Rosyth School
Weighted Assessment 2022
SCIENCE
Primary 5

Name: _____ Total Marks: /50

Class: Pr 5- _____ Register No. _____

Date: 13 May 2022 Parent's Signature: _____

Duration: Total time for Booklets A and B: 1 h

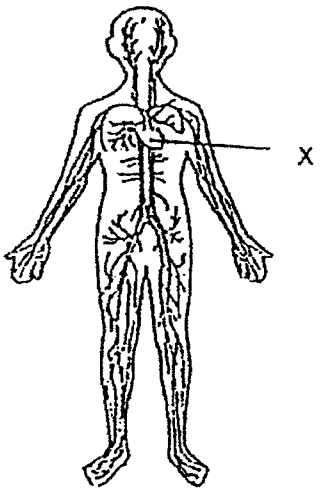
Booklet B

Instructions to Pupils:
1. Please do not turn this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.

	Maximum	Marks Obtained
Booklet A	28 marks	
Booklet B	22 marks	
Total	50 marks	

* This booklet consists of 8 printed pages (including cover page).

15 The diagram shows a human organ system.



(a) Identify the organ system. [1]

_____

(b) State the function of part X. [1]

_____

_____

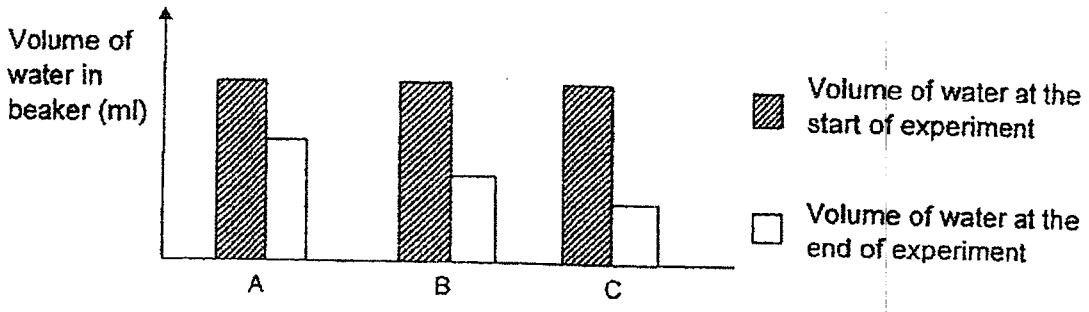
(c) Other than X, name another two parts of this system.

_____

_____

16 Ahmad carried out an experiment using similar plants with different number of leaves in three set-ups A, B and C as shown below.

Set-up	A	B	C
Number of leaves on the plant	20	30	40

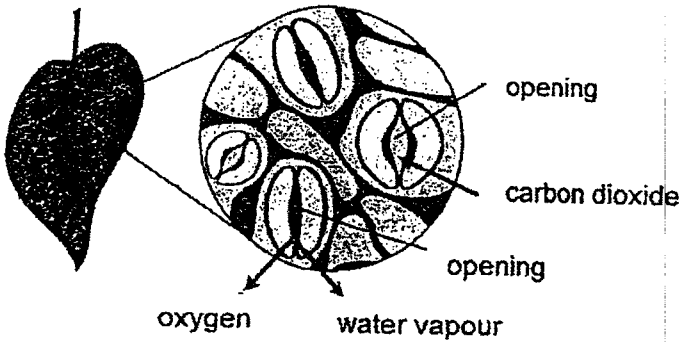


(a) Based on the graph, what is the relationship between the number of leaves on the plant and the volume of water in the beaker at the end of the experiment? [1]

_____

_____

Ahmad studied the leaf diagram under a microscope showing the openings. The arrows show the movement of gases such as carbon dioxide, oxygen and water vapour through the openings when the plant is placed in the presence of light.



Question 16 is continued on the next page

(b) What is the name of the opening? [1]

_____

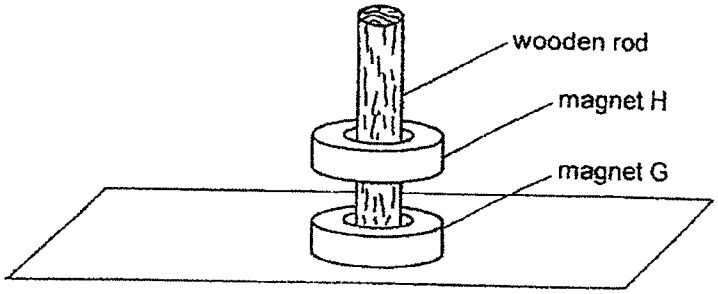
(c) Using the graph and the leaf diagram, explain why some trees shed most of their leaves in a dry season. [2]

_____

_____

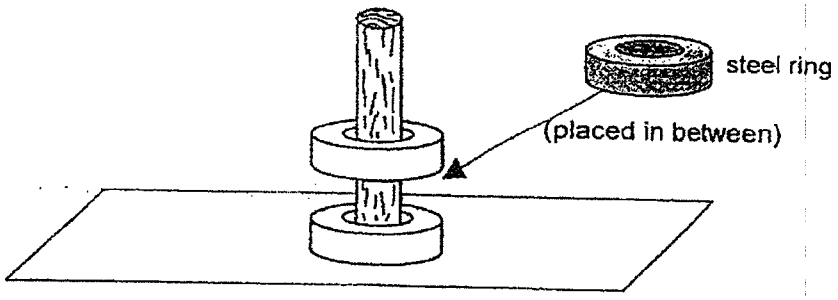
_____

17 Karl placed a magnet H above magnet G through a wooden rod and observed magnet H suspended in the air as shown below.



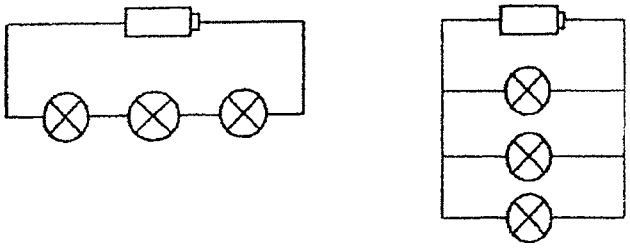
(a) Explain why magnet H would be suspended above magnet G. [1]

(b) Karl removed magnet H and inserted a steel ring, then placed magnet H back into the wooden rod without flipping it.



What is the change Karl will observe? Explain the observation. [2]

18 Jacob set up two circuits, 1 and 2, for an experiment.

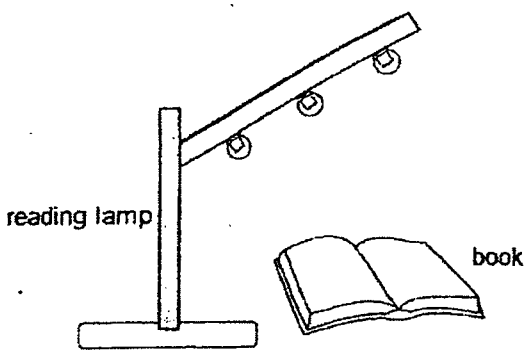


Circuit 1 Circuit 2

Jacob measured the time the bulbs in each circuit remained lighted up.

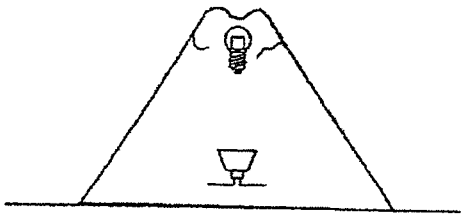
(a) What is the aim of Jacob's experiment? [1]

(b) Jacob wants to set up a circuit for a battery-operated reading lamp.



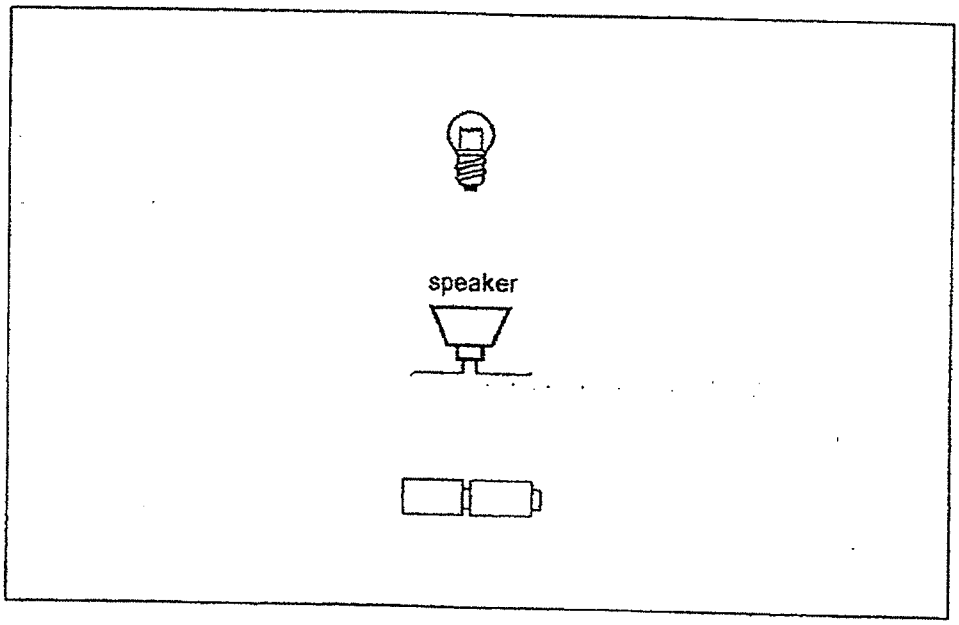
Which circuit, 1 or 2, would you suggest for this reading lamp? Explain why. [2]

19 Khairul wants to make a toy volcano that can light up at the top and make some sound.



Toy volcano

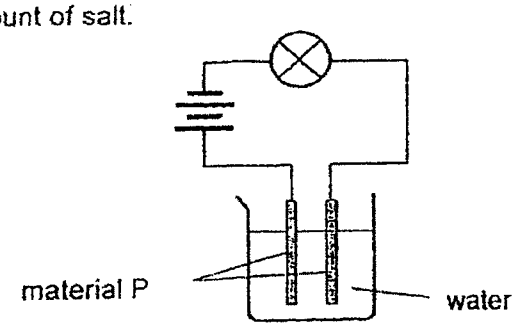
(a) Using wires and two switches, draw the electric circuit diagram for the toy volcano in the box below.
i) The bulb should light up as brightly as possible.
ii) The volcano should be able to light up and make sounds independently. [3]



(b) Suggest one way that Khairul can make his toy produce a louder sound. [1]

_____

20 Nanda set up an experiment below to test the electrical conductivity of water with different amount of salt.



He recorded his results in a table.

Amount of salt in 100ml of water (g)	Electrical conductivity (unit/km)
0	0
10	5
30	10
50	10

(a) What could material P be made of? [1]

_____

(b) State one variable about material P that must be kept the same for a fair test. [1]

_____

(c) What is the relationship between the amount of salt in the water and electrical conductivity of the water? [2]

_____

_____

_____

(d) Nanda did the experiment with no salt added as a control set-up. What is the purpose of having a control set-up? [1]

_____

End of Paper

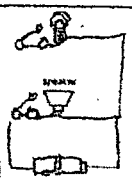
ANSWER KEY

YEAR : 2022
LEVEL : Primary 5
SCHOOL : Rosyth School
SUBJECT : SCIENCE
TERM : Weighted Assessment

Booklet A

Q1	3	Q2	2	Q3	3	Q4	4	Q5	4
Q6	1	Q7	3	Q8	4	Q9	1	Q10	3
Q11	2	Q12	4	Q13	4	Q14	2		

Booklet B

Q15	(a) Circulatory system (b) The function of X is to pump blood to transport digested food, water and oxygen to all parts of the body and transport carbon dioxide to the lungs for removal. (c) Blood, blood vessels.
Q16	(a) As the number of leaves increases, the volume of water at the end of the experiment decreases. (b) Stomata (c) The lesser number of leaves, the lesser the volume of water lost through the stomata, so less water is taken in by the plant.
Q17	(a) Magnet. H's and G's like poles are facing each other and since like poles repel, H and G is repelling each other. (b) H will drop as magnetic force cannot pass through the steel ring.
Q18	(a) To find out how the arrangement of the bulbs will affect the time the bulb in eavh circuit remianed lighted up. (b) Circuit 1, arrange light bulbs in series, so that the bulbs will last for a longer period of time.
Q19	 (a) (b) Add another speaker in parallel to the first speaker.
Q20	(a) Steel (b) Thickness of material P

	(c) As the amount of salt in 100ml of water increases from 0 to 30g , the electrical conductivity increases from 0 to 10. As the amount of salt in water increases from 30g to 50g, the electrical conductivity remains the same. (d) To compare and confirm that the electrical conductivity of water is only due to the amount of salt.

2

END