RED SWASTIKA SCHOOL
Primary 4 Science
Revision Paper 1

Name: _____ ( ) Date: _____

Class: P4/_____

For Questions 1 to 24, choose the most suitable answer and shade its number in the Optical Answer Sheet provided.

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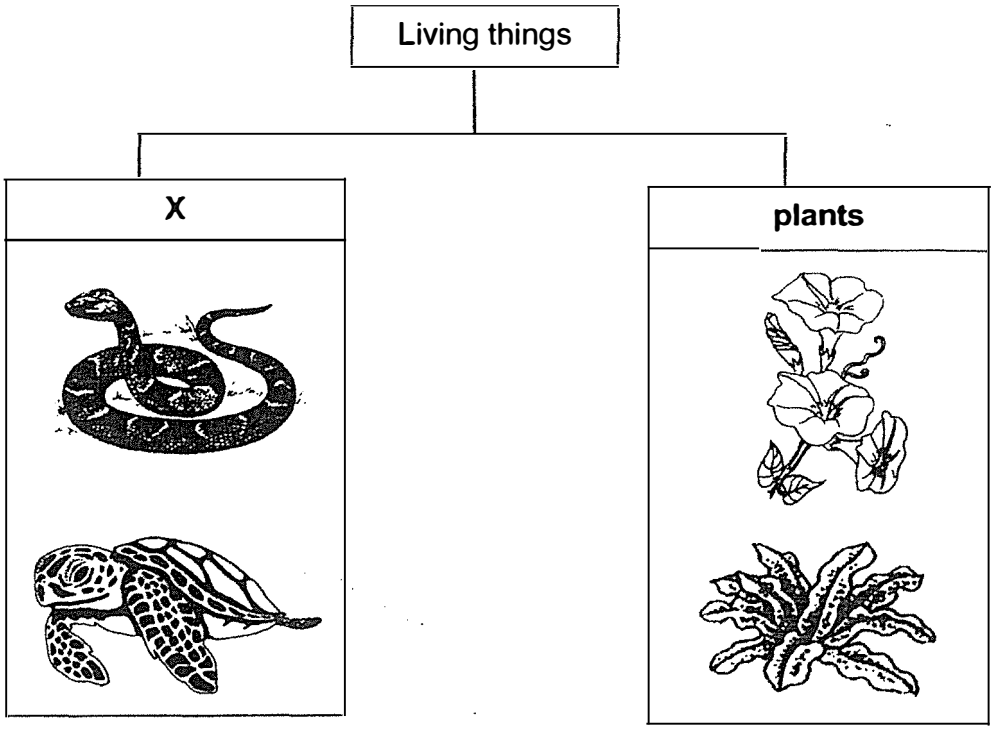
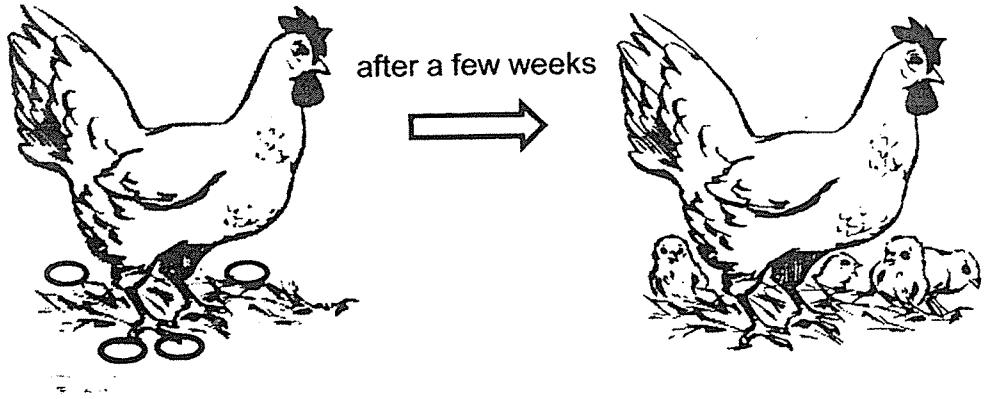
1. Study the classification table shown.



Which one of the following is the most suitable heading for group X?

(1) birds
(2) insects
(3) reptiles
(4) amphibians

2. Study the following organism.



What characteristic of living things does it show?

(1) Living things can die.
(2) Living things can reproduce.
(3) Living things can respond to changes.
(4) Living things need air, food and water to survive.

3. Benny recorded some information in the table shown.

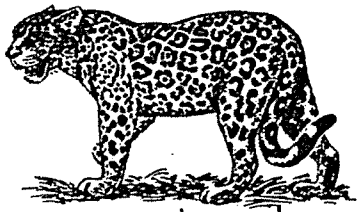
Animal	Characteristics	Example
fish	has scales and breathes through gills	seal
bird	has feathers and a beak	parrot
insect	has six legs and three body parts	beetle
mammal	has hair and produces milk	elephant

Which one of the following has been grouped wrongly?

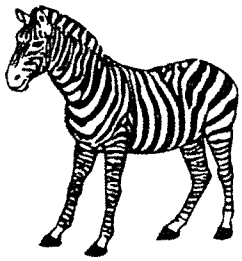
(1) seal
(2) parrot
(3) beetle
(4) elephant

4. The diagrams show some animals.

rabbit



leopard



zebra

bat

Based on the animals shown above, which of the following is/are true about all the animals?

A : They live on land.
B : They have hair as their outer covering.
C : They respond to changes around them.

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

5. Aminah recorded her observations on the development of plant X.

Day	Development
1	seed planted
3	root appeared
7	shoot appeared
10	leaf appeared

When would the seedling be able to start making food?

(1) day 1
(2) day 3
(3) day 7
(4) day 10

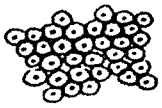
6. The table shows the characteristics of the life cycles of four animals.

Animal	P	Q	R	S
Young looks like the adult	✓	X	✓	X
Has four stages in its life cycle	✓	✓	X	X
Moults during one of the stages	X	✓	✓	✓

Which animal most likely represents a butterfly?

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

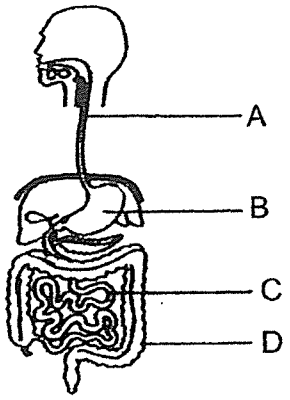
7. The diagrams show the different stages in the life cycle of a frog. The stages are not arranged in order.

A	
B	
C	
D	

Which of the following shows the correct order of the life cycle of a frog?

(1) C → A → B → D
(2) C → D → B → A
(3) C → B → D → A
(4) C → D → A → B

8. The diagram shows the human digestive system.



At which parts, A, B, C or D, are digestive juices not added?

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

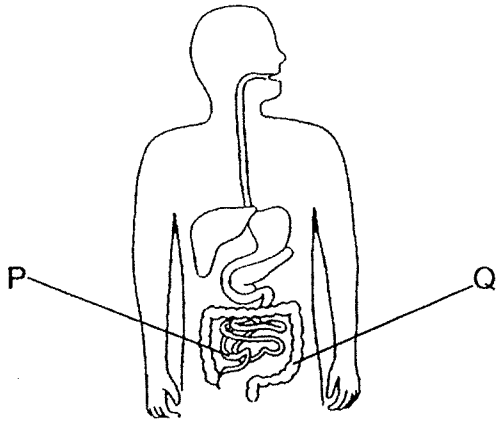
9. Study the classification table of the organ systems in a human body.

Respiratory system	**Circulatory system**	**Skeletal system**	**Muscular system**
nose windpipe	lungs heart	skull rib	muscles

Which organ is placed in the wrong group?

(1) heart
(2) skull
(3) lungs
(4) muscles

10. The diagram shows a human digestive system.

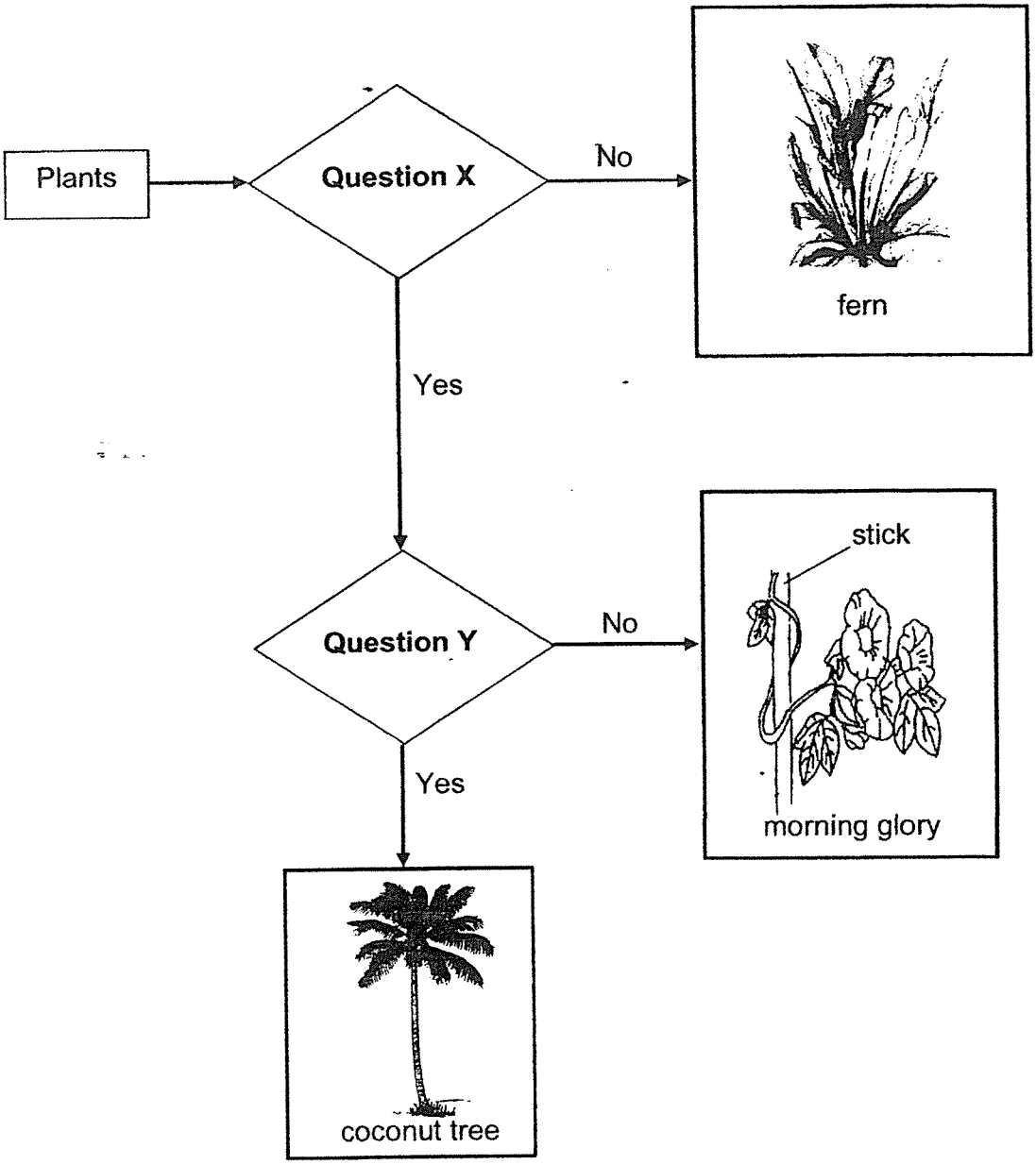


Compare organ P and Q, which two comparisons are correct?

A : Digestion is completed in organ P.
B : Digestion is completed in organ Q.
C : Organ P absorbs digested food while Organ Q absorbs water.
D : Organ Q absorbs digested food while Organ P absorbs water.

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

11. Study the flow chart below carefully.



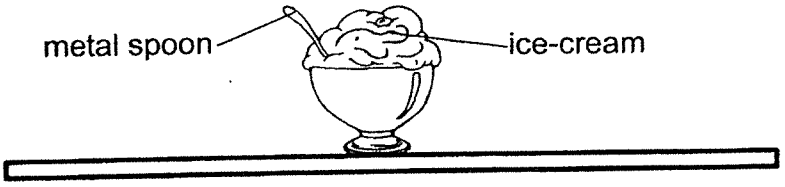
Based on the flow chart, which one of the following correctly states what question X and question Y might be?

	Question X	Question Y
(1)	Does it have a weak stem?	Does it have flowers?
(2)	Does it have a strong stem?	Does it have flowers?
(3)	Does it have flowers?	Does it have a weak stem?
(4)	Does it have flowers?	Does it have a strong stem?

12. Which one of the following is not an example of a matter?

(1) air
(2) jelly
(3) oxygen
(4) shadow

13. A bowl of ice-cream is put on the kitchen table.

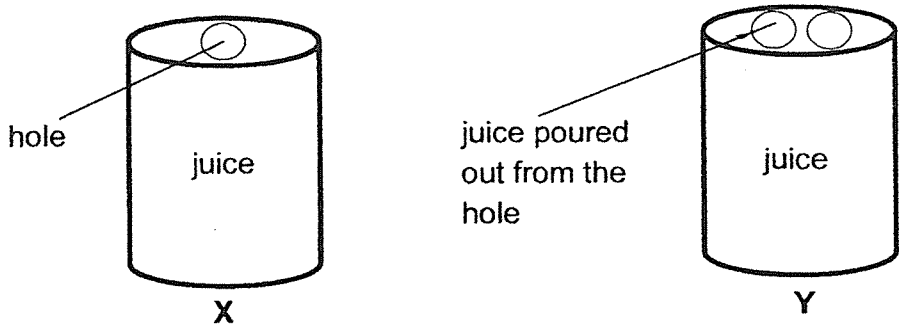


Which of the following correctly shows the heat changes of the ice-cream?

A : The ice-cream loses heat to the surroundings.
B: The ice-cream gains heat from the metal spoon.
C: The ice-cream loses heat to the metal spoon.

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

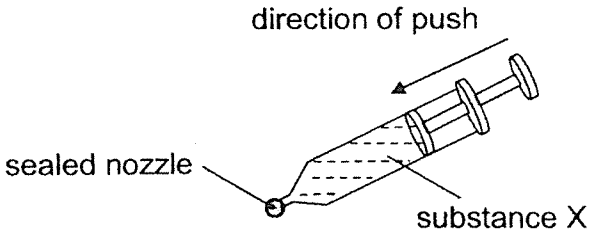
14. There were two cans of juice, X and Y. Zach poked one hole in can X while David poked two holes in can Y as shown. Next, both of them poured out the juice from the hole of each can.



What would be the immediate observation as the juice was poured out?

(1) Juice from X flowed out slower than Y.
(2) Juice from Y flowed out slower than X.
(3) Juice from X and Y flowed out at the same rate.
(4) Juice from Y flowed out but juice from X would not flow out.

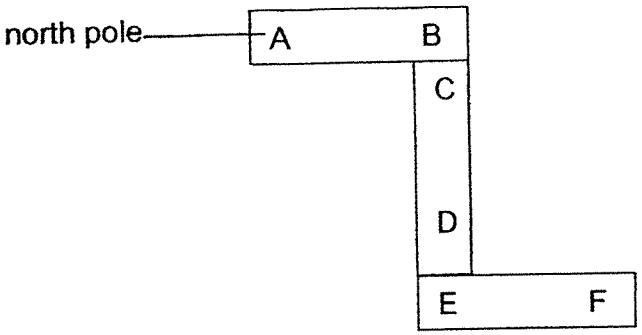
15. The syringe below contains $200cm^3$ of substance X and its nozzle is sealed tightly. Melody is not able to push the plunger inwards no matter how hard she tried.



Which of the following is correct about substance X?

	Substance X	Reason
(1)	liquid	has no definite volume
(2)	liquid	has a definite volume
(3)	gas	cannot be compressed
(4)	gas	can be compressed

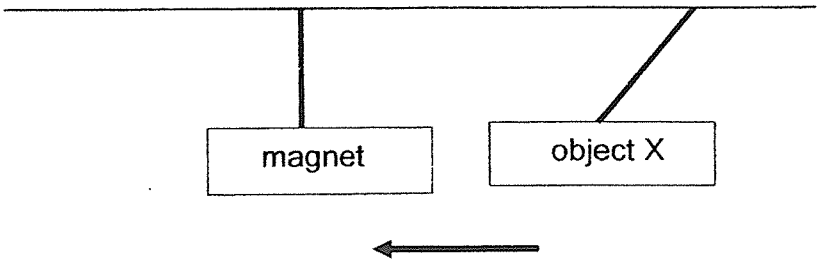
16. Study the three magnets as shown carefully.



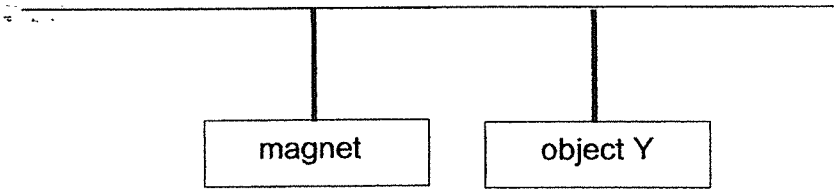
Which of the following correctly identifies poles C and F?

	C	F
(1)	north pole	north pole
(2)	south pole	north pole
(3)	north pole	south pole
(4)	south pole	south pole

17. The diagram below shows object X moving towards a freely-suspended magnet when it was put near to the magnet.



However, when object Y was brought near to the freely-suspended magnet, it did not move towards the magnet.

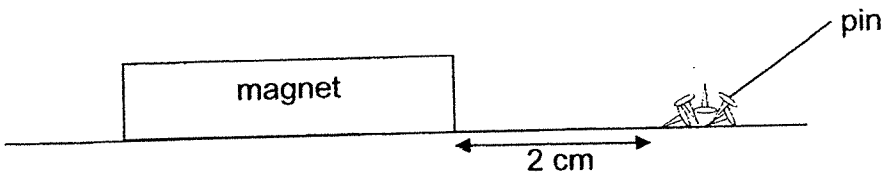


Based on the observations above, which of the following statements are **true**?

A: Object Y is a non-magnetic material.
B: Object Y will not be attracted to Object X.
C: Object X is a magnet or magnetic material.

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

18. Caleb wanted to test the magnetic strength of four magnets, W, X, Y and Z. He placed each magnet near some iron pins and recorded his observation.



Magnet	Distance between the magnet and the pins (cm)	Number of pins attracted to the magnet
W	2	6
X	2	5
Y	2	1
Z	2	3

Which one of the following statements is most likely to be correct?

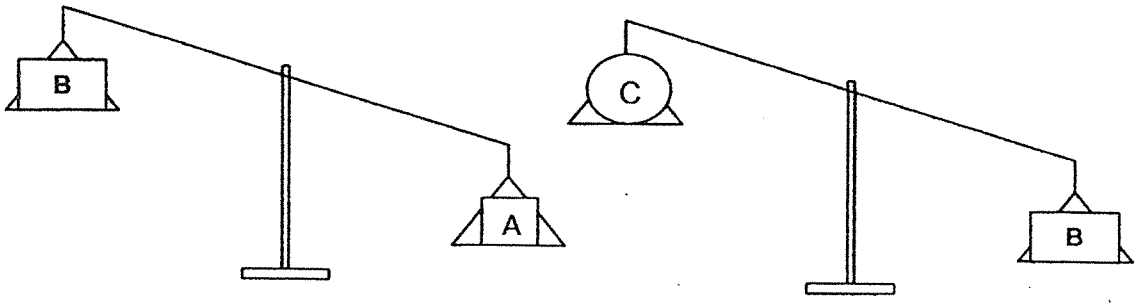
(1) Magnet W has the least magnetism.
(2) Magnet Y has the greatest magnetism.
(3) The magnetism for magnet Z is less than magnet Y.
(4) The magnetism for magnet X is greater than magnet Z.

19. Which of the following item(s) produce(s) heat?

A: the sun
B: an ice cube
C: a candle flame

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

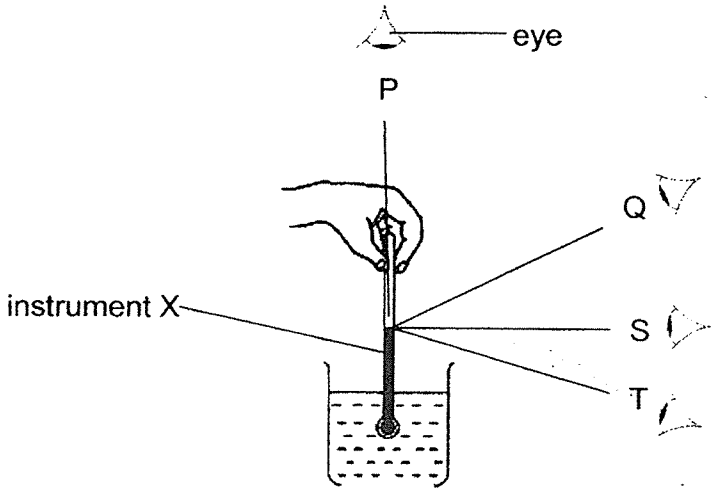
20. Betty is comparing the mass of three objects A, B and C using the balance beam as seen below.



Which of the following statements is true about their masses?

(1) Object A is the heaviest.
(2) Object B is the heaviest.
(3) Object B is lighter than object C.
(4) Object A is lighter than object C.

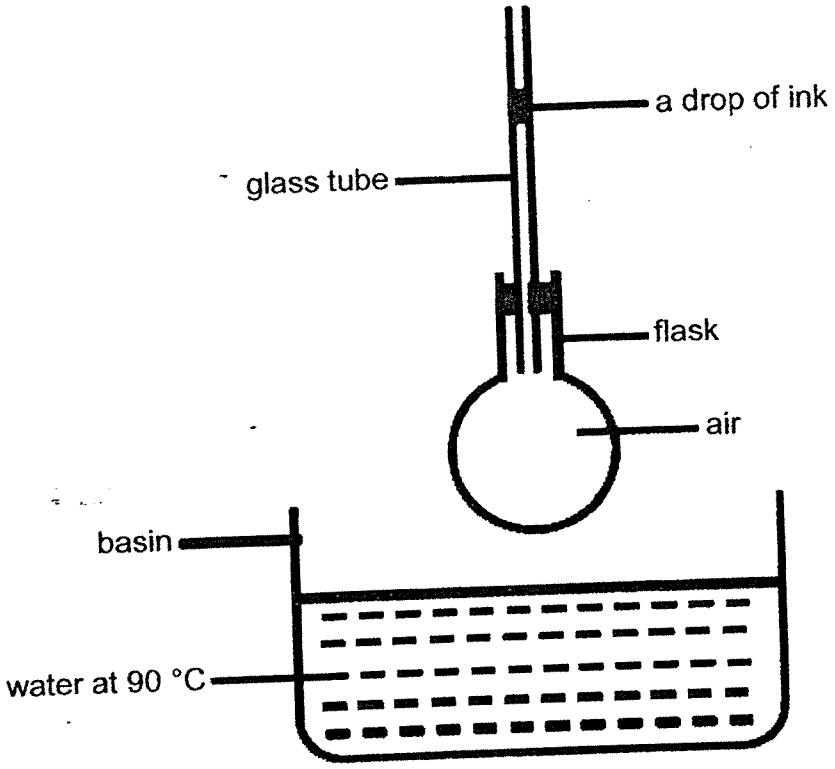
21. Ahmad used instrument X to find out the temperature of hot water in the beaker.



At which point, P, Q, S or T, should he place his eye to have an accurate reading of the temperature?

(1) P
(2) Q
(3) S
(4) T

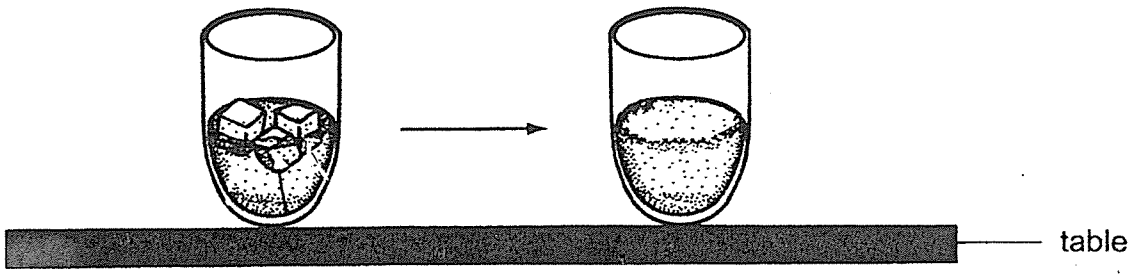
22. Minah set up the experiment as shown.



The flask is placed into the water. Which of the following correctly explains what will happen?

	ink drop	reason
(1)	moves up	water in the basin expands
(2)	moves up	air in the flask expands
(3)	moves down	water in the basin contracts
(4)	moves down	air in the flask contracts

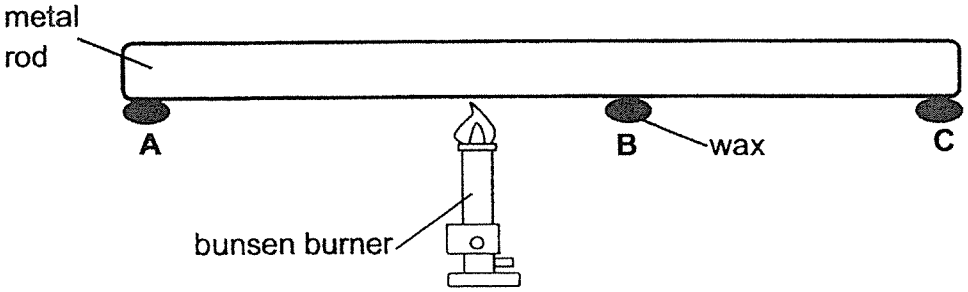
23. Sharon put some ice cubes into a glass of hot coffee as shown below. The ice soon melted and the hot coffee turned cold.



Which of the following shows how heat travelled when the coffee was cooling?

	Ice	Coffee
(1)	heat loss	heat loss
(2)	heat loss	heat gain
(3)	heat gain	heat loss
(4)	heat gain	heat gain

24. Su Ling placed three equal amount of wax, A, B and C, at three different parts of a metal rod as shown.



Which of the following about the wax is correct?

	first to melt	last to melt
(1)	B	A
(2)	C	B
(3)	A	C
(4)	B	C

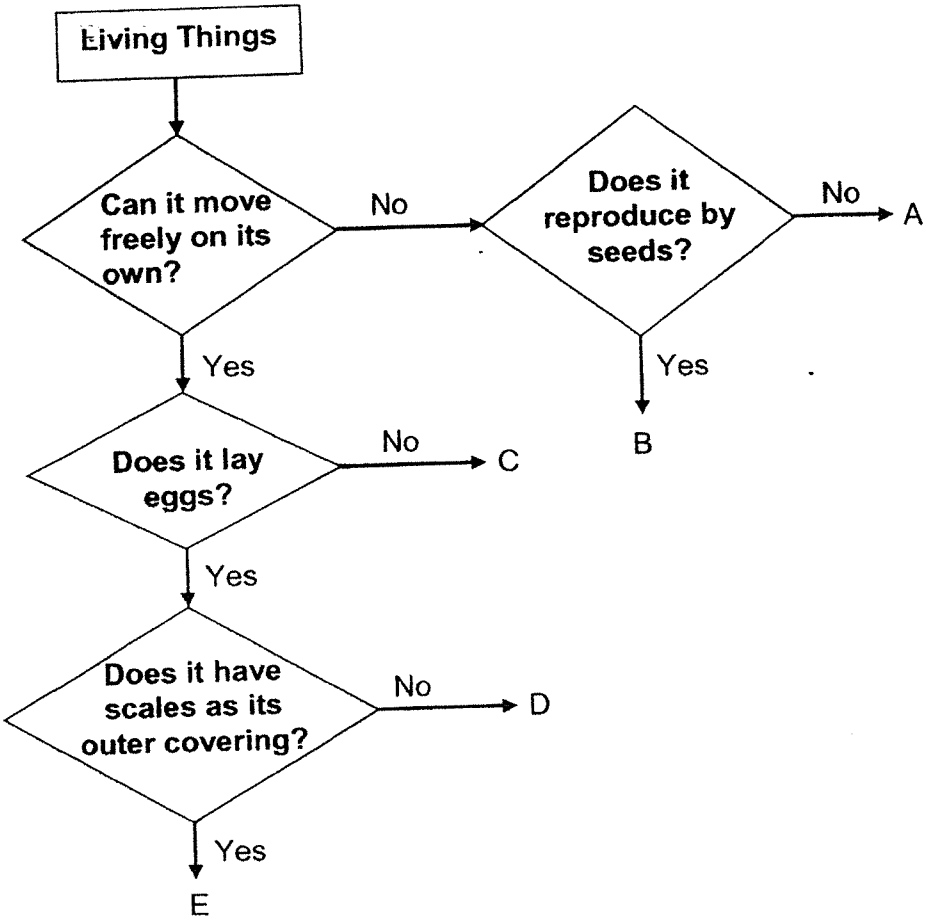
RED SWASTIKA SCHOOL
Primary 4 Science
Revision Paper 2

Name: _____ ( ) Date: _____

Class: P4/ _____

Answer all the questions in the space provided.

25. Study the flow chart below.



(a) Based on the flow chart, what are the characteristics of organism A? (1m)

_____

_____

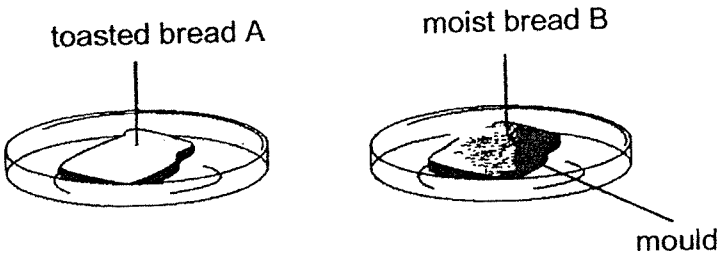
(b) Which letter (A, B, C, D or E) in the flow chart represent the following organisms? (1m)

(i) cockroach: _____

(ii) apple tree: _____

2

25. Mr Wong left two pieces of bread A and B in the Science room for five days.

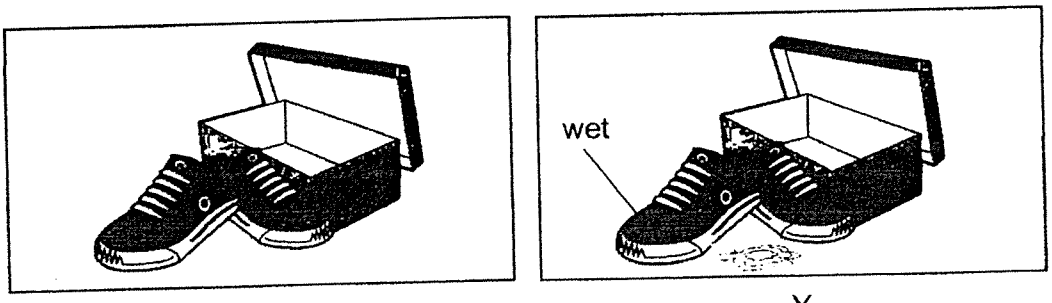


After five days, Mr Wong observed that some bread mould was formed on Bread B.

(c) Based on the information above, name the condition necessary for the bread mould to grow on the bread. (1m)

Presence of _____

(d) Mr Wong had two similar pairs of shoes, X and Y, as shown below.



X Y

Mr Wong kept the two pairs of shoes in two separate shoe boxes and left them in the shoe cabinet. After one week, he found some mould growing on one of the pairs of the shoes.

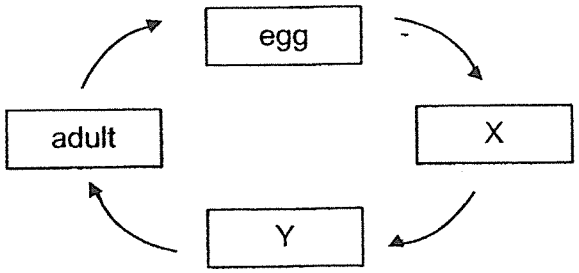
Which pair of shoes, X or Y, would mould be seen growing? Give a reason for your answer. (1m)

_____

_____

2

26. The diagram below shows the stages in the life cycle of a beetle.

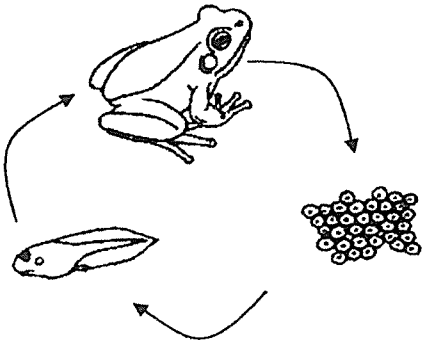


(a) Name the two stages **X** and **Y**. (1m)

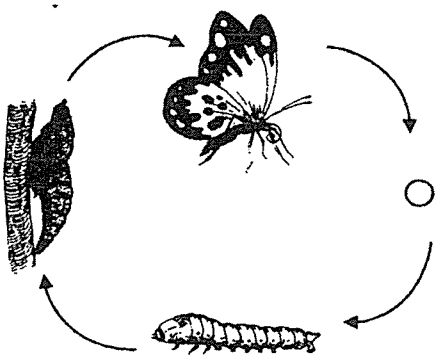
X : _____

Y : _____

The diagrams below show the life cycles of a frog and a butterfly.



Life cycle of a frog



Life cycle of a butterfly

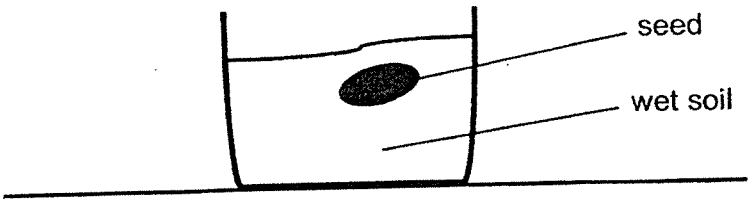
(b) Based on the life cycles above, state one similarity between the two life cycles. (1m)

_____

_____

2

26. May planted a seed in a pot of soil and placed it near the window. She observed the development of the seed into a young plant over a period of time.



(c) May recorded her observations but they were not in order. Fill in the boxes with 1, 2, 3 and 4 to show the correct order of the development of the seed. Stage '5' has been indicated for you. (1m)

Stage	Observation
5	The seed leaves shrink in size and drop off.
	The shoot emerges from the seed.
	The roots emerge from the seed.
	The leaves appear.
	The seed coat breaks open.

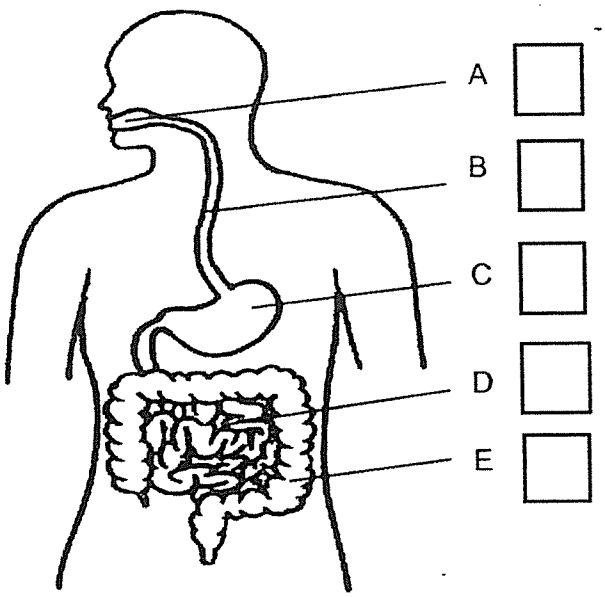
(d) May planted another seed of the same type in another pot of wet soil and placed it in a dark cupboard. Would the seed be able to germinate? Explain your answer. (1m)

_____

_____

2

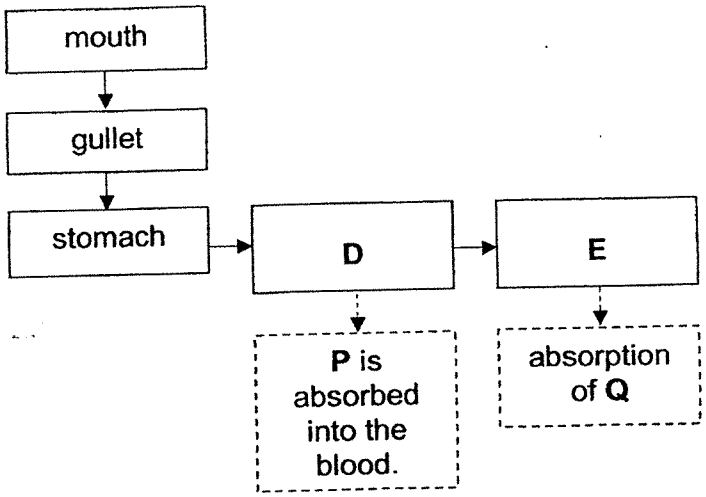
27. The diagram below shows the human digestive system.



(a) In which part(s) of the human digestive system, A, B, C, D and/or E, is digestive juice added? Tick (✓) your answer in the boxes provided. (1m)

1

27. The flow chart below shows the path of food in the human digestive system.



(b) Identify organs **D** and **E**. (1m)

Organ D: _____

Organ E: _____

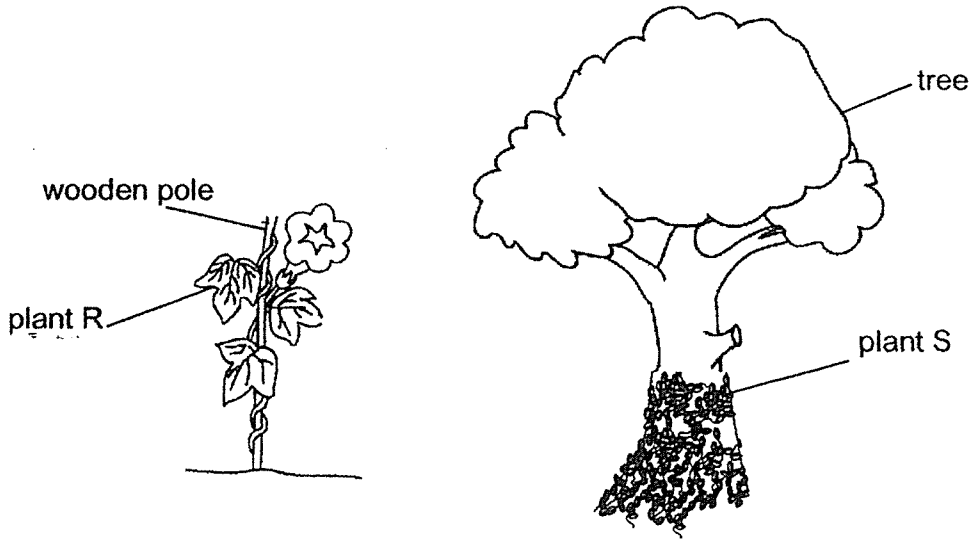
(c) Identify substances **P** and **Q**. (1m)

Substance P : _____

Substance Q : _____

2

28. Study the diagrams below.



Plant R grows around a wooden pole while plant S grows around a tree.

(a) Based on the diagrams shown, what is the common characteristic of the stems of plants R and S? (Do not compare size, shape and colour.) (1m)

_____

(b) Explain how the arrangement of the leaves at a higher position on the tree help plant S. (1m)

_____

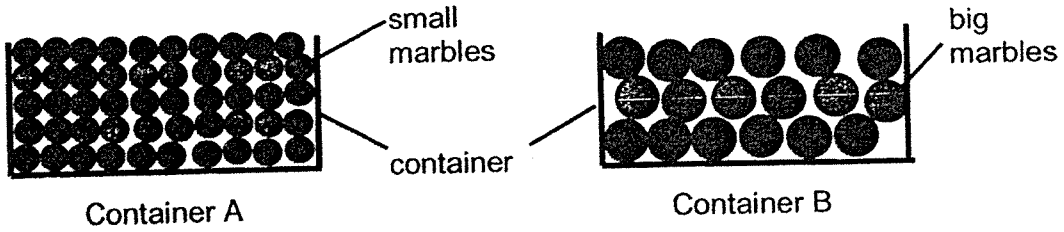
_____

(c) The skeletal system of the human body supports the body. Which part of the plant performs a similar function? (1m)

_____

3

29. Raymond filled up Container A with small marbles and Container B with big marbles. Containers A and B are of the same size. He then poured water into the containers until the water filled up to the brim of the containers.



Container A Container B

Raymond managed to pour a greater amount of water into Container B than A. Explain why. (2m)

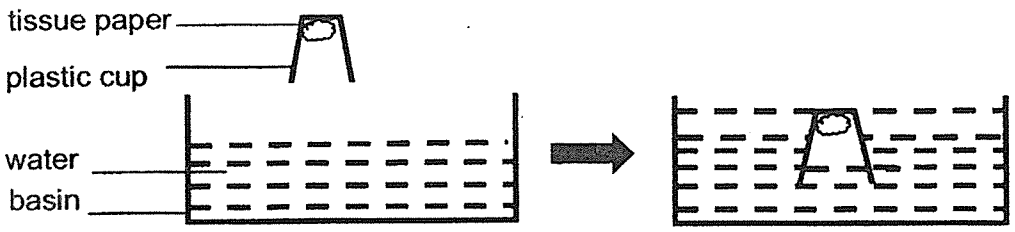
_____

_____

_____

2

30. Caleb conducted an experiment as shown below. He pasted some tissue paper inside a plastic cup and pushed the cup into a basin of water as shown below.



The tissue paper felt dry when Caleb took it out of the cup.

(a) Explain why the tissue paper was dry. (2m)

_____

_____

(b) Did the volume of water in the basin **decrease, increase or remain the same** after the plastic cup was pushed into the basin? (1m)

_____

3

31. Gabriel placed three discs, A, B and C, through a wooden holder as shown below in diagram 1. Two of the discs are magnets and one is an iron disc.

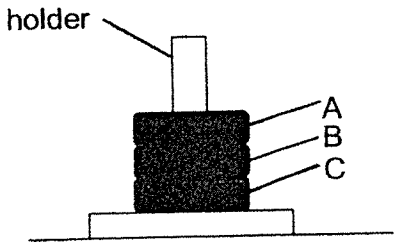


Diagram 1

Then, he changed the positions of the discs and noticed that disc C became suspended above disc A.

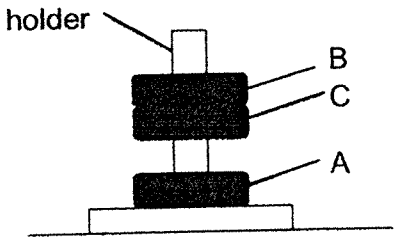


Diagram 2

(a) Based on the information above, complete the table below. (1m)

Disc	Is disc a magnet or an iron disc?
A	
B	

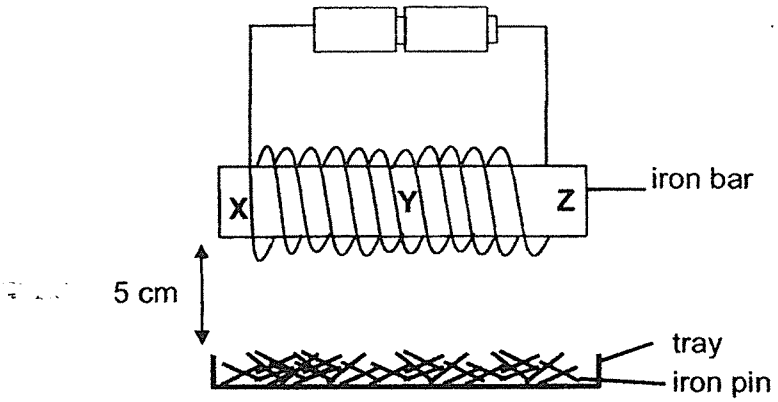
(b) Explain why disc C is suspended above disc A. (1m)

_____

_____

2

31. Gabriel constructed an electromagnet using an iron bar, as shown in the diagram below. The different parts of the iron bar were labelled X, Y and Z.



He placed a tray of iron pins 5 cm below the iron bar and recorded his observations in the table below.

Part of iron bar	**X**	**Y**	**Z**
Number of iron pins attracted to the iron bar	5	2	?

(c) Based on the information above, predict the number of iron pins attracted to part Z of the iron bar. Explain your answer.(1m)

_____

_____

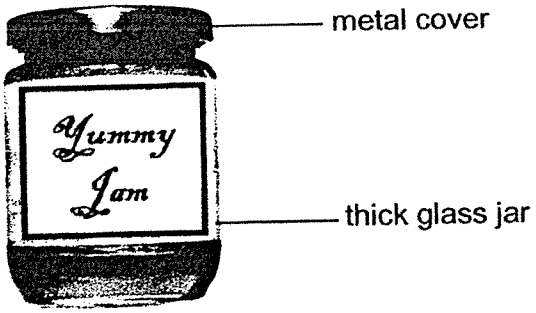
(d) What is one way he could do to the set-up to attract more iron pins? (1m)

_____

_____

2

32. Le Ming wanted to spread some jam on his bread. He tried to remove the metal cover but was unsuccessful.



He turned the jar over and dipped the metal cover into a basin of water for ten minutes. Then, he was able to open the cover.

(a) Did Le Ming use cold water or hot water? (1m)

_____

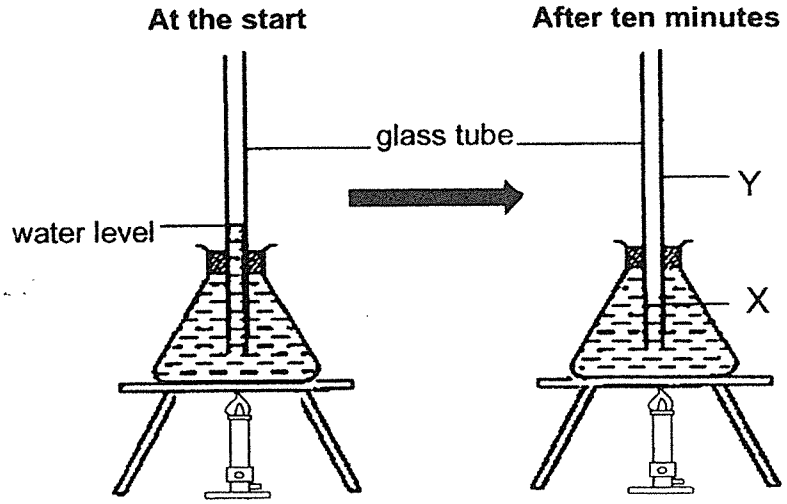
(b) Explain why Le Ming was able to open the cover of the bottle. (1m)

_____

_____

2

33. Jamie conducted an experiment as shown below. She observed the water level in the glass tube after the water in the flask had been heated for 10 minutes.



(a) At which position, X or Y, will the new water level be after heating? (1m)

_____

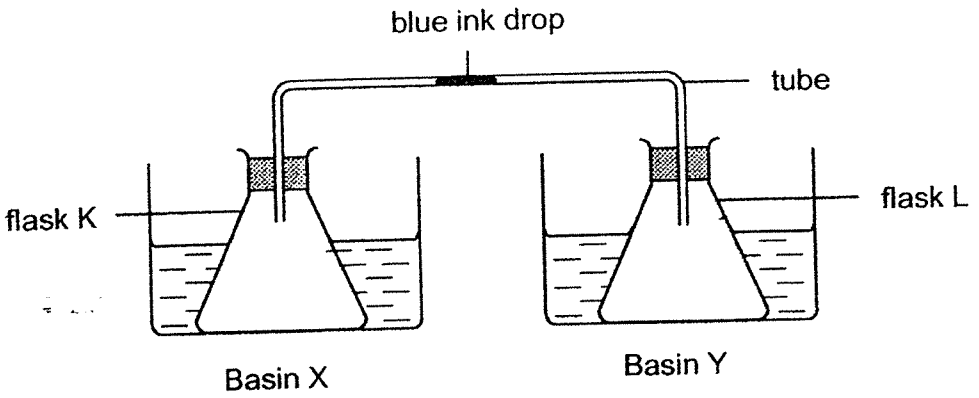
(b) Explain your answer in (a). (2m)

_____

_____

3

34. Jay carried out an experiment as shown below.



Jay placed flask K into basin X and flask L into basin Y. Both basins contained water of different temperatures. After some time, he observed that the drop of blue ink moved away from flask K towards flask L. The temperature of the surrounding was 30°C.

(a) What are the most likely temperatures of the water in basins X and Y? Fill out the table with letters X and Y.(1m)

Basin	Temperature
	80°C
	10°C

(b) Explain how did the ink drop move from flask K to flask L. (2m)

_____

_____

(c) What will be the temperature of the water in basin Y after six hours? (1m)

_____

4

Please check your answer.

ANSWER KEY

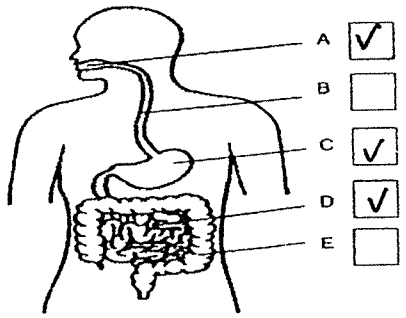
YEAR : 2021
LEVEL : PRIMARY 4
SCHOOL : RED SWASTIKA SCHOOL
SUBJECT : SCIENCE
TERM : REVISION PAPER

PAPER 1

Q1	3	Q2	2	Q3	1	Q4	4	Q5	4
Q6	2	Q7	2	Q8	4	Q9	3	Q10	2
Q11	4	Q12	4	Q13	2	Q14	1	Q15	2
Q16	3	Q17	4	Q18	4	Q19	2	Q20	1
Q21	3	Q22	2	Q23	3	Q24	4		

PAPER 2

Q25	(a)	Organism A cannot move freely on its own and does not reproduce by seeds.
	(b)	(i) cockroach : D (ii) apple tree : B
	(c)	Presence of moisture
	(d)	Shoe Y. Because there is presence of water
Q26	(a)	X: larva Y: pupa
	(b)	The young of a frog and the young of a butterfly do not look like its adult
	(c)	5 3 2 4 1
	(d)	Yes. There is water, oxygen and warmth for germination to take place.

<table>
<tr><td rowspan="3">Q27</td><td>(a)</td><td> 
</td></tr>
<tr><td>(b)</td><td>Organ D: small intestine
Organ E: large intestine</td></tr>
<tr><td>(c)</td><td>Substance P: Digested food
Substance Q: Undigested water</td></tr>
<tr><td rowspan="3">Q28</td><td>(a)</td><td>Plant R and S have weak stems</td></tr>
<tr><td>(b)</td><td>The leaves of S grow onto the trunk of the tree to reach a higher position to trap more sunlight to make food</td></tr>
<tr><td>(c)</td><td>The stem</td></tr>
<tr><td>Q29</td><td colspan="2">The total volume occupied by the air in B is more than that in A.</td></tr>
<tr><td rowspan="2">Q30</td><td>(a)</td><td>Air occupies space in the cup. There was no more space for water to enter.</td></tr>
<tr><td>(b)</td><td>The volume of water remained the same.</td></tr>
<tr><td rowspan="4">Q31</td><td>(a)</td><td><table><tr><td>A</td><td>Magnet</td></tr><tr><td>B</td><td>Iron disc</td></tr></table></td></tr>
<tr><td>(b)</td><td>Like poles of discs A and C are facing each other and they repel.</td></tr>
<tr><td>(c)</td><td>5 pins. Magnetic strength is greatest at the poles of a magnet. Both X and Z are the poles of the magnet.</td></tr>
<tr><td>(d)</td><td>He can add more batteries.</td></tr>
<tr><td rowspan="2">Q32</td><td>(a)</td><td>Hot water</td></tr>
<tr><td>(b)</td><td>The metal cover gained heat from the hot water and expanded.</td></tr>
<tr><td rowspan="2">Q33</td><td>(a)</td><td>Position Y.</td></tr>
<tr><td>(b)</td><td>Water in the flask gained heat from the burner and expanded to occupy more space. There was no more space in the flask so the water moved upwards.</td></tr>
<tr><td rowspan="3">Q34</td><td>(a)</td><td><table><tr><td>X</td></tr><tr><td>Y</td></tr></table></td></tr>
<tr><td>(b)</td><td>Air in flask K gained heat from the hot water and expanded. There was no more space in the flask so the air pushed the ink drop towards to flask L</td></tr>
<tr><td>(c)</td><td>30°C</td></tr>
</table>

END