



Maha Bodhi School  
2007 Semestral Assessment 1  
Science

Name : \_\_\_\_\_

Date : 11 May 2007

Class : Pr 4 (                      )

Duration : 1 h 30 min ( Parts I & II )

---

**Part I: ( 60 marks )**

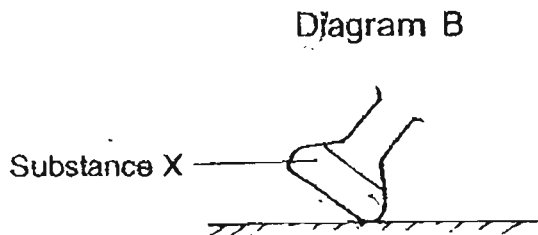
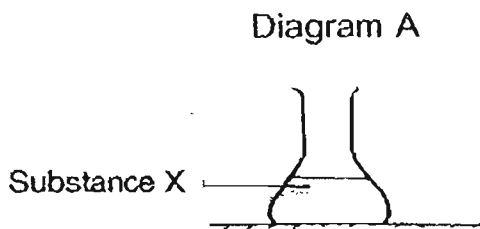
For each question from 1 to 30, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Mark Sheet (OMS).

1. Which of the following states do **not** have a definite shape?

- A: Solid
- B: Liquid
- C: Gas

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

2. Diagram A shows a flask containing a substance X at room temperature. Diagram B shows the same flask being tilted to one side.



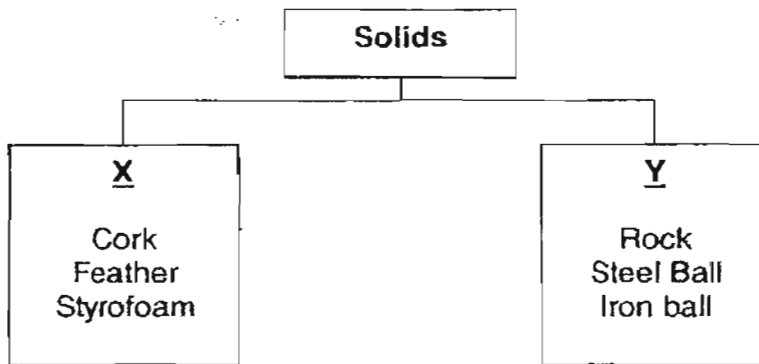
Substance X is most probably \_\_\_\_\_

- (1) milk
- (2) jelly
- (3) water
- (4) orange juice

3. Mass is the amount of \_\_\_\_\_ an object has.

- (1) weight
- (2) energy
- (3) space
- (4) matter

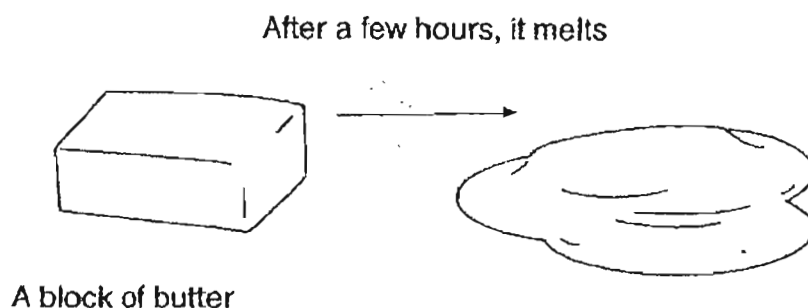
4. Study the classification table below.



Which one of the following are the correct headings?

	X	Y
(1)	No definite shape	Definite shape
(2)	Dissolve in water	Do not dissolve in water
(3)	Float on water	Sink in water
(4)	Once alive	Never alive

5. Study the diagram below.



When the block of butter melts, it undergoes a change in \_\_\_\_\_.

- A: mass
- B: state
- C: shape

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

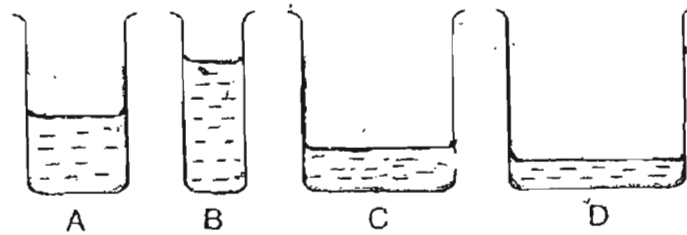
6. The freezing point of water is the same as the \_\_\_\_\_.

- (1) melting point of ice
- (2) boiling point of steam
- (3) boiling point of water
- (4) condensation of water vapour

7. Which one of the following statements is **NOT** true?

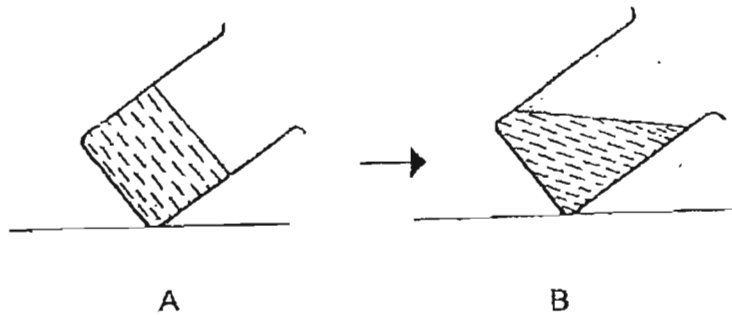
- Both water vapour and water have mass*
- (1) ~~Water vapour has no definite mass but water does.~~
  - (2) ~~Water vapour has a definite shape but water does.~~ *not*
  - (3) Water vapour does not have a definite volume but water does.
  - (4) Water vapour can be compressed but water cannot be compressed.

8. Four beakers of different sizes are filled with 200ml of water. They are all placed under a tree. The temperature of the water is the same for all the beakers.



Which one of the beakers would have the least amount of water left after 3 days?

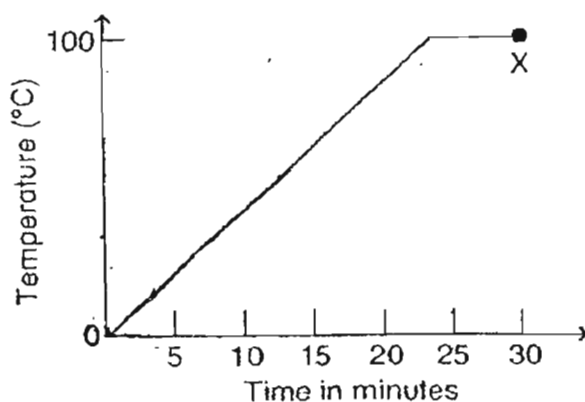
- (1) A
  - (2) B
  - (3) C
  - (4) D
9. A beaker containing a substance is set up as in Diagram A and left for 2 hours at room temperature after which it appears as in Diagram B.



What has most likely happened to the substance to produce the change in appearance?

- (1) evaporation
- (2) condensation
- (3) melting
- (4) freezing

10. The graph shows the temperature change when a beaker of ice-cold water was heated.



Which one of the following processes is happening in the water at Point X?

- (1) Melting
- (2) Boiling
- (3) Freezing
- (4) Condensation

11. Which one of the following statements is **NOT** true?

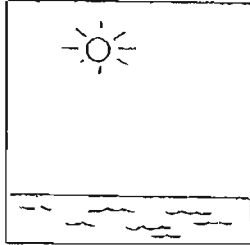
- (1) Water evaporates only from water bodies.
- (2) The water cycle occurs because water can change from one state to another.
- (3) The formation of the clouds is due to the condensation of water vapour in the sky.
- (4) There is constantly water vapour all around us as evaporation takes place all the time.

12. Snow is just like rain that comes from the sky. Under what circumstances will snow form?

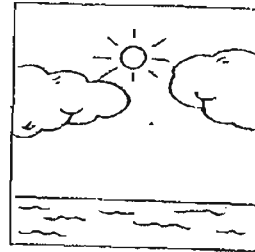
- (1) When there is too much wind.
- (2) When the weather gets very cold.
- (3) When the water particles get too big.
- (4) When there is too much water in the clouds.

13. Tommy looks at the sky and predicts that it is not going to rain within the next hour. Which one of the following could he have probably seen?

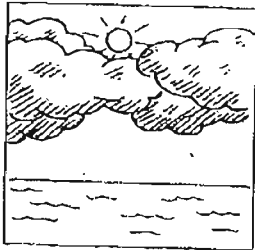
(1)



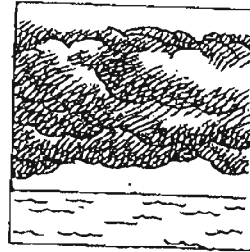
(2)



(3)



(4)



14. Which of the following is/are sources of water supply in Singapore?

- A: Buying of water from Malaysia
- B: Desalination of seawater
- C: Recycling of water to produce NeWater
- D: Collection of rainwater in reservoirs and water catchment areas

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

15. Some seawater is being heated in a beaker. After all the water has evaporated, some white substance is left in the beaker. What is the white substance mostly made of?

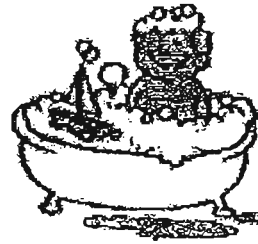
- (1) Ice
- (2) Salt
- (3) Sugar
- (4) Talcum powder

16. Which one of the following activities shows wastage of water?

(1)



(2)



(3)



(4)



17. Some hikers on a trek wanted to boil some water for drinking. They collected samples of water from four streams and made the following observation.

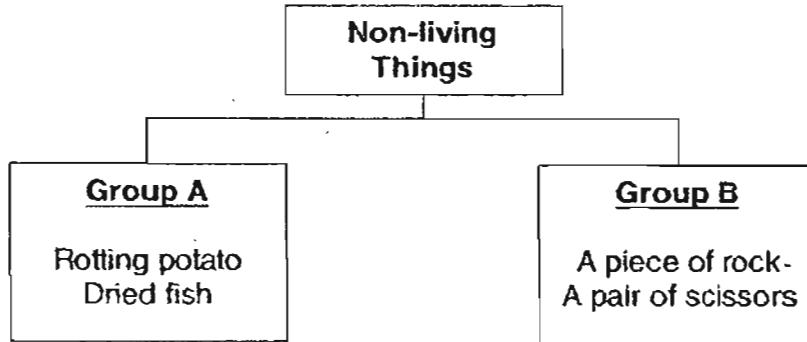
Sample of water	Colour	Smell	Presence of harmful organisms
A	√	x	√
B	x	√	x
C	x	x	√
D	x	x	x

**KEY**  
 √ Present  
 x Not present

Which one of the following streams has water that is safest to drink?

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

18. Study the classification diagram below.



Which one of the following items can be classified under Group B?

- (1) A coin
- (2) An apple
- (3) A dead housefly
- (4) An uprooted tree

19. Two groups of plants are left in the garden. There are 10 plants in each group. Plants in group A are watered daily but plants in group B are not being watered at all.

If it does not rain at all, what is most likely to happen to the two groups of plants after a month?

- (1) Both groups of plants will die.
- (2) Both groups of plants will grow taller.
- (3) Plants in group A will die and plants in group B will survive.
- (4) Plants in group A will survive and plants in group B will die.

20. An animal has six legs and three body parts. It has two pairs of wings. It lives near the pond and eats insects. It is likely to be a/an \_\_\_\_\_.

- (1) housefly
- (2) dragonfly
- (3) mosquito
- (4) cockroach

21. Which one of the following statements is **true**?

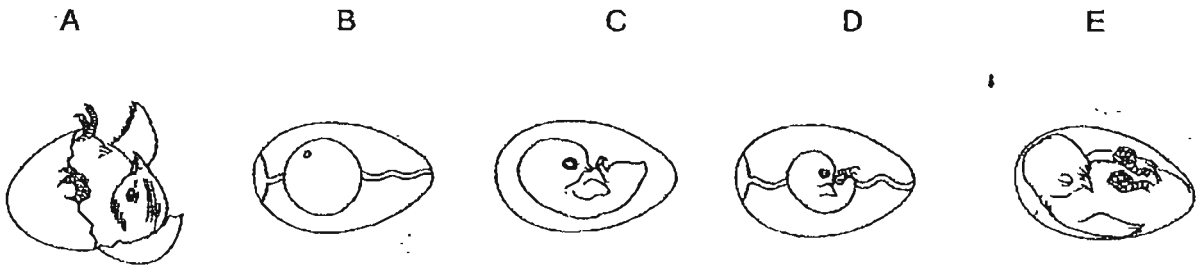
- (1) Mango trees can reproduce but mushrooms cannot.
- (2) Mushrooms are poisonous but mango trees are not.
- (3) Mushroom grow in the forest but mango trees do not.
- (4) Mango trees can make food for themselves but mushrooms cannot.



22. Which one of the following animals has the same life cycle as a chicken?

- (1) Mosquito
- (2) Butterfly
- (3) Giraffe
- (4) Sparrow

23. Study the diagrams below. Rearrange them in the correct order to show the development of the chick from a fertilised egg.



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

24. Mei Ling has some of these characteristics.

- A: Short hair
- B: Big round eyes
- C: Long fingernails
- D: Double eyelids

Which of these characteristics are passed down from either/both of her parents?

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

25. Ali knows that someone is knocking on his door although the door is closed. Which sense organ did he use?

- (1) skin
- (2) eyes
- (3) ears
- (4) tongue

26. What is main function of the digestive system?

- (1) It breaks down food into simpler substances.
- (2) It takes in oxygen and gives out carbon dioxide.
- (3) It carries messages from one part of the body to another.
- (4) It transports blood from one part of the body to another.

27. Which of the following statements about the skeleton is/are true?

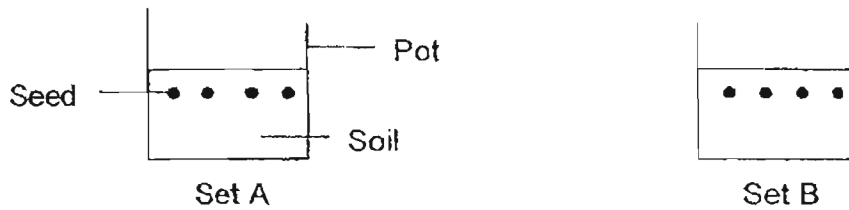
- A: Our skeleton is made up of many bones.
- B: Our skeleton enables us to move.
- C: The skeleton **cannot** grow.

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

28. What happens when you move your arm?

- (1) The lower arm becomes shorter so it bends.
- (2) Both arm muscles relax to pull the lower bone up.
- (3) Both arm muscles contract to move the lower arm.
- (4) The muscles and the bones in the arm work together to move the arm.

29. Mary wants to find out if different types of plant soil will affect the growth of tomato seeds. She sets up two sets of items as shown below.

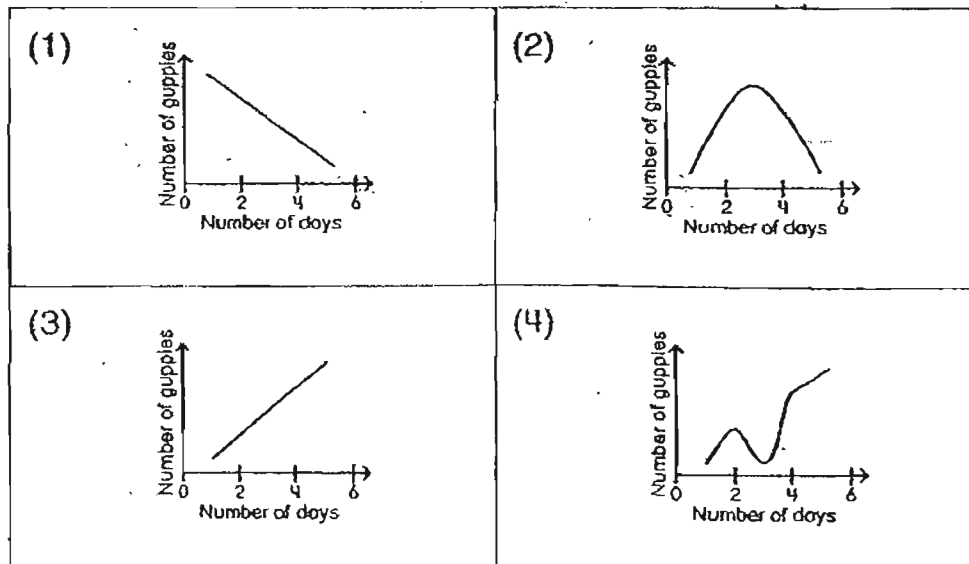


Which of the following must she keep the same for both sets to make a fair test?

- A: Amount of soil
- B: Amount of water
- C: Type of soil
- D: Size of pot

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

30. A guppy population is affected when some detergent were dumped in the pond in which they were living. Which one of these graphs shows the most likely changes in the population if the poison is found in the pond from day one (the day the detergent was dumped into the pond)?



END OF PART I



Maha Bodhi School  
2007 Semestral Assessment 1  
Science

Name : \_\_\_\_\_ (

Class : Pr 4 ( )

Duration : 1 h 30 min ( Parts I & II )

Date : 11 May 2007

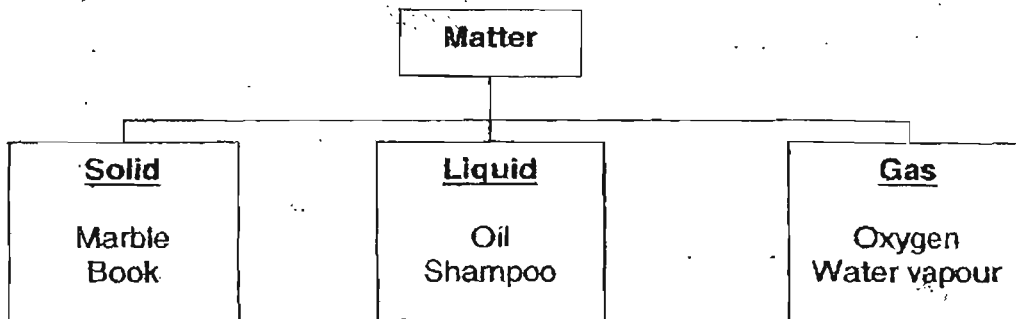
Parent's Signature : \_\_\_\_\_

Part I ( 60 marks )	
Part II ( 40 marks )	
SA1 ( 100 marks )	

**Part II: ( 40 marks )**

Write your answers to questions 31 to 46 in this script.

31. Study the classification table below.



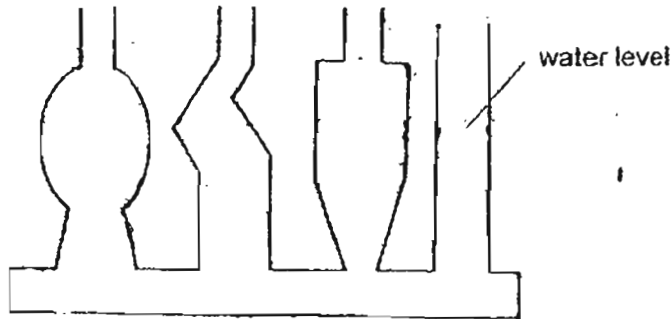
Where would you place 'milk' and 'sugar' in the classification table above?

[2]

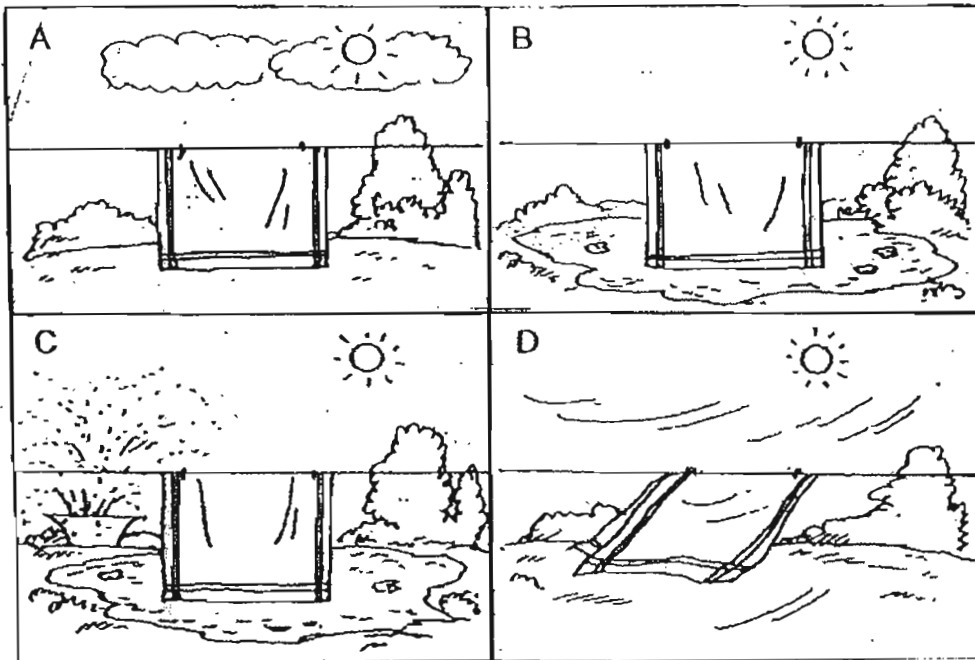
(a) Milk: \_\_\_\_\_

(b) Sugar: \_\_\_\_\_

32. Harry bought a special glass container which is made of 4 columns of hollow glass with different shapes. Harry fills his container with water. The water level in one part of the container has been drawn for you. **Draw** in the water levels of each of the columns to complete the diagram. (NOTE: Include the water mark and meniscus.) [2]



33. The pictures below show the four identical handkerchiefs being dried in 4 different conditions.



- (a) Which handkerchief will probably dry the fastest?

[1]

---

- (b) Explain your answer in (a).

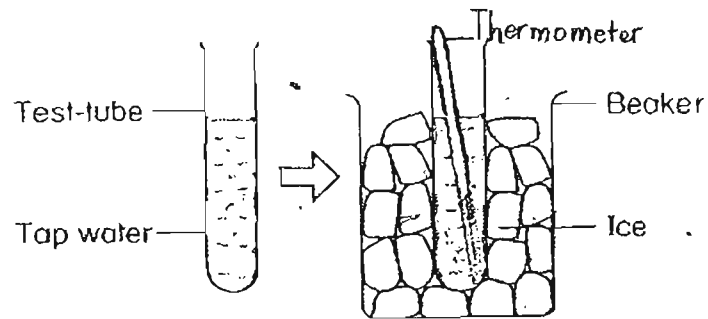
[2]

---



---

34. Tommy carries out an experiment as shown below.



He puts the test tube of tap water into a beaker of crushed ice.

(a) What will happen to the temperature of the water in the test-tube after 10 minutes? [1]

---

(b) Would the water in the test-tube turn to ice? Explain your answer. [2]

---

---

35. Ali notices that there are droplets of water on the windshield of his father's car in the early morning before his father sends him to school. He is puzzled, as it was not raining the night before.

Explain his observation. [2]

---

---

36. Write (T) for statements that are true and (F) for statements that are false in the blanks. [2]

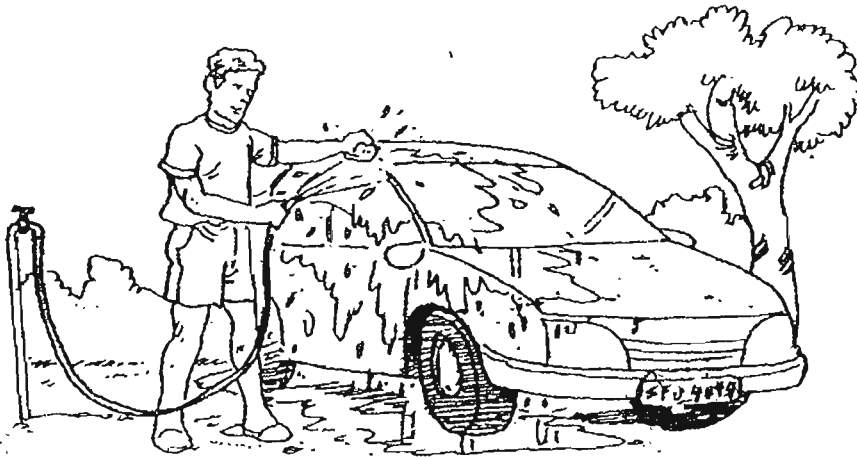
(a) The amount of water vapour in the air is known as humidity. \_\_\_\_\_

(b) The rate of evaporation depends on the rate of the wind only. \_\_\_\_\_

(c) Icebergs are water in its solid state. \_\_\_\_\_

(d) The freezing point of water is 100°C. \_\_\_\_\_

37. Study the diagram below.



(a) What is wrong with the way Mr Tan washes his car?

[1]

---

(b) State two ways in which he can conserve water.

[2]

i) \_\_\_\_\_

ii) \_\_\_\_\_

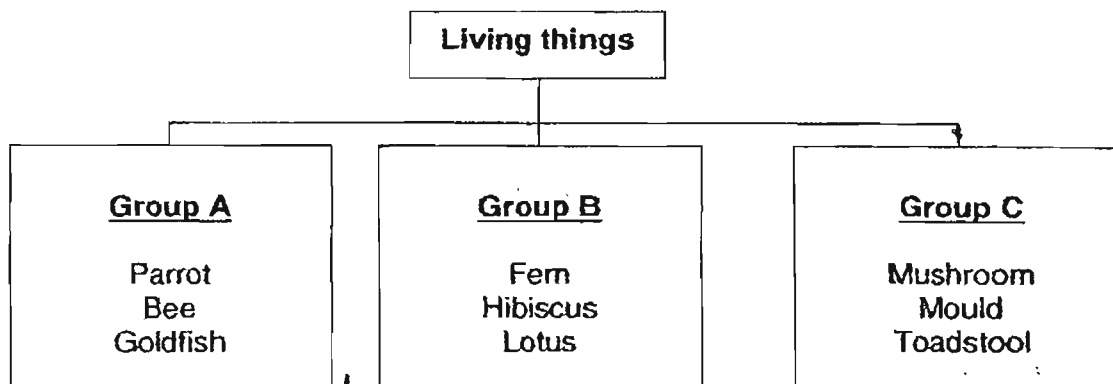
38. Oil spills at sea can cause a lot of marine life to be destroyed. State two ways in which the animals and plants can be harmed from oil spills.

[2]

i) \_\_\_\_\_

ii) \_\_\_\_\_

39. Study the classification table below.



Give a suitable heading for each group.

[3]

i) Group A: \_\_\_\_\_

ii) Group B: \_\_\_\_\_

iii) Group C: \_\_\_\_\_

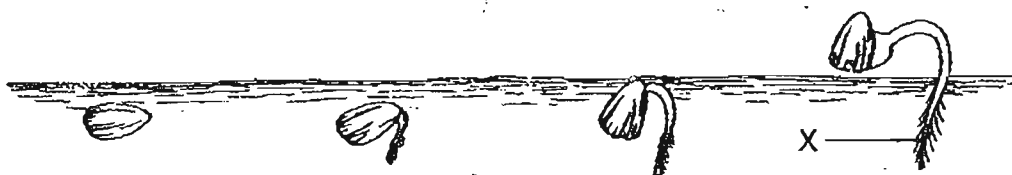
40. State one difference in the way a bird and giraffe reproduces.

[2]

---

---

41. Study the diagram below.



What is the function of part X?

[2]

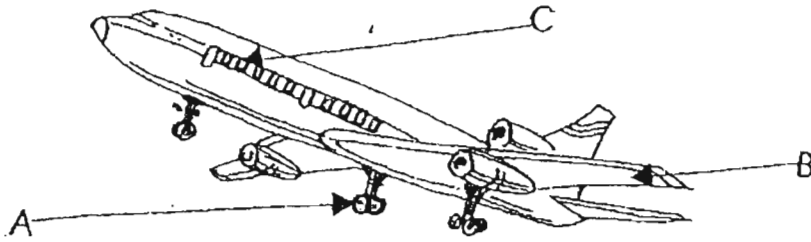
---

---



42. The diagram below shows an airplane. What materials are the parts labelled made of?

[3]



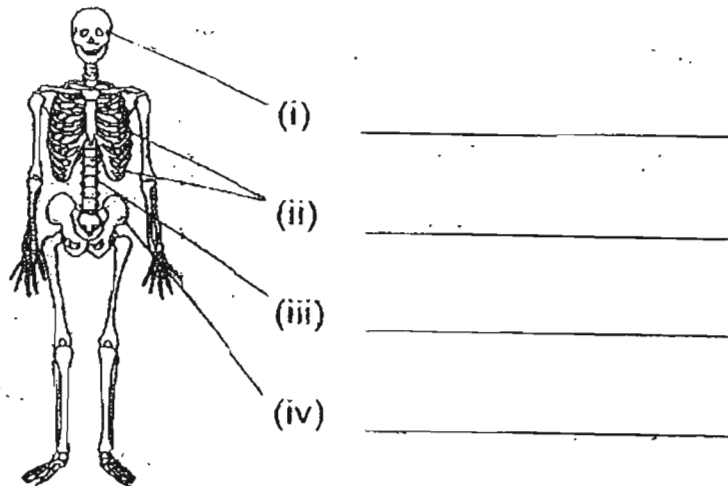
A: \_\_\_\_\_

B: \_\_\_\_\_

C: \_\_\_\_\_

43. (a) Name the four different parts of the skeleton as shown below.

[2]

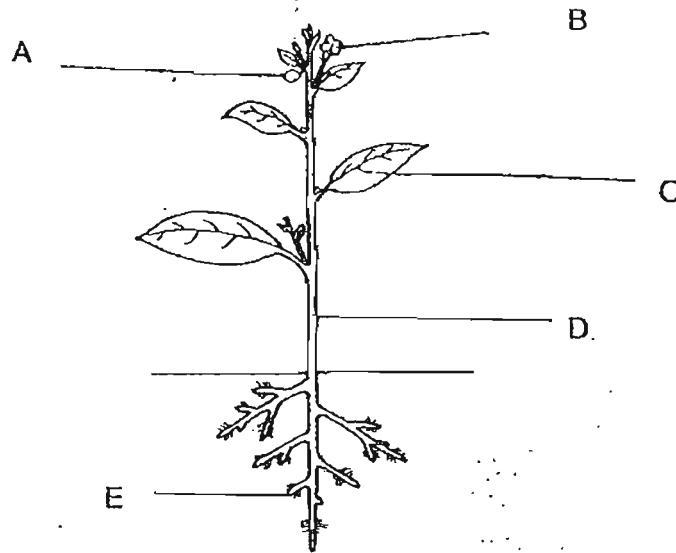


(b) State one common function of these four parts of the skeleton.

[1]

\_\_\_\_\_

44. Study the diagram of the plant below.



(a) What would happen if all part C is removed?

[2]

---

---

(b) State one function of part D.

[1]

45. A bunch of grapes are weighed and the mass was recorded. The grapes were then placed in the sun. After four days, the grapes were weighed again.

(a) What would happen to the mass of the grapes?

[1]

---

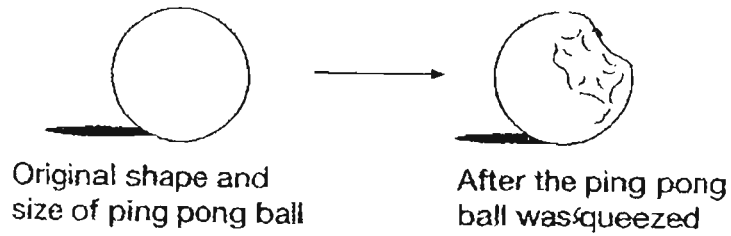
(b) Explain your answer in (a).

[2]

---

---

46. A ping pong ball became dented after it was squeezed.



a) What happened to the air in the ping pong ball? [1]

---

b) What did the above activity show? [1]

---


---

END OF PAPER



# ANSWER SHEET

MAHA BODHI PRIMARY SCHOOL - PRIMARY 4 SCIENCE 2007  
SEMESTRAL ASSESSMENT (1)

1. 3                    31) a) Liquid            b) Solid
2. 2
3. 4                    33) a) Handkerchief D will probably dry  
the faster.
4. 3                    b) The presence of wind and lower  
humidity increases the rate of  
evaporation of water from the  
handkerchief.
5. 3
6. 1
7. 2
8. 4
9. 3
10. 2
11. 1
12. 2
13. 1
14. 4
15. 2
16. 4
17. 4
18. 1
19. 4
20. 2
21. 4
22. 4
23. 2
24. 2
25. 3
26. 1
27. 3
28. 4
29. 4
30. 1
- 32) 
- 34) a) There will be a decrease in  
temperature.
- b) No. The temperature of ice is  
low enough so there is very little  
loss of heat from the water to  
the surrounding.
- 35) The water vapour in the air condenses on  
the cool surface of the glass.
- 36) a) T            b) F            c) T            d) F
- 37) a) He is using a hose to wash his car  
so there will be a lot of wastage  
of water.
- b) i) Mr Tan can use a pair of water  
to wash the car,

37) b) Mr Tan can use water used to wash rice and vegetables to wash the car.

38) i) The oil prevents the oxygen from dissolving and reaching the living things in the sea.

ii) The oil coats the outer covering of the animals and does not allow them to move easily.

39) i) Animals ii) Plants iii) Fungi

40) The bird lays eggs but the giraffe gives birth to its young alive.

41) The wind holds the plant firmly to the ground.

42) A: Rubber B: Metal C: Glass

43) i) skull (ii) ribcage (iii) backbone (iv) hip bone  
b) They protect some internal organs.

44) a) Plants will have no leaves to make food and will die.  
b) Part D transport minerals, salt and food to other parts of the plants.

45) a) The mass of grapes would decrease.  
b) Some of the water in the grapes have evaporated thus making the mass smaller.

46) a) The air was compressed.  
b) Air can be compressed.

-- end ---