

NANYANG PRIMARY SCHOOL
 Term 1 Weighted Assessment
 Science
 Primary 5

20

Name: _____ ()

Date: _____

Class: 5 _____

Parent's signature: _____

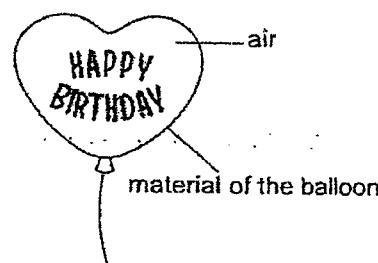
Dear Parent/Guardian,

Please sign the Weighted Assessment paper and have your child/ward return it the next day. Any query should be raised at the same time when returning the paper.

Section A: Multiple Choice Questions (12 marks)

For each question from 1 to 6, four options (1, 2, 3 and 4) are given. One of them is the correct answer. Indicate your choice in the brackets provided.

1. Jasper blew air into a balloon and tied it tightly. He left the balloon tied to a pole under the hot sun. After a few hours, he noticed that the balloon became bigger.



Which of the following is the correct explanation?

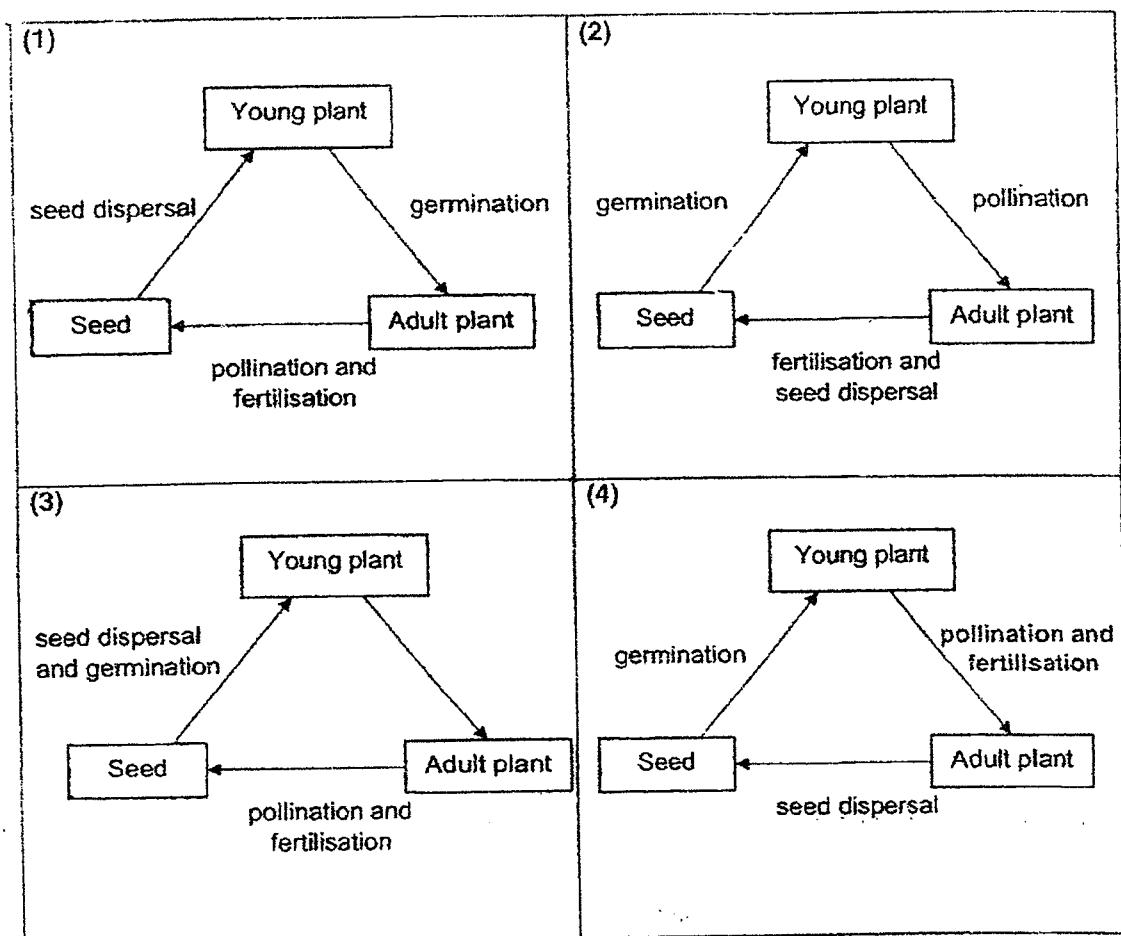
- (1) The air in the balloon loses heat to the surrounding and contracted.
- (2) The air in the balloon gains heat from the surrounding and expanded.
- (3) The material of the balloon loses heat to the surrounding and contracted.
- (4) The material of the balloon gains heat from the surrounding and expanded.

()

1

2

2. Which of the following correctly shows the processes that have taken place in the life cycle of a plant?



()

3. Nicholas wanted to find out if air is needed for seeds to germinate.

set-up	water (ml)	light (lux)	air (cm ³)	temperature (°C)
A	0	50	0	0
B	100	50	500	30
C	100	50	0	30
D	0	50	500	0

Which two set-ups should Nicholas use to conduct a fair test?

- | | |
|------------------|------------------|
| (1) A and B only | (2) A and D only |
| (3) B and C only | (4) C and D only |

()

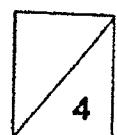
4. John made the following statements.

- A Humans reproduce to ensure the continuity of its kind.
- B Female reproductive cells are produced in the womb.
- C The young only inherits characteristics from the mother.
- D Fertilisation takes place when the male reproductive cells enter the vagina.

Which of the following statement(s) is/are correct?

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

()



- 5 Which of the following characteristics is **not** passed on to the young?
- (1) hair colour
 - (2) length of hair
 - (3) type of eyelid
 - (4) type of earlobe
- ()
6. Four students made the following statements about sexual reproduction in plants and humans.
- A The fertilised egg develops in the womb.
 - B Fertilisation occurs in a female reproductive part.
 - C Male reproductive cells are produced in the anthers.
 - D Female reproductive cells are produced in the ovary.

Which of the statements are correct about sexual reproduction in plants and humans?

	Plants	Humans
(1)	A	A and C
(2)	A and D	B, C and D
(3)	B and C	A and C
(4)	B, C and D	A, B and D

()



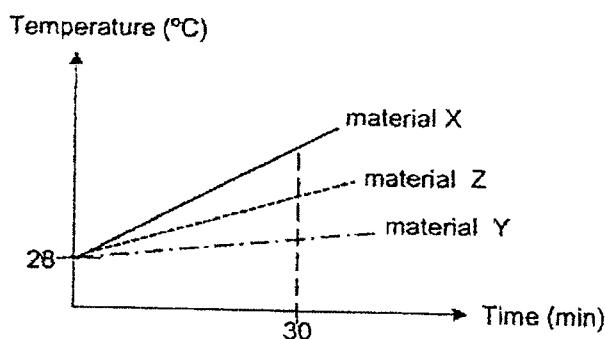
Section B: Open-Ended Questions (8 marks)

For questions 7 and 8, fill in your answers in the spaces provided.

7. Jasper conducted an experiment using the set-up below. He measured the temperature of material X and placed material X in a beaker of water at 100°C. He then measured the temperature of material X over 30 minutes with a data logger.



He repeated the experiment for materials Y and Z. He recorded the results in the table below.



Before the start of the experiment, Jasper measured materials X, Y and Z, and ensured that the materials were at 28°C.

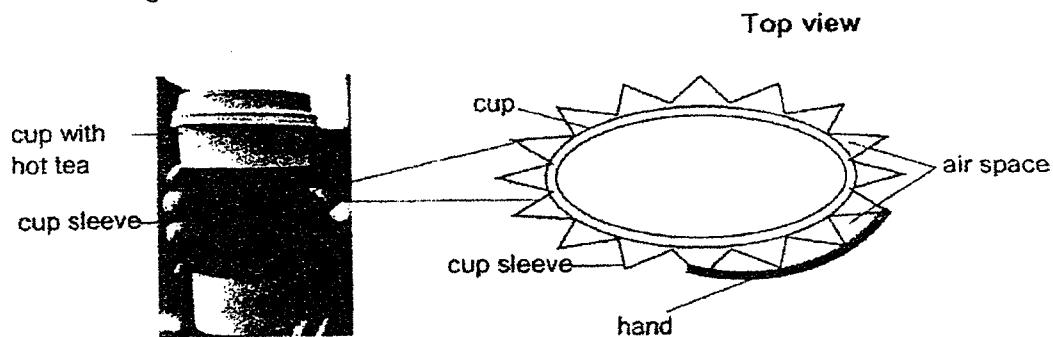
- (a) Give a reason why Jasper had to measure the temperature of the materials at the start of the experiment. [1]

Jasper wanted to make a cup to keep his hot tea warm for the longest period of time.

- (b) Based on his experiment, which material is the most suitable for making a cup to keep his hot tea warm for the longest period of time? Explain your answer. [2]

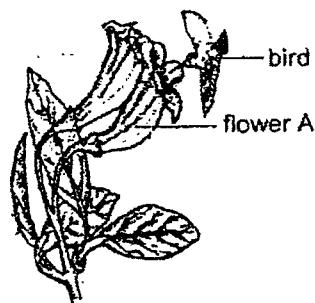
(Continue from Question 7)

Jasper added a cup sleeve to protect his hand from the heat from the hot tea as shown in the diagram below.

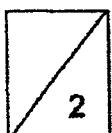


- (c) Explain how the cup sleeve helps to protect his hand from the heat from the hot tea. [1]

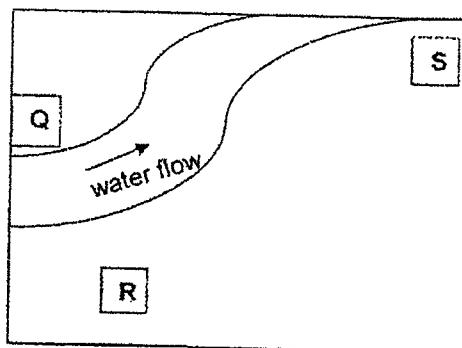
8. In Island X, birds are commonly found near flower A.



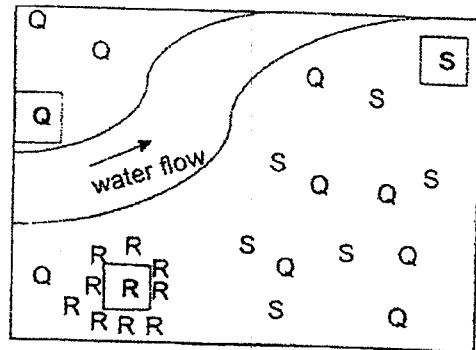
- (a) How do birds help plant A to reproduce? [1]



The diagram below shows part of an island where 3 types of plant, Q, R and S are growing. The parent plants are indicated with a box.



Year: 2018



Year: 2022

- (b) Explain why it is important for seeds to be dispersed from the parent plant. [1]

- (c) Based on the diagram above, state the most likely method of seed dispersal for plants Q and R. [1]

(i) Plant Q: _____

(ii) Plant R: _____

The seeds of Plant S are dispersed by wind.

- (d) Other than the size and weight of the seed, state one physical characteristic of seeds of plant S and explain how this physical characteristic helps the seeds to be dispersed further from the parent plant. [1]

Physical characteristic of seed: _____

Explanation: _____

- End of Paper -

Suggested Answer Key – P5 WA1 2022

Qns No	Answer	Qns No	Answer
1	2	6	void
2	3		
3	3		
4	1		
5	2		

Qns No	Answer
7	(a) Any increase in temperature is solely due to the differences in material and not due to any other factors (b) Material Y. The temperature of material Y increases the slowest. Material Y is the poorest conductor of heat so material Y transfers heat the slowest from the tea to the surrounding. (c) The air spaces (between her hand and the sleeve) is a poor conductor of heat. The air spaces slows down the transfer of heat from the tea to her hand.
8	(a) Birds help to transfer pollen grains from the anther to the stigma of the flowers. (b) It is to reduce competition for space, water, light and mineral salts. (c) Plant Q : animal / wind Plant R: explosive action / splitting (d) Wing-like structure. The wing-like structure allows fruit/seed of plant S to stay longer in the air.

