

**NANYANG PRIMARY SCHOOL**

**PRIMARY THREE SCIENCE**

**SEMESTRAL ASSESSMENT 1**

2006

**BOOKLET A**

Date : 8<sup>th</sup> May 2006

Duration : 1-h 45 min

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

Class: Primary 3 ( )

Marks Scored:

Booklet A:		60
Booklet B :		40
Total :		100

Parent's signature: .....

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.  
FOLLOW ALL INSTRUCTIONS CAREFULLY.**

**Booklet A consists of 11 printed pages including this cover page.**

**Section A (30 x 2 marks = 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 Answer Sheet provided.

1. Lizam observed that the leaves of the rain tree close in the evening. What characteristics of living things is the rain tree showing?
- A Living things can die.
  - B Living things can grow.
  - C Living things can move on their own.
  - D Living things can respond to changes around them.
- (1) A and B only  
(2) A and D only  
(3) B and C only  
(4) C and D only
2. Sally was asked to close her eyes and use only her hands to feel an object. Which of the following things about the object would she not be able to tell?
- A Its size
  - B Its taste
  - C Its colour
  - D Its texture
- (1) A and B only  
(2) A and D only  
(3) B and C only  
(4) C and D only

3. Study the diagrams below carefully.

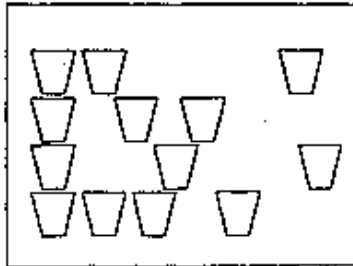


Diagram 1

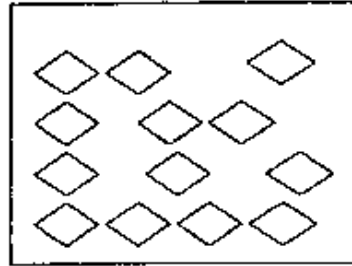


Diagram 2

How is Diagram 1 similar to Diagram 2?

- A The shape of the objects is similar.
- B The position of the objects is similar.
- C Both have the same number of sides.
- D Both have the same number of objects.

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

4. Joe learnt that animals move from place to place for many reasons. One day, his cat chased a mouse which then darted into a hole in the wall.

What are some of the reasons that animals move as shown by the cat and the mouse?

- A To reproduce
- B To obtain food
- C To obtain shelter
- D To escape from danger

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

5. One day at the zoo, Magdalene saw an animal without gills swimming. She noted that it had scales all over its body.

What animal is it likely to be?

- (1) a bird
- (2) a fish
- (3) a snake
- (4) a mammal

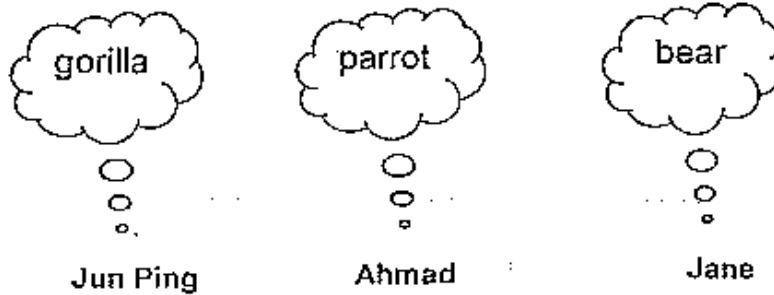
6. Study the picture of the beetle and the cricket carefully.



Based on the above diagram only, which one of the following shows a similarity between the two animals?

- (1) Both animals cannot fly.
  - (2) Both animals have no feelers.
  - (3) Both animals have three body parts.
  - (4) Both animals have two pairs of wings.
7. Which one of the following animals does not obtain its food directly from other animals?
- (1) Frog
  - (2) Leopard
  - (3) Squirrel
  - (4) Alligator
8. Which of the following animals is least likely to be found around the dustbin?
- (1) ant
  - (2) lizard
  - (3) ladybird
  - (4) cockroach

9. Three children were each asked to think of an animal that always appears in the same colour. Study the thought bubbles of the children below.



Who has/have correctly thought of one animal that always appears in the same colour?

- (1) Jane only
  - (2) Ahmad only
  - (3) Jun Ping only
  - (4) Jun Ping and Jane
10. While walking in a forest, Cassie observed that there were animals living underground:

Which pair of animals was likely to live underground in the forest?

	Animal 1	Animal 2
(1)	snail	rabbit
(2)	earthworm	grasshopper
(3)	rabbit	earthworm
(4)	grasshopper	snail

11. The outer coverings are useful to the animals in a variety of ways. What are some of these ways?

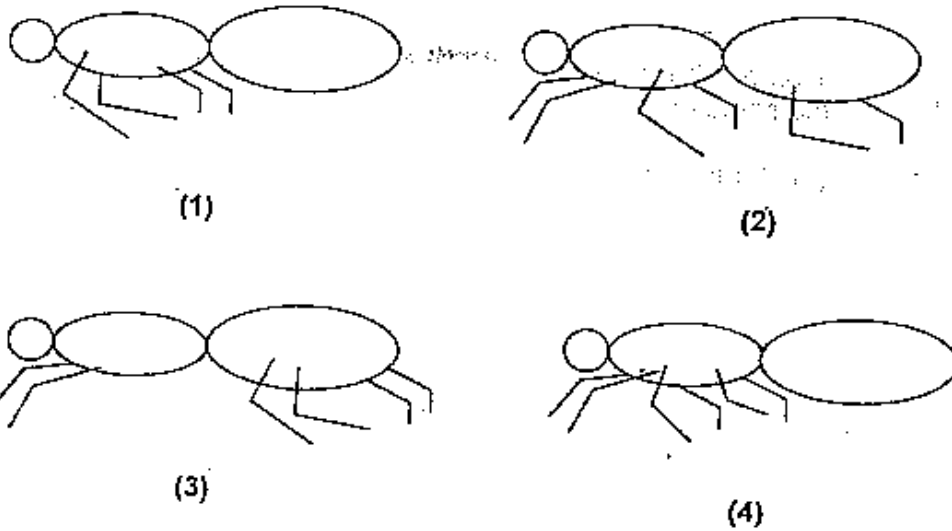
- A Keep the animals warm.
- B Protect the animals against injury.
- C Help the animals move around more easily.
- D Allow the animals to look more like their surroundings.

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

12. Anna claimed that all animals have outer body covering. However, Desmond disagreed. Which one of the following examples would Desmond use to support his answer?

- (1) Frog
- (2) Whale
- (3) Sea lion
- (4) Penguin

13. Joo Bin found an insect in the classroom. Which sketch below best represents the insect that he found?



14. Sean classified two groups of animals according to the type of food they can eat. Study these two groups, A and B, below carefully.

Group A	Group B
goat	cheetah
horse	penguin
zebra	crocodile

Which one of the following animals can be placed in both Group A and Group B?

- (1) eagle
- (2) shark
- (3) rabbit
- (4) chimpanzee

15. Study the two groups of animals below.

Group R	Group S
snake lizard	tiger kangaroo

Which of the following headings best describe Group R and S?

	Group R	Group S
(1)	reptiles	mammals
(2)	meat eaters	plant eaters
(3)	cannot swim	can swim
(4)	do not have tails	have tails

16. Which of the following statements about roots are true?

- A All roots grow underground.  
 B Some roots provide us with food.  
 C Roots that grow underground tend to grow downwards.

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

17. Simon wanted to find out if fertilisers help plants to grow. Which one of the following statements had to be true at the start of the experiment for the test to be a fair one?

- (1) One plant should be healthier than the other plant.  
(2) He should not give fertilisers to the healthier plant of the two.  
(3) He should use the same plants but they had to be of different sizes.  
(4) He should give equal amounts of water to plants that are of the same type.

18. Susan received a cactus plant as a gift and noticed that the leaves are needle-like. Which one of the following statements is **incorrect**?

- (1) The plant still needs sunlight to survive.
- (2) The leaves help the plant to reduce water loss.
- (3) The stem helps to transport water to the leaves.
- (4) The plant does not make its own food but depends on nutrients in the soil for food.

19. How is the rose flower different from the orchid flower?

- A Both flowers have petals with different shapes.
- B The rose flower grows singly while the orchid flowers grow in clusters.
- C Orchids from the same plant will have flowers of different colours while roses from the same plant will have the same colour.

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

20. Study the table below.

X	Y	Z
Cattail Water lily	Duckweed Water lettuce	Hydrilla Cabomba

Which of the following headings best represent X, Y and Z?

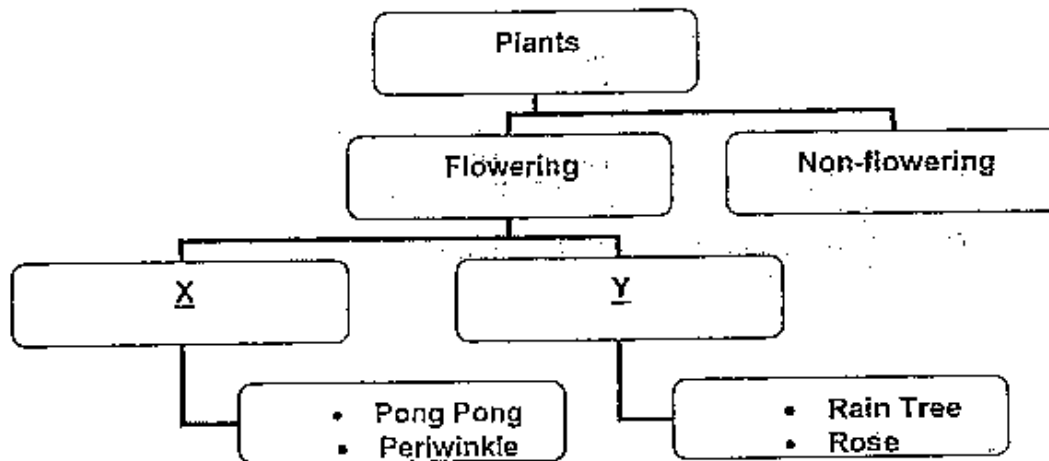
	X	Y	Z
(1)	fully submerged	floating	partially submerged
(2)	partially submerged	floating	fully submerged
(3)	floating	partially submerged	fully submerged
(4)	fully submerged	partially submerged	floating



21. Which of the following helps the leaves of the water lotus to float?

- (1) Its edges.
- (2) Its shape.
- (3) Its leaf stalk.
- (4) Its vein pattern.

22. Study the flow chart below.



What is a suitable heading for X?

- (1) bear fruits
- (2) poisonous
- (3) woody stem
- (4) compound leaves

23. In what way is a Bracket Fungus similar to a Stag's Horn Fern?

- A They both reproduce by spores.
- B They both make their own food.
- C They both need sunlight to grow.
- D Both can be found on living trees.

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

24. Rani placed 3 pieces of bread from the same loaf in different locations and gave them different amounts of water. The table below shows the conditions for the different slices of bread.

Bread	Number of tablespoons of water added daily	Location
X	5	under the sun
Y	5	in a storeroom
Z	20	in a storeroom

Which of the following statements is true?

- A Bread mould would appear on Bread X first.  
B Bread mould would appear on Bread Y and Z only.  
C She wanted to find the most suitable conditions to grow bread mould.  
D She wanted to find out if bread from the same loaf stays fresh for the same amount of time.
- (1) A and C only  
(2) A and D only  
(3) B and C only  
(4) B and D only
25. Which of the following statements is definitely true about all micro-organisms?
- (1) They cause diseases.  
(2) They can make their own food.  
(3) They can help us to digest food.  
(4) They cannot be seen without a microscope.
26. Which one of the following materials does not come from living things?
- (1) silk  
(2) wood  
(3) rubber  
(4) plastic

27. Study the table below.

Group A	Group B	Group C	Group D
keys	water hose	raincoat	bricks
safety pin	tyres	compact disc	cement

In which group would you place an eraser?

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

28. How are the characteristics of plastic similar to that of aluminium?

- A light
- B waterproof
- C translucent
- D good conductor of heat

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

29. Which one of the following objects is most likely to be made of only one material?

- (1) watch
- (2) blanket
- (3) umbrella
- (4) a pair of denim jeans

30. Ali wanted to set up a drink stall selling hot drinks. His speciality is 'teh tarik' which is best drunk while it is hot. The design for the cup is shown below.



Which one of the following materials should he use to make the cup so that the drink can be kept warm for a longer period of time?

- (1) metal
- (2) paper
- (3) plastic
- (4) styrofoam

**Section B (40 marks)**

Write your answers to questions 31 to 46 in the spaces provided.  
Marks will be deducted for misspelt key words.

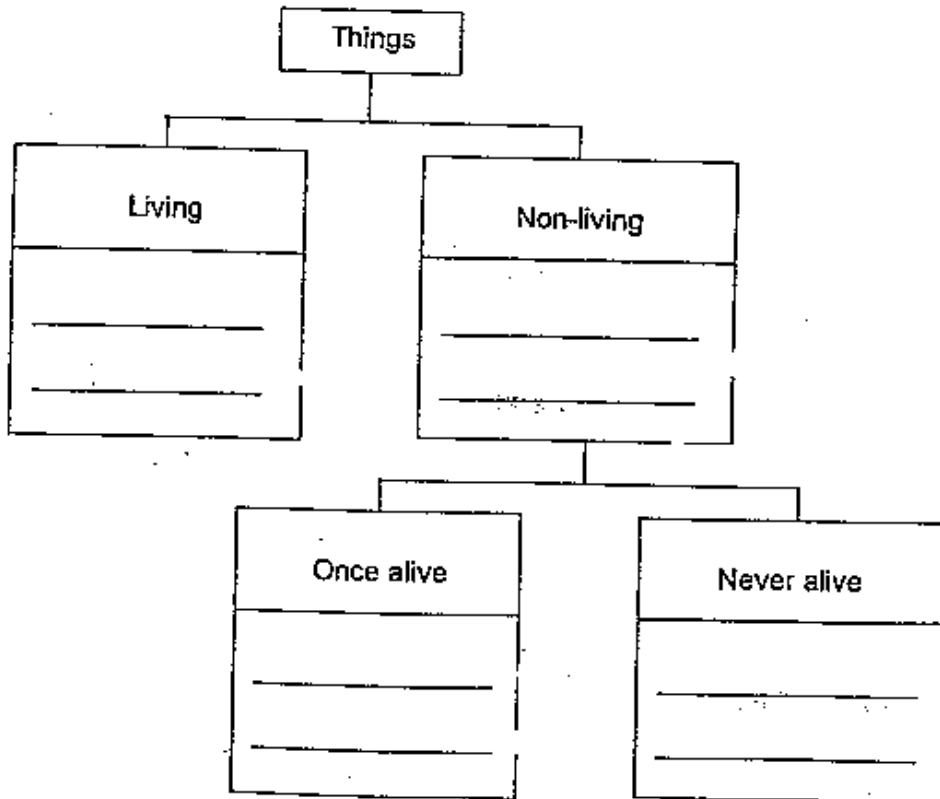
31. Peter believed that fire is not a living thing.  
What two reasons should he give to support his answer? (2 m)

a) \_\_\_\_\_

b) \_\_\_\_\_

32. Fill in the classification chart below with the four items given.  
Use each word only once and only in the most suitable blank. (2 m)

paper	bird's nest fern
mirror	dead cockroach



<< w/o Pg 12 >>

33. Narnia wrote down a list of things from the school field that she wanted to photograph for the school magazine.

<u>To photograph from the school field</u>	
<input checked="" type="checkbox"/>	snail
<input checked="" type="checkbox"/>	toad
<input checked="" type="checkbox"/>	lizard
<input type="checkbox"/>	stone
<input checked="" type="checkbox"/>	sailfish

- (a) Which item would she definitely not be able to find from the field? (1 m)

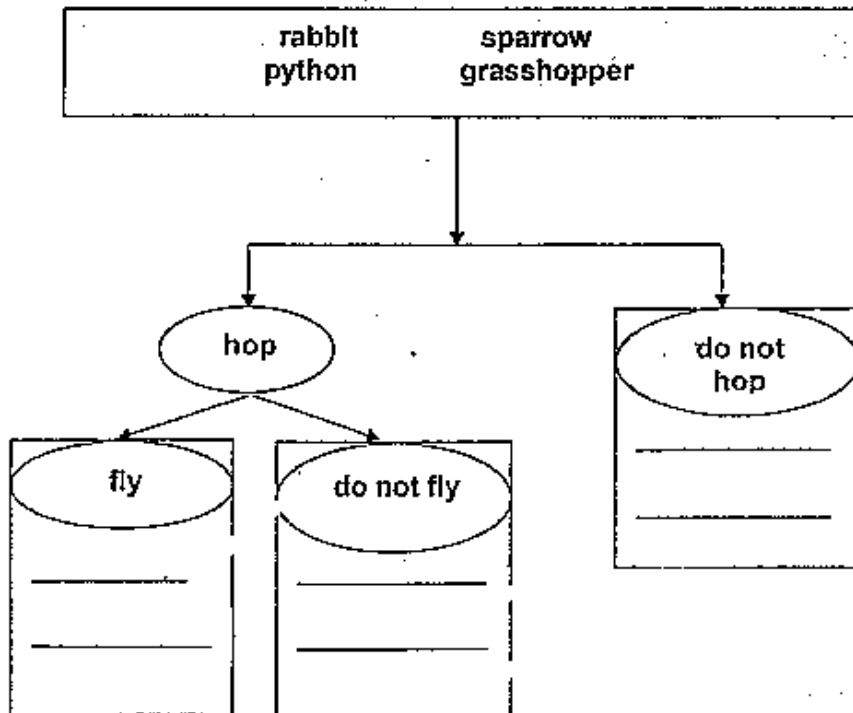
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- (b) Where would the item named in (a) be most likely found? (1m)

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34. Fill in the classification chart with the four items below.  
Use each word only once and only in the most suitable blank

(2 m)



35. Read the statements about mammals in the table below.  
Put a tick (✓) in the correct column.

(2 m)

	Statement	True	False
(a)	All mammals give birth.		
(b)	Mammals that live in the sea breathe with gills.		
(c)	All mammals feed their young with the mother's milk.		
(d)	All mammals have hair except the platypus and spiny anteater.		

36. Study the diagrams below carefully.

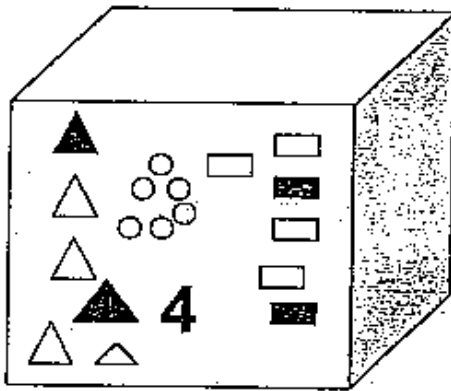


Diagram X

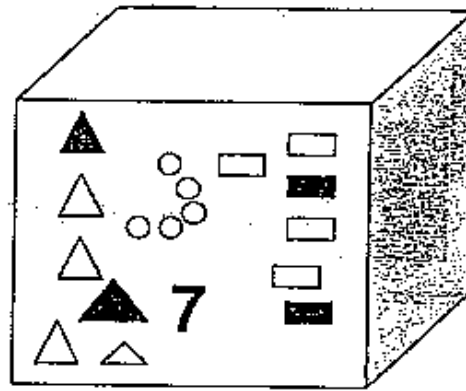


Diagram Y

Compare Diagram X with Diagram Y. List two differences that you see.  
(2 m)

Difference 1: \_\_\_\_\_

\_\_\_\_\_

Difference 2: \_\_\_\_\_

\_\_\_\_\_

37. Write a suitable word in each of the blanks below. (3 m)

All birds have one beak each. Although not all birds can fly, all birds

have a) \_\_\_\_\_ Two examples of birds that cannot fly

are the b) \_\_\_\_\_ and the c) \_\_\_\_\_.

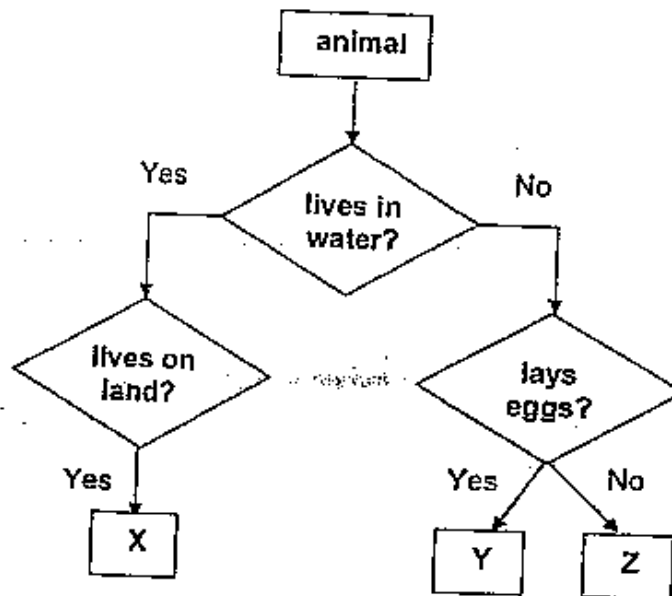
38. Using a ruler, draw lines to best match the insects on the left to the correct pairs of wings on the right. Each insect should be matched to only one answer. (2 m)

head louse • • 0 pair of wings

dragonfly • • 1 pair of wings

housefly • • 2 pairs of wings

39. The flow chart below shows the characteristics of three different animals represented by the letters X, Y and Z. Study it carefully and answer the following questions.



- a) Name one similarity between animals Y and Z. (1m)

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- b) In what way(s) is/are animals X and Y different? (1m)

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- c) Read the statement on animal X in the table below. Put a tick (✓) in the correct column. (1m)

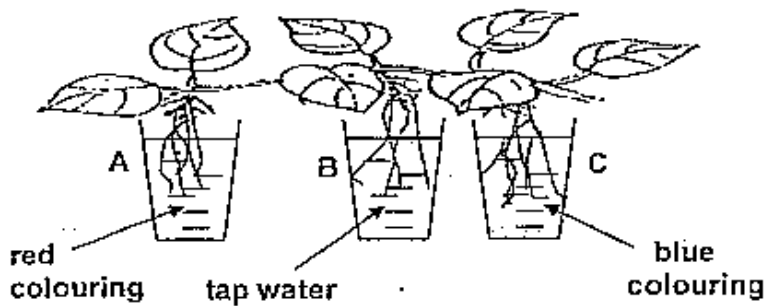
Statement	True	False	Not possible to tell
Animal X lays eggs.			

- d) Give an example of what animal X may be. (1m)

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40. Study the diagram below.



Hui Hui collected a plant with light coloured leaves, as shown above, and conducted an experiment by submerging the roots of the plant in 3 beakers of tap water, A, B and C, for some time. Beaker A had red colouring added to it whilst Beaker C had blue colouring added to it.

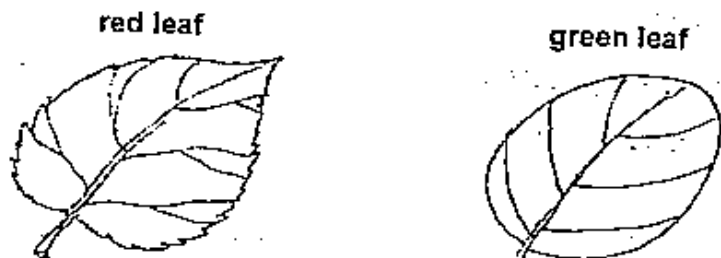
(a) What would she observe of the leaves after some time? (2 m)

---

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

---

41. Hussein picked up a green leaf and a red leaf to observe for a science lesson as shown below.



- (a) Based on the diagram above, state one difference in the leaves other than the colours. (1 m)

\_\_\_\_\_

- (b) Can the red leaf make food? Explain your answer. (2 m)

\_\_\_\_\_

42. The following examples provide us with food. Name the part for of the plant used for each of the example. (2 m)

(a) broccoli \_\_\_\_\_

(b) sugar cane \_\_\_\_\_

43. Steven was asked to go into the garden and classify the plants that he saw. After the walk in the garden, he came up with the following table.

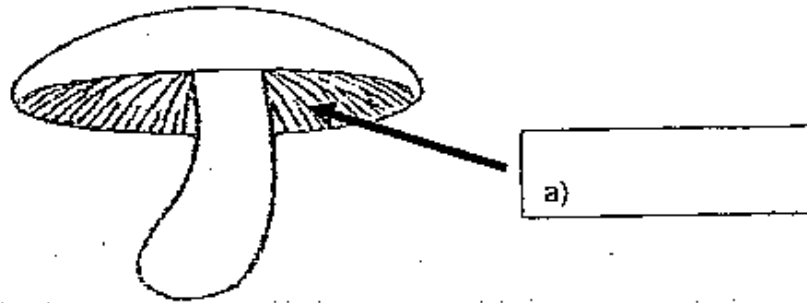
X	Y
money plant	rose
morning glory	hibiscus

Give a suitable heading for the groups above. (2 m)

X: \_\_\_\_\_

Y: \_\_\_\_\_

44. The diagram below shows a mushroom.



- (a) Name the part as shown above in the box. (1 m)
- (b) Name one function of the part labelled. (1 m)
- 

45. During a class discussion, Kai Seng said that fungi are harmful living things which could grow on our body and cause skin irritation. He also said that they were not useful. Sita, however, disagreed.

Give 2 examples of how fungi can be useful. (2 m)

- (i) \_\_\_\_\_
- (ii) \_\_\_\_\_

46. In Africa, people live in huts as shown below.



(a) Name 2 main materials that are used in building such huts. (2 m)

- (i) \_\_\_\_\_
- (ii) \_\_\_\_\_

(b) Write down one of the materials mentioned in (a) and give one characteristic that makes it suitable for building the hut. (1 m)

\_\_\_\_\_

\_\_\_\_\_

(c) For the same material mentioned in (b), give one disadvantage of using the material. (1 m)

\_\_\_\_\_

\_\_\_\_\_

-----END OF PAPER-----

**Answer Sheets**  
**Nanyang Pri 3 SA1 / 2006 Science**

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1) 4  | 2) 3  | 3) 4  | 4) 3  | 5) 3  |
| 6) 3  | 7) 3  | 8) 3  | 9) 3  | 10) 3 |
| 11) 4 | 12) 1 | 13) 4 | 14) 4 | 15) 1 |
| 16) 3 | 17) 4 | 18) 4 | 19) 1 | 20) 2 |
| 21) 2 | 22) 2 | 23) 2 | 24) 3 | 25) 4 |
| 26) 4 | 27) 1 | 28) 2 | 29) 4 | 30) 4 |

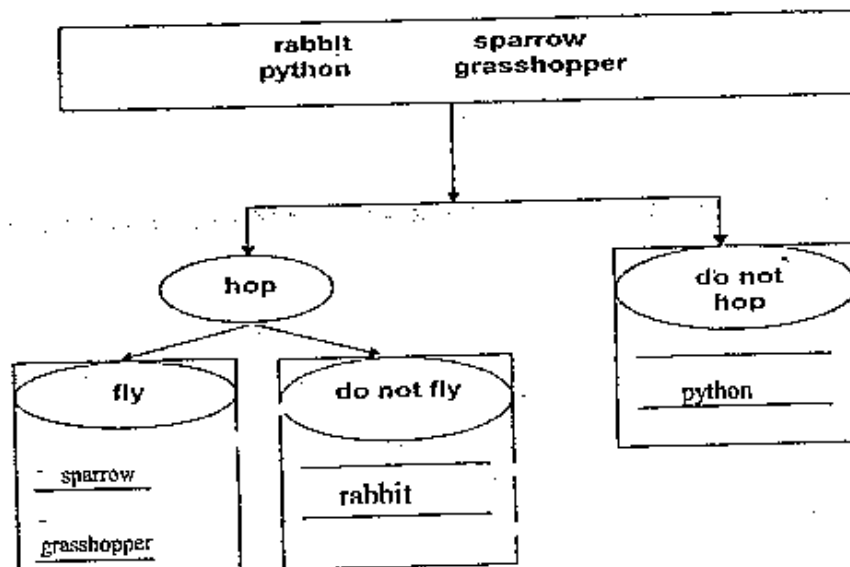
- Q31a. Fire does not reproduce.  
b. Fire does not need air, food and water.

- Q32. Living Things : bird's nest fern  
Non-living things : mirror

Once alive : paper  
Never alive : dead cockroach

- Q33a. The sailfish  
b. It will found in the sea.

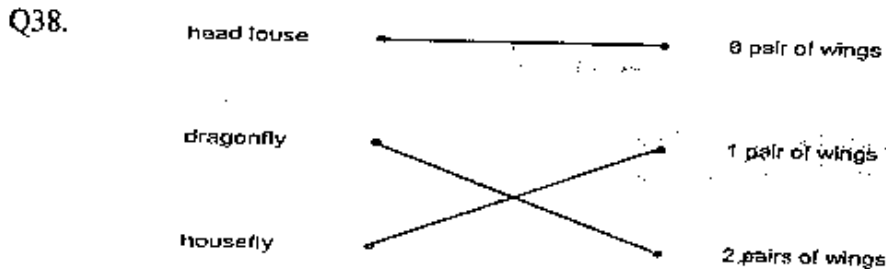
Q34.



- Q35a. All mammals give birth (False)  
 b. Mammals that live in the sea breathe with gills (False)  
 c. All mammals feed their young with the mother's milk. (True)  
 d. All mammals have hair except the platypus and spiny anteater. (False)

Q36. Difference 1 : The box numbers are different  
 Difference 2 : Diagram X has 6 circles and Diagram has 5 circles.

Q37. All birds have one beak each. Although not all birds can fly, all birds have wings. Two examples of birds that cannot fly are the emu and ostrich.



- Q39a. Both does not live in water.  
 b. Animal X can live in water but Animal Y does not in water

c.

Statement	True	False	Not possible to tell
Animal X lays eggs.			✓

d. Mudskipper

Q40a. Plant A the leaves turn red and Plant C the leaves turn blue.  
 b. The roots absorbed the coloured water and the coloured water was transported from the roots to various parts of the plant, turning its to red and blue

Q41a. The red leaves has a tooth-edged shapes and the green leaf has a oval shaped.

Q41b. Yes, the red leaf has chlorophyll.

Q42a. Broccoli : flower  
 Sugar can : stem

Q43 X : Plants with short, thin and woody stems  
Y : Plants cling onto other plants and things for support.

Q44a. Part A : Gills  
b. To store spores

Q45(i) Some fungi can be eaten  
(ii) The made bread fluffy.