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Red Swastika School
Primary 6 Science 2020
Class Test 1

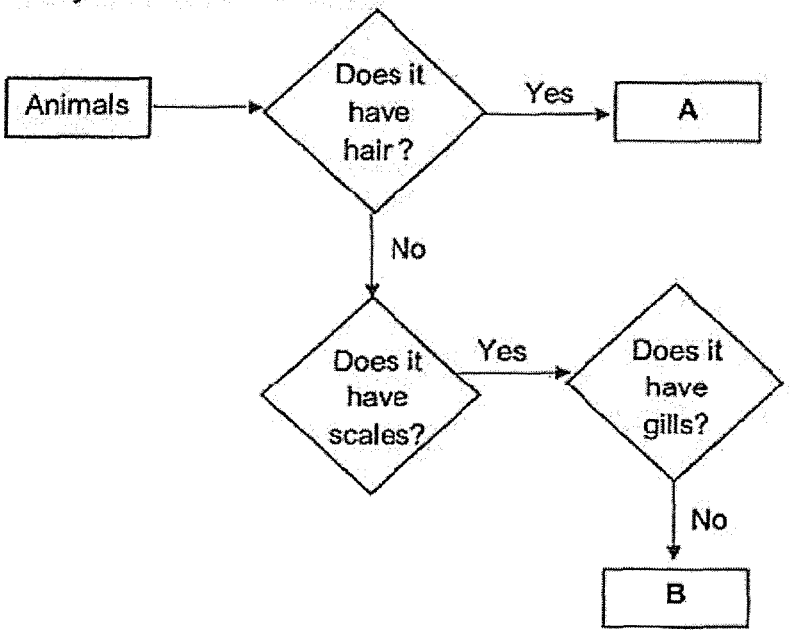
Name: _____ ( ) Parent's Signature: _____

Class: Pr. 6 _____ Date: _____

Section A: Multiple-Choice Questions (15 x 2 = 30 marks)

Choose the most suitable answer and write its number in the brackets provided.

1. Study the flow chart below.



Which of the following is classified correctly for group A and B?

	A	B
(1)	insect	reptile
(2)	mammal	fish
(3)	insect	fish
(4)	mammal	reptile

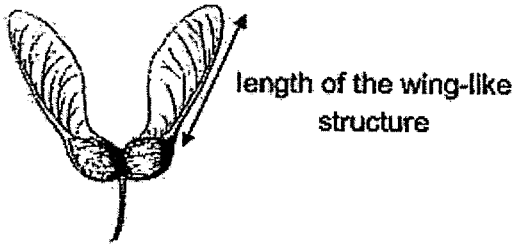
( )

2

2. Which statement is correct about the fern and the mushroom?

(1) They grow only on the ground.
(2) They are non-flowering plants.
(3) They reproduce from spores.
(4) They make their own food. ( )

3. Aminah wanted to find out how the length of the wing-like structure affects the distance travelled by the seeds.



Which of the following should be kept constant to ensure a fair test?

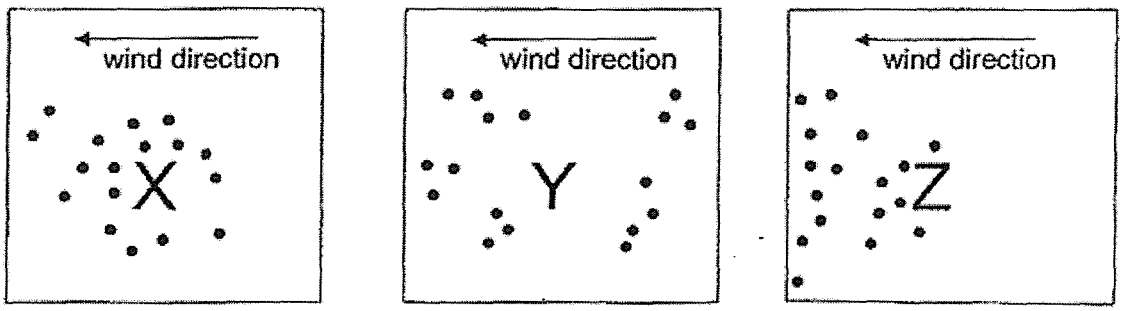
A: location of the experiment
B: length of the wing-like structure
C: height from which the seeds were dropped

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

( )

4

4. Study the dispersal of seeds by plants X, Y and Z.



How are their seeds most likely dispersed?

	X	Y	Z
(1)	animal	explosive action	wind
(2)	explosive action	animal	wind
(3)	animal	wind	explosive action
(4)	wind	animal	explosive action

( )

5. Bryan observed two cells, X and Y, under the microscope. He completed the table below. A tick (√) indicates that the part was observed in the cell.

Parts of cell	Cell X	Cell Y
nucleus	√	√
cell wall		√
cytoplasm	√	√
chloroplasts		
cell membrane	√	√

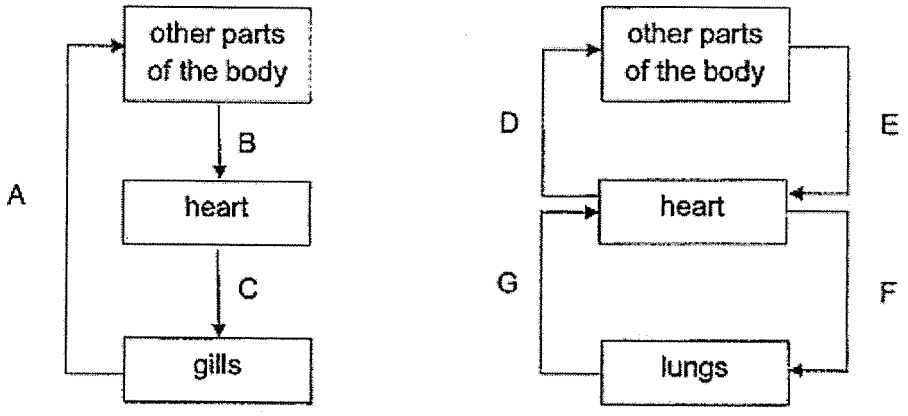
Which of the following shows the correct classification?

	Cell X	Cell Y
(1)	cheek	leaf
(2)	root	cheek
(3)	onion	cheek
(4)	cheek	onion

( )

4

6. The diagram below shows the circulatory system in a fish and human.



Circulatory system of a fish Circulatory system of a human

Which one of the following identifies oxygen-rich blood and carbon dioxide-rich blood at the different parts correctly?

	Oxygen-rich blood	Carbon dioxide-rich blood
(1)	A, D, G	B, C, E, F
(2)	B, C, D, G	A, E, F
(3)	C, G	A, B, E, D, F
(4)	A, E, F	B, C, D, G

( )

7. Which of the following is produced by green plants during photosynthesis?

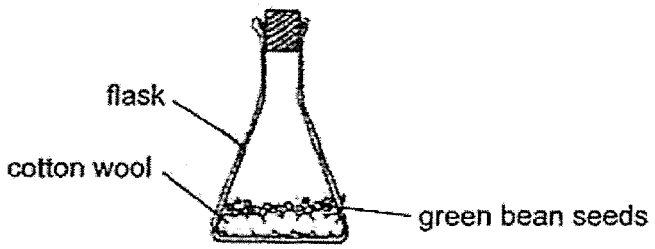
A: food
B: oxygen
C: carbon dioxide

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

( )

4

8. David set up the following experiment using green bean seeds.



Which of the following conditions should he choose in order to have the seedlings with the thinnest stems at the end of his experiment?

	Location	Type of cotton wool	Number of green bean seeds
(1)	in the garden	moist	6
(2)	in a dark cupboard	dry	30
(3)	in the refrigerator	dry	6
(4)	near the window	moist	30

( )

9. Rain boots are worn to protect the person from getting their feet wet when he/she walks in heavy rain.

Based on the properties shown below, which material is most suitable for making the rain boots?

	Material	Property		
		Strong	Flexible	Waterproof
(1)	A	×	√	√
(2)	B	√	√	√
(3)	C	√	×	√
(4)	D	√	√	×

Key
√ : yes
× : no

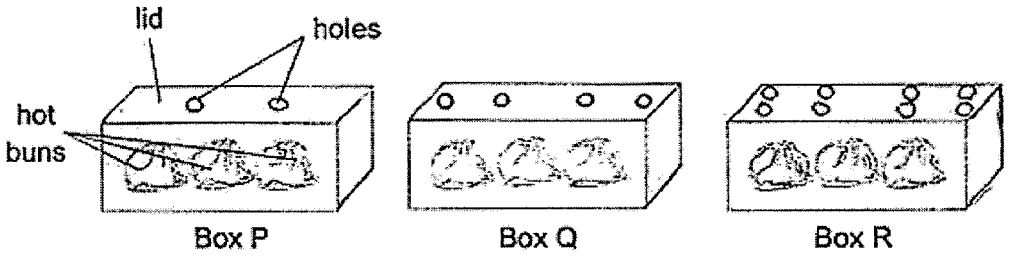
( )

4

10. Which of the following about condensation and evaporation in the water cycle is not correct?

(1) Evaporation occurs at a fixed temperature.
(2) Condensation happens when water vapour loses heat.
(3) Evaporation is affected by the temperature of the surroundings.
(4) Condensation causes the formation of clouds. ( )

11. Martin put three identical hot buns, of the same temperature, into three identical boxes,P,Q and R. The number of holess on the lid of the boxes are different.



Based on information above, which of the following statements is correct?

(1) Water droplets formed on the inner surface of the box lids for P and Q only.

(2) The holes allow all the water droplets in the box to escape to the surrounding air outside the box.

(3) The most amount of water droplets dripped from the inner surface of the box lid onto the buns in box P.

(4) The most amount of water droplets dripped from the inner surface of the box lid onto the buns in box R.

( )

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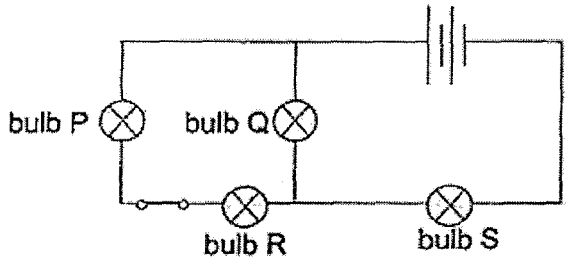
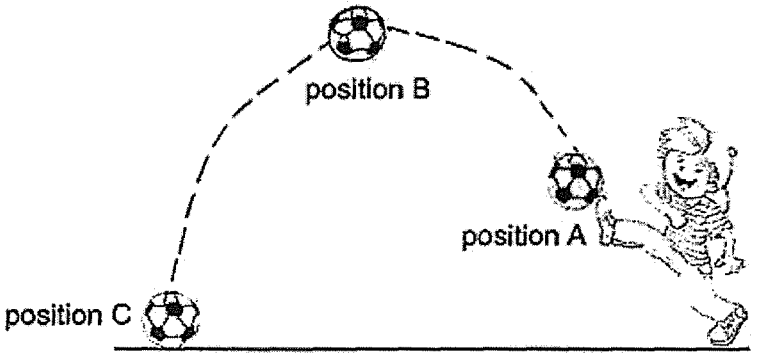
12. The diagram shows the arrangement of four bulbs in a circuit.



Which of the following bulbs can be turned on or off using the switch?

(1) Q and S only
(2) Q and R only
(3) P and R only
(4) P, Q and R only ( )

13. Ramesh kicked a ball upwards.

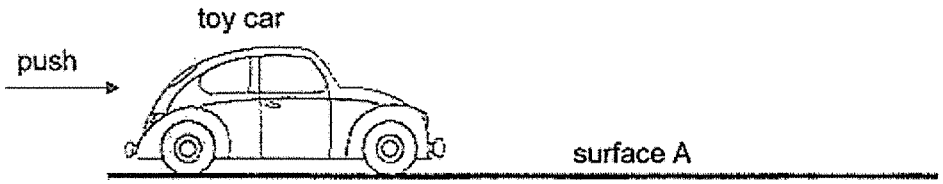


At which position(s) did gravitational force act on the ball?

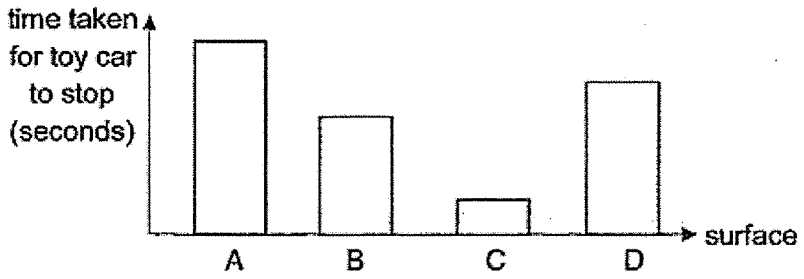
(1) A only
(2) B only
(3) B and C only
(4) A, B and C ( )

4

14. Ahmad pushed his toy car across surface A.



He repeated the experiment by using the same amount of force on the toy car on three other different surfaces, B, C and D. The time taken for the toy car to come to a complete stop is recorded and shown below.



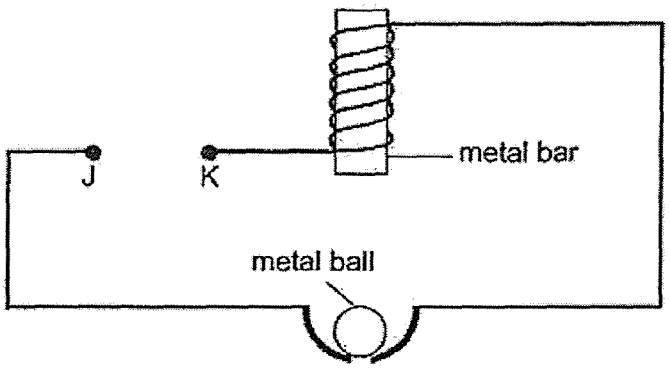
Based on information above, which of the following statements are correct?

A: Surface C is the smoothest.
B: Surface D is rougher than surface A but smoother than surface C.
C: The frictional force between the toy car and surface A is the least.
D: There is no frictional force acting between the toy car and surface C.

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

2

15. A wire was coiled around a metal bas as shown below.At first, the metal ball did not move.



When a battery was placed in between points J and K, the metal ball moved towards the metal bar before dropping back down. This was repeated until the battery was removed.

What can be concluded based on the information above?

A: The metal bar was a permanent magnet.
B: The metal ball was made of a magnetic material.
C: The metal ball dropped down as there was a closed circuit.

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

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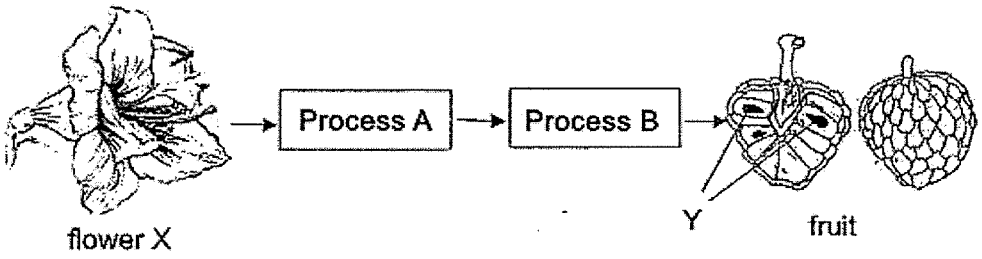
Section B: Open-ended Questions (5 Questions: 20 marks)

16. The diagram below shows how a fruit is formed from flower X.



(a) State process A and B. (1m)

(i) Process A : _____

(ii) Process B : _____

(b) Which part of the flower did part Y of the fruit developed from? (1m)

_____

The picture shows organism Z, interacting with flower X.

(c) Describe how organism Z helps in process A (2m)

_____

_____

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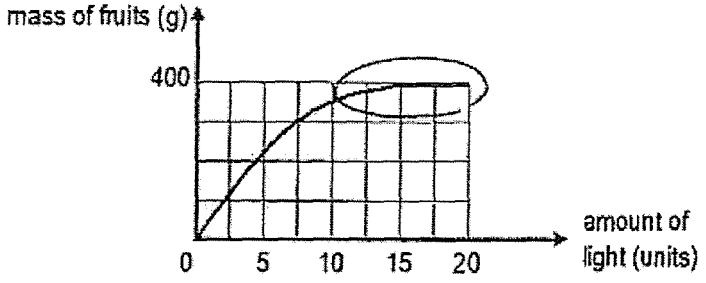
17. Peter conducted an experiment to investigate how the amount of light affected the mass of fruits in plant X over a period of time.

The graph below shows the result of the experiment.



(a) Based on the graph, state how the amount of light affected the mass of fruits produced by plant X. (2m)

_____

_____

_____

(b) Peter decreased the amount of carbon dioxide used in the experiment. Explain what would happen to the mass of the fruits after some time. (2m)

_____

_____

_____

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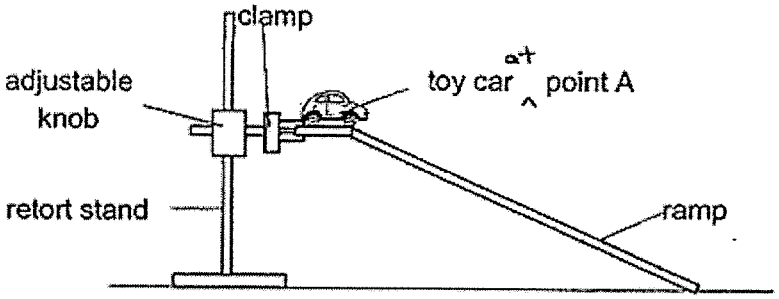
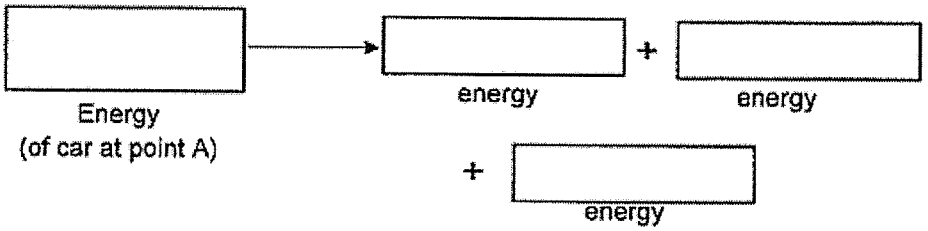
18. Jerome wanted to find out how the mass of a car affects the time taken for it to reach the bottom of a ramp. He set up the experiment below and gave the car a gentle push to let it move down the ramp.



(a) Fill in the boxes to show the energy conversion in the car as it moves down the ramp. (1m)



(b) Without changing or adding any new apparatus or materials, state what he could do to make the car move down the ramp faster using the same force. (1m)

_____

_____

(c) Explain your answer in (b). (1m)

_____

_____

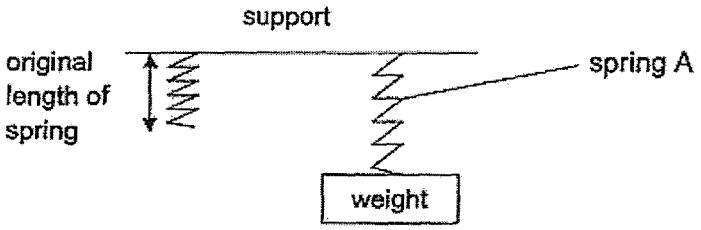
3

(d) Jerome repeated the experiment by applying a layer of oil on the surface of the ramp. Explain what will happen to the time taken for the toy car to reach the bottom of the ramp. (1m)

_____

_____

19. A weight is hung on spring A as shown below.



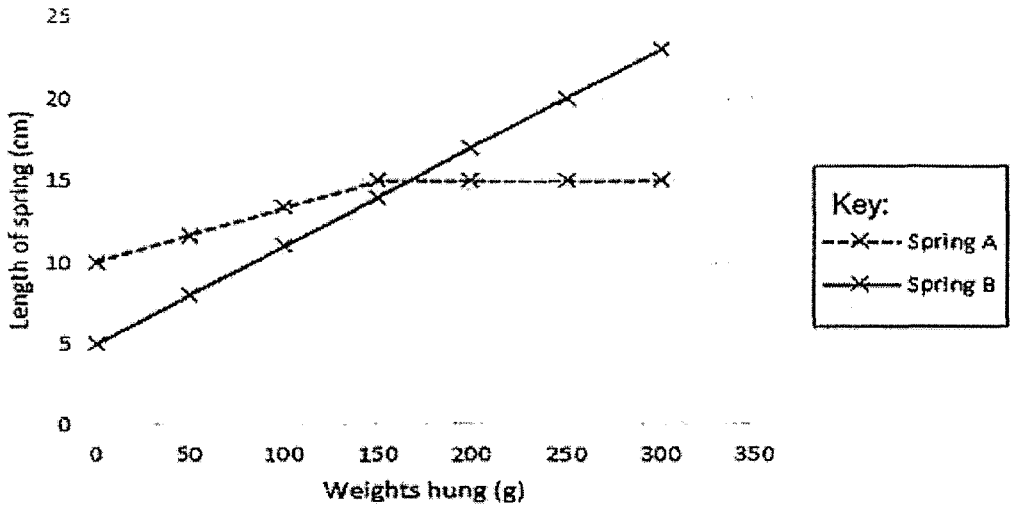
(a) Name the force acting on the weight when it is hung on the spring. (1m)

_____

2

Five more identical weights were hung on spring A, one by one. The length of spring A was measured and recorded. The experiment was repeated using spring B.

The graph shows the results obtained.



(b) What is the original length of spring A? (1m)

_____

(c) Which spring is more suitable for measuring objects weighing 250 g. Explain your answer. (2m)

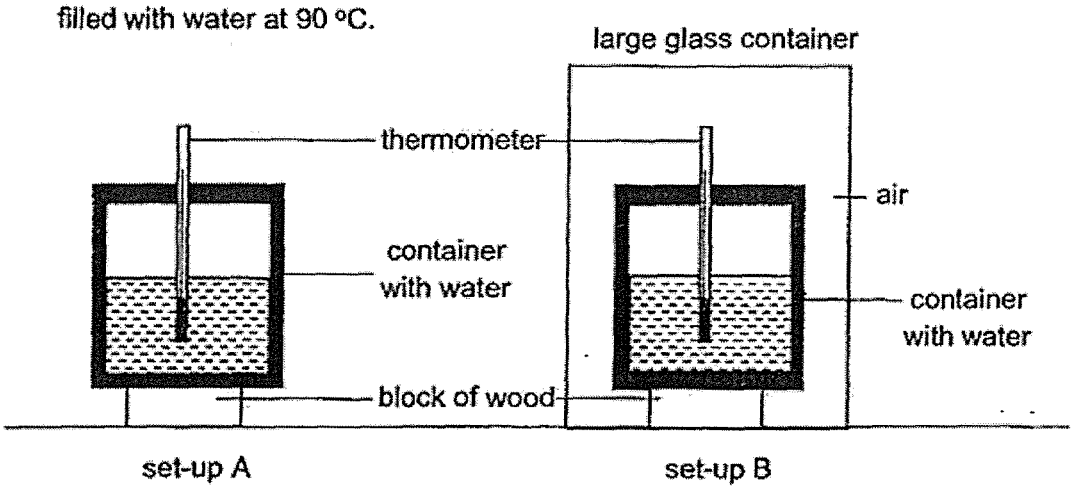
_____

_____

_____

3

20. An experiment is set up as shown below. Both containers were identical and filled with water at 90 °C.



(a) In which set-up, A or B, will the water be at a higher temperature after 30 minutes? (1m)

_____

(b) Explain your answer in (a). (2m)

_____

_____

_____

(c) What will happen to the temperature of water in both set-ups after one day? (1m)

_____

_____

End of Paper
Please check your answer.

4

SCHOOL : RED SWASTIKA PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : SCIENCE
TERM : 2020 JULY CLASS TEST

SECTION A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	3	3	2	4	1	2	4	2	1
Q 11	Q12	Q13	Q14	Q15					
3	3	4	2	1					

SECTION B

Q16)	a)i)Pollination b)Fertilisation b)Ovules. c)Organism Z helps to pollinate flower X when its body rubs on the anthers of flower X and the pollen grains stick onto its body. There after, organism Z moves on to another flower and pollinates the flower when its body brushes on the stigma of the flower.
Q17)	a)As the amount of light increased to 15 units, the mass of fruits increased. When the amount of light was 15 units and more, the mass of fruits remained the same. b)Mass of the fruits will decrease. With less carbon dioxide the rate of photosynthesis will decrease. The plant made less food. Less food would be transported to the fruit and stored in the fruit.
Q18)	a)Gravitational Potential →kinetic + heat + sound b) Shift the adjustable knob to a higher position to raise the ram.

	c)When the slope is steeper, the car is higher, resulting in it having more gravitational potential energy, thus, more gravitational potential energy will be converted to more kinetic energy. d)The time taken will be less. There is less friction between the car and the surface of the ramp.
Q19)	a)Gravitational force. b)10cm c)Spring B. Spring B can stretch to measure but spring A cannot.
Q20)	a)Set up B. b)The layer of air is a poor conducted of heat and reduces heat loss from the water to the surroundings. c)They will both lose heat and reach room temperature.