Rosyth School
Weighted Assessment Two for 2020
SCIENCE
Primary 5

Name: _____ Total Marks: /40

Class: Pr 5_____ Register No. _____ Duration: 45 min

Date: 27 Aug 2020 Parent's Signature: _____

Instructions to Pupils:
1. Do not open the booklet until you are told to do so.
2. Follow all instructions carefully.
3. For questions 1 to 11, write the correct answer in the brackets provided.
4. For questions 12 to 16, give your answers in the spaces provided.

	Maximum Marks	Marks Obtained
Q1 - Q11	22 marks	
Q12 - Q16	18 marks	
Total	40 marks	

* This booklet consists of 15 printed pages (including cover page).

For each question from 1 to 11, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade your correct answer on the Optical Answer Sheet.

(22 marks)

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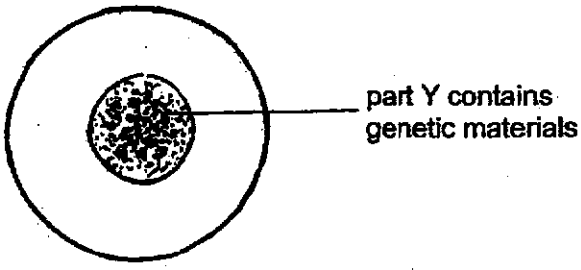
1. The diagram below shows a typical animal cell.



What is the function of part Y?

(1) It controls cell activities.

(2) It controls movement of substances.

(3) It is a place to keep all parts of the cell.

(4) It is a place for cell activities to take place.

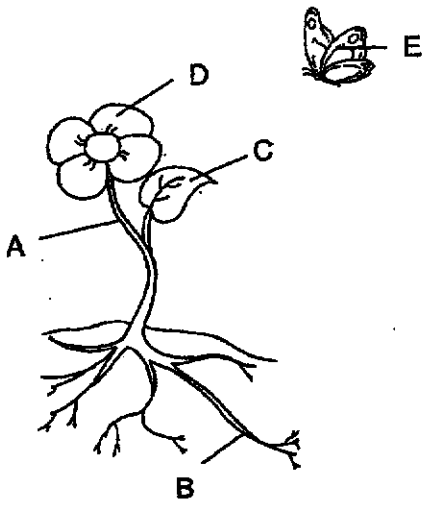
2. Cells A, B, C and D are from different parts of a plant and an animal. James observed the cells under the microscope and recorded his observations in the table below. A tick (√) shows that the cell part is present in the cell.

	Cell A	Cell B	Cell C	Cell D
Nucleus		√	√	√
Cell wall		√		√
Cytoplasm	√	√	√	√
Chloroplast				√
Cell membrane	√	√	√	√

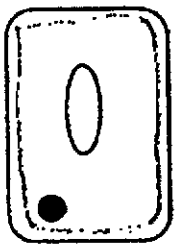
Which one of the following classifications is correct?

	Animal Cell	Plant Cell
(1)	C and D	A and B
(2)	B and D	A and C
(3)	A and C	B and D
(4)	A, B and C	D

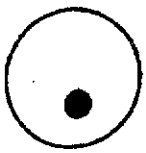
3. A, B, C, D and E are parts of the two living organisms shown in the diagram below.



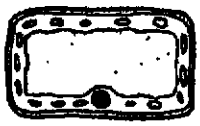
Cell X, Y or Z may be found among these parts.



cell X



cell Y



cell Z

In which parts, A, B, C, D and E, would the cells shown above be found?

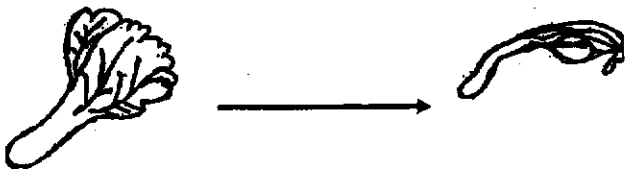
	Cell X	Cell Y	Cell Z
(1)	D	E	B
(2)	A	E	B
(3)	D	E	C
(4)	B	D	C

4. Which of the following are made up of cells?

A: a seed
B: a steel spoon
C: a wooden piece
D: a piece of chicken meat

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

5. Mabel bought some fresh vegetable from the market and left it in a refrigerator. On Day 7, she took out the vegetable from the refrigerator, she observed that it had become limp.



Day 1
fresh vegetable

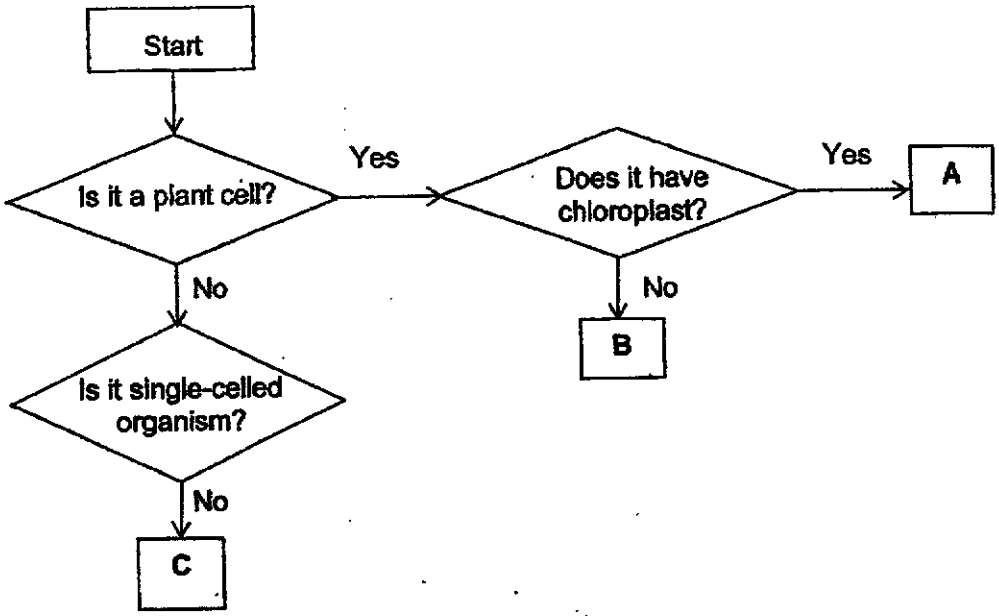
Day 7
limp vegetable

Mabel then soaked the limp vegetable in a basin of water. The vegetable looked fresh again.

What caused the vegetable to look fresh again?

(1) The nucleus of each cell in the vegetable controlled the shape.
(2) The cytoplasm of each cell in the vegetable allowed water to enter.
(3) The cell wall of each cell in the vegetable gave it a regular shape.
(4) The cell membrane of each cell in the vegetable allowed water to enter.

6. Study the flowchart below.



Halim was studying four types of cells, leaf, onion skin, cheek and yeast. He used the above flowchart to classify the cells he was studying.
Based on the above flowchart, which one of the following correctly matches the letters A, B and C?

	A	B	C
(1)	leaf cell	yeast cell	cheek cell
(2)	leaf cell	onion skin cell	cheek cell
(3)	leaf cell	onion skin cell	yeast cell
(4)	onion skin cell	cheek cell	leaf cell

7. Which of the following processes take place at a fixed temperature?

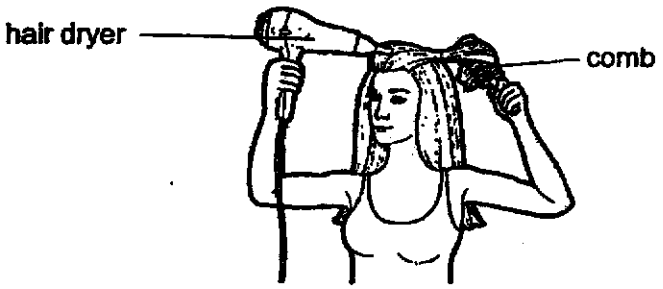
(1) boiling and freezing

(2) melting and evaporation

(3) freezing and condensation

(4) evaporation and condensation

8. The picture below shows Mrs Lim using a hair dryer to dry her wet hair faster.

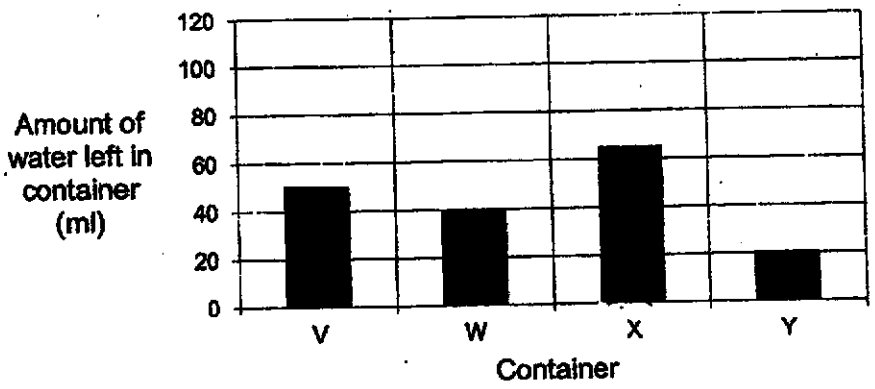


Which of the following cause Mrs Lim's wet hair to dry faster?

A: Wind speed of the hair dryer
B: Temperature of the air blown from the hair dryer
C: How much she spreads her hair using the comb

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

9. Alan filled four different containers V, W, X and Y with 100 ml of water and left them in an open field. After two hours, he measured the amount of water left in each container. He recorded his results in the graph below.



Based on Alan's results, which container, V, W, X or Y, has the least exposed surface area?

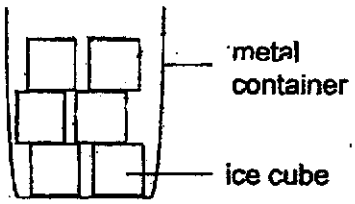
(1) V

(2) W

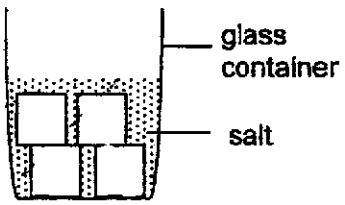
(3) X

(4) Y

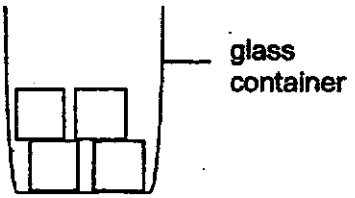
10. Ahmad wanted to find out if the number of ice cubes would affect the total amount of time taken for the ice cubes to melt completely. He prepared four set-ups using similar ice cubes and containers as shown below.



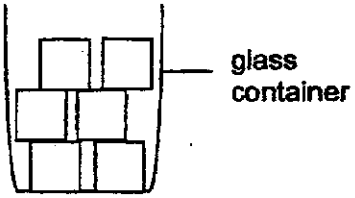
set-up A



set-up B



set-up C



set-up D

Which two set-ups should Ahmad use to ensure that his experiment is a fair one?

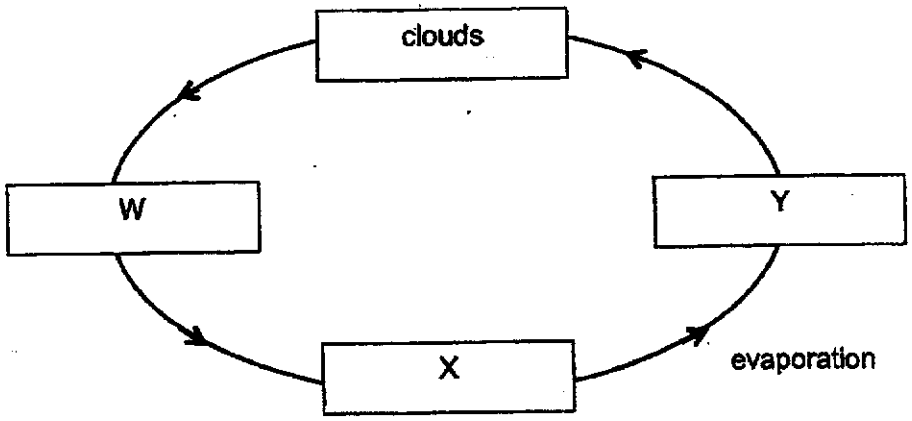
(1) A and C only

(2) A and D only

(3) B and C only

(4) C and D only

11. The diagram below shows the water cycle.



Based on the diagram above, which one of the following is correct?

	W	X	Y
(1)	rain	sea water	water vapour
(2)	steam	water droplets	water vapour
(3)	rain	sea water	steam
(4)	rain	water droplets	steam

For questions 12 to 16, write your answers in the blanks provided.
The number of marks available is shown in brackets [ ] at the end of each question or part question.

(18 marks)

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12. Raju compared three types of cells which had been taken from the leaves of a plant. One of the cells had its chloroplast removed, another had its nucleus removed and a third one had its cell membrane removed. He recorded his observations in the table below.

Characteristics	Cell A	Cell B	Cell C
able to reproduce	✔	✔	x
able to make food	x	✔	✔
has regular shape	✔	✔	✔
controls movement of substances in and out of cell	✔	x	✔

Key : ✔ = yes x = no

(a) Which one of the cells, A, B or C, had its chloroplast removed? State the characteristic to support your choice. [1]

_____

_____

(b) Which one of the cells, A, B or C, had its nucleus removed? State the characteristic to support your choice. [1]

_____

_____

Raju placed the three cells into a bowl of water which contained yellow food colouring. After a few hours, he removed the cells from the bowl and placed them under the microscope to observe. He observed that cell B was stained by the yellow food colouring while cell A and cell C remained unchanged.

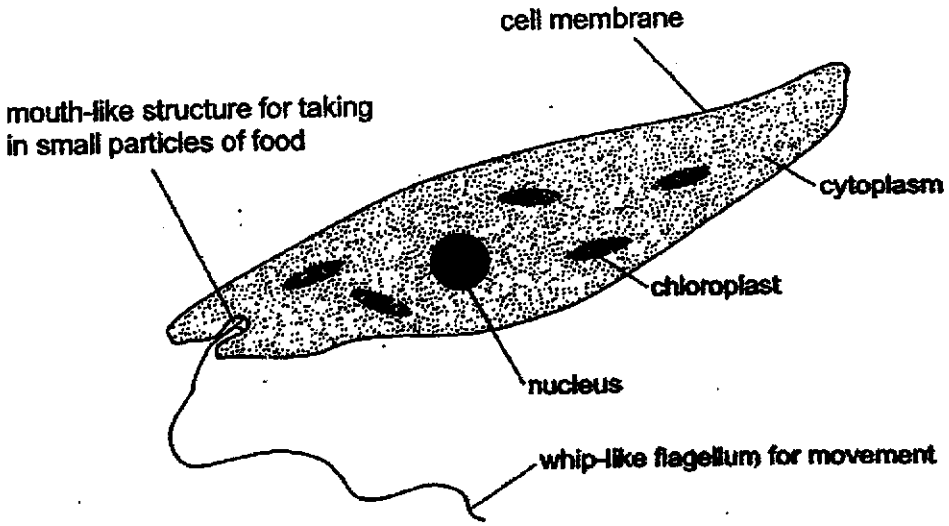
(c) Explain Raju's observation. [2]

_____

_____

_____

13. The diagram below shows organism X. It is made of only one cell. It lives in ponds and streams.



Observe organism X.

(a) Name a cell part that can be found in some plant cells only. [1]

_____

(b) State a function of cytoplasm. [1]

_____

_____

(c) Based on what can be observed in the diagram above, give two evidences which suggest that organism X is an animal cell. [2]

Evidence 1:

_____

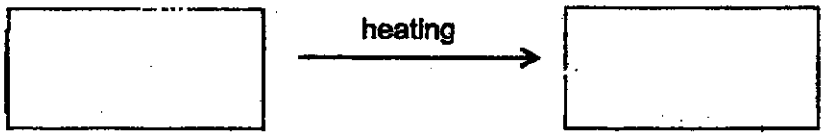
Evidence 2:

_____

14. Two substances, A and E, have different boiling points. The room temperature is 25°C.

Substance	Boiling point of substance (°C)
A	150
E	20

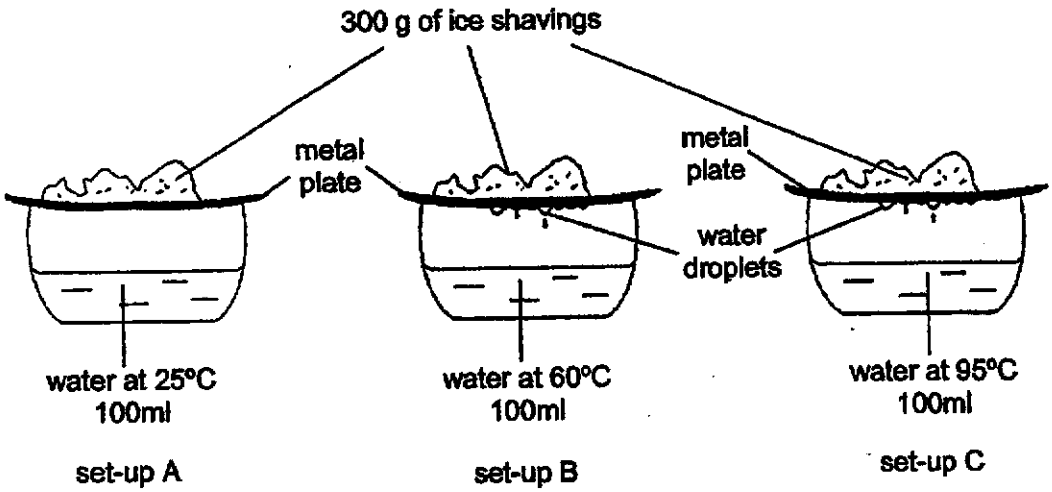
(a) State the change in states of Substance A when it is heated to its boiling point. [1]



(b) Explain why Substance E is not a liquid at room temperature [1]

(c) Based on the information above, would you be able to tell the state of substance A at 1°C? Explain your answer. [1]

15. An experiment is conducted to find out if the temperature of water affects the amount of water droplets formed at the base of a metal plate using the three set-ups, A, B and C, as shown below. Similar metal plates and glass bowls were used for all three set-ups. The room temperature is 25°C. Water droplets can be observed in set-up B and set-up C in five minutes.



(a) Which one of the above is a control set-up? [1]

(b) Which set-up, B or C, will more water droplets be formed at the base of the metal plate in five minutes? Explain your answer. [2]

Question 15 is continued on page 14

Peter went to Country X for holiday. The temperature of the surrounding air in Country X was 3°C. As he breathed out air through his mouth, he observed "white clouds" forming as shown below.

(c) Explain how the "white clouds" were formed. [1]

(d) Within one second, the "white clouds" disappeared. Name the process that causes the "white clouds" to disappear into the surroundings. [1]

16. (a) Why is water cycle important to all life on earth? [1]

Singapore experiences smoke haze from time to time. The haze is caused by forest fires in the region which arise when open burning is carried out.

(b) How does water cycle relieve us from smoke haze in Singapore? [1]

End of Paper

SCHOOL : ROSYTH SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : 2020 CA2

SECTION A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	3	3	4	4	2	1	4	3	4

Q 11
1

SECTION B

Q12)	(a) Cell A. It was not able to make food. (b) Cell C. It was not able to reproduce. (c) Cell B has the cell membrane removed so the yellow food colouring was able to enter into the cell. The other two cells were unaffected as their cell membrane were not removed so the yellow food colouring could not enter the cells.
Q13)	(a) Chloroplast (b) Holds all the cell parts in place (c) Evidence 1: it has a tail to help it move Evidence 2: it has a mouth like structure for taking in food.
Q14)	(a) Liquid to Gas (b) The boiling point of substance E is lower than the room temperature at 25°C so substance E will be a gas and not a liquid. (c) No. I do not know the melting point of substance A, so A can be a liquid at 1°C.

Q15)	(a) Set – up A. (b) C. Water in C is at higher temperature so more water will evaporate to form more water vapour. More water vapour will condense to form more water droplets. (c) The warm water vapour from peter's mouth lost heat to the cool surroundings and condensed into water droplets which are the white clouds. (d) Evaporation.
Q16)	(a) The water cycle ensures that there is a constant supply of fresh water on earth. (b) The water cycle helps to purity the air when it rains.