



Nan Hua Primary School
Primary 5 Science
Term 3 Weighted Assessment 2020

Name: _____

Class: Primary 5/_____

Date: _____

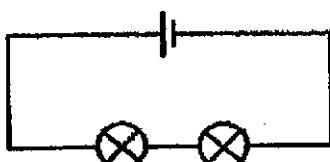
Marks	
Section A:	/10
Section B:	/10
Total:	/20

Answer all questions.

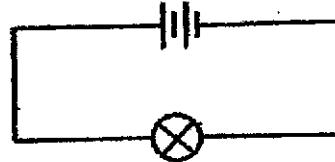
Section A: (5 x 2 marks = 10 marks)

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 brackets provided.

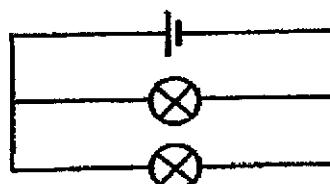
- 1 Jaslyn set up four electrical circuits, W, X, Y and Z. The bulbs and batteries used were identical, and they were all in working condition.



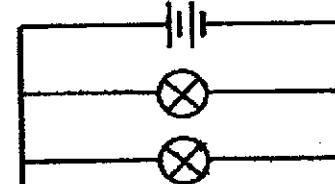
Circuit W



Circuit X



Circuit Y

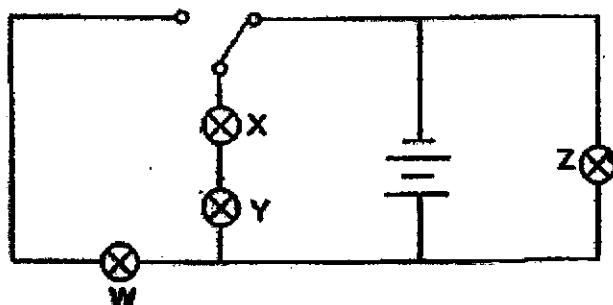


Circuit Z

Which circuit will the bulb(s) be the least brightly lit?

- (1) Circuit W
- (2) Circuit X
- (3) Circuit Y
- (4) Circuit Z

2 The diagram below shows an electric circuit.

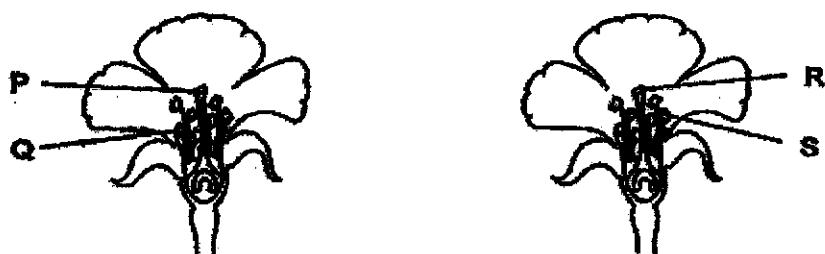


When the switch is at the current position, which bulb(s) will be the brightest?

- (1) Z only
- (2) X and Y only
- (3) X, Y and Z only
- (4) W, X, Y and Z

() ()

3 The diagram below shows two flowers from the same plant.



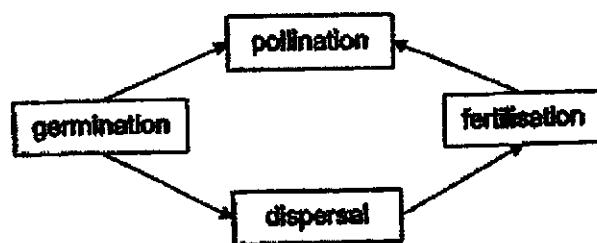
Pollination between these two flowers occurs when pollen grains are transferred from

-
- (1) P to R
 - (2) P to S
 - (3) Q to R
 - (4) Q to S

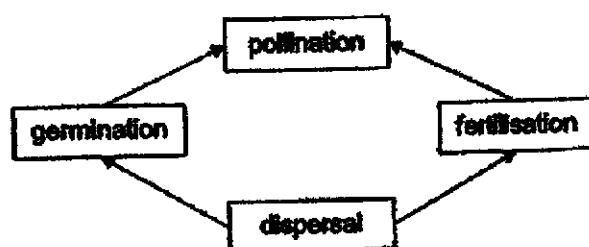
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- 4 Which one of the following shows the correct sequence in the reproduction of a flowering plant?

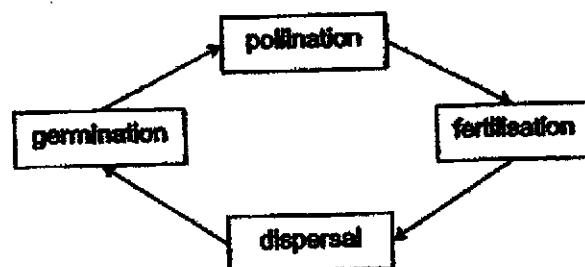
(1)



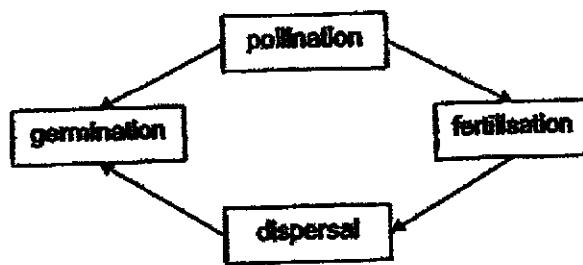
(2)



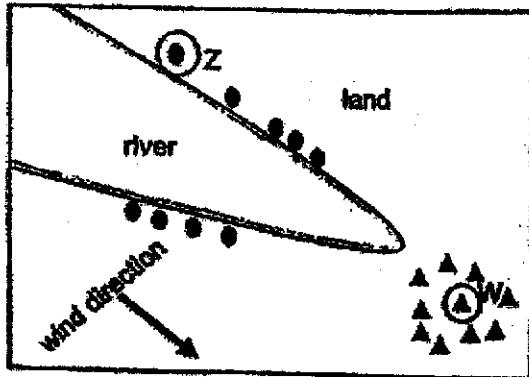
(3)



(4)



- 5 The diagram below shows how the seeds of fruit W and Z are dispersed from their parent plants.



Key	
parent plant of fruit W	(▲)
seeds of fruit W	▲
parent plant of fruit Z	(●)
seeds of fruit Z	●

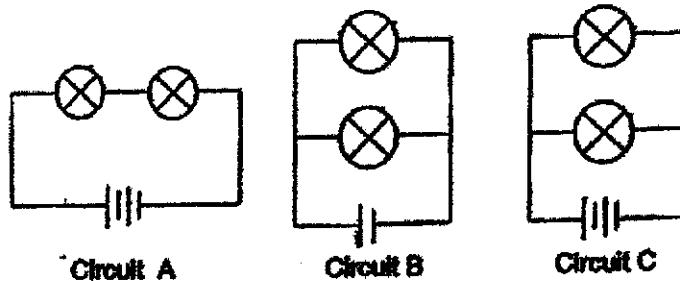
Which of the following shows the dispersal methods for seeds of fruit W and Z?

	W	Z
(1)	animal dispersal	wind dispersal
(2)	animal dispersal	water dispersal
(3)	splitting action	wind dispersal
(4)	splitting action	water dispersal

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 Study the ~~four~~^{three} circuit diagrams shown below. The batteries and bulbs used in the circuits are similar.



- (a) (i) Which circuit, B or C, has bulbs that is as bright as those in circuit A? [1]
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- (ii) Gopal wants to find out if the arrangement of bulbs affect the brightness of the bulbs.
Which of the two circuits should he choose? Explain your answer. [1]
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-

Score	
	2

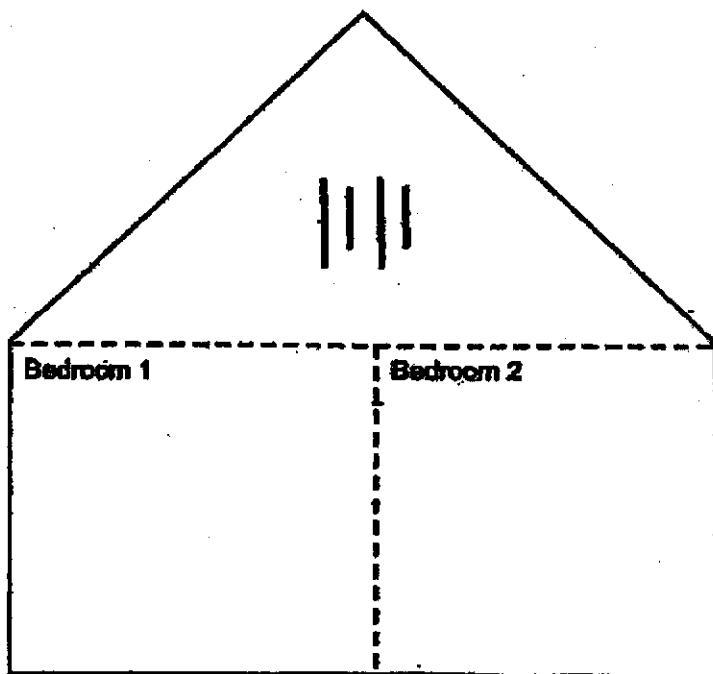
- 6 (b) Janice has two bedrooms in her toy doll house. She wants to light up the two bedrooms in her doll house. Each bedroom needs a bulb to light up.

She has the following materials:

- wires
- two light bulbs
- two switches

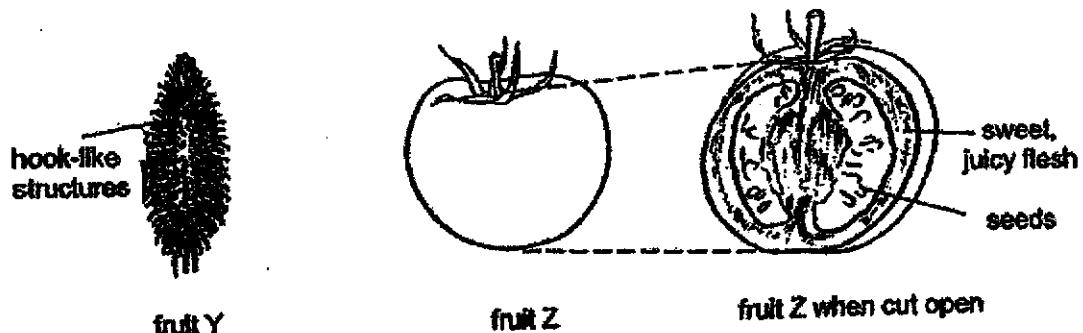
Using symbols, draw a circuit diagram to show how the bulb in each room can be switched on or off one at a time without affecting the bulb in the other bedroom. Two batteries have been drawn for you below.

[2]



Score	
	2

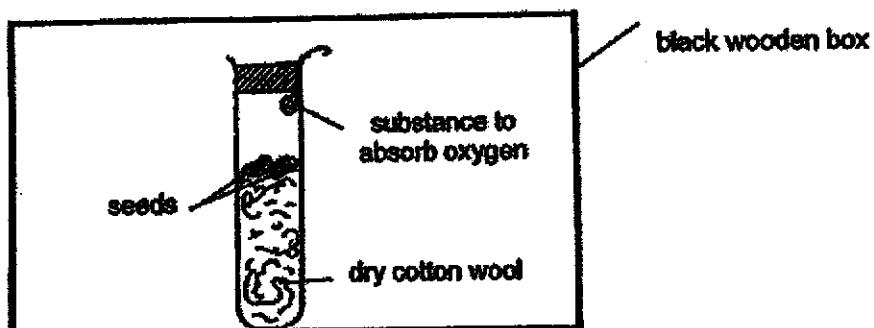
- 7 The diagram below shows the fruits of two different plants.



- (a) State one similarity in the way the two plants disperse their seeds. [1]

- (b) Explain how the characteristic of fruit Y shown above helps in its seed dispersal. [1]

- (c) Jane wanted to grow some seeds. She placed the seeds in a set-up at room temperature as shown below.

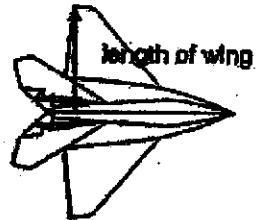


After two weeks, none of the seeds germinated. What factors in the set up does she need to change in order for the seeds to germinate? Explain your answer. [1]

Score	3
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- 8 Jason conducted an experiment to find out how the length of the wings of the paper aeroplane affects the time taken for it to reach the ground. He dropped four paper aeroplanes with different lengths of wings from the same height. He recorded his measurements in the table below.

Paper aeroplane	Length of wing (cm)	Time taken to reach the ground (s)
A	10	14
B	7	10
C	6	8
D	4	6



- (a) Based on the results, what is the relationship between the length of the wings of a paper aeroplane and the time taken for the paper aeroplane to reach the ground?

[1]

Jason found two similar fruits from the same plant, fruit Q and fruit R, with wing-like structures of different lengths as shown below.



- (b) Based on the results above, which fruit will most likely be dispersed further away from the parent plant? Explain your answer.

[1]

- (c) Give a reason why the seeds of fruit Q and R need to be dispersed further away from the parent plant.

[1]

End of paper
8

Score

3

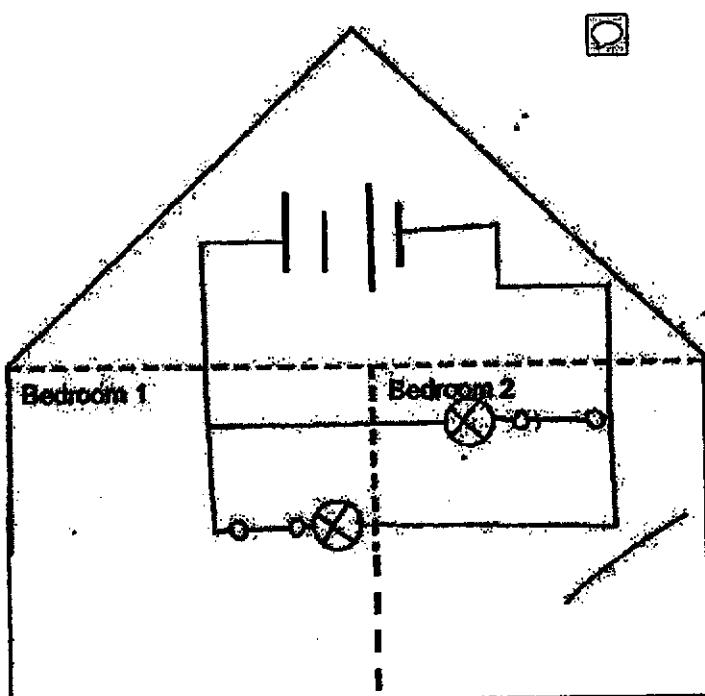
SCHOOL : NAN HUA PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : 2020 CA2

SECTION A

Q 1	Q2	Q3	Q4	Q5
1	1	3	3	4

- Q6) a)i) Circuit B has bulbs that is as bright as those in circuit A.
ii) Gopal should choose circuit A and C. The only changed variable is the arrangement bulbs and the number of bulbs and batteries were kept the same.

b)



Q7)	<p>a) Both plants are dispersed by animal dispersal.</p> <p>b) The hook-like Structures on fruit Y helps it during its seed dispersal because the hook-like structure can cling onto the hair of animals or the clothes, skin or shoes of humans. When the animal or human moves to another place away from the parent plant, the seed would eventually drop off to germinate.</p> <p>c) Jane needs to wet the cotton wool and take away the substance to absorb oxygen, because seeds need water, oxygen and warmth to germinate, thus Jane needs to wet the cotton wool and remove the substance to absorb oxygen.</p>
Q8)	<p>a) The longer the length of the wings of the paper aeroplane, the time to reach the ground increases.</p> <p>b) Fruit Q is likely to be dispersed further away from the parent plant, because fruit Q's wing-like structure is longer than fruit R's, which allows fruit Q to float longer in the air and to be carried further away from the parent plant thus fruit Q is likely to be dispersed further away from the parent plant.</p> <p>c) Seeds Q and R need to be dispersed further away from the parent plant so as to reduce the competition for sunlight, water and space. To prevent overcrowding.</p>