

SINGAPORE CHINESE GIRLS' SCHOOL
PRIMARY 5 SCIENCE
2024 Term 1 Weighted Assessment

Term 1 WA

Name: _____ () Date: _____

Class: Primary 5 SY / C / G / SE / P

	Marks Attained	Maximum Marks	
Section A		16	
Section B		14	
Total		30	
			Parent's signature _____

Section A (16 marks)

For each question from 1 to 8, four options are given. One of them is the correct answer. Choose the correct answer and write its number in the Answer Sheet on Page 5.

- 1 The table below shows the characteristics of cells W, X, Y and Z. A (✓) indicates the presence of the characteristic.

	Cell W	Cell X	Cell Y	Cell Z
Fixed shape		✓		✓
Can photosynthesise	✓	✓		

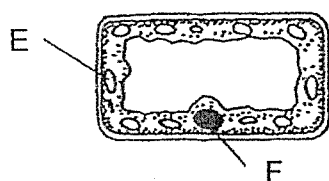
Based on the information above, which cell best represents a root cell?

- (1) Cell W
 (2) Cell X
 (3) Cell Y
 (4) Cell Z
- 2 The characteristics that can be passed from parents to their offspring are _____.
 A blood type
 B ability to roll tongue
 C length of fingernails
- (1) A and B only
 (2) A and C only
 (3) B and C only
 (4) A, B and C

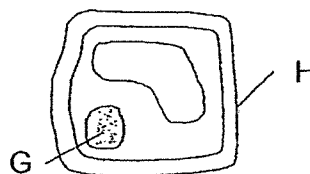
- 3 The table shows some characteristics of fruits, A and B.

Characteristics	Fruit A	Fruit B
Size	Small	Big
Taste	Juicy	Sweet
Days to ripen	15	20

A scientist wants to create a type of fruit which is big, sweet, and juicy and will take a short time to ripen. He took some cells from fruit A and fruit B as shown below.



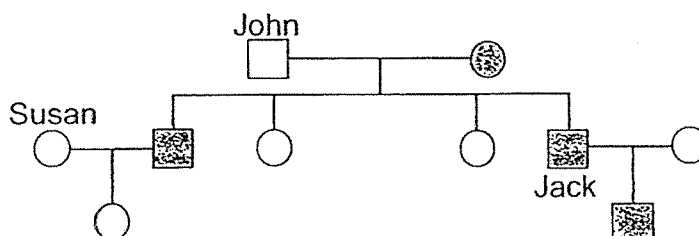
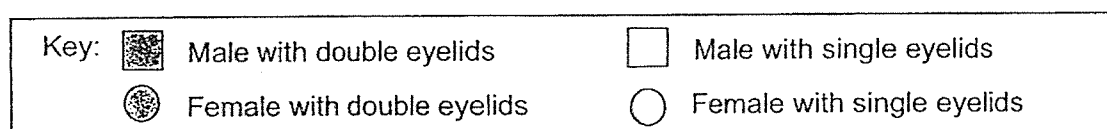
Cell from fruit A



Cell from fruit B

Which cell parts should the scientist modify so that he can create the fruit he wants?

- (1) E and G
 - (2) E and H
 - (3) F and G
 - (4) F and H
- 4 Study John's family tree below.



Based on the information above, four children made the following statements.

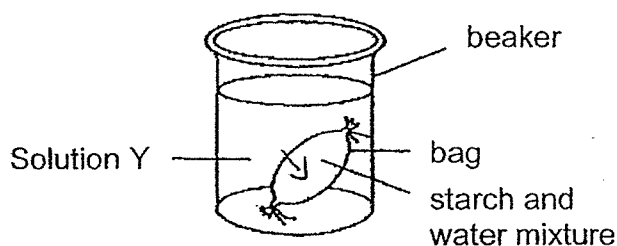
- | | |
|------|---|
| Ava | : Susan inherited her single eyelids from John. |
| Ben | : Jack has four sisters who all have single eyelids. |
| Cath | : Jack's son inherited his double eyelids from his grandfather. |
| Dan | : Jack inherited his double eyelids from his mother. |

Who has made a correct statement?

- (1) Ava
- (2) Ben
- (3) Cath
- (4) Dan✓

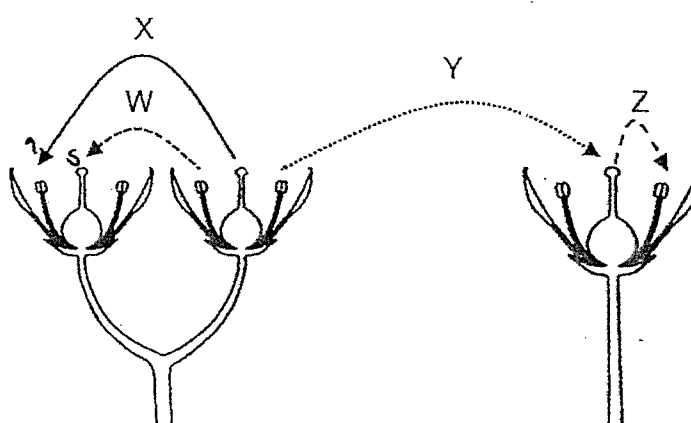
- 5 A bag filled with starch and water mixture was made to model an animal cell. The bag was lowered into a beaker filled with solution Y. Solution Y changes from yellowish brown to dark blue in the presence of starch.

Six hours later, the mixture in the bag turned dark blue and solution Y in the beaker remains yellowish brown.



Which of the following statements are correct?

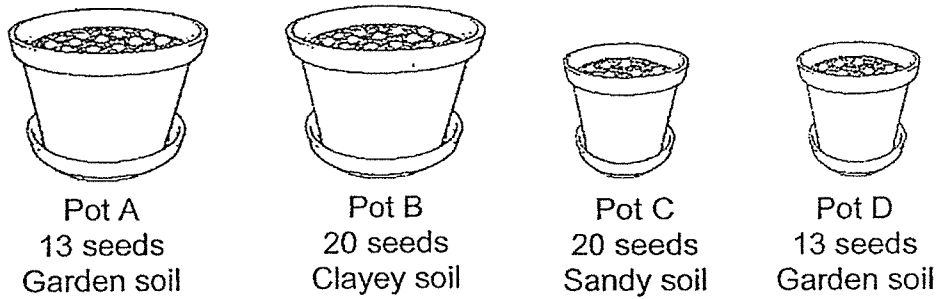
- A The bag only allows certain substances to pass through.
 - B The bag allows solution Y to pass through to react with the starch and water mixture.
 - C The bag represents one of the functions of the cytoplasm.
- (1) A and B only
 (2) A and C only
 (3) B and C only
 (4) A, B and C
- 6 The diagrams below show flowers from the same type of plant.



Which of the arrows show(s) the process of pollination?

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

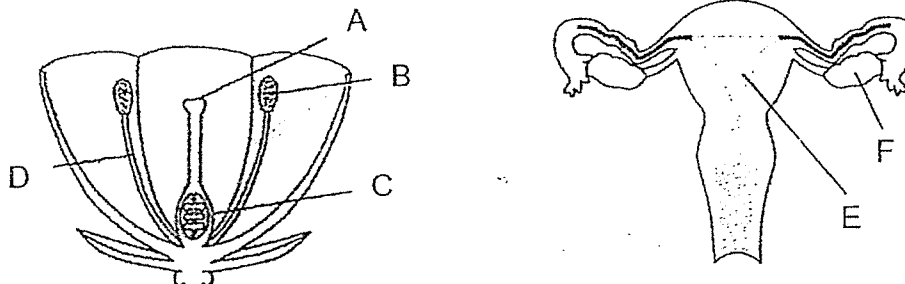
- 7 Charis wants to find out if overcrowding affects the growth of plants. She was given four pots and seeds from the same plant.



Which two pots should she choose for her experiment to ensure a fair test?

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

- 8 Study the diagrams below carefully.



Which of the following pairs have similar functions?

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

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Term 1 WA

Name: _____ ()

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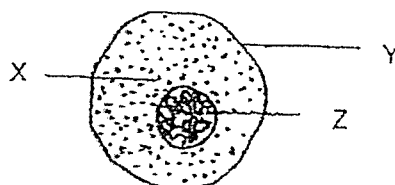
Class: Primary 5 SY / C / G / SE / P**Answer Sheet for Section A (16 marks)**

- | | |
|--------|--------|
| 1. () | 5. () |
| 2. () | 6. () |
| 3. () | 7. () |
| 4. () | 8. () |

Section B (14 marks)

For Questions 9 to 14, write your answers in the space provided.

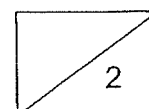
- 9 Study the cell shown below.



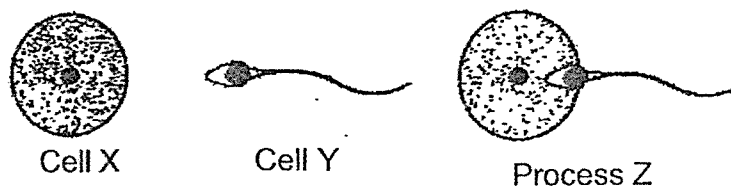
Indicate 'True' or 'False' for the following statements.

[2]

	Statement	True or False
(a)	X is a jelly-like substance where cell activities take place.	
(b)	Y supports and gives the cell its shape.	
(c)	Y controls the movement of substances in and out of the cell.	
(d)	Z controls all activities in the cell.	



- 10 The diagrams show two reproductive cells, X and Y, in the human reproductive system.



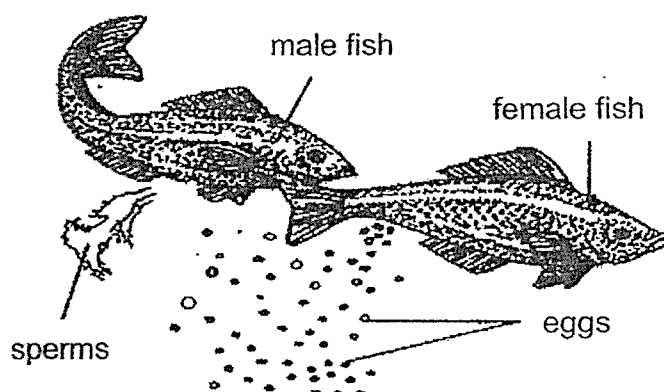
- (a) Name the reproductive organ where cell X and cell Y are produced. [1]

Cell X is produced in: _____

Cell Y is produced in: _____

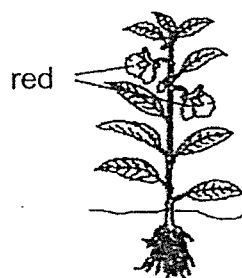
- (b) Name and describe process Z. [2]

- (c) The female fish releases a large number of eggs at a time from its body into the water. The diagram below shows a female fish laying eggs and a male fish releasing sperms over the eggs.



Explain why the female fish produces a large number of eggs at a time to ensure the continuity of its species. [1]

- 11 The diagram below plant A which produces red-coloured flowers.

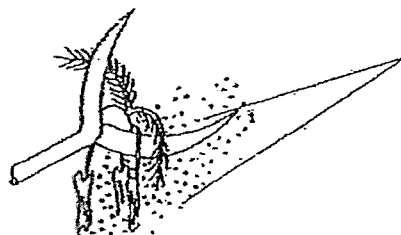


Plant A

Mr Lee collected the seeds from plant A and planted them.
Explain why the new plants will produce only red flowers.

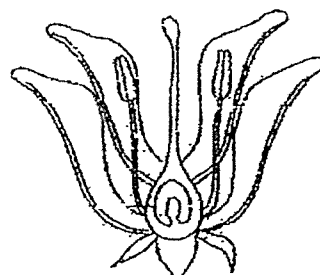
[1]

- 12 The diagram below shows flowers of plants X and Y.



Flower of plant X

pollen
grains



Flower of plant Y

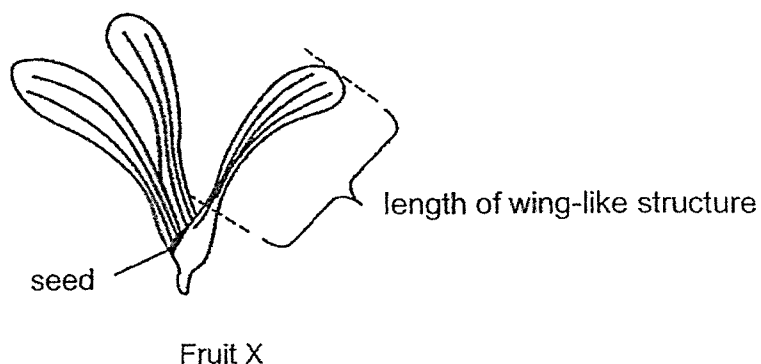
Jana visited Island B during school holidays and made the following notes in her Science journal.

Presence of wind	strong winds most of the time
Temperature	Very hot
Animals on the island	None

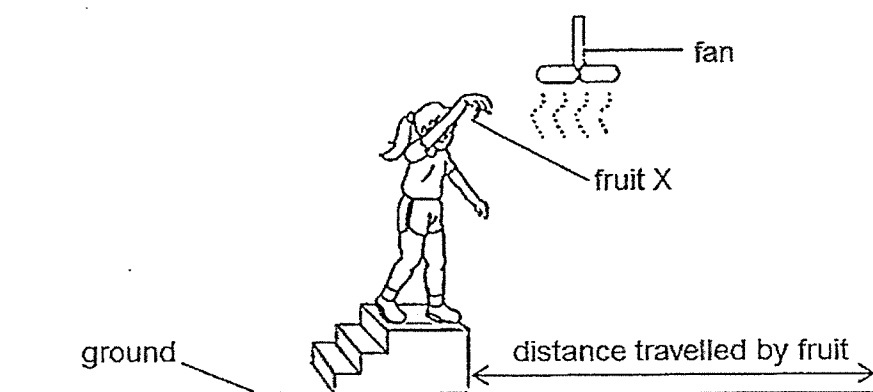
Based on Jana's observations of Island B, which species of plant, X or Y, will Jana be able to observe more on the island? Explain your answer with reference to the characteristics of the flowers shown in the diagram above.

[2]

- 13 Jane conducted an experiment to find out how the height at which fruit X is dropped affects the distance it travels.



She released fruit X from a height and measured the distance travelled by the fruit when the fan was switched on.



She repeated the experiment by dropping the fruit at different heights and her readings are shown below.

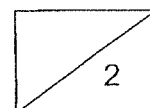
Height at which fruit is dropped (cm)	120	100	80	60
Distance travelled by fruit (cm)	50	43	32	17

- (a) Based on Jane's results, what is the relationship between the height at which fruit X is dropped and the distance travelled by fruit X? [1]

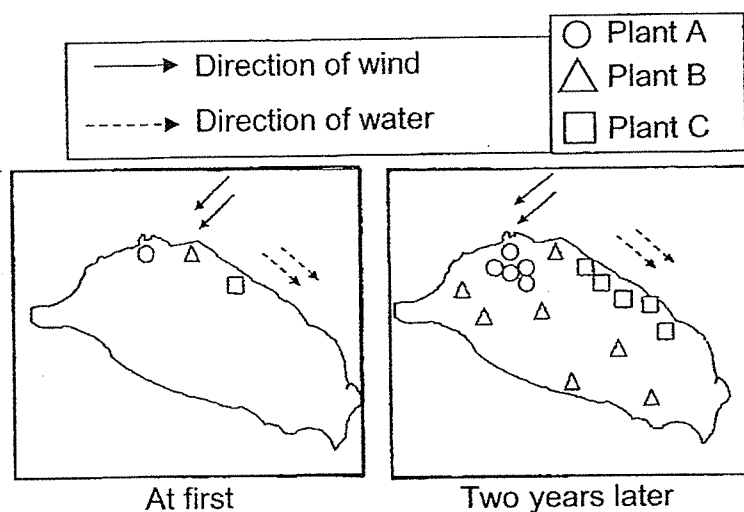
- (b) Jane wants to find out if the length of the wing-like structure on fruit X affects the distance it travels. State two variables she has to keep the same to ensure a fair test. [1]

Variable 1: _____

Variable 2: _____



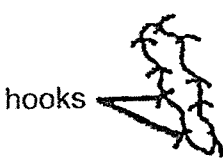
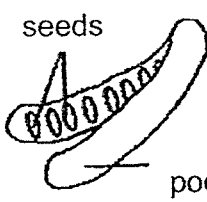

- 14 Three different types of plants were grown on an island. Two years later, researchers returned to the island to investigate the reproduction cycle of the plants.



The researchers found three different types of fruits on the island as shown in the table below.

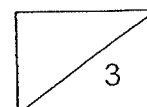
- (a) Based on the information above, match fruit X, Y and Z to the correct plant.

[2]

Fruit X	Fruit Y	Fruit Z
		
Plant _____	Plant _____	Plant _____

- (b) State one advantage of the method used by Fruit X compared to Fruit Y to disperse its seeds. [1]

End of Paper
Check your answers.



SCHOOL : SINGAPORE CHINESE GIRLS' SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : 2024 WEIGHTED ASSESSMENT 1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8		
4	1	3	4	1	2	2	3		

9	a) True b) False c) True d) True
10	a) Cell X produces in: Ovary Cell Y produces in: Testes b) Fertilization. Fusion of the male reproductive cell and female reproductive cell. The sperm travels from the male penis to the female ovary and fuses with the male egg cell. c) To increase rate of fertilization reproduction.
11	The new plants will only produce red flowers as the parent plant passed down the same characteristics to its offspring.
12	Flower X has its anthers hanging outside the flower, so it is pollinated by the strong wind on the island, there will be higher rate of reproduction for flower.
13	a) When the height at the fruit is dropped is higher, the distance travelled by the fruit will be further. b) Variable 1: same height at which the fruit is dropped. Variable 2: speed of the fan must be the same.
14	a) Fruit X: Plant B Fruit Y: Plant A Fruit Z: Plant C b) To reduce overcrowding