MAHA BODHI SCHOOL

2021 WEIGHTED ASSESSMENT 1

SCIENCE REVIEW 1

PRIMARY FIVE

Name : _____( ) Date : 17 May 2021

Class : Primary 5 _____

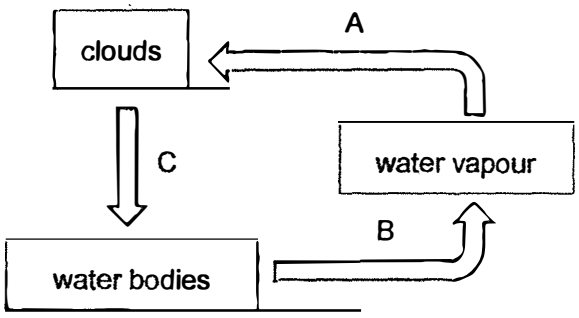
Duration : 50 min **Marks:** / 30

Parent's signature : _____

Section A : [8 x 2 marks = 16 marks]

For each question from 1 to 8, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). **Write your answer in the bracket.**

1. Study the diagram below that shows the movement of water in the environment.



Which of the following correctly show the changes in the state of water at A, B and C?

Point	Changes in state
A	gaseous to liquid
B	liquid to gaseous
C	gaseous to liquid

(1) A and B only

(2) A and C only

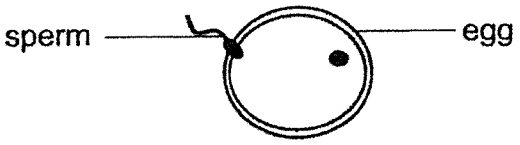
(3) B and C only

(4) A, B and C

( )

Marks : / 2

2. Study the diagram below.



Which of the following statements are true?

A. The sperm fuses with the egg to become a fertilised egg.

B. The fertilised egg will develop into a baby in the mother's stomach.

C. The sperm and egg contain information that is passed on to the baby.

(1) A and B only

(2) A and C only

(3) B and C only

(4) A, B and C

( )

3. Which of the following are parts of an animal cell?

A. cell wall

B. cytoplasm

C. chloroplast

D. cell membrane

(1) A and C only

(2) A and D only

(3) B and C only

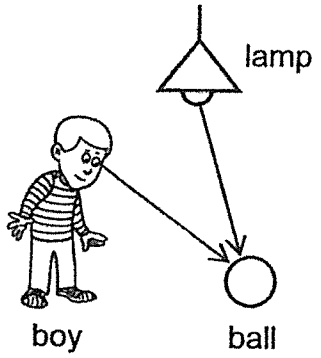
(4) B and D only

( )

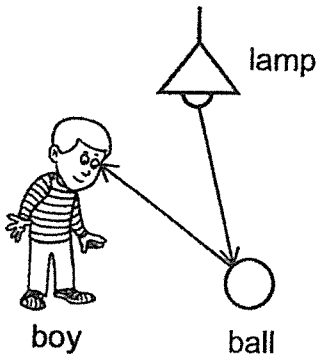
Marks : / 4

4. Which of the following correctly shows how the boy is able to see the ball?
(The arrows show the path of light)

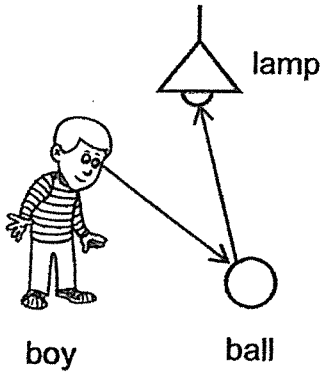
(1)



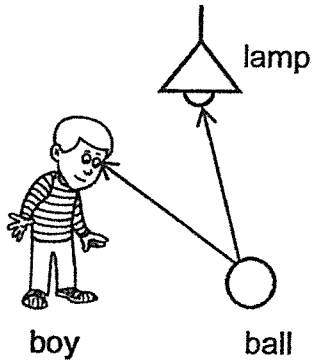
(2)



(3)



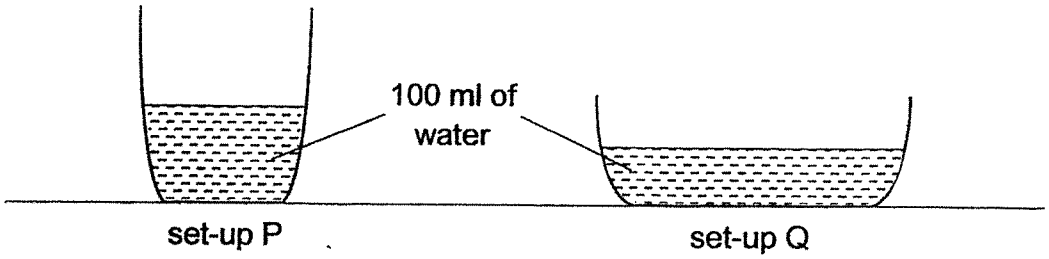
(4)



( )

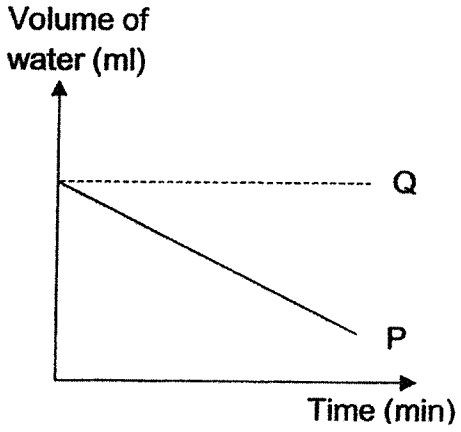
Marks : / 2

5. Javier conducted an experiment using the set-ups shown below. He filled each container with 100 ml of water and left the set-ups next to an open window.

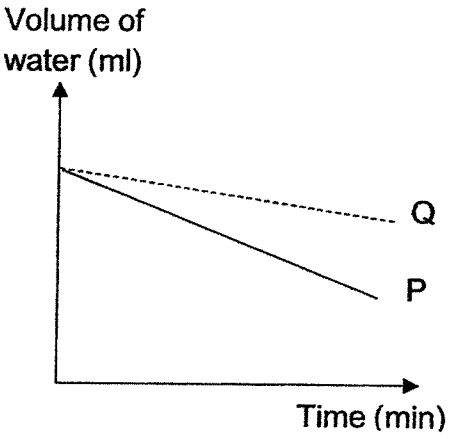


Which of the following graphs shows how the amount of water in each set-up changed during the experiment?

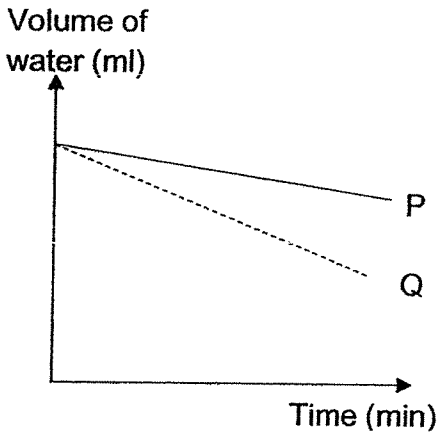
(1)



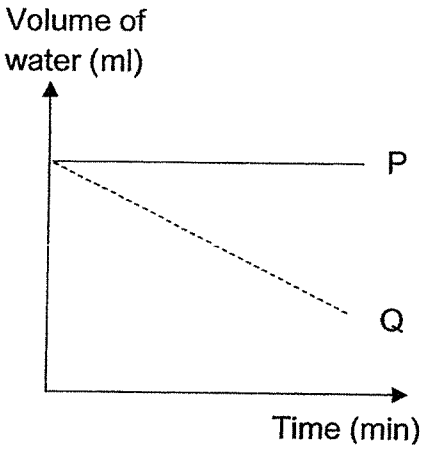
(2)



(3)



(4)



( )

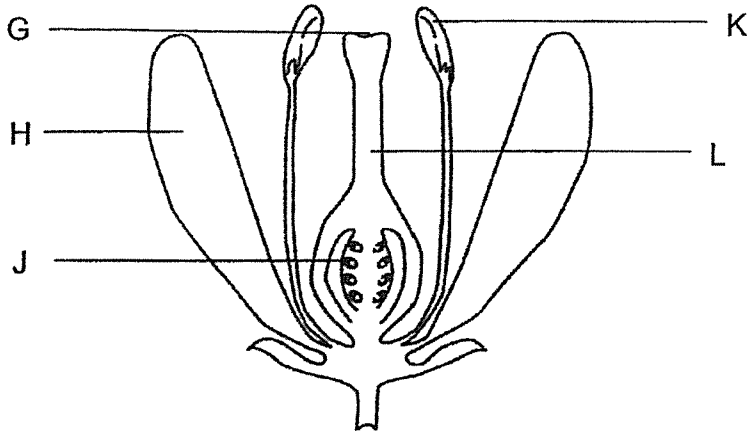
Marks : / 2

6. Kenneth wanted to find out if the parts of a flower would affect the development of a fruit.

He carried out the following steps:

- He removed some parts of flower Z.
- He transferred some pollen grains from a similar flower to the remaining parts of flower Z.

After some time, flower Z developed into a fruit.



Flower Z

Which two parts of flower Z were removed?

(1) G and H

(2) G and K

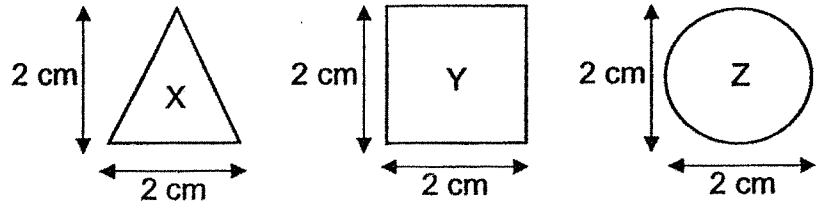
(3) K and H

(4) J and L

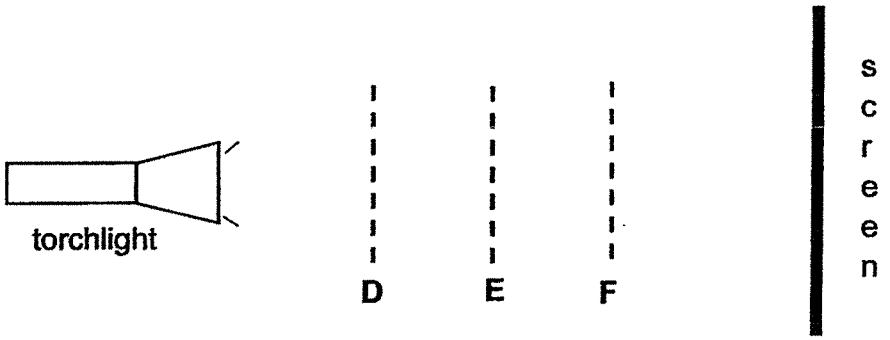
( )

Marks : / 2

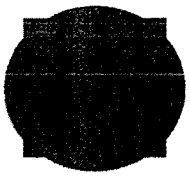
7. Timothy cut three shapes, X, Y and Z, out of a piece of cardboard as shown below. All the three shapes, X, Y and Z, are of 2 cm in height and width.



He then placed X, Y and Z in between a torch and a screen. D, E and F are the positions where he placed the shapes.



He recorded the shadow made by the three shapes below.



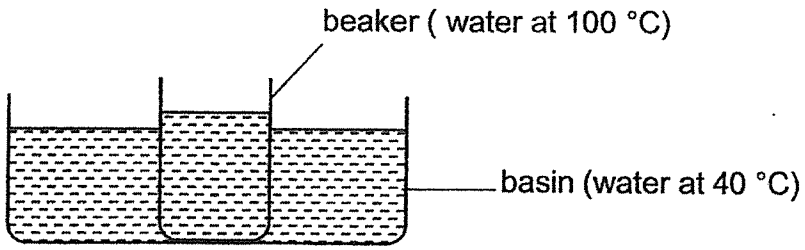
Which of the following shows the correct positions of the three shapes?

	D	E	F
(1)	X	Y	Z
(2)	Z	X	Y
(3)	Z	Y	X
(4)	Y	Z	X

( )

Marks : / 2

8. Larry placed a beaker of water at 100 °C into a basin of water at 40 °C as shown below. The set-up was placed on a table in a classroom.



What was the temperature of the water in both the beaker and basin after four hours?

	Temperature	
	water in beaker (°C)	**water in basin (°C)**
(1)	100	40
(2)	70	70
(3)	30	30
(4)	40	100

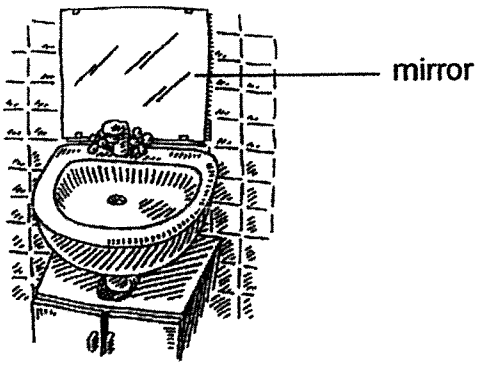
( )

Marks : / 2

SECTION B : [14 marks]
For questions 9 to 12, write your answers in this booklet.

The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

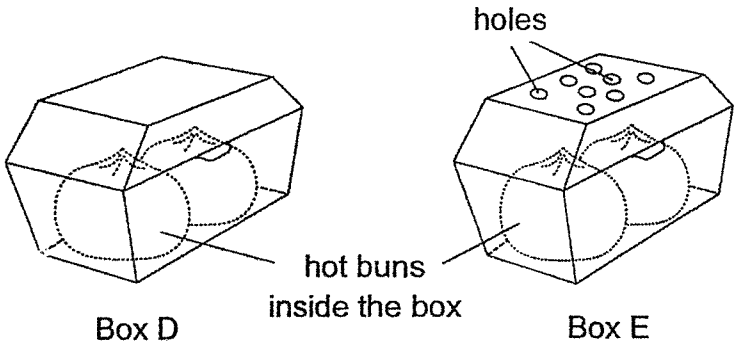
9 Daniel took a hot bath on a cold rainy day. After his bath, he noticed that he could not see his image clearly in the mirror in his bathroom. The mirror had become blurry.



(a) Explain why Daniel could not see his image on the mirror clearly after his hot bath? [2]

Marks: / 2

(b) Daniel placed some hot buns in two similar boxes. Box D has no holes but box E has some holes.

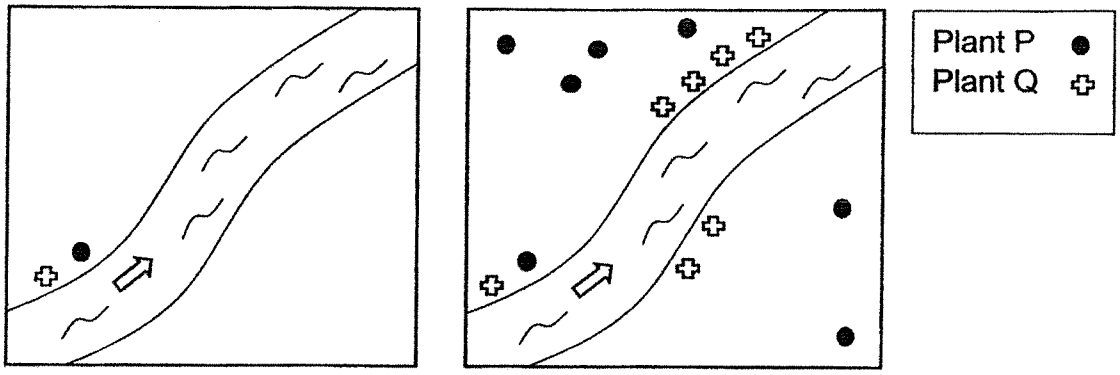


He observed that the buns in one of the boxes became wet after some time and the buns in the other box were dry.

Which box of buns were dry? Explain why. [2]

Marks: / 2

10. The diagrams below show the number of plants P and Q on an island over two years.

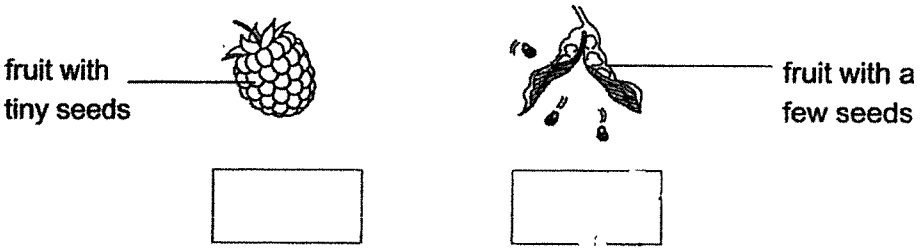


First observation

After two years

(a) Study the two fruits below carefully.

Which of the following is likely to be the fruit of Plant P?
Choose your answer and put a tick (✓) in the box. [1]

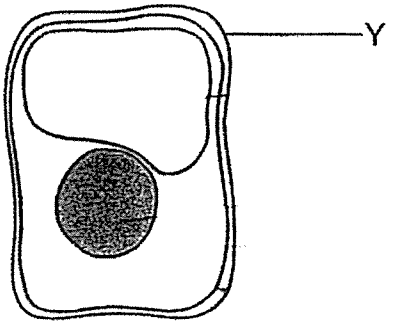


(b) Give a reason for your answer to (a). [1]

(c) State two characteristics of the fruit of plant Q which help in its dispersal. [2]

Marks: / 4

11. The diagram below shows a plant cell.



(a) State the function of part Y. [1]

_____

(b) Which part of the plant could the cell be taken from? Explain why. [2]

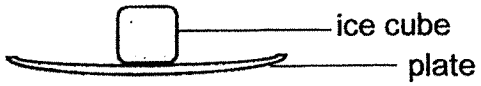
_____

_____

_____

Marks: / 3

12. Jane had four similar plates made of different materials P, Q, R and S. She placed an identical ice cube on each plate as shown below.



She recorded the time taken for each ice cube to completely melt in the table below.

Material	P	Q	R	S
Time taken for ice cube to melt (minutes)	9	18	10	12

(a) Based on the results, what can you conclude about the property of material P? [1]

_____

(b) Which material should she choose to make a container for keeping food hot the longest? Explain why. [2]

_____

_____

_____

Marks: / 3

~ END OF PAPER ~

ANSWER KEY

YEAR : 2021
LEVEL : PRIMARY 5
SCHOOL : MAHA BODHI SCHOOL
SUBJECT : SCIENCE
TERM : SCIENCE REVIEW 1

SECTION A

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

SECTION

Q9	a)	The water vapour from Daniel's hot bath came into contact with the cooler surface of the mirror, lose heat and condenses into water droplets which will make the mirror blurry.
	b)	Box E. The holes allowed the water vapour from the hot buns to escape and not condense into water droplets inside the box which would cause the hot buns to become soggy.
Q10	a)	tick*(Fruit with tiny seeds)✔
	b)	The seeds are scattered far away from parent plant.
	c)	The fibrous husk and waterproof outer covering
Q11	a)	It gives the cell a shape
	b)	Root. The cell does not have a chloroplast and leaf cells have chloroplasts because leaves make food for the plant.
Q12	a)	Material P is a best conductor of heat.
	b)	Material Q. The ice cube melted the slowest. Material Q is the poorest conductor of heat so heat loss from the food will be the slowest thus keeping the food hot the longest.

END

MAHA BODHI SCHOOL

2021 SCIENCE REVIEW 2

PRIMARY FIVE

Name : _____( ) Date: 26 August 2021

Class : Primary 5 _____

Duration : 50 min

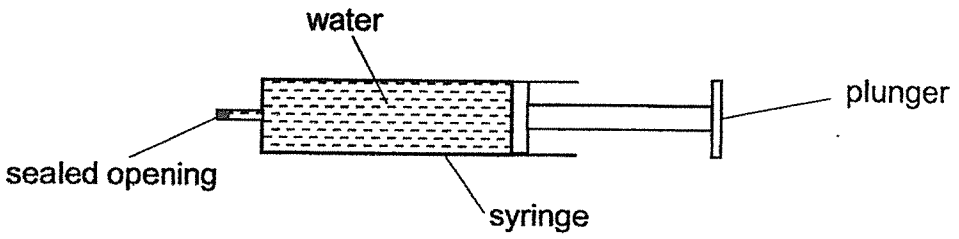
Marks: / 30

Parent's signature : _____

Section A : [8 x 2 marks = 16 marks]

For each question from 1 to 8, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). **Write your answer in the bracket provided.**

1. A syringe was filled with water as shown in the diagram below. The opening of the syringe was sealed so that no water would spill out.



Which of the following explains why the plunger could not be pushed in?

(1) Water has mass.

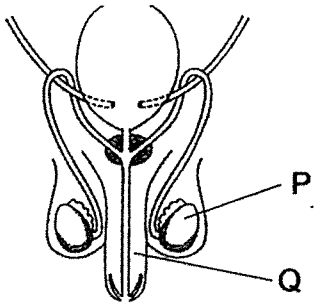
(2) Water can be compressed.

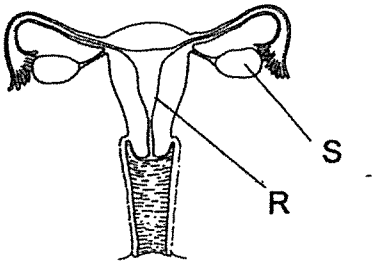
(3) Water has a definite volume.

(4) Water has no definite shape. ( )

Marks : / 2

2. The diagram shows the human reproductive system

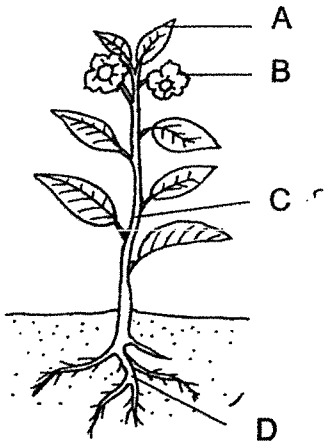




In which two parts are the reproductive cells produced?

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

3. The diagram below shows a plant.



Based on the diagram, at which part(s) of the plant can water-carrying tubes be found?

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

Marks : / 4

4. Which of the following correctly shows the parts of the human respiratory system and circulatory system?

	Respiratory system	Circulatory system
(1)	nose, windpipe and lungs	heart, blood, and blood vessels
(2)	nose, gullet and lungs	nose, lungs and heart
(3)	mouth, gullet and stomach	nose, heart and blood vessels
(4)	mouth, nose, lungs and heart	lungs, heart, blood

( )

5. Max wants to find out how temperature of water affects the rate of evaporation.

Set-up	Exposed surface area (cm^2)	Amount of water at the start of experiment (ml)	Temperature of water (°C)
W	40	150	27
X	40	200	27
Y	40	150	35
Z	90	200	40

Which two set-ups should he use for his experiment?

(1) W and Y
(2) W and Z
(3) X and Z
(4) Y and Z

( )

Marks : / 4

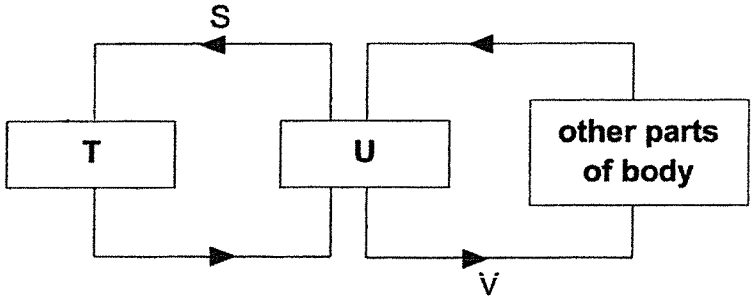
6. Four identical flowers, J, K, L and M had parts removed as shown in the table below. Insects were observed visiting all the four flowers.

Flower	Petals	Anther	Stigma
J	removed	present	present
K	present	removed	removed
L	removed	removed	present
M	present	present	removed

Which two flowers would likely turn into a fruit?

(1) J and L
(2) J and M
(3) K and L
(4) K and M ( )

7 The diagram below shows the direction of blood flowing in a human body.



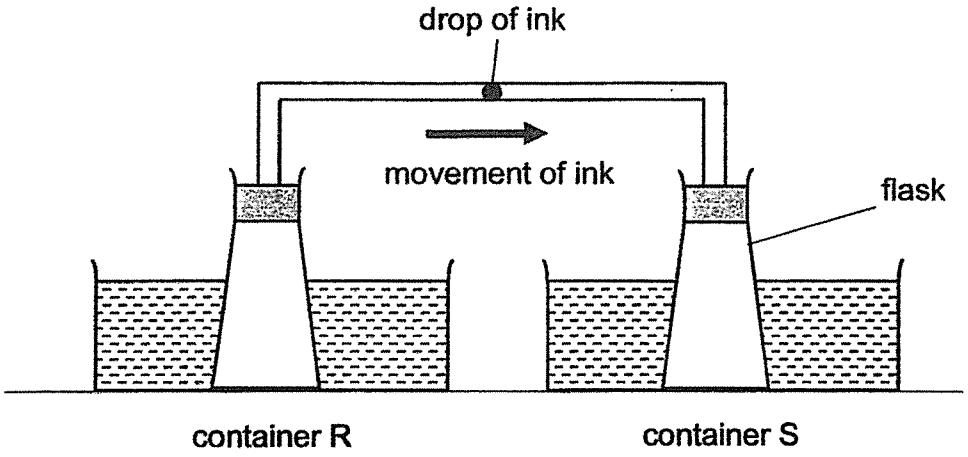
Which of the following correctly shows what S, T, U and V represent in the diagram above?

	Blood rich in oxygen	Blood rich in carbon dioxide	Heart	Lungs
(1)	V	T	U	S
(2)	S	V	T	U
(3)	V	S	U	T
(4)	U	V	S	T

( )

Marks : / 4

8. Leslie put a drop of ink in the middle of the glass tube connecting two identical flasks. Both flasks were then immersed into containers R and S which contained the same amount of water at different temperatures. The experiment was conducted in the classroom.



After some time, the drop of ink moved towards container S.
Which one of the following shows the possible temperature of water in containers R and S?

	Temperature of water in containers (°C)	
	R	**S**
(1)	5	5
(2)	90	90
(3)	5	90
(4)	90	5

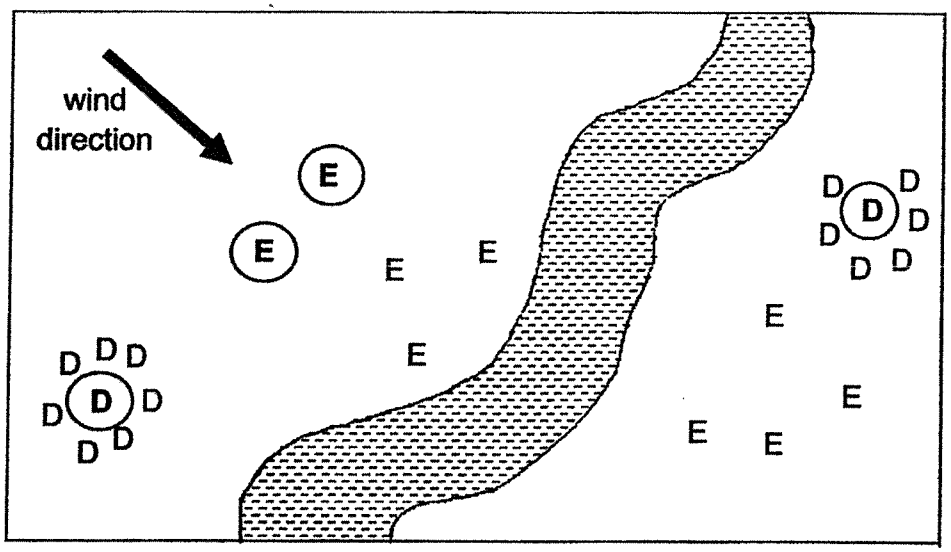
( )

Marks : / 2

SECTION B : [14 marks]
For questions 9 to 12, write your answers in this booklet.

The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

9. Study the diagram below.



Key: (D) parent Plant D D young Plant D
(E) parent Plant E E young Plant E

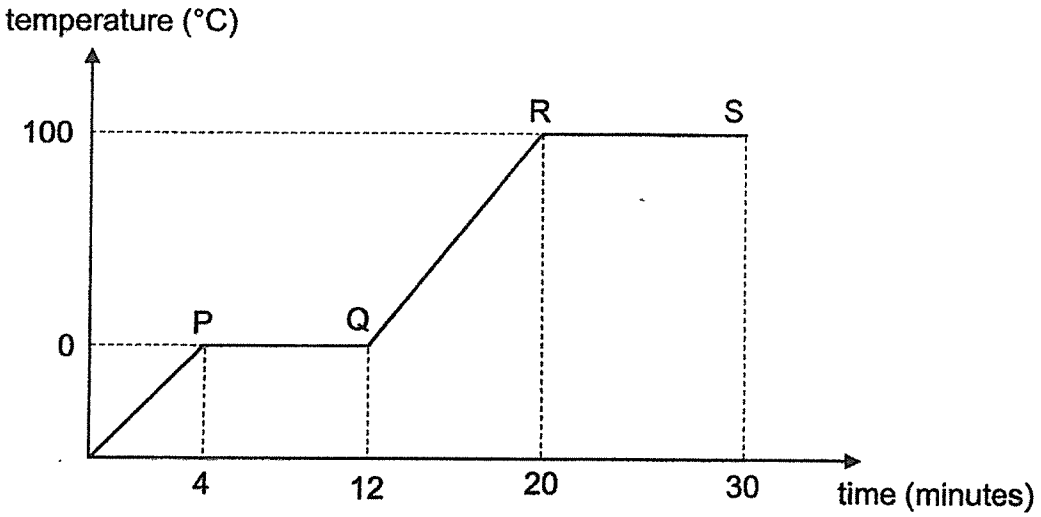
(a) Based on the diagram, state the seed dispersal methods of D and E. [2]

Plant	Dispersal method
D	
E	

(b) Young plant D did not grow as well as the young plant of E.
Explain why. [2]

Marks: / 4

10. Mandy heated 300g of ice cubes in a beaker. She recorded the temperature of the ice cubes over 30 minutes as shown in the graph below.



(a) State the processes occurring at PQ and RS. [2]

(i) PQ: _____

(ii) RS: _____

(b) After 30 minutes, Mandy observed that the volume of water in the beaker was less than the volume of ice cubes at the start of the experiment. Explain her observation. [2]

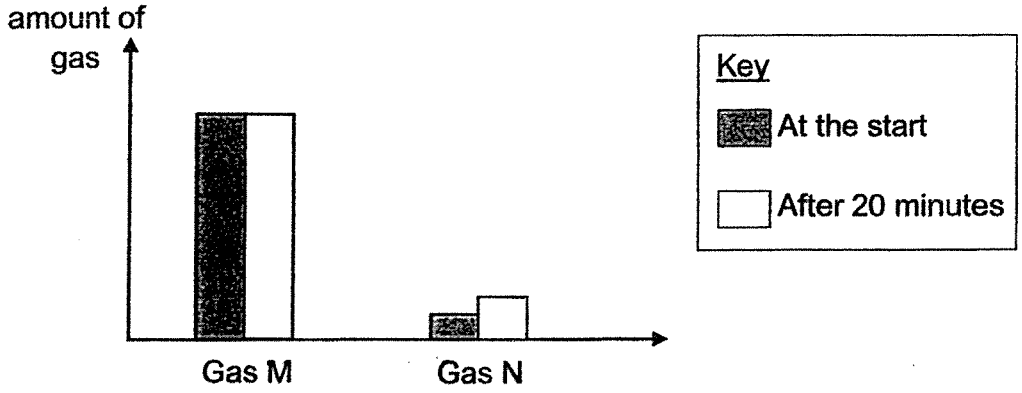
_____

_____

_____

Marks: / 4

11. Five adults were trapped in a lift for 20 minutes before they were rescued.



The graph above shows the amount of two different type of gases in the lift at the start and after 20 minutes.

(a) What could Gas M and N possibly be? [1]

(i) Gas M: _____

(ii) Gas N: _____

(b) Explain why the breathing rate of the people trapped in the lift increased after some time. [2]

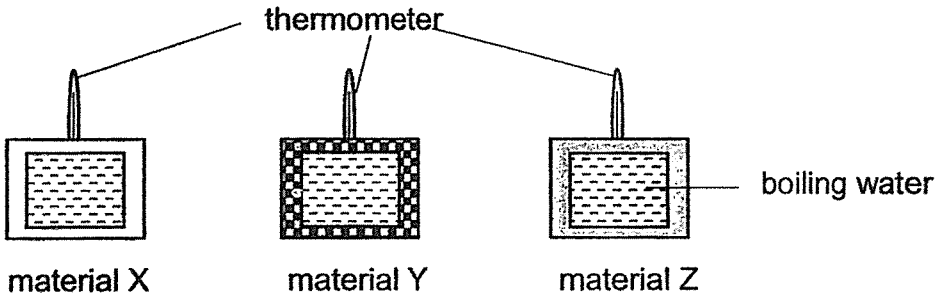
_____

_____

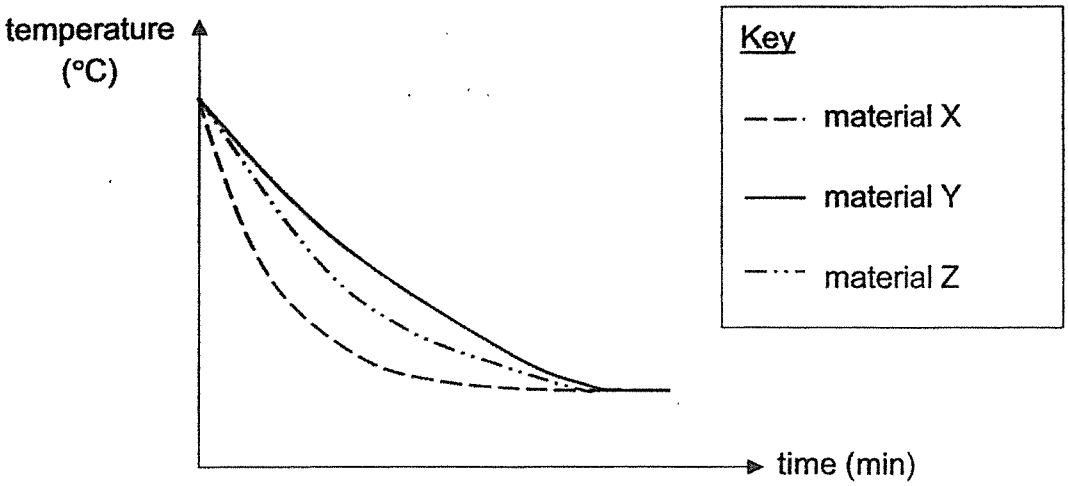
_____

Marks: / 3

12. Desmond had three containers made of different materials X, Y and Z. He filled all the containers with 200 ml of boiling water. He placed a thermometer in each of the container before sealing it off.



He measured and recorded the temperature of water in each container at regular intervals using a thermometer. The results of the experiment were plotted in the graph below.



(a) State how the temperatures of the water in all three containers changed over time. [1]

_____

_____

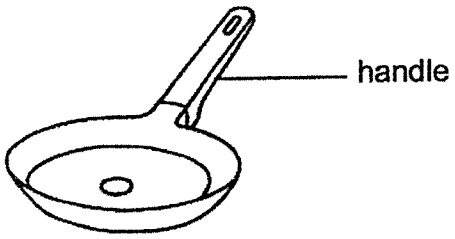
(b) Explain why the thickness of the three containers must be kept the same to ensure a fair test. [1]

_____

_____

Marks: / 2

(c) Study the diagram below.



frying pan

Which material, X, Y or Z, is suitable to make the handle of a frying pan? Explain your answer. [1]

_____

_____

_____

Marks: / 1

~ END OF PAPER ~

ANSWER KEY

YEAR : 2021
LEVEL : PRIMARY 5
SCHOOL : MAHA BODHI SCHOOL
SUBJECT : SCIENCE
TERM : SCIENCE REVIEW 2

SECTION A

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

SECTION

Q9	a)	D: Explosive E: Wind
	b)	For Young plant D, it did not grow as well as young as Young plant E, its because the young plant of D are competing their adult plant with sunlight and water. Young plant of E is growing better than D its because the young plants are not competing each other for sunlight and water as they are spread out nicely from each other.
Q10	a)	(i): melting (ii): boiling
	b)	Ice cube boiling point is 100°C, so when it reaches 100°C the water will turn into gas. Therefore, the volume of water will be lesser than at the start of the experiment.
Q11	a)	(i): nitrogen (ii): carbon dioxide
	b)	As the amount of oxygen decreases, the amount of carbon dioxide increases, and humans need oxygen to breathe. Therefore, the rate of the people breathing increase.
Q12	a)	The temperature until all they become the same of water decreased.
	b)	To ensure that any change in the temperature of the water in the container is not caused by the thickness of the material but by the type of material used.
	c)	Material Y. Water in the container made of material Y lost heat the slowest, so Y is the poorest conductor of heat. Material Y conducts the least heat.

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END