| Name   |      | ( |
|--------|------|---|
| Hairie | <br> | \ |

Class \_ : Primary 3 ( )

Date : 16<sup>th</sup> May 2005



### CHIJ ST. NICHOLAS GIRLS' SCHOOL SEMESTRAL ASSESSMENT 1 – 2005

### **PRIMARY 3 SCIENCE**

### **BOOKLET A**

30 Questions

60 Marks

Total time for Booklet A and B: 1 h 30 min

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

#### SEMESTRAL ASSESSMENT 1 - 2005

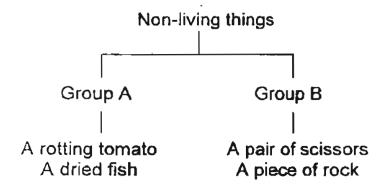
#### PRIMARY 3 SCIENCE

16-5-05

### 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. Study the classification diagram below.



Which one of the following can be classified under Group A?

- (1) A coin
- (2) A cardboard box
- (3) A crawling caterpillar
- (4) A stalk of plastic flower

- 2. A balsam plant needs \_\_\_\_\_ to survive but an earthworm does not.
  - (1) air
  - (2) food
  - (3) water
  - (4) sunlight
  - 3. Animals and plants are alike because they \_\_\_\_\_.
    - (1) grow and die
    - (2) make their own food
    - (3) give birth to their young
    - (4) move about to look for food
  - 4. The diagram on the left shows the weight and height of a baby. The baby is healthy and growing well.



Weight = 5 kg Height = 60 cm



(one month later)
Weight = ?
Height = ?

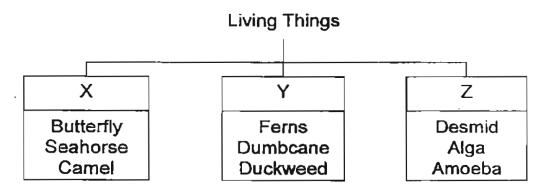
What will be her most likely weight and height one month later?

|     | Weight in kg | Height in cm |
|-----|--------------|--------------|
| (1) | 4            | 55           |
| (2) | 5            | 58           |
| (3) | 6            | 59           |
| (4) | 7            | 62           |

### 5. What do the diagrams below tell you about living things?



- (1) Living things grow in size.
- (2) Living things move about.
- (3) Living things die eventually.
- (4) Living things reproduce to survive.
- 6. Linda classified some living things into 3 groups as shown in the diagram.



Which one of the following can be used as headings for X, Y and Z?

| X               | Y               | Z               |
|-----------------|-----------------|-----------------|
| Animals         | Micro-organisms | Plants          |
| Animals         | Plants          | Fungi           |
| Micro-organisms | Plants          | Fungi           |
| Animals         | Plants          | Micro-organisms |

# A. In which group would you put the following living thing?



- (1) Fungi
- (2) Plants
- (3) Animals
- (4) Micro-organisms

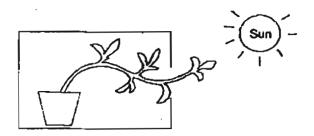
## 8/ How are mimosa and lalang similar to each other?



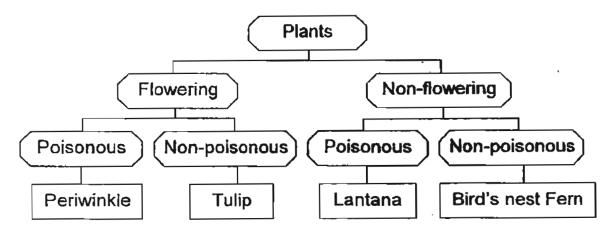
They are \_\_\_\_\_

- A: land plants
- Ɓ: water plants
- C: flowering plants
- 心: poisonous plants
- (1) A and C only
- (2) A and D only
- (3) B and C only
- (4) A, C and D only

9. Study the picture below carefully. Based on the picture, which one of the following statements about the plant is correct?



- (1) The plant is withering.
- (2) The plant needs more air.
- (3) The plant responds to sunlight.
- (4) The plant needs more rainwater.
- 70. The diagram below shows a classification table.



Which plant is grouped wrongly?

- (1) Tulip
- (2) Lantana
- (3) Periwinkle
- (4) Bird's nest Fern

11. Observe the two plants below.



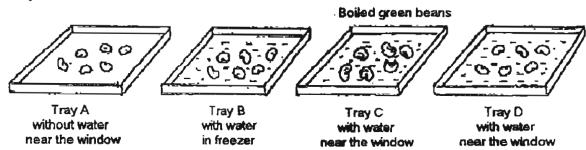




Fern

Based only on what you can **observe**, which one of the following statements is <u>true</u>?

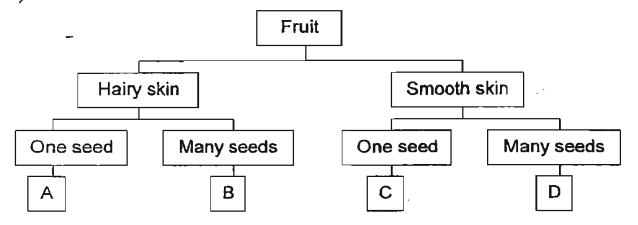
- (1) The money plant is bigger than the fern.
- (2) Both the money plant and the fern have green leaves.
- (3) The leaves of the money plant are smaller than the leaves of the fern.
- (4) The money plant reproduces by seeds but the fern reproduces by spores.
- 72. Four trays, each containing six green beans, are shown below. Trays B, C and D contained some water but not tray A. The green beans in tray C are first boiled before they are put onto the tray. Tray B is left in the freezer while the rest of the trays are left near the window for three days.



The seeds in tray \_\_\_\_ will have the best chance to develop into seedlings.

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

13. Study the classification table below.



In which boxes would you place the kiwi fruit and watermelon respectively?

|     | Kiwi fruit | Watermelon |
|-----|------------|------------|
| (1) | D          | В          |
| (2) | Α          | С          |
| (3) | В          | D          |
| (4) | С          | Α          |

14. The table below shows two groups of animals.

|     | Fish       | Mammal  |
|-----|------------|---------|
| (A) | Shark      | Cat     |
| (B) | Guppy      | Dolphin |
| (C) | Silverfish | Giraffe |
| (D) | Swordtail  | Whale   |

Which of the above has been grouped wrongly?

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

- 15. Lisa made the following statement, "Animal M has four legs. It gives birth and feeds its young with milk."

  From Lisa's statement above, which group of animals does M belong to?
  - (1) Bird
  - (2) Fish
  - (3) Insects
  - (4) Mammal
- 16. Which one of the following animals gives birth to its young alive?
  - (1) Molly
  - (2) Tilapia
  - (3) Slingray
  - (4) Goldfish
- 17. Feathers are important to birds because they
  - A: help the birds to fly.
  - B: keep the birds warm.
  - C: help the birds to swim.
  - D: protect the skin of the birds.
    - (1) A only
    - (2) A and D only
    - (3) A, B and D only
    - (4) A, B, C, D







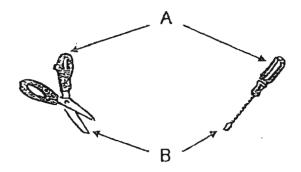
Cobra

Penguin

Gorilla

Which one of the following characteristics can be used to group the above animals?

- (1) Animals that lay eggs.
- (2) Animals that cannot fly.
- (3) Animals that have four limbs.
- (4) Animals that have hair on their bodies.
- 19. The diagram below shows a pair of scissors and a screwdriver.



Which one of the following pairs shows the correct materials for A and B?

|     | A       | В       |
|-----|---------|---------|
| (1) | Fabric  | Wood    |
| (2) | Metal   | Plastic |
| (3) | Rubber  | Ceramic |
| (4) | Plastic | Metal   |

# 20. Look at the table below.

|       | Metal    | Wood | Rubber | Plastic |
|-------|----------|------|--------|---------|
| Comb  |          |      |        | 1       |
| Ruler |          | 1    |        |         |
| Key   | <b>V</b> |      |        |         |
| Z     | <b>✓</b> |      |        |         |
| Ball  |          |      | 1      |         |
| Table |          | ✓    |        |         |

Sandra ticked a checklist on the materials used for making the six objects. Which of the following objects is Z most likely to be?

- (1) nail
- (2) cushion
- (3) flower pot
- (4) swimming float

| 21. | Kathy did an experiment to find out the properties of an object. |
|-----|--|
| //  | She hit it with her hands and it became flat. She dropped it but |
|     | it did not break. What was the object she was testing?           |

- (1) Magnet
- (2) Fish tank
- (3) Plasticine
- (4) Basketball

| <i>2</i> 2. | Plastic bottles are more con | nmonly used today t | han glass |
|-------------|------------------------------|---------------------|-----------|
| , ,         | bottles because glass is     | <del></del>         |           |

- (1) light
- (2) hard
- (3) brittle
- (4) strong

28. Jean conducted a series of test on materials P, Q, R and S. Her results are tabulated below.

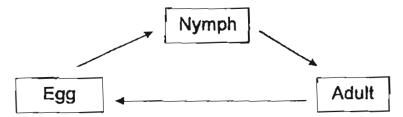
| Material             | Р   | Q   | R   | S   |
|----------------------|-----|-----|-----|-----|
| Is it fragile?       | Yes | No  | No  | No  |
| Can it bend?         | No  | Yes | No  | Yes |
| Can it be stretched? | No  | Yes | No  | Yes |
| Is it waterproof?    | Yes | Yes | Yes | No  |

What material, P, Q, R or S, should Jean use to make a bookshelf and a tent cover respectively?

|     | Bookshelf | Tent cover |
|-----|-----------|------------|
| (1) | Р         | R          |
| (2) | , Q       | S          |
| (3) | R         | Q          |
| (4) | S         | Р          |

- 24. Which one of the following things is made of a combination of materials?
  - (1) String
  - (2) Eraser
  - (3) Balloon
  - (4) Sharpener

25. The diagram below shows the life cycle of a grasshopper.



Which one of the following animals has a similar life cycle as the grasshopper?

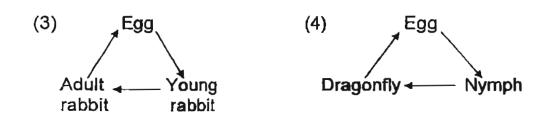
- (1) Frog
- (2) Moth
- (3) Mosquito
- (4) Cockroach

26. At which stage or stages in the life cycle of a butterfly does it remain stationary?

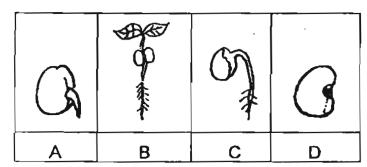
- A: Egg
- B: Pupa
- C: Adult
- D: Caterpillar
- (1) A only
- (2) B only
- (3) A and B only
- (4) A, B and D only

## 27. Which one of the following life cycles is incorrect?



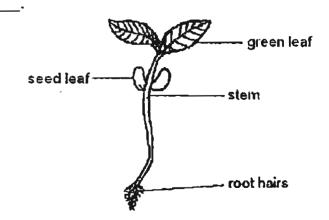


—28. The diagram shows the stages in the growth of a seed to a young plant. At which stage is sunlight necessary for the seedling?



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

- 29. Peter wants to grow a green bean plant from its seed. What conditions are needed for the seed to germinate?
  - A: air
  - B: water
  - C: sunlight
  - D: warmth
  - (1) A and B only
  - (2) C and D only
  - (3) A, B and D only
  - (4) A, B, C and D
- 39. The diagram below shows a seedling. Before the first pair of green leaves appeared, the seedling obtained its food from the



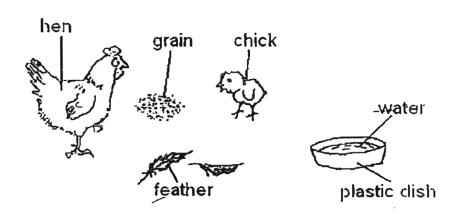
- (1) stem
- (2) root hairs
- (3) seed leaves
- (4) green leaves

& END OF SECTION A &

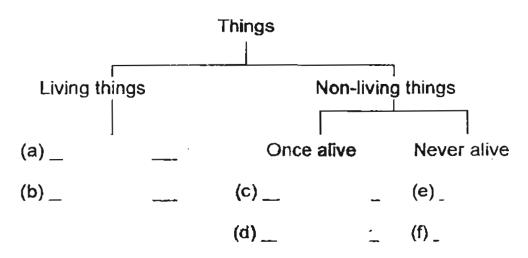
### Section B: (40 marks)

Write your answers in the space provided.

[4]. Look at the things shown in the diagram below.

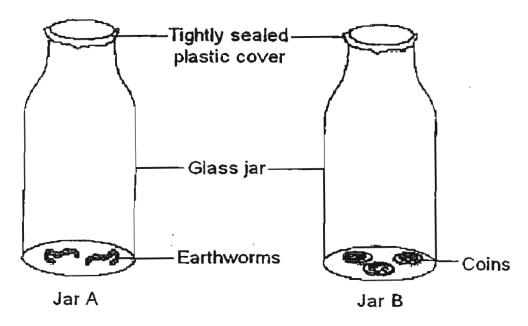


Group these things under the appropriate headings in the classification diagram below. (3m)



3m

# 32. Study the diagram below.



James set up an experiment as shown above. He placed some earthworms and coins into two identical jars. Both jars were then sealed tightly with a cover.

(a) What do you think James will notice in Jar A after 2 days?

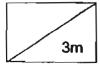
(1m)

(b) What do you think James will notice in Jar B after 2 days?

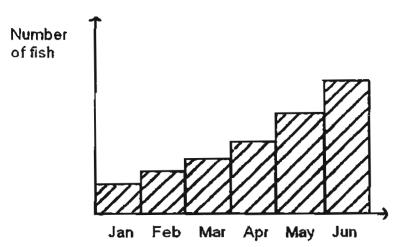
(1m)

(c) What can James learn from this experiment?

(1m)



33. Sam studied the fish that lived in a natural pond. He drew the bar graph shown below to show the number of fish found in the pond every month for six months.

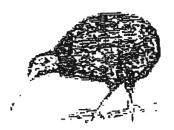


(a) From the graph above, what do you notice about the number of fish? (1m)

(b) What characteristics of a living thing causes the change in the number of fish? (1m)



34.



| (a)Which group o | fanimals does a kiwi belong to? | (1m) |
|------------------|---------------------------------|------|
|------------------|---------------------------------|------|

- (b) Give two main characteristics of this group of animals.
- (i)\_
- (ii)

(2m)

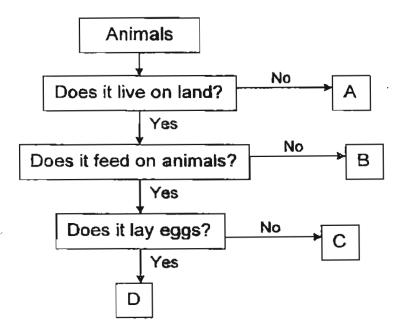
35. The picture below shows a millipede.



Is it an insect? Give a reason for your answer.

(2m)

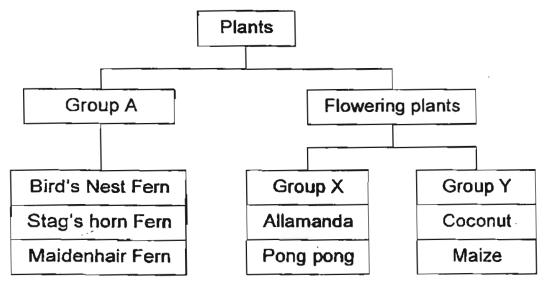
36/ Study the flowchart below.



From the list of animals given in the box below, select the most appropriate animal that best represents A, B, C and D.

| Lion | Chicken | Whale | Giraffe |
|------|---------|-------|---------|
| A:   |         |       | (1m)    |
| B:   |         |       | (1m)    |
| C:   |         |       | (1m)    |
| D: _ | -       |       | (1m)    |

\_37. Study the classification diagram.



(a) Give a suitable heading for Group A.

|  | (1m) |
|--|------|
|--|------|

- (b) Give a suitable heading for Group X and Group Y.
- (i) Group X:

\_\_\_\_\_(1m)

(ii) Group Y:

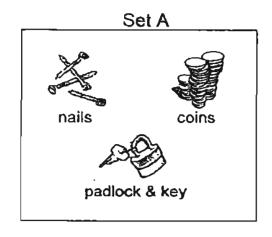
\_\_\_\_\_ (1m)

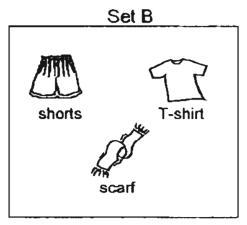
| , . | mould   | chlorophyll                                   | yeast                               | food           | plants           |
|-----|---|---|-------------------------------------|----------------|------------------|
|     |   | cannot make thei                              |                                     | ecause they o  | do not           |
|     | (b)   | is a  | type of fung                        | us that grows  | on bread.        |
|     | (c) Fungi<br>dead.  | feed on                                       | a                                   | nd animals tha | at are           |
|     | (d)   | is t  | ised for mal                        | king bread.    |                  |
|     |   |   |                                     |                |                  |
| 39. | Write 'TRUE' for every true statement and 'FALSE' for every false statement in the boxes provided. (2m) |   |                                     |                | . <del>-</del> . |
|     | (a) The anchor of a ship is made from iron because iron has the ability to sink.                        |   |                                     |                |                  |
|     | /L. 3. A  |   |                                     | . –            |                  |
|     |   | al ruler is able to se<br>ecause it is flexib |                                     | oden           |                  |
|     | ruler b (c) When materia  |   | le.<br>, the choice<br>eir physical | of [           |                  |

- 40 (a) What is the outer covering of a fish?

(1m)

- (b) Give one important purpose of this outer covering.
- 44. Study the two sets of objects.





(a) What materials are they made of?

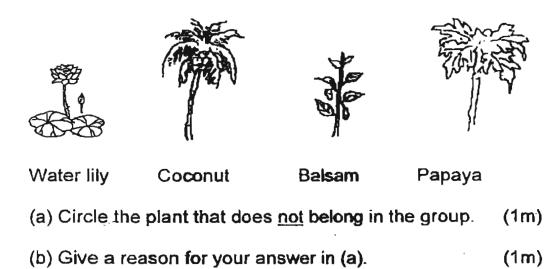
Set A is made of \_\_\_\_\_\_.

Set B is made of \_\_\_\_\_\_.

(b) Which set would you put 'handkerchief' in? (1m)

(2m)

42/. Look at the pictures below.



The diagram below shows the different stages in the life cycle of a cockroach.



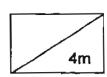
Stage X



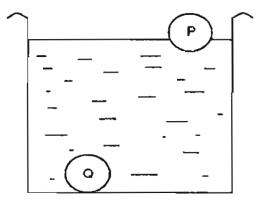
Stage Y

List two differences between Stage X and Stage Y. (2m)

- (i)\_
- (ii)



Bill set up an experiment as shown in the diagram below.
2 similar sized balls were pushed into the water and released after a short while.



(a) What do you think Bill was trying to find out? (1m)

(b) If Bill had used a steel and a plastic ball, identify the positions of the balls, P and Q, as shown in the diagram above. (1m)

| Material          | Position |
|-------------------|----------|
| (i) steel ball    |          |
| (ii) plastic ball |          |

45. The diagram below shows a pair of spectacles.

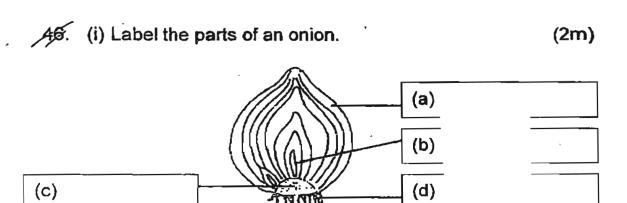


| ĺ | (a)            | Name two    | possible | materials | which X     | can be | made | of             |
|---|----------------|-------------|----------|-----------|-------------|--------|------|----------------|
| ١ | ( <del>•</del> | TAGING LAND | Possible | materials | 44111011 77 |        | Hauc | $\mathbf{v}$ . |

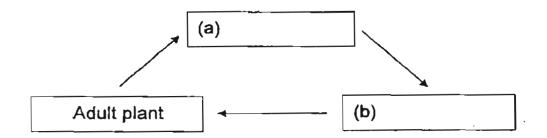
| and | i . | (1m) |
|-----|-----|------|
|     |     |      |

\_\_\_\_\_

2m

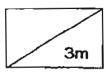


(ii) Complete the life cycle of the onion below. (1m)



### - END OF PAPER -

Have you checked your work?



| $\neg$    | Pr-3 Science-sAl                          | Dance (6-5-05 Hz.               |
|-----------|---|---------------------------------|
|           | 2 6-4 11-3 16-1                           | 3 36-3                          |
| _2        | 4 T-1 13-4 1T-3                           | 77 - 3 7 - 2                    |
| 3         | 1 8-1 13-3 18-2                           | 23-3 28-2                       |
| 4         | 4 9-3 14-3 19-4                           | 4 29 - 3                        |
| _5        | 3 10-3 15-4 20-1                          | 25-4 30-3                       |
|           |   |                                 |
| 31        | a) hen c) grain e) water                  |                                 |
|           | b) chick d) feather f) plastic            | dish                            |
| <u>32</u> | a) The earthworms in jar A will die       |                                 |
|           | b) The coins in jar B will still remain.  |                                 |
|           | c) Living things need air but non-living  |                                 |
| 33        | a) The number of fishes increased.        |                                 |
|           | b) Living things reproduce.               |                                 |
| 311       | a) Birds                                  | 44-a) He was trying to find out |
|           | bi) It has a beak.                        | whether object P and Q has      |
|           | ii) It is covered with feathers.          | the ability to float or sink in |
|           | No. It does not have 6 legs.              | water.                          |
|           | A: whale c: lion                          | b) i) sink in water             |
|           | 8: giraffe D: chicken                     | ii) float in water              |
| 3]        | a) Non-flowering plants.                  | 45 - 9) plastic, metal          |
|           | bi) poisonous plants                      | b) Glass. H is transparent.     |
|           | (i) non-poisonous plants                  | 146-i)a) leaves                 |
| 3&        | a) Chlorophyll c) plants                  | b) bud                          |
|           | b) Mould d) Yeast                         | c) stem                         |
|           | T, F, T, T                                | d) roots                        |
| .40       | a) The outer covering of a fish is scales |                                 |
| ·         | b) It is to protect the fish's body.      | b) young plant                  |
| 451_      | a) A: metal B: fabric                     | <u> </u>                        |
|           | 6) Set B.                                 |                                 |
| 4         | a) water lily                             |                                 |
| //2       | b) Water lily is a water plant but the r  |                                 |
| 45        | i) stage x has wings but stage Y does     |                                 |
|           | ii) Stage X has a pair of longer feelers  | mon stage 1.                    |
| ~ · ·     | <del></del>                               |                                 |