

Name : _____ ()

Class : Primary 5 ()

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 5
Continuous Assessment 1 – 2009
SCIENCE

BOOKLET A

4th March 2009

Total Time for Booklets A and B: 1 hour 30 minutes

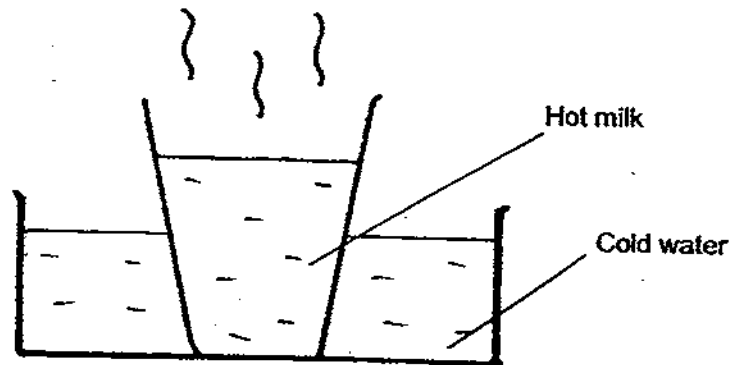
25 questions
50 marks

Do not open this booklet until you are told to do so.
Follow all instructions carefully.

Section A : (25 x 2 marks)

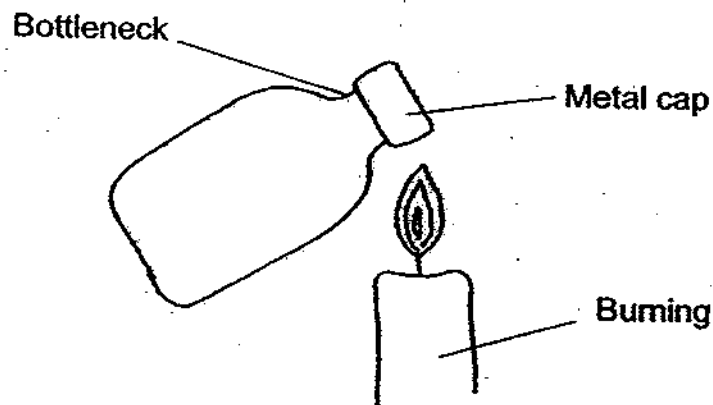
For each question from 1 to 25, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. A glass of hot milk is put into a basin of cold water.



Which one of the following statements is true?

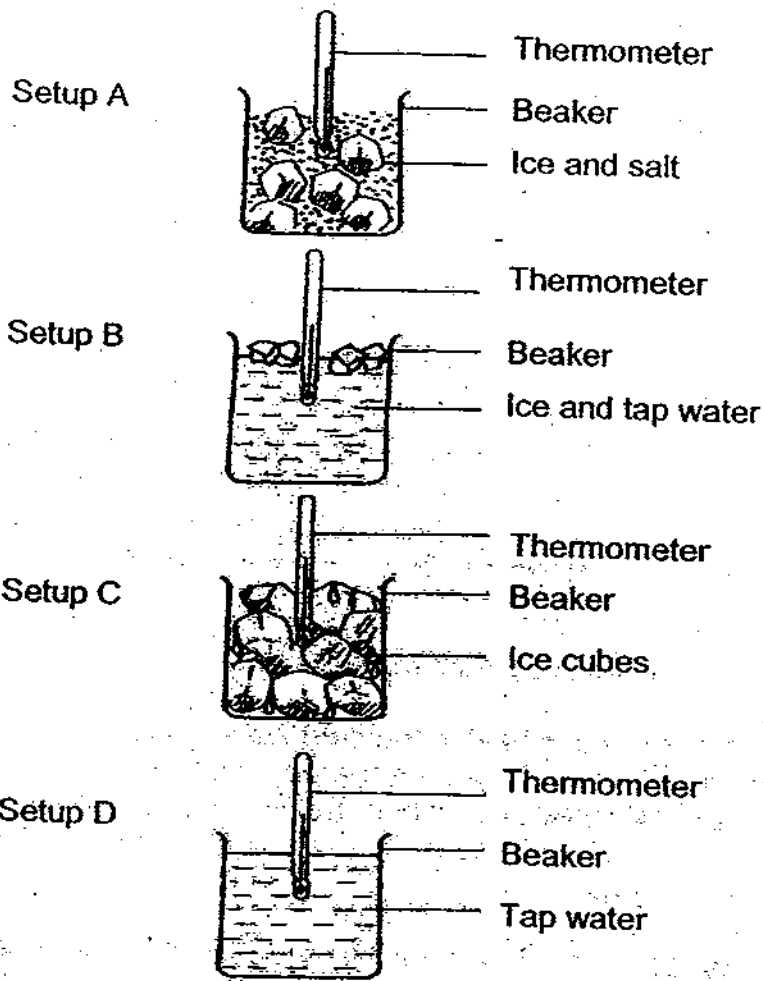
- (1) The hot milk loses heat to the cold water only.
 - (2) The hot milk gains heat from the cold water only.
 - (3) The hot milk loses heat to both the cold water and the surrounding air.
 - (4) The hot milk gains heat from the cold water and loses heat to the surrounding air.
2. A tight metal cap can be loosened by warming the metal cap over a flame as shown in the diagram below.



This is because the _____

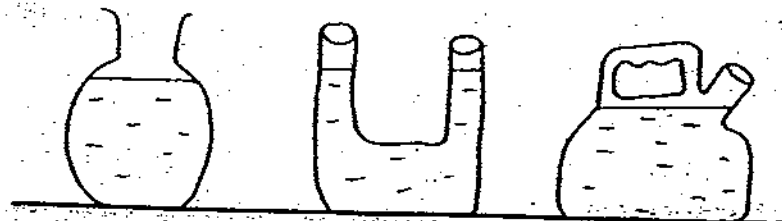
- (1) metal cap expands more than the bottleneck
- (2) metal cap expands while the bottleneck contracts
- (3) bottleneck and the cap contract to the same extent
- (4) bottleneck and the cap expand to the same extent

3. Kumar measured the temperature of the four setups below and arrange the setups starting from the coldest.



Which one of the following orders is correct?

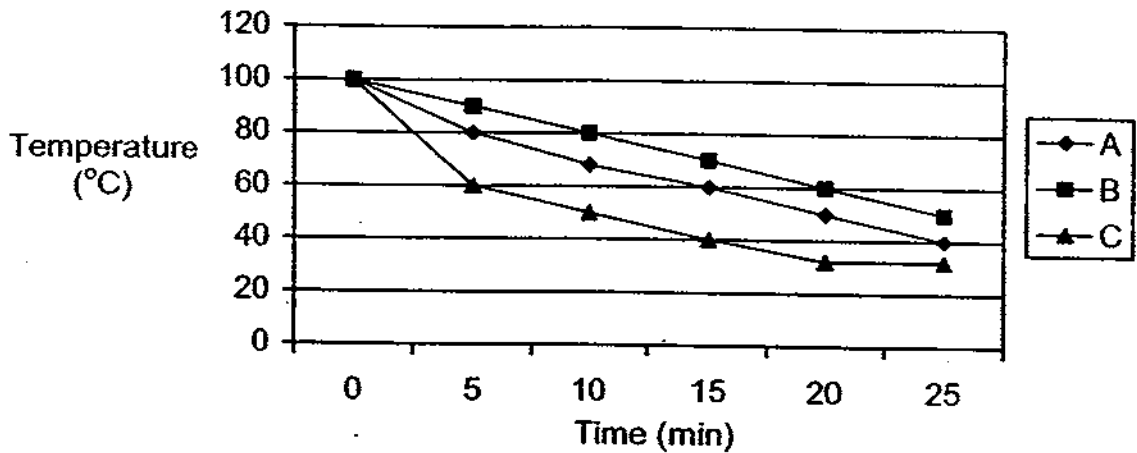
- (1) A, B, C, D
 - (2) A, C, B, D
 - (3) C, B, A, D
 - (4) D, B, A, C
4. 50ml of water is poured into each of the containers below.



This experiment shows that water has _____

- 1) a definite shape only
- 2) a definite volume only
- 3) a definite mass and definite volume
- 4) a definite shape and definite volume

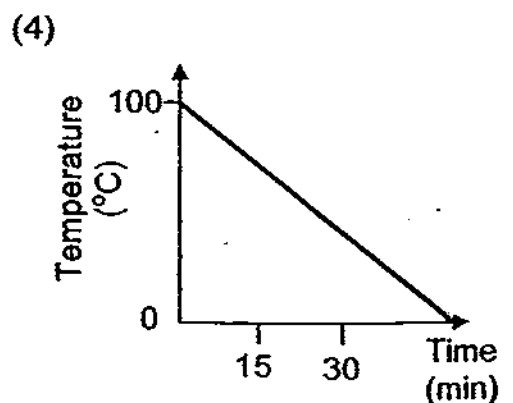
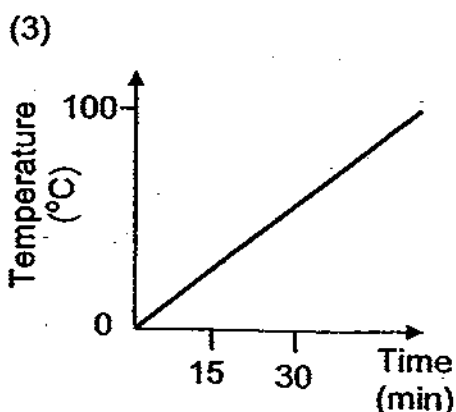
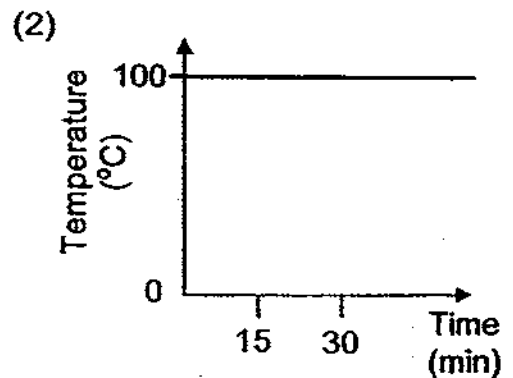
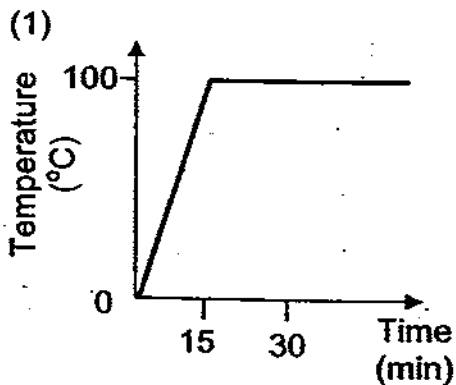
5. Some boiling water is poured into three different containers, A, B and C. The time taken for the water in each container to cool down is recorded in the graph below.



Which one of the following sets correctly represents the materials used to make the above containers?

	Container A	Container B	Container C
(1)	Glass	Styrofoam	Stainless steel
(2)	Plastic	Stainless steel	Styrofoam
(3)	Glass	Styrofoam	Plastic
(4)	Stainless steel	Glass	Plastic

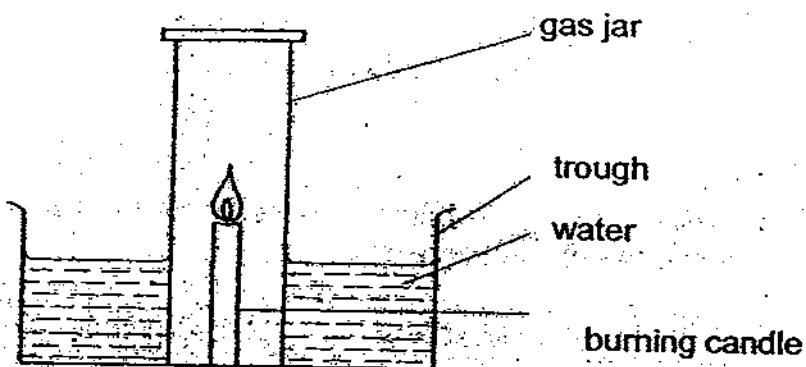
6. Sean heated 100ml of pure water in a beaker for 15 minutes till it boils. He continued to heat the water for another 15 minutes. Which of the following graphs show the change in temperature correctly during the entire heating process?



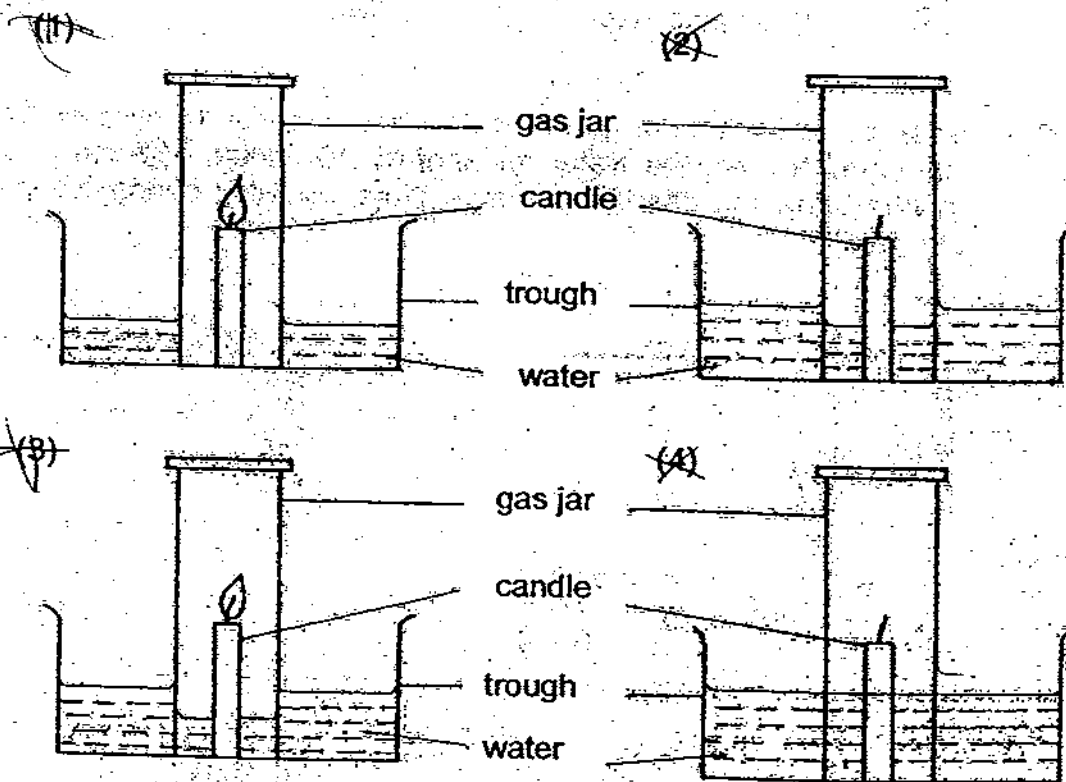
7. Substance Q melts at 10°C and boils at 120°C . Which one of the following temperatures is substance Q a solid?

- (1) 4°C
- (2) 29°C
- (3) 100°C
- (4) 143°C

8. Fatimah wanted to investigate whether oxygen was used up during burning. She setup apparatus as shown below.



What would Fatimah expect to see at the end of her experiment?

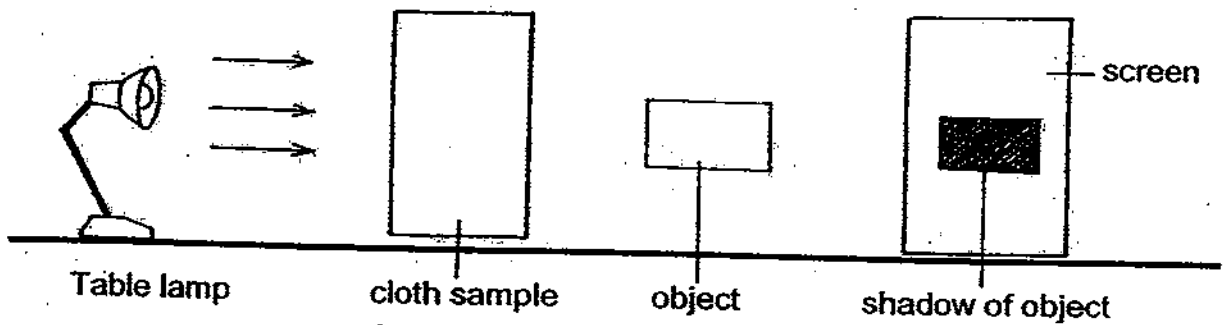


9. The state of water **does not** depend on _____

- A: the temperature of the surroundings
- B: the size of the container it is placed in
- C: the shape of the container it is placed in
- D: the amount of heat it takes in or gives out

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

10. Mrs Lim wanted to make a new set of curtains for her living room to block out all the sunlight entering the room. To ensure her choice was right, she selected some samples of cloth to test the amount of light that passes through it. She set up her test as shown below and observed the shadow formed on the screen.

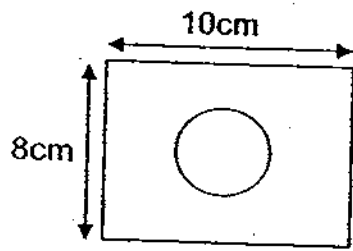


	Amount of light passing through the cloth
A	
B	
C	
D	

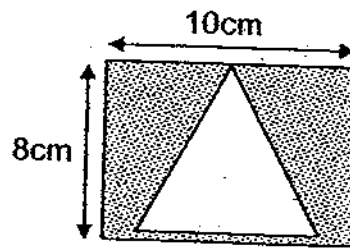
Which one of the above cloth is the best choice for Mrs Lim to use to make her new set of curtains?

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

11. Kim cut out a circle from a sheet of clear plastic and a triangle from a sheet of metal as shown below.



Clear plastic sheet

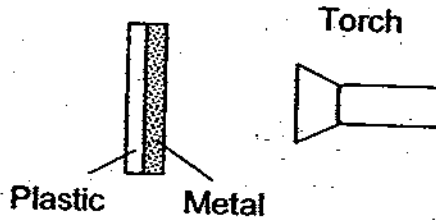


Metal sheet

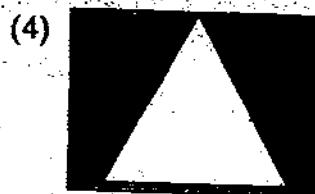
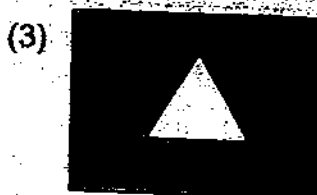
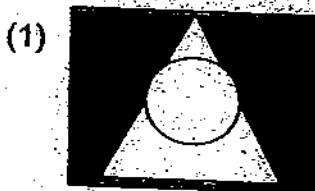
Then the two sheets were glued one on top of another. He then placed it between the torch and a screen in a dark room as shown below.



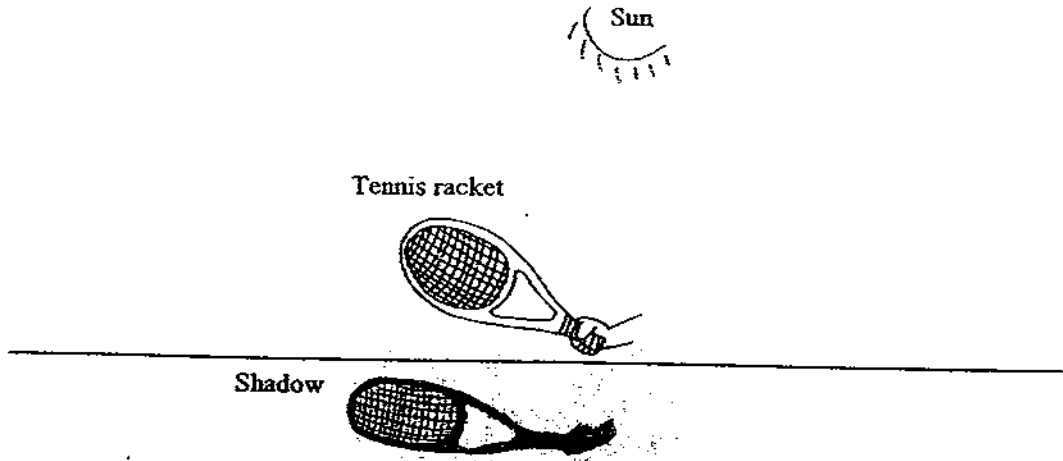
Screen



Which one of the following could be the shadow cast on the screen?



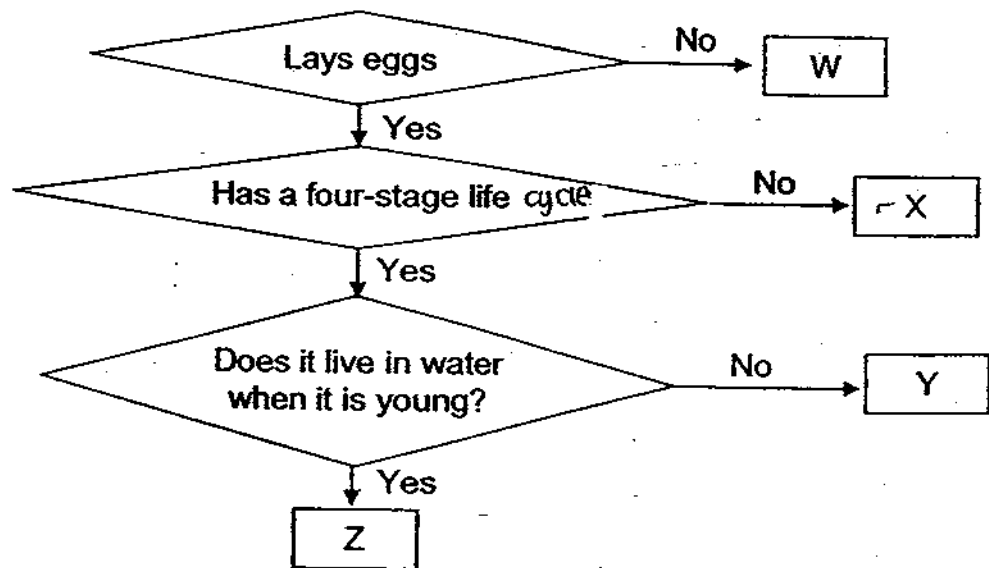
12. The tennis racket casts a shadow on the ground as shown below.



When the tennis racket is moved a few centimeters away from the ground, it gives a _____ image on the ground.

- (1) bigger and blurred
- (2) bigger and sharper
- (3) smaller and blurred
- (4) smaller and sharper

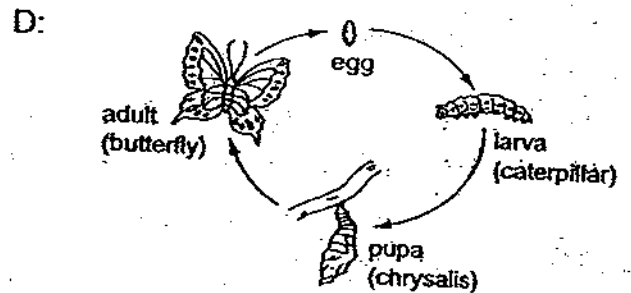
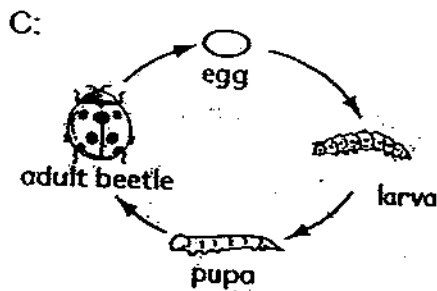
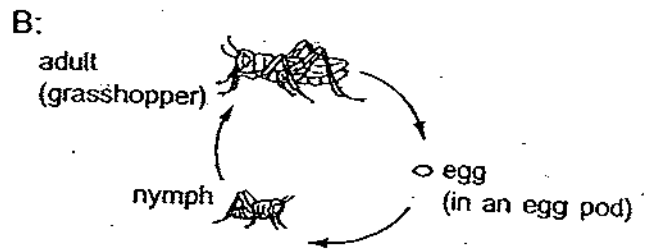
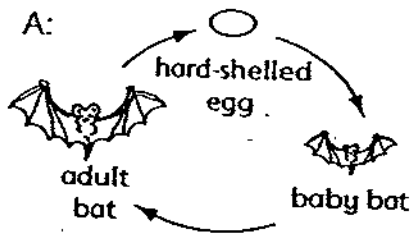
13. Study the flow chart below carefully.



Which of the following animals are best represented by W, X, Y and Z?

(1) x	Pigeon	Guppy	Cockroach	Mosquito
(2) x	Mosquito	Pigeon	Guppy	Frog
(3)	Guppy	Pigeon	Cockroach	Mosquito
(4) x	Cockroach	Guppy	Mosquito	Frog

14. Study the life cycles of the animals below carefully.



Which of the life cycles are correctly presented?

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

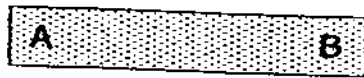
15. Leslie's magnet is unable to attract any more iron nails. What can the reason be?



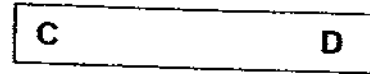
- A: It has been used too often.
- B: It was washed before using.
- C: It has been dropped too often.
- D: It has been heated under strong flame.

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

16. There are two iron bars, X and Y, of equal size.



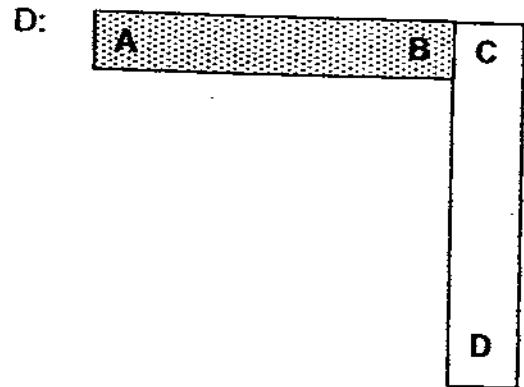
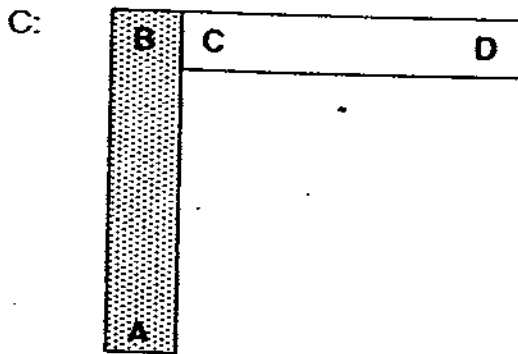
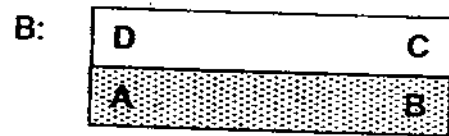
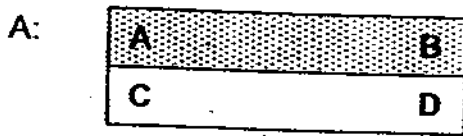
Bar X



Bar Y

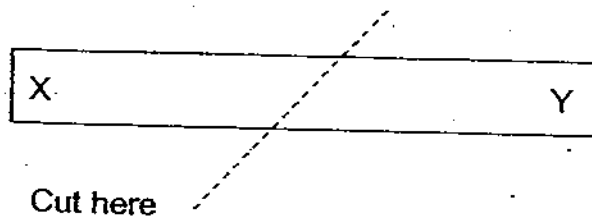
They are hung by a thin thread and allowed to turn freely. Bar X always comes to rest with the end marked A pointing to the South and bar Y comes to rest with the end marked C pointing to the North.

Which of the following arrangements may be observed when the two bars are brought near to each other?

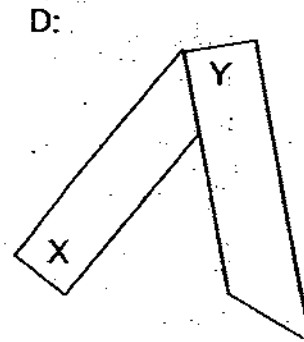
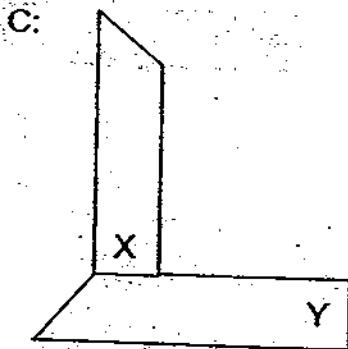
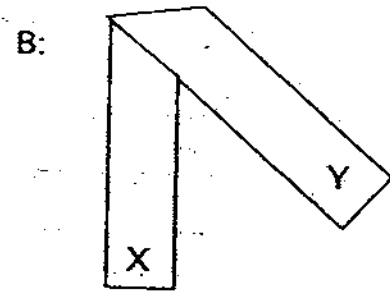
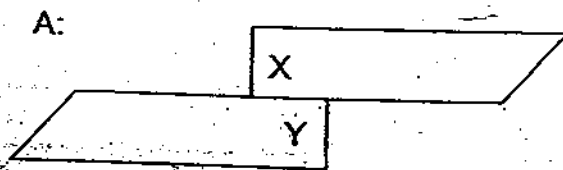


- (1) D only
- (2) A and C only
- (3) A and D only
- (4) B and C only

17. A piece of magnet was cut into two equal pieces as shown below.

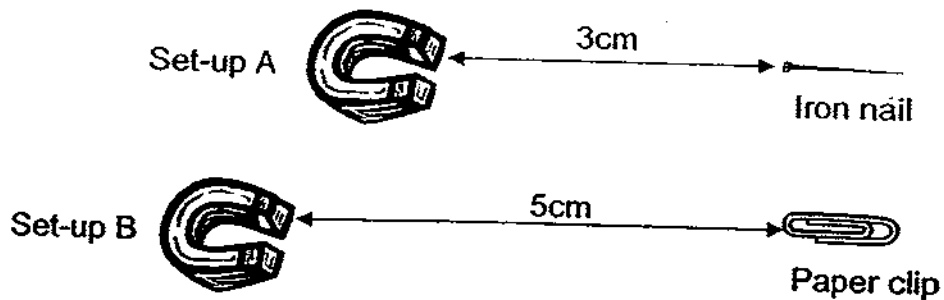


Which of the following arrangements of the two pieces of magnets are not possible?



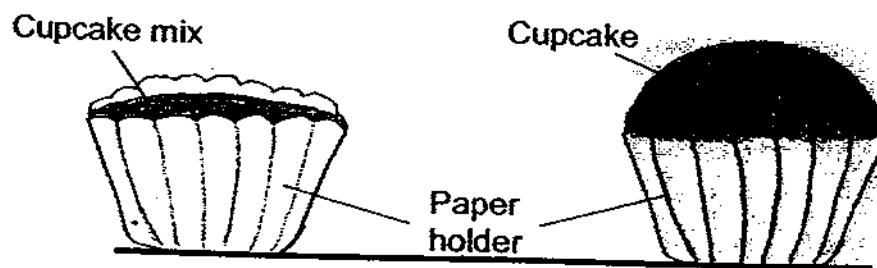
- (1) A only
- (2) A and B only
- (3) C and D only
- (4) B, C and D only

18. Amin moved the magnet slowly towards an iron nail and measured the distance when the magnet attracted the iron nail as shown in setup A. Then he moved the same magnet slowly towards a paper clip and measured the distance when the magnet attracted the paper clip shown in setup B.



What conclusion can Amin draw from this experiment?

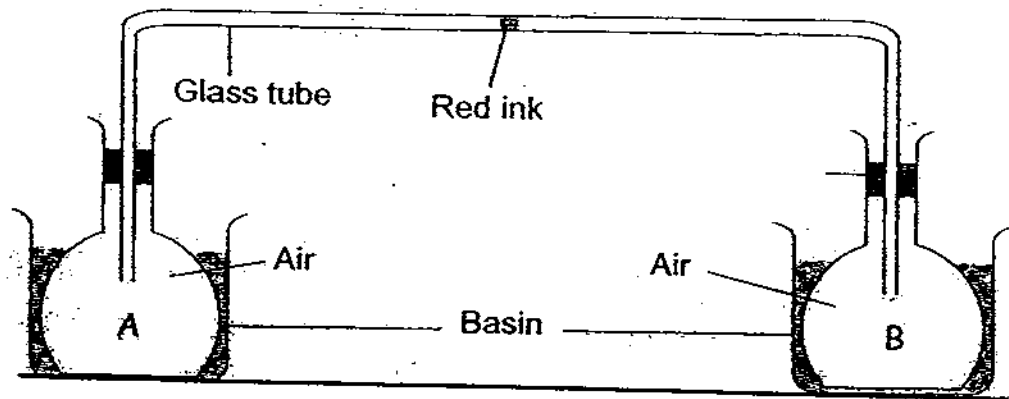
- A: Magnetic forces can act at a distance.
B: Both the iron nail and the paper clip are magnetic objects.
C: Iron nail can get attracted to magnets better than paper clip.
D: Setup A has a stronger magnetic attraction than setup B
- (1) A and D only
(2) A and B only
(3) B and C only
(4) A, B and D only
19. Rachel wanted to bake some cupcakes for her family members. The diagram below shows what happened to her cupcake before and after baking.



Which of the following statements does not explain the observation?

- A: Air is a poor conductor of heat.
B: The paper holder gained heat and expanded.
C: The paper holder contracted and become smaller.
D: The gases trapped in the cupcake mix gained heat and expanded.
- (1) D only
(2) A and C only
(3) B and D only
(4) A, B and C only

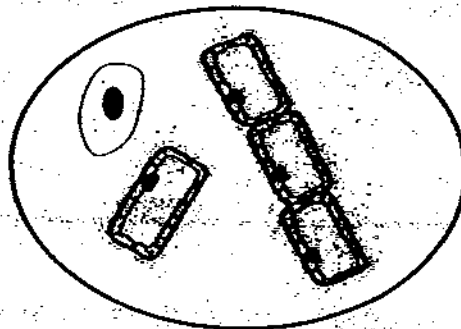
20. The set-up below shows a drop of red ink placed in the glass tube connecting the two flasks, A and B. Each flask is placed in a basin of water.



What should the temperature of the water in the basin of Flask A and B be in order to make the drop of red ink move towards Flask A?

	Temperature of water in Flask A's basin	Temperature of water in Flask B's basin
(1)	5°C	50°C
(2)	90°C	90°C
(3)	50°C	5°C
(4)	8°C	9°C

21. The picture below shows some cells that Rahim observed under the microscope. He then made the following conclusions.

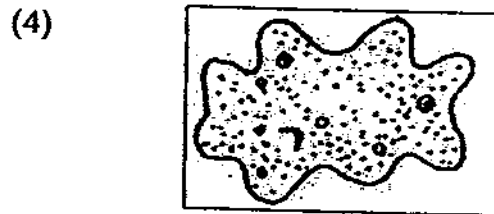
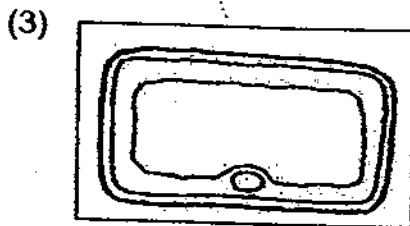
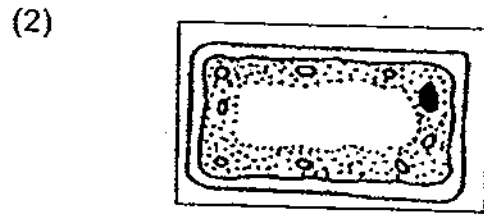
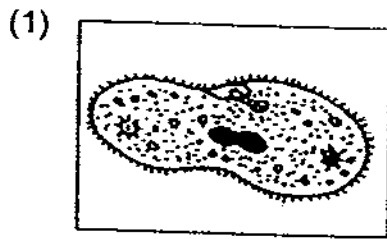


- A: Only plant cells are observed.
 B: There is only one cell that is able to make food.
 C: One of the cells does not have a regular shape.

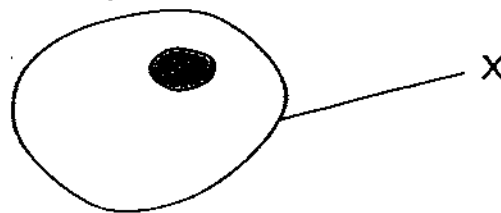
Which of the following conclusion(s) he made is/are wrong?

- (1) A only
 (2) A and B only
 (3) B and C only
 (4) All the above

22. Look at the diagrams of cells below.
Which one of them is taken from the skin of a red apple?



23. The diagram below shows a typical cell.



- What is the function of the part labelled 'X'?
- (1) It supports the cell.
 - (2) It helps the cell to grow.
 - (3) It gives the cell a regular shape.
 - (4) It controls all the movement of the substance entering or leaving the cell.
24. Which of the following organism are made up of only one cell?
- (1) Alga and chicken
 - (2) Flower and egg
 - (3) Paramecium and yeast
 - (4) Moss and bacteria
25. Which of the following statement(s) is/are true about cells?
- A: They are the basic building block of life.
B: They cannot be found in all non-living things.
C: Most cannot be seen by the naked eye.
- (1) A only
 - (2) A and C only
 - (3) B and C only
 - (4) A, B and C

----- End of Section A -----

Name : _____ ()

Class : Primary 5 ()

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 5

Continuous Assessment 1 – 2009

SCIENCE

BOOKLET B

4th March 2009

Total Time for Booklets A and B: 1 hour 30 minutes

10 questions
30 marks

Booklet A	50
Booklet B	30
Total	80

Do not open this booklet until you are told to do so.
Follow all instructions carefully.

Parent's Signature/Date

Section B : (30 marks)

Answer the following questions in the spaces provided.

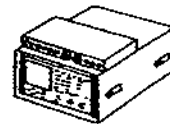
26. Fatimah carried out the following experiment to investigate the degree of transparency of four different materials, W, X, Y and Z to light.



Torchlight

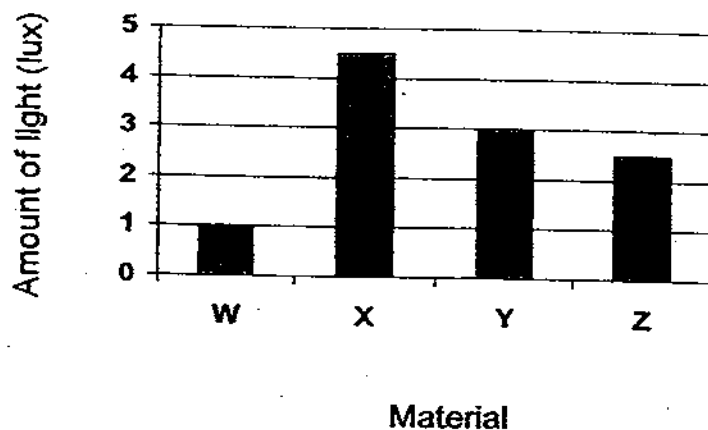


Material



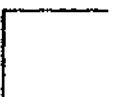
Data logger

The bar graph below shows the results of the degree of transparency of the four materials.

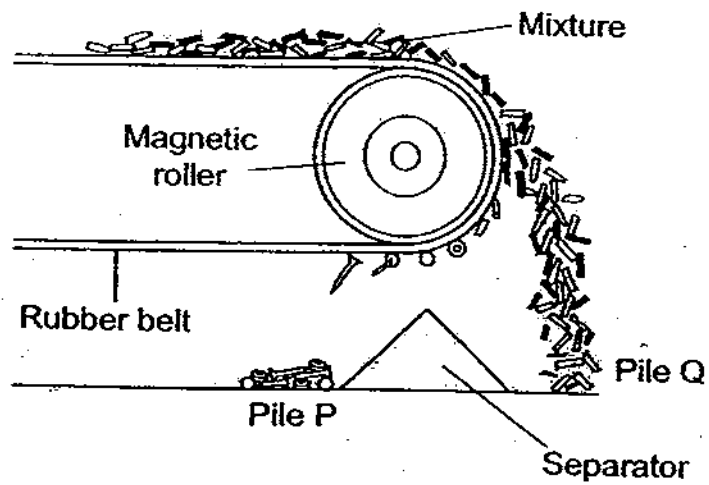


- a) Based on the bar graph above, which one of the materials will cast the darkest shadow when the torchlight is shown on it in a dark room? Explain your choice. [2]

- b) Which is the best material to use for the making of a school pinafore? Explain your choice. [2]



27. The diagram below illustrates a magnetic conveyor belt.



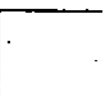
The mixture contains iron nails, paper clips, silver pins, stainless steel thumbtacks, staples, small plastic straws and aluminum bottle caps that can be separated into two piles, P and Q.

- a) List all the objects that will be found on Pile P.

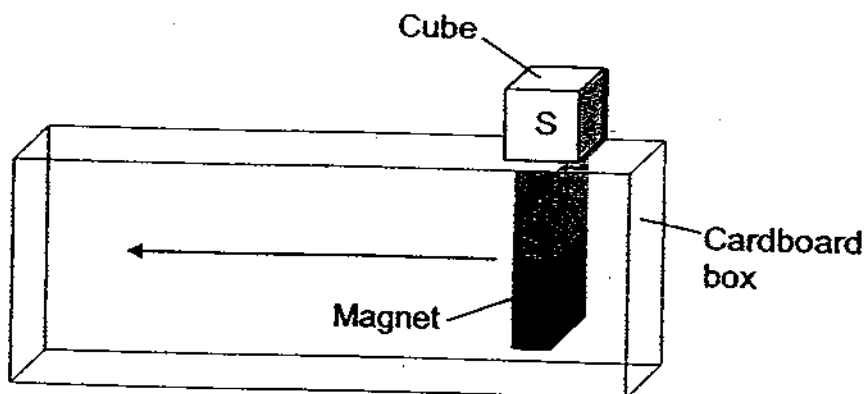
[1]

- b) Explain how the mixture is separated into the two piles.

[2]



28. Lalitha placed cube S on a cardboard box. She then held a magnet in the box under the cube as shown below.



As she moved the magnet to the left, cube S also moved to the left. She uses the same magnet and repeated the experiment with cubes T, U and V. The cubes were made up of different materials but they were of the same mass. The table below showed her results.

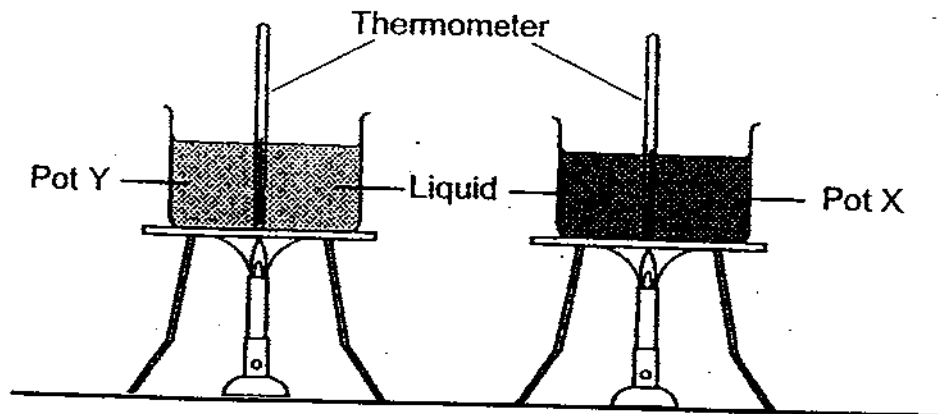
S	Yes
T	No
U	Yes but slowly
V	Yes

- a) Lalitha concluded that cube U is not made from a magnetic material. Is her conclusion correct? Explain your answer. [1]

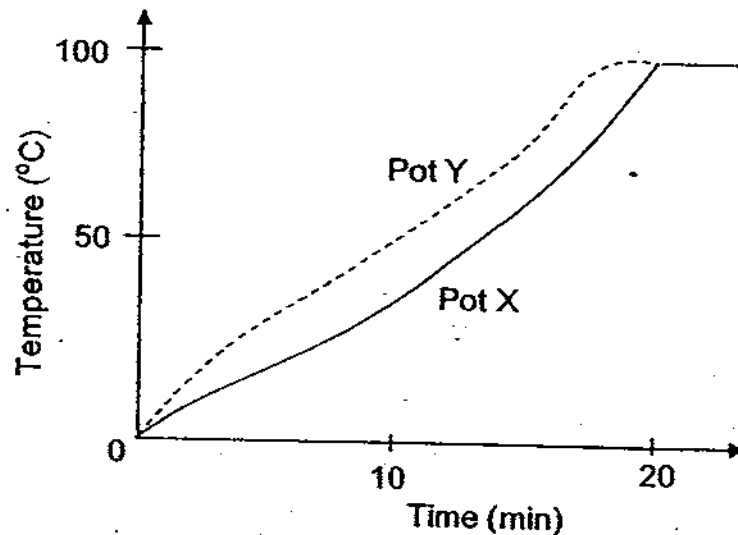
- b) Which other cube (s) is/are made of magnetic materials? [1]



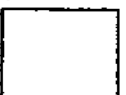
29. Ken had two identical shiny, silvery and smooth surface pots, X and Y. He painted Pot X black. He then fixed a thermometer to each of the pots and filled them up with the same kind of liquid.



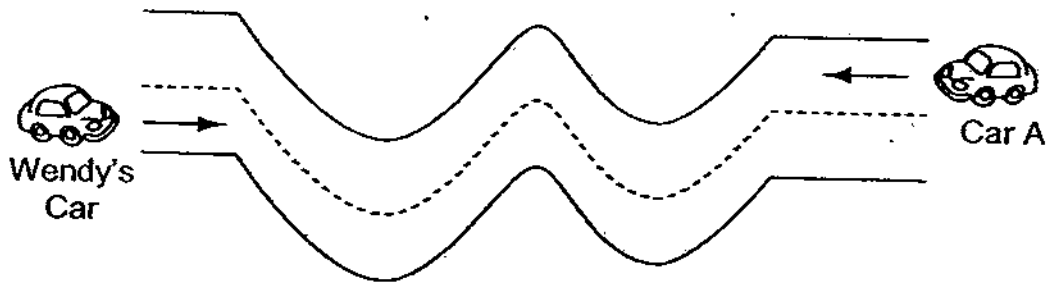
Ken placed the two pots under two identical burners and recorded the thermometer's reading every two minutes. The graph below shows the results Ken obtained.



- a) Based on the graph above, which pot has a higher temperature liquid after 10 minutes of heating? [1]
-
- b) Based on the experiment, which pot is able to cook soup in a shorter period of time. Explain your choice. [2]
-
- c) What could the liquid Ken used be? Explain your answer. [1]
-



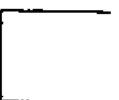
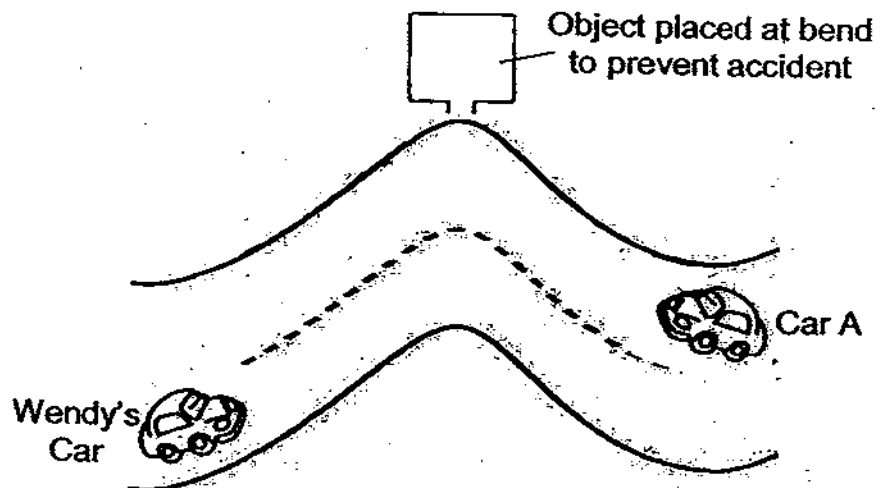
30. Wendy was driving along a winding road as shown below.



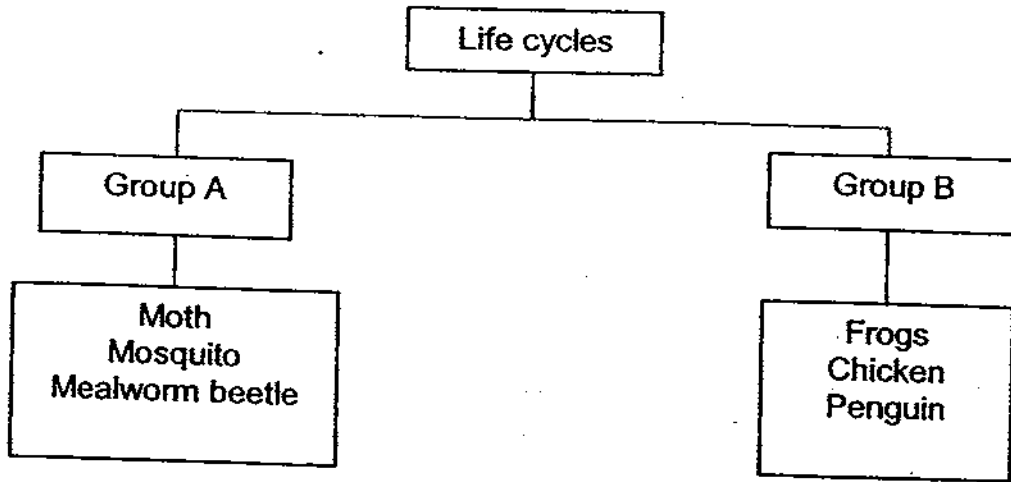
As she was driving along the bends, her car collided with Car A which was coming from the opposite direction. Luckily, no one was hurt.

a) What should be placed at the bends or the blind corners of this winding road to prevent such accident to happen again? Explain your answer. [2]

b) The diagram below shows a section of the winding road. On the diagram, draw arrows (\rightarrow) to indicate how the light rays from Wendy's car is being reflected on the object placed at a bend and onto the Car A driver. [1]



31. Study the classification chart below.



a) Which group, A or B, would you place 'Grasshopper' in? Explain your choice. [1]

b) Raja wanted to place 'Crocodile' into Group B. Is he correct? Explain your answer. [1]

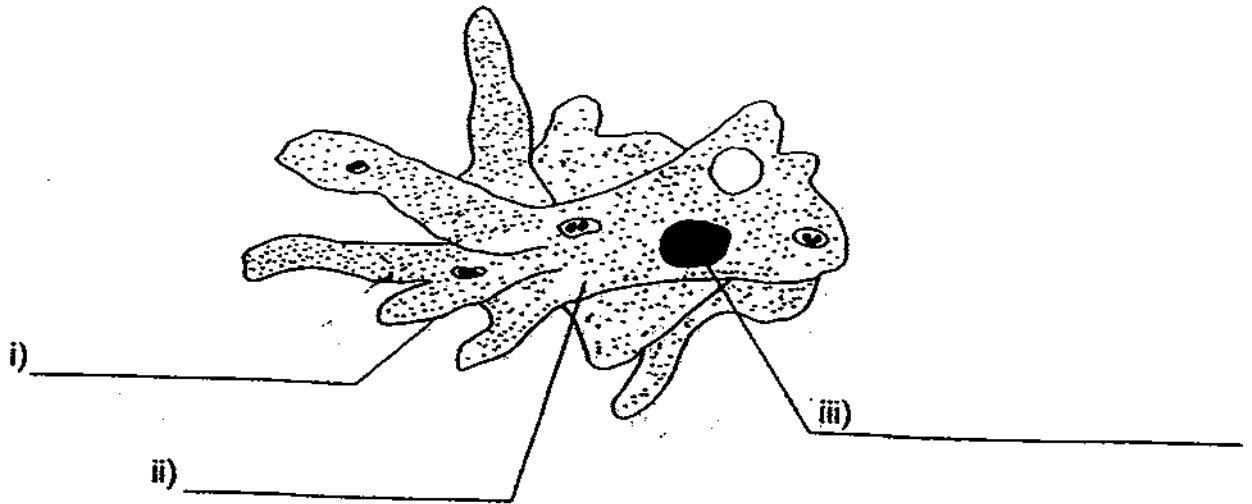
c) What are the appropriate headings for groups A and B? [1]

Group A: _____

Group B: _____

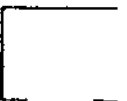


32. The diagram below shows a single-celled animal called amoeba.



a) Write down the names of the three parts of the cell labelled (i), (ii) and (iii) in the diagram above. [3]

b) How can you tell that amoeba is not a plant? [1]



33. Study the diagrams below.

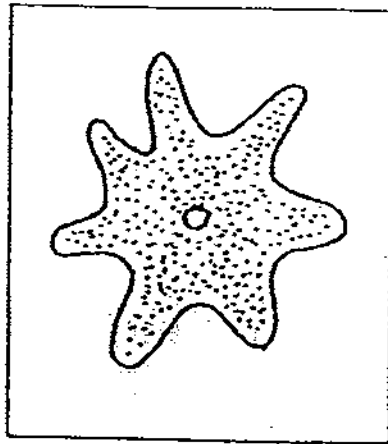


Figure A

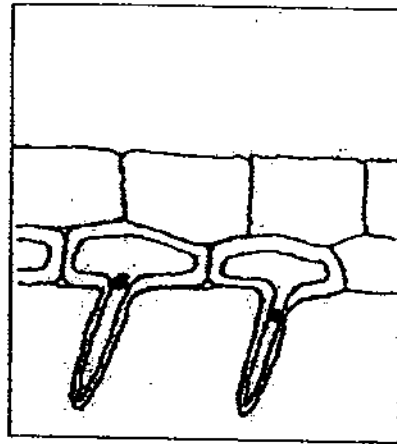
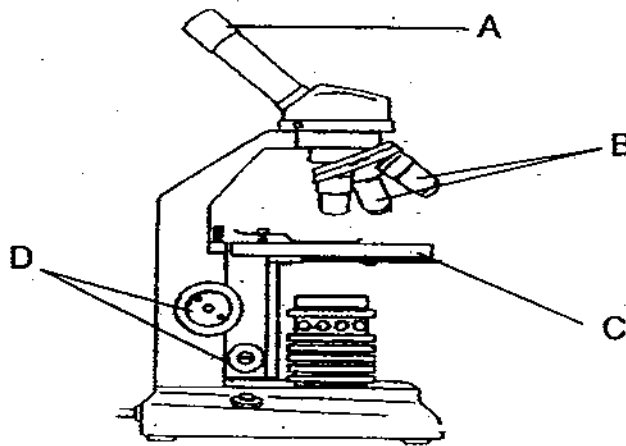


Figure B

Which figure shows a plant cell? Give a reason for your answer. [2]

34. The diagram below shows an instrument that is used to observe cells and the parts within the cell.



a) Name the parts labelled B and D. [2]

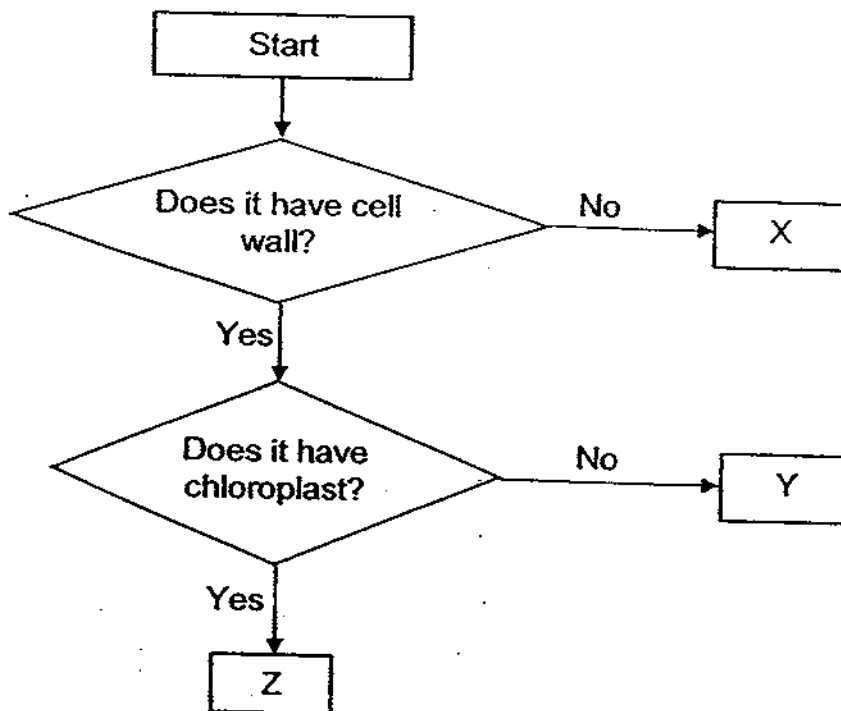
Part B: _____

Part D: _____

b) If the image is unclear, which part, B, C or D should you adjust? [1]



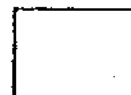
35. Study the flow chart below carefully.



Using the flow chart above, complete the table below to indicate what X, Y and Z could be. [2]

QUESTIONS	
	A cork cell
	A bamboo leaf cell
	A potato skin cell
	A human's blood cell

----- End of Paper -----





ANSWER SHEET

EXAM PAPER 2009

SCHOOL : CHIJ PRIMARY
SUBJECT : PRIMARY 5 SCIENCE

TERM : CA1



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
3	1	2	2	1	1	1	2	2	4	4	1	3	3	3	2	3

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
2	4	1	2	3	4	3	2

26)a) It has the least amount of light that passes through the material least transparent.

b) Material W. It allows the least amount of light to pass through hence it is not that translucent.

27)a) The objects are iron nail, paper clip and staples.

b) The magnetic roller will attract item made from magnetic material and will drop when it is no longer in contact with the roller.

28)a) No. It may be a magnetic object just that the magnetism is not strong enough.

b) The cube are S and V.

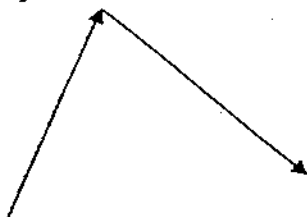
29)a) Liquid in pot Y is hotter than the liquid in pot X.

b) Pot Y. Pot Y is able to bring the liquid to a higher temperature.

c) Tap water. Water boils at 100°C and from the graph, the liquid temperature stops at 100°C hence, it could be water that Ken is using.

30)a) You should use mirrors. Because it can reflect each other then you can see the car from the opposite side.

b)



31)a)Group B. It has a three stage life cycle.

b)Yes. A crocodile has three stage life cycle, just like the others.

c)A: 4 stage life cycle.

B: 3 stage life cycle.

32)a)i)cell membrane ii)cytoplasm iii)nucleus

b)Because it does not have a sap.

33)B. Because a plant cell has a cell wall and Figure A do not have a cell wall.

34)a)B: objective lens.

D: focus knobs.

b)You should adjust D.

35)Y,Z,Y,X