



2021 PRIMARY 5 WEIGHTED ASSESSMENT 2

Name : _____ ()

Date: _____

Class : Primary 5 ()

Duration: 40 minutes

Parent's signature: _____

SCIENCE

INSTRUCTIONS TO CANDIDATES

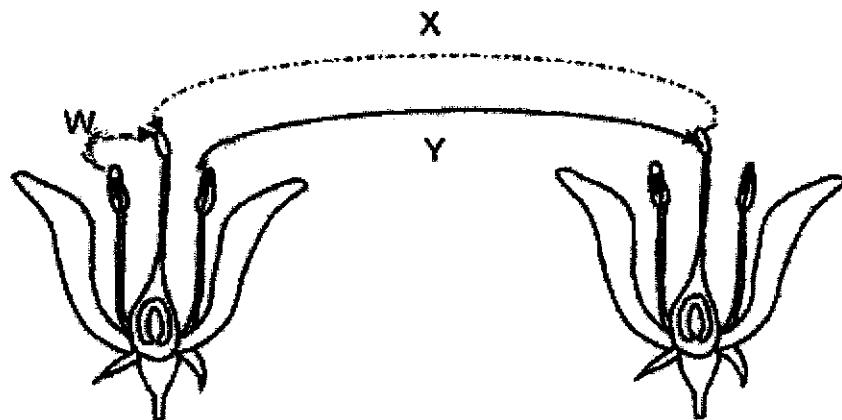
1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in the booklet.

Booklet A	16
Booklet B	14
Total	30

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) and write your answer in the brackets () provided.

(16 marks)

1. The diagram below shows two flowers from the same plant.

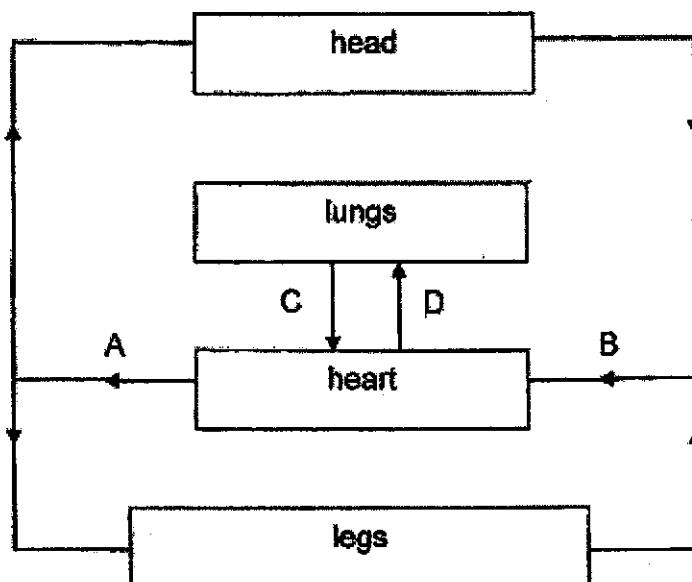


Which of the arrows show(s) pollination taking place?

- (1) W only
- (2) W and Y only
- (3) X and Y only
- (4) W, X and Y

()

2. The diagram below shows the movement of blood in some parts of the human circulatory system.



Which of the above blood vessels carry blood that is richer in carbon dioxide?

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

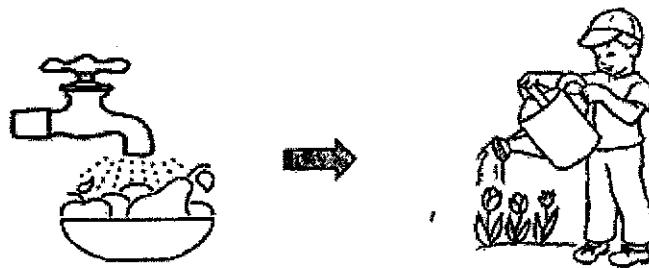
()

3. Which of the following takes place in plants but not in humans?

- (1) The fertilised egg is found in the ovary.
- (2) The fertilised egg develops in the womb.
- (3) Reproductive cells are produced in testes.
- (4) The male reproductive cell fuses with the egg.

()

4. Study the picture below.



Tom used water that was used to wash fruits to water the plants in his garden.

What method(s) of water conservation is/are involved?

- (1) recycling
- (2) reducing and reusing
- (3) reducing and recycling
- (4) reducing, reusing and recycling

()

5. Study the table below.

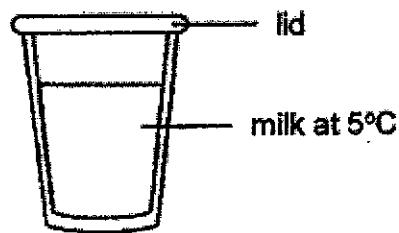
Substance	State of substance at		
	25 °C	45 °C	85 °C
X	solid	solid	solid
Y	solid	solid	liquid
Z	liquid	liquid	gas

Which of the following is a correct conclusion?

- (1) The melting point of substance Y is 85 °C.
- (2) The boiling point of substance Z is the highest.
- (3) Substance Y has a lower boiling point than substance Z.
- (4) Substance X has a higher freezing point than substance Y.

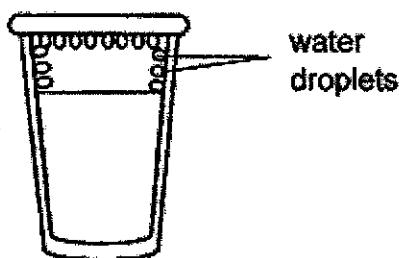
()

6. Abdul took a glass of cold milk from the refrigerator and placed it on a table in the kitchen at room temperature.

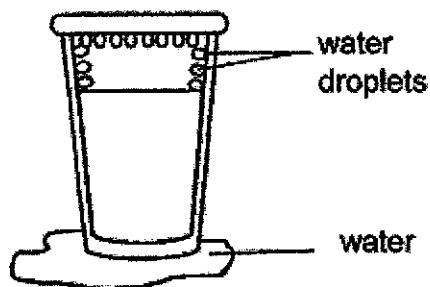


Which of the following would he observe after 20 minutes?

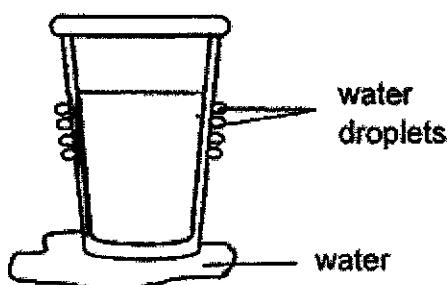
(1)



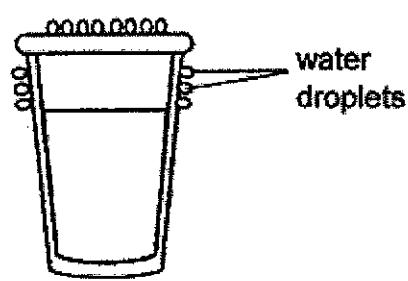
(2)



(3)



(4)



()

7. Plants lose water through tiny openings on both the upper and lower surfaces of their leaves. These tiny openings are called stomata.

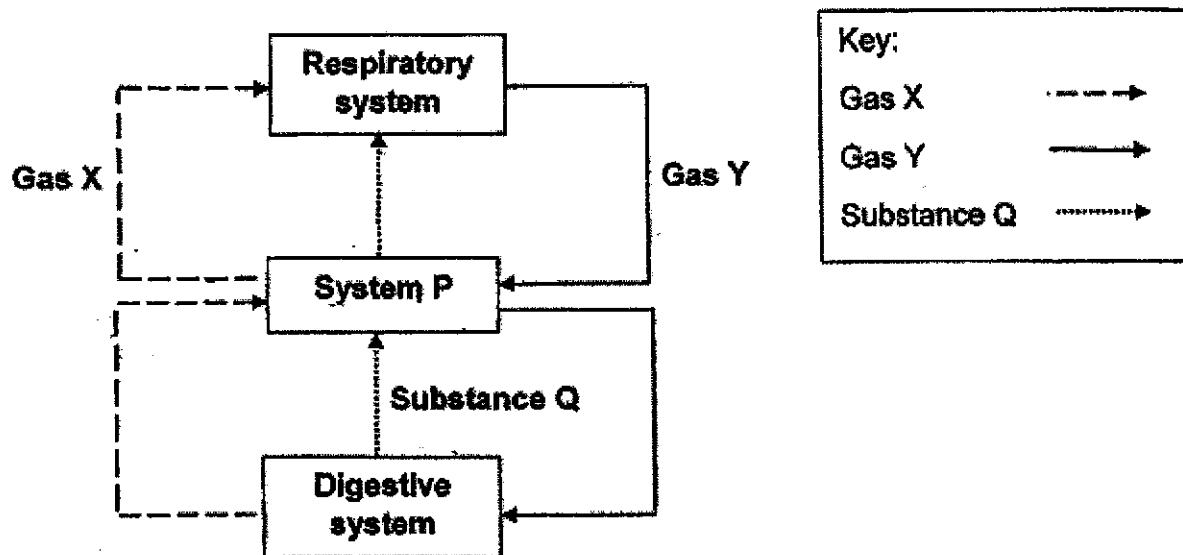
Some surfaces of leaves on a plant were coated with oil. The plant was placed in a field with bright sunlight. The volume of water loss after three hours was recorded in the table below.

Leaf	Surface coated with oil	Volume of water loss through stomata of leaf (cm ³)
R	upper surface only	25
S	none	40
T	lower surface only	10

Based on the results in the table, which of the following is a correct conclusion about the stomata on the leaves?

- (1) There are more stomata on the lower surface.
- (2) The stomata on both surfaces are equal in size.
- (3) The stomata on the lower surface are smaller in size.
- (4) There are equal number of stomata on both the surfaces. ()

8. The diagram below shows the movement of substance Q, gases X and Y, to system P and also to other human organ systems.



Which of the following best represents P, Q, X and Y?

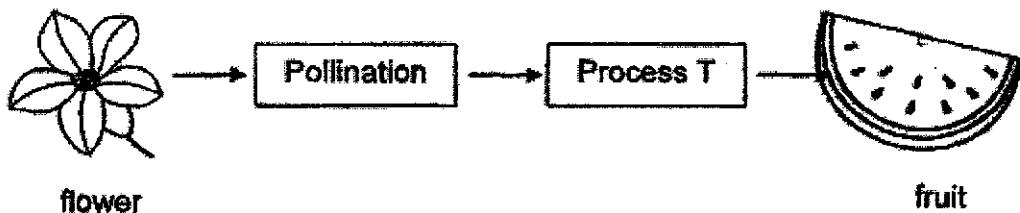
	P	Q	X	Y
(1)	muscular system	waste	oxygen	carbon dioxide
(2)	muscular system	digestive juice	carbon dioxide	oxygen
(3)	circulatory system	digested food	oxygen	carbon dioxide
(4)	circulatory system	digested food	carbon dioxide	oxygen

()

For questions 9 to 13, 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.

(14 marks)

9. Process T occurs in a plant. The diagram shows how its fruit is formed from its flower.



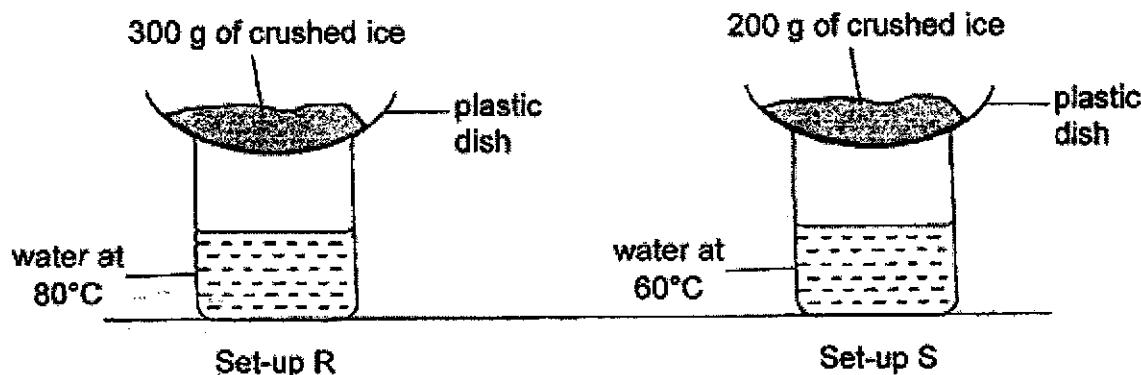
- (a) Describe process T. [1]

- (b) In a garden where many plant Q grow, some plant Q have only purple fruits or only green fruits. A gardener collected seeds from plant Q with purple fruits to grow new plants.

- Explain why these new plants will have only purple fruits. [1]



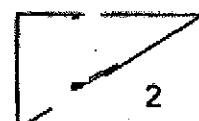
10. Two set-ups, R and S, were prepared to show how the temperature of the water affected the rate at which 'rain' was formed.



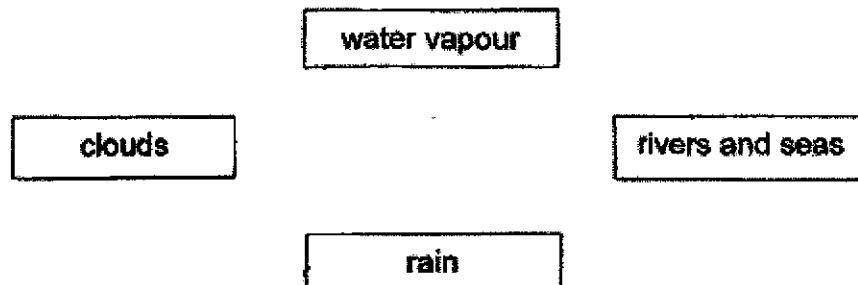
(a) Explain why the test is not a fair one.

[1]

(b) Describe a change to be done to Set-up S to make the test a fair one. [1]



11. The diagram below represents the different stages in the water cycle.

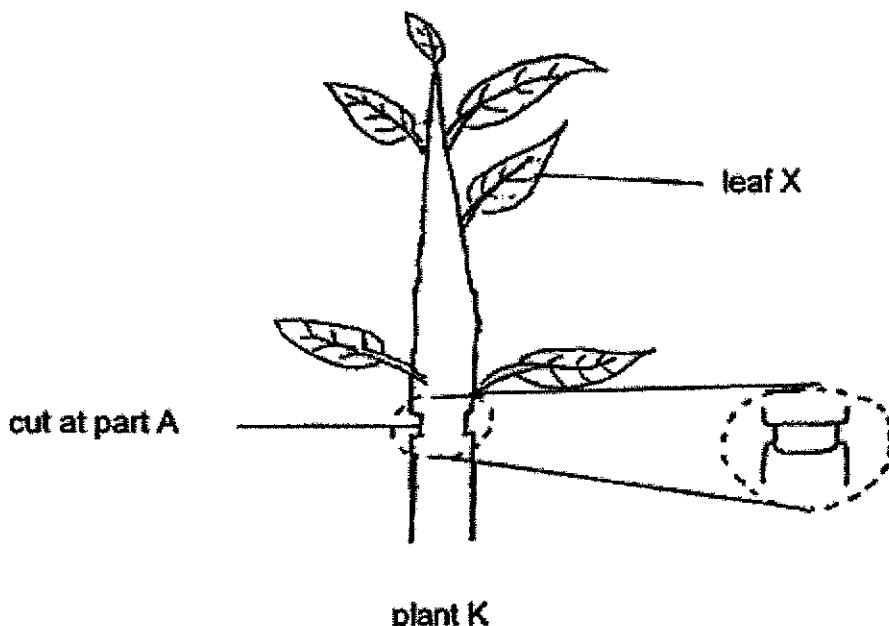


(a) Draw four arrows (→) in the diagram above to complete the water cycle. [1]

(b)(i) Write down the name of the process (beside the correct arrow in the water cycle above) that is needed to dry wet clothes. [1]

(ii) Wet clothes dry faster when the surrounding temperature increases.
Explain why the wet clothes dry faster. [2]

12. Andy carried out an experiment on a plant K. He cut out only the food-carrying tubes at part A.



- (a) Andy found substance P in the soil. After a few days, he observed that leaf X also has substance P. Explain why substance P is found in leaf X. [1]

- (b) One day, Andy observed some insects eating their way through the stem of plant K. This affects the growth of the roots. Explain why. [1]

2

13. Heat is given out by the body when energy is produced in the body.

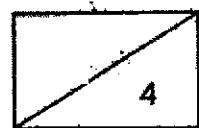
Five workers were trapped in freezer room that was locked from outside. Some of them started to jog on the spot to keep themselves warm while waiting for help.

(a) State if their breathing rates and heart rates increased or decreased after they started jogging. [2]

(i) breathing rate : _____

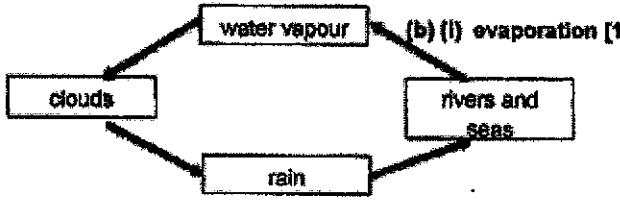
(ii) heart rate : _____

(b) Explain your answer for part (a)(ii). [2]



End of Paper

PS Science WA 2 Suggested Answers

MCG	1. (2)	2. (3)	3. (1)	4. (2)	5. (4)	6. (3)	7. (1)	8. (4)
9(a)	Description of fertilisation							
9(a)	It is fusion of a male reproductive cell and a female reproductive cell.							
9(b)	<i>definition of inherit: passing on of traits from parents to offspring need only to state: to young plant or from parent plant</i>							
9(b)	The characteristic of purple fruits is passed on from the parent plant to the young plants. Or The characteristic of purple fruits is inherited by the young plants from the parent plant.							
10 (a)	<i>Link incorrect variable (difference in the mass of the ice) to affecting results of the experiment.</i>							
10 (a)	The difference in the mass of the crushed ice will affect the results/rate of condensation.							
10 (b)	Add 100g of crushed ice to setup S.							
11 (a)								
11(b)(i)	<i>show heat source & heat destination to show heat transfer</i>							
11(b)(ii)	The water in the wet clothes will gain more heat from the surroundings (heat source) so the water evaporates faster. <i>Can explain using amount or speed of heat</i>							
12	The roots absorb P from the soil along with the water. The water-carrying tubes then transport P to leaf X.							
12(b)	The insects have eaten the food-carrying tubes (cause) so the roots could not receive food from the leaves (effect 2) and would not grow well.							
13(a)	breathing rate : increase. heart rate : increase.							
13(b)	Their heart needs to pump faster so that more oxygen and more digested food can be transported by the blood to all parts of the body/body cells.							

