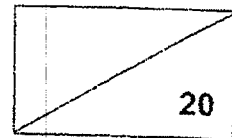


**NANYANG PRIMARY SCHOOL**  
**Term 1 Weighted Assessment**  
**Science**  
**Primary 5**



Name: \_\_\_\_\_ (    )

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

Class: 5 \_\_\_\_\_

Parent's signature: \_\_\_\_\_

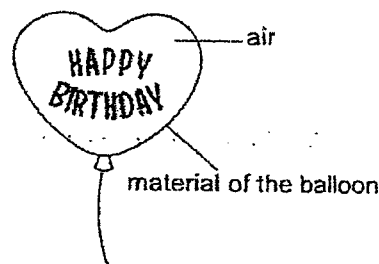
Dear Parent/Guardian,

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.

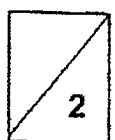
1. Jasper blew air into a balloon and tied it tightly. He left the balloon tied to a pole under the hot sun. After a few hours, he noticed that the balloon became bigger.



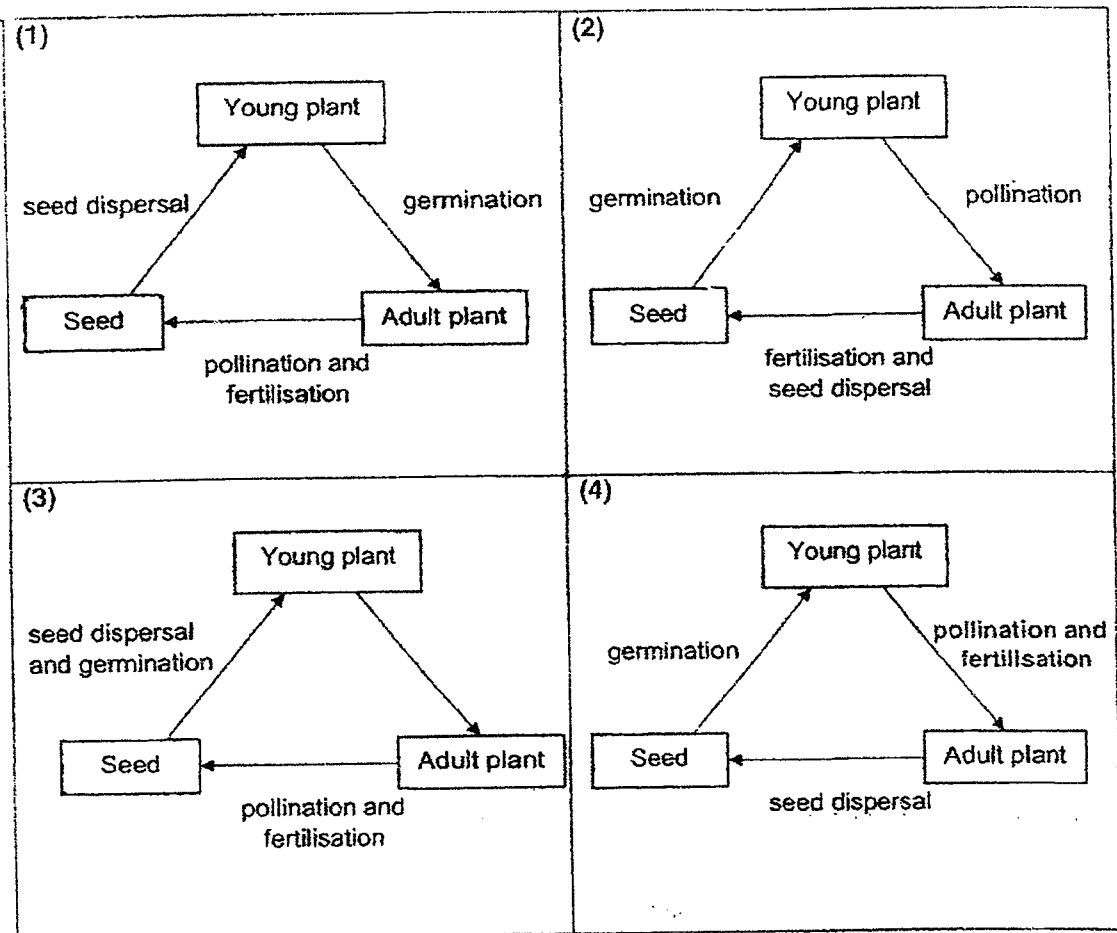
Which of the following is the correct explanation?

- (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.

(    )



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



( )



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

(     )



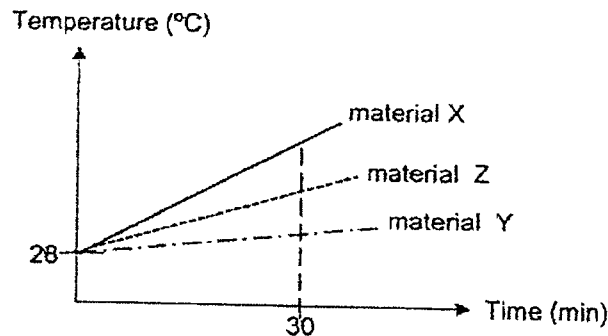
**Section B: Open-Ended Questions (8 marks)**

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  $100^{\circ}\text{C}$ . 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  $28^{\circ}\text{C}$ .

- (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]

---



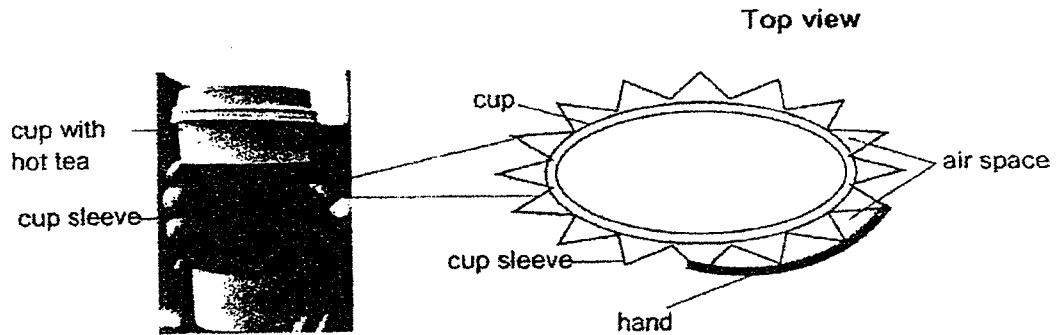
---



---

(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.



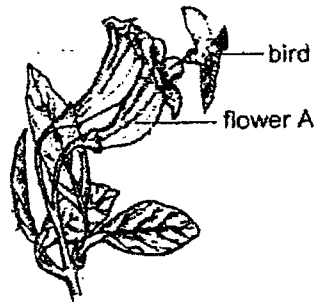
- (c) Explain how the cup sleeve helps to protect his hand from the heat from the hot tea. [1]

---



---

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

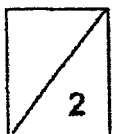


- (a) How do birds help plant A to reproduce? [1]

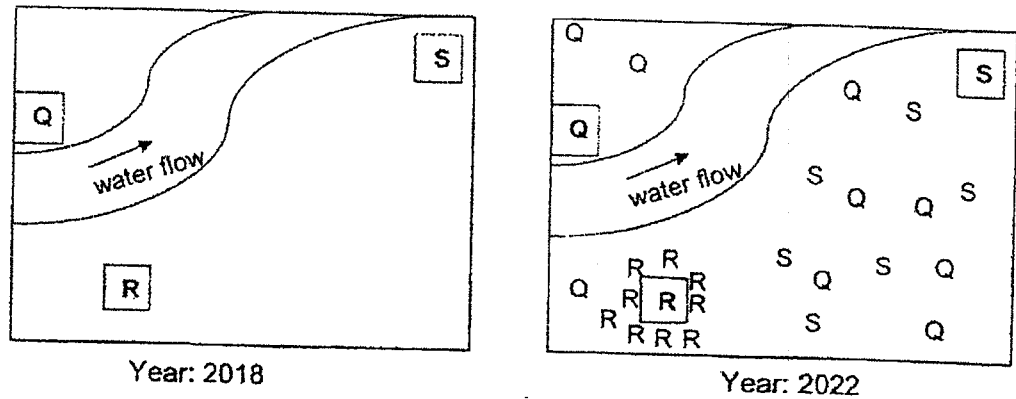
---



---



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.



- (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. <sup>loses</sup> 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 <sup>gain</sup> 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.

