



**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2011
PRIMARY 3**

SCIENCE

BOOKLET A

30 Multiple Choice Questions (60 marks)

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

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.

Marks Obtained

Booklet A		/ 60
Booklet B		/ 40
Total		/100

Name: _____ (. .) **Class: P 3** _____

Date : 12 May 2011

Parent's Signature: _____

Section A: (30 x 2marks = 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.

1. Which one of the following is ~~a non-living thing?~~ ^{a non-living thing?}

- (1) Steel
- (2) Snake
- (3) Starfish
- (4) Sunflower

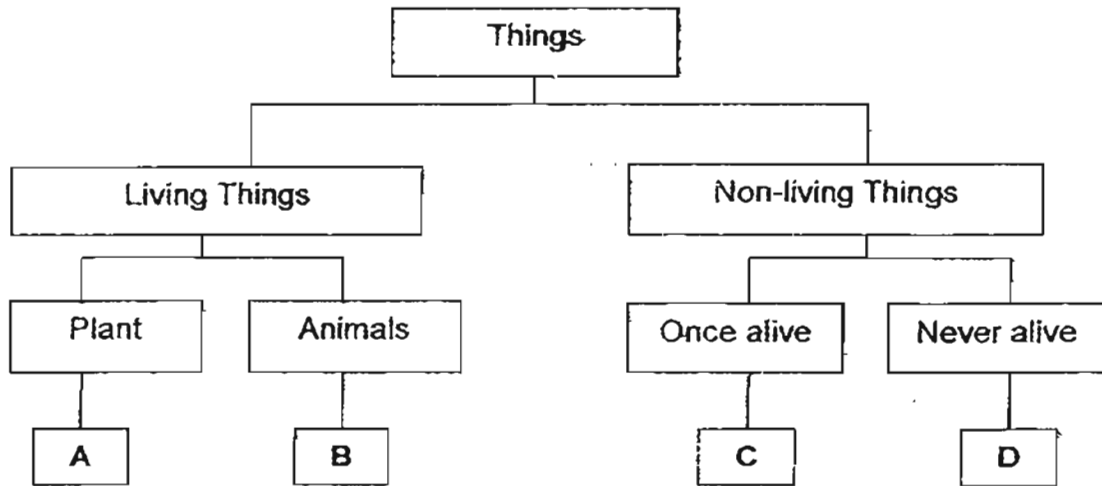
2. Joshua kept his pet fish in a small plastic bag of water and ~~with a rubber band.~~ ^{with a rubber band.} After a few hours, he observed that his pet fish has died. What could have caused the death of the fish?

- (1) It did not have enough air.
- (2) It did not have enough light.
- (3) It did not have enough space.
- (4) It did not have enough water.

3. How are ~~animals and plants similar?~~ ^{animals and plants similar?}

- (1) They make their own food.
- (2) They give birth to their young.
- (3) They grow and eventually die.
- (4) They move from place to place by themselves.

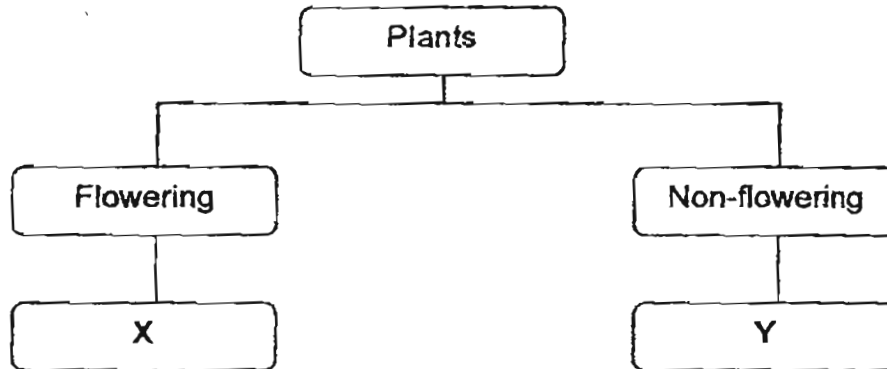
4. Study the classification table below carefully.



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

(1)	anteater	puppy	tyre	coin
(2)	fern	eagle	kettle	nail
(3)	butterfly	lantana	shirt	eraser
(4)	hibiscus	rooster	balloon	glass jar

5. Study the classification table below.



Which of the following plants could be X and Y?

(1)	Bird's Nest Fern	Rose
(2)	Water Lily	Grass
(3)	Moss	Pong Pong
(4)	Carnation	Ladder Fern

6. Henry found an animal in a garden. He wanted to confirm if the animal found was an insect. Which of the following characteristics should he observe?

- A The number of legs
- B The diet of the animal
- C The presence of wings
- D The number of body parts

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

7. David collected three balls, A, B and C, of the same size. Each ball is made of different materials. He dropped each ball from a height of 1 metre onto hard floor to see whether it bounced.

	Material
A	Plastic
B	Ceramic
C	Rubber

Which balls are likely to bounce on the hard floor?

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

8. Which of the following are the properties of glass taken into consideration to be used to make window panes?

- A It is flexible
- B It is waterproof
- C It is transparent
- D It breaks when dropped

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

9. Shopping bags are usually made of plastic because plastic _____.

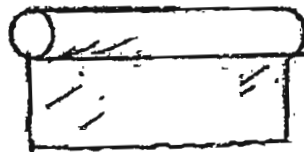
- A is hard
- B is light
- C is waterproof
- D sinks in water

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

10. The pictures show 3 objects that are made from aluminium.



can



foil



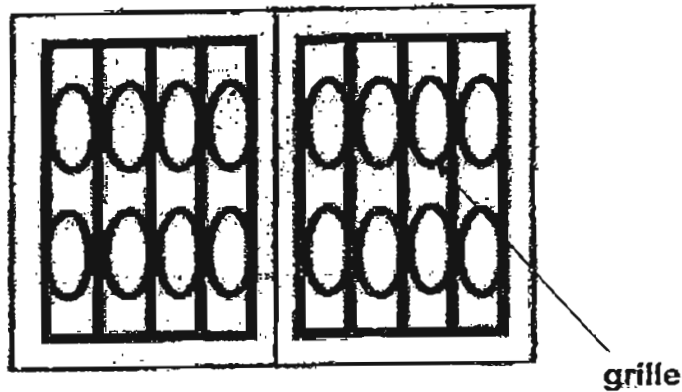
container

Which of the following statements A, B or C, could be the possible reasons for aluminium to be used to make the above objects?

A	It is flexible
B	It is waterproof
C	It is transparent

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

11. The diagram shows a window grille.



Which one of the following materials is most suitable for making the window grille?

- (1) Glass
- (2) Wood
- (3) Steel
- (4) Ceramic

12. The following is a description of Material A.

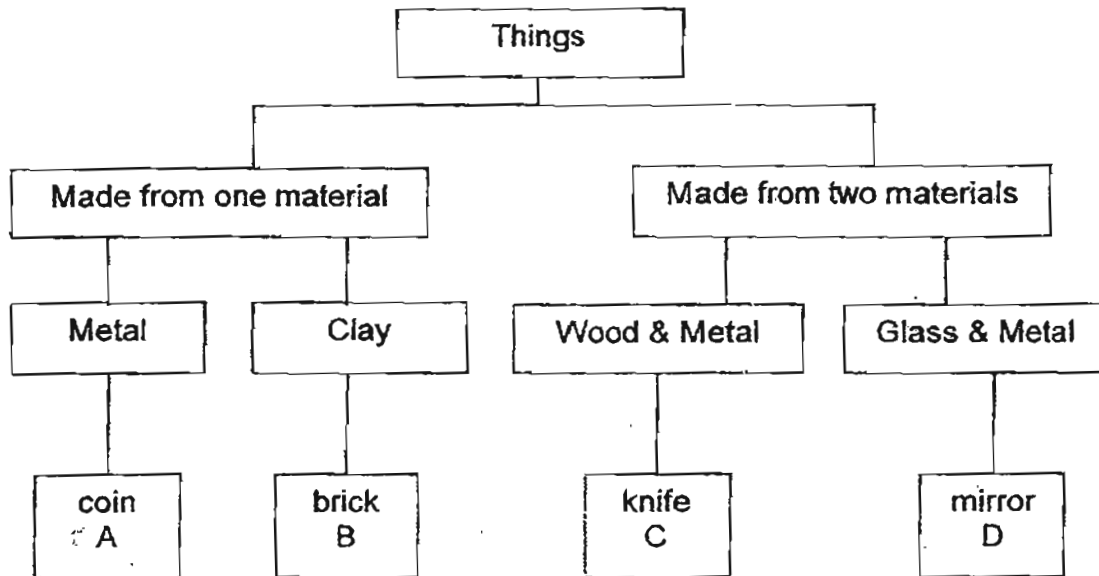
I am hard yet smooth.
I am transparent and do not smell.
When you hit me with a hammer or drop me,
I will break into pieces.
I am usually used to make mirrors.
What material am I?



Which of the following is most likely to be Material A?

- (1) Steel
- (2) Glass
- (3) Fabric
- (4) Rubber

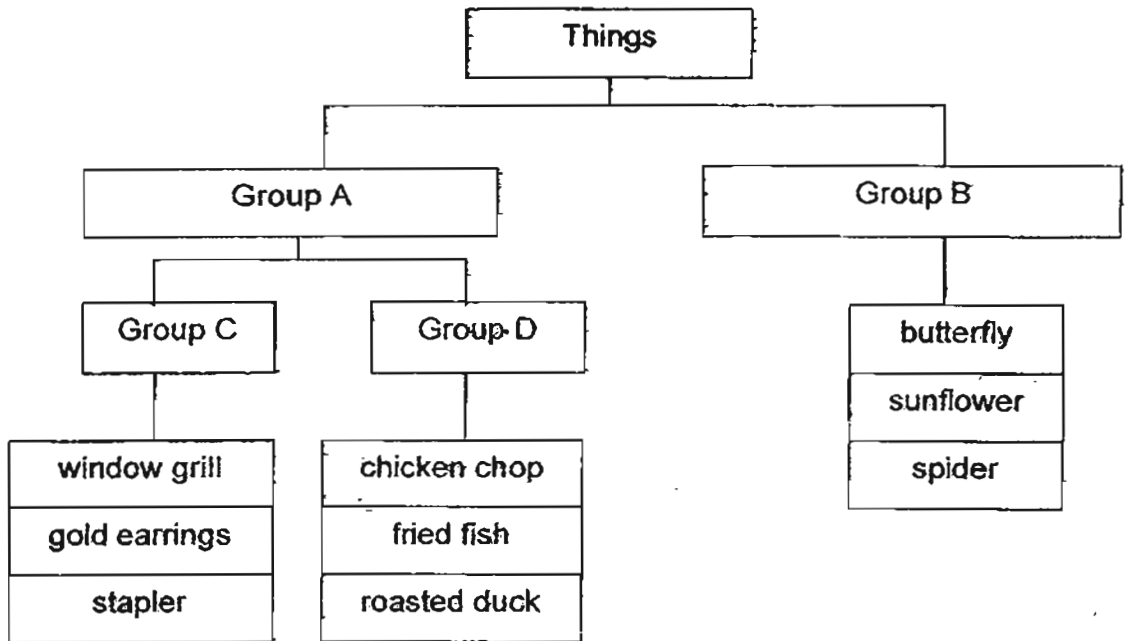
13. The table below shows some of the things grouped according to the materials they are made of.



Which of the following choices, A, B, C or D, best represent a nail and a watch respectively?

	Nail	Watch
(1)	A	C
(2)	A	D
(3)	B	C
(4)	B	D

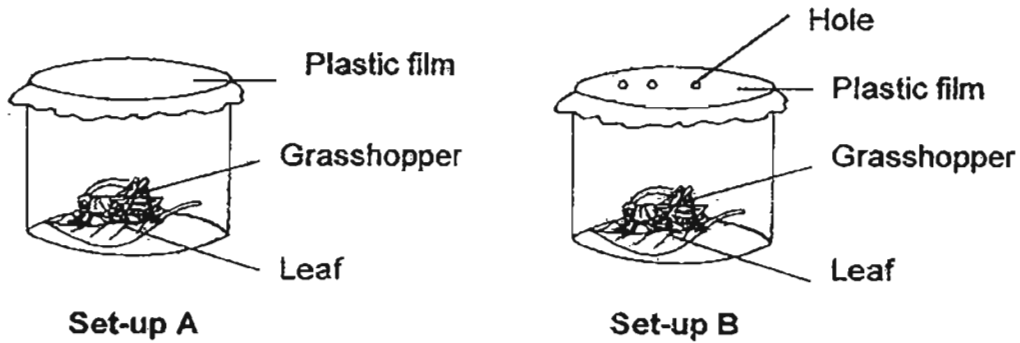
14. The classification diagram below shows how things are grouped.



Which one of the following sets of heading best describes A, B, C and D respectively?

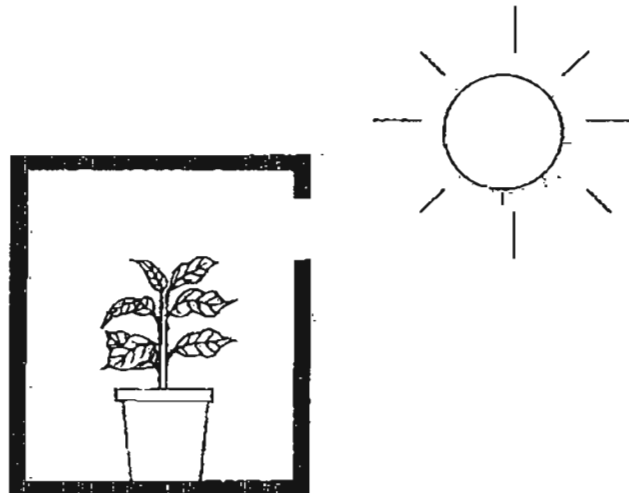
(1)	Animals	Non-living Things	Once Alive	Never Alive
(2)	Non-living Things	Living Things	Never Alive	Once Alive
(3)	Plants	Animals	Living Things	Never Alive
(4)	Living Things	Non-living Things	Once Alive	Never Alive

15. Tom prepared 2 experiment set-ups A and B, as shown in the diagram below. What was the aim of his experiment?



He was trying to find out if the grasshopper _____.

- (1) needs air to survive
 - (2) needs leaf for shelter
 - (3) needs food to survive
 - (4) can reproduce in the container
16. Sharon placed a plant inside a cardboard box as shown below. The set-up is then placed in the garden and the plant is watered daily. What will Sharon probably observe about the plant after three days?



It will grow _____.

- (1) away from the hole
- (2) towards the hole to obtain light
- (3) upwards and hit the top of the box
- (4) downwards to the base of the pot to get water

17. A teacher gave her pupils some information about Animal Z as shown below.

It has no gills.
It does not lay eggs.
It feeds its young with milk.
It has hair as outer covering.

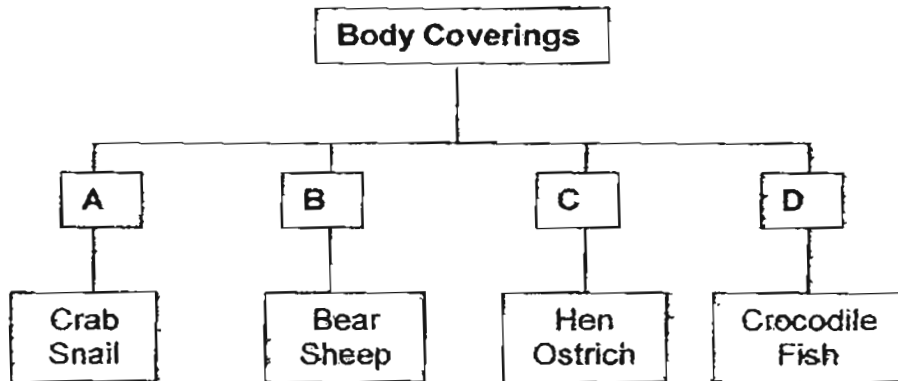
Four pupils then made statements about Animal Z.

- Yilin : It can fly.
- Sarah : It is a fish.
- Darren : It lives in water.
- Joshua : It is a mammal.

Which pupil made the correct conclusion?

- (1) Yilin
- (2) Sarah
- (3) Darren
- (4) Joshua

18. The diagram below shows how some animals can be grouped according to their body coverings.



Which one of the following animals can be grouped under C?

- (1) Snake
- (2) Prawn
- (3) Platypus
- (4) Penguin

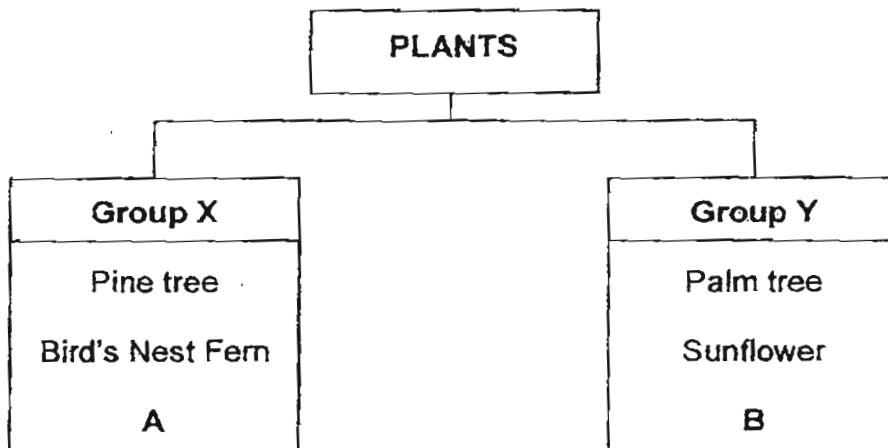
19. The picture below shows the leaves of a bird's nest fern.



The spores under the leaves are for _____.

- (1) producing new ferns
- (2) the fern to look nice
- (3) carrying food to other parts of the plant
- (4) carrying water to other parts of the plant

20. Study the diagram below and answer the following question.



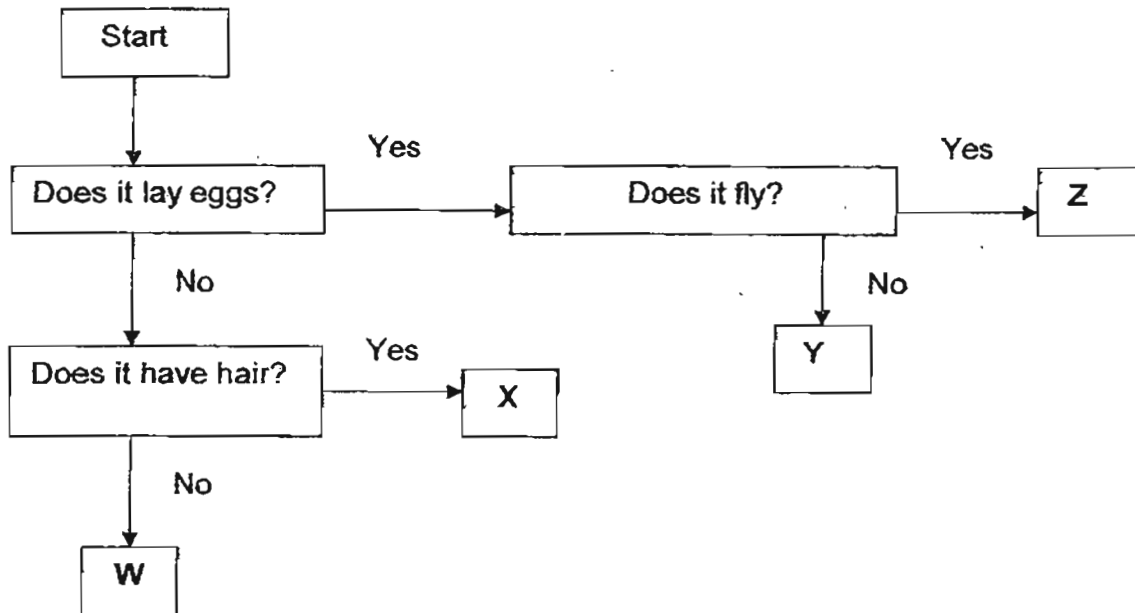
Which plants can A and B be?

	A	B
(1)	Rose	Mushroom
(2)	Grass	carnation
(3)	Mosses	Hibiscus
(4)	Staghorn Fern	Ladder fern

21. The table below shows the characteristics of 4 animals. A tick (✓) means it has the characteristics. Which animal, A, B, C or D, represents the goldfish? (1)

	Animal	Is it cold blooded?	Reproduces by laying eggs	Does it breathe through gills?
(1)	A		✓	✓
(2)	B	✓	✓	
(3)	C			✓
(4)	D		✓	✓

22. Study the flow chart below.



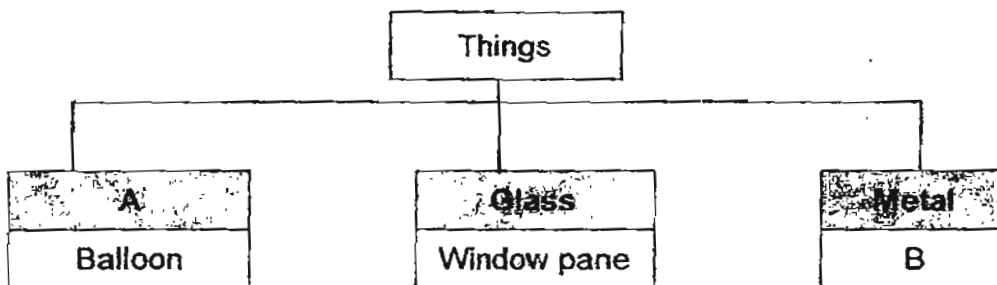
Which of the following best represents W, X, Y and Z respectively?

	W	X	Y	Z
(1)	Snake	Platypus	Bat	Eagle
(2)	Swordtail	Mosquito	Penguin	Ant
(3)	Bat	Camel	Guppy	Monkey
(4)	Guppy	Monkey	Crocodile	Mosquito

23. Which of the following objects is made from a man-made material?

- (1) Gold chain
- (2) Nylon string
- (3) Cotton shirt
- (4) Wooden chair

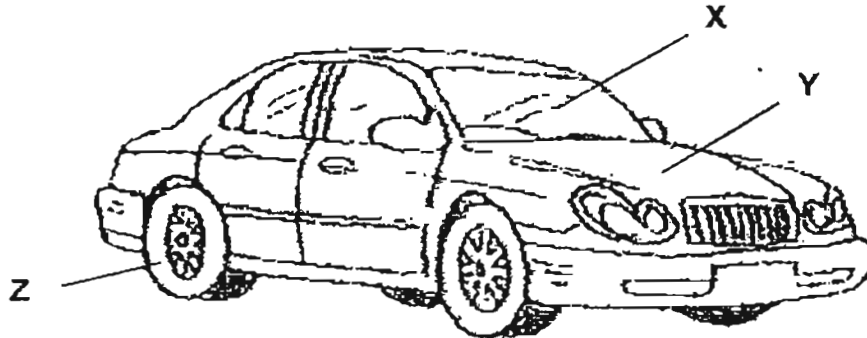
24. Study the classification chart below carefully.



Which of the following best represent A and B respectively?

(1)	Wood	Vase
(2)	Fabric	Newspaper
(3)	Rubber	Staples
(4)	Plastic	Towel

25. Study the picture of the car below.



Which one of the following correctly represents the materials of part X, Y and Z respectively?

	X	Y	Z
(1)	plastic	plastic	metal
(2)	glass	metal	rubber
(3)	metal	wood	plastic
(4)	glass	plastic	plastic

26. Study the table below.

Objects	
Absorbent	Non-absorbent
Object X	gold chain
sponge	Object Y

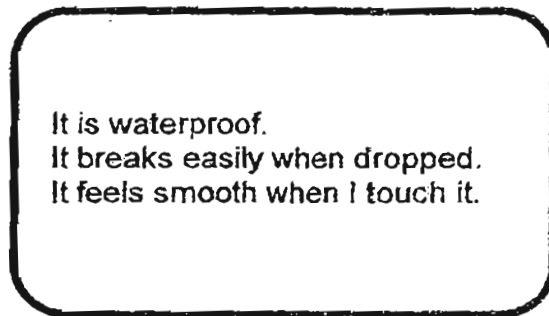
Which of the following best represent objects X and Y respectively?

	Object X	Object Y
(1)	canvas shoes	rubber ball
(2)	safety pin	nylon bag
(3)	rubber ball	safety pin
(4)	pillow case	cotton ball

27. Materials are selected for specific uses based on their properties. Which one of the following materials has its property and function matched wrongly?

	Material	Property	Use to make
(1)	Clay	can be shaped when moist	vases
(2)	Glass	can see through easily	window panes
(3)	Plastic	can float on water	container
(4)	Stainless steel	can come in contact with water without rusting	tablespoons

28. Study the statements about an object in the box below.



Which of the following is the object most likely to be?

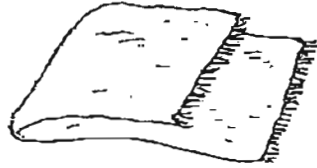
- (1) Paper file
- (2) Metal ruler
- (3) Cotton socks
- (4) Ceramic Plate

29. Which one of the following objects is made of one material only?

(1)



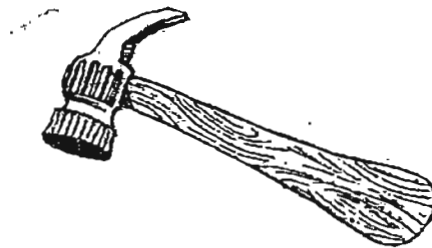
(2)



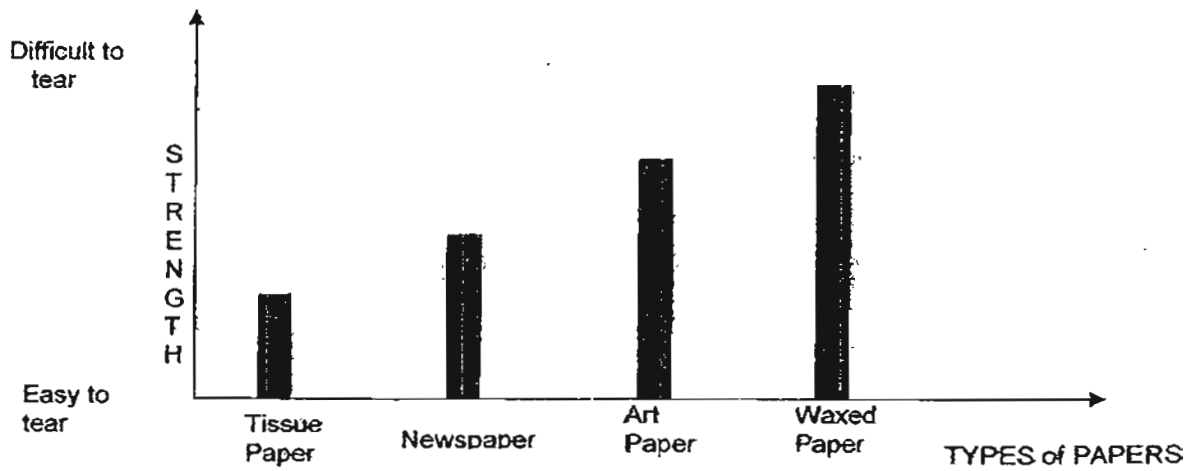
(3)



(4)



30. The graph below shows the strength of 4 different types of paper.



Based on the graph, which type of paper is the strongest?

- (1) Art paper
- (2) Newspaper
- (3) Waxed paper
- (4) Tissue paper



**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2011
PRIMARY 3**

SCIENCE

BOOKLET B

14 Open-ended questions (40 marks)

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

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

Marks Obtained:

Section B

	/40
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Name: _____ () **Class: P 3** _____

Date : 12 May 2011

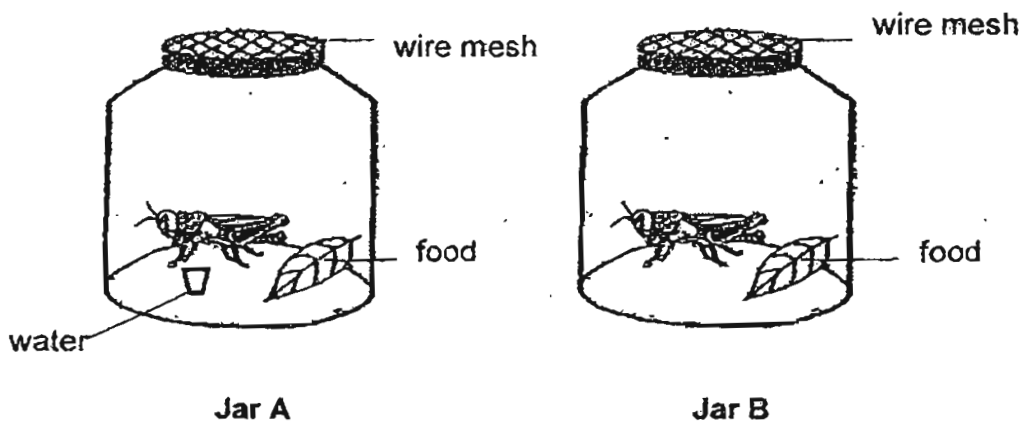
Parent's Signature: _____

Section B: (40 marks)

Write your answers to question 31 to 44 in the space provided.

The number of marks available is shown in brackets [] at the end of each question or part question.

31. In the following experiment, grasshoppers were kept in containers under different conditions.



- (a) In which jar will the grasshopper live longer? [1]

- (b) Give a reason for your answer in (a). [1]

Score	2
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32. Match the following observations to the correct characteristics of the living things by joining the dots correctly. [2]

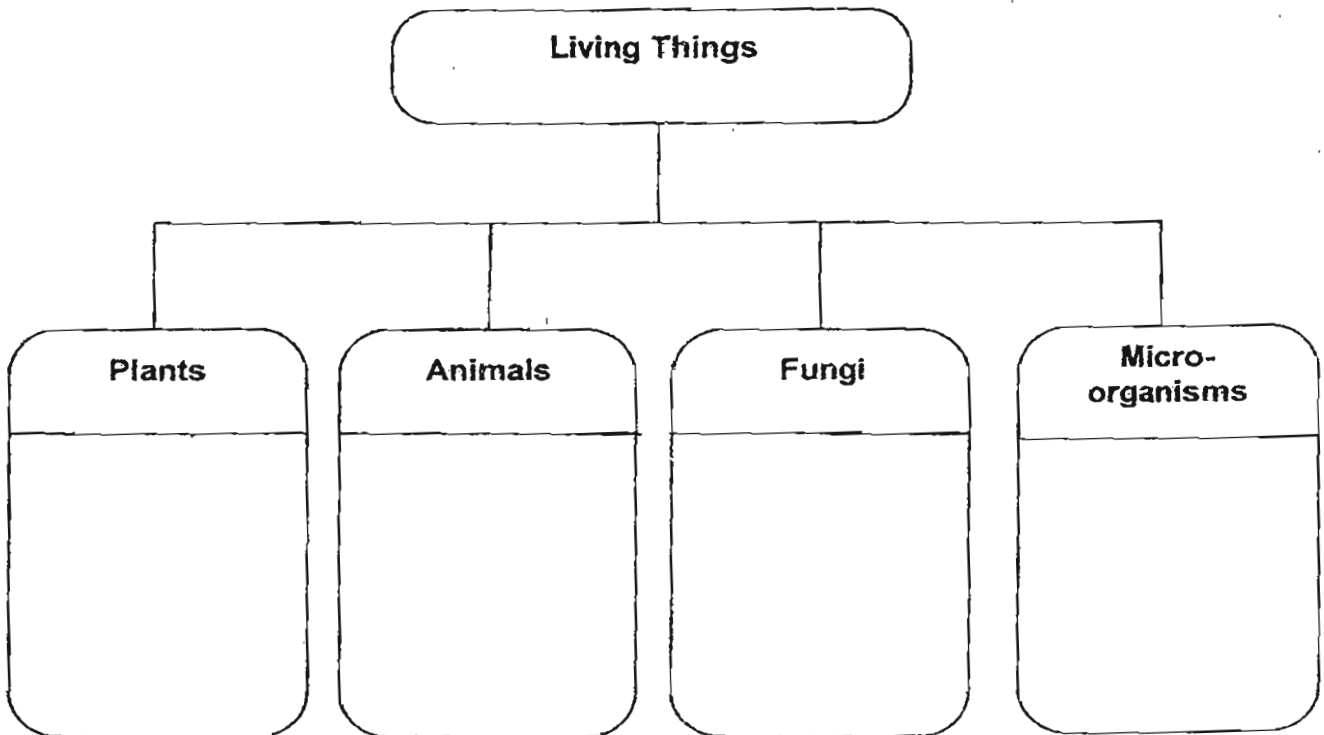
Observations		Living things can...
(a) A fish lays eggs in the water.	●	● respond to changes
(b) A hungry cat walking to its bowl of food.	●	● grow
(c) When a dragonfly flies and lands on the Pitcher plant, it closes up and traps the dragonfly.	●	● reproduce
(d) A chick turns into a chicken.	●	● move by themselves

Score	2
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33. Group the living things given in the box correctly in the classification chart below. Use each word ONCE only.

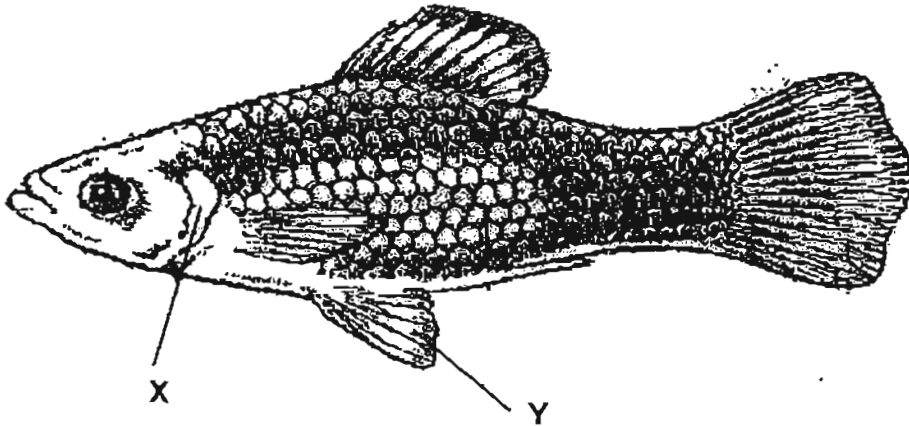
[3]

mushroom	conifers	ginger
bread mould	orang utan	bacteria



Score	3
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34. The picture below shows a fish



(a) Identify the parts labelled X and Y.

[1]

X: _____

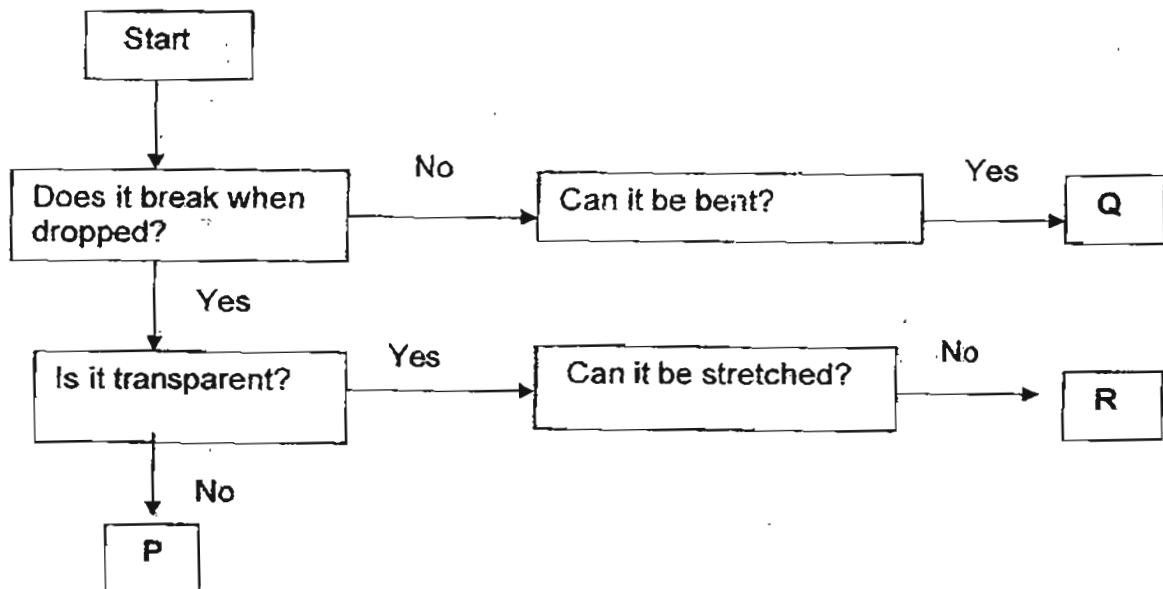
Y: _____

(b) State the function of the part labelled X.

[1]

Score	2
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35. Study the flow chart below.



(a) Based on the information above, state the properties of Material Q. [1]

(b) Which material (P, Q or R) is most suitable to make a fish bowl? Give a reason for your answer. [2]

Score	3
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36. Three types of plants were placed into 3 identical containers filled with 300 ml of water. A layer of oil was poured into each container to prevent the water lost from evaporating into the air.



Container A



Container B



Container C

The volume of water in each container was recorded on the 7th day in the table below.

A	300	280
B	300	275
C	300	300

- (a) Based on the observation above, which one of the following containers A, B or C, most likely contained a plastic plant? Give a reason for your answer. [2]

- (b) Explain why there was less water in Containers A & B on Day 7? [1]

Score	3
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37. A fresh piece of bread was left in a plastic bag. After some days, patches of thread-like things started to grow on the bread. Later, tiny black dots were formed.

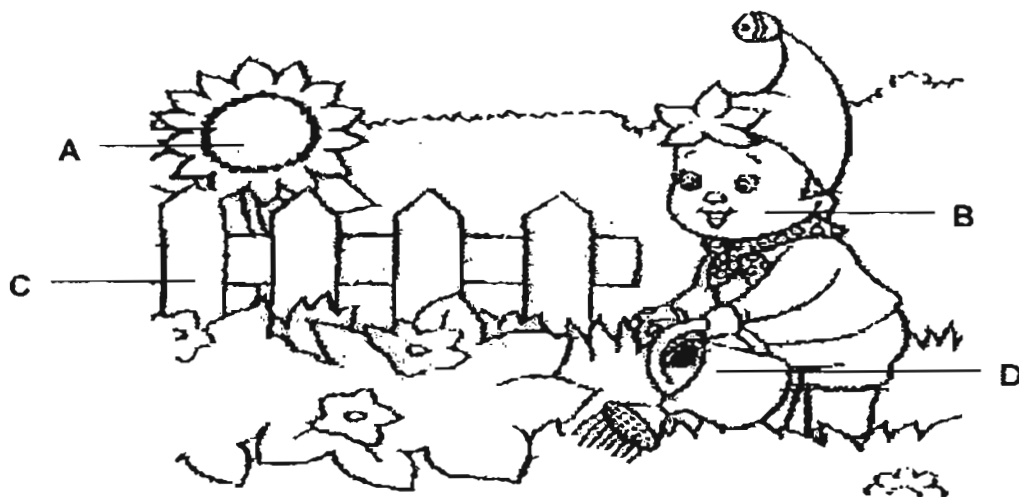


- (a) What organism had grown on the surface of the piece of bread? [1]

- (b) Name one condition that promoted the growth of the organism that you mentioned in (a). [1]

Score	2
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38. Study the picture below.



(a) Classify A, B, C and D into Group X and Y respectively in the table below. [2]

Group X	Group Y

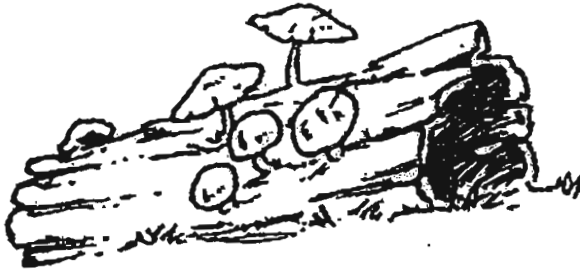
(b) Give a suitable heading for each Group X and Group Y. [1]

X: _____

Y: _____

Score	3
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39. Study the diagram below



Fungi growing on a rotting log



Fern growing on a tree

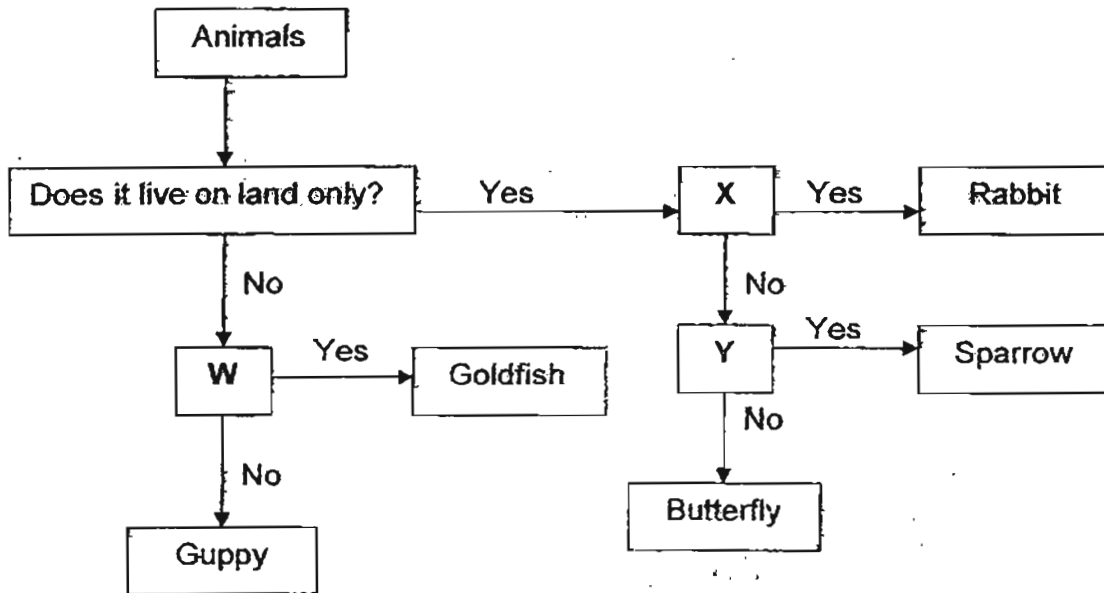
From the diagram above

- (a) ~~State one difference~~ state one difference between the fungi and fern. [Do not mention the size and appearance] [1]

- (b) State one **similarity** between the fungi and fern. [Do not mention the size and appearance] [1]

Score	2
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40. Study the flowchart below.



The letters W, X and Y represent questions that classify the animals. Write the correct letter that represents the questions in the flowchart above. Each letter can only be used once.

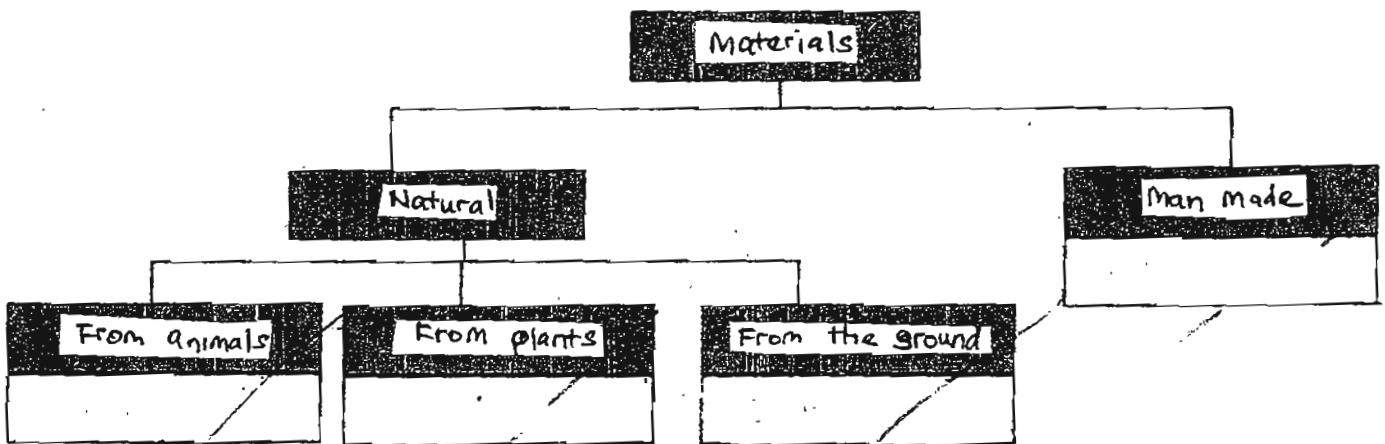
[3]

Questions	Letter
Does it have feathers?	
Does it lay eggs?	
Does it give birth to its young alive?	

Score	3
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41. Group the following materials stated in the boxes below, correctly into the classification table below. USE EACH WORD ONCE ONLY. [2]

wool	nylon	rubber	iron
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Score	2
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42. Part X of the spectacles below is made of glass.



(a) Name another material that is suitable for making part X. [1]

(b) What is the **most important characteristic** of the material stated in (a) has which is similar to glass, such that it can be considered in the making of part X in a spectacles? [1]

(c) State one **difference** between the two materials. [1]

Score	3
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43. Joanna carried out an experiment to find out how much water each material can absorb. She placed four different materials, A, B, C and D, into each container as shown in the diagram below. Each container was filled with 50 ml of water. She removed the materials and recorded the amount of water left in each container after 20 minutes as shown in the table that follows.



Material	Amount of water left in container
A	48
B	35
C	50
D	28

- (a) Which material absorbed the most water?
How much water did it absorb? [1]

- (b) Which of the materials, A, B, C or D, is most suitable to make into a raincoat and a mop respectively? Give a reason for your answer in b(i) and b(ii) respectively.

- (i) **Raincoat** [2]

Material: _____

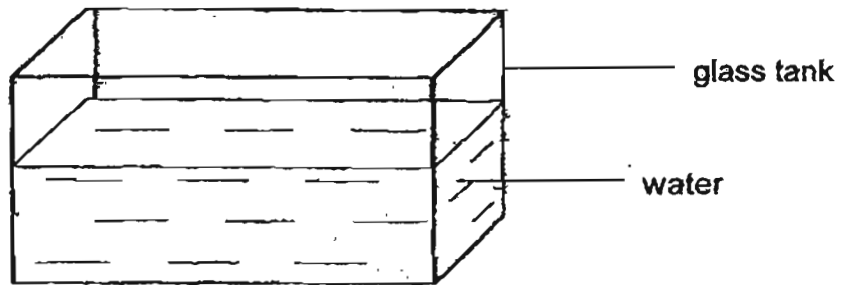
Reason: _____

- (ii) **Mop** [2]

Material: _____

Reason: _____

44. Nicholas wanted to find out if an object floats or sinks. He used the set-up shown in the diagram below for his experiment.



Nicholas then dropped the following objects into the glass tank.

metal fork	inflated balloon	cork
marble	stapler	ping pong ball

- (a) Classify the above objects in the table below. [3]

- (b) Based on your classification table in (a), give a suitable heading for Group A and Group B respectively. [2]

Group A : _____

Group B : _____

END OF PAPER

Score	5
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ANSWER SHEET

EXAM PAPER 2011

**SCHOOL : NANYANG PRIMARY
SUBJECT : PRIMARY 3 SCIENCE**

TERM : SA1



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

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
4	1	3	1	4	2	3	2	1	3	4	2	3

31)a) Jar A.

b) As all living things need water to survive, there are these three things in Jar A.

32)a) reproduce

b) move by themselves

c) respond to changes

d) respond to changes

33)Plants

conifers

ginger

Animals

orang utan

Fungi

mushroom

bread mould

Micro-organisms

bacteria

34)a) X: gill cover Y: fin

b) It protects the gills

35)a) Material Q does not break when dropped and can be bent.

b) Material R: It is transparent and enables us see the fish in the fish bowl.

36)a) Container C. The amount of water remained the same shows that plastic plant did not take in water as it is a non-living thing.

b) As plants need water to survive, Containers A and B's plant takes in water.

37)a) Mould had grown on the surface of the piece of bread.

b) Warmth promoted the growth of the mould.

38)a) X: A, B Y: C, D

b) X: Living things

Y: Non-living things

39)a)The fungi feed on the plant it lives on but the fern makes its own food.
b)They reproduce by spores.

40)Y, W, X

41) nylon

wool rubber iron

42)a)plastic
b)Transparent
c)Glass is brittle while plastic is not.

43)a)D. It absorbed 22ml of water.
b)i)Material: C Reason: It is waterproof
ii)Material: D Reason: It is the most absorbent material

44)a)Group A: metal fork, marble, staple
Group B: cork, ping pong ball, inflated balloon
b)A: materials that sink I water.
B: material that floats on water.