MAHA BODHI SCHOOL

2022 WEIGHTED ASSESSMENT 1

SCIENCE REVIEW

PRIMARY FIVE

Name : _____( ) Date : 12 May 2022

Class : Primary 5 _____

Duration : 50 min

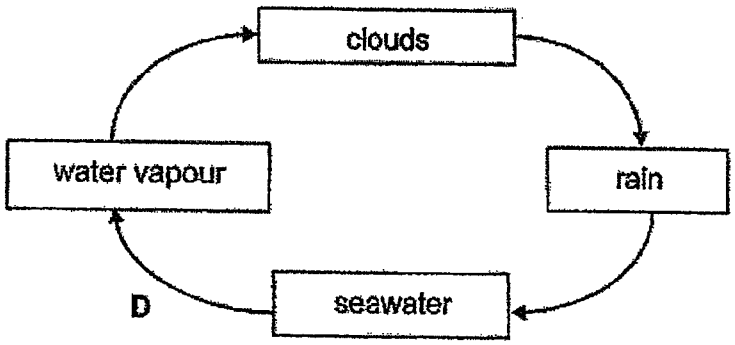
Marks: / 30

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. The diagram below shows the water cycle.



What is process D and the heat change occurring during the process?

	Process D	Heat change
(1)	condensation	gains heat
(2)	condensation	loses heat
(3)	evaporation	gains heat
(4)	evaporation	loses heat

( )

Marks : /2

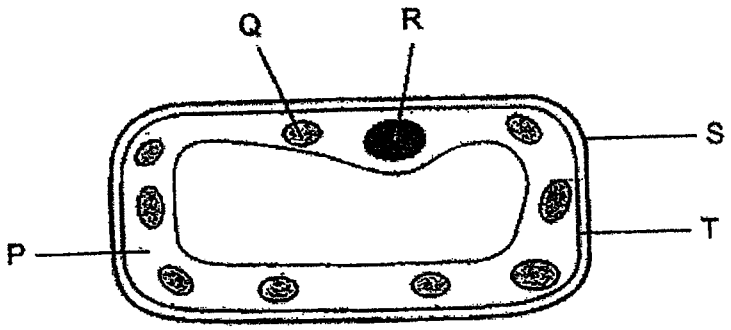
2. The following pupils made some statements about fruit and seed dispersal.

Amy : Seeds in fleshy fruits are dispersed by animals.
Ben : Fruits and seeds dispersed by wind have fibrous husks.
Carl : Plants disperse their fruits and seeds to reduce overcrowding.

Which of the following pupils made the correct statement?

(1) Amy and Ben only
(2) Amy and Carl only
(3) Ben and Carl only
(4) Amy, Ben and Carl ( )

3. The diagram below shows a plant cell.

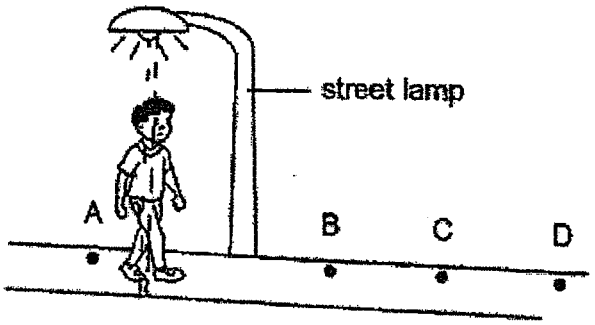


Which of the parts, P, Q, R, S or T, can also be found in animal cells?

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

Marks : /4

4. Gareth was walking along a street from point A to point D as shown below.



If the street lamp is the only source of light, at which point would his shadow be the shortest?

(1) A

(2) B

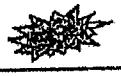
(3) C

(4) D

( )

Marks : /2

5. Mary conducted an experiment to find the melting and boiling points of Substance X. She recorded her results in the table below but spilled ink on the paper. The melting point could not be seen clearly.

Melting point (°C)	Boiling point (°C)
	75

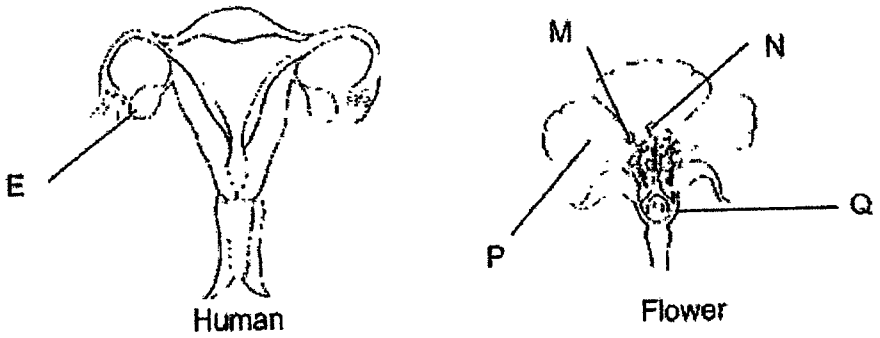
Based on her observation, she noticed that Substance X is a solid at 30 °C.

Which of the following correctly describes the states of Substance X at 25 °C and 80 °C?

	State of substance X at 25 °C	State of substance X at 80 °C
(1)	solid	gas
(2)	solid	liquid
(3)	liquid	liquid
(4)	liquid	solid

( )

6. The diagrams below show the reproductive parts of a human and a flower.



Human Flower

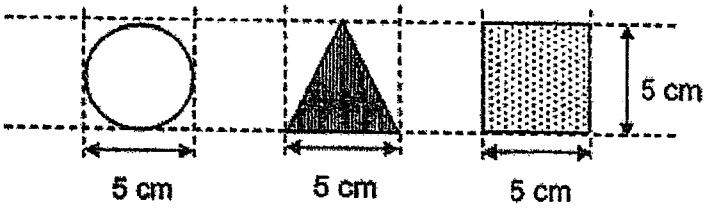
Which part of the flower, M, N, P or Q, has a similar function as part E in human?

(1) M
(2) N
(3) P
(4) Q

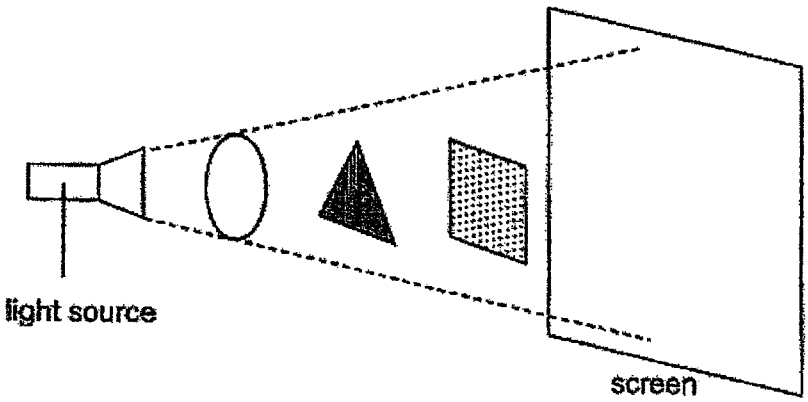
( )

Marks : /4

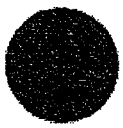
7. Jane has three shapes made of the same material. The height and width of each shape is 5 cm.



She conducted an experiment in a dark room using the following set-up below, and the shadow is formed on the screen.



Based on the information above, which one of the shadows will be formed on the screen?

(1) 

(2) 

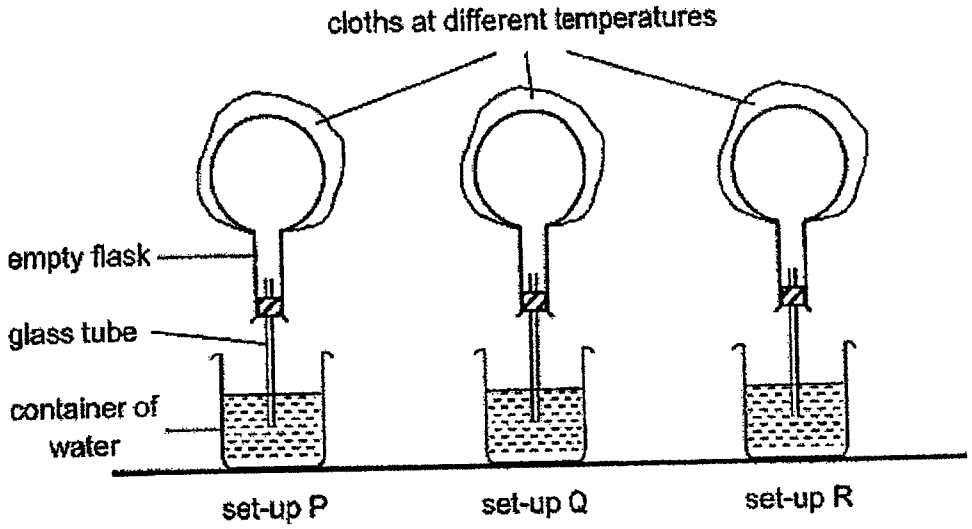
(3) 

(4) 

( )

Marks : /2

8. Mary carried out an experiment in the Science Room using the set-ups P, Q and R as shown below. The room temperature was 28 °C.



Mary made the following observations after the cloths were placed on the flasks in the three set-ups.

set-up P	No change was observed.
set-up Q	Bubbles escaped into the water from the glass tube.
set-up R	Water rose up the glass tube.

Which of the following shows the temperature of the cloths placed on the flasks in the three set-ups?

	Temperature of cloths (°C)		
	set-up P	**set-up Q**	**set-up R**
(1)	28	5	80
(2)	80	28	5
(3)	28	80	5
(4)	5	80	28

( )

Marks : /2

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

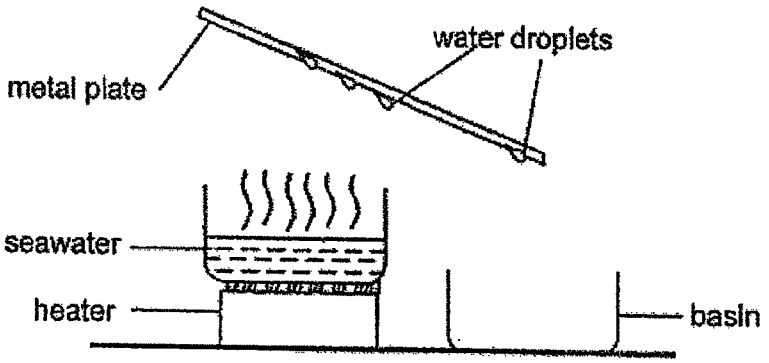
The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

9. (a) State a similarity and a difference between boiling and evaporation. [2]

(i) Similarity:

(ii) Difference:

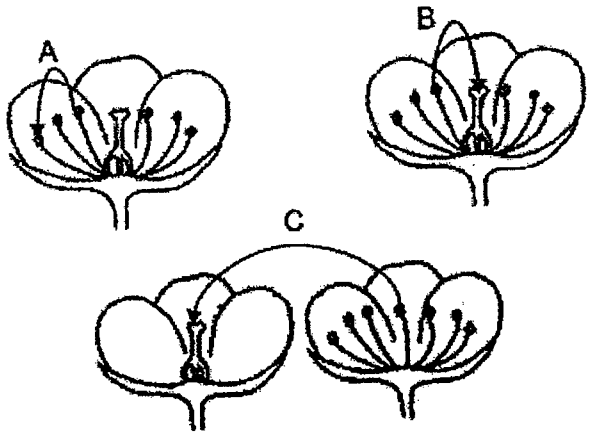
(b) Maya prepared a set-up to obtain water from seawater as shown below.



Describe how water is collected in the basin. [2]

Marks: / 4

10. Study the diagrams below. The arrows A, B and C represent the transfer of pollen grains.



(a) Which of the above arrows show pollination taking place? Explain your answer. [1]

(b) The diagrams below show two different flowers X and Y.

Flower X Flower Y

How are flower X and flower Y pollinated? Give a reason for each of your answers. [2]

(i) Flower X:

(ii) Flower Y:

Marks: / 3

11. The table below provides some information about three different cells, X, Y and Z. A tick (✓) indicates the presence of the cell part.

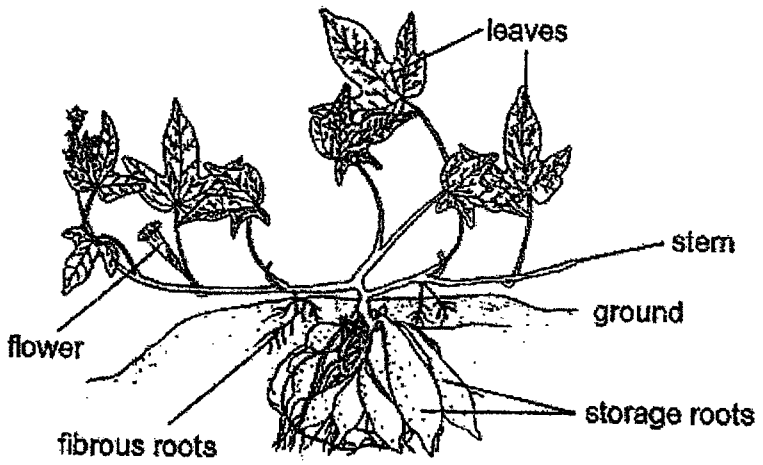
cell parts	cell X	cell Y	cell Z
cell wall	✓	✓	X
nucleus	✓	✓	X
chloroplasts	X	✓	X
cell membrane	✓	✓	✓

(a) Which of the cells, X, Y or Z, cannot reproduce? Explain your answer.[1]

_____

_____

(b) The diagram shows a plant.



(i) For each of the following cells X and Y, state <u>one</u> plant part based on the above diagram where the cell can be found. [2]

Cell X : _____

Cell Y : _____

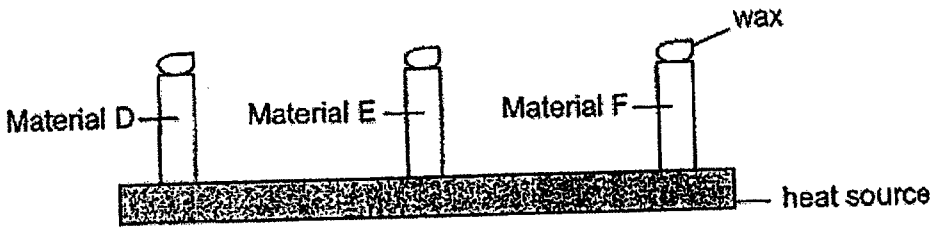
(ii) Explain your answer in (i) for cell Y. [1]

_____

_____

Marks: ☐

12. In an experiment, some wax was placed on the top of three rods made of different materials, D, E and F. The three rods were then placed on the top surface of a heat source as shown below.



The time taken for the wax on the three materials to melt completely is shown below.

Material	D	E	F
Time taken (min)	5	9	2

(a) Explain how the wax on the three rods melted. [1]

(b) A group of students want to make a container for keeping hot drinks.

Which of the materials, D, E or F, is most suitable for making such a container so that the hot drinks can stay hot for the longest period of time? Explain your answer. [2]

Marks: /3

~ END OF PAPER ~

SCHOOL : MAHA BODHI PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : 2022 WA1

SECTION A

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

SECTION B

Q9)	a) i) Bailing changes the substance from liquid to gas / Both require heat gain. ii) Bailing occurs at a fixed temperature but evaporation does not. b) Water in the seawater gained heat from the heater and evaporated into water vapour. The water vapour came into contact with the metal plate, lost heat and condensed into water droplets.
Q10)	a) Band C. The pollen grain was transferred to the stigma. b) i) Wind. The stigma is hanging out ii) Animal. The petals are large.
Q11)	a) Z. It does not have a nucleus which contains genetic information. b) i) Cell X: roots Cell Y: leaves ii) Cell Y has chloroplasts to trap sunlight and make food.
Q12)	a) Heat from the heat source flowed through the rod to the wax. b) E. The wax melted the slowest. Material E is the poorest conductor of heat. Heat from the hot drink will be lost to surrounding the slowest.