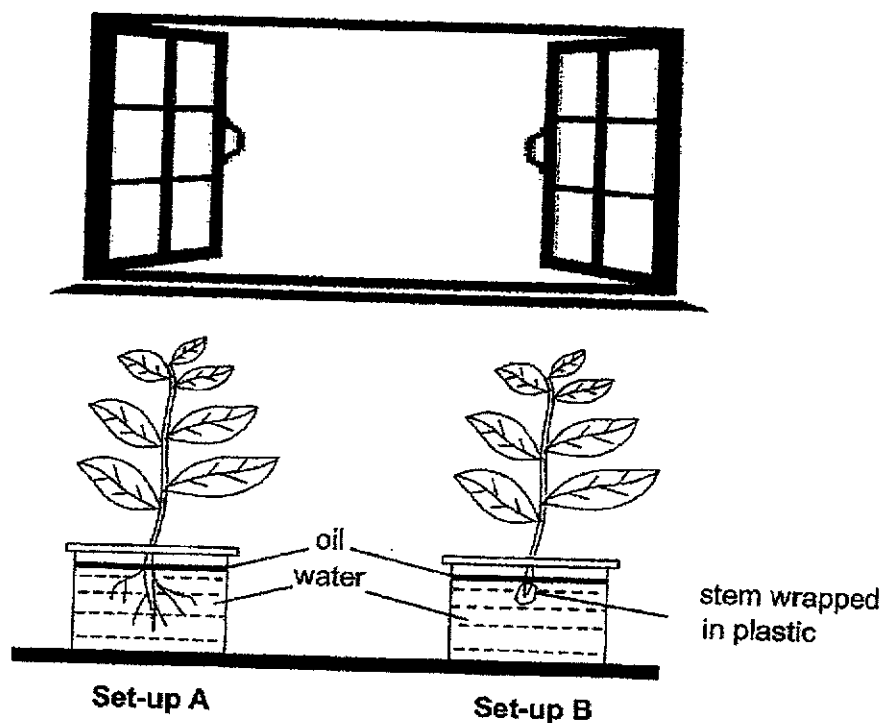


Plant Y

Which of the following letters correctly represents plant Y?

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

6. Mr Wong conducted an experiment. Both set-ups A and B contained the same volume of water and were placed next to a window.

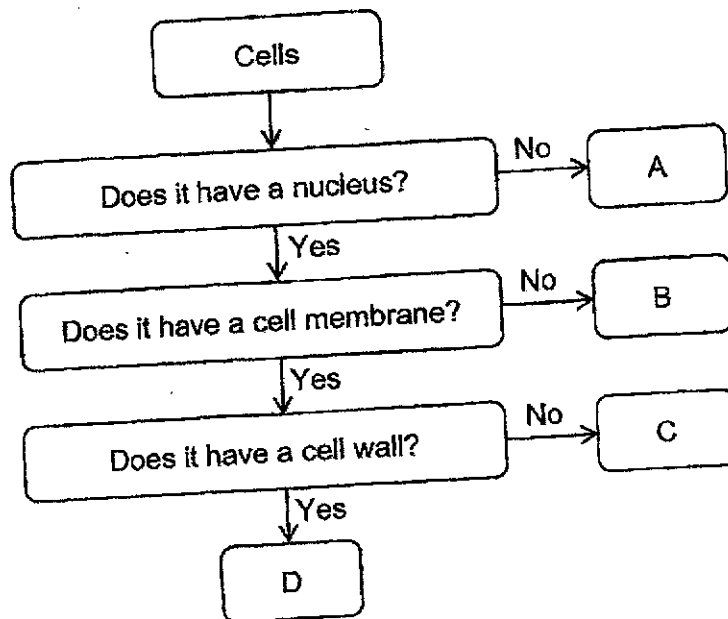


At the end of three days, it was observed that more water was left in set-up B.

What is the aim of Mr Wong's experiment?

- (1) To find out if roots are needed for plants to absorb water.
- (2) To find out if stem is needed for plants to absorb water.
- (3) To find out if leaves are needed for plants to absorb water.
- (4) To find out if presence of light affects the absorption of water.

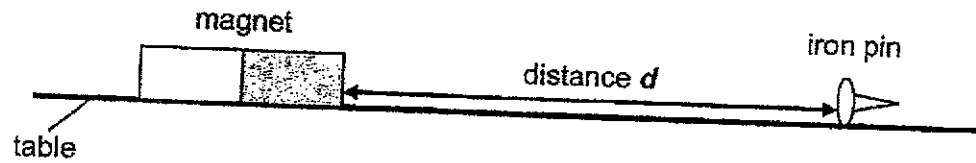
7. Study the flowchart carefully.



Which of the following cell, A, B, C or D is most likely to be taken from a leaf?

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

8. Jamee conducted an experiment using the set-up below.



She moved the magnet towards the iron pin and recorded the distance  $d$  at which the iron pin is attracted to the magnet. She repeated the experiment with two other magnets of the same size and the results are shown below.

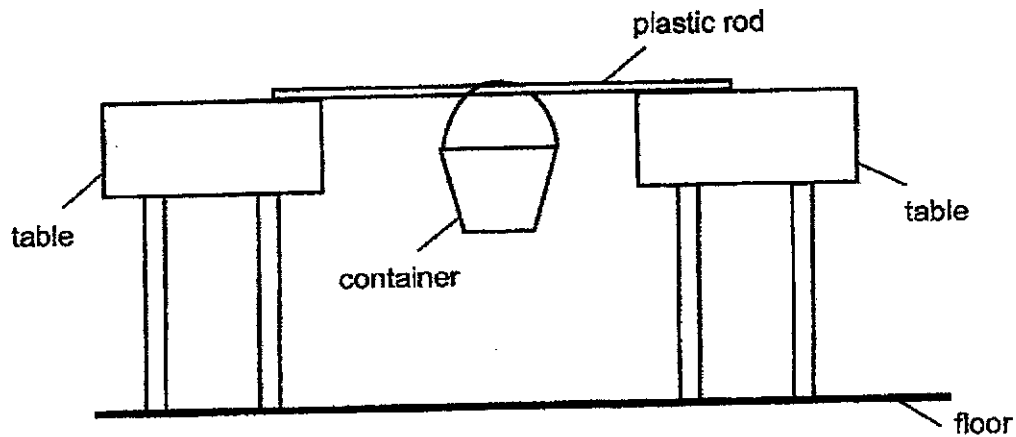
| magnet                                                                                          | distance $d$ (cm) |
|-------------------------------------------------------------------------------------------------|-------------------|
| <br><b>X</b>   | 10                |
| <br><b>Y</b>  | 6                 |
| <br><b>Z</b> | 14                |

Based on the results above, what can she conclude from her experiment?

- A: Magnet Y has the weakest magnetic strength.  
 B: Magnet X has a greater magnetic strength than magnet Y.  
 C: Magnet Z has the greatest magnetic strength.

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

9. Weiming conducted an experiment with 3 types of plastic rod, X, Y and Z, of the same thickness and length as shown in the diagram below.



He then put some weights into the container, one at a time until the plastic rod X broke. He repeated the experiment using plastic rods, Y and Z, one at a time, and recorded his observations in the table below.

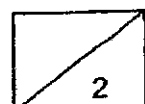
| Plastic | Number of weights needed to break the plastic |
|---------|-----------------------------------------------|
| X       | 15                                            |
| Y       | 5                                             |
| Z       | 10                                            |

Weiming made the following statements based on his experiment.

- A: Rod Y was the strongest.  
 B: Rod X held the greatest number of weights.  
 C: Rod Z was stronger than Rod Y but weaker than Rod X.

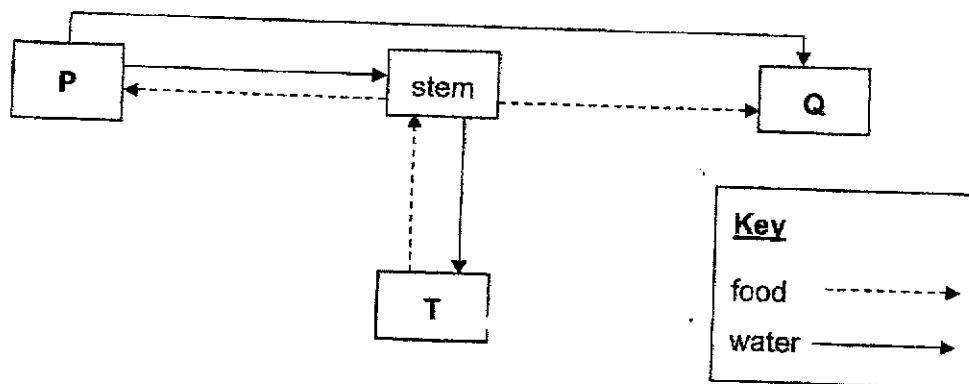
Which of his statements is/are correct?

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

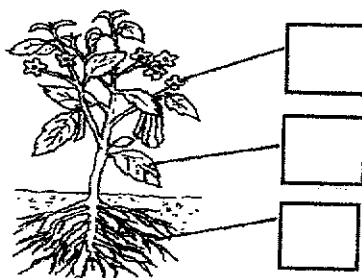


**Section B: Open-Ended Questions (12 marks)**  
**Answer all the questions in the space provided.**

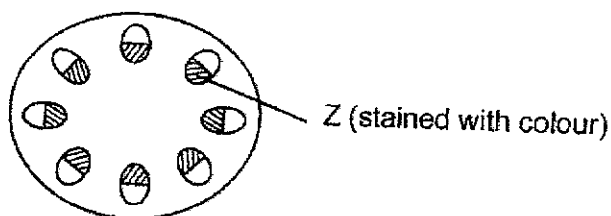
10. The diagram below shows how food and water are transported to and from different parts of a plant.



- (a) Write the letter P in the box below which correctly represents it. (1m)



The diagram below shows the cross section of a stem placed in a beaker of blue water for two days.



- (b) Which part of the plant transport system does part Z represent? (1m)

- (c) Name one substance transported by Z. (1m)

11. Beng Kong conducted an experiment to find out how the number of jumping jacks he did affected his breathing rate. He measured his breathing rate using a device.



He recorded his results in the table below.

|                         | Breathing Rate (units per min) |                        |                        |                        |
|-------------------------|--------------------------------|------------------------|------------------------|------------------------|
|                         | Before jumping jacks           | After 20 jumping jacks | After 40 jumping jacks | After 60 jumping jacks |
| 1 <sup>st</sup> attempt | 15                             | 25                     | 30                     | 40                     |
| 2 <sup>nd</sup> attempt | 16                             | 26                     | 31                     | 41                     |
| 3 <sup>rd</sup> attempt | 17                             | 27                     | 32                     | 42                     |

- (ai) Based on the records in the table above, state the relationship between the number of jumping jacks and his breathing rate. (1m)

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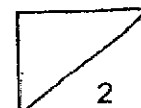
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- (aii) In the human respiratory system, describe how oxygen in the environment reach his lungs? (1m)

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11. In the evening, Beng Kong went for a jog at the park. He measured his heart rate using a device. The graph below shows his heart rate.



- (b) Explain the increase in Beng Kong's heart rate from 1715 to 1730 hours. (2m)

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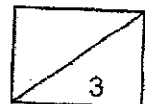
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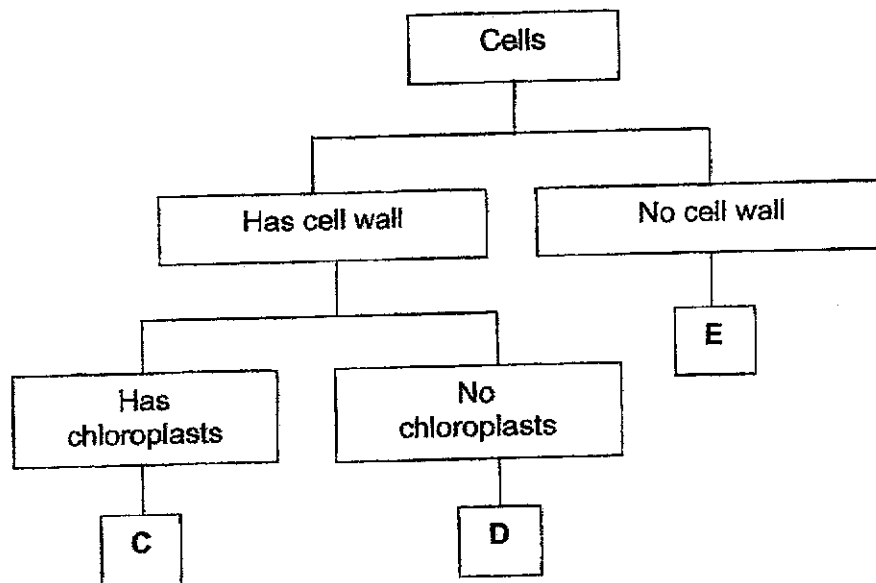
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- (c) What time did Beng Kong stop jogging? (1m)

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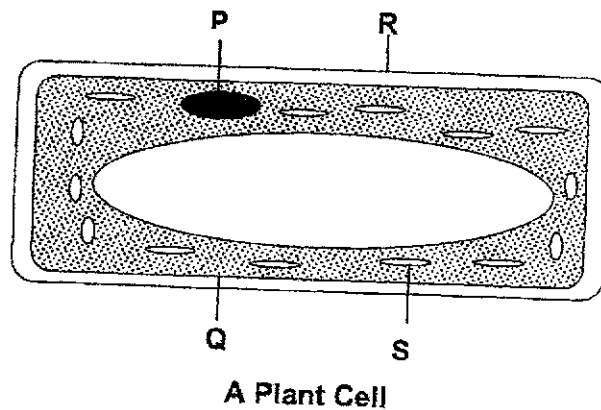
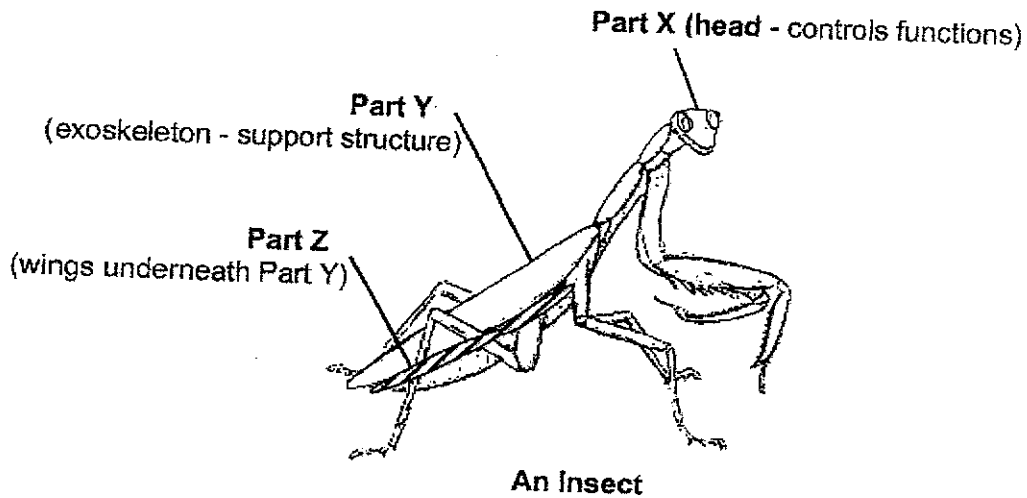
12. Study the chart below.



(a) Complete the table by writing **C**, **D** or **E** in the correct space provided.  
Each letter can only be used once. (2m)

| cheek cell | leaf cell | root cell |
|------------|-----------|-----------|
|            |           |           |

12. Daryl came across an insect in his school as shown below.



He compared the insect to a plant cell.

- (b) Which parts, **P**, **Q**, **R** or **S** of the plant cell shares the same function as that of the animal parts, **X** and **Y**? (1m)

(i) **Part X** : \_\_\_\_\_

(ii) **Part Y**: \_\_\_\_\_

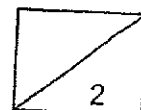
- (c) State the function of Part Y. (1m)

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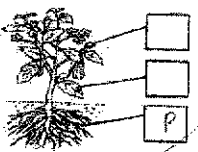
**End of Paper ☺**  
**Please check your answers.**





SCHOOL : RED SWASTIKA PRIMARY SCHOOL  
 LEVEL : PRIMARY 5  
 SUBJECT : SCIENCE  
 TERM : 2024 WA1

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 |
|----|----|----|----|----|----|----|----|----|
| 4  | 4  | 2  | 1  | 3  | 1  | 4  | 4  | 3  |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q10 | <p>a)</p>  <p>b) Water-carrying tubes.<br/>c) Water</p>                                                                                                                                                                                                                                                                                             |
| Q11 | <p>ai) The more jumping jacks Beng Kong did, the higher his breathing rate became.<br/>         aii) Air enters the nose, then travels down to the wind pipe and then to the lungs. Oxygen is absorbed at the lungs.<br/>         b) His heart rate increases because the heart pumps faster to transport blood with digested food and oxygen more quickly to all parts of the body to produce more energy.<br/>         c) 1745</p> |
| Q12 | <p>a) E, C, D<br/>         b) i) P ii) R<br/>         c) c) Part Y gives the insect its shape</p>                                                                                                                                                                                                                                                                                                                                    |

