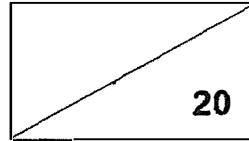


**NANYANG PRIMARY SCHOOL**  
**Term 1 Weighted Assessment**  
**Science**  
**Primary 5**



Name: \_\_\_\_\_ ( )

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. Sarah recorded the time taken for 500ml of water to boil when it was placed in three containers of different materials, X, Y and Z, in the table shown below.

Material	Time taken for water to start boiling (min)
X	10
Y	5
Z	15

She needed two different containers, one to keep her orange juice cold and another one to keep her chicken soup hot, for as long as possible.

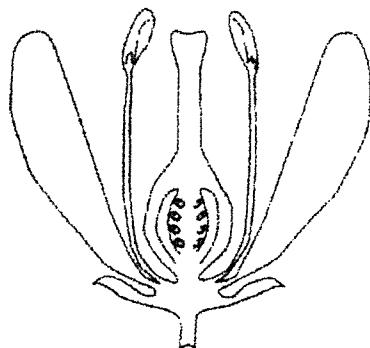
Which materials would be the most suitable for making each container?

Material of container		
	Keep orange juice cold	Keep chicken soup hot
(1)	X	Y
(2)	X	Z
(3)	Y	Y
(4)	Z	Z

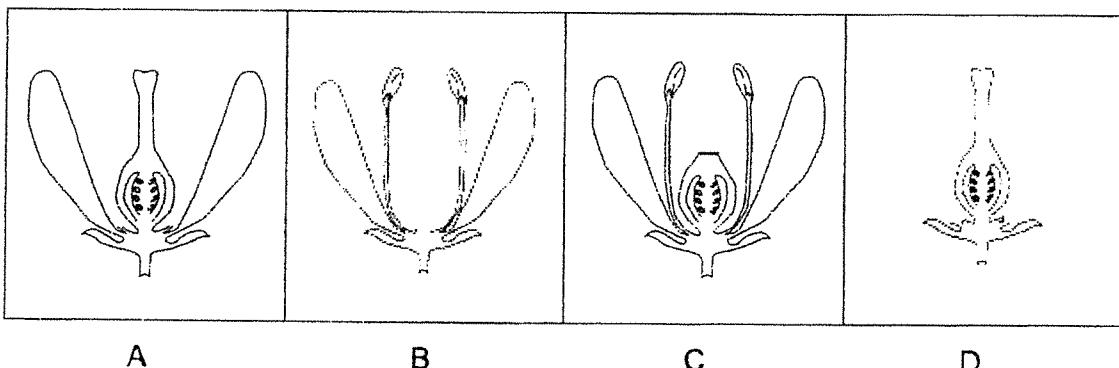
( )



2. Jeremy found 4 flowers, A, B, C and D, similar to the one shown below, from the same plant in his garden.



He then removed different parts from the 4 flowers as shown below.



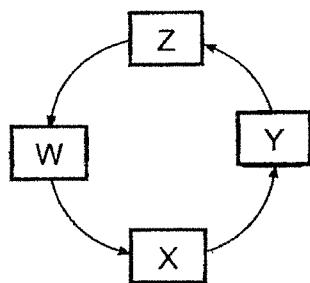
Which of these flowers, A, B, C or D, will definitely **not** be able to develop into a fruit?

3. W, X, Y and Z represent the processes that all flowering plants go through during reproduction.

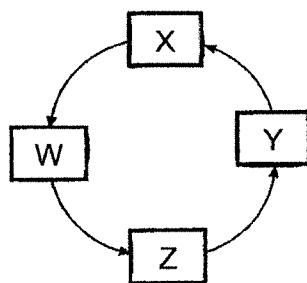
W: pollination  
X: fertilisation  
Y: germination  
Z: seed dispersal

Which of the following diagrams shows the correct order of the four processes?

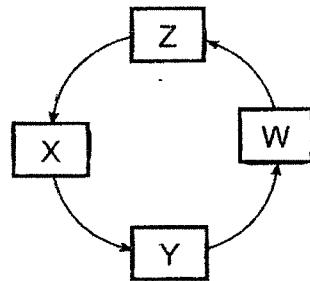
(1)



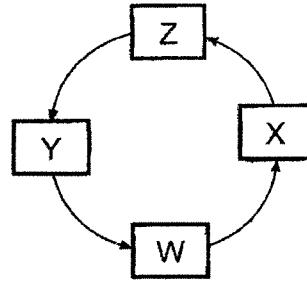
(2)



(3)



(4)



(      )

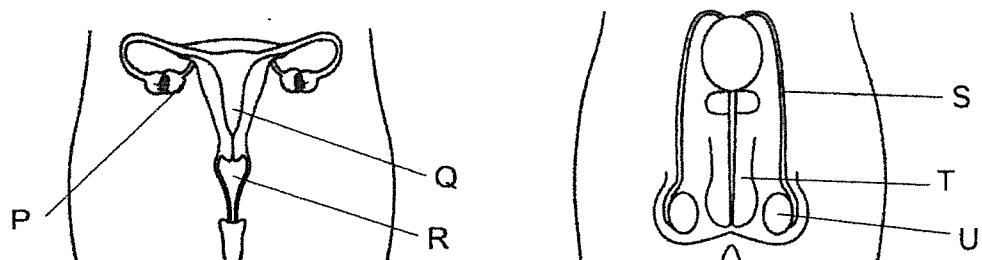
4. Which two of the following are characteristics that are **not** passed down from parents to their young?

- A Length of hair
- B Type of earlobe
- C Length of fingernails
- D Ability to roll the tongue

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

(      )

5. The diagrams below show the human female and male reproductive systems.

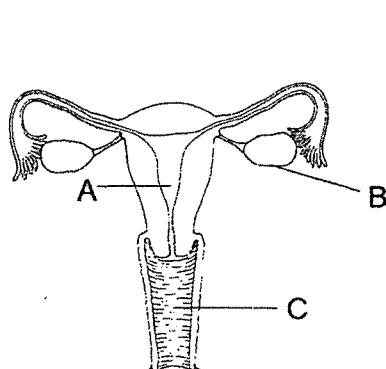


Which of the following correctly matches the parts its function.

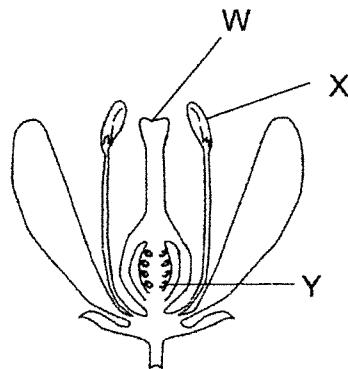
Part	Function	Part	Function
(1) R	Produces sperms	U	Produces eggs
(2) Q	Produces sperms	S	Produces eggs
(3) P	Produces eggs	U	Produces sperms
(4) P	Produces eggs	T	Produces sperms

(      )

6. The diagrams below show the human and plant reproductive systems.



human reproductive system



plant reproductive system

Which one of the following statements is correct?

- (1) Parts C and X have the same function.
- (2) Parts B and X store male reproductive cells.
- (3) Parts B and Y store female reproductive cells.
- (4) Parts A and W are where fertilisation take place.

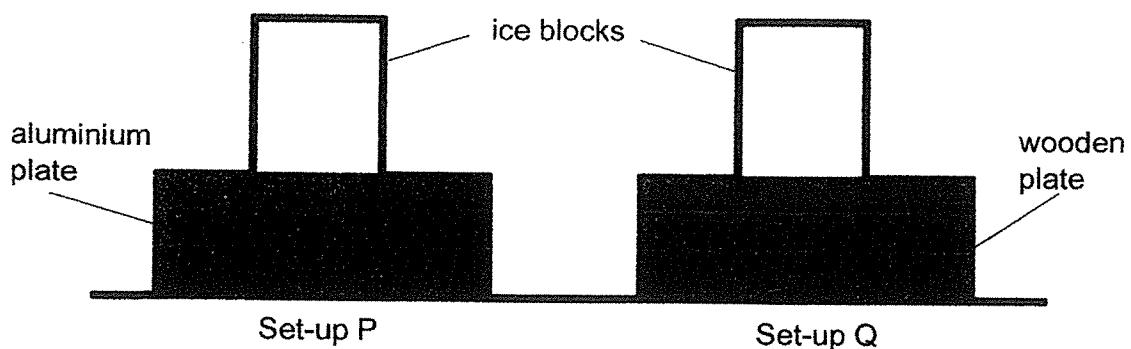
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**Section B: Open-Ended Questions (8 marks)**

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

7. Liza set up an experiment as shown below to find out which material will cause the ice to melt faster. In set-up P and Q, the plates are made of aluminium and wood respectively. She placed a block of ice on each of the plates. The plates and the ice blocks are of similar size and temperature.

She then used a stopwatch to measure the time taken for the ice blocks to melt completely.



(a) Explain why the block of ice in set-up P melted faster

[2]

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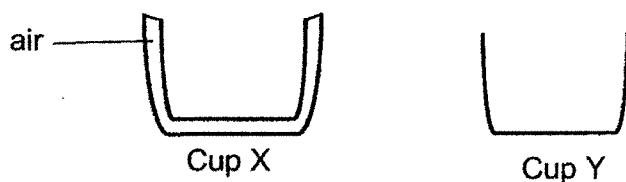
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Liza used aluminium to make cups X and Y as shown below. Cup X is a double layer cup and cup Y is a single layer cup. Cup X has air trapped in between the double layers.

She poured the same amount of milo at 80°C into cups X and Y at the same time.



(b) Explain why cup X felt cooler than cup Y when she held both cups in her hand. [2]

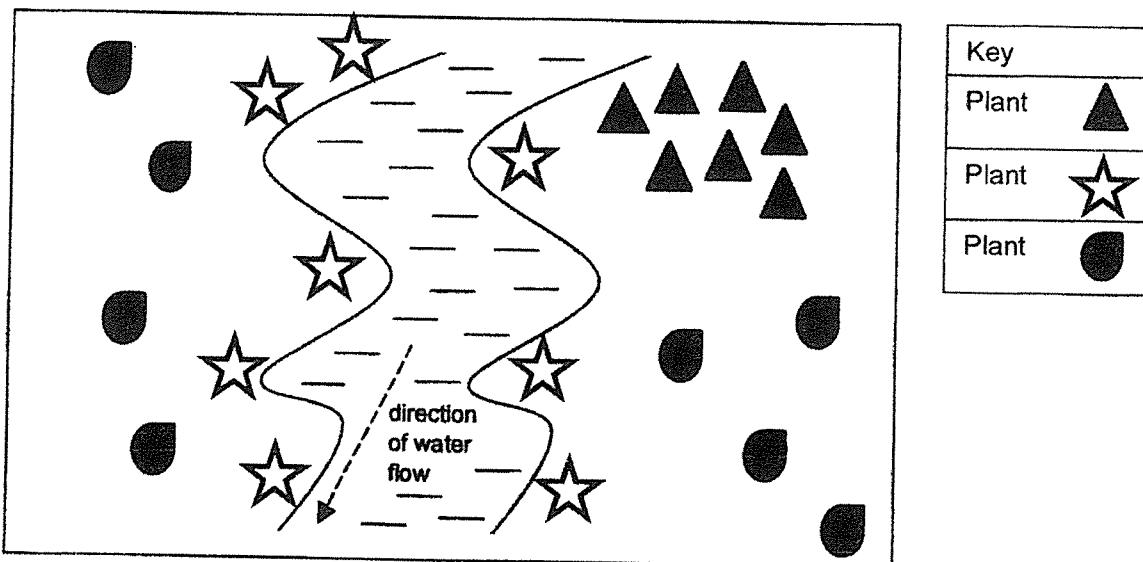
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8. Three plants, X, Y and Z, were planted in a location. Four years later, more of plants X, Y and Z were found growing in different parts of the location as shown in the diagram below.



(a) Based on the diagram above, identify the dispersal method for the three plants. [1]

Plant	Method of dispersal
▲	(i) _____
★	(ii) _____
●	(iii) _____

(b) State two characteristics of fruits dispersed by water. [1]

(i) \_\_\_\_\_  
 (ii) \_\_\_\_\_

(c) State one advantage that the seeds dispersed by splitting has over seeds dispersed by wind. [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 : 2021  
LEVEL : PRIMARY 5  
SCHOOL : NANYANG PRIMARY SCHOOL  
SUBJECT : SCIENCE  
TERM : TERM 1 WEIGHTED ASSESSMENT

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

Q7	<p>(a) Aluminium is a better conductor of heat better than wood, Aluminium loses heat quicker than wood. Therefore, the ice block will melt faster on set-up P.</p> <p>(b) Cup X is a double layer cup, so there will be air in between the two layer which air is a poor conductor of heat, slowing down the heat travelling to Liza's hand compared to cup Y, thus cup X felt cooler than cup Y when Liza held both cups in her hand.</p>
Q8	<p>(a)(i) Explosive splitting (ii) Water (iii) Animals/Wind</p> <p>(b)(i) Fibrous husk (ii) Waterproof exterior</p> <p>(c) Seeds dispersed by splitting do not have to depend on the availability of wind/ external factors to disperse its seed.</p> <p>(d) Plants disperse their fruits to prevent overcrowding between young plants and the parent plant leads to competition for sunlight, water, mineral salts and space between young plants and the adult plant.</p>