**Nan Hua Primary School**
**Primary 6 Science**
**Term 1 Timed Practice 2025**

| Marks | |
|---|---|
| Section A: | /16 |
| Section B: | /14 |
| **Total:** | **/30** |

**Name:** _____( )

**Class:** Primary 6S_____

**Date:** _____

**Duration: 35 minutes**

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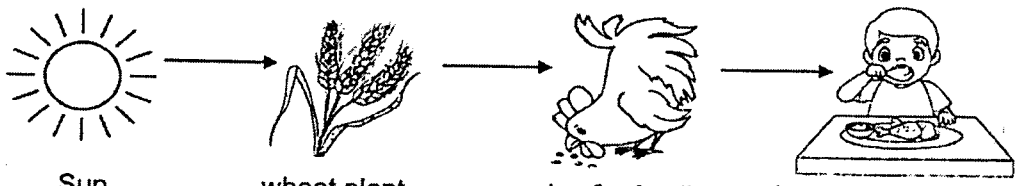
**Answer all questions.**

**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) and write your answer in the brackets provided.

1 Study the energy chain.




Based on the diagram above, which of the following statements is true?

(1) The chicken gets its energy directly from the Sun. X

(2) The energy from the Sun is passed on to the wheat plant.

(3) The boy does not get his energy from the chicken he eats.

(4) The energy from the Sun is not passed on from one living thing to another.

( )

This booklet consists of **12** printed pages.



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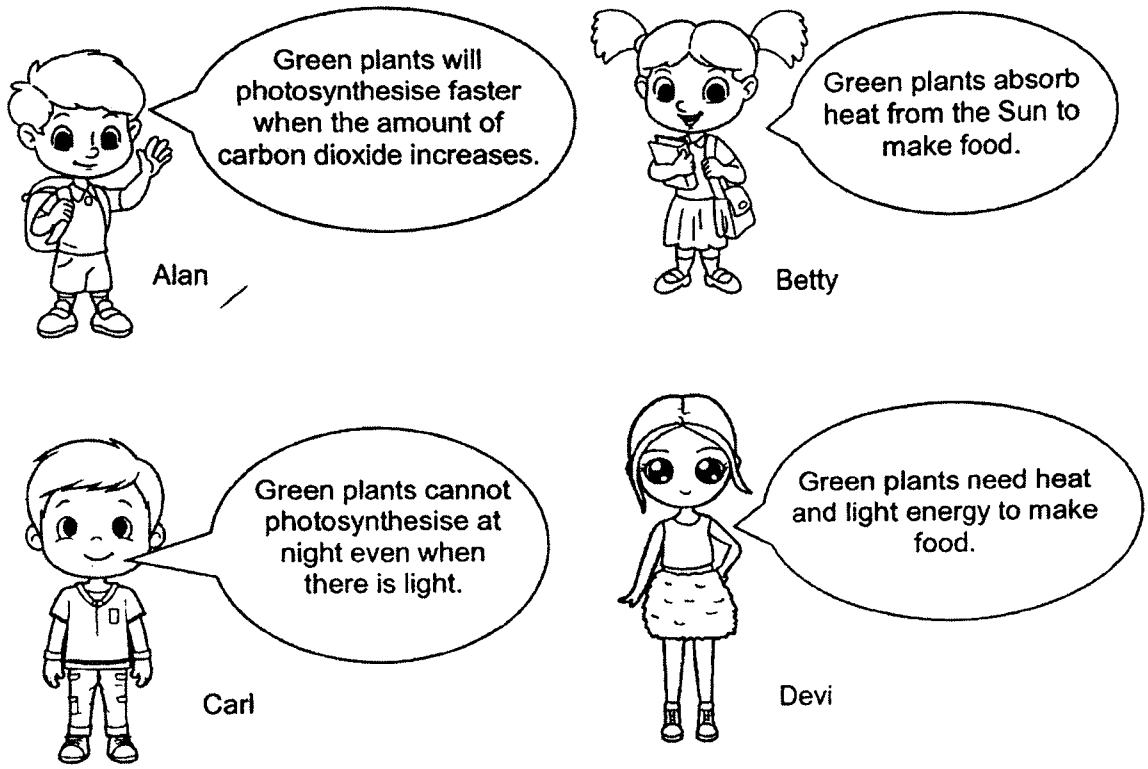
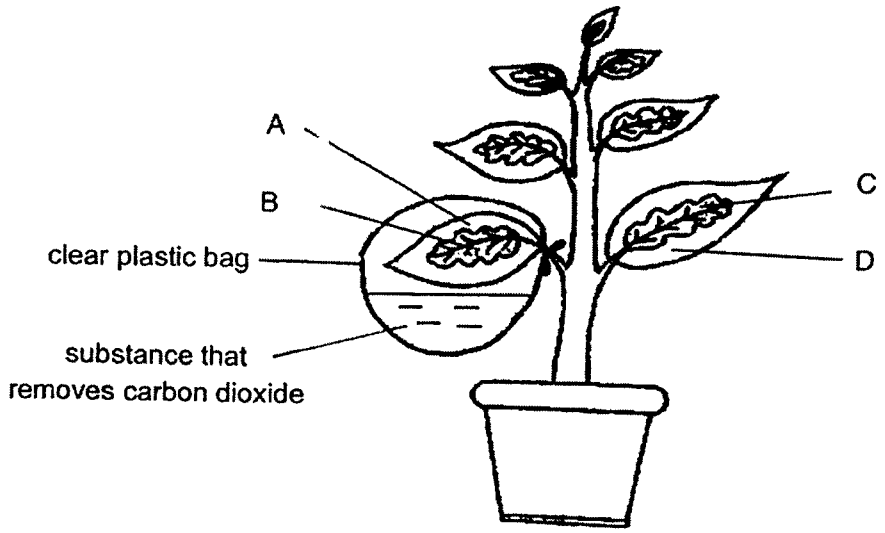
2 Four students made some statements about photosynthesis.




Which student made the correct statement?

(1) Alan
(2) Betty
(3) Carl
(4) Devi ( )

3 Lilian set up an experiment to find out whether carbon dioxide is necessary for photosynthesis. She used a plant which had leaves with green areas in the middle, labelled B and C, and white areas around the edges, labelled A and D, as shown below.




Which of the following two areas should Lilian compare to show that carbon dioxide is needed for photosynthesis?

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



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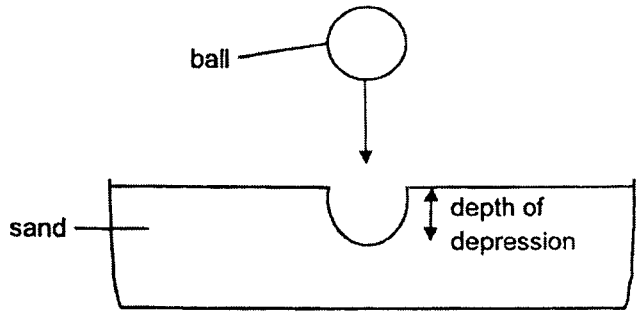
4 Joel dropped four identical balls, A, B, C and D, into a tray of sand from different heights.



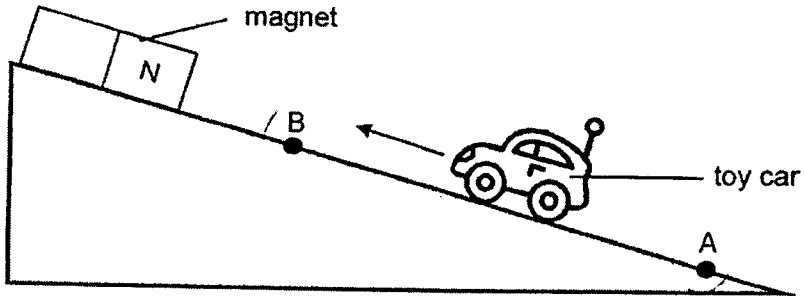

He then measured and recorded the depth of the depression made by the balls in the table below.

| Ball | Depth of depression (mm) |
|---|---|
| A | 8 |
| B | 4 |
| C | 15 |
| D | 10 |

Which ball was dropped from the highest height above the sand?

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

5 A toy car made of iron was moving up a slope due to the attraction of a magnet placed at the top of the slope.




Which of the following shows the change in kinetic energy and potential energy of the toy car as it moved from point A to point B?

| | kinetic energy | potential energy |
|---|---|---|
| (1) | decrease | decrease |
| (2) | decrease | increase |
| (3) | increase | decrease |
| (4) | increase | increase |

( )



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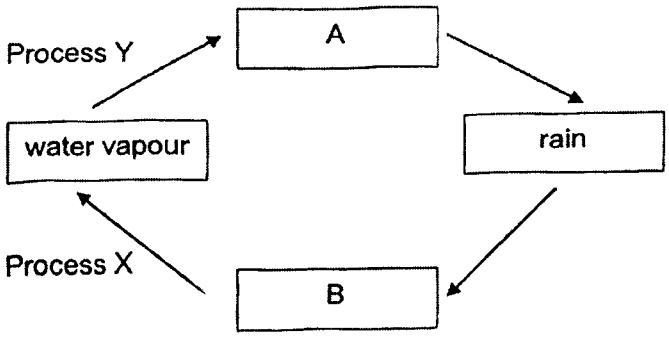
6 The diagram shows the water cycle.




Which of the following is correct?

| | A | B | Process X | Process Y |
|---|---|---|---|---|
| (1) | rivers | clouds | evaporation | condensation |
| (2) | rivers | clouds | condensation | evaporation |
| (3) | clouds | rivers | condensation | evaporation |
| (4) | clouds | rivers | evaporation | condensation |

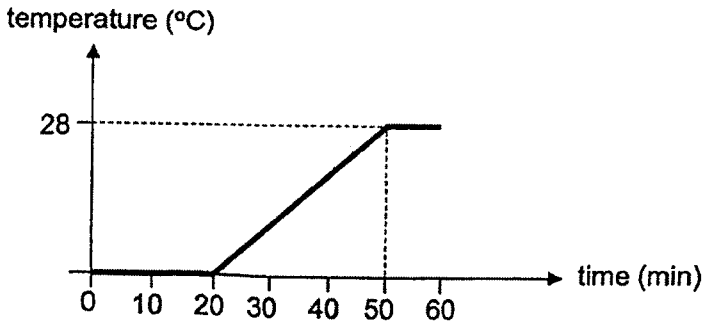
( )

7 Substance X is a solid at 25 °C and a gas at 85 °C.
Which of the following is possible?

| | Melting point (°C) | Boiling point (°C) |
|---|---|---|
| (1) | 0 | 80 |
| (2) | 0 | 100 |
| (3) | 30 | 80 |
| (4) | 30 | 100 |

( )

8 The graph below shows the change in temperature of a block of melting ice.




Based on the graph, how long did it take for the water to reach 28 °C after the ice had melted completely?

(1) 20 minutes
(2) 30 minutes
(3) 50 minutes
(4) 60 minutes ( )

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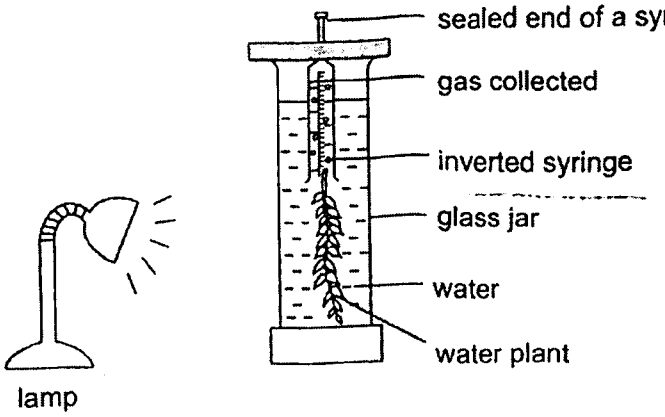
**Section B: Structured questions (14 marks)**

For questions 9 to 12, 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.

9 Nelly set up the experiment below. She wanted to find out how (distance between the lamp and the water plant affects the rate of photosynthesis, She placed the set-up in a dark room under a lamp.




(a) State the gas that was collected in the syringe. [1]

_____

Nelly observed her set-up every 30 minutes and recorded her results in the table below.

(b) Write the most suitable heading for her results in the table below. [1]

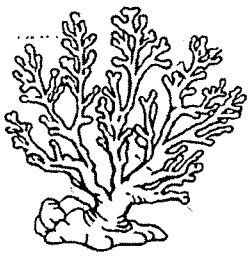
| Distance between lamp and water plant (cm) | 60 | 50 | 40 | 30 |
|---|---|---|---|---|
| _____ | 0.1 | 0.4 | 0.9 | 1.3 |

(c) Nelly conducted the experiment in a dark room. Explain why this helped to make the experiment a fair one. [1]

_____

_____

The diagram below shows organism H that can make food and lives in the sea.



The table below shows the conditions at different parts of the sea where organism H lives.

| Part of the sea | Depth below the water surface (m) | Amount of light received (units) |
|---|---|---|
| X | 200 | 38 |
| Y | 50 | 1650 |
| Z | 10 | 4500 |

**(d)** In which part of the sea, X, Y or Z, would the least number of organism H be found? Explain your answer. [1]

_____

_____

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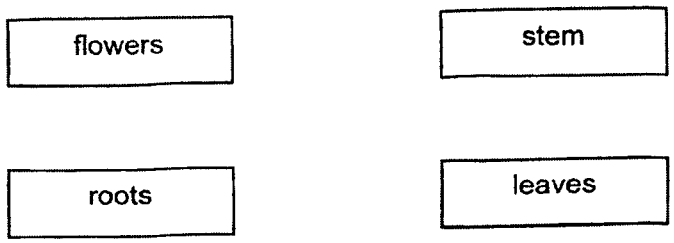
| Score | /4 |
|---|---|

10 Four parts of a plant are shown below.




(a) Draw arrows ( → ) in the diagram above to show how food is transported to the different parts of a plant. [1]

(b) Describe the process of photosynthesis in green plants. [1]

_____

_____

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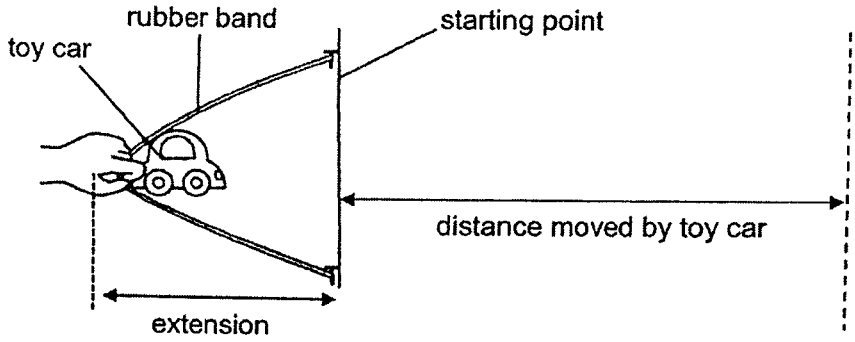
| Score | 2 |
|---|---|

**11** Joshua placed a toy car in the middle of a rubber band and used it to pull the rubber band backwards. He then released the rubber band and measured the distance moved by the toy car.




He repeated the experiment with different extension lengths and recorded his results in the table as shown below.

| Extension (cm) | 4 | 6 | 8 |
|---|---|---|---|
| Distance moved (cm) | 10 | 14 | 20 |

**(a)** State the energy that the stretched rubber band has. [1]

_____

**(b)** What is the relationship between the extension of the rubber band and the distance moved by the toy car [1]

_____

_____

**(c)** Name one variable that should be kept constant in this experiment. [1]

_____

**(d)** What could Joshua do to obtain more reliable results? [1]

_____

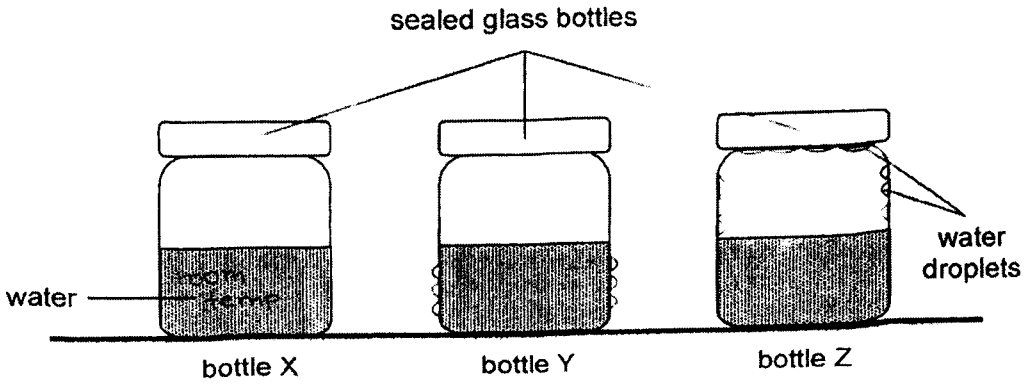
_____

(Go on to the next page)



Score 4

12 Jaden filled 3 identical glass bottles, X, Y and Z, with water of different temperatures to the same level in each bottle. He left them sealed on the table. He observed water droplets form on the outer surface of bottle Y and the inner surface of bottle Z. For bottle X, no water droplets were formed.




**(a)** Fill in the boxes below with X, Y or Z, starting from the bottle containing water with the lowest temperature. [1]

**Bottle containing water with the lowest temperature** → **Bottle containing water with the highest temperature**

**(b)** Explain how water droplets were formed on the inner surface of bottle Z. [2]

_____

_____

_____

**(c)** The water droplets formed on the outer surface of bottle Y cannot be seen after a while. Explain why. [1]

_____

_____

**End of Paper**

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

SCHOOL : NAN HUA PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : SCIENCE
TERM : WA1 2025

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

| | |
|---|---|
| Q9) | a) oxygen<br>b) Amount of gas collected<br>c) Conduct his experiment at least 3 times to check that the results are consistent and to find the average result.<br>d) X. Organism H needs light to make food through photosynthesis but X receives the least amount of light , so it makes the least amount of food. |
| Q10) | a)flowers ← stem<br>roots ↙ leaves<br>b)Photosynthesis is a process where chlorophyll in green plants trap light, use water and carbon dioxide to make food and produce oxygen. |
| Q11) | a) Elastic potential energy.<br>b) When the extension of the rubber band increases, the distance moved by the toy car increases.<br>c) The type of toy car.<br>d) Repeat the experiment a few more times and calculate the average of the results. |
| Q12) | a) Y , X , Z<br>b) The hot water in Z gained heat and evaporated into water vapour. The warm water vapour then rose up and contacted the cooler |

| | |
|---|---|
| | inner surface of bottle Z, lost heat and condensed into water droplets.<br>c) The water droplets on the outer surface of Y gained heat from the surroundings and evaporated into water vapour. |