6

卍慈学校

RED SWASTIKA SCHOOL

# RED SWASTIKA SCHOOL

## 2016 MOCK TEST
## SCIENCE
## PRIMARY 5

Name : _____ (  )

Class : Primary 5 / _____

Date : 29 February 2016

## BOOKLET A

Total time for Booklets A & B: 1h 45 min

Booklet A: 28 questions (56 marks)

**Note:**

1. Do not open the booklet until you are told to do so.
2. Read carefully the instructions given at the beginning of each part of the booklet.
3. Do not waste time. If the question is too difficult for you, go on to the next question.
4. Check your answers thoroughly and make sure you attempt every question.
5. In this booklet, you should have the following:
   a. Page 1 to Page 19
   b. Questions 1 to 28

**SECTION A**

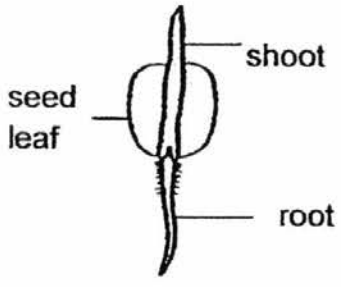
**For Questions 1 to 28, choose the most suitable answer and shade its number in the OAS provided.**

1. Danny's aquarium had fourteen fishes. After a week, four fishes died and two months later, there were seventeen fishes left. No fish had been added to the aquarium.

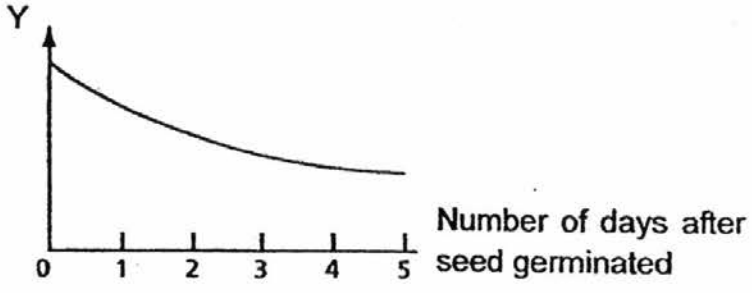
   Which of the following best explains the increase in the number of fishes in Danny's aquarium?

   (1) The fishes had laid eggs.
   (2) The fishes had grown in size.
   (3) The eggs laid by some fishes had hatched.
   (4) The fishes had been fed with too much food.

2. Sharifah carried out an experiment to observe how a seed grows into a seedling.




At the end of five days, she drew a line graph as shown below.




What could Y represent?

(1) Mass of the seed leaf
(2) Mass of the shoot
(3) Length of the shoot
(4) Length of the root

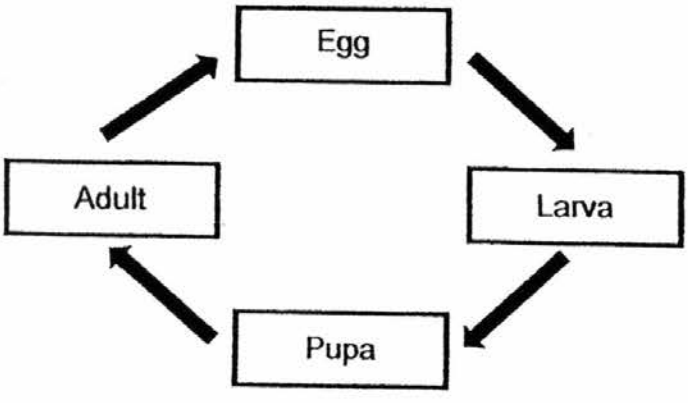
3. Some animals have been classified into two groups as shown below.

| Group A | Group B |
|---|---|
| fox | grasshopper |
| bear | crocodile |
| guppy | platypus |

Which one of the following characteristics of the animals is used to classify them?

(1) The number of legs
(2) The way they move
(3) The method of reproduction
(4) The type of outer covering

4. The life cycle of insect X is shown below.

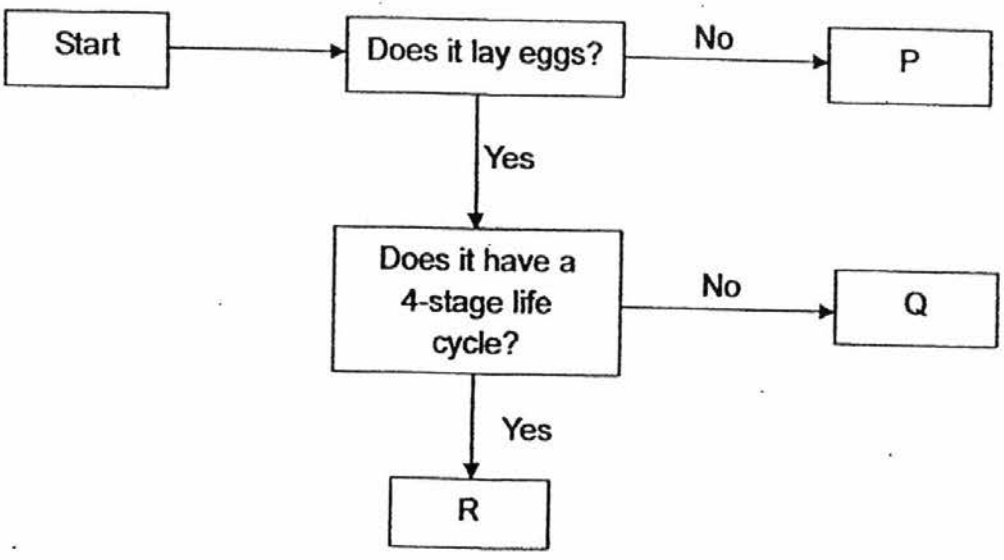



Which of the following statements about the life cycle of insect X is/are correct?

A : The larva of the insect looks like its adult.
B : There are four stages in the life cycle of the insect.
C : The egg is laid in water.

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

5. The flowchart below shows the characteristics of three animals, P, Q and R.




Based on the above flowchart, which of the following statements is/are correct?

A : P has a 4-stage life cycle
B : Q lays eggs.
C : R gives birth to young alive.

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

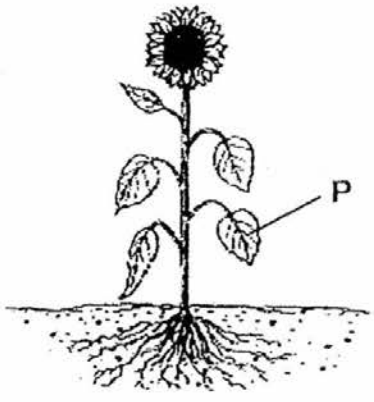
6. Gabriel set up an experiment with some seeds and cotton wool. At the end of the experiment, he observed that the seeds grew in some set-ups but not in others. He listed the conditions used in his experiment set-ups in the table below.

| Set-up | Temperature | Cotton wool | Number of seeds |
|---|---|---|---|
| A | 0℃ | wet | 6 |
| B | 30℃ | wet | 6 |
| C | 0℃ | dry | 6 |
| D | 30℃ | dry | 6 |

What was Gabriel trying to find out from the experiment using all the set-ups?

(1) To find out if seedlings need warmth to make food.
(2) To find out if the number of seeds affects its growth.
(3) To find out if seeds need water and warmth to grow into seedlings.
(4) To find out if seeds need water, warmth and cotton wool to grow into seedlings.

7. The diagram below shows a green plant.



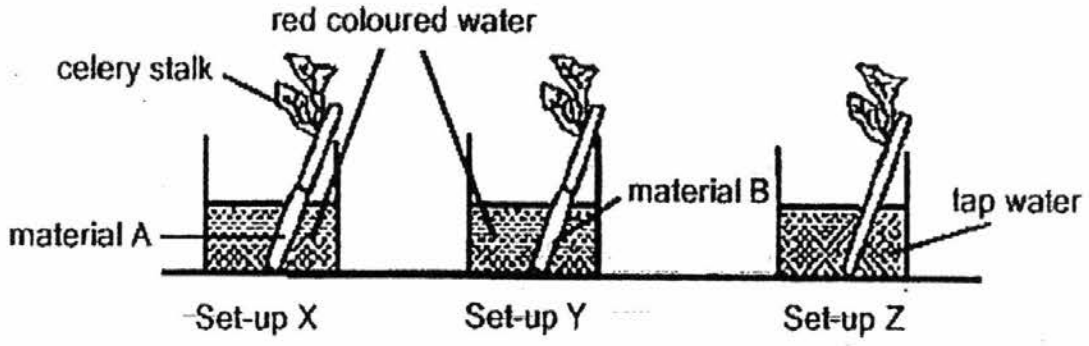

Which of the following statements describe the functions of the part marked "P"?

A: It helps the plant to stay upright.
B: It helps the plant to make food.
C: It transports water and food to other parts of the plant.
D: It allows gaseous exchange to take place

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

8. Alvin set up an experiment as shown below.

The base of the celery stalks in set-up X and Y were wrapped with material A and B respectively before placing them into the beaker of red coloured water. The celery stalk in set-up Z was placed in clear tap water.




Three days later, Alvin recorded his observations of the 3 celery stalks in the table below.

| | Set-up X | Set-up Y | Set-up Z |
|---|---|---|---|
| Observations | Leaves turned reddish and were not wilted. | Leaves turned yellowish and were wilted. | Leaves remained green and were not wilted. |

Which of the following statements can be inferred from Alvin's observations?

A. Water can pass through material A.
B. Red dye can pass through material A but not material B.
C. Material B has prevented the celery stalk from taking in water.

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

9. Ahmad conducted an experiment with two types of beans, A and B. He carried out the following steps.

| Step | Action Taken |
|---|---|
| 1 | Filled pots X and Y with the same amount of garden soil. Pots X and Y are of the same size. |
| 2 | Placed the same number of bean A and bean B in pots X and Y respectively. |
| 3 | Placed pot X and pot Y in the garden. |
| 4 | Poured 20ml of water into each pot daily. |
| 5 | Measured and recorded the height of the plants daily. |

Which of the following could be the aim of Ahmad's experiment?

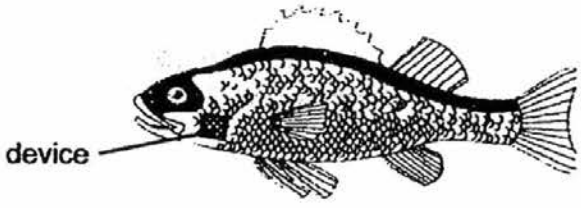
(1) To find out if sunlight affects the growth of the plants.

(2) To find out if garden soil affects the growth of the plants.

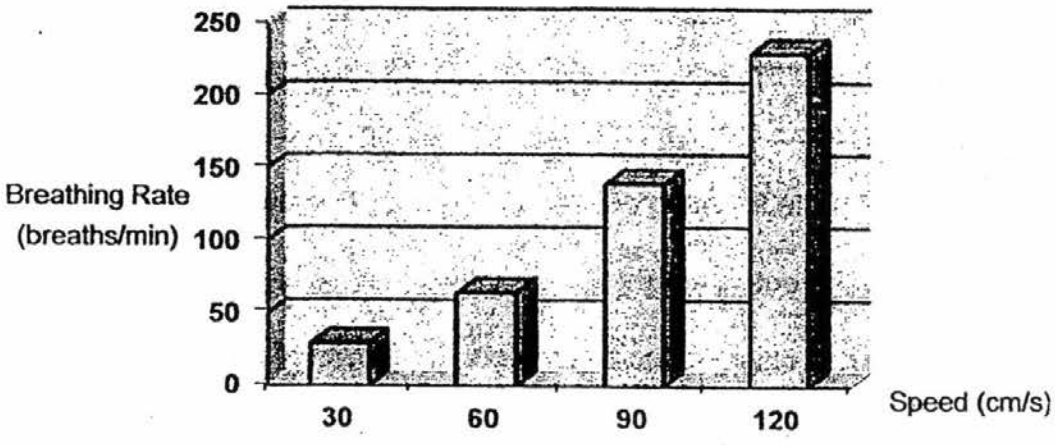
(3) To find out if the amount of water affects the growth of the plants.

(4) To find out the different growth rates of different types of plants.

10. A device was attached to the body of an unknown fish as shown below. This device is able to track the speed at which the fish is swimming and its breathing rate (number of breaths per min) in the water.



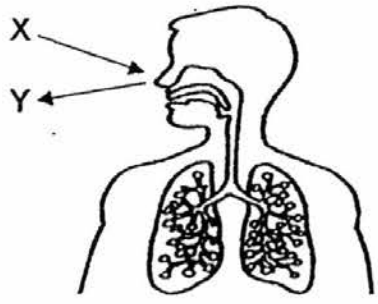

The table below shows how fast the fish was swimming and its breathing rate.




Based on the information above, what can we conclude about the relationship between the breathing rate and swimming speed of the fish?

(1) The smaller the fish, the faster the breathing rate.
(2) The faster the fish swims, the slower its breathing rate.
(3) As the swimming speed increases, the breathing rate of the fish increases.
(4) As the breathing rate increases, the swimming speed of the fish decreases.

11. The diagram below shows the human respiratory system. X represents the air from the surroundings that enters the respiratory system while Y represents the air that leaves the respiratory system into the surrounding.




Which of the following statements about X and Y are correct?

A : Y can make limewater turn chalky faster than X.
B : X contains the same amount of water vapour as Y.
C : X enters the nose, travels down the windpipe and into the lungs.

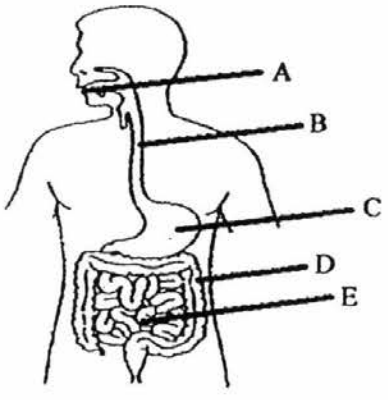
(1) A only
(2) B only
(3) A and C only
(4) B and C only

12. Study the table below.

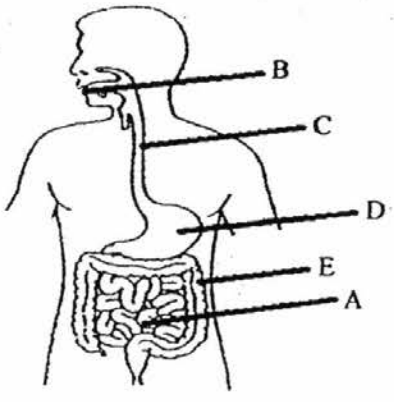
| | Parts of the digestive system | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| Adds digestive juice | √ | √ | | √ | |
| Absorbs digested food | √ | | | | |
| Absorbs excess water | | | | | √ |

Based on the table above, which one of the following diagrams correctly represents parts A, B, C, D and E?

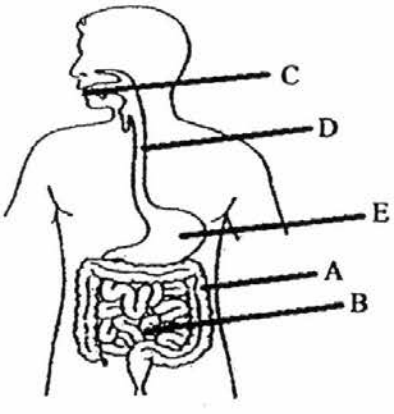
(1)



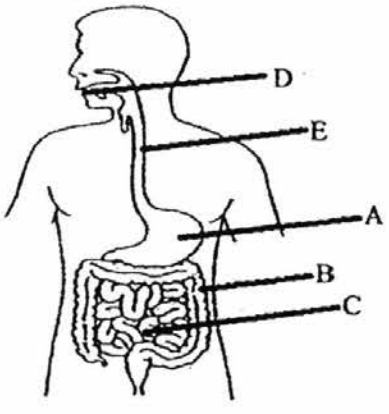

(2)



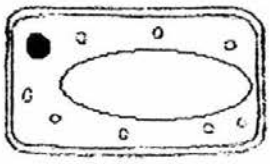

(3)



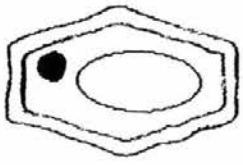

(4)



13. The diagrams show two cells, A and B.



Cell A



Cell B

Which of the following could cell A and cell B represent?

| | Cell A | Cell B |
|---|---|---|
| (1) | leaf of a lime plant | onion skin |
| (2) | roots of a green bean plant | leaf of a lime plant |
| (3) | leaf of a lime plant | leaf of a green bean plant |
| (4) | roots of a green bean plant | onion skin |

14. Jasmine observed three different types of cells under the microscope. She recorded the following observations.

| Cell A | Cell B | Cell C |
|---|---|---|
| Does not have any green pigment. | Does not have any green pigment. | Contains some green pigment. |
| No regular shape | Has a regular shape | Has a regular shape |

Which of the following is most likely the type of cells that Jasmine had observed?

| | Cell A | Cell B | Cell C |
|---|---|---|---|
| (1) | nerve | root | onion |
| (2) | onion | cheek | root |
| (3) | nerve | onion | fern |
| (4) | cheek | fern | nerve |

15. Samad tripped over a box containing steel pins, copper coins, aluminium screws, plastic beads and wooden match sticks. He then used a magnet to pick up the objects. Which objects will be left on the floor after Samad's attempt to clear up the mess?

(1) Steel pins and wooden match sticks only.
(2) Plastic beads and wooden match sticks only
(3) Aluminium screws, steel pins and copper coins only.
(4) Copper coins, wooden match sticks, plastic beads and aluminium screws only.

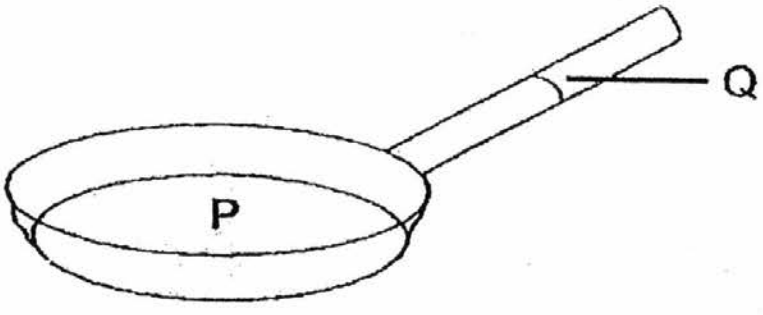
16. Ariel conducted an experiment on four different types of materials of the same size and thickness. She soaked the materials in a bucket of water for 20 minutes. She recorded the mass of each material before and after soaking as shown in the table below.

| Material | Mass at the beginning | Mass after 20 minutes |
|---|---|---|
| W | 10g | 20g |
| X | 11g | 12g |
| Y | 12g | 18g |
| Z | 13g | 13g |

Which material is the most suitable for making a raincoat?

(1) W
(2) X
(3) Y
(4) Z

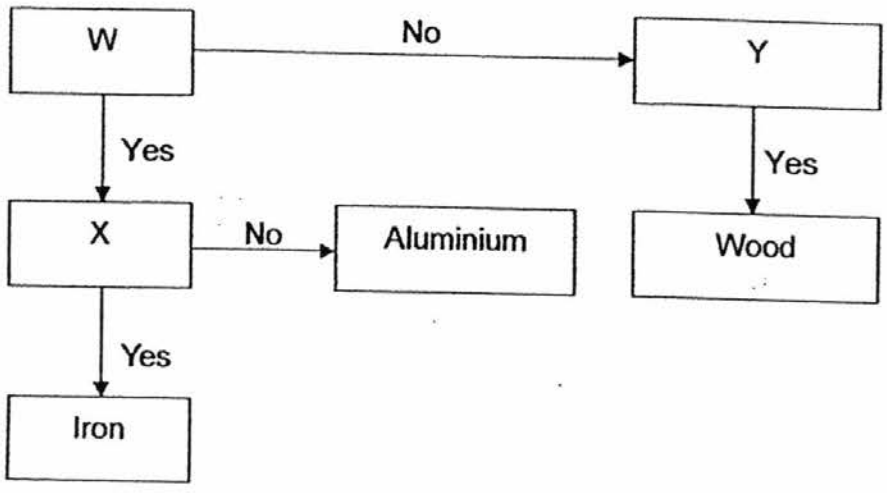
17. Mrs Tan wants a frying pan which is able to conduct heat quickly. She also wants to be able to hold the frying pan without burning her hand.




What should the parts, P and Q, of the frying pan be made of?

| | Part P | Part Q |
|---|---|---|
| (1) | stainless steel | wood |
| (2) | iron | stainless steel |
| (3) | plastic | rubber |
| (4) | copper | iron |

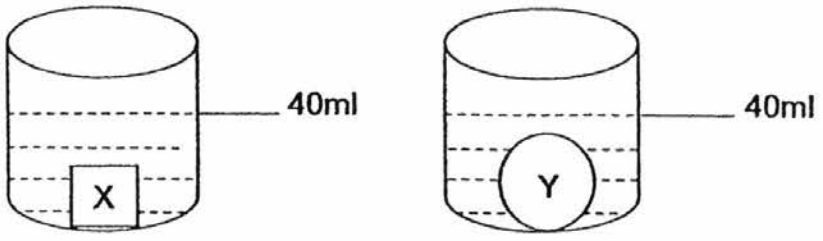
18. Study the flowchart below.




Which of the following are the questions that should be placed in W, X and Y of the flowchart respectively?

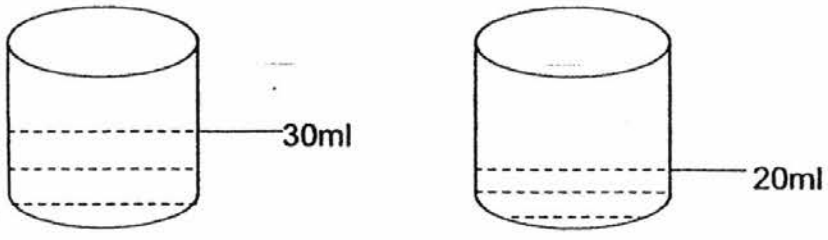
| | W | X | Y |
|---|---|---|---|
| (1) | Can it float on water? | Is it a good conductor of heat? | Is it a magnetic material? |
| (2) | Is it a magnetic material? | Is it a good conductor of heat? | Can it float on water? |
| (3) | Is it a magnetic material? | Can it float on water? | Is it a good conductor of heat? |
| (4) | Is it a good conductor of heat? | Is it a magnetic material? | Can it float on water? |

19. Study the two sets of beakers below.




Beaker 1 Beaker 2

The water levels in the two beakers above are at 40ml. When objects X and Y are taken away, the water levels of the containers are shown below.




Beaker 1 Beaker 2

Which one of the following statements is true?

(1) X has a larger mass than Y.
(2) Y has a larger mass than X.
(3) X has a larger volume than Y.
(4) Y has a larger volume than X.

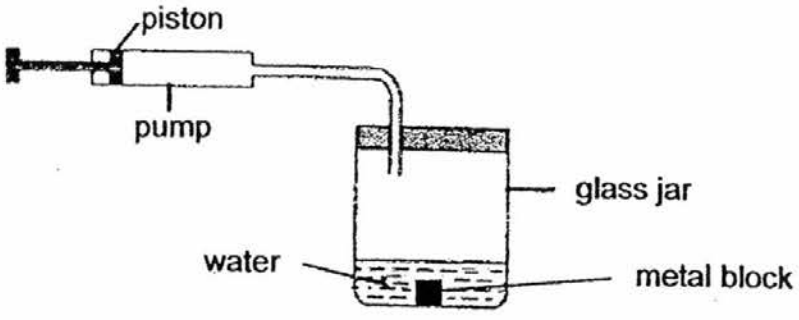
20. Study the table below.

| Item | Definite shape | Definite volume | Can be compressed |
|---|---|---|---|
| X | No | Yes | No |
| Y | No | No | Yes |

Which of the following is correct?

| | Item X | Item Y |
|---|---|---|
| (1) | oxygen | water |
| (2) | milk | magazine |
| (3) | oil | water vapour |
| (4) | spoon | carbon dioxide |

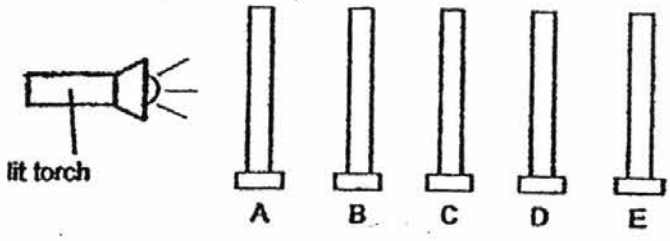
21. A pump was connected to a glass jar as shown below. The capacity of the glass jar is 500 $cm^3$ and the jar contains 200 $cm^3$ of water. A 50 $cm^3$ metal block was placed in the water.



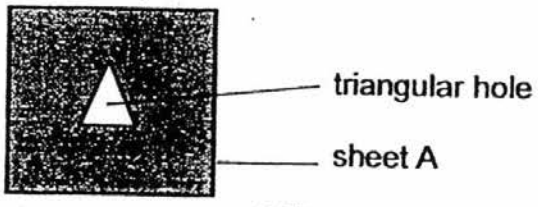

When the piston is completely pushed in, 50 $cm^3$ of air is pumped into the glass jar. What is the volume of air in the glass jar after the piston is pushed in once?

(1) 50 $cm^3$
(2) 250 $cm^3$
(3) 300 $cm^3$
(4) 350 $cm^3$

22. The experiment below was carried out in a dark room. Sheets of materials A, B, C, D and E were arranged in a straight line.




A triangular hole was observed on sheet A as shown below.




The degree of transparency of the materials are given in the table below.

| Allows most light to pass through | Does not allow any light to pass through |
|---|---|
| B | A |
| E | C |
| | D |

On which sheet of material, B, C, D or E, would a triangular patch of light be seen when the torch was switched on?

(1) B
(2) C
(3) D
(4) E

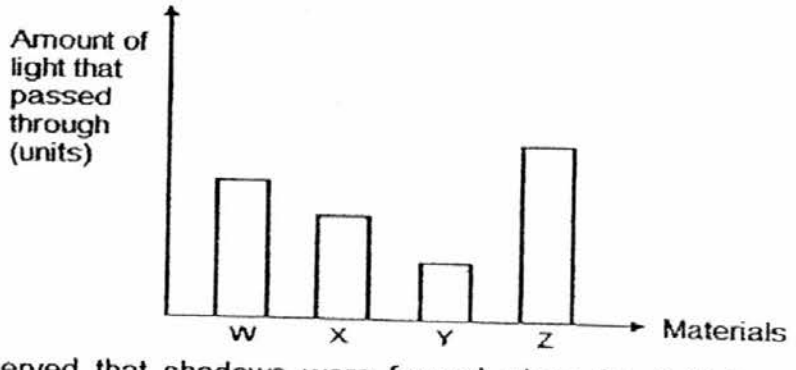
23. The table shows the initial temperature of water in four cups, A, B, C and D and the final temperature after 30 minutes. The cups are similar in size and thickness but are made of different materials. They are placed under the sun in an open field.

| Cups made of material | Initial temperature in the cup (°C) | Final temperature in the cup (°C) |
|---|---|---|
| A | 28 | 34 |
| B | 28 | 32 |
| C | 28 | 35 |
| D | 28 | 30 |

Which of the following is correct?

(1) Material A conducts heat slower than Material B.
(2) Material B conducts heat slower than all the others
(3) Material C conducts heat faster than Material D.
(4) Material D conducts heat faster than Material A

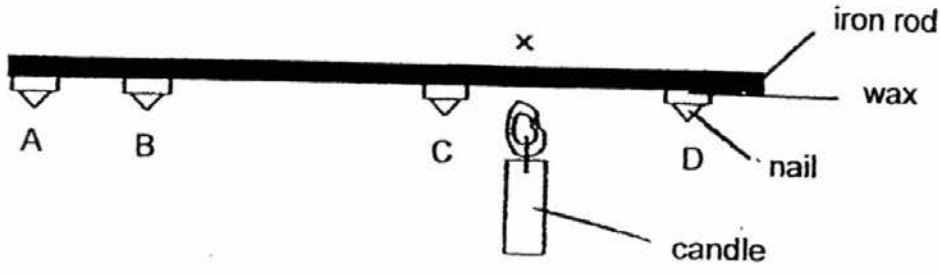
24. May used a light sensor and a datalogger to find out how much light passes through four sheets, W, X, Y and Z of the same size and thickness. The four sheets were made of four different materials. The same torch was used to shine on each sheet of material. The torch was placed at the same distance from each sheet of material. The results were shown in the bar graph below.




May observed that shadows were formed when the light from the torch passed through each sheet of material. Which sheet of material will form the shadow that is the lightest in shade?

(1) W
(2) X
(3) Y
(4) Z

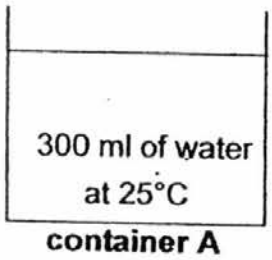
25. Joshua set up the experiment as shown below.



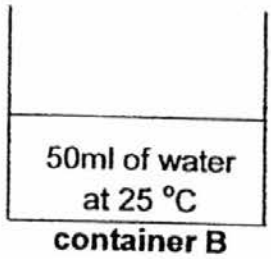

He used some wax to attach 4 nails A, B, C and D to the iron rod. He lit a candle and held it near the rod at the part marked X. Which one of the following options shows the correct order in which the nails will drop from the rod?

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

26. Jeremy conducted an experiment using two similar metal containers. He poured 300ml of water into container A and 50 ml of water into container B as shown in the diagrams below. The temperature of the water in both containers was the same.




**container A**



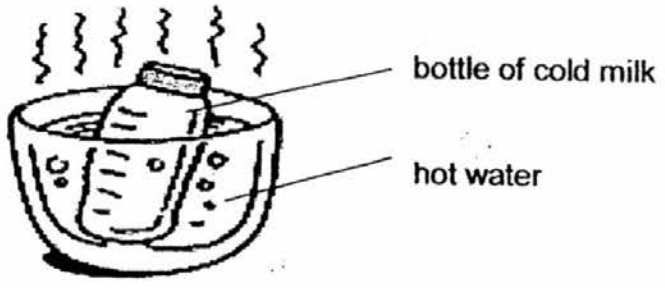

**container B**

He used a bunsen burner to heat container A for two minutes. Then, he recorded the temperature of the water using a thermometer immediately after the heating. He repeated the experiment with container B.

Which of the following are possible temperature of the water recorded in both containers immediately after heating for two minutes?

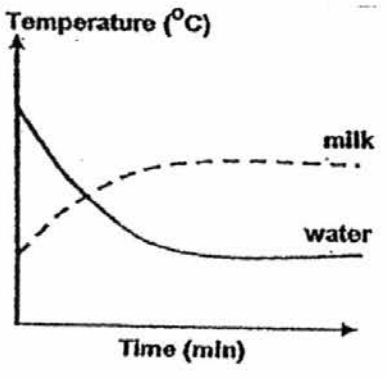
| | Container A | Container B |
|---|---|---|
| (1) | 40°C | 40°C |
| (2) | 40°C | 60°C |
| (3) | 60°C | 40°C |
| (4) | 25°C | 25°C |

27. Mrs Ravi took a bottle of cold milk from the refrigerator and warmed it up in a bowl of hot water as shown below.

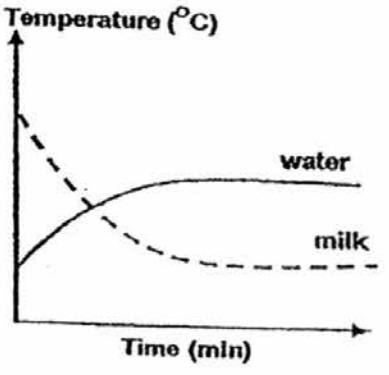



Which one of the following graphs shows the correct change in temperature of the milk and water after some time?

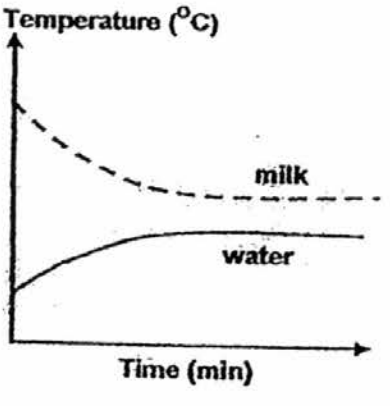
(1)



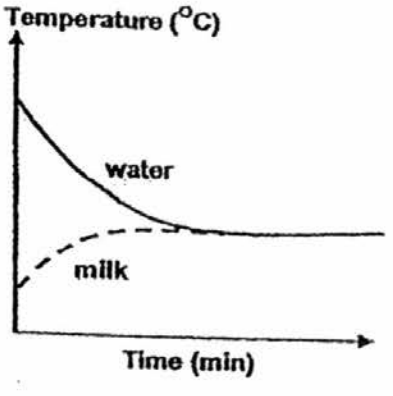

(2)



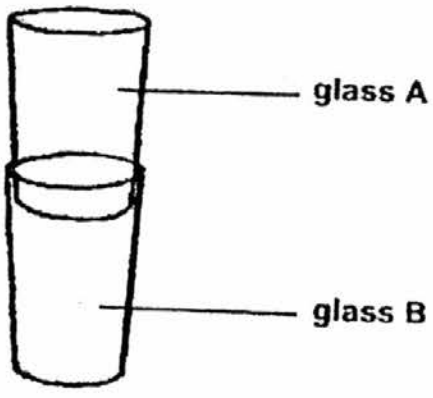

(3)




(4)



28. Charmaine tries to separate two glasses that are stuck together as shown in the diagram below.




Which one of the following methods should she use in order to separate the two glasses without breaking any of them?

(1) Put glass B in cold water.
(2) Pour hot water into glass A
(3) Pour hot water into glass A and put glass B in cold water.
(4) Pour cold water into glass A and put glass B in hot water.

**END OF SECTION A**
**PLEASE CHECK YOUR WORK**

# RED SWASTIKA SCHOOL

## 2016 MOCK TEST
## SCIENCE
## PRIMARY 5

Name : _____ (  )

Class : Primary 5 / _____

Date : 29 February 2016

## BOOKLET B

Booklet B: 13 questions (44 marks)

In this booklet, you should have the following:

a. Page 20 to Page 34
b. Questions 29 to 41

**MARKS**

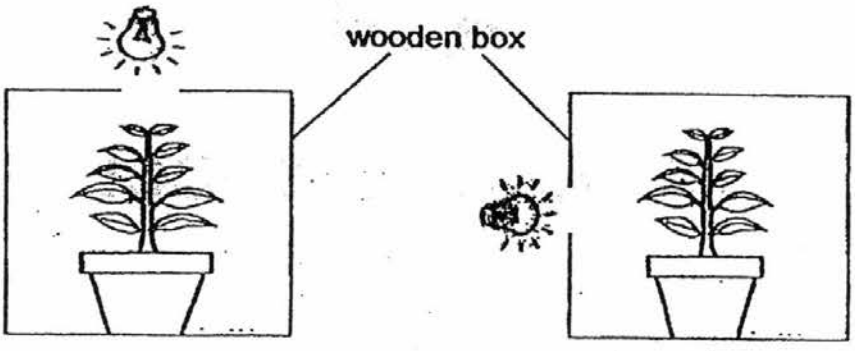
| | OBTAINED | POSSIBLE |
|---|---|---|
| BOOKLET A | | 56 |
| BOOKLET B | | 44 |
| TOTAL | | 100 |

Parent's Signature : _____

**SECTION B**

**Answer all the questions in the spaces provided.**

29. Peter set up an experiment as shown below.




Set-up X Set-up Y

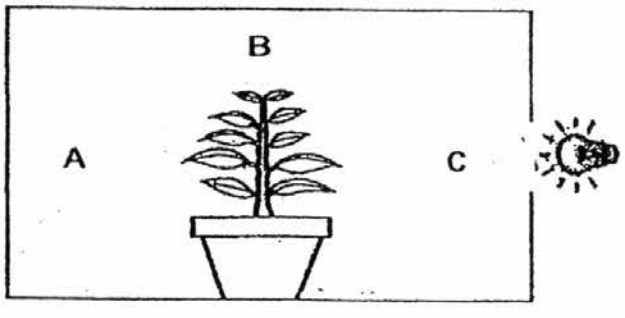
Each set-up consisted of a similar wooden box with an opening at one of its sides. A brightly lit lamp was placed at the opening of each box. A similar pot of plant was placed at the center of the wooden box. After a week, Peter observed the plants.

(a) Based on the information above, what was the aim of Peter's experiment? (1m)

_____

_____

Peter had another similar pot of plant in set-up Z shown below. The plant was given enough water each day.




Set-up Z

(b) In the diagram above, circle the correct letter, A, B or C, to show the direction the plant would be growing towards after two weeks. (1m)

(c) Explain why the plant in set-up Z would grow in such a manner. (1m)

_____

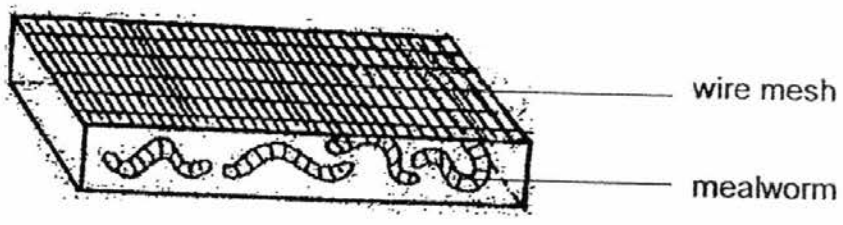
_____



3

30. Gopal put 10 mealworms in a box as shown below. He ensured that the mealworms had enough food to eat. Two weeks later, he found that he had only 4 mealworms left. He looked everywhere in the box but found no sign of the other 6 mealworms.

Instead, he discovered six organisms which he had not seen before. He was puzzled as he had not added any other organisms into the box. His mother told him that the six organisms were related to the mealworms.

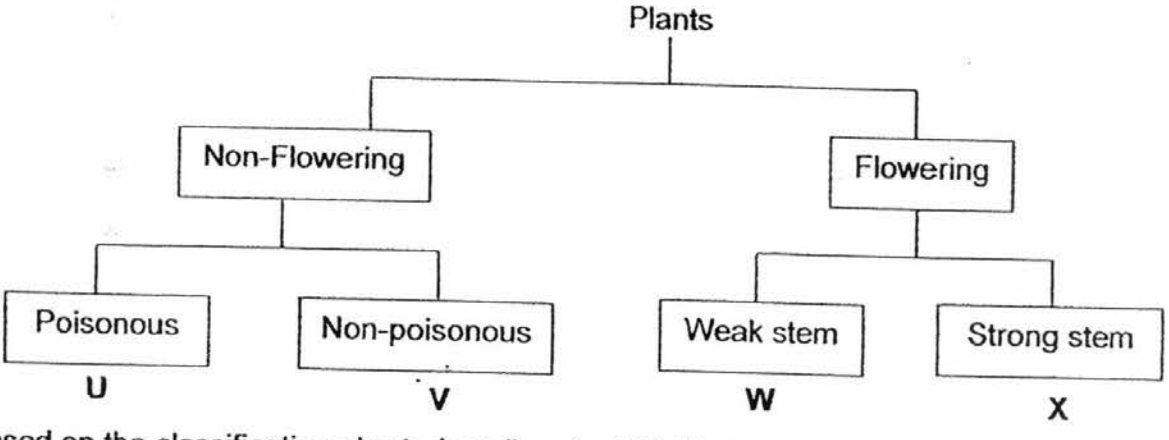



(a) State what the six new organisms were. (1m)

_____

_____

Study the classification chart below carefully and answer the questions that follow.




(b) Based on the classification chart, describe plant W. (1m)

_____

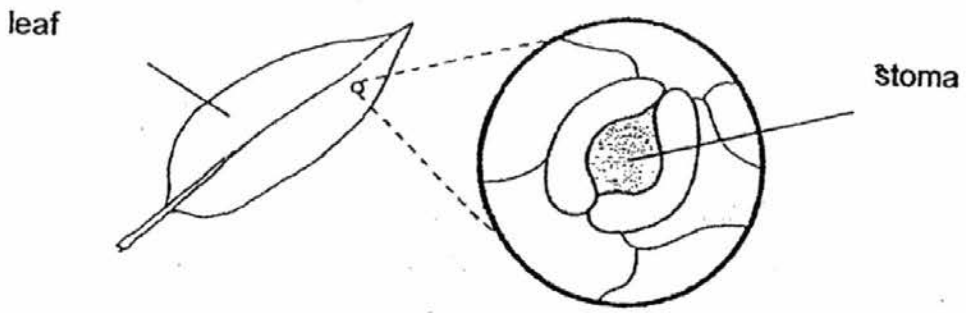
_____

(c) Classify the organisms in the table below into the correct group. (1m)

| Organism | Group U, V, W or X? |
|---|---|
| Bird's nest fern | |
| Sunflower | |

3

31. A leaf has tiny openings called stomata on its surface.




June measured the changes in the size of the stomata of some leaves on a plant placed in the open field at different times of the day. She recorded her results in the table below.

| Time | 4am | 8am | 12pm | 4pm | 8pm |
|---|---|---|---|---|---|
| Average size of the stomata (units) | 8 | 11 | 15 | 12 | 9 |

(a) Based on the table, what can be observed about the change in size of the stomata from 4am to 8pm? (1m)

_____

_____

_____

(b) How is the size of the stoma in the day different than at night? Explain your answer. (2m)

_____

_____

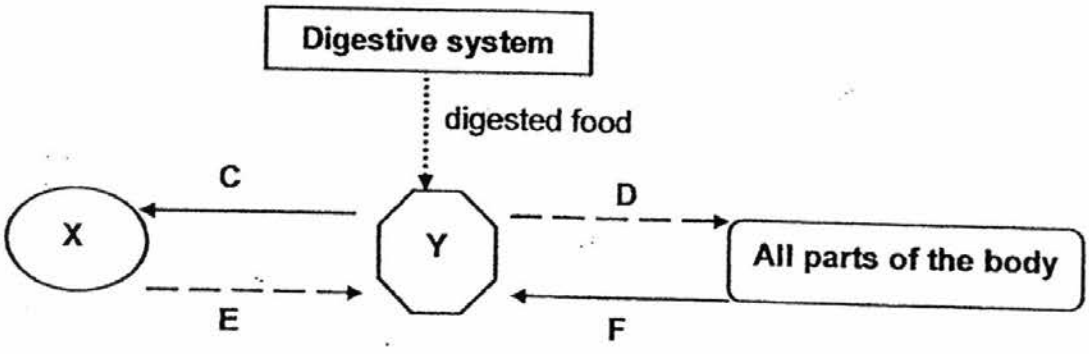
(c) What is the disadvantage to the plant when the stoma remained open? (1m)

_____

_____

4

32. The different systems of the human body are represented in the diagram below. The arrows symbolise the different substances moving within the body. The arrows are also part of system Y.




(a) Based on the above diagram, which systems, respiratory system or circulatory system, do the letters X and Y represent? (1m)

System X : _____

System Y : _____

(b) Name the gas that blood vessels at D and F are rich in. (1m)

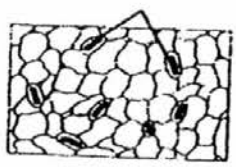
Blood vessels at D : _____

Blood vessels at F : _____

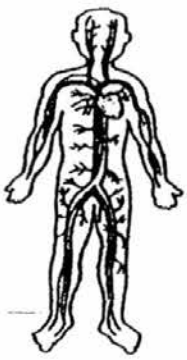
2

33. Study the diagrams of the stomata of a leaf and the different human body systems shown below.

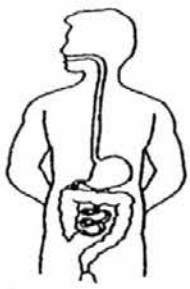
stomata



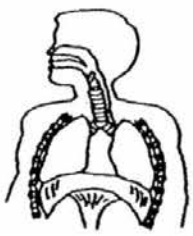
top view of a leaf seen under a microscope



A



B



C

D

(a) Which one of the systems, A, B, C or D in the human body performs a similar function to the stomata in the leaf? Name the system. (1m)

_____

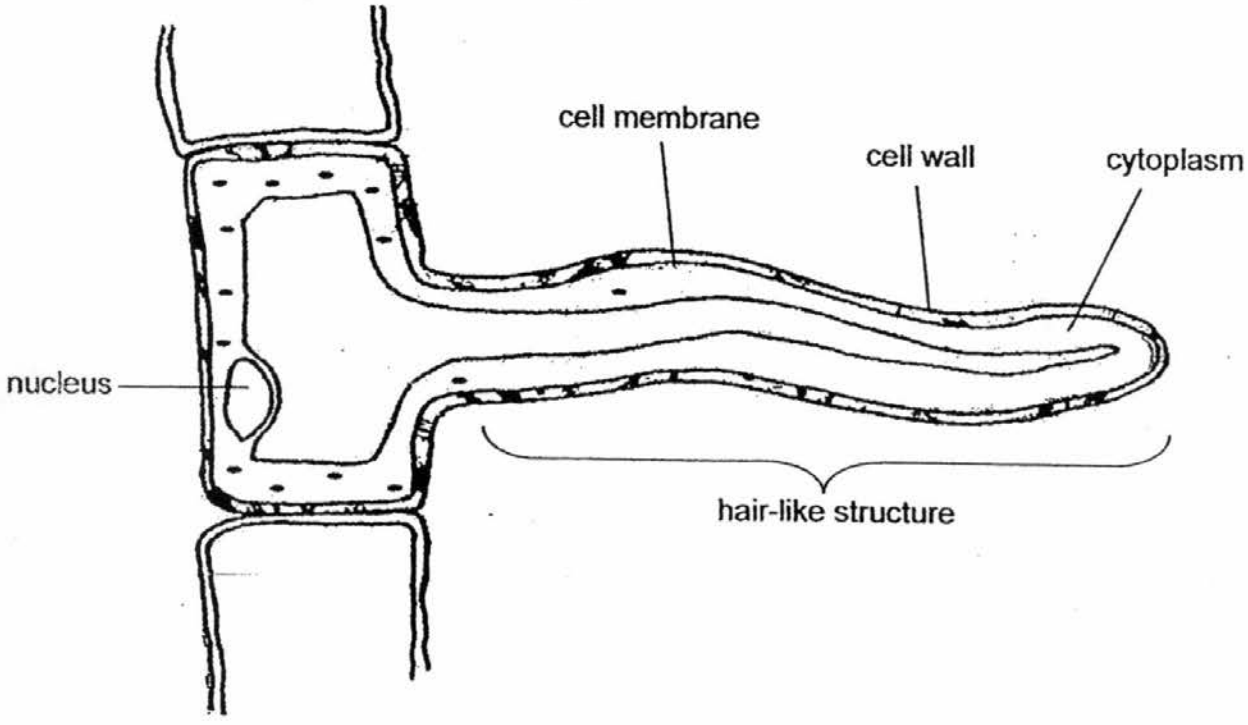
(b) Based on the answer in part (a), what is the similarity in the function of both the stomata and the system chosen in part (a)? (1m)

_____

_____

2

34. The diagram shows a root hair cell. The root hair helps the plant to absorb water.




(a) How does the hair-like structure help the root hair cell in absorbing water? (2m)

_____

_____

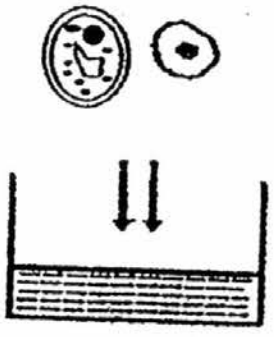
(b) Explain what will happen to the root hair cell if its nucleus is missing? (2m)

_____

_____

4

35. Jane carried out an experiment with a pair of cells, a plant cell and an animal cell. She placed the plant cell and the animal cell in pure water as shown below.



Pure water

(a) After 30 minutes, she recorded her observations below.

| Plant cell | Animal cell |
|---|---|
| Cell swelled slightly but remained the same shape and did not burst. | Cell swelled greatly and burst. |

(i) What had happened that caused the two cells to swell? (1m)

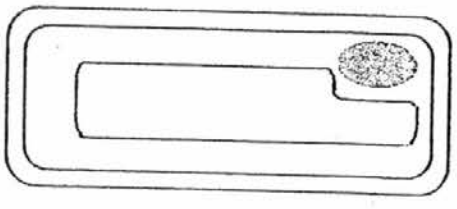
_____

(ii) Explain why the animal cell burst but the plant cell did not. (1m)

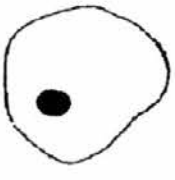
_____

_____

Halim observed two different cells, X and Y. He made drawings of his observation.



Drawing of Cell X



Drawing of Cell Y

(b) Are cells X and Y able to make food? Explain your answer. (2m)

_____

_____

4

36. Gabriel carried out an experiment in the science room with four different magnets, A, B, C and D. The table below shows the greatest number of paper clips each magnet can attract when the magnet was placed at the same distance from some paper clips.

| Magnet | A | B | C | D |
|---|---|---|---|---|
| Number of paper clips attracted | 9 | 12 | 7 | 4 |

(a) What could be concluded about the magnetic strength of magnets B and D? (1m)

_____

_____

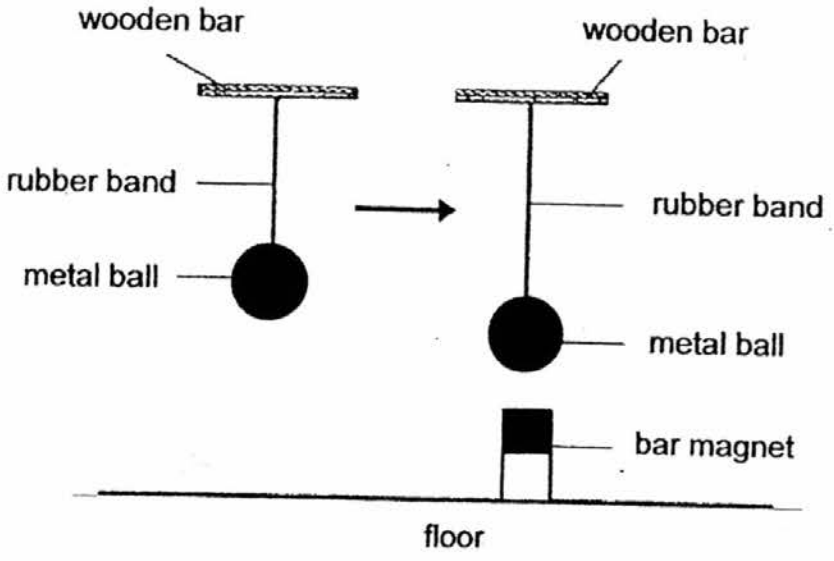
(b) For the experiment to be a fair test, state two other variables that must be kept the same. (2m)

(i) _____

(ii) _____

3

37. (a) A metal ball was hung from a wooden bar with a rubber band. The length of the rubber band increased when a bar magnet was placed under the metal ball as shown below.




(i) Based on the information given, state the physical property of the metal ball that caused the rubber band to increase its length when a bar magnet was placed under it. (1m)

_____

_____

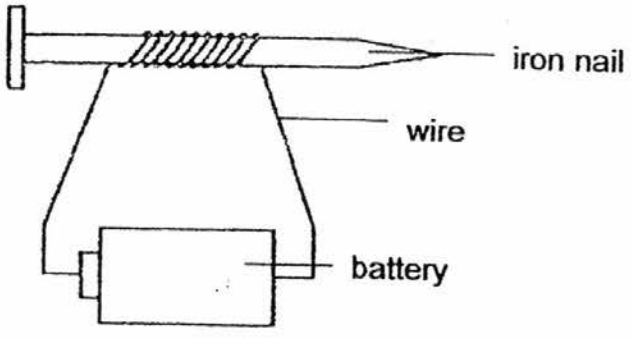
(ii) Explain why the length of the rubber band increased when the bar magnet was placed under the metal ball. (1m)

_____

_____

2

37.(b) An iron nail can be made into an electromagnet by coiling some wires around it and connecting it to a battery as shown below.




Razali wanted to find out how the number of turns of wires around the iron nail would affect the magnetic strength of the electromagnet. He drafted out his plan shown in the table below. For each arrangement, he tested the magnetic strength of the electromagnet by counting the number of paper clips it could attract.

| Set-up | Number of batteries used | Number of turns of wires around the iron nail |
|---|---|---|
| A | 1 | 20 |
| B | 3 | 20 |
| C | 2 | 30 |
| D | 3 | 30 |

(i) Which two set-ups should he use to carry out a fair test? (1m)

_____

(ii) What is Razali trying to find out if he uses set-up A and B to conduct an experiment? (1m)

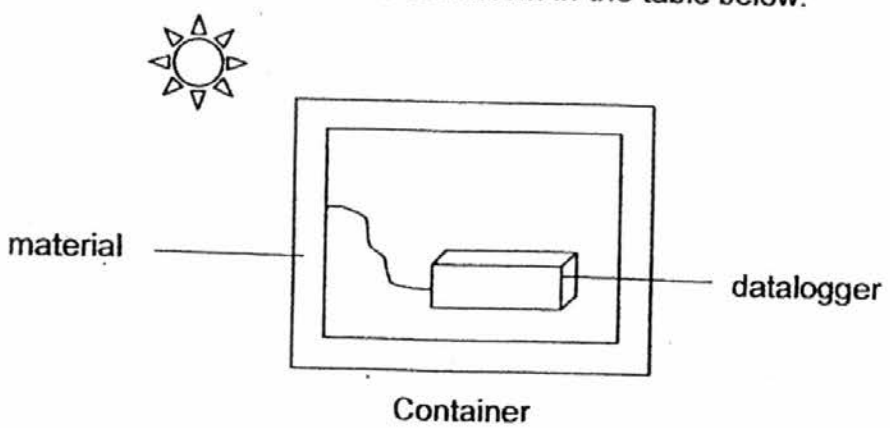
_____

_____

2

38. The Housing Development Board (HDB) wanted to find out which material they should choose for the construction of the latest block of flats in Singapore.

An engineer set up the following experiment. He placed a datalogger in the container and recorded the results as shown in the table below.




| Surrounding temperature outside the container (°C) | Average temperature of air inside the container after one hour (°C) | | | |
|---|---|---|---|---|
| | Material A | Material B | Material C | Material D |
| 27 | 30 | 28 | 42 | 27 |
| 30 | 35 | 30 | 45 | 29 |
| 35 | 37 | 33 | 48 | 32 |

(a) Which material is the best for constructing the wall to keep the interior of the house as cool as possible? Explain your choice. (2m)

_____

_____

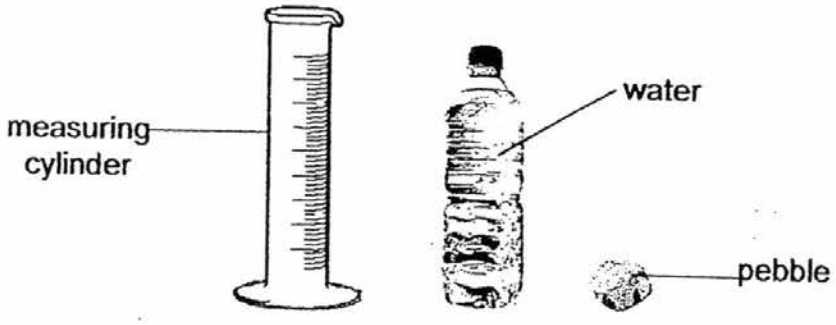
(b) Explain why the choice of material in part (a) is also the most suitable for constructing buildings in countries which experience winter. (2m)

_____

_____

4

39. Mrs Tan was going to class and accidentally dropped a stack of cards with the instructions on how to measure the volume of a pebble using a measuring cylinder and a bottle of water.




(a) Help Mrs Tan put the instruction cards in the correct order by numbering the steps. Step 1 has been done for you. (2m)

| Step | Instruction |
|---|---|
| | Record the volume of water in the measuring cylinder. |
| | Subtract the original volume of water from the volume of water and pebble. |
| 1 | Pour water into the measuring cylinder. |
| | Place the pebble into the water. |
| | Measure the volume of water with the pebble inside. |

(b) Which property of a solid makes it possible to find out the volume of the pebble using the method given in (a)? (1m)

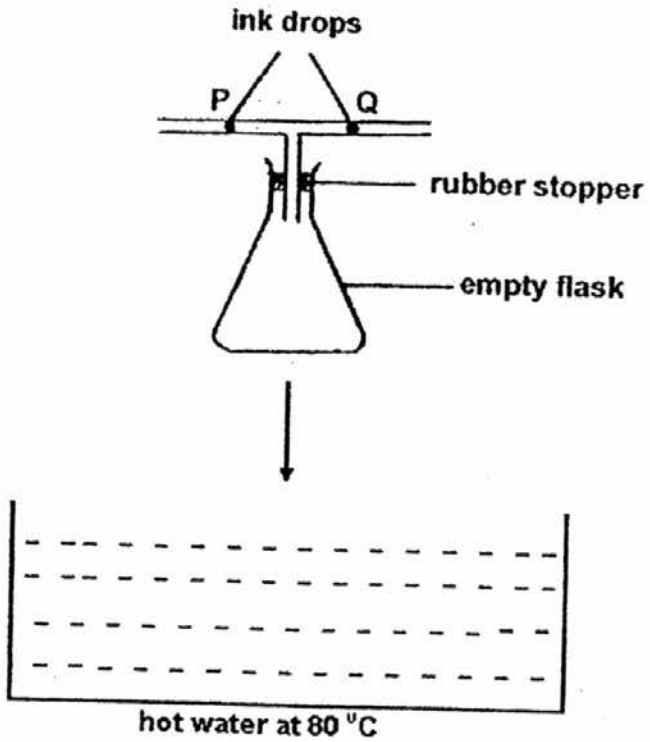
_____

_____

3

40.(a) Hendrick had an empty conical flask with a T-shaped tube. He placed two drops of black ink, P and Q, in the tube as shown in the diagram. Then he placed the flask into a basin containing hot water at a temperature of 80 $^0$C.

After two minutes, he noticed that P and Q had moved.




(i) Based on the diagram, draw an arrow in each box provided to show the directions of the movement of P and Q after the flask was placed in the basin of hot water for two minutes. (1m)

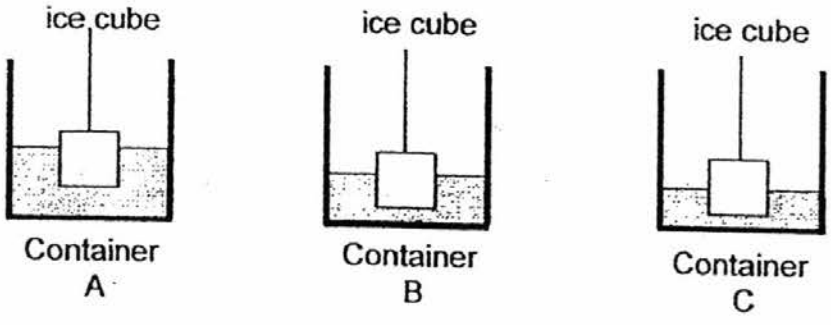
P Q

(ii) Explain why P moved in such a manner. (2m)

3

40.(b) Hendrick poured different amount of water at 100° C into 3 identical containers labelled A, B and C. He then dropped a cube of ice into each container.

The ice cube in container A melted first, while the ice cube in container C melted last.




If Hendrick wants to show how the temperature of water affects the melting rate of an ice cube, which two changes must he make to his experiment? (2m)

(i) _____

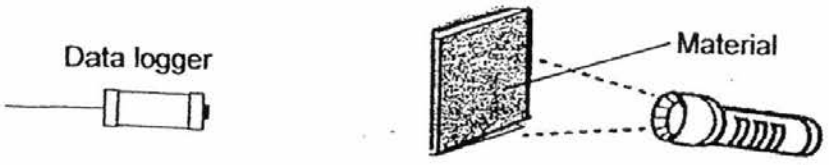
_____

(ii) _____

_____

2

41. Devi set up an experiment as shown below to find out the amount of light that passes through a material of different thickness.




First, Devi used a data logger to measure the amount of light from the surrounding when the torch was switched on and off. The results were recorded in Table 1 below.

Table 1

| | **Amount of light detected (lux)** |
|---|---|
| Torch switched off | 0 |
| Torch switched on | 2500 |

Then, Devi used the data logger to measure and record the amount of light that could pass through the material when it was cut into different thickness.

Table 2

| **Thickness of material (cm)** | **Amount of light detected (lux)** |
|---|---|
| 0.3 | 2000 |
| 0.6 | 1200 |
| 1 | 0 |

(a) What is the relationship between the amount of light detected by the datalogger and the thickness of the material? (1m)

_____

_____

(b) Devi wants to find out how the growth of a plant is affected when the plant is kept in total darkness. She needs to make a box to conduct the experiment. Based on the results in Table 2, how thick should the material be for making the box? Why? (2m)

_____

_____

3

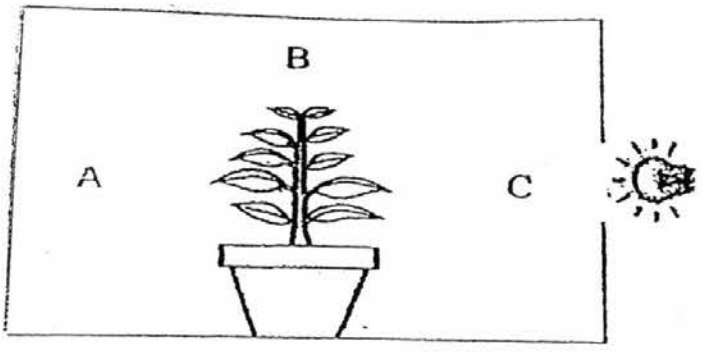
**END OF SECTION B**
**PLEASE CHECK YOUR WORK**

**EXAM PAPER 2016**
**LEVEL : PRIMARY 5**
**SCHOOL : RED SWASTIKA SCHOOL**
**SUBJECT : SCIENCE**
**TERM : MOCK TEST**

| Q 1 | Q 2 | Q 3 | Q 4 | Q 5 | Q 6 | Q 7 | Q 8 | Q9 | Q 10 |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 1 | 3 | 2 | 2 | 3 | 2 | 4 | 4 | 3 |
| Q 11 | Q 12 | Q 13 | Q 14 | Q 15 | Q16 | Q17 | Q18 | Q19 | Q20 |
| 3 | 2 | 1 | 3 | 4 | 4 | 1 | 4 | 4 | 3 |
| Q21 | Q22 | Q23 | Q24 | Q25 | Q26 | Q27 | Q28 | | |
| 2 | 2 | 3 | 4 | 3 | 2 | 4 | 4 | | |

Q29a) To find out if plants grow towards sunlight.

b)




Set-up Z

c) The plant bends towards the direction of the light source so that it can get as much sunlight as possible to make food.

Q30a) Beetles or pupas.

b) Plant W is a flowering plant and it has a weak stem.

c) Bird's nest fern – V
*Sunflower* – X

Q31a) From 4am to 12pm, the size of the stomata increased but from 12pm to 8pm, the size of stomata decreased.

b) The stomata is bigger to allow the plant to take in more carbon dioxide to help the plant to make food when there is light.

c) The plant will lose water vapour.

Q32a) System X – Respiratory system
a) System Y – Circulatory system

Q33a) C, respiratory system.

b) Both allow gaseous exchange with the surroundings to take place.

Q34a) To increase the surface area of the cell so that it can absorb more water for the plant.

Q35a)(i) The pure water.
(ii) The animal cell do not have cell wall, however the plant cell have, therefore the cell wall gives the plant cell another protection.

b) No. Both do not have chloroplast and do not contain chlorophyll to trap light and make food.

Q36a) Magnet B has a stronger magnetic strength than magnet D.

b)(i) The type of paper clips used.
(ii) The paper clips must be the same when the magnet is going to attract.

Q37a)(i) The metal ball is made of a magnetic material.
(ii) The bar magnet attracted the metal ball which was suspended by the rubber band, causing the rubber band to stretch.

b)(i) B and D.
(ii) Razali will be trying to find out whether the number of batteries used will affect the magnetic strength.

Q38a) Material D. The average temperature of the air inside the container made of D is the lowest. This shows that material D conducts heat slowest from the surroundings outside the container to the inside container.

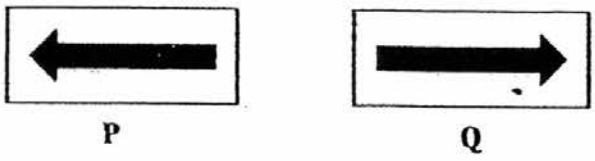
b) D is the poorest conductor of heat. It will conduct heat away from the building the slowest.

Q39a)

| Step | Instruction |
|---|---|
| 2 | Record the volume of water in the measuring cylinder. |
| 5 | Subtract the original volume of water from the volume of water and pebble. |
| 1 | Pour water into the measuring cylinder. |
| 3 | Place the pebble into the water. |
| 4 | Measure the volume of water with the pebble inside. |

b) The stone occupies space and has a definite volume.

Q40a)(i)



P Q

(ii) The air in the flask gains heat form the hot water and expands. The air escapes through the tube as there is not enough space in the flask and pushes P to the left.

b)(i) Use the same amount of water in all containers.
(ii) Use water of different temperature in all containers.

Q41a) As the thickness of the material increases, the amount of light detected decreases.

b) She should have make the box 1cm, as it does not let any light to pass through.



END.