NANYANG PRIMARY SCHOOL
Term 2 Weighted Assessment
Science
Primary 5

20

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. How are steam and water vapour similar?

A They have no mass.
B They have no fixed shape.
C They are water in the gaseous state.
D They can be compressed to occupy less space.

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

( )

2. Which of the following statements about condensation and evaporation are correct?

A Both processes involve heat gain.
B Both processes involves water vapour.
C Both processes involve a change in state.

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

( )

4

3. Shu Qin wanted to find out how the rate of evaporation is affected by the exposed surface area of a container.

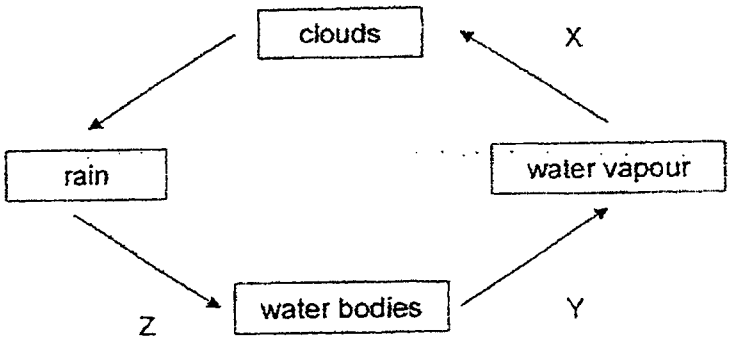
Set-up	Exposed surface area of container (cm^2)	Volume of water in container (ml)	Temperature (°C)	Wind
A	80	570	25	absent
B	180	500	32	absent
C	180	570	25	absent
D	80	500	32	present

Which two set-ups should Shu Qin use to conduct a fair test?

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

( )

4. Study the water cycle below.



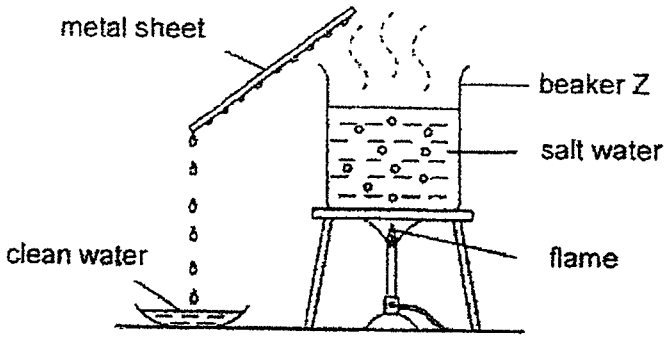
Which one of the following statements about the water cycle is true?

(1) Heat loss is needed during process Z.
(2) Heat gain is needed during process Y.
(3) There is no heat loss during process X.
(4) There is a change of state during processes X and Z.

( )

4

5. Julia conducted an experiment using the set-up below.



The salt water in beaker Z was heated for some time. It was noticed that less water droplets formed on the metal sheet as time passed.

Which one of the following statements would explain why less water droplets formed?

A The metal sheet had become hotter.
B The water in Beaker Z had become hotter.
C The rate of evaporation for the salt water had increased.
D The rate of condensation had decreased.

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

6. Which of the following are ways to reduce water usage?

A Washing clothes on a half load
B Turning off the shower when soaping
C Treat seawater so that it can be drinkable
D Use water from washing rice to water the plants

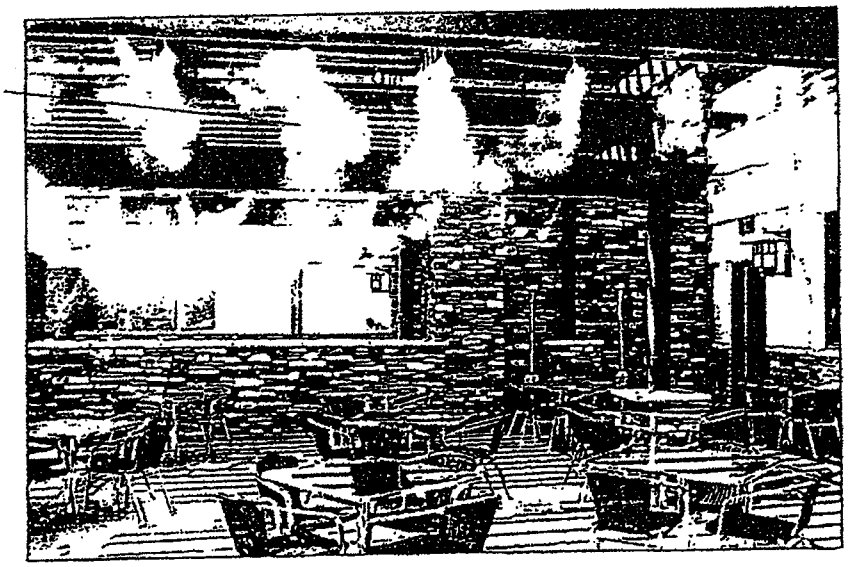
(1) A and C only
(2) A and D only
(3) B and C only
(4) B and D only ( )

4

Section B: Open-Ended Questions (8 marks)

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

7. Some restaurants use a water mist system to cool the surrounding air. Mist consist of tiny water droplets as shown below.

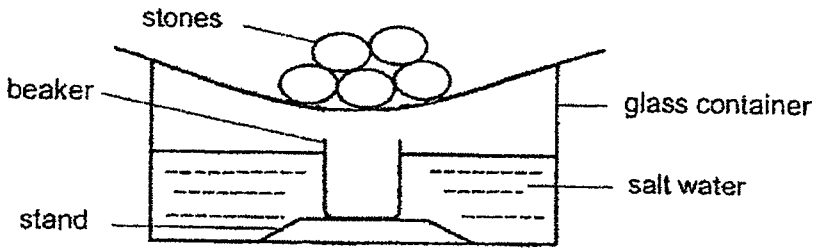


(a) Explain how the mist system helps to make the surrounding air cooler. Give a reason for your answer. [2]

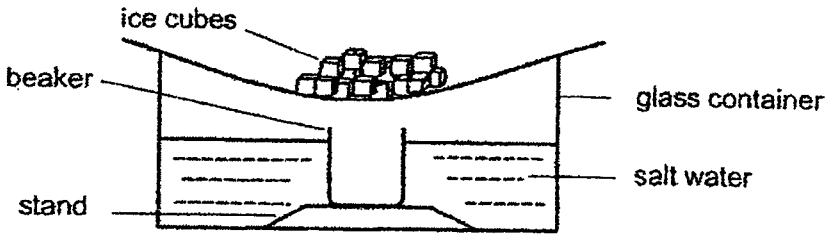
(b) Would adding fans increase or decrease the rate of cooling the surrounding air? Explain. [2]

4

8. Ali prepared set-ups, C and D, to find out if the presence of ice cubes on the plastic sheet affects the rate of condensation.



set-up C



set-up D

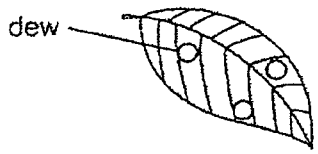
After three hours, water was collected in both beakers in set-ups, C and D.

(a) Would the water in the beaker be salty? Give a reason for your answer. [1]

(b) Which set-up will most likely collect more water in the beaker? Explain your choice. [2]

3

The picture below shows dew formed on a leaf. Dew, which consists of water droplets, is formed when the surrounding water vapour condenses on the leaf's surface.



When lost in a forest, people who have ran out of drinking water can collect the dew on leaves to drink.

The graph below shows the average temperature in a forest from 6 a.m. to 6 p.m.

Time	Temperature on the surfaces of the leaves (°C)
6 a.m.	25
9 a.m.	29
12 p.m.	31
3 p.m.	30
6 p.m.	28

(c) From the graph, what would be the best time to collect the most dew from the surfaces of the leaves when the temperature of the surrounding air is 28 °C? Explain your answer. [1]

_____

_____

- End of Paper -

1

Suggested Answer Key – P5 WA2 2022

Qns No	Answer	Qns No	Answer
1	3	6	4
2	2		
3	2		
4	2		
5	2		

Qns No		Answer
7	a	The surrounding air lost heat to the mist. The mist evaporated.
	b	Increase. Wind increases the rate of evaporation. Surrounding air will lose heat faster to the mist.
8	a	No. The water in the saltwater evaporates and the salt is left behind.
	b	Set up D. The plastic sheet in set up D is cooler. This increases the rate of condensation.
	c	Question voided

2
END

Rosyth School
Weighted Assessment 2022
SCIENCE
Primary 5

Name: _____ Total Marks: /28

Class: Pr 5- _____ Register No

Date: 13 May 2022

Total Time for Booklet A and B: 1h

Booklet A

Instructions to Pupils:

1. Do not open the booklet until you are told to do so.
2. Follow all instructions carefully.

* This booklet consists of 11 printed pages (including cover page).

For each question from 1 to 14, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade your answer on the Optical Answer Sheet.

[28 Marks]

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1 Which of the following characteristics are similar between animals and plants?

A: Both grow
B: Both reproduce
C: Both grow towards sunlight
D: Both need air, food and water to carry out life processes

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

2 The table below shows the characteristics of three animals, A, B and C.

	Animal A	Animal B	Animal C
Where it lives	water	land	water
Its outer covering	hair	scales	scales
How it reproduces	gives birth	lays eggs	lays eggs

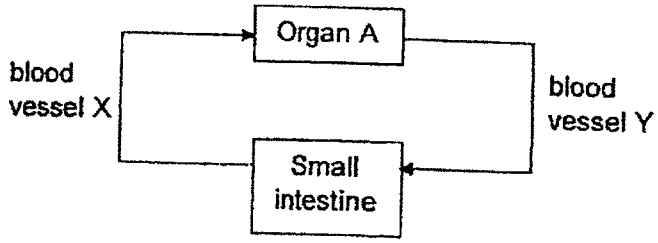
Which of the following shows the groups that animals A, B and C most likely belong to?

	Animal A	Animal B	Animal C
(1)	mammal	reptile	amphibian
(2)	mammal	reptile	fish
(3)	amphibian	fish	reptile
(4)	amphibian	mammal	fish

3 Which one of the following statements is true about human digestive system?

(1) Digestion begins in the stomach.
(2) Digested food is absorbed in the gullet.
(3) Excess water is absorbed in the large intestine.
(4) Undigested food is absorbed into the bloodstream.

4 The chart below shows how oxygen and digested food are transported in the human body.



Which of the following is correct?

	Organ A	Oxygen at X compared to Y	Digested food at Y compared to X
(1)	Lungs	Less	More
(2)	Lungs	More	Less
(3)	Heart	Less	More
(4)	Heart	Less	Less

5 The air we breathe out _____ than the air that we breathe in.

(1) is cooler
(2) has more oxygen
(3) has less water vapour
(4) has more carbon dioxide

6 Mr Sim observed that his resting breathing rate is faster at an altitude of 5000m compared to at an altitude of 0 m. 'Altitude' refers to the height above sea level as shown in the diagram.

Based on the altitude, which of the following table shows the percentage of oxygen in inhaled air and his resting heart rate correctly?

(1)

altitude (m)	percentage of oxygen in inhaled air (%)	resting heart rate
0	20.9	70
5000	11.2	95

(2)

altitude (m)	percentage of oxygen in inhaled air (%)	resting heart rate
0	11.2	70
5000	20.9	95

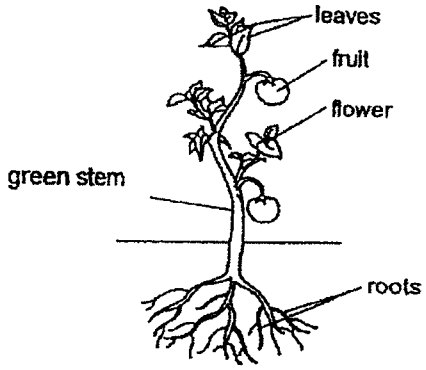
(3)

altitude (m)	percentage of oxygen in inhaled air (%)	resting heart rate
0	20.9	95
5000	11.2	70

(4)

altitude (m)	percentage of oxygen in inhaled air (%)	resting heart rate
0	20.9	70
5000	20.9	70

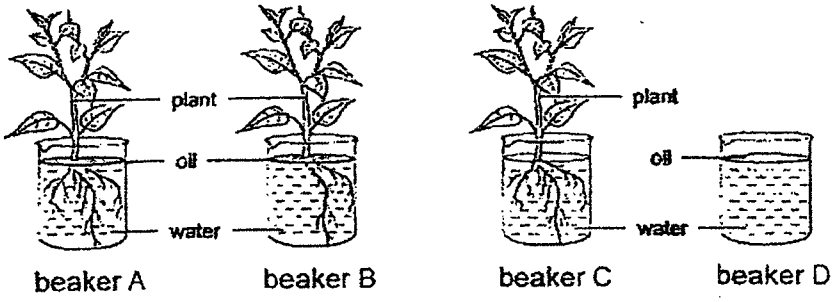
7 The diagram below shows a plant.



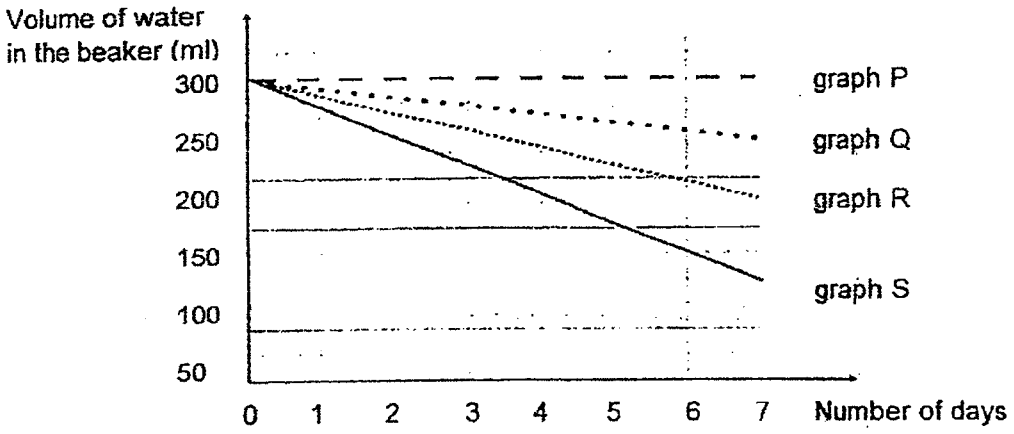
Which statement is not true about the above plant?

(1) Food is made in the green stem and leaves.
(2) Food-carrying tubes are found in the green stem.
(3) Food and oxygen are transported to the fruit from the stem.
(4) Food is transported from the leaves to the fruit, stem and roots.

8 Ahmad prepared four set-ups using four similar beakers A, B, C, D as shown in the diagram below. All the beakers have 300 ml of water. Beakers A, B and D have a layer of oil but not Beaker C. He placed the set-ups next to an open window.



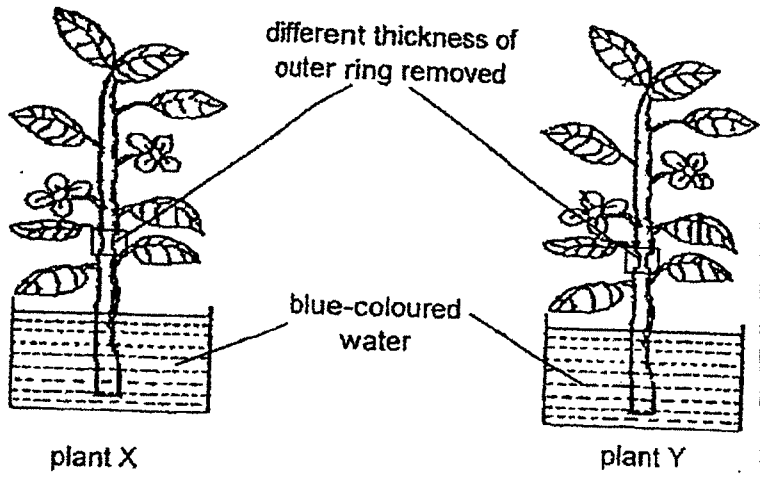
He observed the volume of the water in the four beakers over seven days and recorded the results in the graph shown below.



Which of the following beakers correctly match with graphs, Q and R?

	Graph Q	Graph R
(1)	D	A
(2)	D	B
(3)	B	C
(4)	B	A

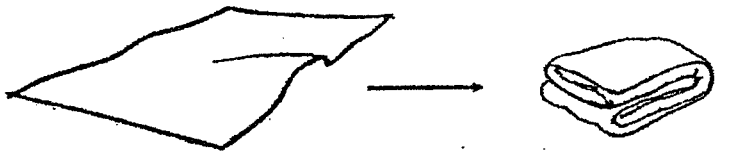
9 June conducted an experiment using two identical plants X and Y. She cut out different thickness of the outer ring of the stems in plants X and Y.



After one day, June observed that flowers of plant X turned blue but flowers of plant Y remained white. Which one of the following explains June's observation?

	Type of tube(s) removed in	
	Plants X	Plants Y
(1)	food carrying tubes only	food and water carrying tubes
(2)	food carrying tubes only	none
(3)	none	food carrying tubes only
(4)	food and water carrying tubes	food and water carrying tubes

10 Peter folds his blanket every morning after getting off from bed as shown below.



blanket folded blanket

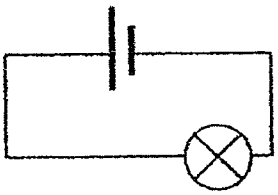
The blanket can be folded because it is _____.

(1) soft
(2) strong
(3) flexible
(4) waterproof

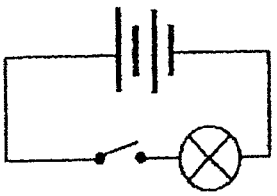
11 Which of the following shows a closed electrical circuit?

(1)

(2)



(3)



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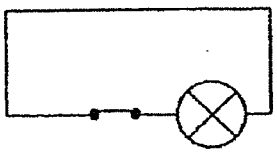


12 Four metal pins, A, B, C and D, were fixed onto a cardboard. The diagram below shows the pins and front side of the cardboard where the pins were fixed on.

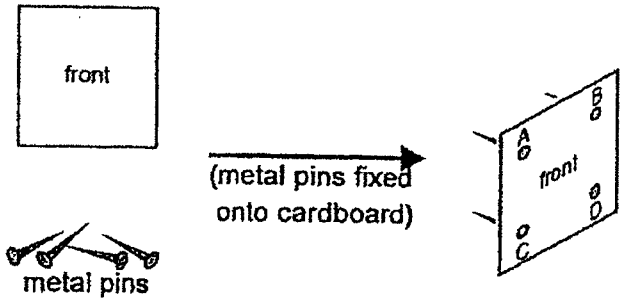
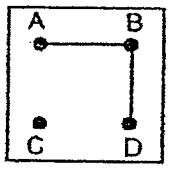


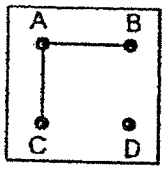
Figure 1

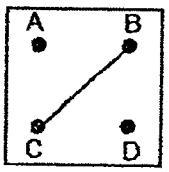
Some of the metal pins were connected with wires behind the cardboard.
Gary used a circuit tester with a bulb to connect to different pairs of metal pins.
He recorded his results in the table below.

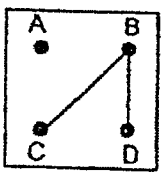
Circuit tester connected to metal pins	Bulb lighted up on circuit tester
A and B	No
B and C	Yes
A and D	No
C and D	Yes

Which one of the following shows the wire connections at the back of the cardboard?

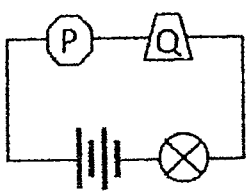
(1) 

(2) 

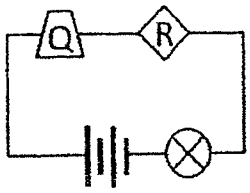
(3) 

(4) 

13 Paul set up two circuits using objects, P, Q and R. The bulb in the circuit with objects, P and Q, lighted up whereas the bulb in the circuit with objects, Q and R, did not light up.

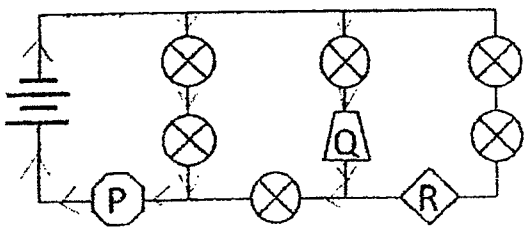


bulb lighted up



bulb did not light up

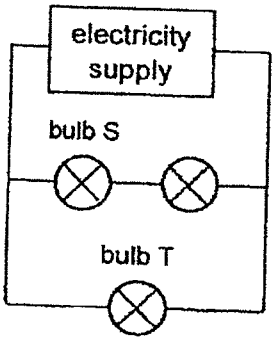
He then set up another new circuit using the same objects, P, Q and R, as shown below.



How many bulbs will be lighted up in the new circuit?

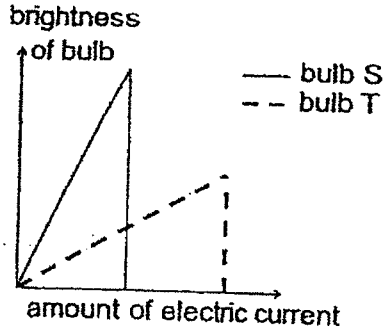
(1) six
(2) two
(3) three
(4) four

14 Jerry set up a circuit below with three bulbs. He wanted to find out how the amount of electric current flowing through the circuit will affect the brightness of bulb S and bulb T.

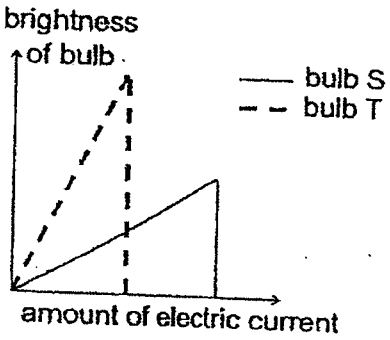


He increased the amount of electric current flowing through the circuit and recorded the brightness of bulb S and T each time, then plotted his findings on a graph. Which graph below would show the results of his experiment?

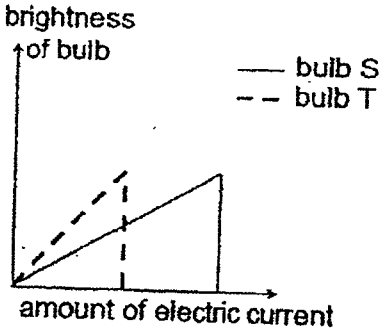
(1)



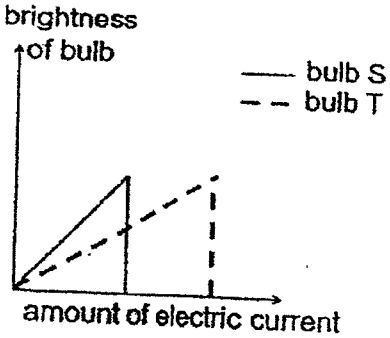
(2)



(3)



(4)



(go to Booklet B)