



Nan Hua Primary School  
Primary 5 Science  
Term 2 Weighted Assessment 2023

Name: \_\_\_\_\_ ( )

| Marks      |     |
|------------|-----|
| Section A: | /10 |
| Section B: | /10 |
| Total:     | /20 |

Class: Primary 5/ \_\_\_\_\_

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

Duration: 30 minutes

Parent's Signature

Answer all questions

**Section A: (5 x 2 marks = 10 marks)**

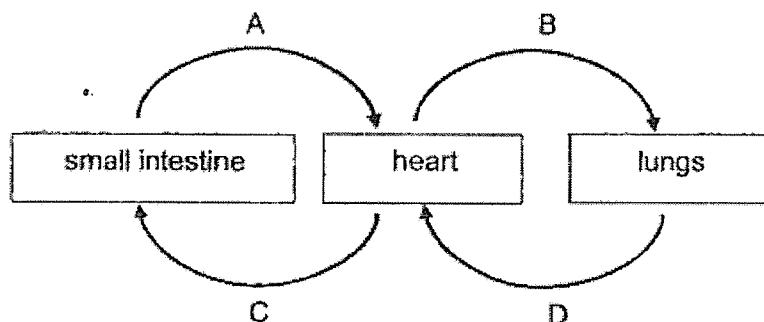
For each question from 1 to 5, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write your answer in the bracket provided.

1 Which statement about the human or plant transport system is correct?

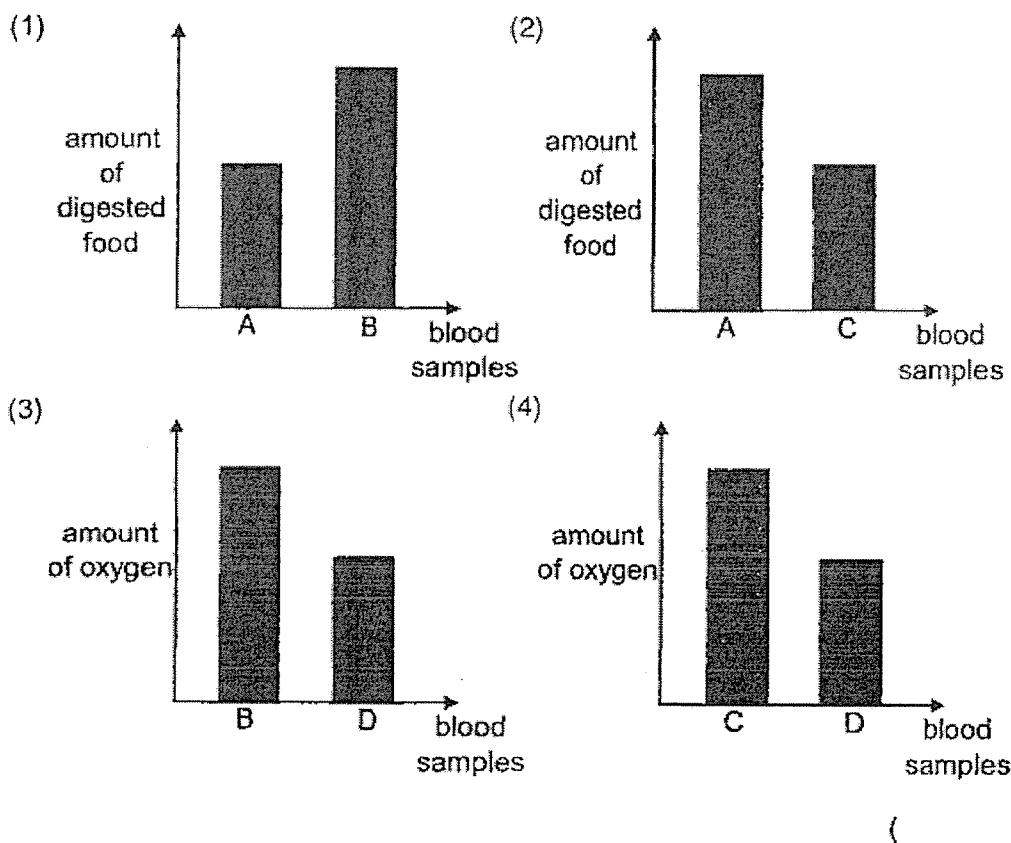
- (1) In the plant transport system, both food and water are transported in the same direction around the plant.
- (2) In the plant transport system, both food and water are transported around the plant through the same tube.
- (3) In the human transport system, the heart pumps oxygen, digested food and water around the body.
- (4) In the human transport system, digested food, water and oxygen are transported around the body in the blood through blood vessels.

( )

2 The diagram below shows the flow of blood in the human circulatory system represented by the arrows, A, B, C and D.

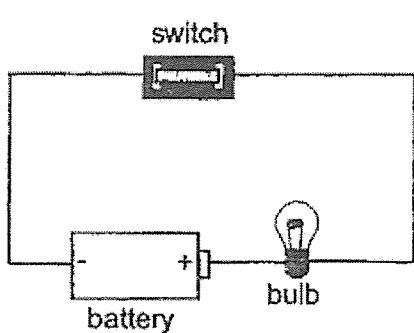


The same amount of blood was taken from A, B, C and D. Which graph shows the correct comparison of substances in the blood samples?

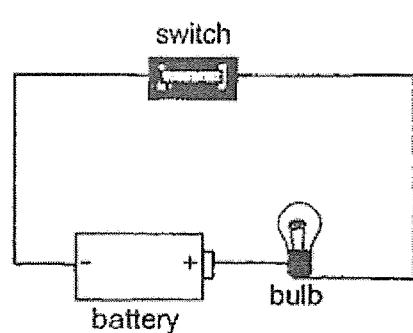


3. Study the following circuits. In which of the following circuits will the bulb light up when the switch is closed?

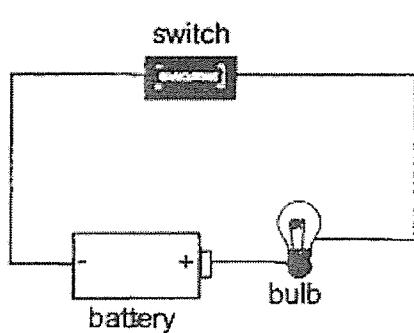
(1)



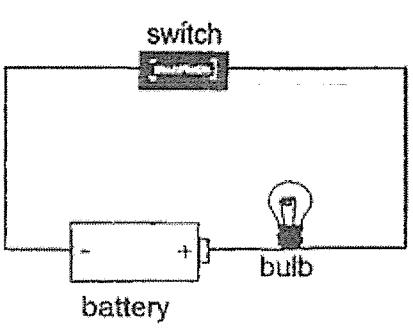
(2)



(3)

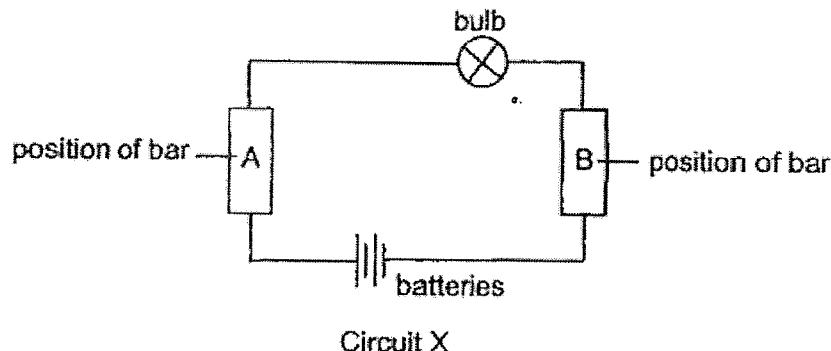


(4)



(        )

4 Sandy set up an electrical circuit as shown below. She wanted to find out if bars V, W, X, Y and Z were electrical conductors or insulators.



She placed the bars at positions A and B and recorded her observations in the table below.

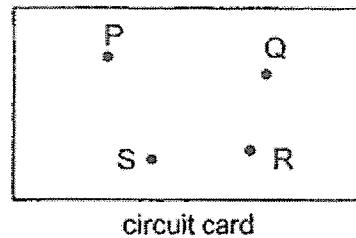
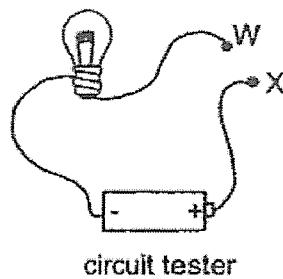
| Position A | Position B | Will the bulb light up? |
|------------|------------|-------------------------|
| V          | W          | Yes                     |
| X          | Y          | No                      |
| V          | X          | Yes                     |
| W          | Z          | No                      |

Based on the table, which of the following bars, V, W, X, Y and Z are classified correctly?

|     | Electrical conductors | Electrical insulators |
|-----|-----------------------|-----------------------|
| (1) | V, W                  | X, Y, Z               |
| (2) | V, X                  | W, Y, Z               |
| (3) | V, W, X               | Y, Z                  |
| (4) | V, W, X, Y            | Z                     |

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5 Jessie used a circuit tester to test a circuit card. She would connect points W and X of the circuit tester to any two metal pins, P, Q, R and S on the circuit card and observe if the light bulb lights up.

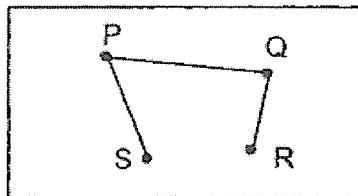


She recorded her results in the table below.

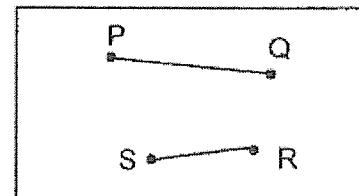
| Metal pins connected | Will the light bulb light up? |
|----------------------|-------------------------------|
| P and Q              | Yes                           |
| P and R              | Yes                           |
| Q and S              | No                            |
| S and R              | No                            |

Which circuit card, with the correct connecting wires, was tested by Jessie?

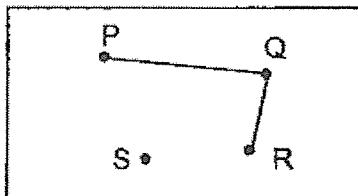
(1)



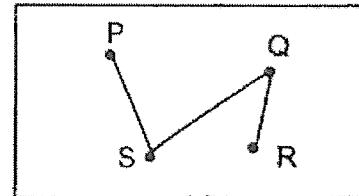
(2)



(3)



(4)

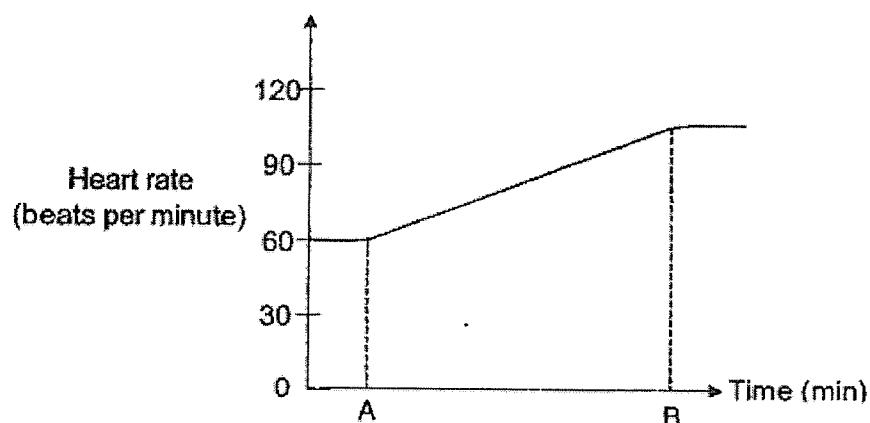


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**Section B: Structured questions (10m)**

For questions 6 to 8, write your answers in the space provided. The number of marks available is shown in brackets [ ] at the end of each question or part question.

6 The graph below showed Jessica's heart rate before and during exercise.



Explain, in terms of substances transported, the change in Jessica's heart rate during exercise from time A to B. [2]

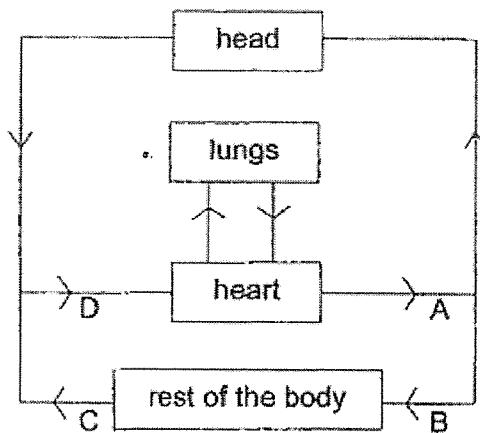
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7 Study the diagram below. The arrows show how blood flows in certain parts of the body.



(a) The blood at C contains a greater amount of a substance than at B. Name this substance. [1]

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(b) Draw a cross (X) on the diagram above to indicate the blood vessel that contains the most amount of oxygen. [1]

(c) Why is the amount of oxygen in the blood greater at A than at D? [2]

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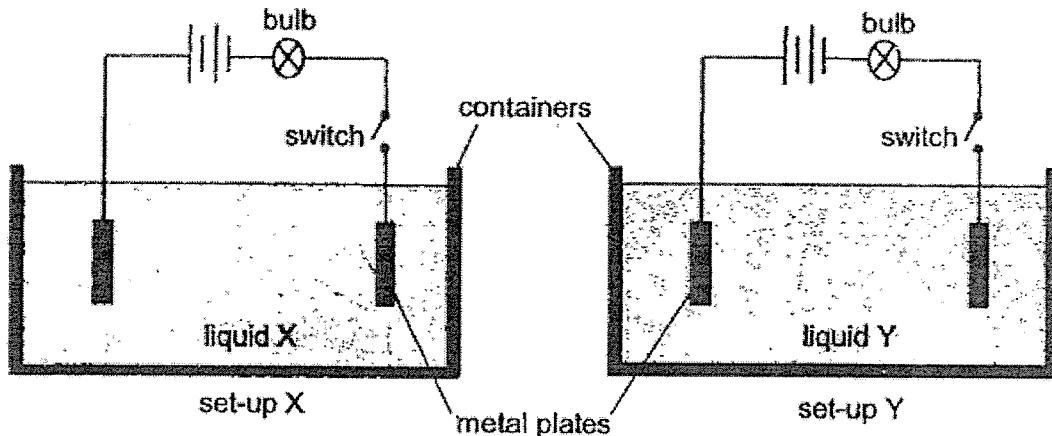
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|       |   |
|-------|---|
| Score |   |
|       | 4 |

8 Raymond set up two experiments, set-up X and set-up Y as shown below.



Raymond filled the containers in the two set-ups with different liquids, X and Y. He closed both the switches in the two set-ups and observed the brightness of the bulbs in the table below.

| Brightness of bulb when switch was closed |             |
|---|-------------|
| Liquid X                                  | dim         |
| Liquid Y                                  | very bright |

(a) State the aim of his experiment. [1]

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(b) What conclusion could he make from the two experiments he had conducted? Explain your answer. [2]

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(c) Which variable(s) must be kept the same to ensure a fair experiment?

Put a tick ( ✓ ) in the box provided.

[1]

|      | Variable                   | Kept the same |
|------|----------------------------|---------------|
| (i)  | Type of batteries          |               |
| (ii) | Type of metal plates       |               |
| (ii) | Type of liquid             |               |
| (iv) | The brightness of the bulb |               |

End of paper

|       |   |
|-------|---|
| Score |   |
|       | 1 |

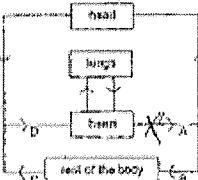


YEAR : 2023  
 LEVEL : PRIMARY 5  
 SCHOOL: NAN HUA PRIMARY SCHOOL  
 SUBJECT : SCIENCE  
 TERM : WA2

SECTION A:

|    |   |    |   |    |   |
|----|---|----|---|----|---|
| Q1 | 4 | Q3 | 2 | Q5 | 3 |
| Q2 | 2 | Q4 | 3 |    |   |

SECTION B:

|                      |   |                   |   |                      |   |
|----------------------|---|-------------------|---|----------------------|---|
| Q6                   | During exercise, her heart will pump blood containing oxygen, digested food faster through the blood vessels to all parts of the body to release more energy carbon dioxide waste materials from the body faster.   |                   |   |                      |   |
| Q7                   | <p>a) carbon dioxide</p> <p>b)</p>  <p>c) Blood at A has absorbed/ received oxygen from the lungs oxygen and blood from the lungs to the heart at A and is transported to the rest of the body through the blood vessels by the pumping action of the heart. Blood at D flows from the different parts of the body back to the heart and most of the oxygen has been used by the body's different parts of the body during respiration to release energy.</p> |                   |   |                      |   |
| Q8                   | <p>a) He is trying to find out whether the type of liquid would effect the brightness of the bulb. He is trying to find out which liquid is a better conductor of electricity.</p> <p>b) Liquid Y is a better electric conductor of electricity than Liquid X. Liquid Y allowed more electric current to flow through the circuits of liquid.</p> <p>c)</p> <table border="1"> <tr> <td>Type of batteries</td> <td>✓</td> </tr> <tr> <td>Type of metal plates</td> <td>✓</td> </tr> </table>  | Type of batteries | ✓ | Type of metal plates | ✓ |
| Type of batteries    | ✓   |                   |   |                      |   |
| Type of metal plates | ✓   |                   |   |                      |   |

