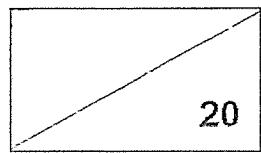


**NANYANG PRIMARY SCHOOL**  
**Term 1 Weighted Assessment**  
**Science**  
**Primary 5**



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. Helen placed a metal cup and a plastic cup on the same table in a room with a surrounding temperature of 25°C. She then poured 100 mL of water at 90°C into each cup.



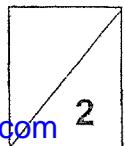
She measured the temperature of the water after 10 minutes. The results are shown below.

	Temperature of water in cup (°C)	
	start	after 10 minutes
metal cup	90	50
plastic cup	90	80

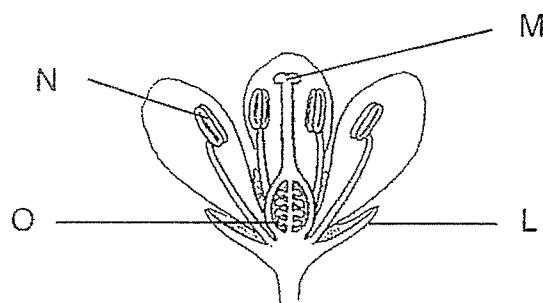
Which of the following best explains why the water in the plastic cup was hotter than the water in the metal cup after 5 minutes?

- (1) The plastic cup is a better conductor of heat than the metal cup.
- (2) The plastic cup had a lower temperature than the metal cup at the start of the experiment.
- (3) The plastic cup conducted heat away from the water to the surrounding air faster than the metal cup.
- (4) The plastic cup conducted heat away from the water to the surrounding air slower than the metal cup.

( )



2. The diagram shows a flower with its parts labelled.

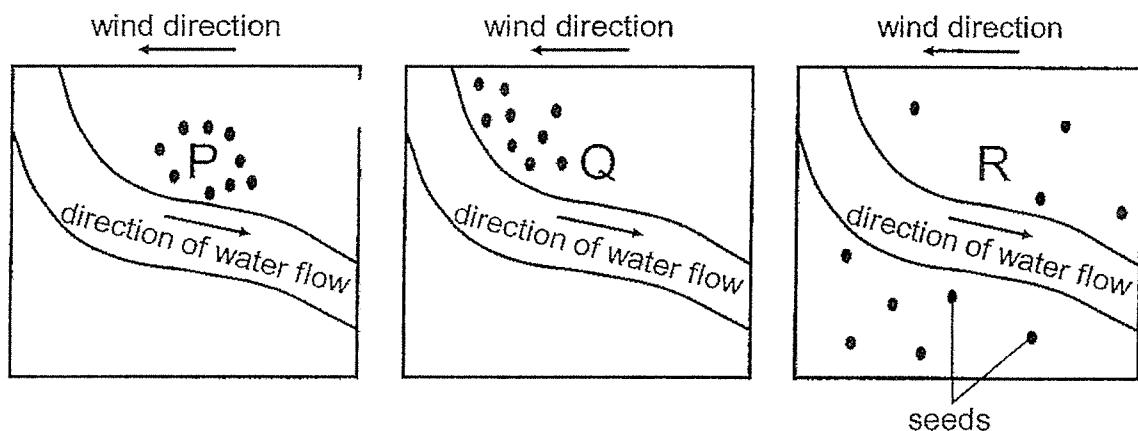


Which of the following parts is **not** required for a plant to undergo pollination and fertilisation?

- (1) L
- (2) M
- (3) N
- (4) O

( )

3. The diagram shows the spread of the seeds by plant P, Q and R found at distances away from the parent plants.



Based on the diagram above, which of the following will most likely be a characteristic of the fruits or seeds of plants P, Q and R?

Fruit/Seed of Plant P	Fruit/Seed of Plant Q	Fruit/Seed of Plant R
(1) sticky hairs	light and feathery	light and feathery
(2) pod-like structure	light and feathery	hook-like structure
(3) hook-like structure	pod-like structure	light and feathery
(4) pod-like structure	hook-like structure	light and feathery

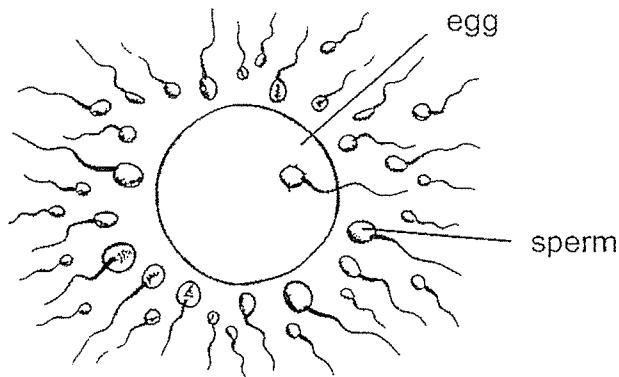
( )

4. Which part of the human body produces the male reproductive cells?

- (1) penis
- (2) womb
- (3) testes
- (4) ovaries

(      )

5. The diagram shows a process in human reproduction.



Which statements are **wrong**?

- A This process occurs in the penis.
- B This process is called fertilisation.
- C The fertilised egg develops in the ovary.
- D Only one sperm is required to fuse with the egg.

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

(      )

6. Jared made the following statements about the similarities of sexual reproduction in both humans and plants.

- A All male reproductive cells are called sperms.
- B Living things reproduce to ensure the continuity of the species.
- C Fertilisation occurs when the male and female reproductive cells fuse.

Which of the following statements is/are true?

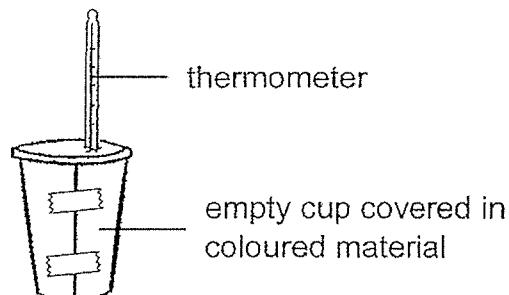
- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) A, B and C

(      )

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

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

7. A group of students wanted to create a cup find out how the colour of the cup affects the temperature of air in the cup. They covered four identical cups with the same type of material. Each material was made with a different colour.



(a) State if the variable below needs to be changed or kept constant by placing a tick (✓) in the correct column. [1]

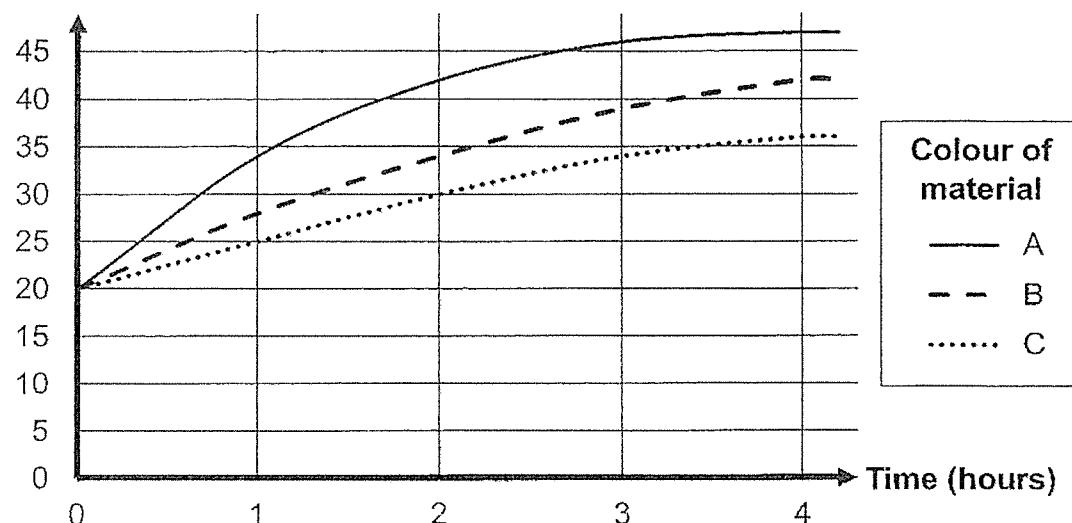
Variable	Changed	Kept Constant
Colour of material		
Thickness of material		
Time taken for experiment		
Temperature of surroundings		

(Continued on next page)

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The students measured the temperature of air in each cup at different times and plotted the results in the graph as shown below.

Temperature of air in cup (°C)



(b) Which coloured material should be used to create a cup to keep iced drinks cold for the longest time? Explain your answer. [2]

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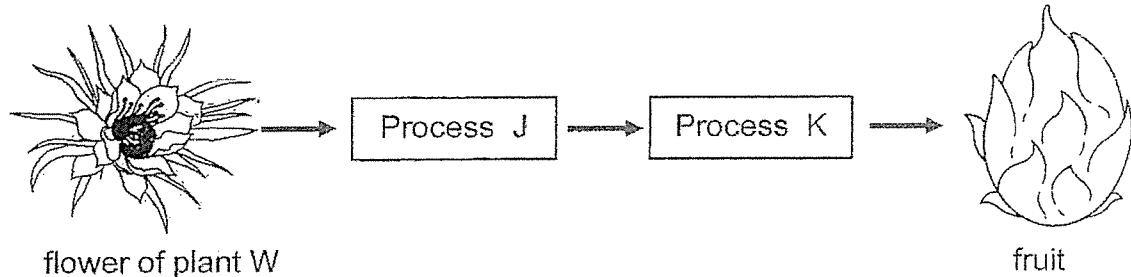
(c) State what they can do to increase the reliability of their results. [1]

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8. Nolem observed that two processes took place for the flower of plant W to form a fruit, as shown in the diagram below.



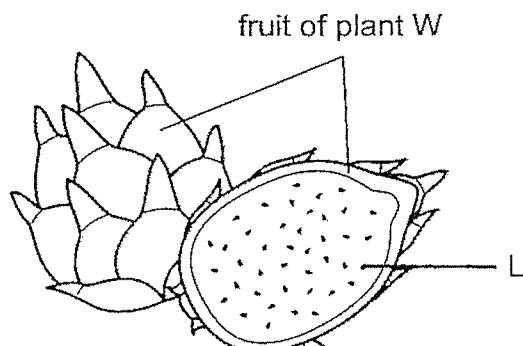
(a) Describe process J.

[1]

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When Nolem cut open the fruit, he observed that it contained a large number of part L, and they were very small.



(b) State the part of the flower that L developed from.

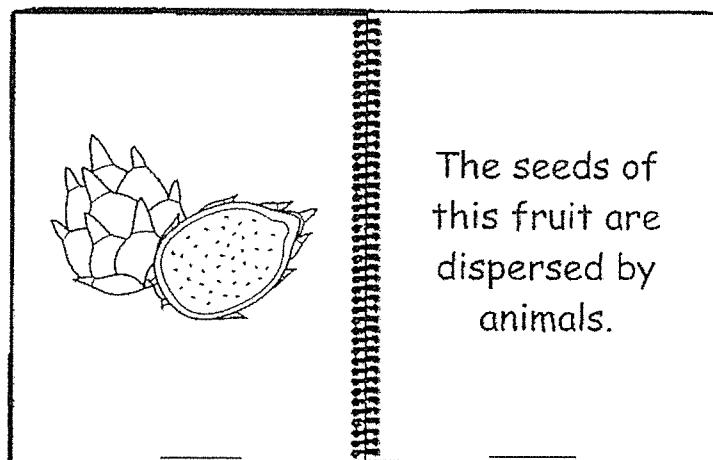
[1]

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Nolem read a book on the dispersal of fruits and seeds and recorded what he had learned in his notebook.



Nolem ate the fruit of plant W and discovered that the fruit was juicy and fleshy.

(c) How does having a fleshy fruit help in the dispersal of plant W? [1]

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(d) Explain why it is important for plants to disperse their fruits. [1]

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- End of Paper -



## ANSWER KEY

YEAR : 2024  
LEVEL : PRIMARY 5  
SCHOOL : NANYANG  
SUBJECT : SCIENCE  
TERM : WA 1

### SECTION A

Q1	4	Q2	1	Q3	2	Q4	3	Q5	2
Q6	3								

### SECTION B

Q7	<p>a) Colour of material : Changed Thickness of material : Kept Constant Time taken for experiment : Kept Constant Temperature of surroundings : Kept Constant</p> <p>b) C. C gained the least heat in 4 hours and is the poorest conductor of heat and is most suitable to be used to create a cup to keep iced drinks cold for the longest time.</p> <p>c) Repeat the experiment 3 times.</p>
Q8	<p>a) Process J is the transfer of pollen grains from the anther to the stigma.</p> <p>b) Seed</p> <p>c) It will attract the animal to eat it, and the seeds that cannot be digested will be passed out in the animal's droppings, and by then the animal probably would have travelled to somewhere else.</p> <p>d) To prevent overcrowding and competition for sunlight , water , space and mineral salts.</p>

EN 12