



RED SWASTIKA SCHOOL

CA1

RED SWASTIKA SCHOOL

2005 CONTINUAL ASSESSMENT 1

SCIENCE

Name : _____ ()

Class : Primary 4/ ___

Date : 3 March 2005

BOOKLET A

30 Questions

60 Marks

Duration of Paper : 1 hour 30 minutes

Note:

1. Do not open this Booklet until you are told to do so.
2. Questions 1 - 26 are to be done on the OAS provided.
3. Read carefully the instructions given at the beginning of each part of the Booklet.
4. Do not waste time. If a question is difficult for you, go on to the next one.
5. Check your answers thoroughly and make sure you attempt every question.

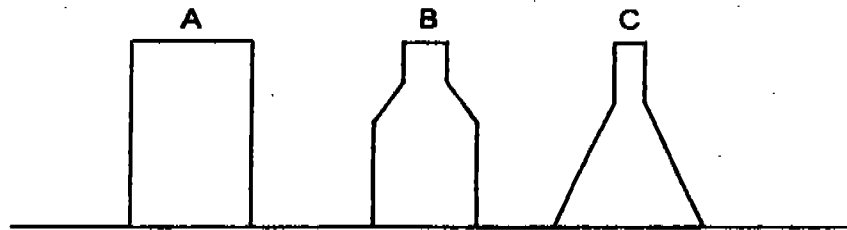
Section A: (30 Questions x 2 marks each)

Choose the correct answer and shade its number in the OAS provided.

1. Gina placed an empty fish tank on the desk. She observed that there is _____ inside the tank.

- 1) fish
- 2) air
- 3) water
- 4) no matter

2. Mr Ali pumped air into 3 containers as shown below.



Volume of container: 60 cm³ 45 cm³ 30 cm³

Mr Ali was able to pump 45 cm³ of air into Container(s) _____.

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

3. The table below shows the properties of solids, liquids and gases.

Properties	K	L	M	N
Has a definite shape	*			*
Has a definite volume	*		*	*
Can be seen	*	*	*	*
Can be compressed		*		
Can occupy space		*	*	*

Which one of the columns, K, L, M or N indicates the properties of an ice cube?

- 1) K
- 2) L
- 3) M
- 4) N

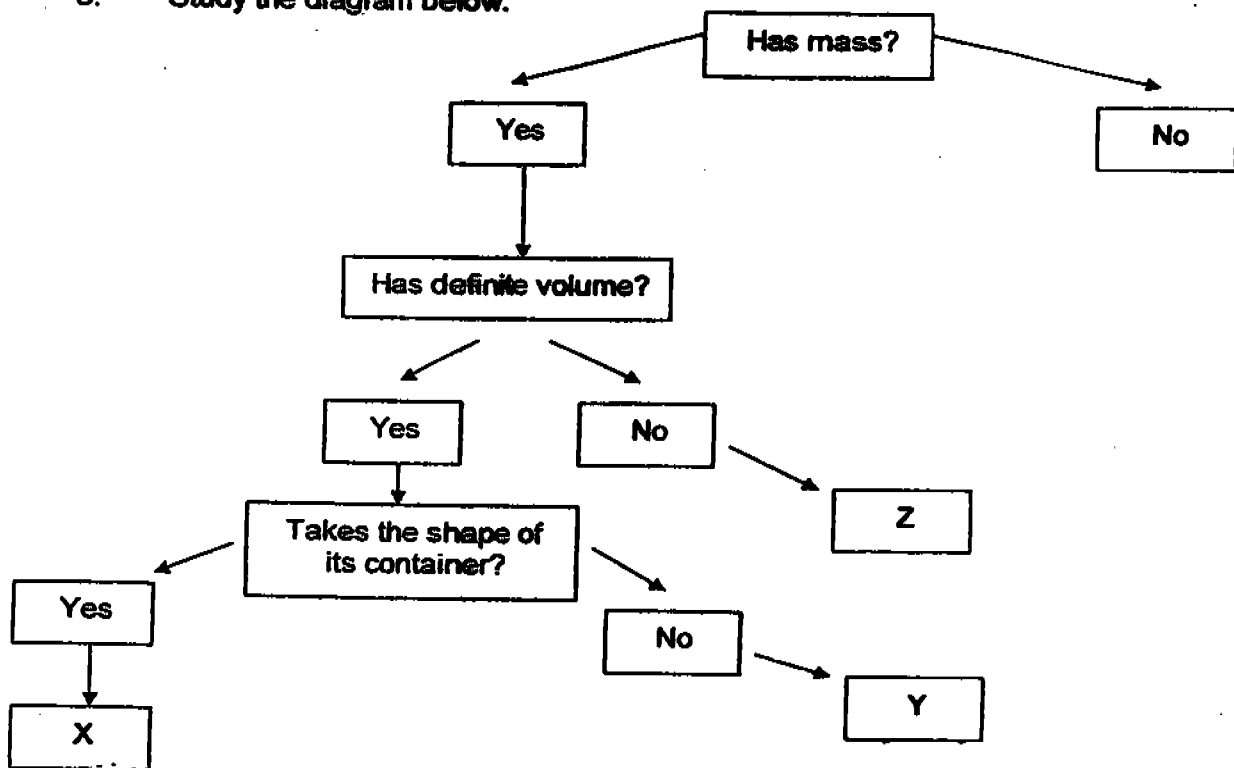
4. Four children, Freddy, Huling, Mohan and Kelly did an experiment with a piece of play dough. They made the following observations:

1)	Freddy	When it is rolled, it becomes round like a ball.
2)	Huling	When it is placed in an empty beaker, it does not change its shape.
3)	Mohan	When it is placed on one pan of a lever balance, the pan goes down.
4)	Kelly	When it is lowered into a cylinder of water, the water level rises.

Only _____ observation shows that the piece of play dough has mass.

- 1) Freddy's
- 2) Huling's
- 3) Mohan's
- 4) Kelly's

5. Study the diagram below.



X, Y and Z are three different states of matter. Which one of the following shows correctly what X, Y and Z are?

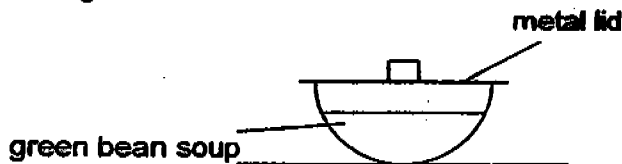
	X	Y	Z
1)	Rain	Hail	Wind
2)	Wind	Rain	Hail
3)	Hail	Wind	Rain
4)	Rain	Wind	Hail

6. A group of pupils conducted an experiment to observe how water turns into steam. They made the following observations:

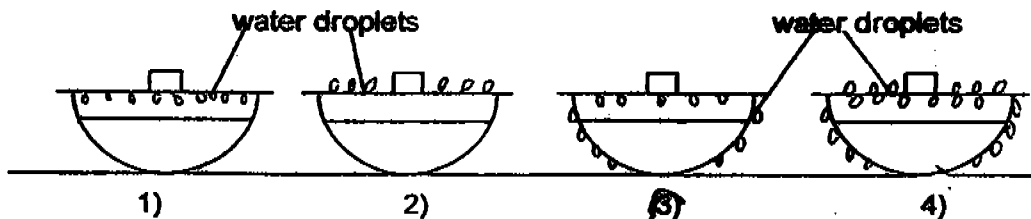
- A: The water started to boil.
- B: White clouds were formed above the mouth of the beaker
- C: Bubbles were produced as the water was heated.
- D: The bubbles became bigger as the water gained more heat.

Arrange the observations in the correct sequence.

- 1) CDAB
 - 2) BACD
 - 3) ABCD
 - 4) DCBA
7. Tim took a bowl of green bean soup from the refrigerator and left it on the kitchen table. He came back half an hour later to drink it but noticed that there was a change.



What was the change he observed?

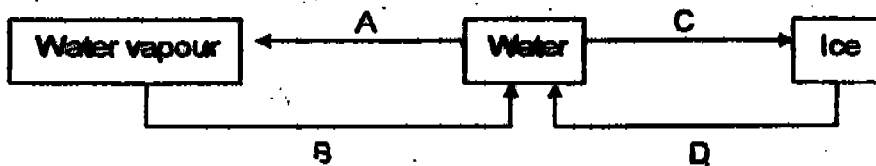


8. Penny and her classmates ~~was~~ conducting an experiment to find out if the exposed surface area affects the rate of evaporation of water.

The variable(s) that they should keep constant is/are _____.

- A: Exposed surface area of the containers
 - B: Material of containers.
 - C: Place where containers are put.
 - D: Quantity of water.
- 1) A only
 - 2) B and C only
 - 3) B, C and D only
 - 4) A, B, C and D

9. The diagram below shows how water changes form one state to another.

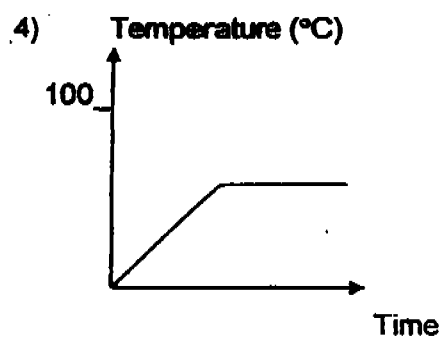
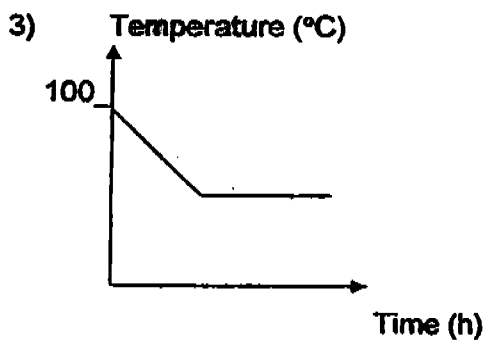
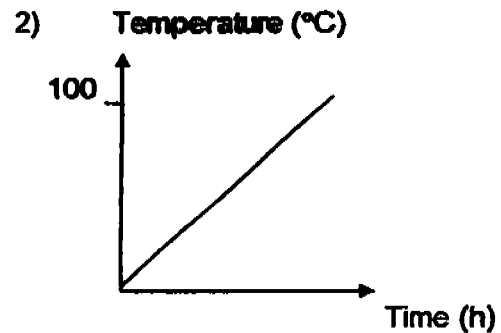
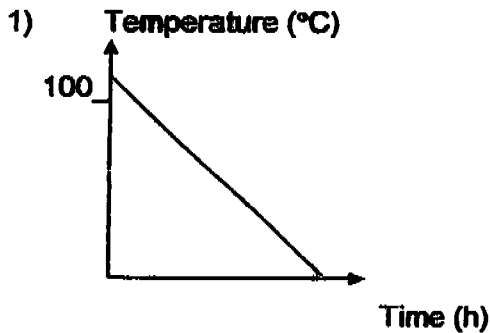


What are the processes that are represented by the arrows A, B, C and D?

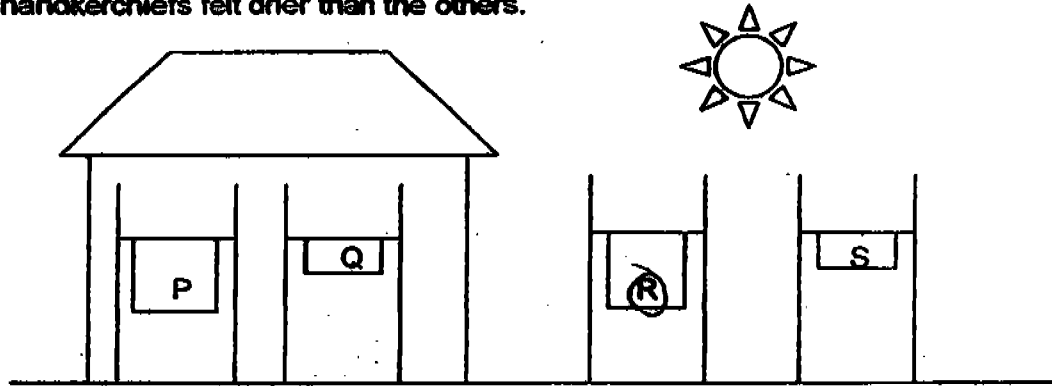
	A	B	C	D
1)	Evaporation	Freezing	Melting	Condensation
2)	Evaporation	Condensation	Freezing	Melting
3)	Condensation	Evaporation	Melting	Freezing
4)	Evaporation	Melting	Condensation	Freezing

10. Larry took out a tub of ice cream from the freezer and left it under the sun for 3 hours. He measured the temperature of the ice cream at regular intervals and plotted a graph.

Which of the following diagrams shows the graph he plotted?



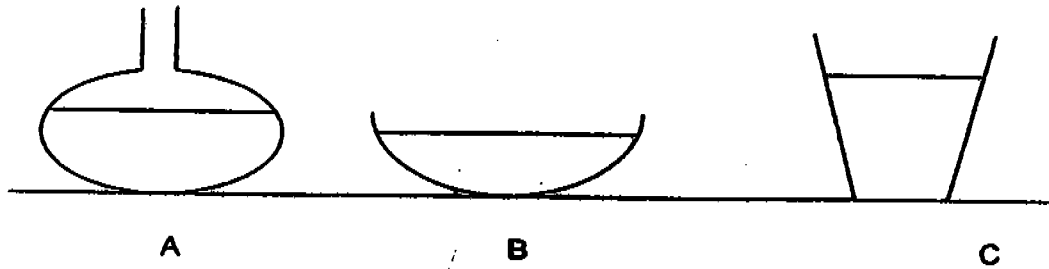
11. Mdm Aminah washed four similar handkerchiefs, P, Q, R and S and hung them out to dry as shown below. After an hour, she noticed that some of the handkerchiefs felt drier than the others.



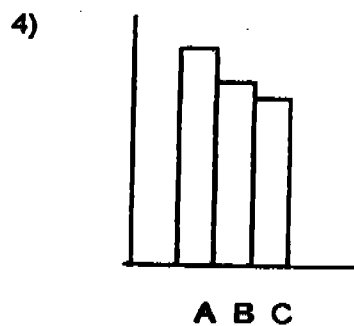
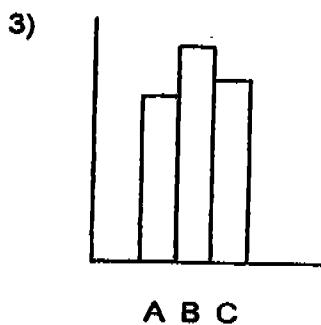
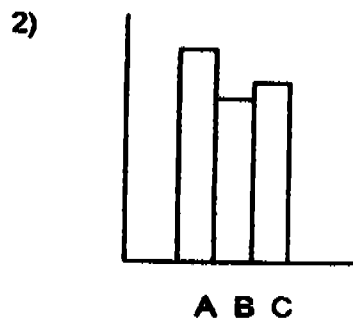
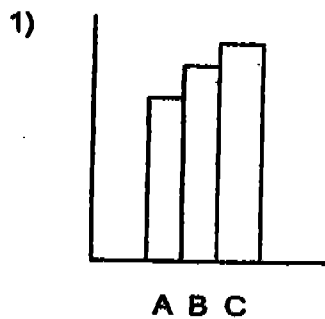
Arrange the towels from the wettest to the driest.

- 1) P Q R S
 - 2) S R Q P
 - 3) Q P S R
 - 4) R S P Q
12. A heavy downpour in the morning caused many puddles of water on the roads. The factor(s) that will cause the puddles of water to evaporate slower is/are _____.
- A: small exposed surface area
B: absence of wind
C: strong sunlight
- 1) A and B only
 - 2) B only
 - 3) A and C only
 - 4) A, B and C
13. Water vapour is different from water and ice in that _____.
- 1) water vapour has mass but water and ice do not.
 - 2) water vapour has a definite volume but water and ice do not.
 - 3) water vapour can be compressed but water and ice cannot.
 - 4) water vapour can be felt but water and ice cannot.

14. Noel poured equal amounts of water into three containers, A, B and C. He left them uncovered in an open field on a sunny afternoon. The next day, he noted the volume of the water in the containers.



Which one of the following graphs shows the volume of water left in the three containers?

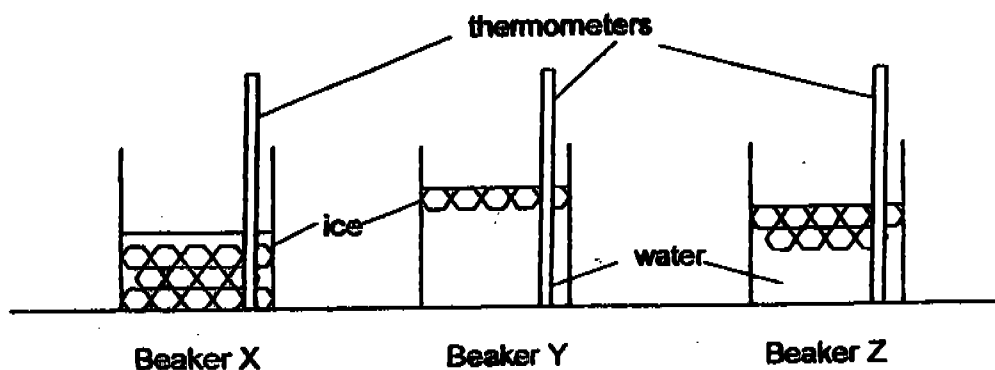


15. Early one morning, Jie Kang found that the surfaces of the leaves on the plants in his garden were wet even though it did not rain the night before. He found out that this water called dew is caused by the _____.

A: drying of his wet clothes hung in the garden.
 B: evaporation of water from the leaf surfaces
 C: condensation of water vapour in the air.

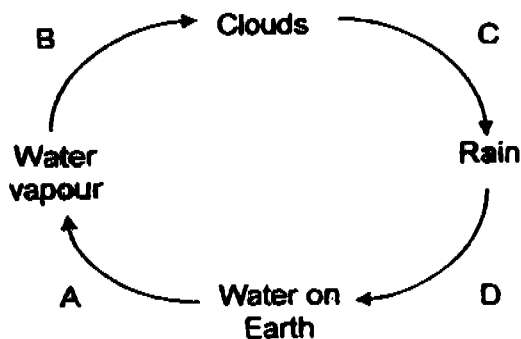
- 1) A and B only
 2) B and C only
 3) C only
 4) A, B and C

16. The diagram below shows ³ identical beakers containing the same amount of water. A thermometer is placed into each beaker.



After fifteen minutes, the thermometer(s) in Beaker(s) _____ registered a temperature of 0°C.

- 1) X only
 - 2) X and Z only
 - 3) Y and Z only
 - 4) X, Y and Z
17. The following is a diagram showing the water cycle. A, B, C and D represent processes that take place during the water cycle.



Which processes involve a heat gain or a heat loss?

	Heat Gain	Heat Loss
1)	A	B
2)	B	C
3)	C	D
4)	D	A

18. Study the following statements about the water cycle carefully.

- A: The water cycle follows a pattern.
- B: The water cycle occurs due to the evaporation and condensation of water.
- C: Evaporation takes place only when the temperature is warm enough.

Which statement(s) is/are true about the water cycle?

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

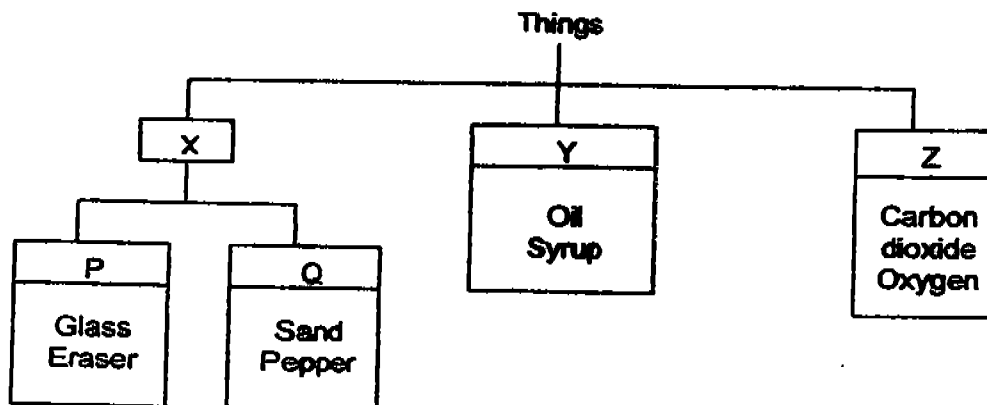
19. Danny, Sufen, Omar and Xiaorong took down some notes on the topic of Man during a Science lesson.

Man is able to:	Respond	Grow	Reproduce	Photosynthesis
Danny		✓		✓
Sufen	✓		✓	✓
Omar	✓	✓	✓	✓
Xiaorong	✓	✓	✓	

The pupil who had made an accurate conclusion is _____.

- 1) Danny
- 2) Sufen
- 3) Omar
- 4) Xiaorong

20. The table below shows the classification of some things:



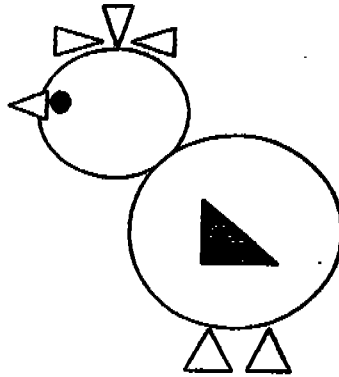
Where would you place 'salt' in the classification table above?

- 1) P
- 2) Q
- 3) Y
- 4) Z

21. Seahorses can be classified in the animal kingdom under the group called _____

- 1) Fish
- 2) mammals
- 3) reptiles
- 4) amphibians

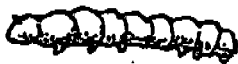
22. Study the diagram below.



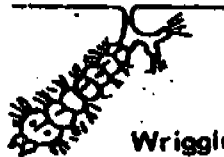
The diagram is made up of _____

- 1) ovals and diamonds
- 2) rectangles and stars
- 3) circles and triangles
- 4) squares and hearts

23. The young of the butterfly is called a caterpillar and the young of the mosquito is called the wriggler.



Caterpillar



Wiggler

How do these two baby animals breathe?

	Caterpillar	Wiggler
1)	Lungs	Breathing holes
2)	Skin	Gills
3)	Breathing holes	Breathing tube
4)	Breathing tube	Skin

24. The animals below have been classified according to their mode of reproduction. Which group has an animal that does not belong to it?

- 1) lion, orang-utan, spiny anteater, camel
- 2) kingfisher, snake, tortoise, swan
- 3) whale, sea lion, dolphin, guppy
- 4) ostrich, spider, lobster, crocodile

25. Different animals have different body coverings to protect themselves. Which of the animals below have the same body covering?

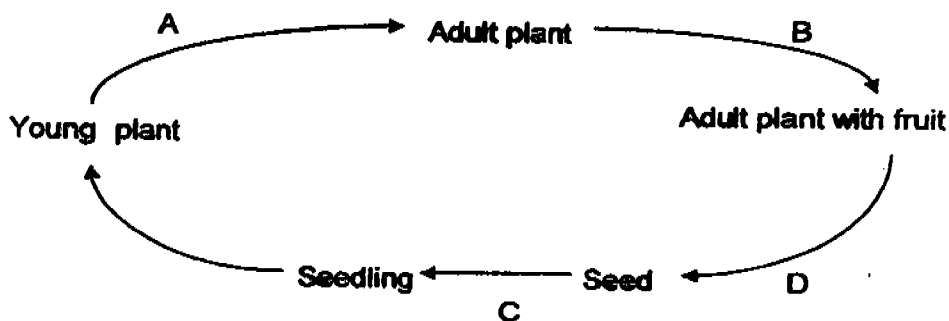
- A) bat
- B) penguin
- C) sloth
- D) seal

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

26. Life cycles of plants are important because they ensure that _____.

- 1) the fruits will not be exhausted
- 2) there is a continuous supply of useful materials
- 3) new plants will grow taller and healthier
- 4) new plants of the same kind are produced

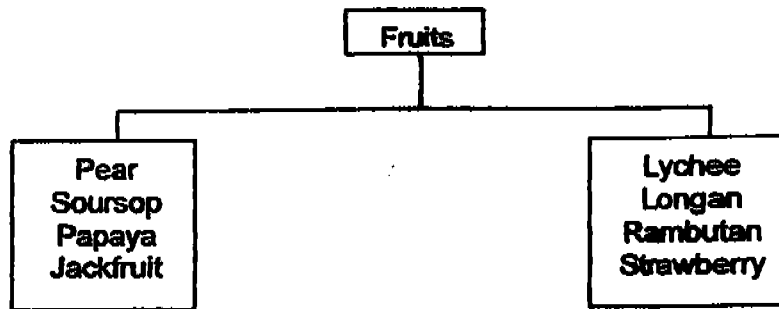
27. The diagram below shows the stages in the life cycle of a flowering plant.



At which stage, A, B, C or D will pollination and fertilisation take place?

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

28. Study the classification table below.



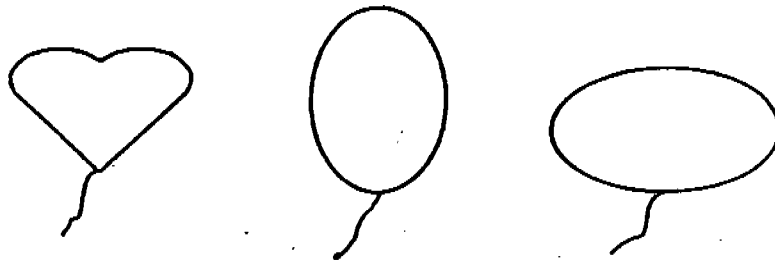
How are the fruits grouped?

- 1) Flowers grow singly or in clusters
 - 2) Fleshy or dry
 - 3) Smooth skin or rough skin
 - 4) One seed or many seeds
29. Meiyen left a slice of cake in a plastic bag on the kitchen table. A few days later, she found that the cake had turned mouldy.
- Which of the following statements can be the possible reason(s) to explain why?
- A: The moisture on the cake caused it to be mouldy.
B: The cream in the cake caused it to be mouldy.
C: The cake became mouldy because it was not baked.
D: The cake became mouldy because it was not refrigerated.
- 1) B only
 - 2) A and B only
 - 3) A, B and D only
 - 4) A, C and D only
30. Mrs Fong is going to buy a mug for her two-year-old son. Which type of mug is most suitable for Mrs Fong to buy for him?
- 1) Clay mug
 - 2) Porcelain mug
 - 3) Paper mug
 - 4) Plastic mug

Section B: (16 Questions = 40 marks)

Answer the following questions in the space provided.

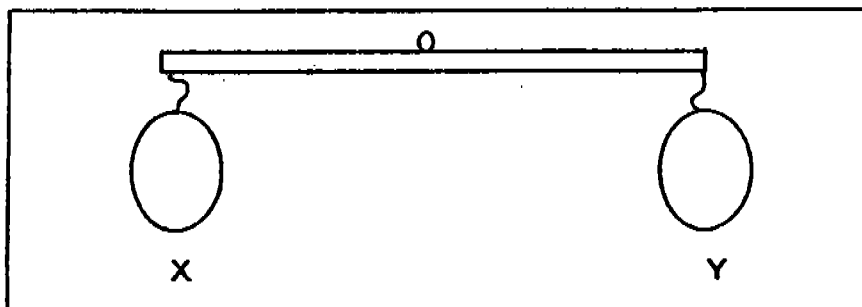
31a. Simon was experimenting with balloons and air. He pumped the same amount of air into three balloons shown below.



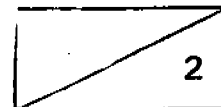
What can he conclude from the experiment?

(1m)

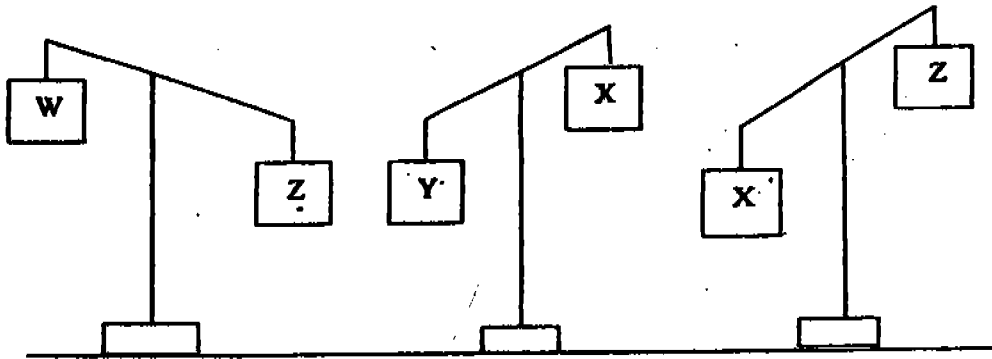
b. Simon conducted another experiment using the setup below. Using a pin, he pricked Balloon Y.



What do you think Simon would observe? Draw and label your answer. (1m)



32.



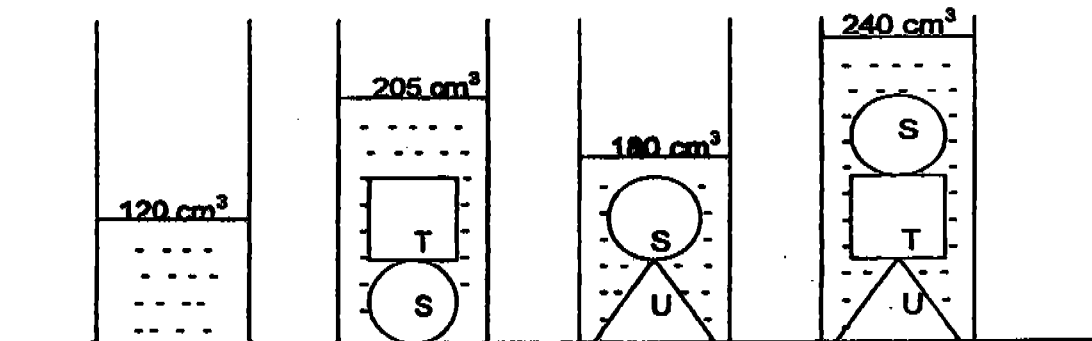
Henry hung four boxes, W, X, Y and Z on a lever balance and compared their masses. He made the following observations.

a. Box _____ has the smallest mass.

b. Box _____ has the biggest mass.

(2m)

33. Study the set-up below carefully.

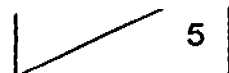


Paul poured 120 cm^3 of water into a measuring cylinder. He put 3 different solids, S, T and U, into the measuring cylinder and noted the water levels. He calculated the volumes of the solids and filled in the table below.

Complete the table below.

(3m)

Solid	Volume (cm^3)
S	
T	
U	



34. Seng Huat was pouring an unknown liquid, X, into a beaker when he accidentally spilled some onto his hand. The liquid dried up quickly and his hand felt cooler than before.

a. Why did Seng Huat's hand feel cooler? (2m)

b. What could Liquid X be? (1m)

35. Amelia took out two similar ice-cubes from the freezer and put them on two similar plates. Next, she crushed one of the ice-cubes. Then, using a stopwatch, she measured the time for each of the ice to melt completely into water.



a. Which will melt faster, the ice cube or the crushed ice? (1m)

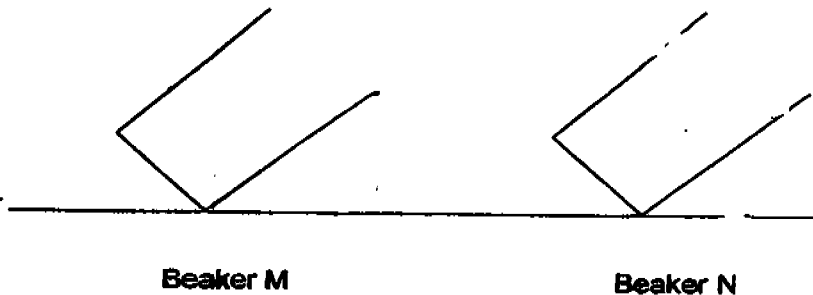
b. Explain your answer in (a). (2m)



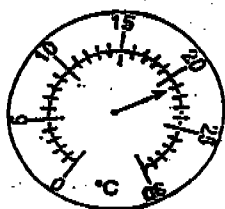
36. Lijun filled two beakers, M and N, with water. Next, she added some food colouring to the water. Then she placed Beaker M in the compartment of the refrigerator where she kept vegetables and Beaker N in the compartment of the refrigerator where she kept ice-cubes. After two hours, she took the beakers out of the refrigerator and tilted them on the table.

In the space provided below, draw what Lijun would observe.

(2m)



37. Orson used Thermometer P to measure the temperature of a container of liquid.



Thermometer P

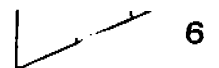


Thermometer Q

- a. The temperature of the liquid is _____ (1m)
- b. Jake used Thermometer Q and measured the same liquid. On Thermometer Q, shade the temperature that Jake would read. (1m)
38. Steve covered a cup of hot chocolate with a lid. After a while, he observed that water droplets were formed on the inner surface of the lid.

Explain how the water droplets were formed

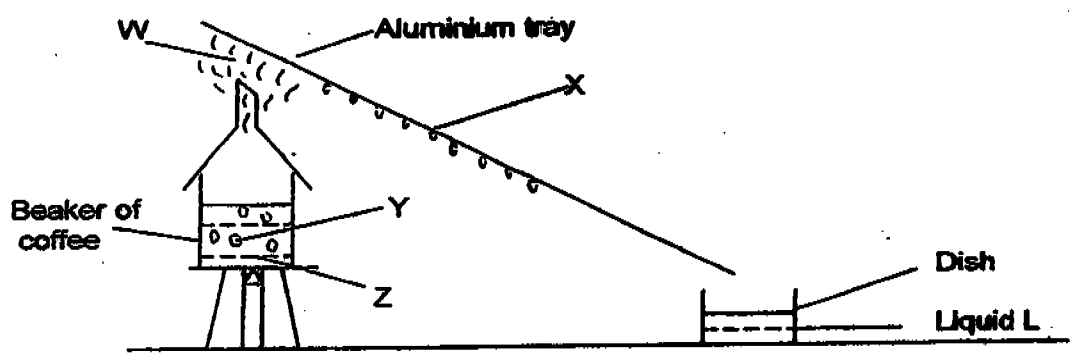
on (2m)



39a. Heat is needed to ensure that the water cycle takes place all the time. Where does this source of heat come from? (1m)

b. Why is the water cycle important to us? (2m)

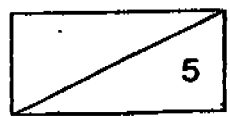
40. Some pupil from the Science Club conducted an experiment using the setup shown below.



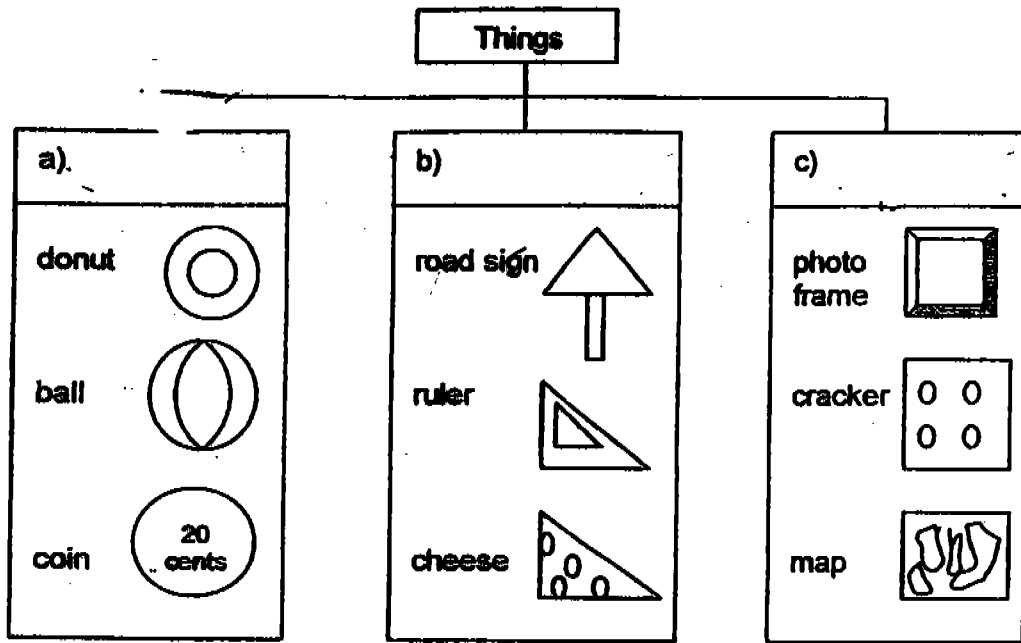
After heating the beaker of coffee for half an hour, a liquid, L was collected in the dish at the end of the experiment.

a. What could Liquid L be? (1m)

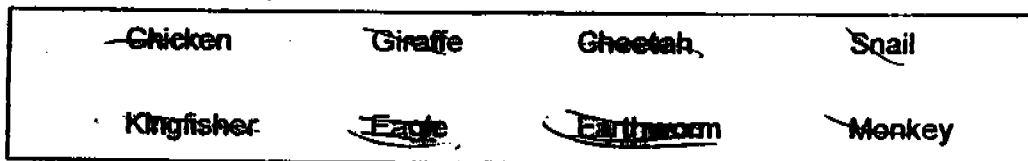
b. Which letter, W, X, Y or Z represents the clouds in the sky? (1m)



41. Study the classification table below. Fill in the headings of the classification table in the space provided. (3m)

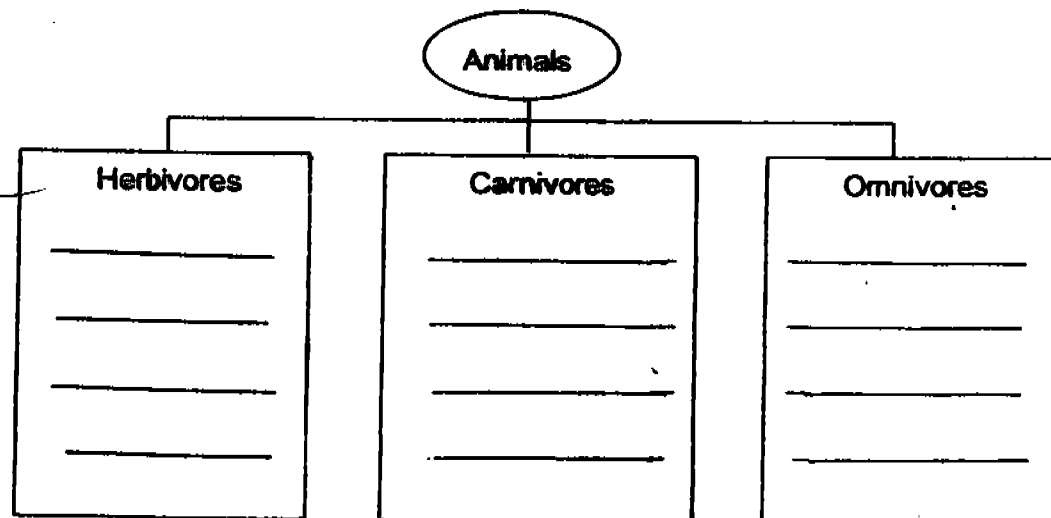


42. Study the animals listed below carefully.



Classify them in the table below.

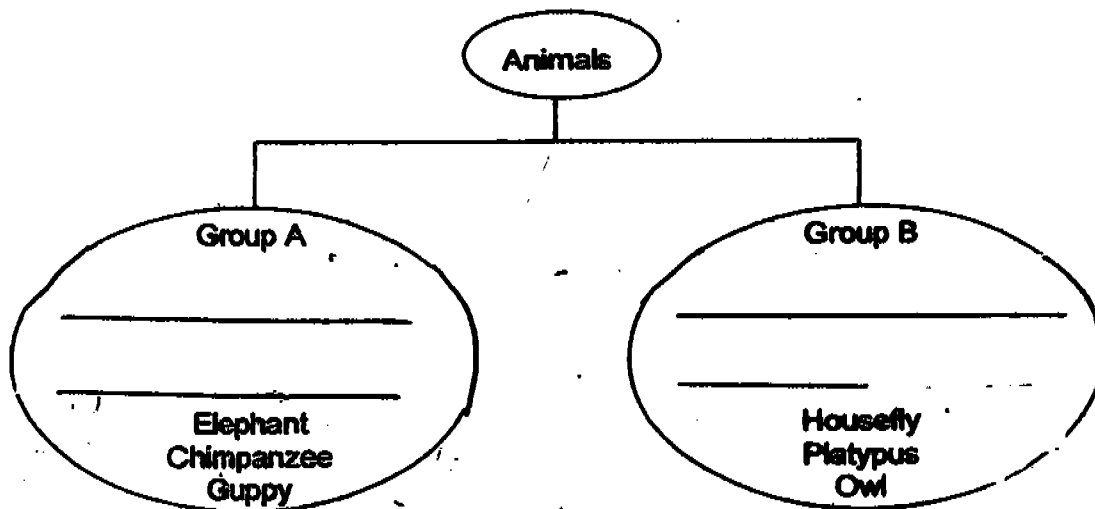
(3m)



43. Look at the diagram below. Jane grouped the following animals into two groups, A and B but she forgot to fill in the headings.

Fill in Jane's headings in the space provided in the diagram.

(2m)



44. Study the two plants, A and B below.



Plant A



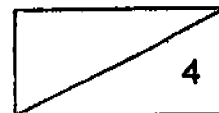
Plant B

Based on the picture above, state one similarity and one difference between them.

(2m)

Similarity: _____

Difference: _____



40) a) Pure water

b) W represents the clouds in the sky.

41) a) circles b) triangles c) squares

42) Snail Cheetah Chicken

Giraffe Eagle Monkey

Earthworm Kingfisher /

43) Animals that give
birth to their young

Animals that give
birth by laying eggs.

44) They both have leaves.

Plant B is a flowering plant while Plant A is a non-
flowering plant.

45) a) fungi

b) chlorophyll

c) mushroom

46) Rubber

Metal

Silk