

CA2

TAO NAN SCHOOL  
PRIMARY 4 SCIENCE CONTINUAL ASSESSMENT 2 – 2004

Name : \_\_\_\_\_ ( )      Duration : 1 hr 15 min  
Class : Primary 4 ( )      Date : \_\_\_\_/\_\_\_\_/2004  
Parent's signature : \_\_\_\_\_      Marks : \_\_\_\_/50 Marks

Section A ( 18 X 2 MARKS)

Each question is followed by four options. Only one of which is correct. Choose the correct answer and shade its appropriate oval in the Optical Answer Sheet (OAS) provided.

1. Which of the following is matter?

- (1) Light
- (2) Heat
- (3) Wind
- (4) Shadow

2. Study the following classification table on matter.

MATTER	
X	Y
Marble	Air
Ice cube	Water

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

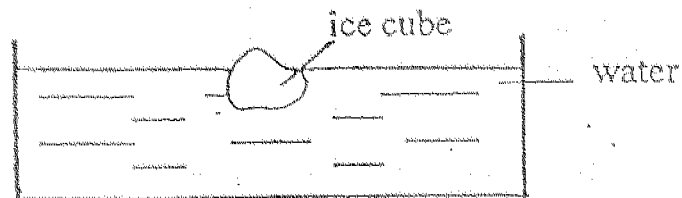
	X	Y
(1)	Has definite volume	Has no definite volume
(2)	Has definite shape	Has no definite shape
(3)	Has definite weight	Has no definite weight
(4)	Can be compressed	Cannot be compressed

3. Which of the following sentences about matter is NOT true?

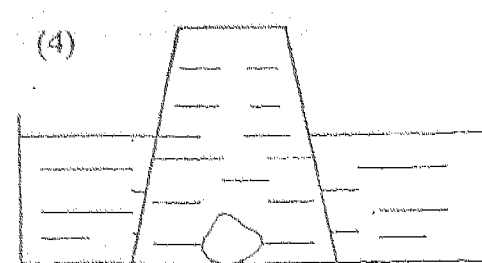
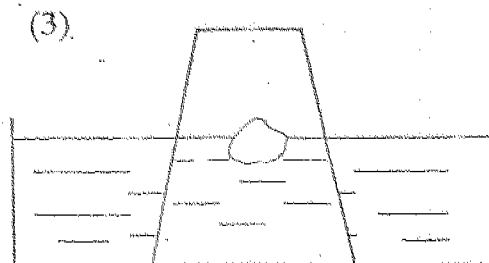
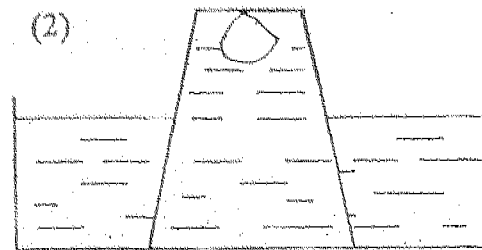
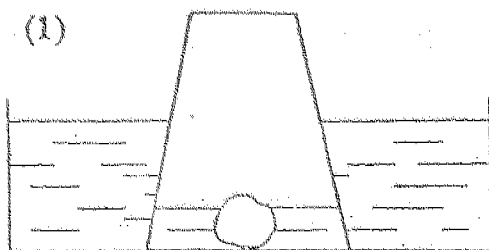
- A : All matter has a definite shape
- B : All matter has no definite volume
- C : Matter can be a solid, liquid or gas
- D : Matter has mass and occupies space

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

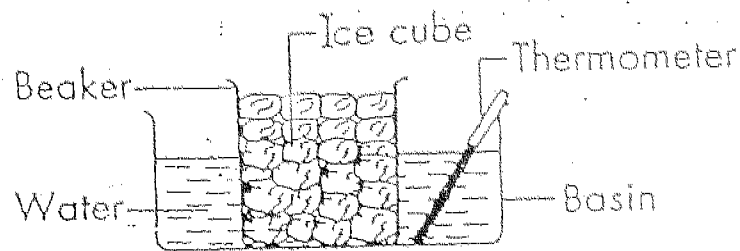
4. A piece of ice cube was put into a basin of water.



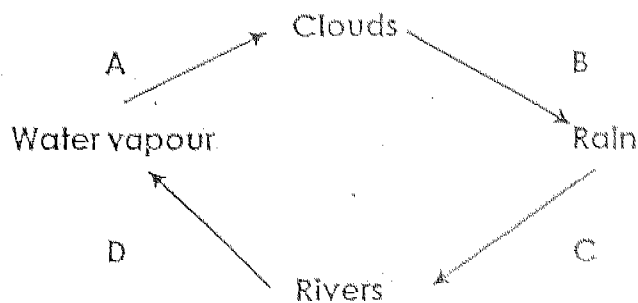
Chen Han then held an inverted glass over the ice cube. Next, he pushed the glass vertically downwards into the basin of water. Which of the diagrams below shows the correct position of the ice cube ?



5. Li Yan put a beaker of ice cubes into a basin of water as shown below. She also dipped a thermometer into the water. She found the mercury level in the thermometer kept falling. Why was this so?



- (1) The water in the basin gains coldness from the melting ice.
  - (2) The water in the basin gains heat from the melting ice.
  - (3) The water in the basin loses coldness to the melting ice.
  - (4) The water in the basin loses heat to the melting ice.
6. The diagram below shows the water cycle.



A, B, C and D represent the processes in the water cycle. Which processes A, B, C or D involve a change in the state of water?

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

7. Water collected in reservoirs is sent to the water treatment plant for \_\_\_\_\_ before it is sent to our homes.

- (1) recycling
- (2) sterilization
- (3) purification
- (4) desalination

8. The gills of a fish have a rich supply of blood vessels to \_\_\_\_\_.

- (1) trap bubbles of air for breathing
- (2) remove carbon dioxide from the water
- (3) absorb dissolved oxygen from the water
- (4) help the fish to breathe out of the water

9. When we breathe in air, our diaphragm moves \_\_\_\_\_ and our lungs \_\_\_\_\_.

- (1) upwards..... expand
- (2) downwards..... expand
- (3) upwards..... contract
- (4) downwards..... contract

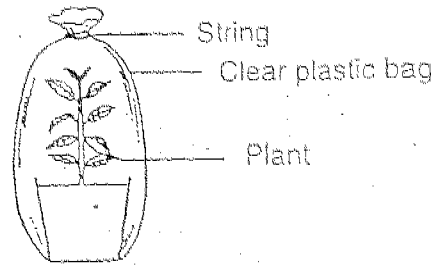
10. The table below shows two processes, P and Q.

Process	Gas taken in	Gas given out	Energy
P	Carbon dioxide	Oxygen	Used up
Q	Oxygen	Carbon dioxide	Released

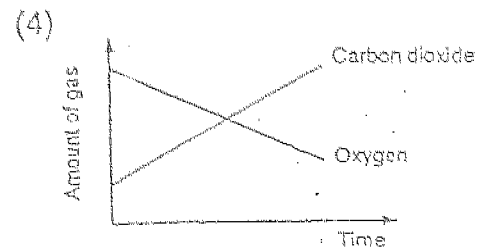
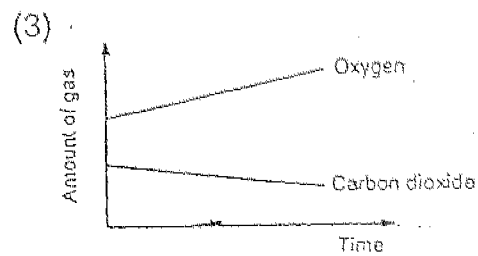
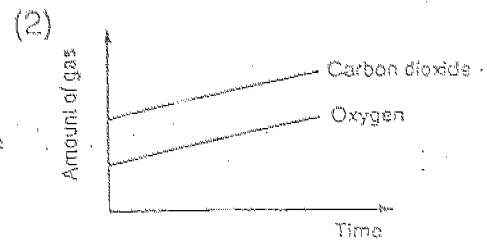
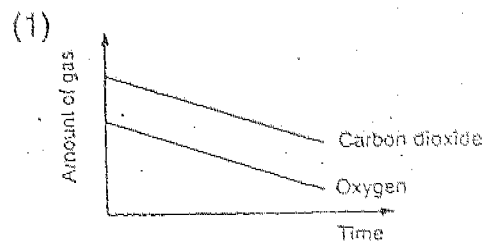
When does process Q take place ?

- (1) All the time
- (2) In the day only
- (3) In the night only
- (4) In strong light only

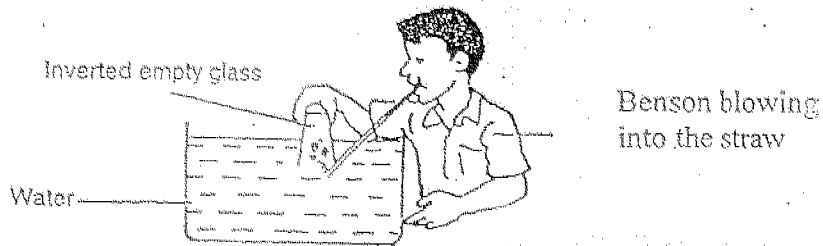
11. Aaron put a plant into a clear plastic bag. He tied the bag with a string and placed it under the sun for 4 hours.



Which of the following graphs shows the changes in the amount of carbon dioxide and oxygen in the plastic bag during that period of time?



12. Benson blew air into an inverted empty glass in a basin of water at room temperature. What do you think is the composition of the air coming through the straw?



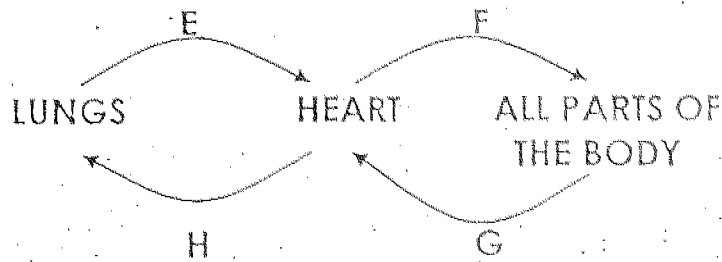
- (1) 78% nitrogen, 21% oxygen, 1% carbon dioxide and other gases.
- (2) 74% nitrogen, 16% oxygen, 3% carbon dioxide, 6% water vapour and other gases.
- (3) 70% nitrogen, 25% oxygen, 4% carbon dioxide, 1% water vapour and other gases.
- (4) 78% nitrogen, 0% oxygen, 22% carbon dioxide and other gases.

13. The human circulatory system consists of \_\_\_\_\_.

- A heart
- B lungs
- C blood
- D blood vessels

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

14.

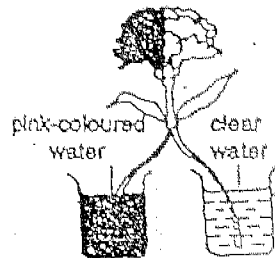


E, F, G and H represent the paths of blood vessels which connect the various organs in our body. Which of the following paths do not carry blood rich in oxygen?

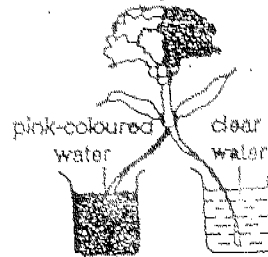
- (1) E and F only
- (2) F and G only
- (3) G and H only
- (4) E and H only

15. Jacinth took a white carnation and split its stalk halfway up its length. She then dipped one half of the flower in pink-coloured water and the other half in plain water. Which of the diagrams below shows what she would observe after 24 hours?

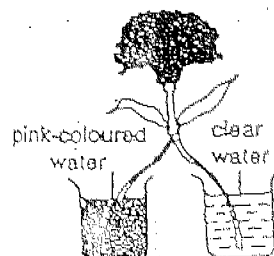
(1) pink-coloured | remains white



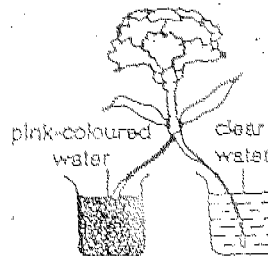
(2) remains white | pink-coloured



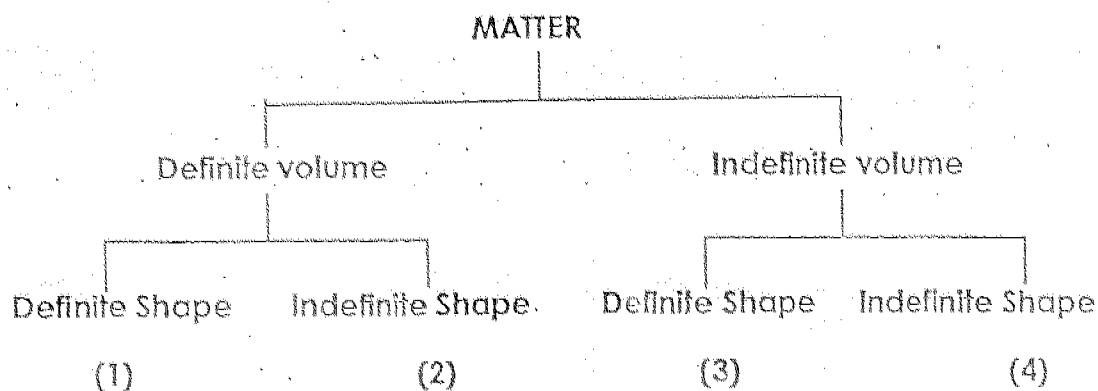
(3) pink-coloured



(4) remains white



16. Study the classification table below. Which can be a liquid?



Different substances have different freezing points and boiling points. The table below shows a list of substances and their freezing points and boiling points.

Substance	Freezing Point (°C)	Boiling Point (°C)
E	-1.5	78
F	3.5	65
G	-4.5	45
H	50	230

17. Which substances are solids at 0°C ?

- (1) E and G only
- (2) F and H only
- (3) F and G only
- (4) E and H only

18. Which substances are gases at 100°C ?

- (1) H only
- (2) F and G only
- (3) E, F and G only
- (4) E, F, G and H



SECTION B ( 14 Marks )

Fill in the blanks with the correct answers

19. Read the following statements below. Write "True" or "False" in the blanks provided. ( 2marks)

	Statements	True or False
a)	Sound is a form of matter	
b)	Sponge is a form of matter	
c)	Liquids can be compressed	
d)	All forms of matter can be seen by the naked eye	

20. The \_\_\_\_\_ point of pure water is  $100^{\circ}\text{C}$  and the \_\_\_\_\_ point of pure water is  $0^{\circ}\text{C}$ . ( 2 marks )

21. Give one reason why seawater does not freeze at  $0^{\circ}\text{C}$ ?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (2 marks)

People	Average Breathing Rate (Number of times per min)
Babies	38
6 year old girls	25
6 year old boys	25
12 year old girls	20
Adults	16

The table above shows the average breathing rates of different people when they are resting. How do the average breathing rates vary according to age? ( 2 marks)

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23. During transpiration, \_\_\_\_\_ escapes from a leaf through its \_\_\_\_\_. ( 2 marks )
24. When we inhale oxygen into our lungs, our a) \_\_\_\_\_ collects it from the air bags in the lungs. The blood with the oxygen then goes to the b) \_\_\_\_\_ which pumps the blood to all parts of our body. Oxygen is used up in the body. The body produces the gas, \_\_\_\_\_ as a waste product. The blood then goes back to the d) \_\_\_\_\_ which pumps the blood to the lungs. Carbon dioxide is exhaled. ( 2 marks)

25. The table below shows Osman's pulse rate as he was engaged in some activities .

ACTIVITY	A	B	C
Duration of activity (in min)	10	15	25
Number of heartbeats per min	135	90	70

- a) Which activity (A, B or C) required the most oxygen?  
\_\_\_\_\_ (1 mark)
- b) In which activity ( A, B or C ) could he be taking a nap?  
Explain your answer.

\_\_\_\_\_  
\_\_\_\_\_

(1 mark)

End of Paper

CA 2

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CONTINUAL ASSESSMENT 2, 2004

01. 3	11. (3)
02. 2	12. (2)
03. 1	13. 3
04. 1	14. 3
05. 4	15. 1
06. 2	16. 2
07. 3	17. (2)
08. 3	18. 3
09. 2	
10. 1	

19) a) False

b) True

c) False

d) False

20) boiling

freezing

21) The salt in the seawater makes the seawater freeze at a lower temperature.

22) The older the person, the slower the breathing rates

23) water vapour

stomata

24) a) blood      b) heart      c) carbon dioxide      d) heart

25) a) Activity A required the most oxygen.

b) Activity C because when you sleep, your pulse slows down.