

**Primary Four
Science
Continual Assessment One**

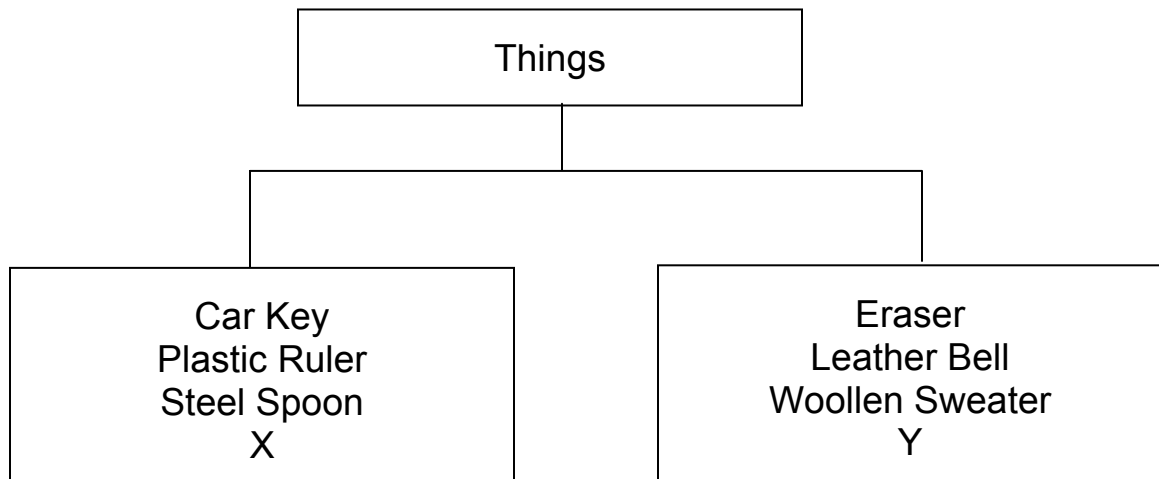
Section A (30 x 2 marks = 60 marks)

For each question 1 to 30, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Write your answer in the box provided.

1. Which one of the following statements is incorrect?

- (1) Papers are made from things that were once alive.
- (2) Some living things are made from non-living things.
- (3) Wooden furniture is made from things that were once alive.
- (4) Some non-living things are made from things that were once alive.

2. The following things are classified according to whether they are made of materials that come from living or non-living things.



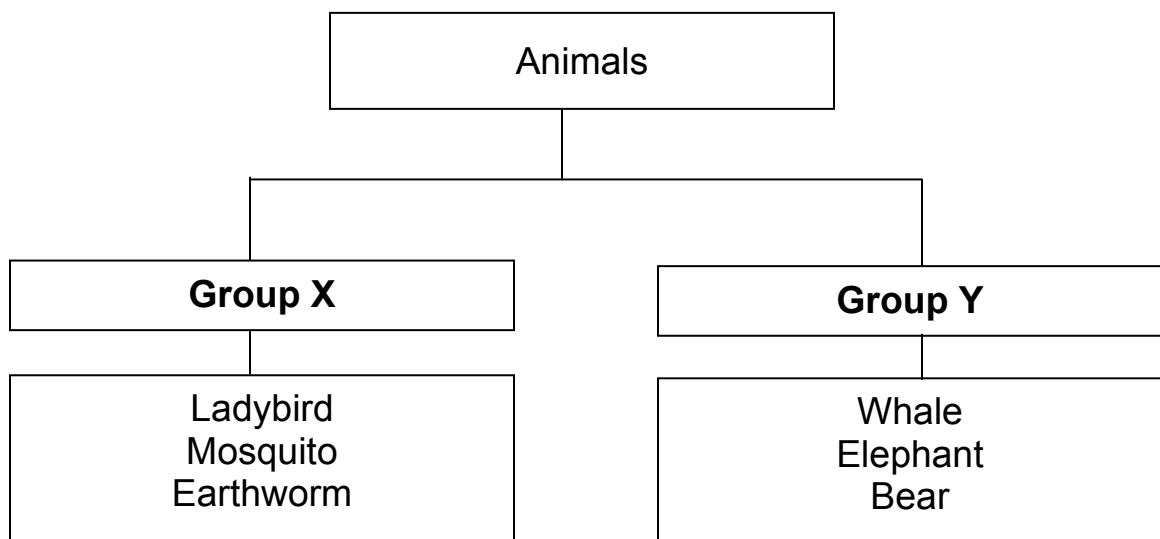
What can X and Y be?

	X	Y
(1)	Cellophane Bag	Wooden Chair
(2)	Feather Duster	Tyre
(3)	Rubber Band	Cotton String
(4)	Stapler	Thumbtack

3. Four pupils have been given an example of an animal for each of the following groups. Who has made mistakes in his/her examples?

	Pupil	Carnivore	Herbivore	Omnivore
(1)	Jenny	Dragonfly	Rabbit	Duck
(2)	Tom	Tiger	Squirrel	Pig
(3)	Alex	Horse	Cow	Mouse
(4)	Wendy	Crocodile	Giraffe	mynah

4. Study the classification diagram below.



Which one of the following are suitable headings for Groups X and Y?

	X	Y
(1)	Plant Eaters	Animal Eaters
(2)	Small Animals	Large Animals
(3)	Animals that lay eggs	Animals that give birth to their young alive
(4)	Animals that live on land only	Animals that live in water only

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

5. The table below shows the characteristics of four animals W, X, Y and Z.

Animal	Number of legs				Feelers	Wings
	2	4	6	8		
W	✓				×	✓
X		✓			×	×
Y			✓		✓	✓
Z				✓	×	×

Which animal is most likely to be an insect?

- (1) W
(3) Y

- (2) X
(4) Z

6. A living thing has the following characteristics:

- A. A segmented body
- B. Three pairs of legs
- C. One pair of feelers

The living thing described above is most likely to be a _____.

- (1) spider
(3) cockroach

- (2) frog
(4) centipede

7. Flowers need to be _____ before fruits and seeds are produced.

- A. cultivated
- B. pollinated
- C. germinated
- D. fertilized

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

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

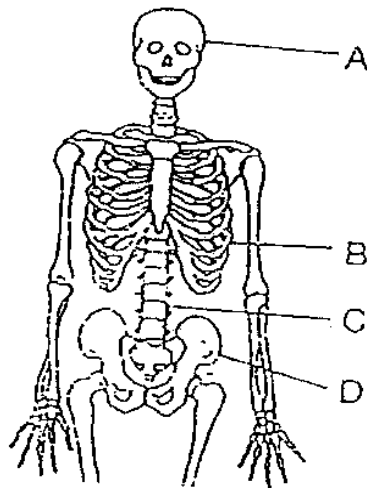
8. Which of the following senses did Hua Chong use when she sold that the bowl of soup is warm and spicy?

- A. Sense of touch
- B. Sense of taste
- C. Sense of smell
- D. Sense of hearing

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

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

9. Which one of the labeled parts of a skeleton as shown below protects our heart and lungs?



- (1) A
- (3) C

- (2) B
- (4) D

10. Which one of the following is not true about a solid?

- (1) A solid must be a matter
- (2) A solid has definite volume
- (3) A solid can never change its shape
- (4) A solid can have different types of texture

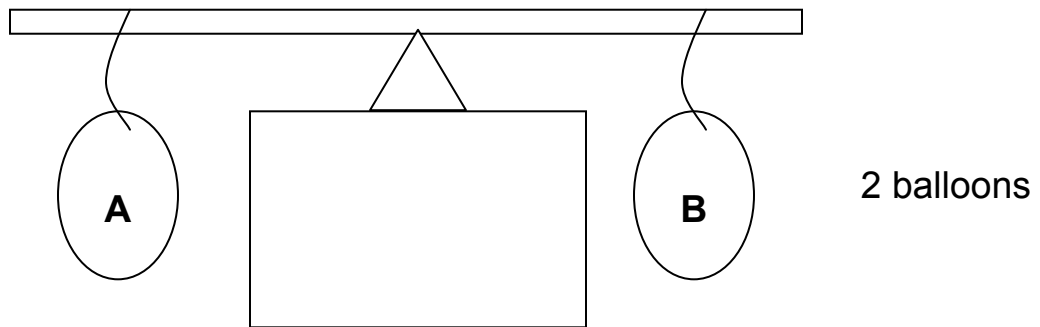
11. The table below shows some properties of green beans, honey and carbon dioxide. Which of them are correct for all the three kinds of matter?

Kinds of Matter				
	Properties	Green beans	Honey	Carbon dioxide
A	Has mass	✓	✗	✓
B	Occupies space	✓	✓	✗
C	Has a definite shape	✓	✗	✗
D	Has a definite volume	✓	✓	✗
E	Can be compressed	✗	✗	✓

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

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

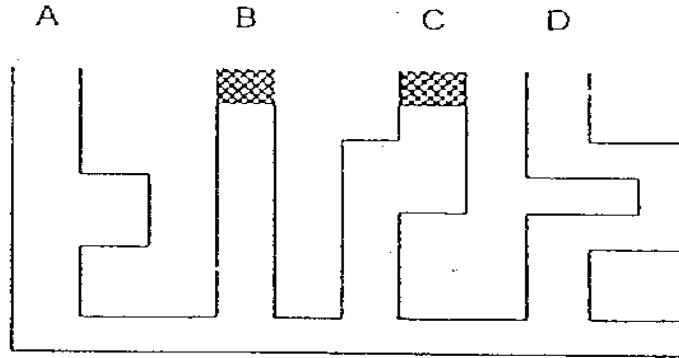
12. Two balloons of the same size are balanced on two ends of a bar as shown below.



Balloon B is then pierced and the air is allowed to escape completely. The bar is observed to swing downwards on the side with Balloon A. What does this experiment show?

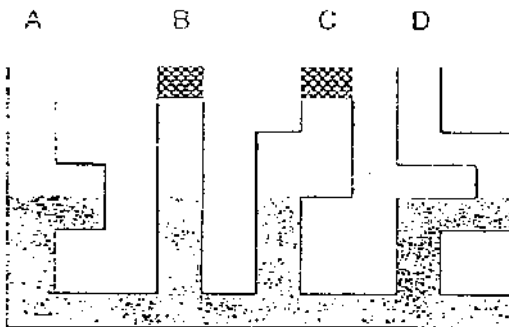
- (1) Air has mass
(2) Air has escaped
(3) Air occupies space
(4) Balloon A is lighter than Balloon B when they are both deflated

13. Study the diagram as shown below carefully.

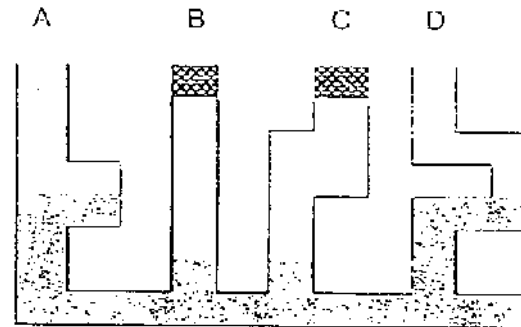


The diagram shows a communicating vessel. The openings B and C are covered with stoppers. 500 ml of water is poured simultaneously into the opening at A and D. Which of the following diagram shows the **correct water level** ?

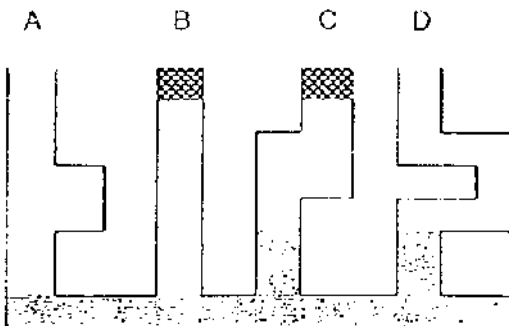
(1)



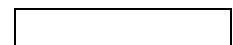
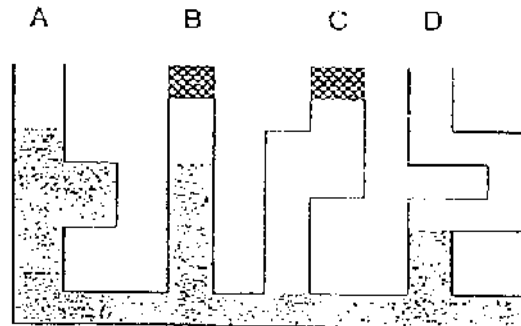
(2)



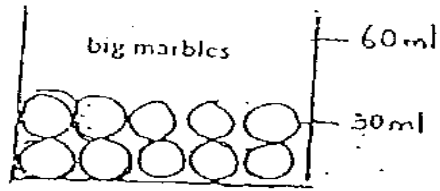
(3)



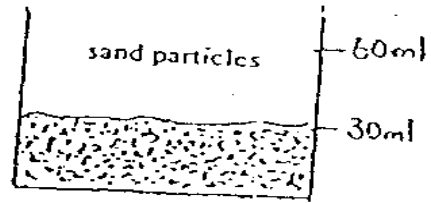
(4)



14. The diagram shows two beakers X and Y. Beaker X contains big marbles and Beaker Y contains sand particles.



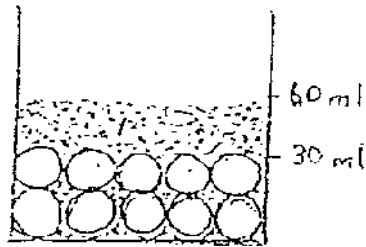
Beaker X



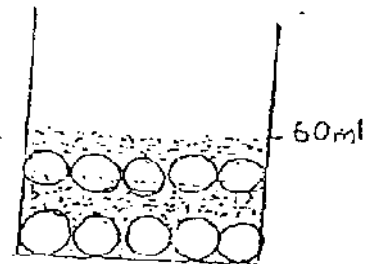
Beaker Y

The sand particles in Beaker Y are then poured into beaker X. Which one of the following results is most likely to be correct?

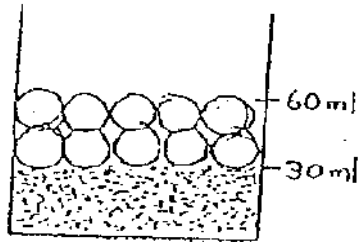
(1)



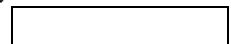
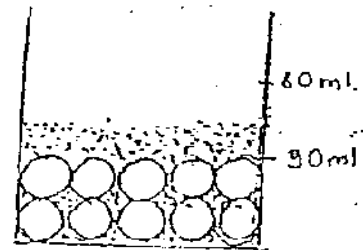
(2)



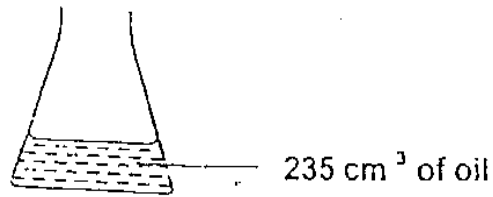
(3)



(4)

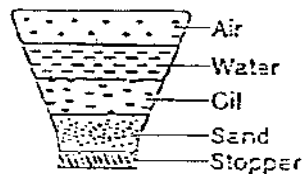


15. Susanna poured 235 cm^3 of oil into a flask.

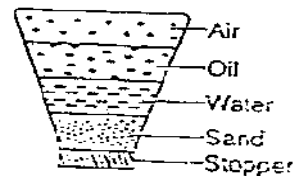


She added a handful of sand and some water before sealing the flask with a stopper. Then she inverted the flask. Which one of the following diagrams shows the **correct position** of the contents of the flask after a few hours?

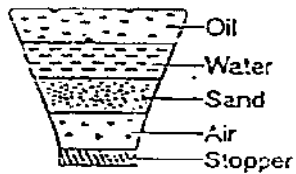
(1)



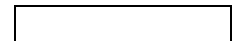
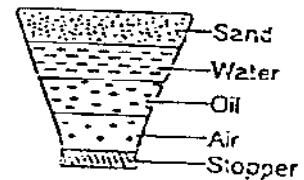
(2)



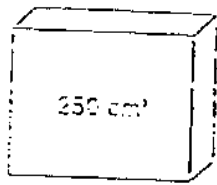
(3)



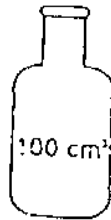
(4)



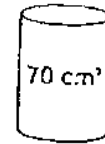
16. Study the three containers carefully.
 If all the air in a 200 cm³ bottle is poured into each container A, B and C respectively, which of the containers will be able to hold all the air?



A



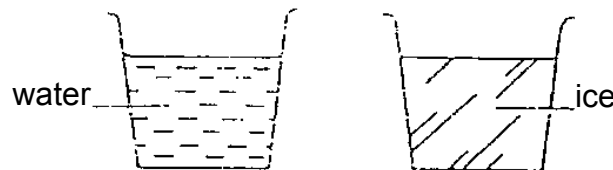
B



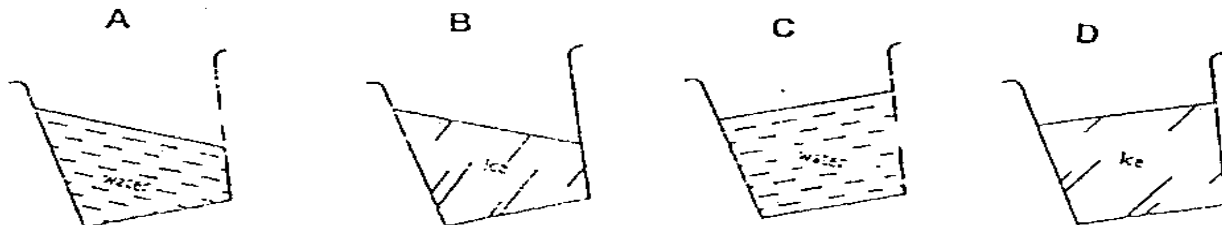
C

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

17. The diagram below shows a glass of water and a glass of ice that have just been taken out of a freezer.



Which of the diagram show what is observed when the two glasses are tilted at an angle as shown below?



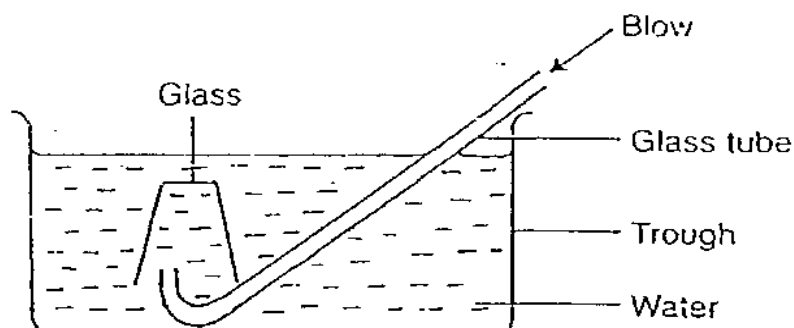
- (1) A and B only (2) A and D only
 (3) B and C only (4) C and D only

18. Four types of matter are described in the table below.
Study the table carefully and decide which one of the following is correctly described.

Type of Matter	Definite Shape	Definite Volume	Occupies Space	Can be compressed
Carbon dioxide	No	No	Yes	No
Cotton wool	No	Yes	No	Yes
Cooking oil	No	Yes	Yes	No
Ping pong ball	No	Yes	Yes	Yes

- (1) Carbon dioxide
(2) Cotton wool
(3) Cooking oil
(4) Ping pong ball

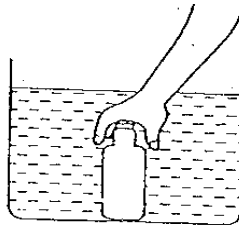
19. Look at the diagram as shown below carefully.



What can be observed when air is blown into the glass tube?

- (A) A water fountain will form
(B) Water will rush up the glass tube
(C) Air bubbles will be seen in the glass
(D) Water will flow out from the glass into the trough
- (1) A and B only
(2) A and C only
(3) B and D only
(4) C and D only

20. Marlene pushed an empty plastic bottle into a basin of waters as shown below. Then, she unscrews and removes the bottle cap. Which of the following will take place?



- (A) No water enters the plastic bottle
- (B) Water rushes into the plastic bottle
- (C) Air in the plastic bottle becomes compressed
- (D) Bubbles of air escape to the surface of the water

- (1) A and C only
- (3) B and C only

- (2) A and D only
- (4) B and D only

21. Which one of the following objects can change from a solid to a liquid when we heat it?

- (1) Ice
- (2) Wooden ruler
- (3) Oxygen gas
- (4) Cooking oil

22. Jason fills a glass completely with water. Then he puts three marbles slowly into the glass of water. He notices that some of the water in the glass spills out. Which of the following explains why this happens?

- (1) The marbles repel water
- (2) The marbles take up space in the water
- (3) The marbles and water cannot be mixed together
- (4) The marbles have a definite shape while water does not

23. Study the table below carefully.

Volume of water	45 ml
Volume of water + stone	78 ml
Volume of cylinder	100 ml

What is the volume of the stone?

- (1) 22 ml (2) 33 ml
(3) 45 ml (4) 55 ml

24. Study the table below carefully.

	Definite Shape	Definite Volume	Once Alive
Object X	No	Yes	Yes

Which of the following is Object X?

- (1) Saliva
(2) Fish ball
(3) Carrot juice
(4) Wooden chair

25. Study the table below carefully.

	Item	State of Matter
(A)	Cloth	Solid
(B)	Turpentine	Liquid
(C)	Sound	Gas
(D)	Snow	Liquid

Which of the above items are classified wrongly?

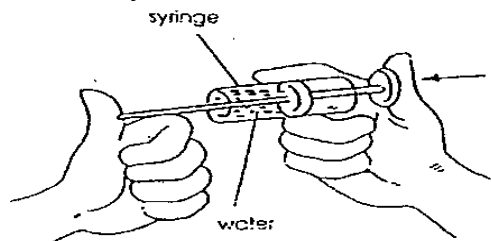
- (1) A and B only (2) A and D only
(3) B and C only (4) C and D only

26. A liquid has no definite _____.

A : density	B : mass	C : volume	D : shape
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- (1) A only
- (2) D only
- (3) B and C only
- (4) C and D only

27. Study the diagram below carefully.



Siti put some water into a syringe. She then placed one end of the syringe on her thumb and tried to push the plunger inwards. She found that she could not do so. From this experiment, Siti concludes that _____.

- (1) water occupies space
- (2) water has a definite volume
- (3) water cannot be compressed
- (4) water takes the shape of the container

28. One difference between water and sugar is that _____.

- (1) water has no definite shape but sugar has
- (2) water has no definite weight but sugar has
- (3) water has definite volume but sugar does not
- (4) water has a definite shape but sugar does not

29. What properties does a gas have?

- (A) It does not burn
- (B) It has a definite shape
- (C) It can be compressed
- (D) It has mass

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

30. Study the table below carefully.

Volume of water	70 ml
Volume of water + Solid A	100 ml
Volume of water + Solid A + Solid B	135 ml
Volume of water + Solid A + Solid B + Solid C	160 ml

Arrange the solids (A, B and C) according to their volumes from the smallest to the biggest volume.

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

Section B (40 marks)

Write your answer for each question 31 to 46 in the blank spaces provided.
Marks will be deducted for wrong spelling of key words.

31. Study the list animals given below.

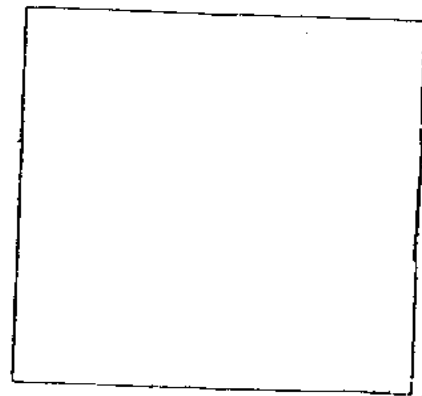
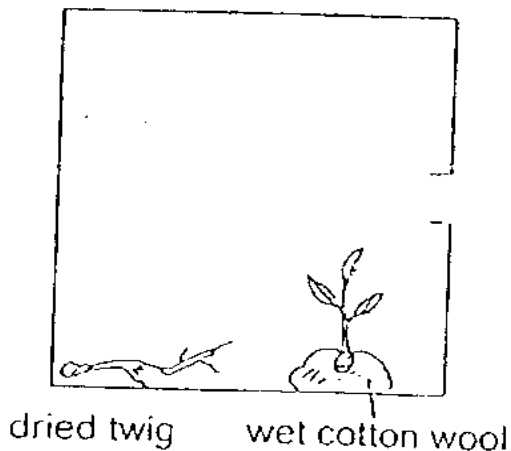
Bee	Butterfly	Crow	Mosquito
Mynah	Moth	Pigeon	Sparrow

All these animals as shown above have wings to help them fly. Classify these animals into 2 group based on the characteristics they have in common. (2m)

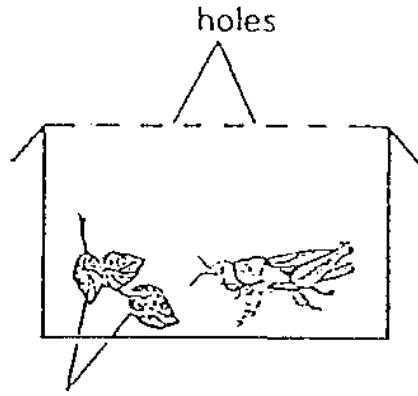
Group A	Group B

32. A dried twig and a seedling were placed in a box with an opening on the side of the box. The box was then left in a garden for a few days.

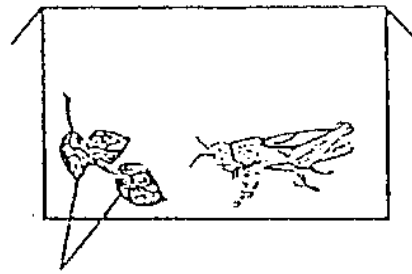
Draw in the empty box as shown below what you will see in a few days' time. (2m)



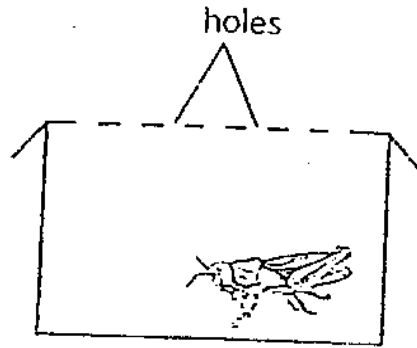
33. The four set-ups as shown were left in the garden untouched for one week.



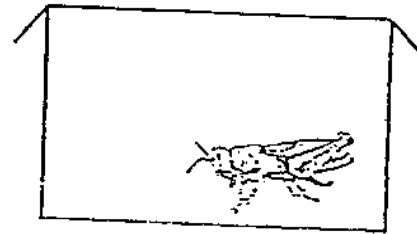
leaves Set - up A



leaves Set - up B



Set - up C

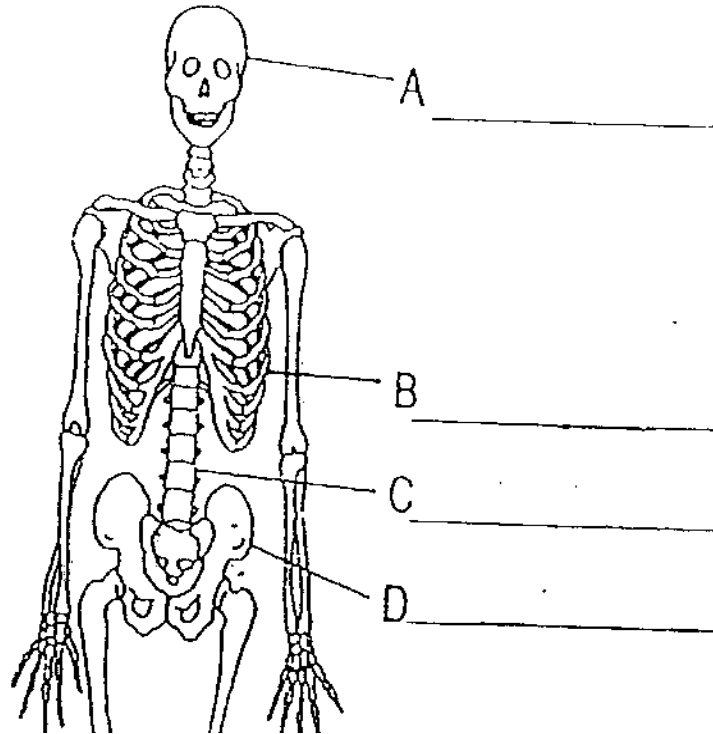


Set - up D

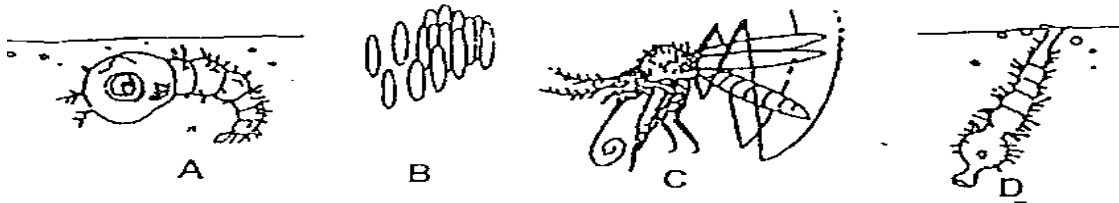
(a) Which grasshopper(s) will not survive after one week? (1m)

(b) What can you conclude from this experiment?
Write down **ONE** statement as a conclusion about what a living thing needs.
(1m)

34. Fill in the names of the bones in the skeleton as shown. (2m)



35. These are the different stages of the life cycle of a mosquito as shown below. (2m)



(a) Name the different stages of the life cycle of a mosquito on the space provided.

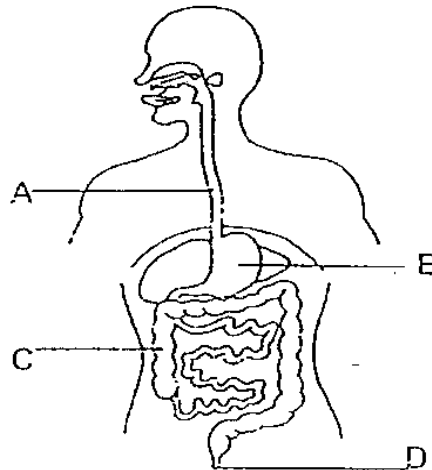
A: _____
B: _____

C: _____
D: _____

- 35 (b) Using the letters in the diagram above, arrange the life cycle of a mosquito in the right order. (1m)

First	Second	Third	Fourth

36. The diagram below shows our digestive system. Use the diagram to answer questions 36(a) and 36(b).

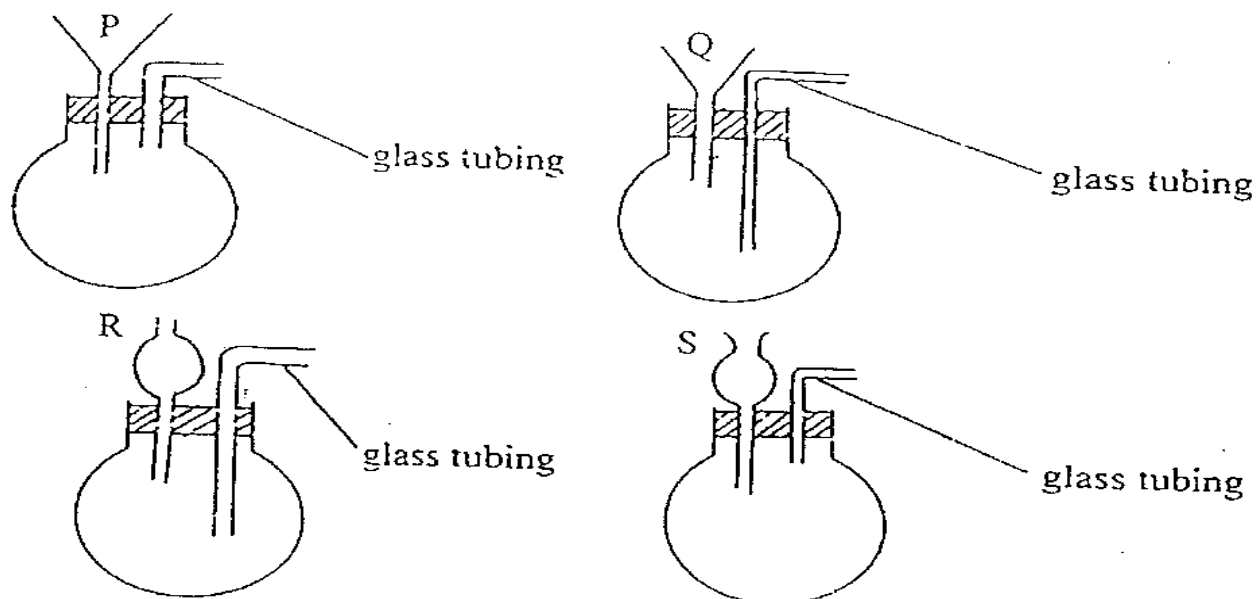


- (a) Name the following parts of the digestive system. (1m)

I. A: _____
 II. C: _____

- (b) What happens to the food when it goes into the stomach (B)? (1m)

37. A class of students was given 4 funnels, labeled P, Q, R and S. They were asked to investigate which one of these funnels would allow water to flow through it most quickly. Using the following set-ups as shown below, they poured some water into each funnel and started the stopwatch to find out the time taken for the water to flow down into the flask.



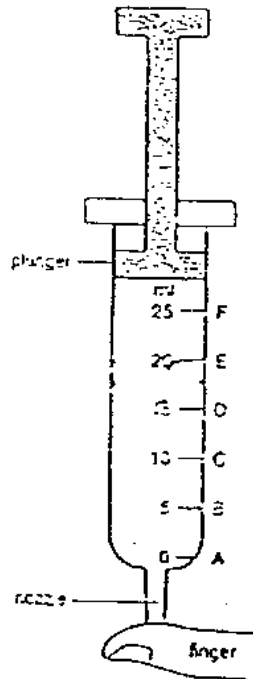
- (a) To make this experiment a fair test, write down two variables which the students should keep the same for ALL the set-ups. (1m)

(i) _____

(ii) _____

- (b) The students had included a glass tubing in each of the above set-ups. What do you think is the purpose of this glass tubing in this experiment? (1m)

38. 20 ml of alcohol water is placed in a syringe as shown below.

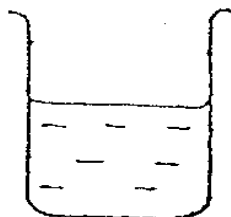


- (a) Indicate by drawing where the water level in the syringe should be as shown in the diagram above? (1m)
- (b) Can the plunger be pushed further in if the nozzle is covered with a finger? Explain your answer. (1m)

39. The diagram below shows some materials and apparatus required to carry out an experiment.



plasticine



water



bottle

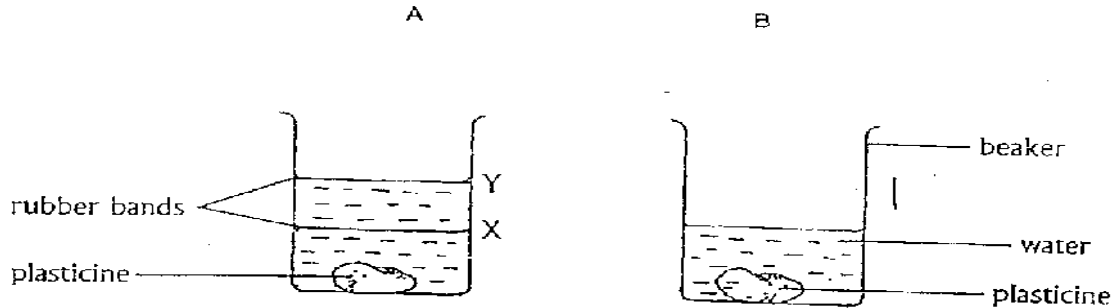


funnel

In the space below, draw and label how you would set up the materials and apparatus to show that air occupies space in the bottle. (3m)
[You are to make use of all the materials shown]

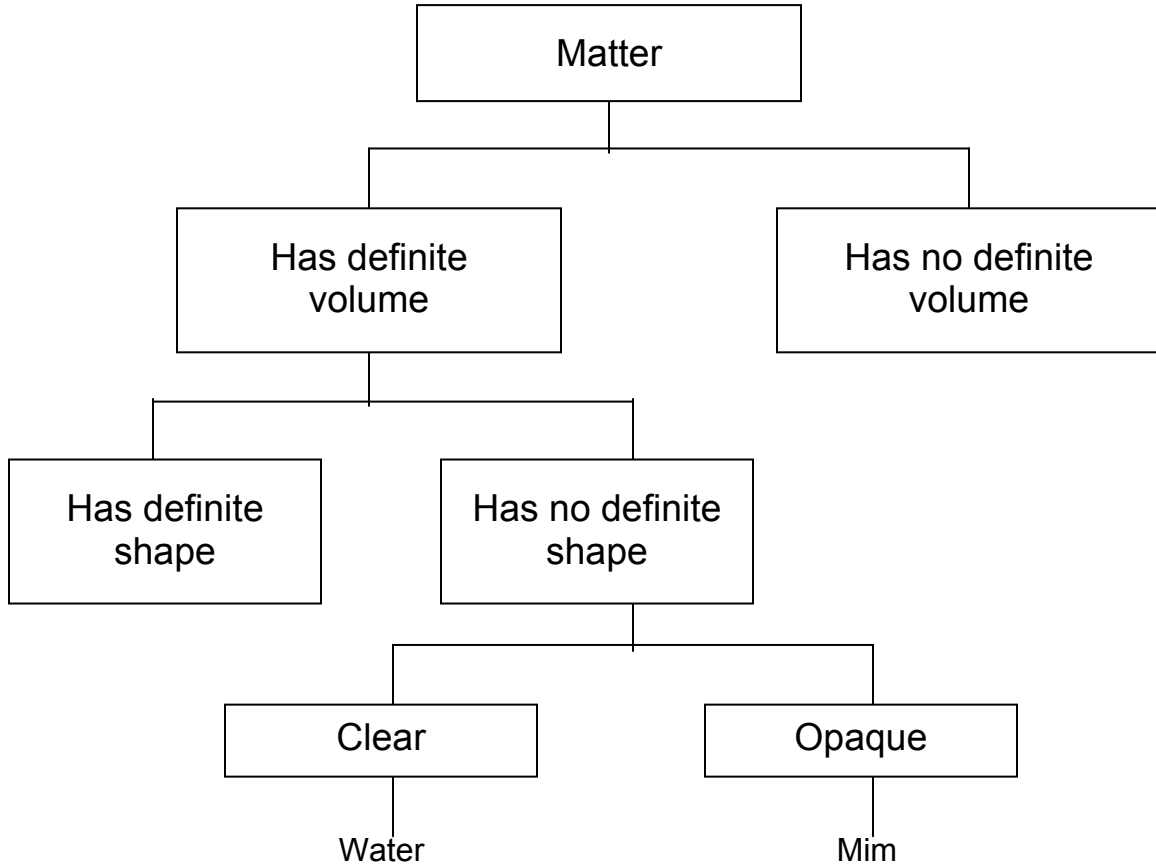
Drawing of the experiment set-up

40. Samuel poured some amount of water into Beaker A and marked the level, X with a piece of rubber band. He then lowered a piece of plasticine gently into same beaker and marked the new water level, Y with another rubber band.



- (a) He then took the plasticine out and moulded it into a new shape. What would the new volume of the plasticine be? Mark the water level on Beaker B of Samuel lowers the moulded plasticine in to the water in Beaker B. (1m)
- (b) Explain your answer in part (a). (1m)

41. Study the classification table below and answer the questions that follow.



(a) What are the three characteristics of “Mim”? (3m)

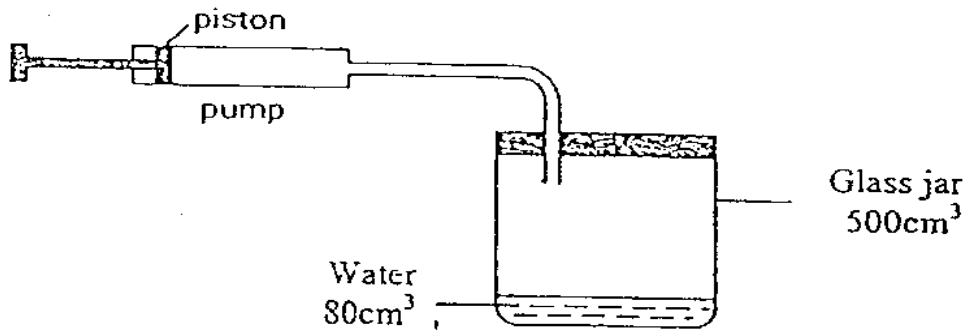
(i) _____

(ii) _____

(iii) _____

(b) What is the difference between water and “Mim”? (1m)

42. Study the diagram below carefully. The pump is connected to a glass jar. The capacity of the jar is 500 cm^3 . The jar contains 80 cm^3 of water.



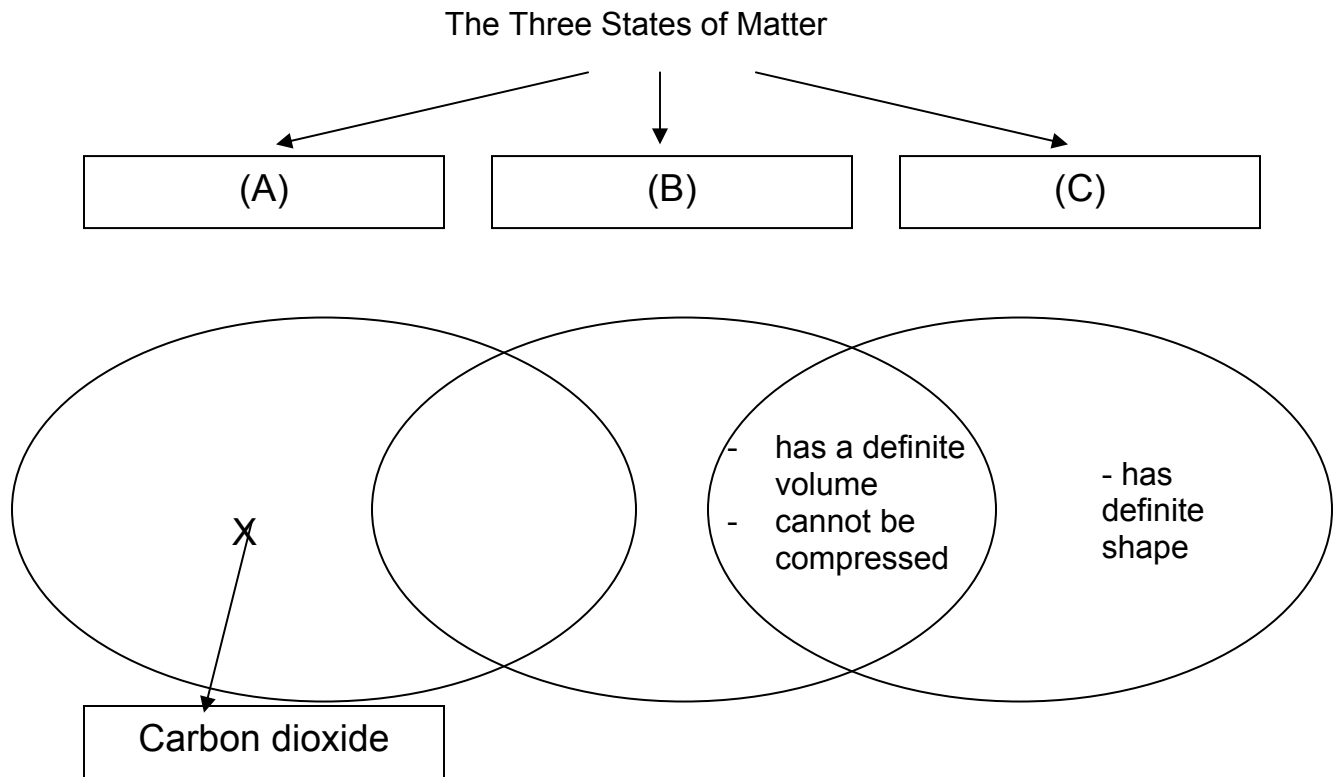
- (a) When the piston is pushed completely in 50 cm^3 of air is forced into the jar. What is the volume of air in the jar? (1m)

The volume of air in the jar is

- (b) Did the volume of water in the jar change when the piston was completely pushed in?(1m)

- (c) Explain your above answer, 42(b)? (1m)

43. Study the Venn Diagram showing the different states of matter carefully and use it to answer questions 43(a) and 43(b).



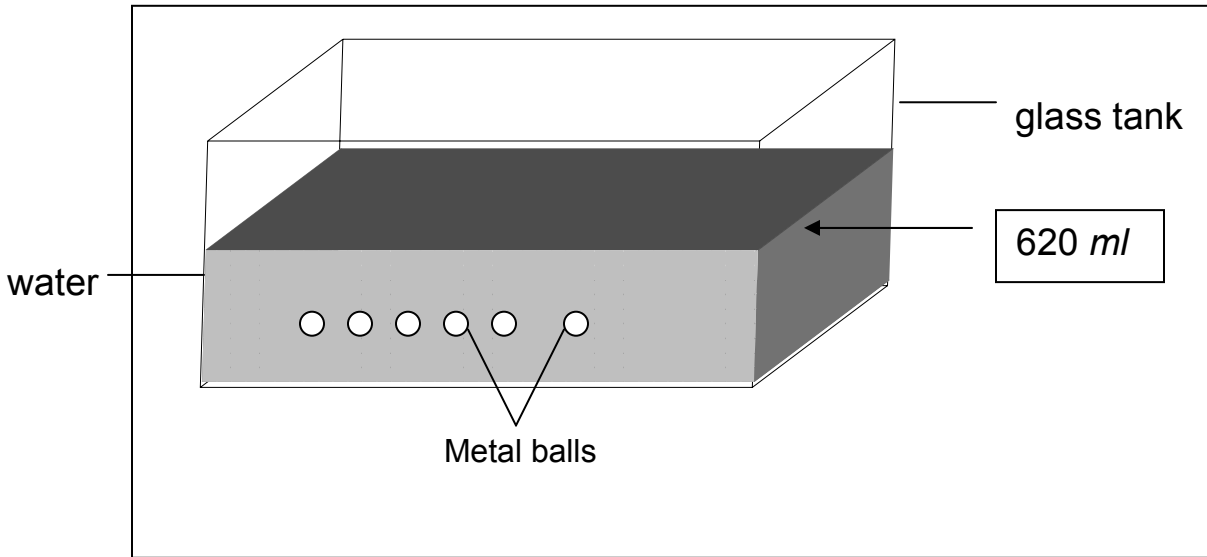
What titles would you put in boxes labeled (A), (B) and (C) for the above Venn Diagram. (3m)

(A) : _____

(B) : _____

(C) : _____

44. Samuel put the metal balls slowly into the tank of water.



(a) What happens to the water level when the metal balls are put in? (1m)

(b) Explain your answer 44(a) above. (1m)

(c) If the volume of water in the tank is 500 ml, find the volume of each metal ball. (1m)

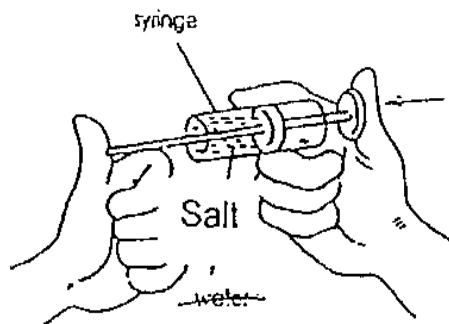
The volume of each metal ball is _____ cm^3

45. Ali put spoonfuls of salt into each of the containers below.



(a) Salt is a solid but why does it take the shape of the container? (1m)

(b) Ali put the salt in a syringe and tried to compress it. He managed to push the plunger in for a few millimeters. Why was Ali able to “compress” the salt? (1m)



46 (a) What are two characteristics of all matter? (2m)

(i) _____

(ii) _____

(b) Name 2 things that are around us which are not matter (1m)

End Of Paper