

# METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887



MID-YEAR EXAMINATION 2012

PRIMARY 3

SCIENCE

BOOKLET A

Total Time for Booklets A and B: 1 hour 45 minutes

## INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.

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

Class: Primary 3. \_\_\_\_\_

Date: 11 May 2012

This booklet consists of 14 printed pages including this page.



## SECTION A : 50 marks

For each question from 1 to 25, 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.

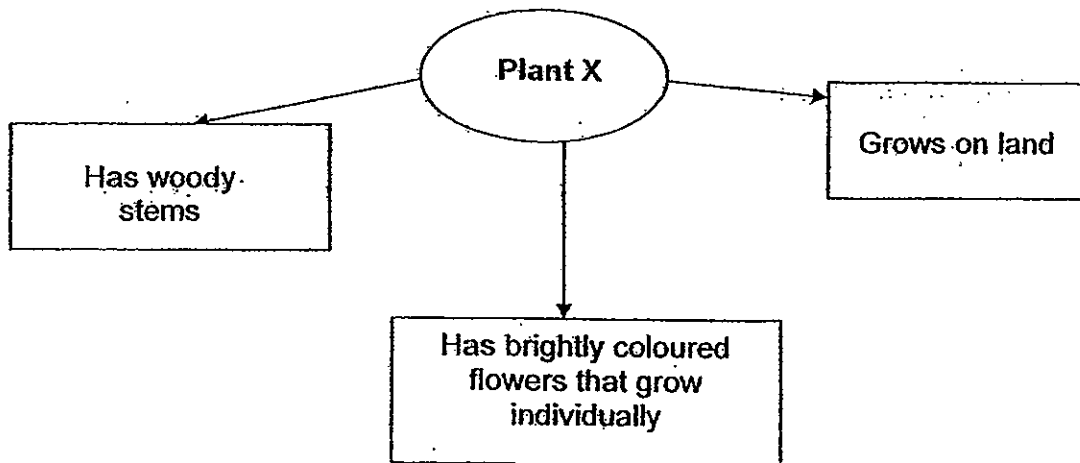
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1 Which of the following do living things need to stay alive?

- A. sunlight
- B. water
- C. food
- D. air

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

2 Study the concept map below.

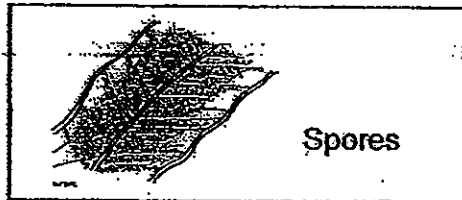
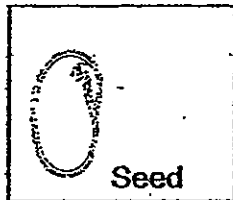


Which of the following is most likely to be Plant X?

- (1) Lotus
- (2) Rose
- (3) Orchid
- (4) Morning glory

(Go on to the next page)

3 In what way is a seed and a spore similar?



- A. They can be eaten.
- B. They are too small to be seen.
- C. They can grow into new plants.
- D. They are be found on the underside of the leaves.

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

4 Which one of the following shows the correct classification?

	Living things	Non-living things
(1)	Lizard	Mite
(2)	Grass	Moon
(3)	Clouds	Star
(4)	Lightning	Sun

(Go on to the next page)

- 5 Mary grew four green plants in her garden. She treated the four plants differently as shown in the table below.

Plants	Conditions			
	Fertilizer	Air	Sunlight	Water
A	√	X	X	√
B	√	X	√	√
C	X	√	√	√
D	√	√	√	X

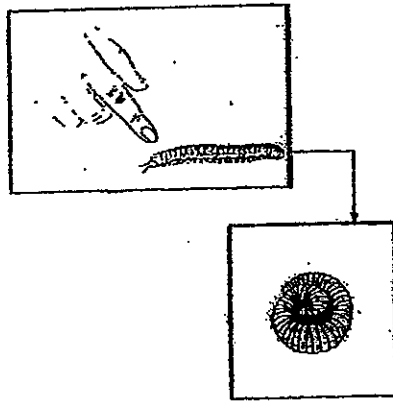
Which of the above plants will grow well?

- (1) A only
  - (2) B only
  - (3) C only
  - (4) D only
- 6 Which of the following things were never alive?

- A: Metal gate
- B: Fur coat
- C: Garden soil
- D: Leather sofa

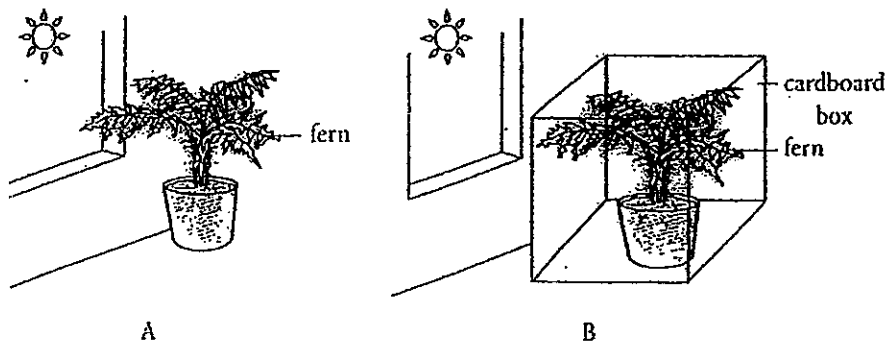
- (1) A and B only
- (2) A and C only
- (3) B and D only
- (4) A, B, C and D

- 7 Look at the picture below carefully.  
What can you conclude about living things?



- (1) Living things die.
- (2) Living things grow.
- (3) Living things reproduce.
- (4) Living things can respond to changes around them.

- 8 Leancy set up an experiment as shown below.

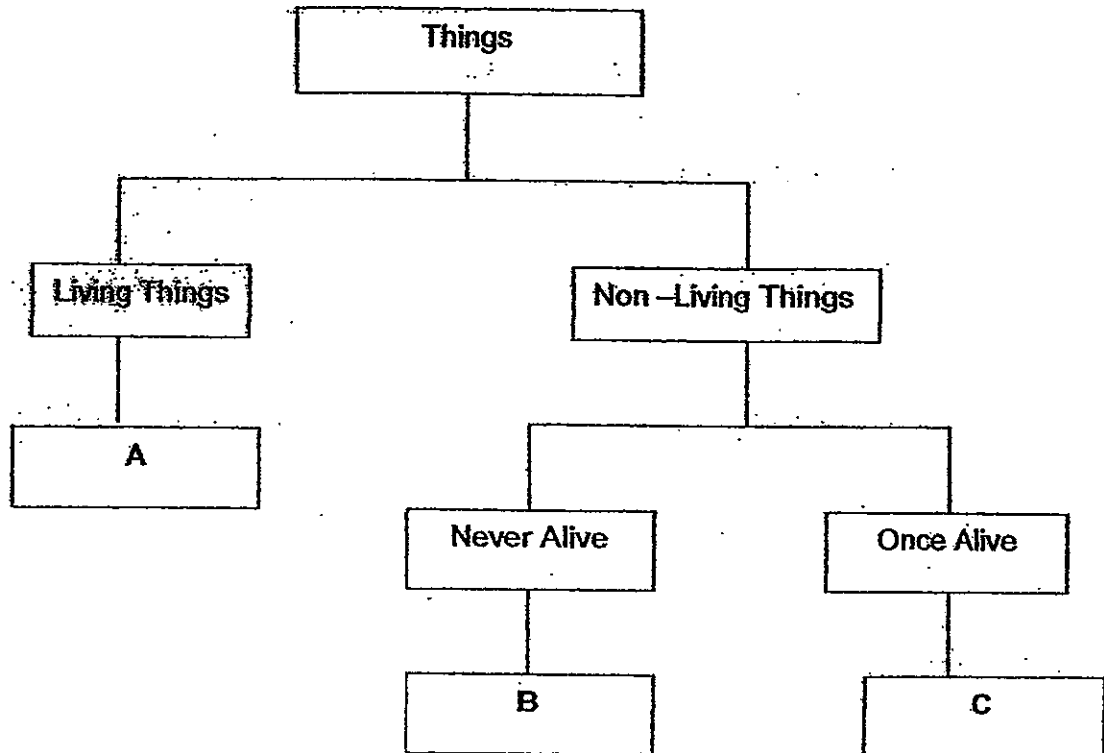


What was Leancy trying to find out from this experiment?

- (1) Ferns need water to survive.
- (2) Ferns need food to survive.
- (3) Ferns need warmth to survive.
- (4) Ferns need sunlight to survive.

(Go on to the next page)

9 Study the classification diagram below carefully.



Which of the following best represent A, B and C respectively?

	A	B	C
(1)	Zebra	Marble	Leather bag
(2)	Dragonfly	Wooden bed	Metal spoon
(3)	Mushroom	Porcelain plate	Glass
(4)	Tuna	Cotton shirt	Key

(Go on to the next page)

10 Peter told his mother that plants were not living things since they could not move from place to place on their own. However, his mother said that he was wrong. Which statement best explains why plants are living things and can move by themselves?

- A: The flowers grow into fruits.
- B: The stem holds the leaves, flowers and fruits.
- C: The leaves of the plants sway to the direction on the wind.
- D: The leaves of the plant grow upwards and outwards to get sunlight.

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

11 Animals move about to \_\_\_\_\_

- A. look for food
- B. look for shelter
- C. escape from danger

- (1) A only
- (2) A and B only
- (3) A and C only
- (4) All of the above

(Go on to the next page)



12 Fish have fins.

Why are the fins important to them?

- A. Fins help them to swim.
- B. Fins protect their body.
- C. Fins help them to breathe.
- D. Fins help them keep their balance.

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

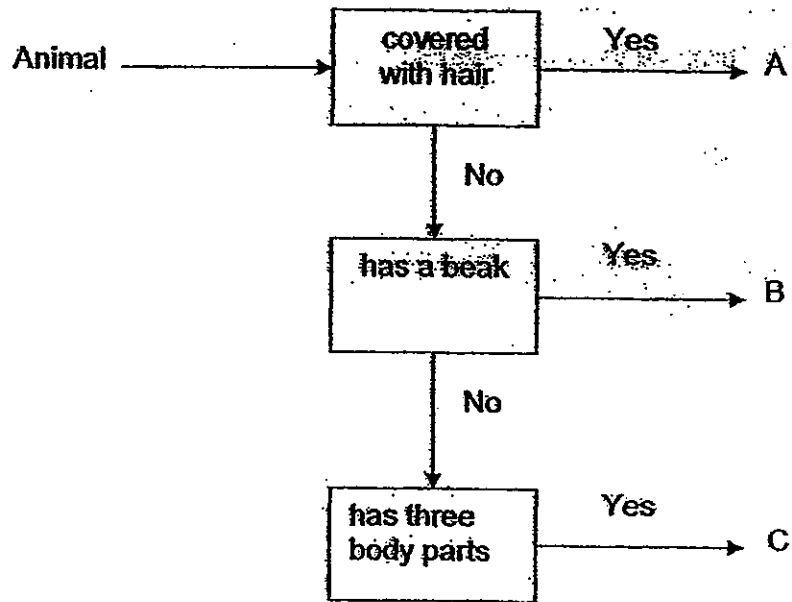
13 Study the table below.

Group A	Group B
butterfly	elephant
bird	cow
goldfish	whale

The animals have been grouped according to \_\_\_\_\_.

- (1) their diet
- (2) their body covering
- (3) the way they move
- (4) the way they reproduce

Study the flowchart below and answer questions 14 and 15.



14 Which of the following animals could B represent?

- (1) goat
- (2) moth
- (3) mynah
- (4) guppy

15 Only Animal C has \_\_\_\_\_.

- (1) legs
- (2) wings
- (3) feathers
- (4) antennae

(Go on to the next page)

16 Which statement about fungi is **NOT** correct?

- (1) Fungi reproduce by spores.
- (2) Fungi are non-flowering plants.
- ~~(3) Fungi need air, food and water.~~
- (4) Fungi can be harmful or useful.

17 Which of the following statements about bacteria are **true**?

- A. Bacteria are non-living things.
- B. Bacteria can be useful or harmful.
- C. Bacteria feed on living and dead plants and animals.
- D. Bacteria can only be seen under a microscope.

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

18 Rani, Lili, Siti and Jill made the following statements.

Rani : Bacteria are harmful as they cause food to spoil which can lead to food poisoning.

Lili : Bacteria only feed on dirt found in the water and not on the bodies of plants and animals.

Siti : Bacteria can make their own food.

Jill : Bacteria are useful as they feed on the food stuck between our teeth and thus keep our teeth clean.

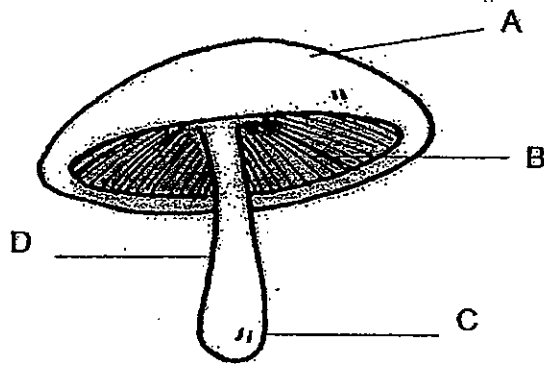
Whose statement about bacteria is correct?

- (1) Rani
- (2) Lili
- (3) Siti
- (4) Jill

19 Sara saw some yellow and green patches on a bowl of rice left on the kitchen table for a week. What could these yellow and green patches be?

- (1) They are non-living things.
- (2) They are bacteria.
- (3) They are moulds.
- (4) They are yeast.

20 Study the diagram below.



Spores in a mushroom can be found at \_\_\_\_\_.

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

(Go on to the next page)

21 An object has the following properties.

- It is strong.
- It is flexible.
- It does not break easily.

What is the object likely to be?

- (1) mirror
- (2) hammer
- (3) water hose
- (4) ceramic vase

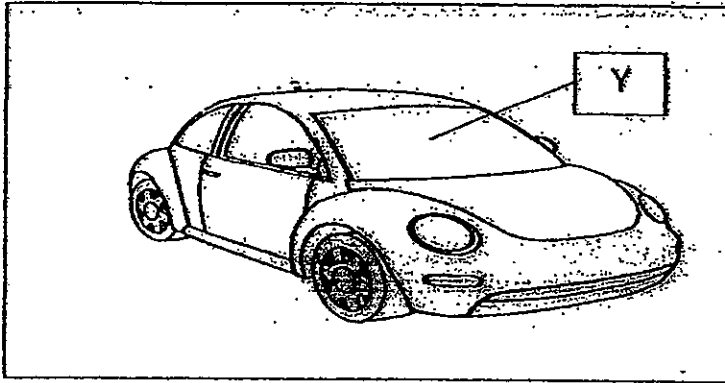
22 Cooking utensils are made of aluminium because ~~aluminium~~

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- A. is light
- B. is flexible
- C. does not rust
- D. is a good conductor of heat

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

23 Look at the car shown below.



The part of the car labelled Y is made of glass. Which of the following correctly explain(s) why it is made of glass?

- A. Glass is waterproof.
- B. Glass is transparent.
- C. Glass is cheaper than plastic.
- D. Glass is heavier than plastic.

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

24 Which of the following objects will not serve its purpose effectively if it were to be made of wood instead of metal?

- (1) stool
- (2) ruler
- (3) kettle
- (4) cupboard

(Go on to the next page)

25 Mrs Tan put a 10 kilogram packet of rice into each bag, A and B.

When both bags were lifted off the ground, bag B burst and the packet of rice fell out. Bag A did not burst.

What can Mrs Tan conclude?

- (1) Bag A is stronger than bag B.
- (2) Bag A is more flexible than bag B.
- (3) Bag B is lighter than bag A.
- (4) Bag B is softer than bag A.

(Go on to the next page)

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METHODIST GIRLS' SCHOOL (PRIMARY)  
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MID-YEAR EXAMINATION 2012  
PRIMARY 3  
SCIENCE

BOOKLET B

Total Time for Booklets A and B: 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

Follow all instructions carefully.  
Answer all questions.  
Write your answers in this booklet.

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

Class: Primary 3. \_\_\_\_\_

Date: 11 May 2012

Performance Task	/10
Booklet A	/50
Booklet B	/40
Total	/100

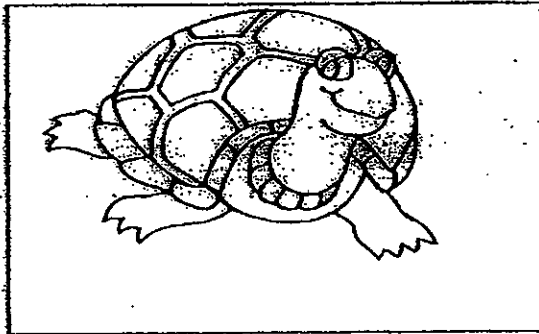
This booklet consists of 13 printed pages including this page.



## SECTION B : 40 marks

For questions 26 – 40, write your answers in the spaces provided. The number of marks available is shown in brackets ( ) at the end of each question or part question.

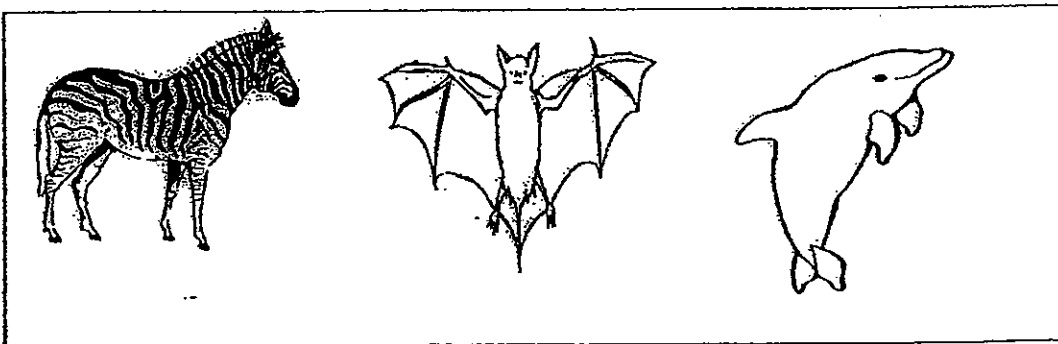
- 26 The picture below shows a turtle.



A turtle is covered with scales and it lays eggs.  
However, it is not a fish.  
State 2 reasons why it is not a fish. (2m)

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

- 27 Look at the group of animals below.

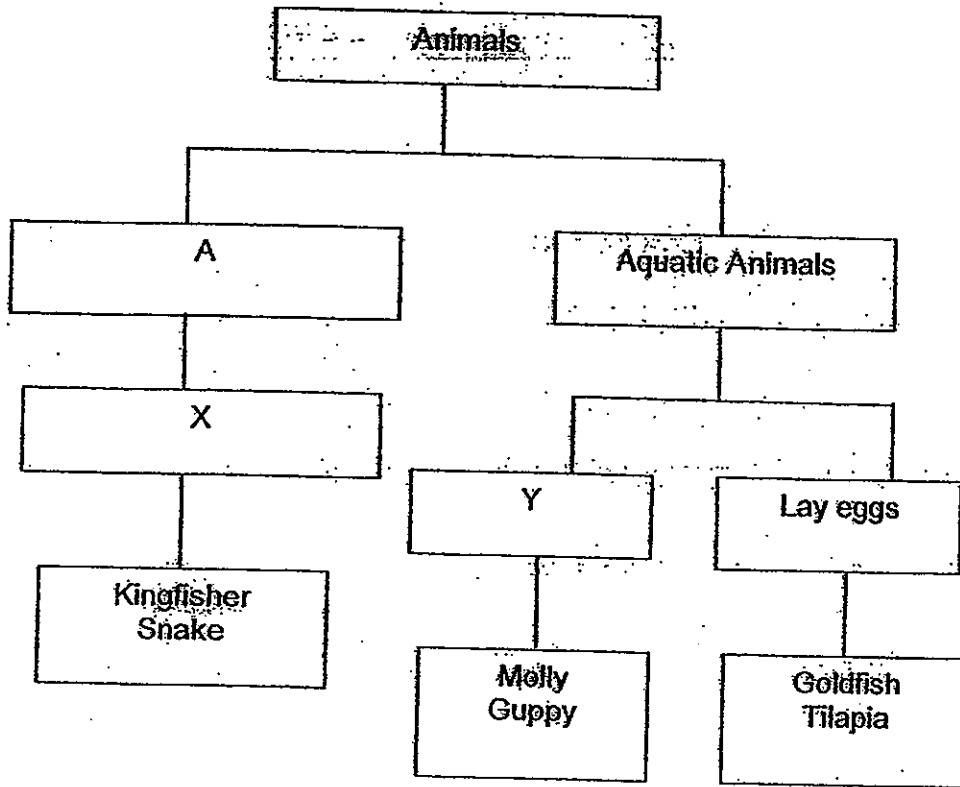


- i) What is similar about these animals?

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

(Go on to the next page)

28 Study the classification table given below and answer the following questions.



i) Based on the above classification table, suggest suitable headings for A, X and Y. (3m)

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

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

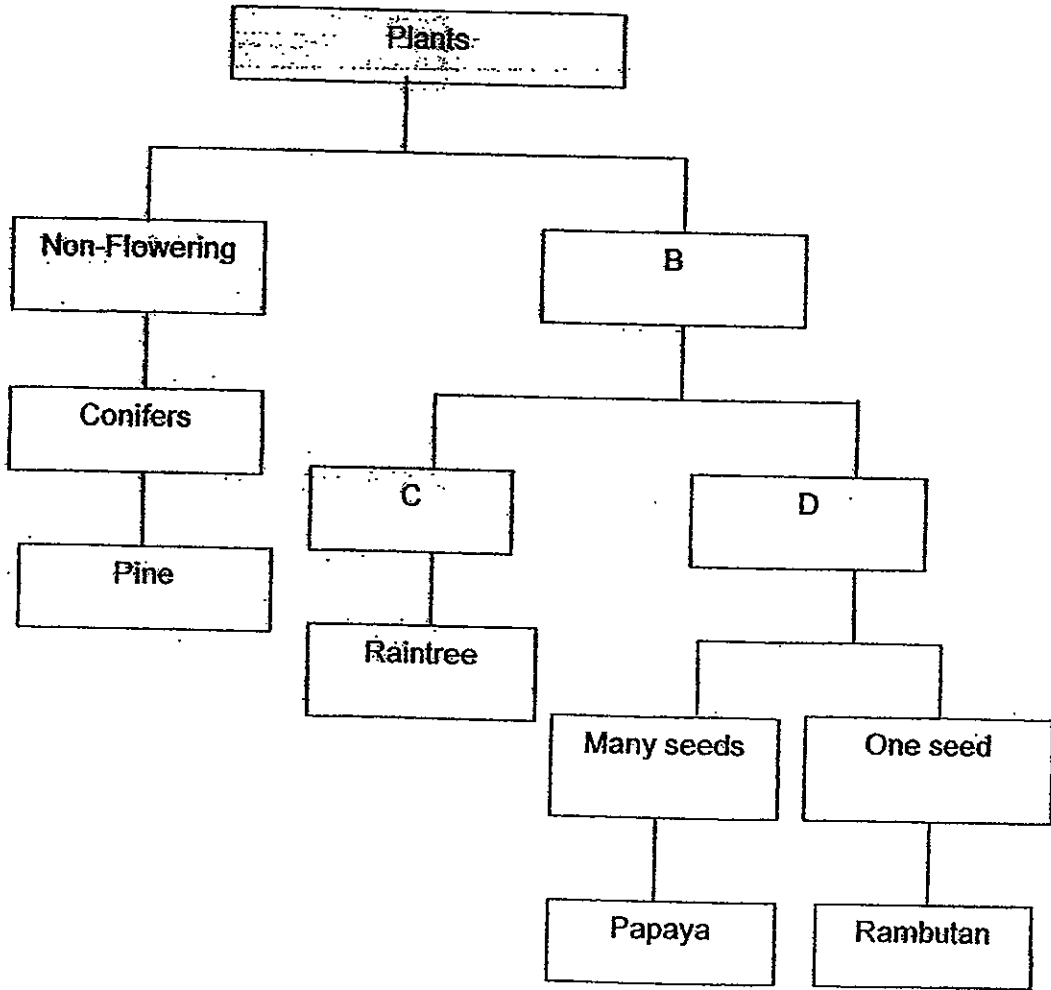
Y: \_\_\_\_\_

ii) Where in the above groups will you place a "swordtail"?

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

(Go on to the next page)

29 Study the classification table below.



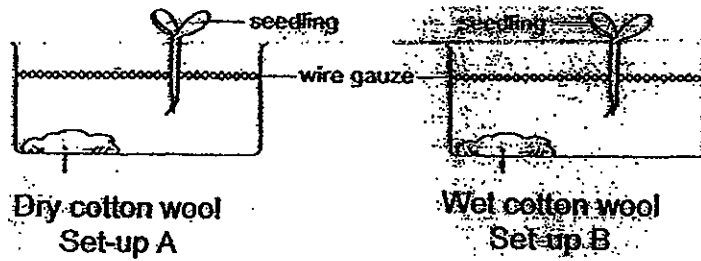
Based on the above classification table, suggest suitable headings for B, C and D respectively. (3m)

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

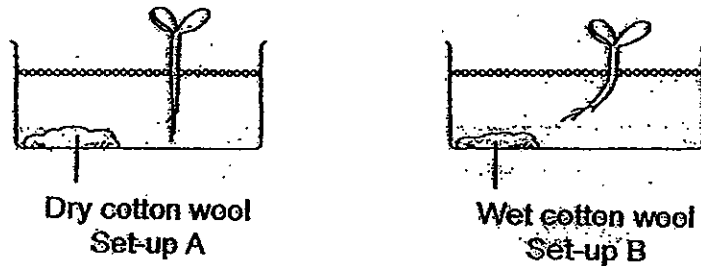
C: \_\_\_\_\_

D: \_\_\_\_\_

30 Clara grew 2 plants in set-up A and set-up B as shown below.



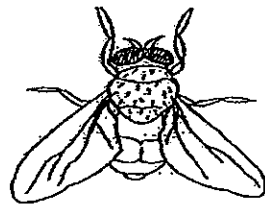
Four days later, Clara observed a change in both set-ups as shown below.



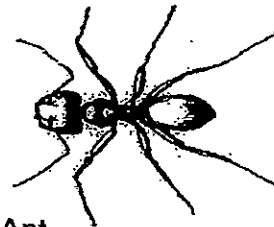
(\*) What does the experiment show us?

(1m)

31



Housefly



Ant

Based on the diagram, identify one similarity and one difference between the two insects... (2m)

Similarity: \_\_\_\_\_

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

(Go on to the next page)

32 The diagram below shows 2 plants.



Plant X



Plant Y

Based on the diagram, state 2 differences between Plant X and Plant Y.  
(Do not mention the flower)

(2m)

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

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

33 Study the different types of fruits shown below.



Group A

Group B

Based on the above classification grouping, suggest suitable headings for A and B.  
(2m)

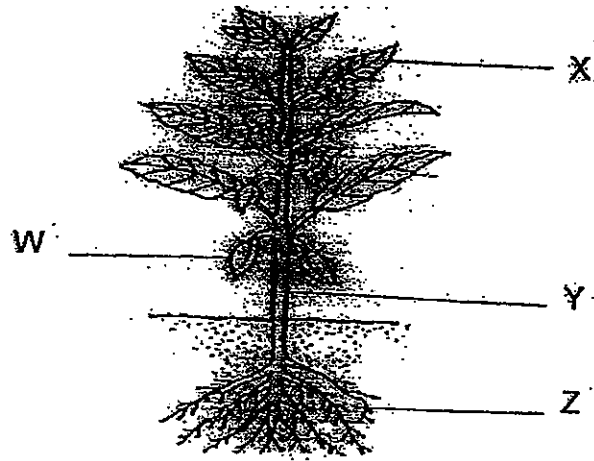
A: \_\_\_\_\_

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

(Go on to the next page)



34 Look at the picture below and write the parts of the plant. (4m)



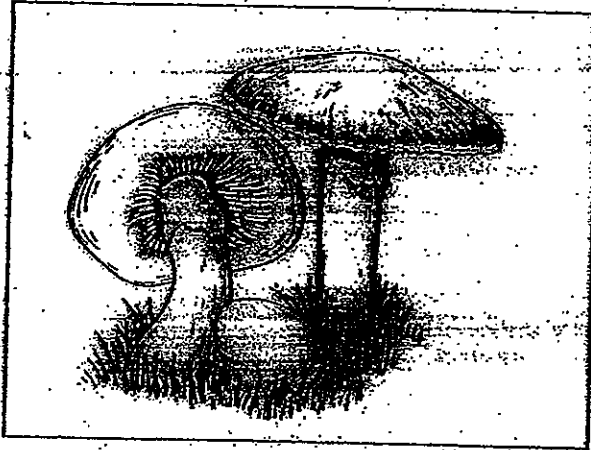
W: \_\_\_\_\_

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

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

Z: \_\_\_\_\_

35 The diagram below shows mushrooms.



(a) Which group of living things does the mushroom belong to? (1m)

\_\_\_\_\_

(b) State two characteristics of this group of living things. (2m)

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

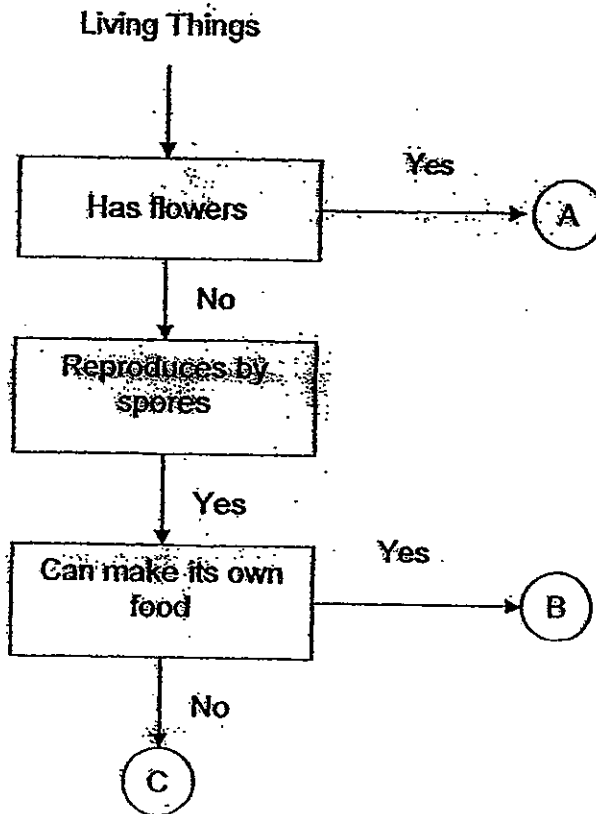
\_\_\_\_\_

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

\_\_\_\_\_

(Go on to the next page)

36 Study the flowchart on living things shown below.



(a) Can organism A make its own food? Explain your answer. (2m)

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(b) Which organism, A, B or C might be a bracket fungus? (1m)

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(c) From the flowchart, state one similarity between organisms B and C. (1m)

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37 Study the table below carefully.

Group X	Group Y
Sunflower	Yeast
Tomato	Mould
Bougainvillea	Bacteria

- (a) The organisms in Group X and Y have been classified as \_\_\_\_\_ and \_\_\_\_\_ respectively. (1m)
- (b) Which organism in the table is used to make yoghurt? (1m)
- \_\_\_\_\_

38 State the main type of material used to make the objects. (4m)

- (a) frying pan \_\_\_\_\_
- (b) shirt \_\_\_\_\_
- (c) tyre \_\_\_\_\_
- (d) disposable chopsticks \_\_\_\_\_

(Go on to the next page)

- 39 Daniel conducted some tests on materials A, B, C and D. The results are recorded in the table below.

Properties	Materials			
	A	B	C	D
It is flexible	√	√	√	X
It is light	X	√	√	X
It is waterproof	√	X	√	√

- (a) Which of the materials could Daniel use to make a raincoat? (1m)

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

(3m)

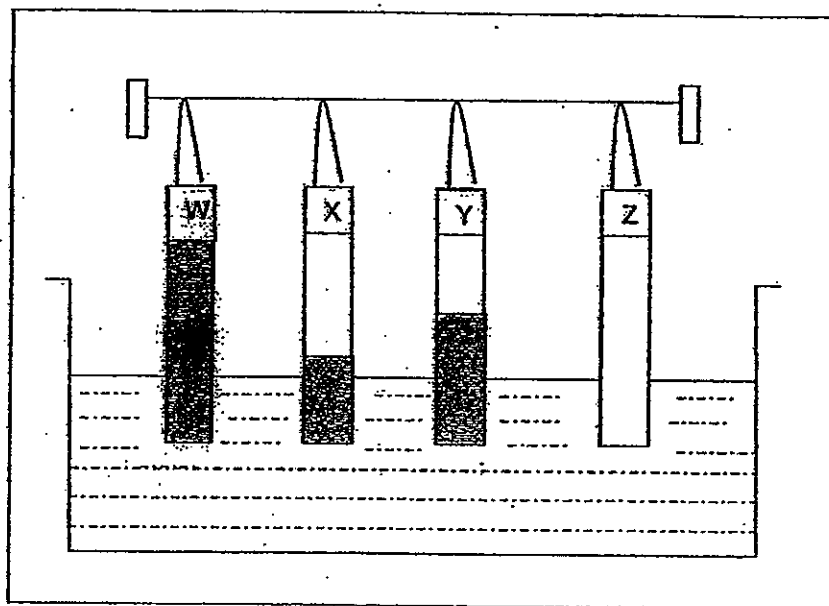
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- 40 The diagram below shows 4 different materials W, X, Y and Z hanging from a rod and placed in a basin of coloured water.

The results are as shown in the diagram.



Arrange the materials from the least absorbent to the most absorbent by writing the letters W, X, Y or Z in the boxes.

(2m)

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least absorbent Most absorbent

End of paper

# **ANSWER SHEET**

## **EXAM PAPER 2012**

**SCHOOL : MGS**  
**SUBJECT : PRIMARY 3 SCIENCE**

**TERM : SA1**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
3	2	2	2	3	2	4	4	1	2	4	2	4	3	4	2	2

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
1	3	2	3	1	2	3	1

26)i)It lives on either land or water.  
ii)It lays it eggs on land.

27)i)They all give birth to their young alive.

28)i)A: Land animals      X: Lays eggs      Y: Give birth to young alive  
ii)Group Y.

29)B: Flowering      C: Inedible      D: Edible

30)All living things need water to survive.

31)Similarity: They both have six legs.  
Difference: A housefly has wings but an ant does not.

32)i)Plant X has smooth edged leaves but plant Y has jagged.  
ii)Plant X has a weak stem but plant Y has a strong stem.

**33)A: grows in one.  
B: grows in a bunch.**

**34)W: Fruits  
X: Leaves  
Y: Stem  
Z: Roots**

**35)a)Fungi  
b)i)They reproduce by spores.  
ii)They feed on other dead or alive.**

**36)a)Yes. Only plants make their own food. Organism A has flowers so it is a plant.  
b)Organism C.  
c)They both reproduce by spores.**

**37)a)Plants and micro-organisms  
b)Bacteria.**

**38)a)Metal.  
b)Cotton.  
c)Rubber.  
d)Wood.**

**39)a)Material C.  
b)It ends to keep the body dry and give comfort to the person wearing it and light to carry.**

**40)Z , X , Y , W**