

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

30

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.

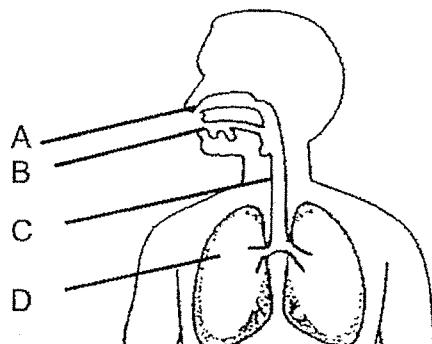
1. In the table below, A, B and C represent the characteristics of the given animals. A tick (✓) shows that the characteristic is present.

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

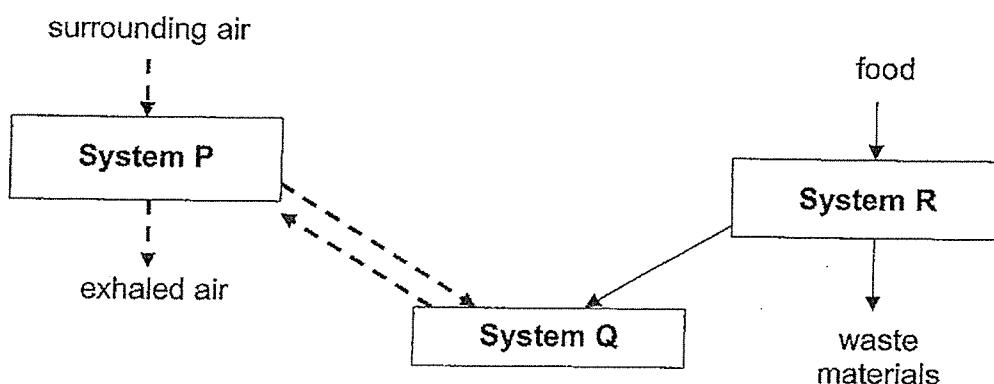
3. The pie chart shows the composition of gases in air that are taken in by a child.

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.

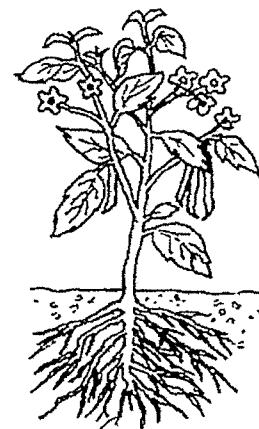
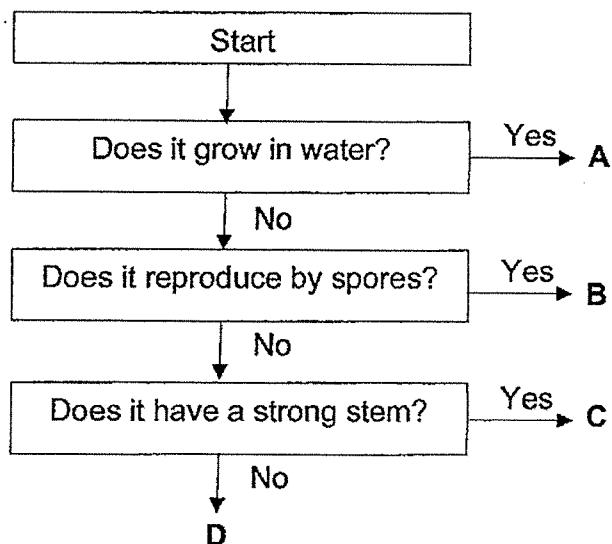
4. The diagram below shows how food and various gases are transported in the human body.



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.

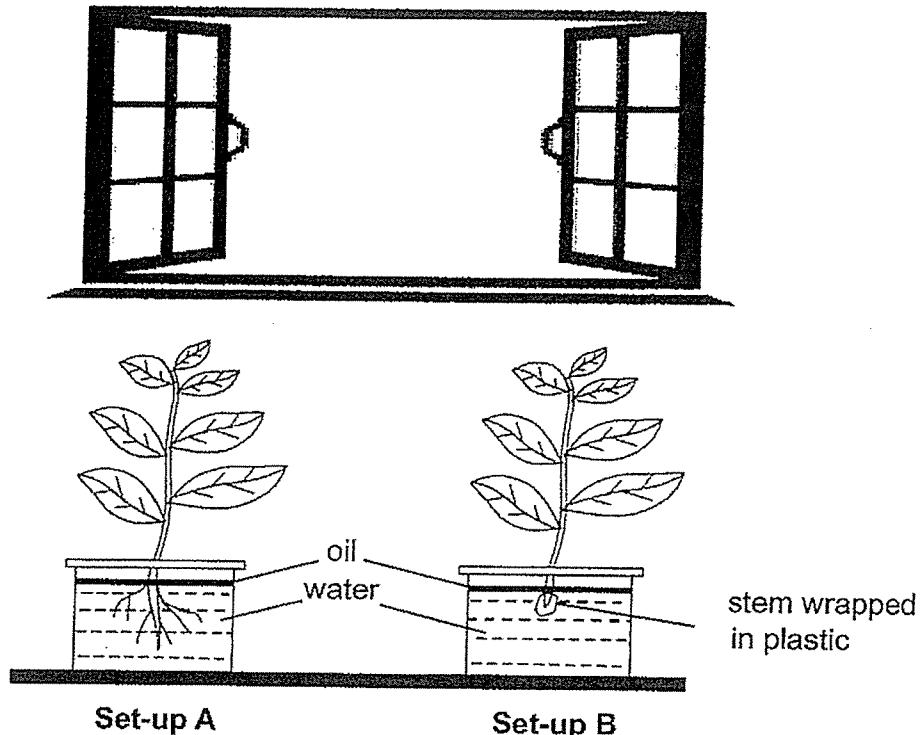


Plant Y

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.

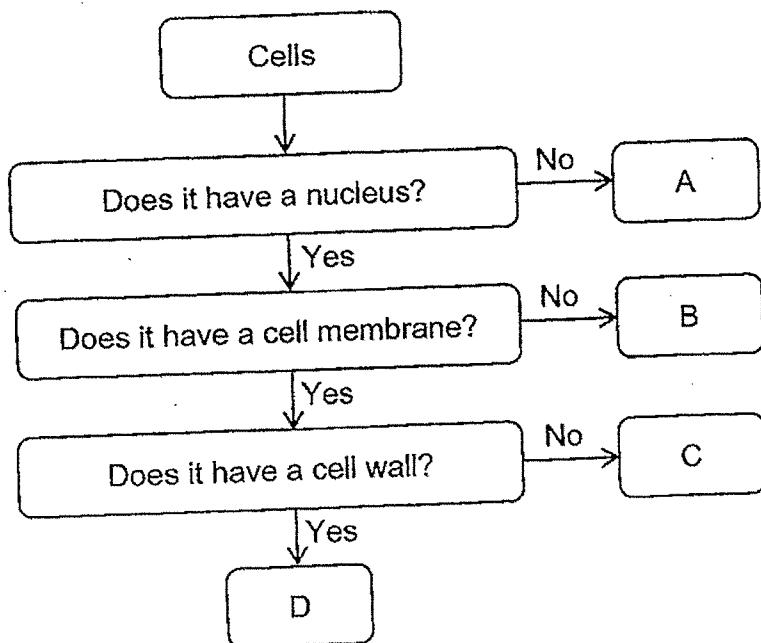


At the end of three days, it was observed that more water was left in set-up B.

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.

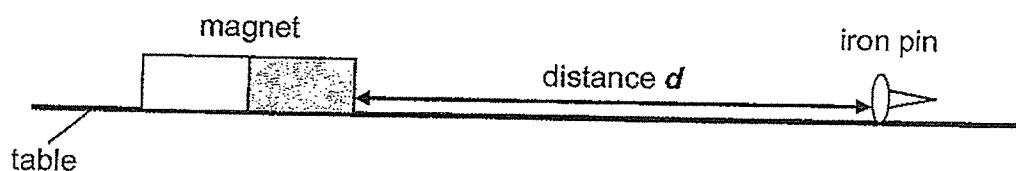
7. Study the flowchart carefully.



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.



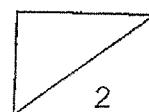
She moved the magnet towards the iron pin and recorded the distance  $d$  at which the iron pin is attracted to the magnet. She repeated the experiment with two other magnets of the same size and the results are shown below.

magnet	distance $d$ (cm)
X	10
Y	6
Z	14

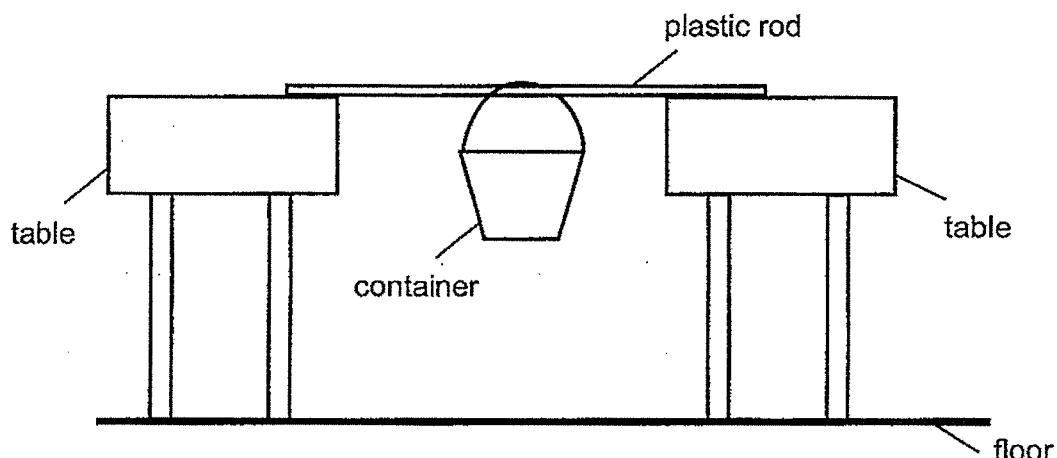
Based on the results above, what can she conclude from her experiment?

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.

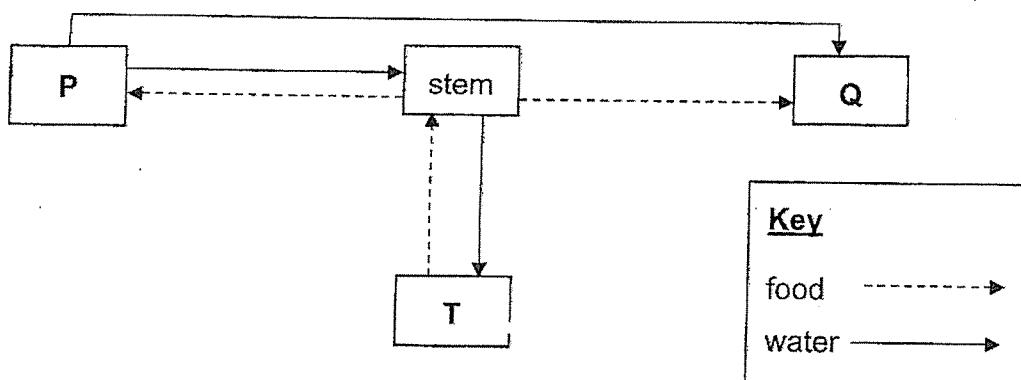
Which of his statements is/are correct?

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

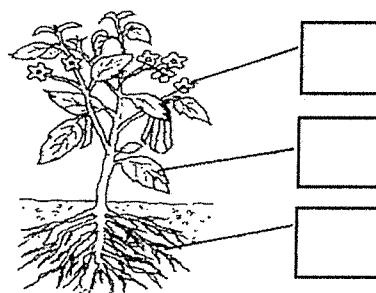
**Section B: Open-Ended Questions (12 marks)**

Answer all the questions in the space provided.

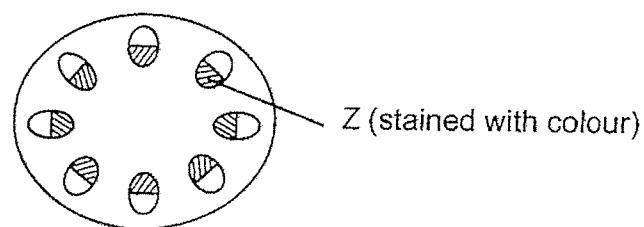
10. The diagram below shows how food and water are transported to and from different parts of a plant.



(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)

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

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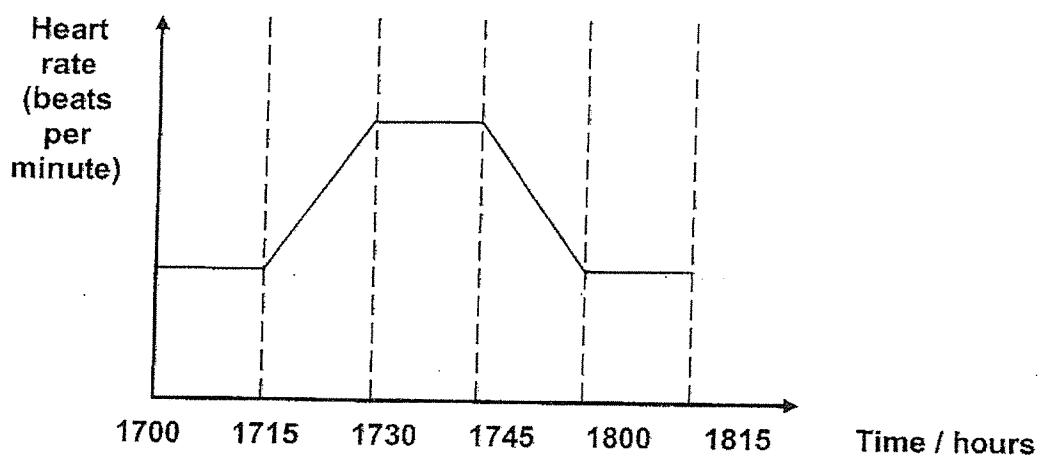
(aii) In the human respiratory system, describe how oxygen in the environment reach his lungs? (1m)

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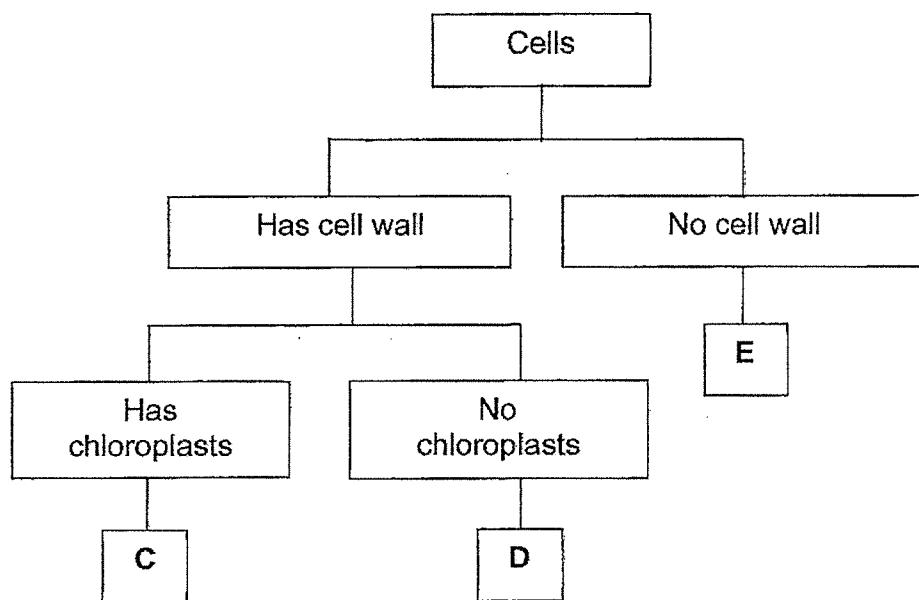
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(c) What time did Beng Kong stop jogging? (1m)

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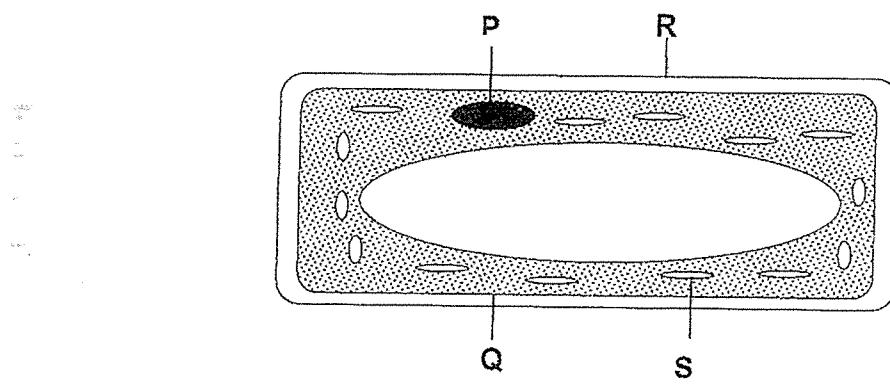
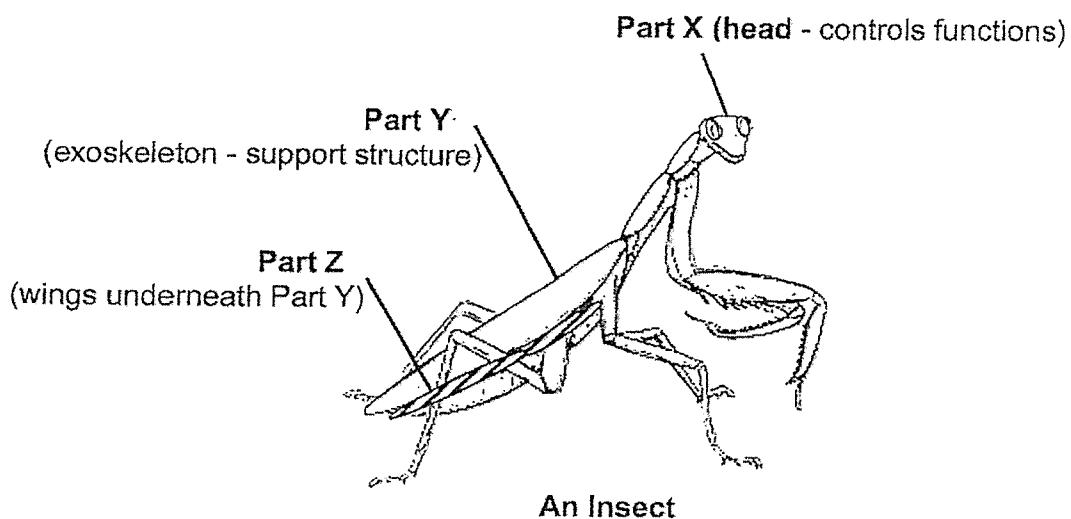
12. Study the chart below.



(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.**

# ANSWER KEY

**YEAR** : 2024  
**LEVEL** : PRIMARY 5  
**SCHOOL** : RED SWASTIKA  
**SUBJECT** : SCIENCE  
**TERM** : CLASS TEST 1

## SECTION A

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

## SECTION B

Q10	a)		b) Part Z represents the water-carrying tubes. c) Water is transported by part Z.						
Q11	ai) The greater the number of jumping jacks, the greater his breathing rate was. aii) When Beng Kong breathes through his nose, the air will go through his windpipe and into his lungs, oxygen is then absorbed. b) Beng Kong started jogging at 1715 and his heart rate increased until 1730 because his heart needed pump blood containing oxygen, water and digested food faster to other parts of his body for a faster rate of respiration to release more energy to jog. c) Beng Kong stopped jogging at 1745.								
Q12	a)	<table border="1"> <tr> <td>Cheek cell</td> <td>Leaf cell</td> <td>Root cell</td> </tr> <tr> <td>E</td> <td>C</td> <td>D</td> </tr> </table>	Cheek cell	Leaf cell	Root cell	E	C	D	b) i. Part X : P    ii. Part Y : R c) part Y supports the insect's body shape and protects the insect's wings.
Cheek cell	Leaf cell	Root cell							
E	C	D							

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END

