**Nan Hua Primary School**
**Primary 5 Science**
**Term 3 Weighted Assessment 2021**

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

**Name:** _____ (  )

**Class:** Primary 5 _____

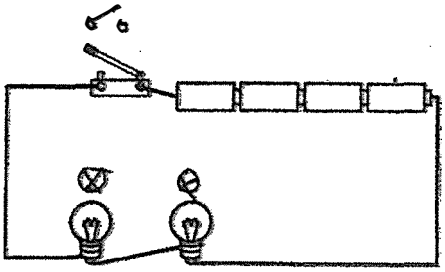
**Date:** 01/09/2021

**Duration: 30 minutes**

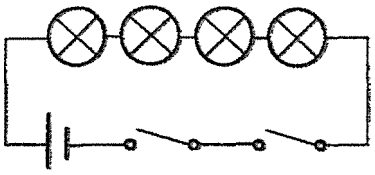
**Answer all questions.**

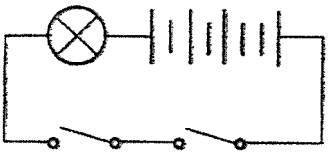
**Section A: (5 x 2 marks = 10 marks)**
For each question from 1 to 5, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write your answer in the bracket provided.

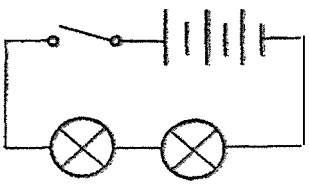
1 Mary set up a circuit as shown below.

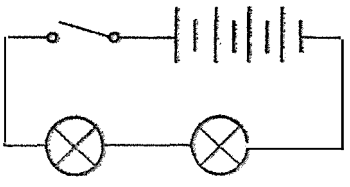


Which one of the following circuit diagrams represent Mary's circuit correctly?

(1)


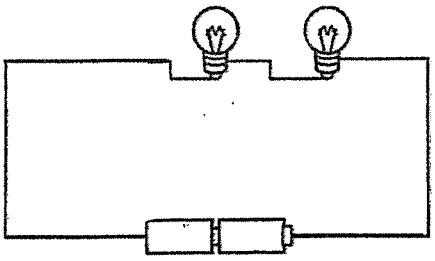
(2)


(3)


(4)


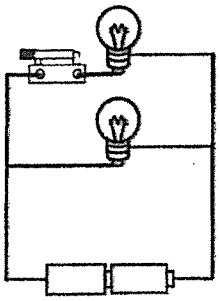
(  )

2 Wendy wants to set up a circuit to light up the bulbs as brightly as possible. The setup of the circuit is shown below.



Circuit A

However, both bulbs did not light up. Wendy adds a switch and rearranges the circuit again as shown below.



Circuit B

She notices one of the bulbs lights up.
Which of the following is/are reason(s) why the bulbs did not light up in circuit A?

A One of the bulbs has fused.
B One of the batteries has ran out of power.
C There is no switch.

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

( )

3 The table below shows the characteristics of flowers, A, B and C.

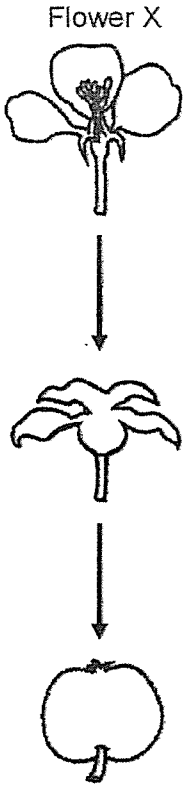
| | Characteristic of the flower | | |
|---|---|---|---|
| **Flower** | **Petal** | **Scent** | **Reproductive parts** |
| A | large and colourful | sweet | anther and stigma found in the flower |
| B | small and dull | no smell | anther and stigma found hanging out of the flower |
| C | large and colourful | foul smell | anther and stigma found in the flower |

Which of the following correctly show how flowers, A, B and C are pollinated?

| | **By animal** | **By wind** |
|---|---|---|
| (1) | A only | B and C |
| (2) | B only | A and C |
| (3) | A and C | B only |
| (4) | C only | A and B |

( )

4 Flower X grows on a plant. Thomas observed that flower X develops into a fruit.




Thomas wrote three statements. Which of the following statements is/are correct?

A Fertilisation has taken place in flower X.
B The ovary of flower X developed into a seed.
C The ovule of flower X developed into a fruit.

(1) A only
(2) A and C only
(3) B and C only
(4) All of the above

( )

5 Three types of plants, W, X and Y, are found on a piece of land as shown in diagram 1 below. Diagram 2 shows the same plot of land five years later.

5 years ago

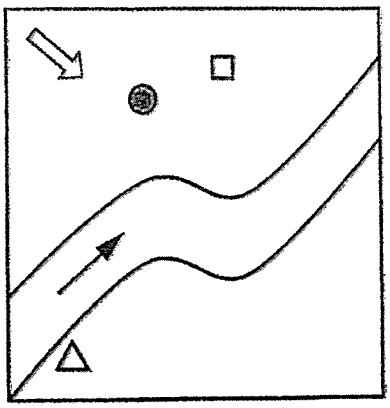
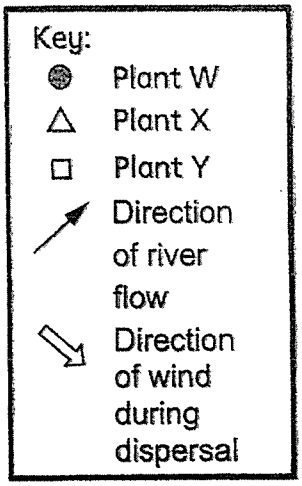


Diagram 1




Now

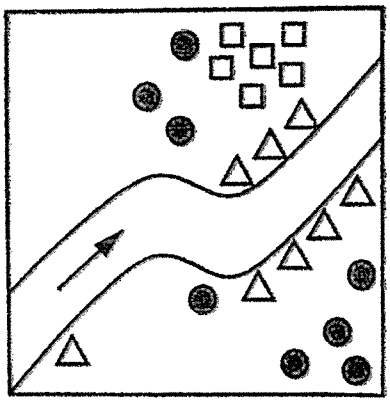


Diagram 2

Based on the information given in the diagrams, how are the seeds of W, X and Y dispersed?

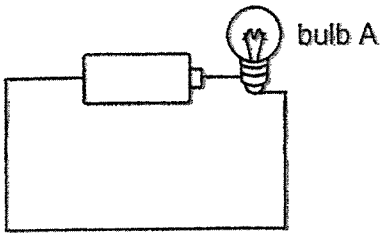
| | W | X | Y |
|---|---|---|---|
| (1) | animals | wind | water |
| (2) | water | wind | animals |
| (3) | water | animal | splitting |
| (4) | wind | water | splitting |

( )

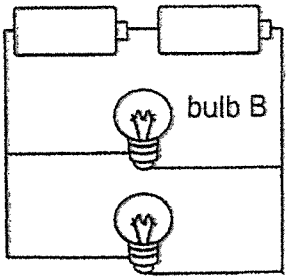
**Section B: Structured questions (10m)**

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.

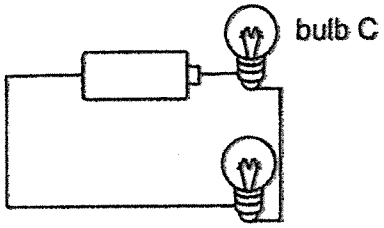
6 The diagram below shows four circuits W, X, Y and Z. All the bulbs and batteries are new and identical.



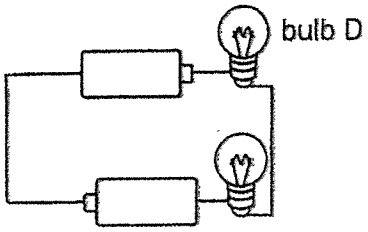

**Circuit W**




**Circuit X**




**Circuit Y**




**Circuit Z**

(a) Which of the following two bulbs, A, B, C and D, have the same brightness? [1]

Bulb _____ and Bulb _____

(b) Taveen wants to find out if the number of batteries affect the brightness of the bulbs. Which of the two circuits W, X, Y and Z should he use to conduct his experiment? Explain your answer. [2]

_____

_____

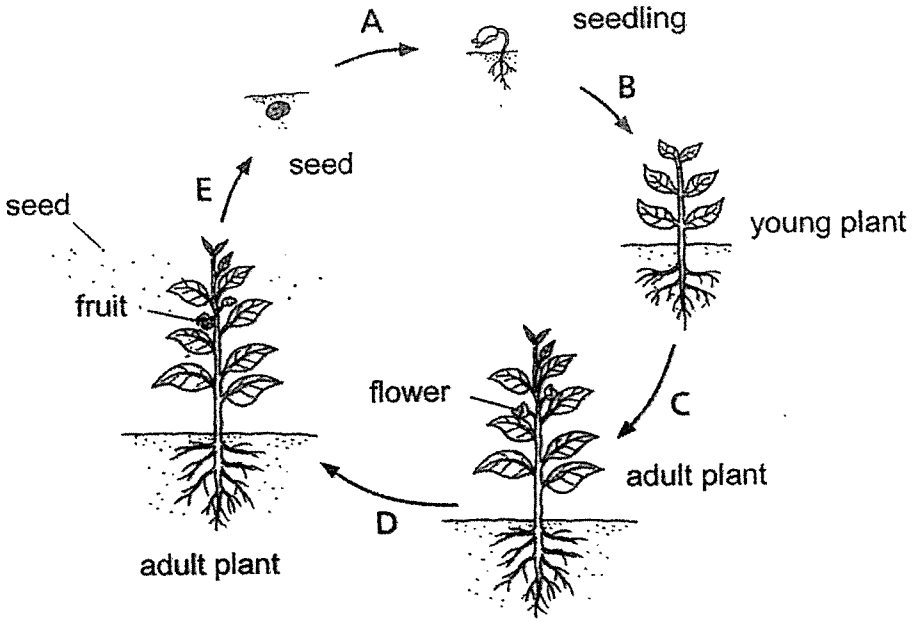
(c) Suggest one way to increase the brightness of bulb D in circuit Z. [1]

_____

_____

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

7 The diagram below shows the stages of growth of a flowering plant.




**(a)** Name the process that occurs at A. [1]

_____

**(b)** State all the conditions needed for the process at A to take place. [1]

_____

_____

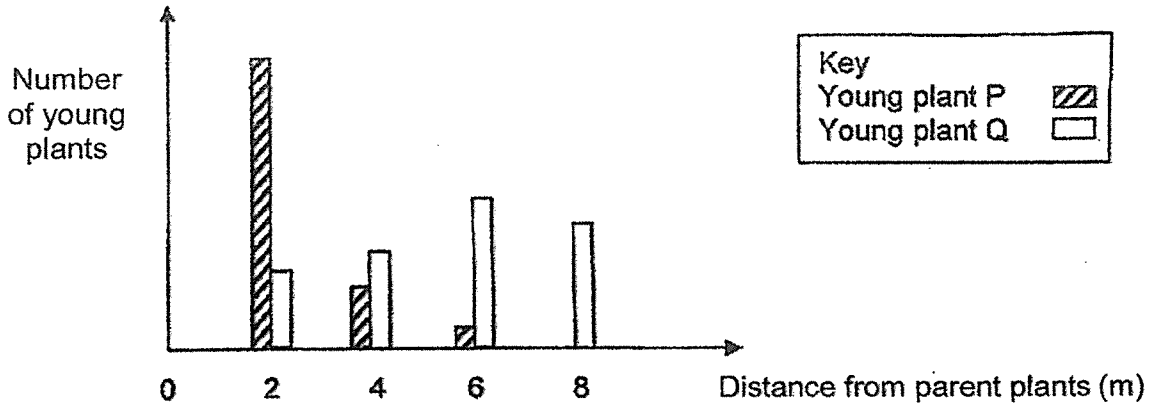
**(c)** The plant in the diagram disperses its light and small seeds by wind. List another possible characteristics of the seed which is not shown in the diagram above, that enables it to stay in the air longer. [1]

_____

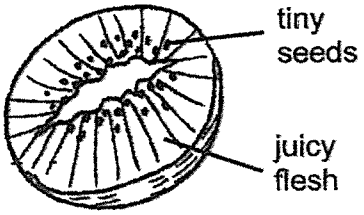
_____

| Score | |
|---|---|
| | 3 |

8 James counted the number of two different types of young plants, P and Q, at various distances from their parent plants in a garden. The results are shown below.




**(a)** Which one of the following is likely to be the fruit of plant Q?
Choose your answer and tick in the box. [1]

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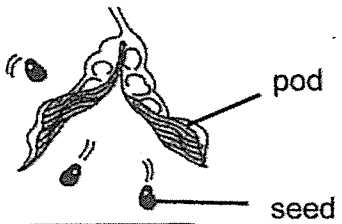


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**(b)** Explain your answer in **(a)**. [1]

_____

_____

**(c)** The young plants grow far apart from their parents to prevent overcrowding.
Explain why growing far apart from one another benefits the plants. [1]

_____

_____

End of Paper

| Score | |
|---|---|
| | 3 |

Nan Hua WA 3

| | Answer |
|---|---|
| 1 | 4 |
| 2 | 1 |
| 3 | 3 |
| 4 | 1 |
| 5 | 4 |

| Qn | Answer |
|---|---|
| 6a | Bulb A & D |
| b | Circuit Y and Z<br>Both circuits contains the same **number of bulbs which are arranged in the same series arrangement** but they have different number of batteries. |
| c | Remove one of the bulb in circuit Z<br>or<br>Add additional battery to circuit Z |
| | |
| 7a | Germination |
| b | The conditions required are as follow:<br>· oxygen<br>· water<br>· warmth / suitable temperature |
| c | Any one of the following:<br>· Hair-like structure(s)<br>· Wing-like structure(s) |
| | |
| 8a | The fruit with juicy flesh and small seeds. |
| b | Evidence: More young plants of plant P are found further away from the parent plant than plant Q.<br>Reason: Animals can carry the seed **further away** from the parent plant to be dispersed than splitting /other methods of dispersal or The fruit has **juicy flesh** that attracts the animals.<br><br>Evidence: The fruit has **juicy flesh** that attracts/ eaten by the animals.<br>Reason: Animals can carry the seed **further away** from the parent plant to be dispersed. |
| c | This process **reduces competition** from its parent plants for **water, nutrients/ mineral salts, space and sunlight.** |

1

END