



AI TONG SCHOOL

2008 CONTINUAL ASSESSMENT (1)

PRIMARY FOUR SCIENCE

DURATION : 1hr 45 min

DATE: 4TH March 2007

INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

Name: _____ ()

Class : Primary _____

Parent's Signature: _____

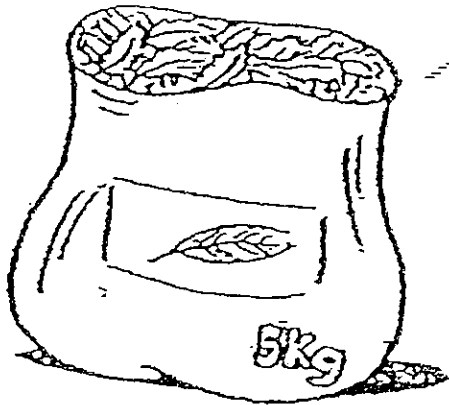
Date : _____

MARKS	100
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Section A (30 x 2 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 Answer Sheet.

1. The picture shows a packet of feathers and a packet of cement.



5kg of feathers



5kg of cement

Which one of the following statements about them is true?

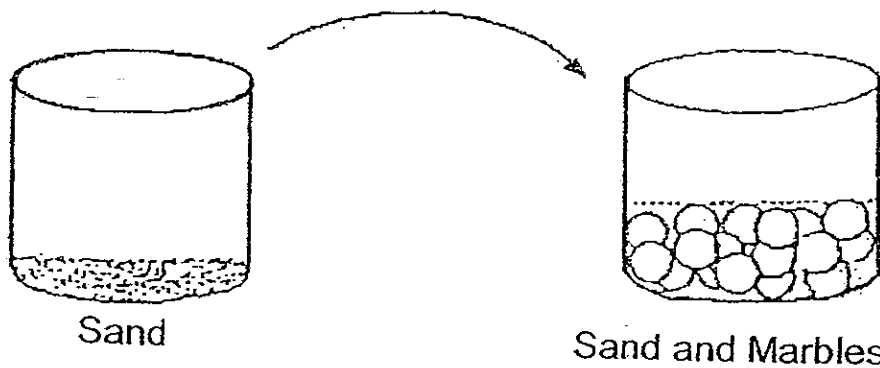
- (1) The bag of feathers has a greater mass than the bag of cement.
- (2) The bag of feathers has the same volume as the bag of cement.
- (3) The bag of cement has the same mass as the bag of feathers.
- (4) The bag of cement has a larger volume than the bag of feathers.

2. The following table contains information about substances X and Y.

Substance X	Substance Y
Takes the shape of the container	Takes the shape of the container
Cannot be compressed	Can be compressed

Which one of the following statements best describes substances X and Y?

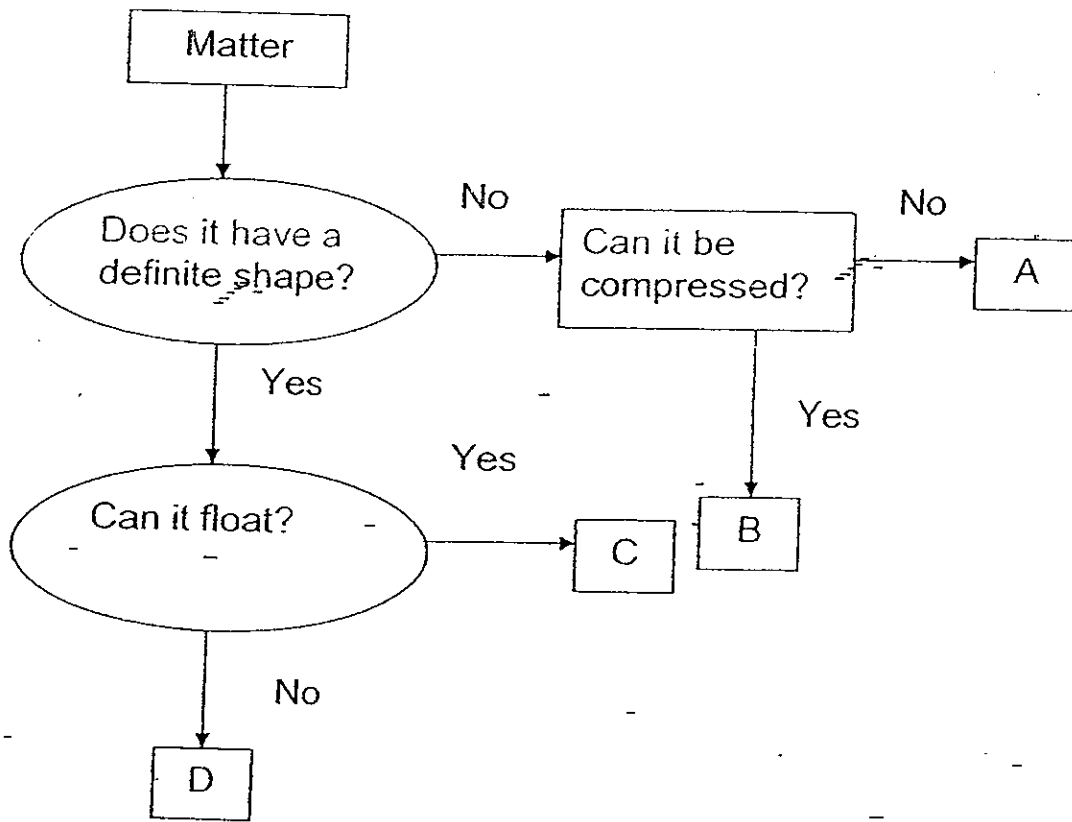
- (1) Both substances X and Y have a definite volume.
 - (2) Both substances X and Y have a definite shape.
 - (3) Substance X is a gas and Substance Y is a liquid.
 - (4) Substance X is a liquid and Substance Y is a gas.
3. Mrs Lee poured 90 cm^3 of fine sand into a container which had 100 cm^3 of marbles. After that she shook the container gently.



She found that the total volume of the sand and the marble was less than 190 cm^3 because _____

- (1) some of the sand overflowed
- (2) the marbles were pressed together by the sand
- (3) air filled the empty spaces between the sand particles
- (4) the sand particles filled the empty spaces between the marbles

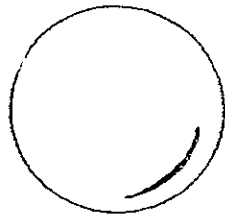
4. Study the flowchart below.



Which one of the following correctly represents A, B, C and D?

	A	B	C	D
(1)	styrofoam	ring	water	air
(2)	water	air	styrofoam	ring
(3)	ring	styrofoam	air	water
(4)	air	water	ring	styrofoam

5. Jack was given 4 balls made of different materials. He was asked to arrange the balls according to their masses, from the smallest mass to the biggest mass.



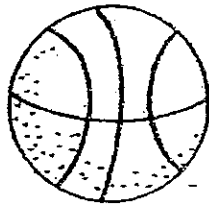
A

polystyrene ball



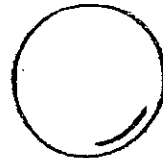
B

iron ball



C

rubber ball



D

polystyrene ball

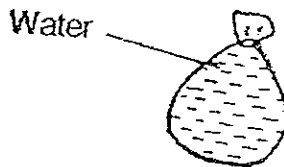
Which one of his arrangements is correct?

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

6. Mary has 4 balls of different volumes as shown in the table below.
Which of the balls can 250ml of air be pumped into?

Ball	Volume
A	115ml
B	180ml
C	250ml
D	450ml

- (1) C only
 (2) D only
 (3) C and D only
 (4) A, B, C and D
7. Joseph has three identical plastic bags. He blows air into the first plastic bag and fills the second one with water. He left the third bag empty as shown below.



First plastic bag

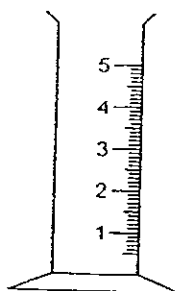
Second plastic bag

Third plastic bag

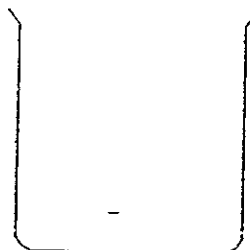
Which one of the following sets of readings is he most likely to get when he weighs each of the plastic bags?

	First plastic bag	Second plastic bag	Third plastic bag
(1)	10g	1 kg	7g
(2)	7g	1 kg	10g
(3)	1 kg	7g	1 kg
(4)	10g	7g	1 kg

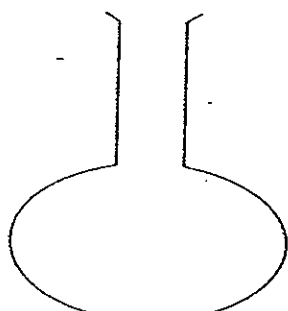
8. Which one of the following apparatus would you use to measure the mass of 5 apples?



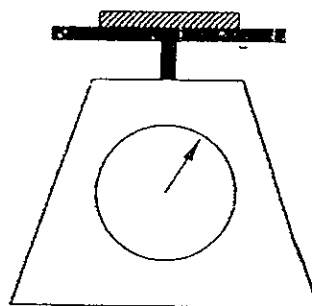
measuring cylinder



beaker



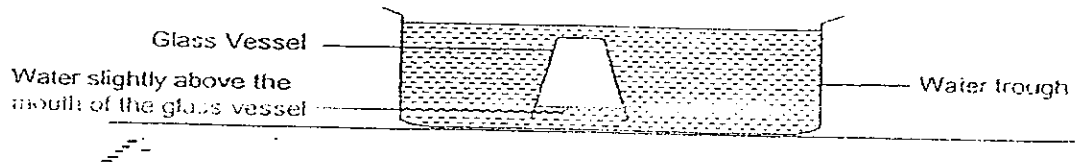
round-bottom flask



weighing scale

- (1) Beaker
- (2) Measuring Cylinder
- (3) Round-bottom Flask
- (4) Weighing Scale

9. Claire inverted a glass into a trough of water. She observed that the amount of water that entered the glass is slightly above the mouth of the glass.



Based on his observation, what conclusion(s) could he infer about air?

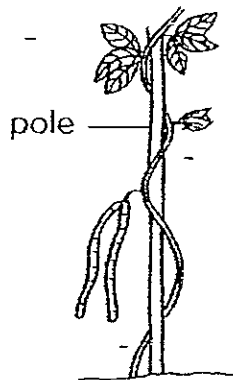
- A: Air has mass
 - B: Air takes up space
 - C: Air has no definite shape
 - D: Air can be compressed
- (1) A and B
 (2) B and C
 (3) B and D
 (4) A, B, C and D
10. Which one of the following is **not** an example of matter?
- (1) Olive oil
 - (2) Sunlight
 - (3) Rain water
 - (4) Rubber band
11. Which pair of living things below has been correctly classified?

	Non-flowering plants	Fungi
(1)	Morning Glory	Algae
(2)	Frangipani	Yeast
(3)	Fern	Toadstool
(4)	Balsam	Mushroom

12. What are the conditions needed for a seed to germinate?

- (1) air, water, warmth
- (2) food, water and air
- (3) water, sunlight and wind
- (4) sunlight, water, fertiliser

13.



Which part of the plant in the diagram above helps it to climb up the pole?

- (1) fruit
- (2) leaf
- (3) stem
- (4) roots

14. The unit for measuring the volume of a small bottle of fruit juice is _____.

- (1) grams
- (2) millilitre
- (3) millimetre
- (4) centimetre

15. Why do tall plants usually have longer roots?

- (1) The roots can make more food.
- (2) The roots can support the branches and leaves.
- (3) The roots help the plants to reach for more food.
- (4) The roots help to hold the plant firmly to the ground.

16. Which parts of a flowering plant are important for reproduction?

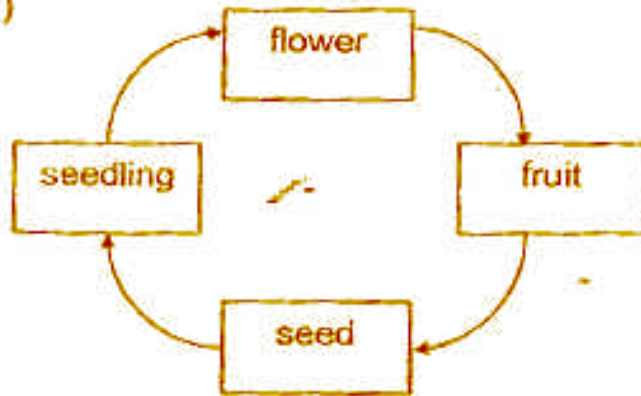
- (1) Leaves and flowers only
- (2) Fruits and flowers only
- (3) Leaves, flowers and seeds only
- (4) Flowers, fruits and seeds only

17. Which one of the following groups consists of only micro-organisms?

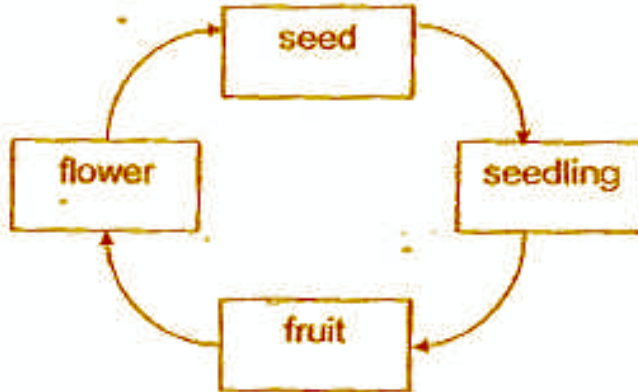
- (1) moss, yeast
- (2) ferns, mould
- (3) bacteria, yeast
- (4) toadstool, yeast

18. Which one of the diagrams shows the correct life cycle of a flowering plant?

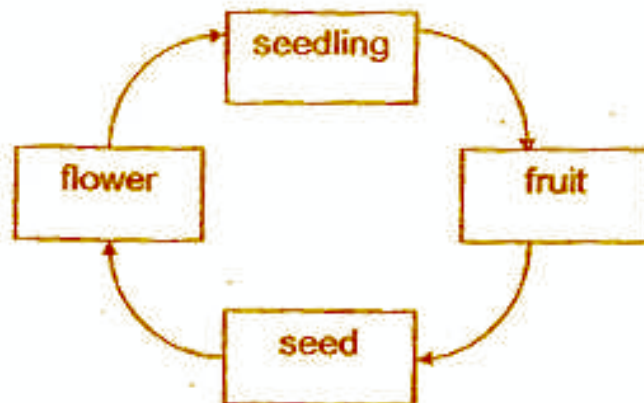
(1)



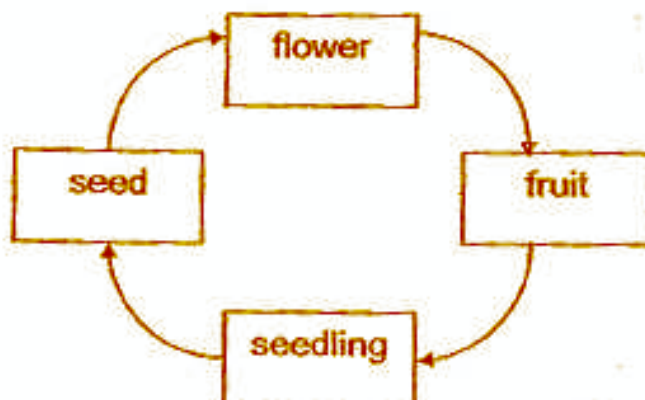
(2)



(3)



(4)



19. What are the functions of the stomata in the leaves?
They allow _____.

- (1) water to enter the leaves
- (2) gases in and out of the leaves
- (3) only oxygen to escape from the leaves
- (4) only carbon dioxide to be taken in by the leaves

20. The following statements describe the growth of a string bean plant.

- A: Roots start to appear
- B: Shoot is seen
- C: Leaves start to grow
- D: Flowers become fruits
- E: Seedling grows into an adult plant
- F: Buds develop into flowers

Which one of the following shows the correct order of growth of the string bean plant?

(1)	B →	A →	C →	D →	F →	E
(2)	D →	F →	E →	C →	B →	A
(3)	A →	B →	C →	E →	F →	D
(4)	A →	B →	C →	D →	E →	F

21. Which one of the following is a characteristic of all living things?

- (1) Respond to changes
- (2) Eat other animals as food
- (3) Move around from place to place
- (4) Reproduce by giving birth to the young alive

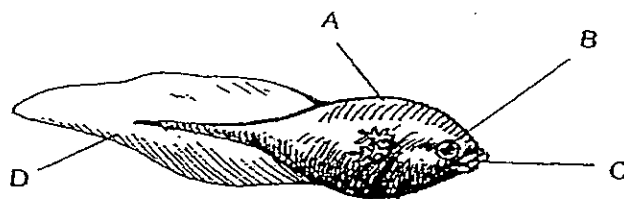
22. A platypus and a cockroach are similar in that they both _____.
- (1) eat only rubbish
 - (2) reproduce by laying eggs
 - (3) belong to the family of 'insects'
 - (4) have the same type of outer covering
23. It walks on four legs. Its body is covered with ^{spikes} ~~scales~~. It lays eggs. Which animal do the statements describe?
- (1) Penguin
 - (2) Spiny Anteater
 - (3) Duck
 - (4) Peacock
24. Ryan found an insect in his garden. He made 4 statements about it. Which one is incorrect?
- (1) It has three body parts.
 - (2) It has six jointed legs.
 - (3) It has feelers on the thorax.
 - (4) It has two pairs of wings.
25. Penguins are covered with feathers. The feathers help them to _____.
- (1) fly
 - (2) swim
 - (3) keep warm
 - (4) reproduce

26. Four pupils were asked to list some examples of living things that live in the water. The names of the 4 pupils and their list is shown below.

Joshua	seahorse, sea hibiscus, duckweed
Eugene	octopus, banana plant, ixora
Jasmine	jellyfish, angelfish, sea urchin
Nicole	water lily, tadpole, hydrilla

Whose list is incorrect?

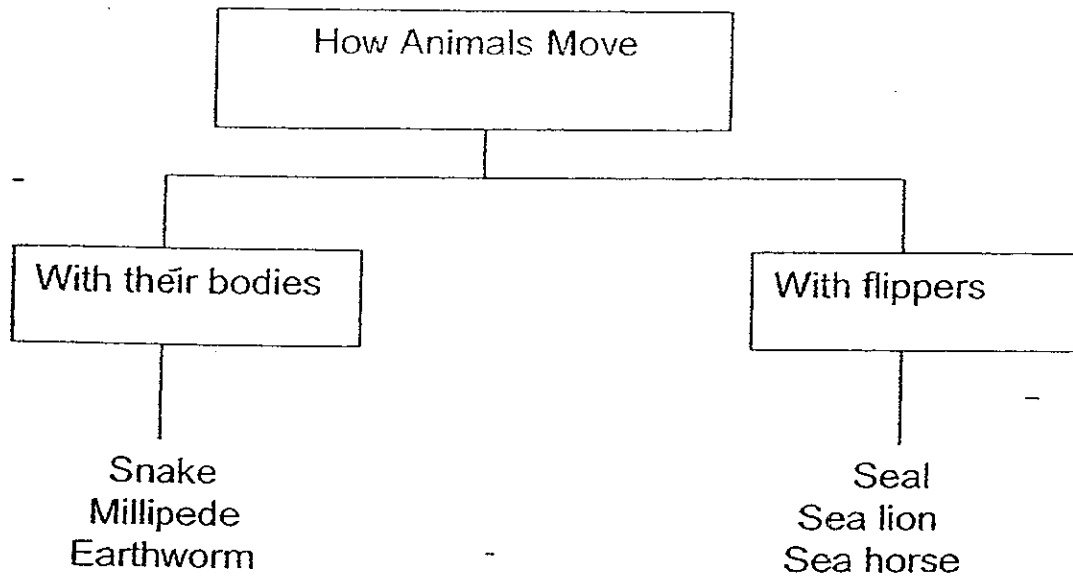
- (1) Joshua
 - (2) Eugene
 - (3) Jasmine
 - (4) Nicole
27. Which of the following is a characteristic of plants but not of animals?
- (1) They need air.
 - (2) They need water.
 - (3) They have chlorophyll.
 - (4) They can move away from danger.
28. Look at the diagram below.



Which part of the tadpole shortens as it grows bigger?

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

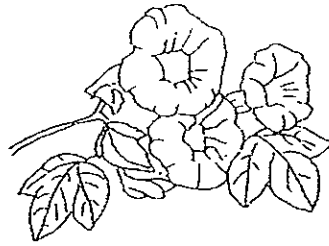
29. Study the classification chart below.



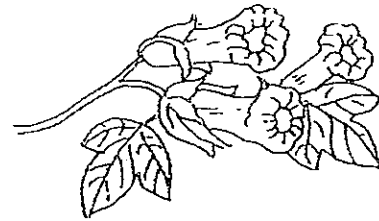
Which of the animals have been wrongly grouped?

- (1) Snake and millipede
- (2) Millipede and sea horse
- (3) Earthworm and seal
- (4) Sea horse and sea lion

30.



In the morning



In the afternoon

Which characteristic of living things are the morning glory flowers showing?

- (1) They need food.
- (2) They can grow.
- (3) They can reproduce.
- (4) They respond to changes.

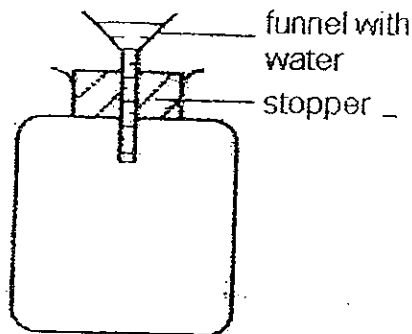
Primary 4 Science CA1 (2008)

Name : _____ ()
Class : P4 ()

Section B: 40 marks

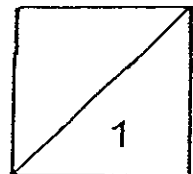
Answer all the questions in the spaces provided.

31. Jane fitted a bottle with a funnel as shown in the diagram below.

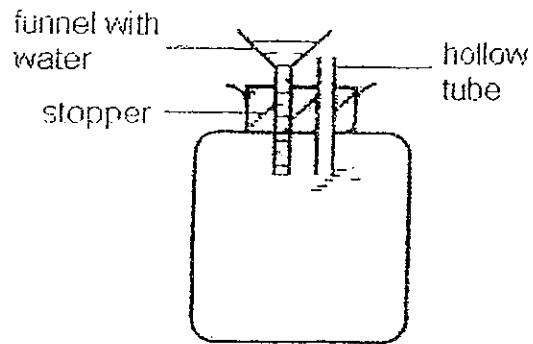


- (a) She poured water into the funnel and realized that no water flowed into the bottle.
Explain why the water could not enter the bottle.

[1]

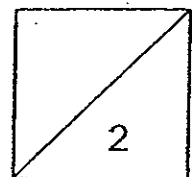


Then Jane decided to insert a tube as shown in the diagram below.



- (b) When she poured the water into the funnel, it flowed into the bottle. Explain why the water could flow into the bottle. [1]
-

- (c) Besides using the tube, suggest another way to enable water to flow into the bottle. [1]
-

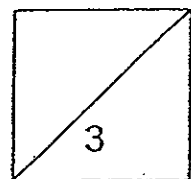


32. Alan was given the following items to carry out an activity to find the volume of a pebble.

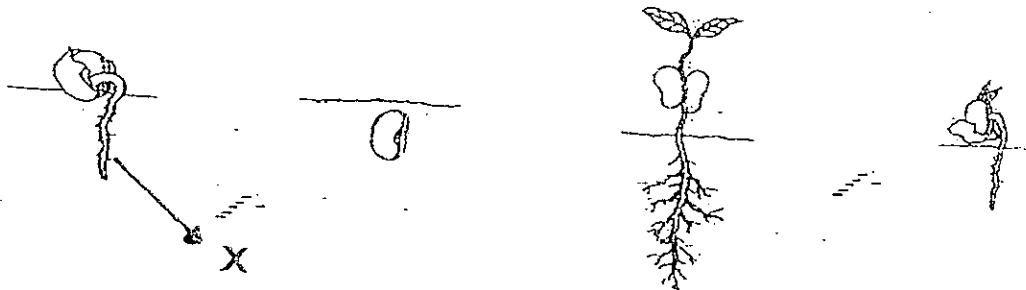
- Measuring cylinder
- A beaker
- A pebble

List down the steps he had to take to find the volume of the pebble.

[3]



33. The pictures below show the different stages in the life cycles of a plant.



Picture A

Picture B

Picture C

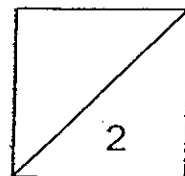
Picture D

(a) Arrange the pictures in the correct order by writing A, B, C and D in the boxes below to show how a seed grows into a seedling. [1]

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(b) What is the function of X? [1]

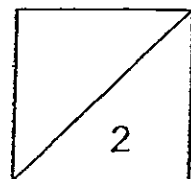
[1]



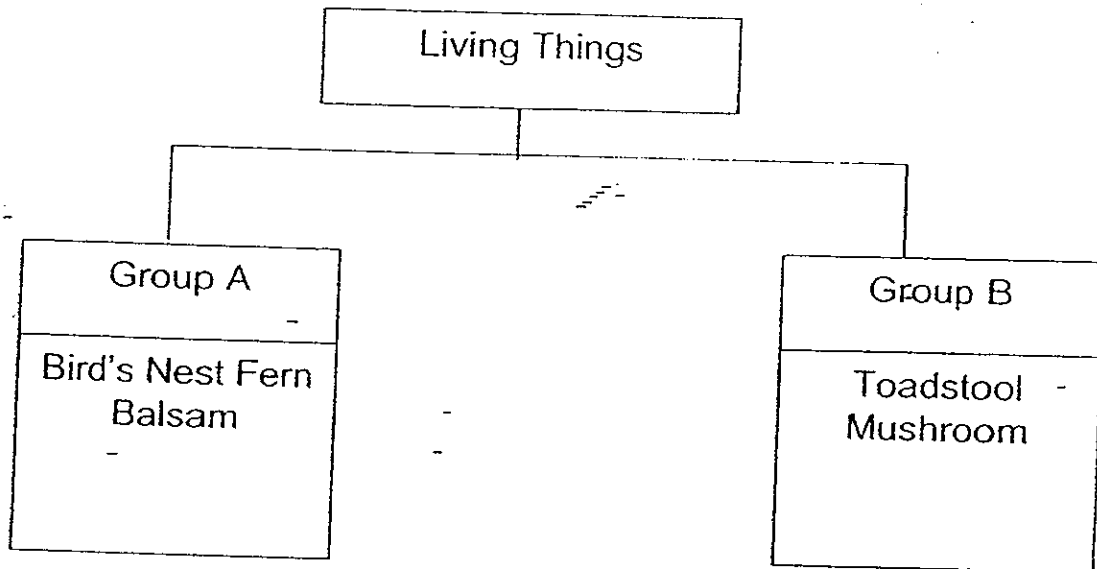
34. Write the 4 examples of matter in the correct box. [2]

lime juice	air	beer	marbles
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	Definite Volume	No Definite Volume
i) Definite Shape		
ii) No Definite Shape		

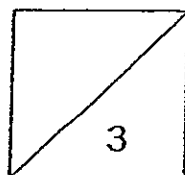


35. The classification chart below shows 2 groups of living things.



(a) State two differences between Group A and B. [2]

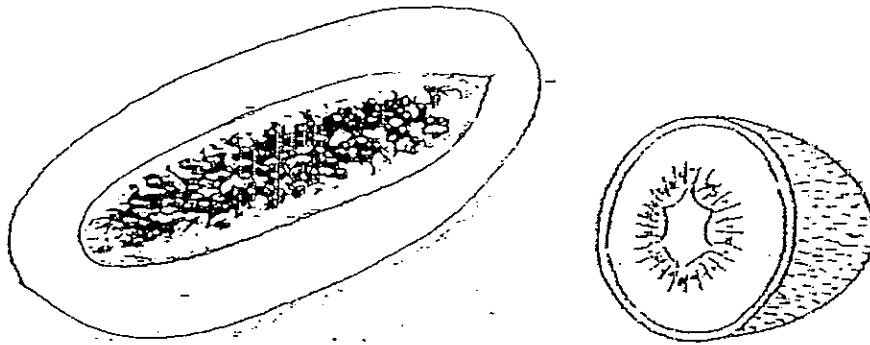
(b) Give another example of a living thing that can be classified in Group B. [1]



36. When a fruit is cut open, seeds can usually be seen.

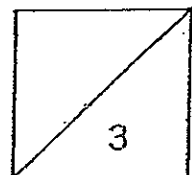
(a) Why are seeds important to a plant? [1]

The picture shows a papaya and a kiwi fruit.



(b) State one similarity about their flesh when they are ripe. [1]

(c) State one difference about their skin. [1]



37. Compare the two organisms shown below.

[3]



Organism A



Organism B

How similar?

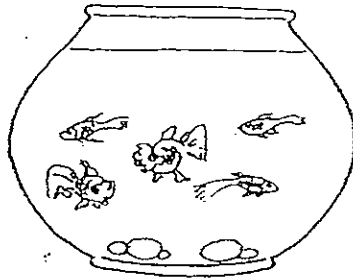
How different with regards to

the number of legs?

the number of body parts?



38. Ryan put some fish in his fish bowl.

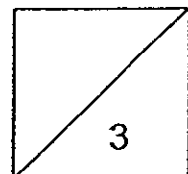


- (a) When Ryan tried to catch a fish with his bare hands, the fish swam away quickly. Which characteristic of living things was the fish showing? [1]

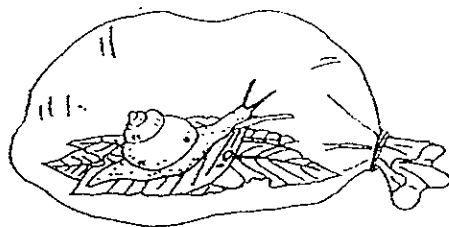
The fishes had just been fed yet some fishes were swimming close to the surface of the water.

- (b) Why do you think the fishes were swimming near the surface? [1]

- (c) After one week, Ryan found that all his fish had died. Write one possible reason for this. [1]

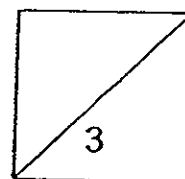


39. Alan brought a snail for his Science lesson. He placed the snail with some leaves in a sealed plastic bag.



- (a) What do you think would happen to the snail after a week? [1]

- (b) Explain your answer in (a). [2]



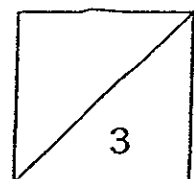
40. John placed some leaves and some meat in a cage. He then placed an animal X into the box. He recorded the mass of the leaves and the meat in the table as shown.

	Meat	Leaves
Beginning	80g	85g
After 3 hours	80g	80g
After 6 hours	80g	65g
After 9 hours	80g	30g

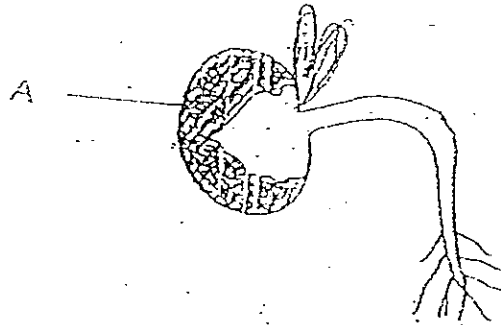
- (a) What do you notice about the mass of the leaves and meat? [1]

- (b) What can you say about animal X? [1]

- (c) Name an animal which could be X. [1]



41. The diagram shows a young seedling.



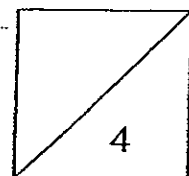
(a) What is the function of part (A)? [1]

(b) How does the seedling get its food at this stage of growth? [1]

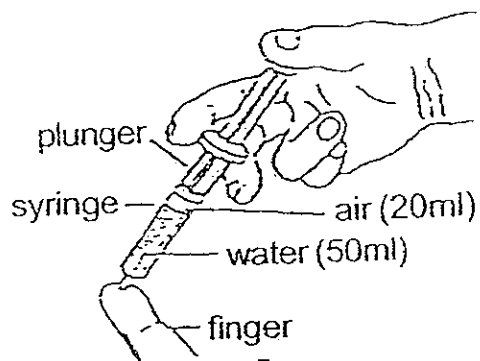
42. Sean accidentally stepped on a ping pong ball and it became dented but did not break.

(a) What happened to the air inside after the ping pong ball was dented? [1]

(b) Based on the above, list down another property of air. [1]



43. Jack carried out an activity with a syringe as shown below.



He pushed the plunger down.

(a) What observations would he make about:

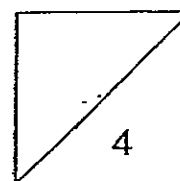
Air: _____ [1]

Water: _____ [1]

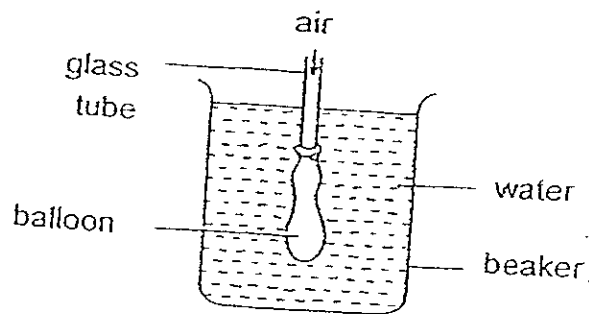
(b) What conclusion can Jack draw about the characteristics of air and water from the experiment above? [2]

Air: _____

Water: _____

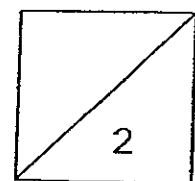


44. Mary fixed a balloon over a glass tube and submerged it into a beaker of water as shown in the diagram below.

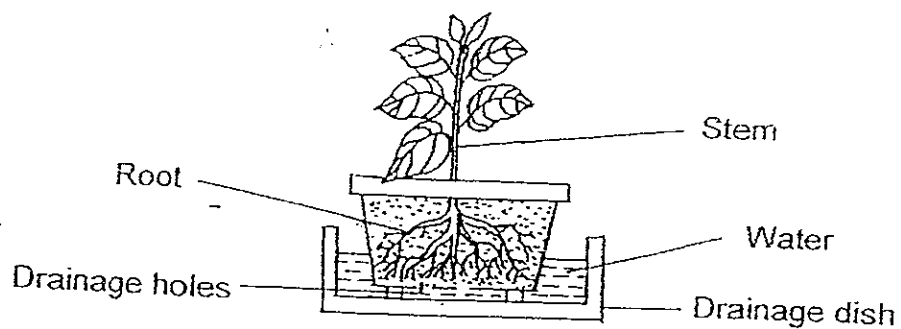


State 2 observations which can be made when she blew air through the tube as shown above. [2]

- (a) _____
- (b) _____

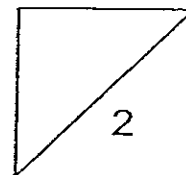


45. Mrs Bala went on a holiday and did not water the plant for a few days. When she returned, the plant was still alive.



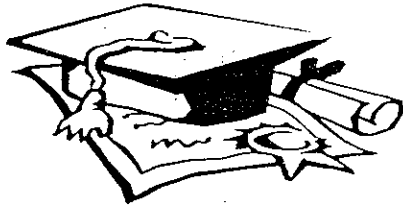
How did the plant keep itself alive?

[2]



End of Paper
Please check your work!





ANSWER SHEET

EXAM PAPER 2008

SCHOOL : AITONG PRIMARY SCHOOL
SUBJECT : PRIMARY 4 SCIENCE

TERM : CA 1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
3	4	4	2	4	4	1	4	3	2	3	1	3	2	4	4	3
Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30				
1	2	3	1	2	2	3	3	2	3	4	2	4				

31)a) Inside the bottle has air and air occupies space, so the water could not enter the bottle.

b) The air escapes from the hollow tube in order for the water to flow into the bottle.

Air in the bottle escapes through the straw.

c) Poke some holes in the stopper.

32) Pour some water in the measuring cylinder. Record the volume of water. Then put the pebble in the measuring cylinder and record it. After that, the volume of water subtract the volume of water and pebble and you can get the volume of pebble.

33)a) B, A, D, C

b) It helps to hold the seedling firmly to the ground.

34)i) marbles

Lime juice beer

air

35)a)Group A can make their own food but Group B cannot.
b)It is puffballs.

36)a)It helps the plant to reproduce.
b)Their flesh can be eaten.
c)The kiwi is hairy but the papaya is smooth.

37) Both respond to changes

The spider has eight legs.

The butterfly has six legs.

The spider has two body party.

The butterfly has three Body party.

38)a)Living things respond to changes.
b)The fishes need air to survive.
c)He does not feed his fish.

39)a)It will die.
b)The snail does not have enough oxygen.

40)a)The mass of the meat remains the same while the mass of the leaves decreases.
b)Animal X is a plant eaten.
c)It is a grasshopper.

41)a)It protects the seed.
b)It gets its food from the seed leaves.

42)a)The air had been compressed.
b)Air does not have definite shape.

43)a)Air: can be compressed.
Water: cannot be compressed.
b)Air: can be compressed.
Water: cannot be compressed.

44)a)The water will overflow.
b)The balloon has air in it.

45)The roots took in water from the drainage dish.