



PRIMARY 3 MID-YEAR EXAMINATION 2012

Name : _____

Date: 14 May 2012

Class : Primary 3 ()

Time: 8.00 a.m. - 9.15 a.m.

Duration: 1 hour 15 minutes

Parent's Signature : _____

Marks: _____ / 40

SCIENCE BOOKLET A

INSTRUCTIONS TO CANDIDATES

Write your name, class and register number.

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

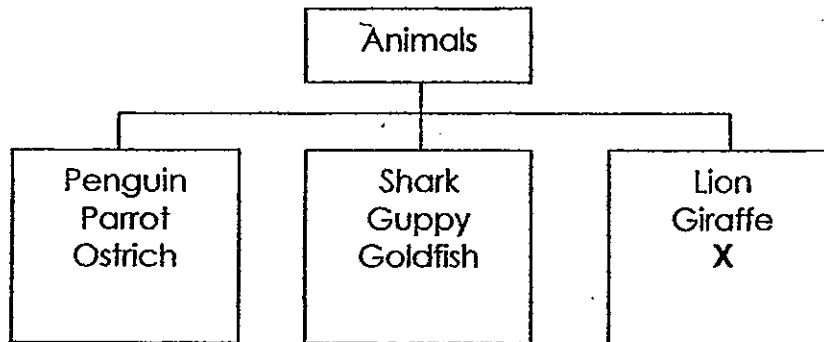
Follow all instructions carefully.

Answer all questions.

Section A (20 x 2 marks)

For each question, choose the most suitable answer and shade its corresponding oval (1, 2, 3 or 4) in the optical answer sheet.

1. Study the classification chart below.



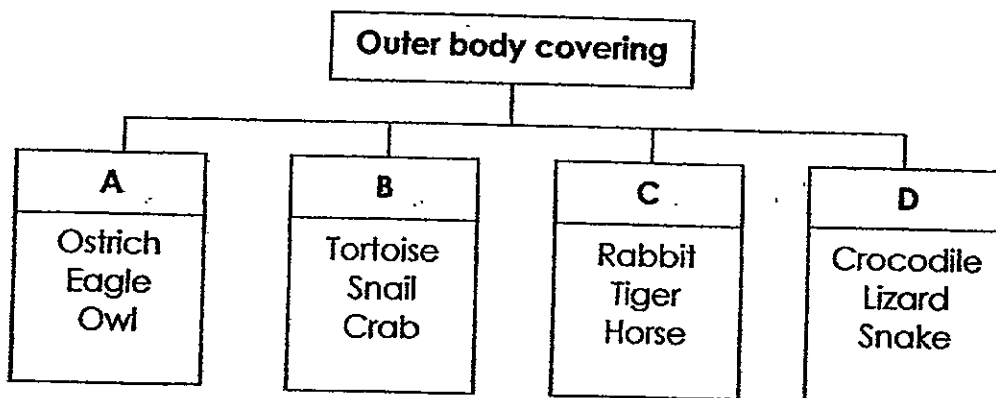
Which animal does X best represent?

- (1) Frog
- (2) Snake
- (3) Dolphin
- (4) Seagull

2. Which of the following statements about living things is **true**?

- (1) All living things can make their own food.
- (2) All living things reproduce by giving birth.
- (3) Living things respond to changes around them.
- (4) Living things need only food and water to survive.

3. Study the classification chart below.



Which group would the **angelfish** be classified under?

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

4. Study the table below.

x	y
Balsam plant	Moss
Sunflower plant	Staghorn fern
Papaya tree	Mushroom

How are the living things classified?

	x	y
(1)	Edible plants	Inedible plants
(2)	Flowering plants	Non-flowering plants
(3)	Make their own food	Do not make their own food
(4)	Reproduce from seeds	Reproduce from spores

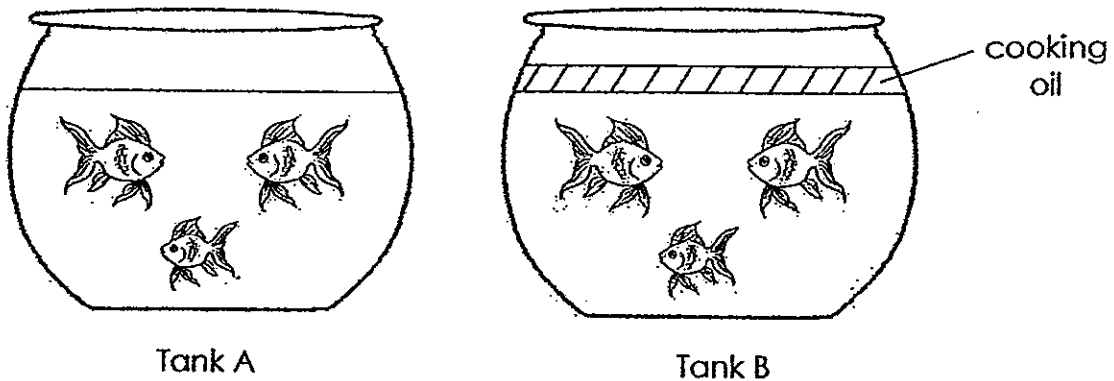
5. Study the table below carefully.

A	B	C
Bear	Earthworm	Sparrow
Tiger	Snake	Eagle

How are the above animals grouped?

	A	B	C
(1)	Live on land	Live on land and in water	Live in water
(2)	Have an outer covering of hair	Have an outer covering of shell	Have an outer covering of feathers
(3)	Move with their legs	Move with their bodies	Fly with their wings
(4)	Have 2 pairs of legs	Have 3 pairs of legs	Have 1 pair of legs

6. The diagram below shows an experiment.



After 4 days, the fish in Tank A are still alive while the fish in Tank B are dead. What does this experiment show?

- (1) Fish need air to survive.
- (2) Fish need water to survive.
- (3) The fish in Tank B died due to a lack of sunlight.
- (4) The fish in Tank A can survive without food for a longer period of time than the fish in Tank B.

7. Study the table below carefully.

X	Y
Car	Bird's nest fern
Wheelchair	Hibiscus
Kite	Coconut tree

Which of the following is represented by X and Y?

	X	Y
(1)	Animals	Plants
(2)	Can reproduce	Cannot reproduce
(3)	Non-living things	Living things
(4)	Can respond to changes	Cannot respond to changes

8. Study the diagram below.



Plant A

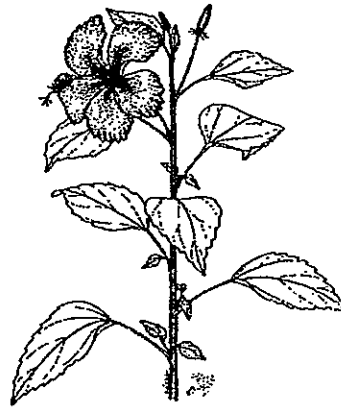
Which of the following statements about Plant A is **true**?

- (1) Plant A has flowers that grow singly.
- (2) Plant A has leaves with entire edge.
- (3) Plant A has leaves with parallel veins.
- (4) Plant A has flowers that grow in clusters.

9. Two plants are shown below.



Fern A

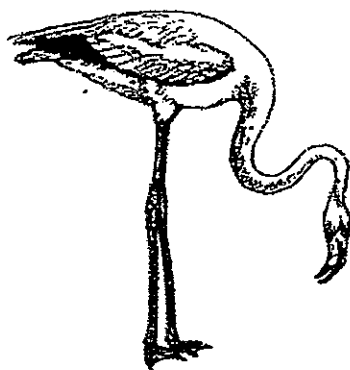


Plant B

Based on the pictures above, which of the following statements is **true** of both plants?

- (1) Both plants are flowering plants.
- (2) Fern A is a non-flowering plant while Plant B is a flowering plant.
- (3) Fern A has needle-like leaves but Plant B has palm-shaped leaves.
- (4) Fern A has leaves with jagged edge but Plant B has leaves with entire edge.

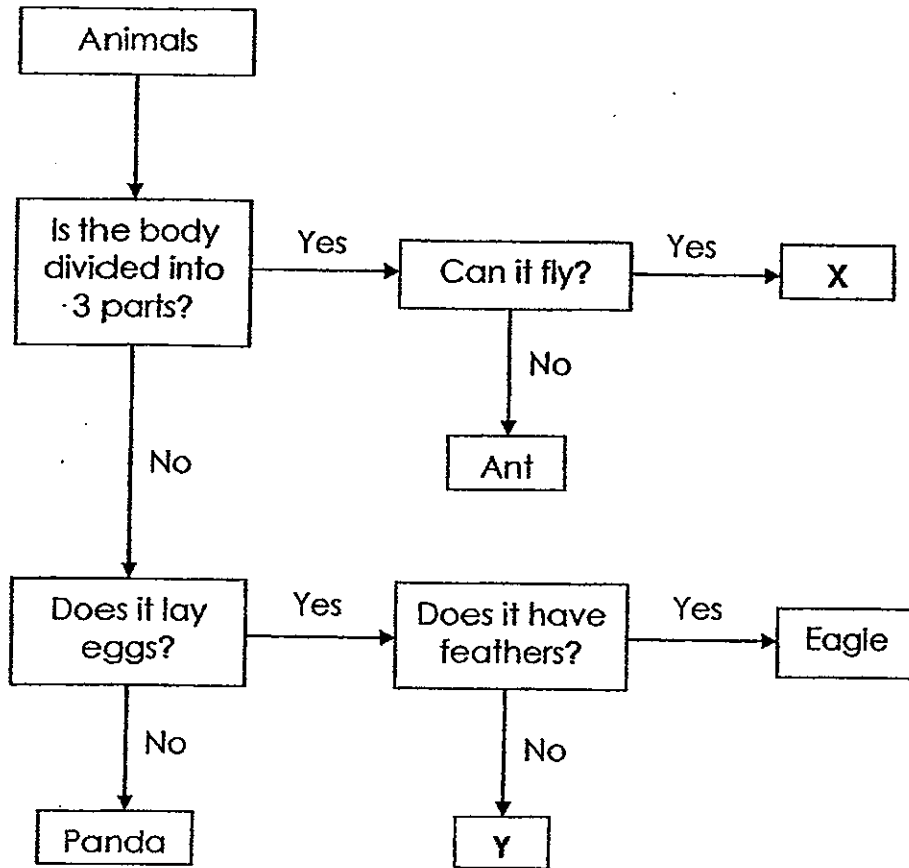
10. Based on the picture below, which of the following statement shows that Animal A is a **bird**?



Animal A

- (1) It has a wing.
- (2) It has a beak.
- (3) It has feathers.
- (4) It has two legs to swim.

11. Study the flowchart below.



Which of the following can X and Y be?

	X	Y
(1)	Spider	Butterfly
(2)	Parrot	Mosquito
(3)	Centipede	Guppy
(4)	Bee	Goldfish

12. Four children are looking at the picture of Animal X, shown below.



Animal X

Amy says that it is a fish as it can swim.

Bobby says that it is a bird as it has a beak.

Cathy says that it is an insect as it has a head, body and tail.

Darren says that it is a mammal as it has an outer covering of hair.

Which child's statement about Animal X is **correct**?

- (1) Amy
- (2) Bobby
- (3) Cathy
- (4) Darren

13. Which of the following statements about bacteria is **true**?

- (1) All bacteria are harmful.
- (2) Bacteria are non-living things.
- (3) All bacteria have the same shape.
- (4) Bacteria can only be seen under a microscope.

14. Four living things are described in the table below.

Characteristic	A	B	C	D
It responds to changes around it.	✓	✓	✓	✓
It can make its own food.	✓	x	✓	x
It reproduces from seeds.	✓	x	x	x
It can only be seen using a microscope.	x	x	x	✓

A '✓' indicates that the living thing has the characteristic.

Which of the living things could be a **mushroom**?

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

15. Daniel had a rod. He was able to bend it into the new shape as shown below.



Which of the following materials could the rod be made from?

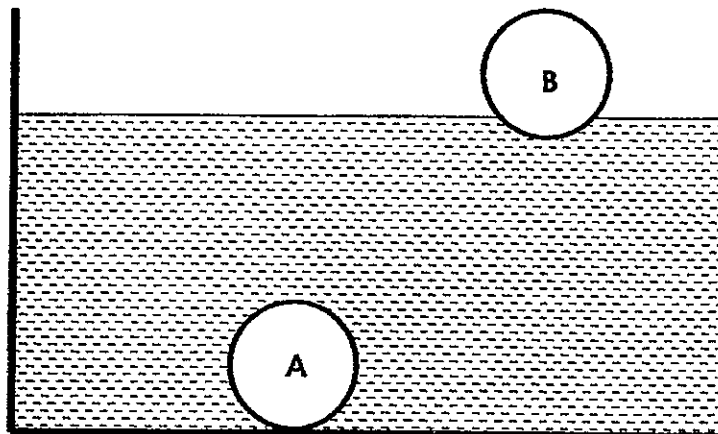
- (1) Glass
- (2) Metal
- (3) Wood
- (4) Ceramic

16. Sili is going to a picnic. She wants to bring plates which are light, cups that are unbreakable and spoons that are strong.

What materials should the plates, cups and spoons be made of?

	Plate	Cup	Spoon
(1)	paper	plastic	steel
(2)	plastic	glass	plastic
(3)	ceramics	paper	steel
(4)	glass	ceramics	steel

17. Study the diagram below.



What materials can A and B be made from?

	A	B
(1)	Plastic	Steel ✓
(2)	Wood	Styrofoam
(3)	Steel	Glass
(4)	Ceramic	Wood

18. Alice conducted an experiment to find out the hardness of 3 objects, X, Y and Z. She recorded her observations below.

X can scratch Y
Y can scratch Z

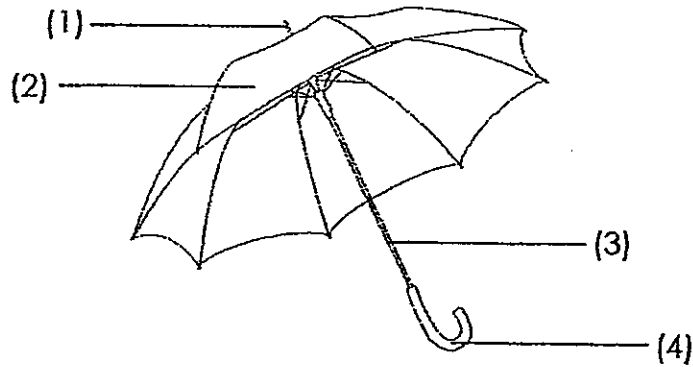
What materials can X, Y and Z be made from?

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

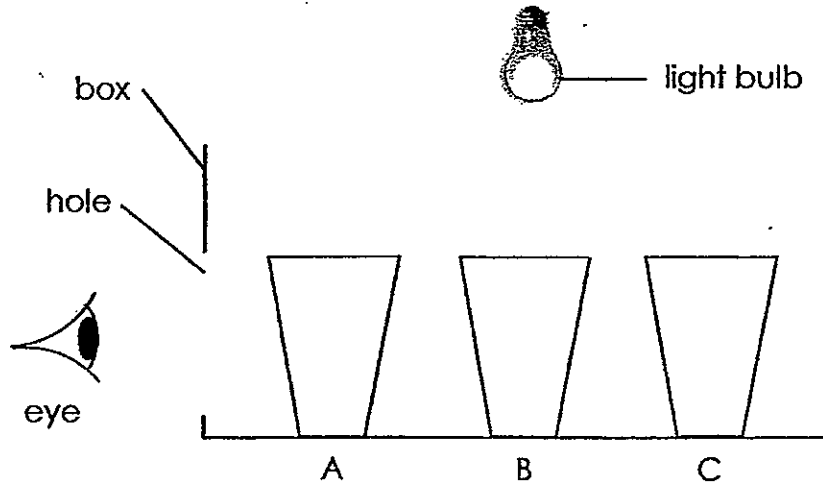
19. Calvin chose a material Y and recorded his observation below.

It is waterproof.
It is light and flexible.

Based on the picture below, which of the following parts is the best use for material Y?



20. Three cups labelled A, B and C are put into an open box and arranged in a straight line. Si Ling looks through a hole in the side of the box as shown below. She can see cups A and B clearly but not cup C.



Which of the following materials are cups A, B and C most likely to be made of?

	A	B	C
(1)	metal	glass	paper
(2)	paper	glass	metal
(3)	metal	paper	glass
(4)	glass	metal	paper

The End



PRIMARY 3 MID-YEAR EXAMINATION 2012

Name : _____ ()

Date: 14 May 2012

Class : Primary 3 ()

Time: 8.00 a.m. - 9.15 a.m.

Duration: 1 hour 15 minutes

Parent's Signature _____

Marks: _____ / 30

SCIENCE BOOKLET B

INSTRUCTIONS TO CANDIDATES

Write your name, class and register number.

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

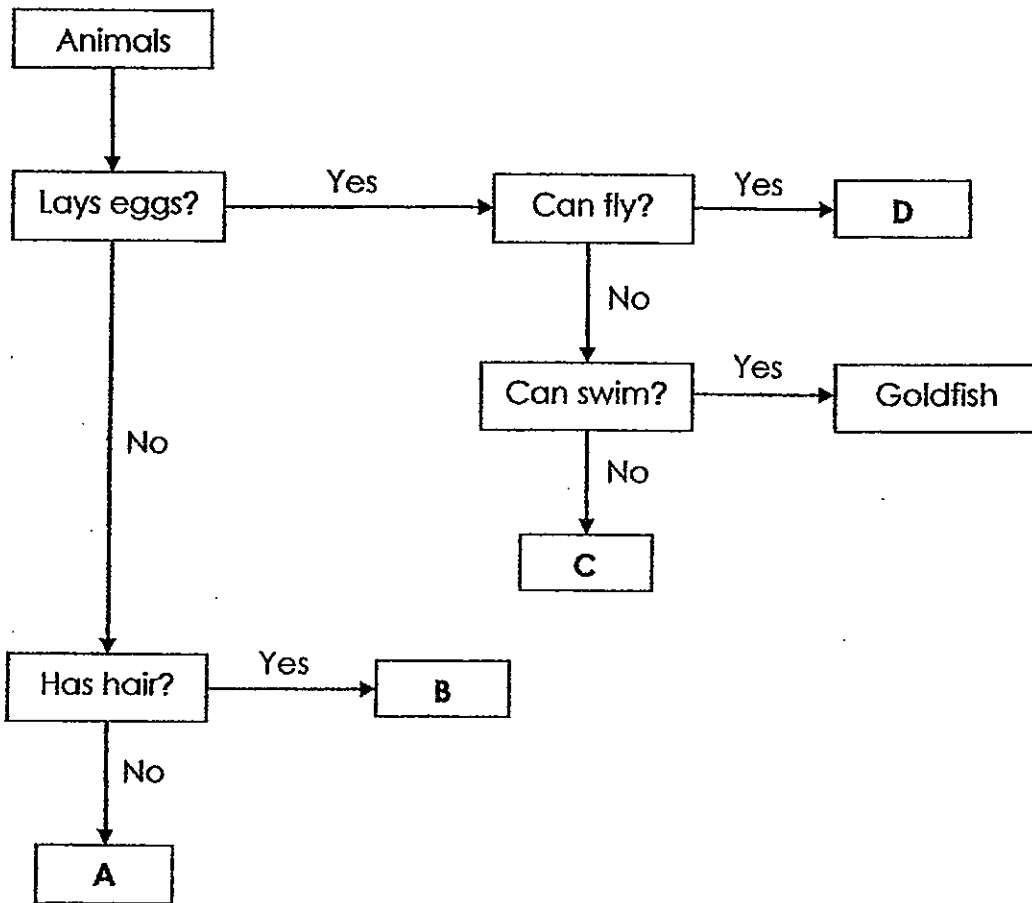
Follow all instructions carefully.

Answer all questions.

Section B (30 marks)

Write your answers in the space provided.

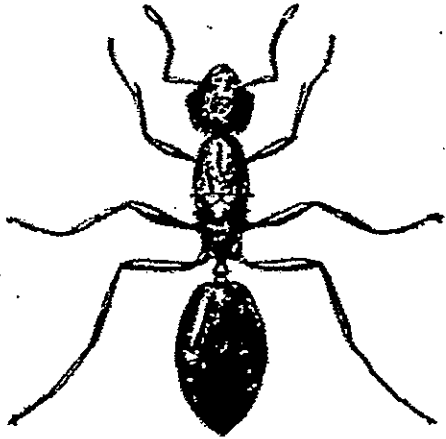
21. (a) Study the flowchart below. **A**, **B**, **C** and **D** are animals.



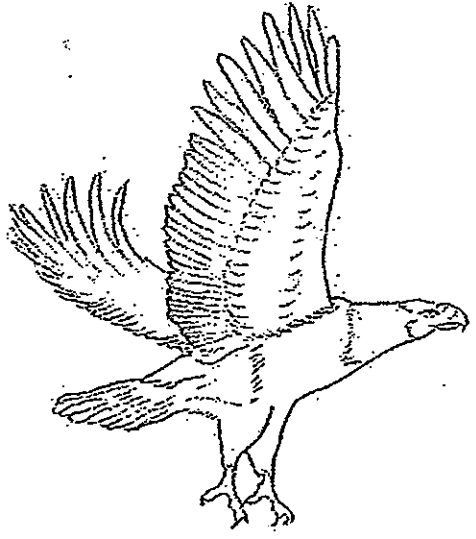
(i) State one similarity between **A** and **B**. (1m)

(ii) State one difference between **C** and **D**. (1m)

(b) Based on the pictures below, state **one** similarity and **one** difference between **Animal X** and **Animal Y**.



Animal X

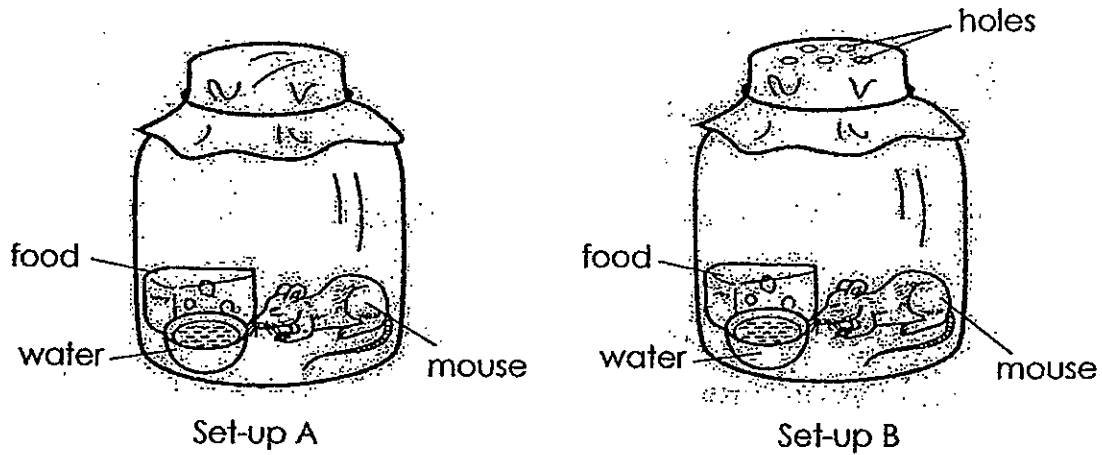


Animal Y

(i) Similarity (1m)

(ii) Difference (1m)

22. Felicia wanted to find out what living things need to survive. She carried out an experiment using the two set-ups, A and B, shown below. She observed the two set-ups over 3 days and came to a conclusion.

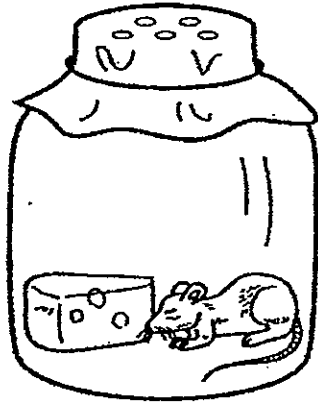


(a) What did she observe in Set-up A after 3 days? (1m)

(b) What was the conclusion of her experiment? Put a tick '✓' in the correct box. (1m)

Conclusion of experiment	Tick (✓)
Living things need air to survive.	
Living things need food to survive.	
Living things need water to survive.	

(c) Felicia has another set-up shown below.



She wants to find out if the absence of water affects the survival of the mouse. Which set-up, A or B, should she use to compare for a fair test?

(1m)

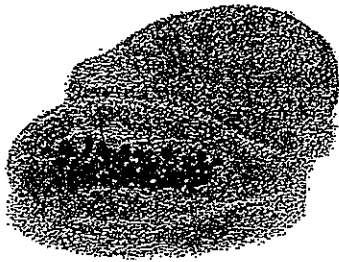
23. Four fruits are shown below.



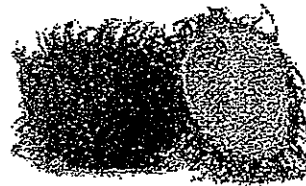
Fruit A



Fruit B

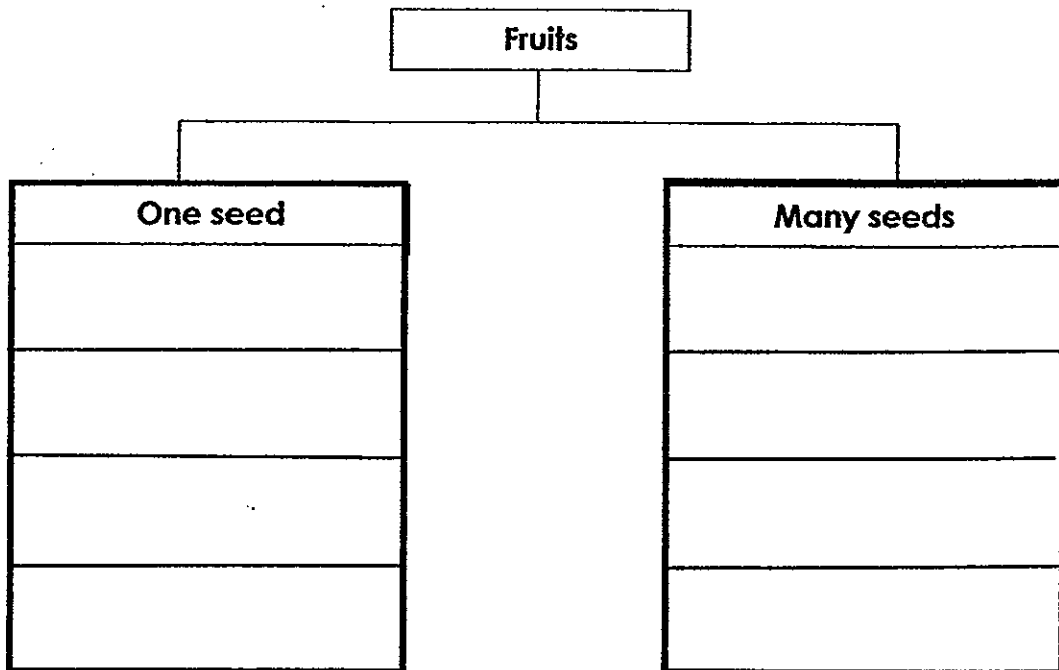


Fruit C



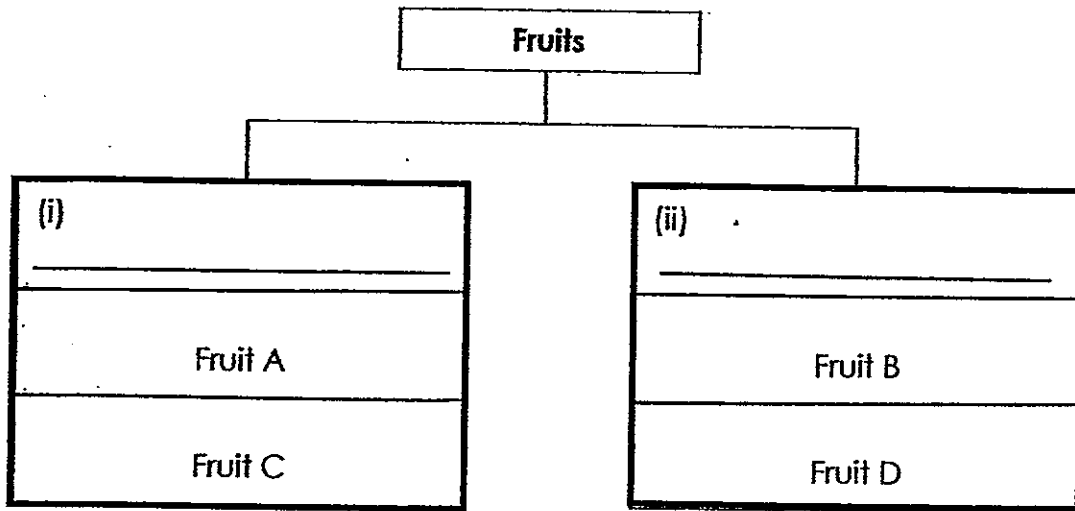
Fruit D

(a) Classify the four fruits in the classification chart below. (2m)

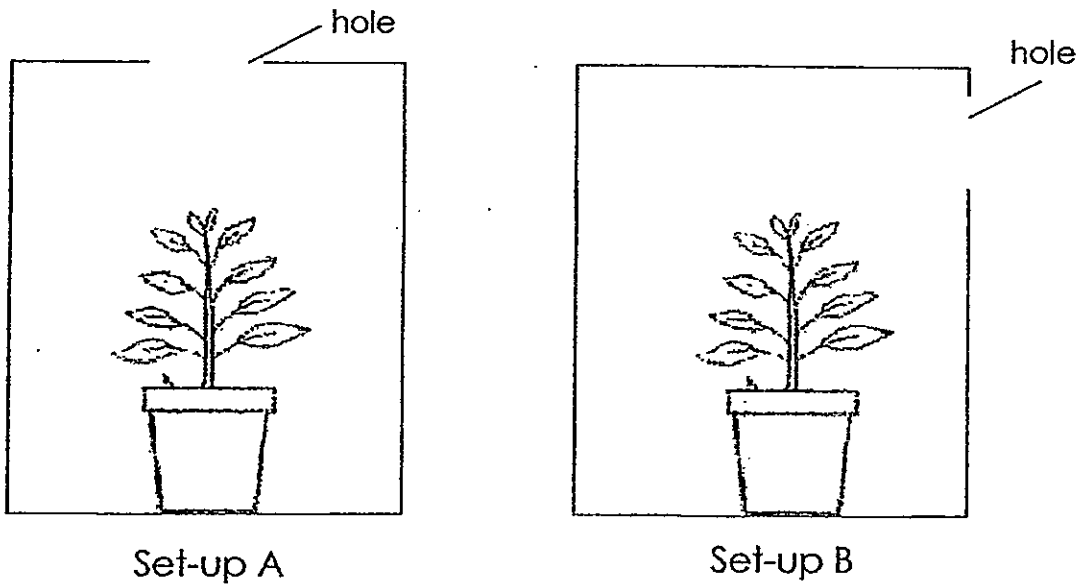


(b) Study the classification chart below. The four fruits have been classified according to the texture of their skin.

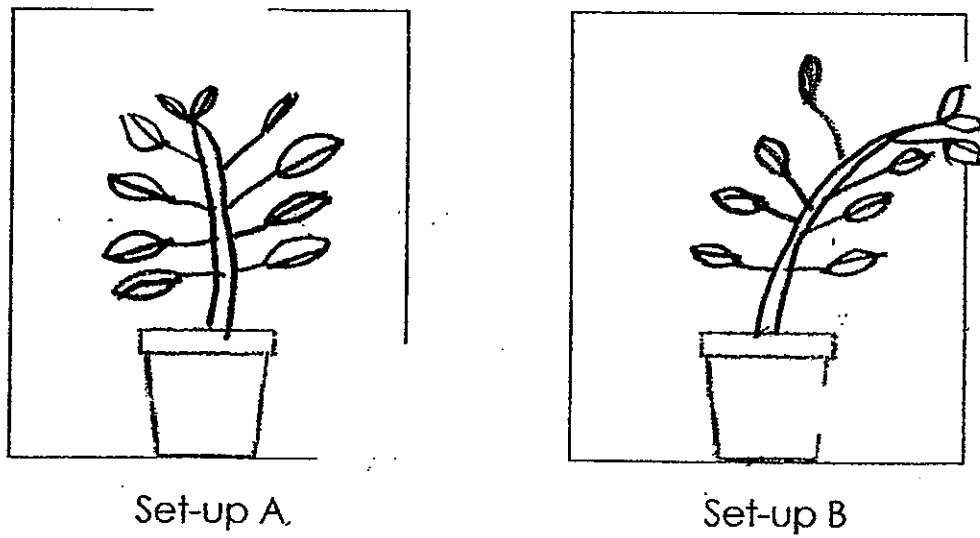
Write down suitable headings for the 2 groups. (1m)



24. Ben placed two potted plants in boxes as shown below. The box in set-up A has a hole at the top while the box in set-up B has a hole at the side. The plants were watered regularly and the boxes were left in an open field.



(a) In the boxes below, draw what the plants would look like after 1 week.
(2m)

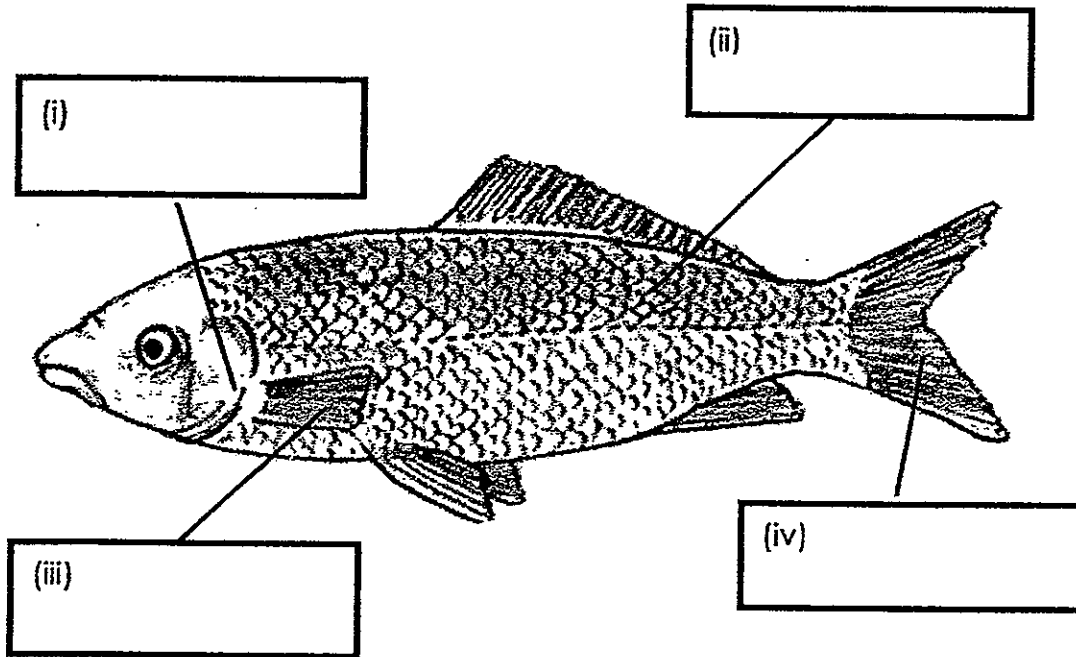


(b) Which characteristic about living things does the above experiment show? (1m)

25. The picture below shows a fish.

(a) Label the different body parts of the fish using the helping words given below. (2m)

fin gill cover scales tail



(b) What is the function of gills? (1m)

26. (a) Study the table below. Four similar slices of bread were kept under different conditions.

Slices	Conditions where the slices of bread were kept					
	Dark	Bright	Damp	Dry	Warm	Cool
A		✓	✓			✓
B	✓		✓		✓	
C		✓		✓		✓
D	✓			✓	✓	

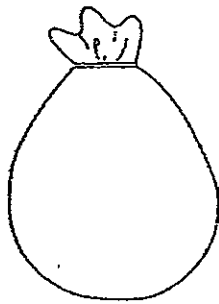
A '✓' indicates that the condition was present.

(i) Which slice of bread would have mould growing on it first? (1m)

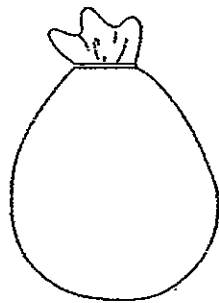
(ii) Explain your choice in (i). (1m)

(b) How does mould obtain food? (1m)

27. Harry wants to give Ron a goldfish as a pet. He has four bags made of different materials as shown below. He is going to put some water and the goldfish into a bag.



Silk bag



Cotton bag



Plastic bag



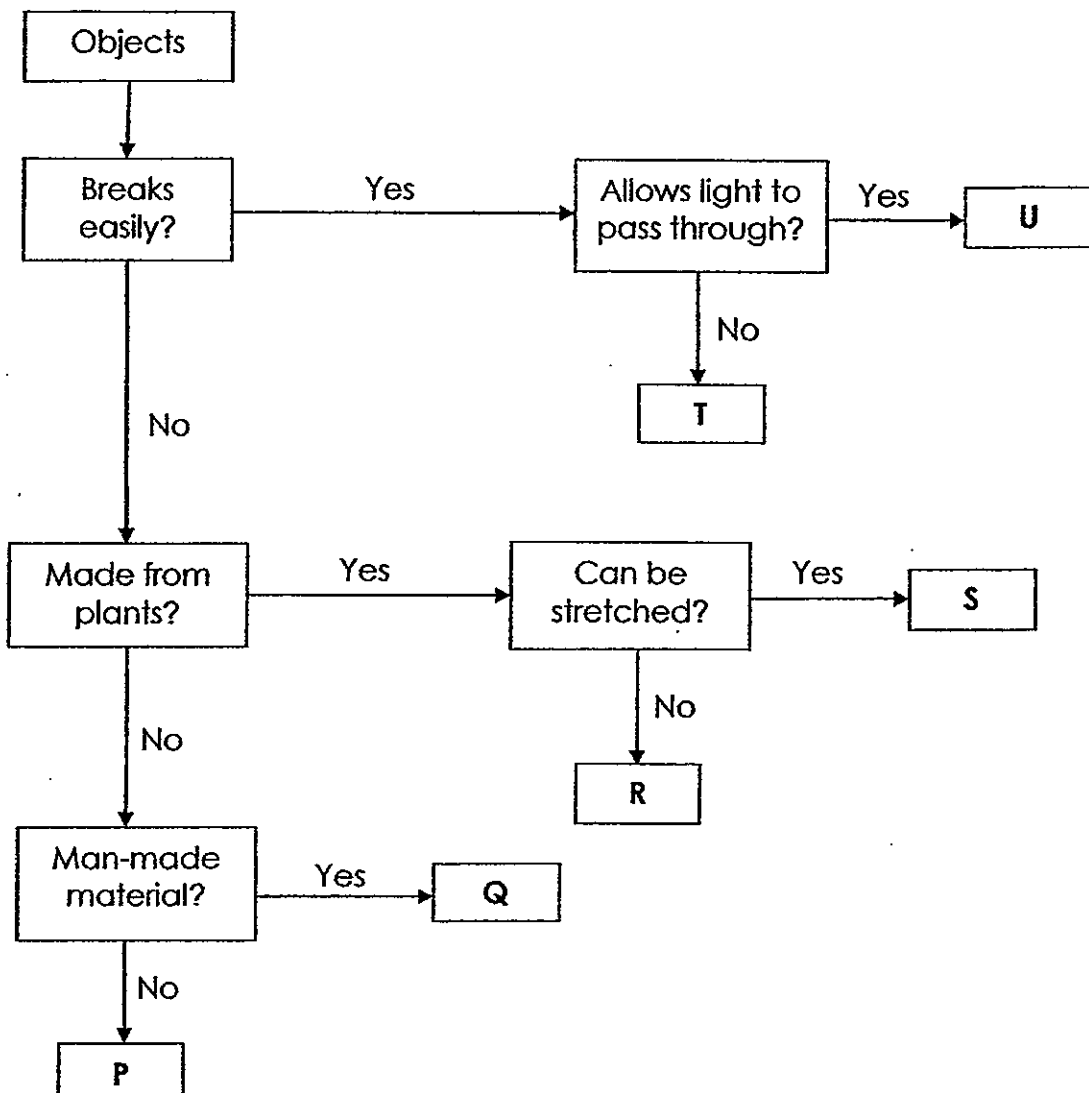
Woollen bag

(a) Which bag should Harry use to give the goldfish to Ron? (1m)

(b) What property of your choice in (a) helps it hold the goldfish and water?

(1m)

28. Study the flowchart below and identify P, Q, R, S, T and U.

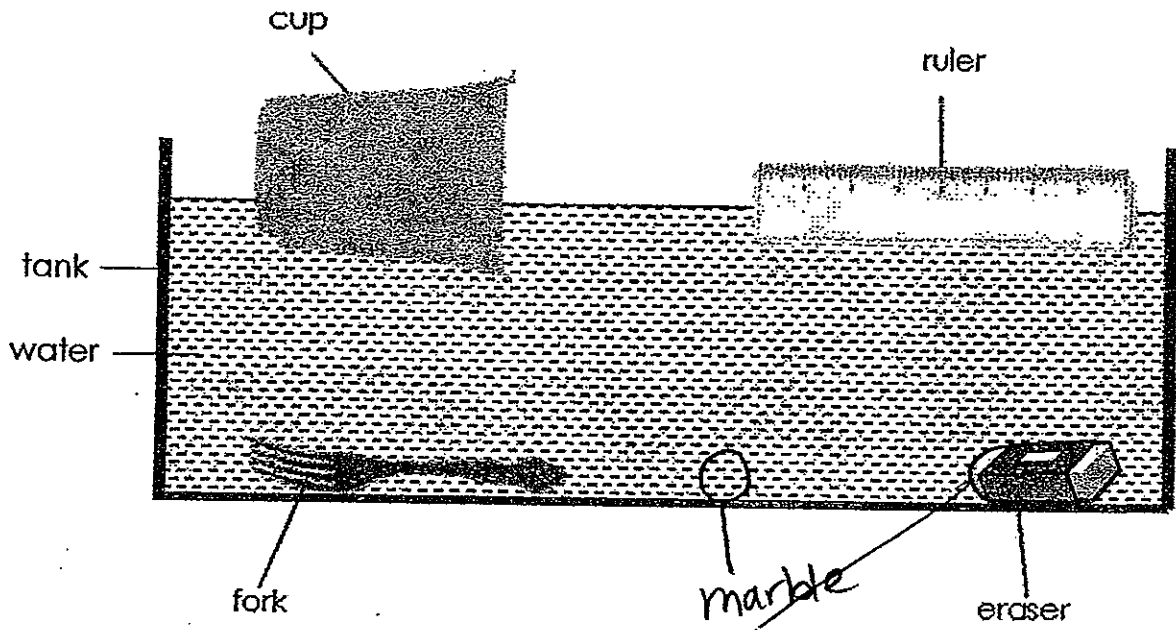


Complete the table using the helping words given below. (3m)

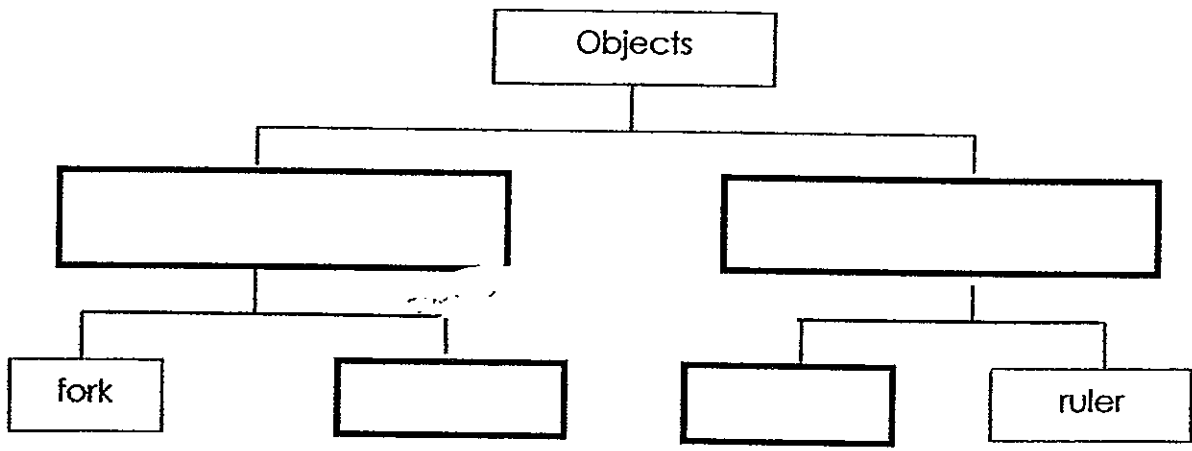
Plastic bag	Glass bottle	Wooden table
Ceramic plate	Balloon	Paper clip

P:	S:
Q:	T:
R:	U:

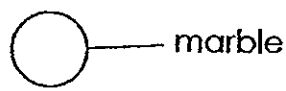
29. Victor dropped some objects into a tank of water. The diagram below shows the resting positions of four objects.



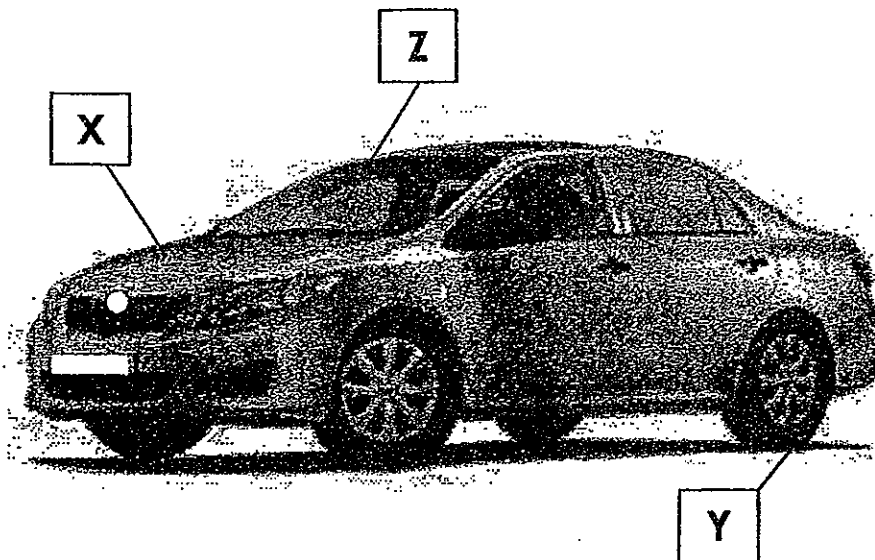
(a) Complete the classification chart below based on Victor's observation. (2m)



(b) Victor dropped a glass marble shown below into the tank. Where will the marble be found? Draw and label the marble in the above diagram. (1m)



30. The diagram below shows a car.



(a) What materials are the parts, X and Y, made of? (1m)

Material for X: _____

Material for Y: _____

(b) State the property of the material which makes it suitable for the part, X.

(1m)

(c) The material used to make part Z can also be used to make spectacle lenses. Which property of the material makes it suitable for making spectacle lenses? (1m)

The End

ANSWER SHEET

EXAM PAPER 2012

SCHOOL : TAO NAN PRIMARY SCHOOL

SUBJECT : PRIMARY 3 - SCIENCE

TERM : SA 1

Booklet A

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

Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31
4	1	2	4											

Booklet B

21. ai) Both A and B give birth to their young alive.
 aii) D can fly while C cannot fly.

21. bi) Both of them have heads.
 bii) Animal X has a pair of feelers while animal Y does not have a pair of feelers.

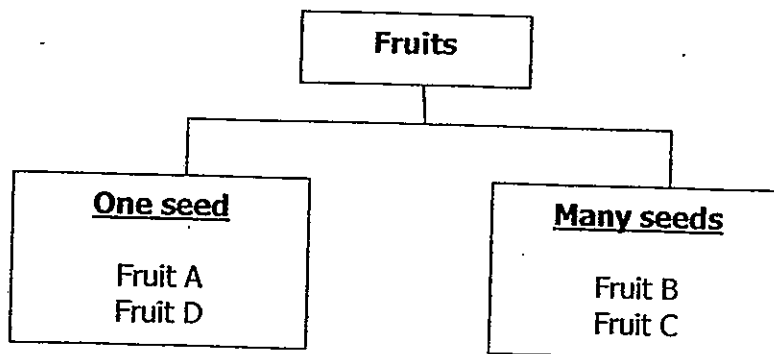
22. a) She would observe that the mouse in set-up A was dead after 3 days.

22. b)

Conclusion of experieiment	Tick(✓)
Living things need air to survive.	✓
Living things need food to survive.	
Living things need water to survive.	

22. c) Set-up B.

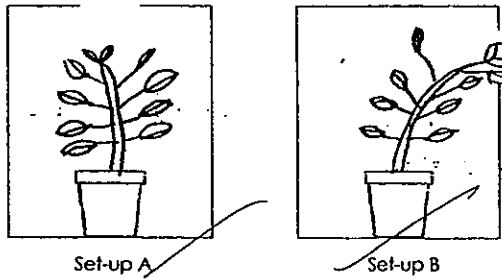
23. a)



23. b) i) Smooth skin

ii) Hairy skin

24. a)



24. b) Living things respond to changes in the environment around them.

25. a) i) gill cover ii) scales iii) fin iv) tail

25. b) The function of gills is to help the fish to breathe in the water.

26. i) Bread B

26. ii) Bread B was kept in a dark, damp and warm place. As such, there would be mould growing on bread B first.

26. b) The mould obtain food by feeding on the bread.

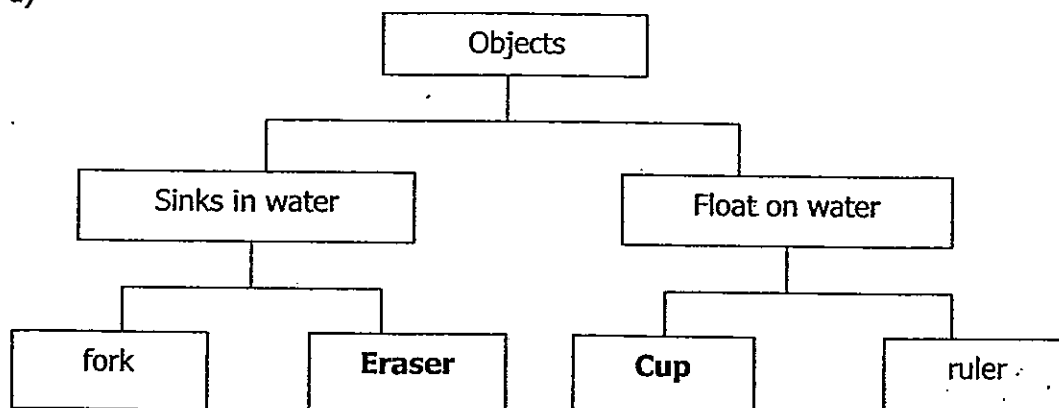
27. a) Plastic bag.

27. b) Plastic is waterproof.

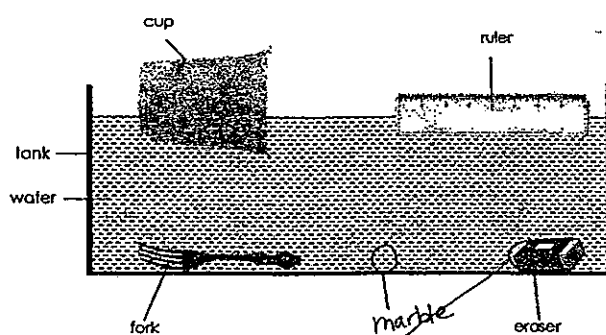
28.

P: Paper clip	S: Balloon
Q: Plastic bag	T: Ceramic plate
R: Wooden table	U: Glass bottle

29. a)



29. b)



30. a) Material for X: Metal
Material for Y: Rubber

30. b) It is stiff and hard.

30. c) It is transparent.

