



**CATHOLIC HIGH SCHOOL
PRIMARY 3
SEMESTRAL EXAMINATION 1
2011**

SCIENCE

Name: _____ ()

Class: Primary 3 _____

Date: 12 May 2011

BOOKLET A

30 Questions
60 Marks

Total Time for Booklets A & B: 1 hour 30 minutes

Instructions to Candidates

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

Section A : Multiple Choice Questions (60 marks)

For each question from 1 to 30, four options are given. One of them is the most suitable answer. Make your choice (1, 2, 3 or 4) on the Optical Answer Sheet.

1. Which of the following is a non-living thing?

- (1) dog
- (2) toadstool
- (3) giraffe statue
- (4) spiny anteater

2. Alex was moving house. He packed some belongings into boxes and sealed them two weeks before he moved. While unpacking, he discovered that his pot of plant that was kept in one of the boxes had died. Which of the following explain(s) what had happened?

- A The plant did not move.
- B It was too warm in the box.
- C The plant did not receive water.
- D The plant did not have enough air.

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

3. Susan made the following observations about Animal X in a garden.

- A It has legs.
- B It has nostrils.
- C It is brown in colour.
- D It has hair on its body.

What can you conclude from the information given about Animal X?

- (1) It is alive.
- (2) It can run.
- (3) It is a dog.
- (4) It is a mammal.

4. The table below shows the number of fish A and B found in a fish tank. No fishes were added into each tank.

Week	Number of fish	
	A	B
0	10	10
2	10	10
4	15	10
6	15	10

Which of the following statements is false?

- (1) Fish A is a living thing.
- (2) Fish B cannot reproduce.
- (3) Fish A has reproduced five more fish.
- (4) Fish B did not reproduce over the 6 weeks.

5. Which of the following shows that living things respond to changes?

- (1) An eagle preyed on a rat.
- (2) John needed to use an oxygen tank while diving.
- (3) An elephant used its trunks to put the bananas into its mouth.
- (4) The lizard ran into hiding when the kitchen lights were switched on.

6. The diagrams below show a mushroom and a Bird's nest fern.



mushroom

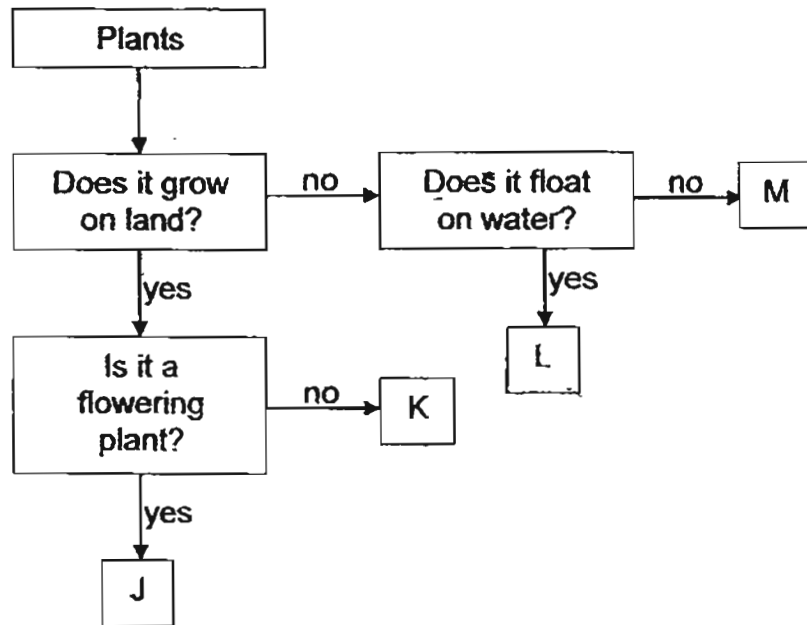


bird's nest fern

What is the similarity between the mushroom and the bird's nest fern?

- (1) They are plants.
- (2) They reproduce by spores.
- (3) They can make their own food.
- (4) They do not need water to survive.

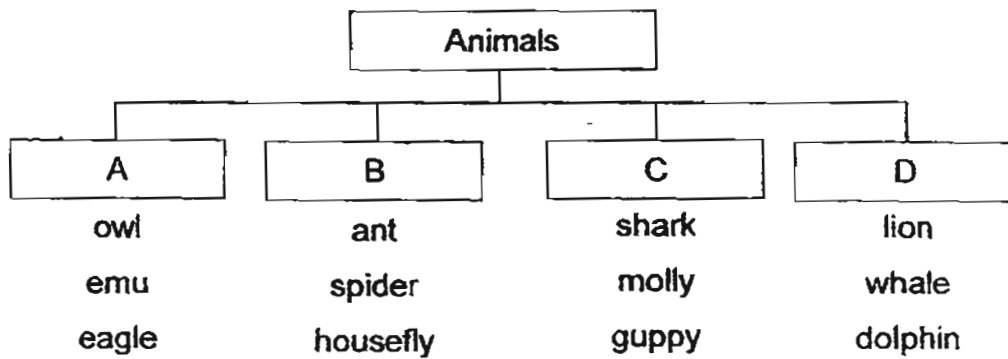
7. Study the flowchart below.



Which letters, J, K, L or M, represent the duckweed and the balsam plant?

	duckweed	balsam plant
(1)	L	J
(2)	L	K
(3)	K	J
(4)	M	K

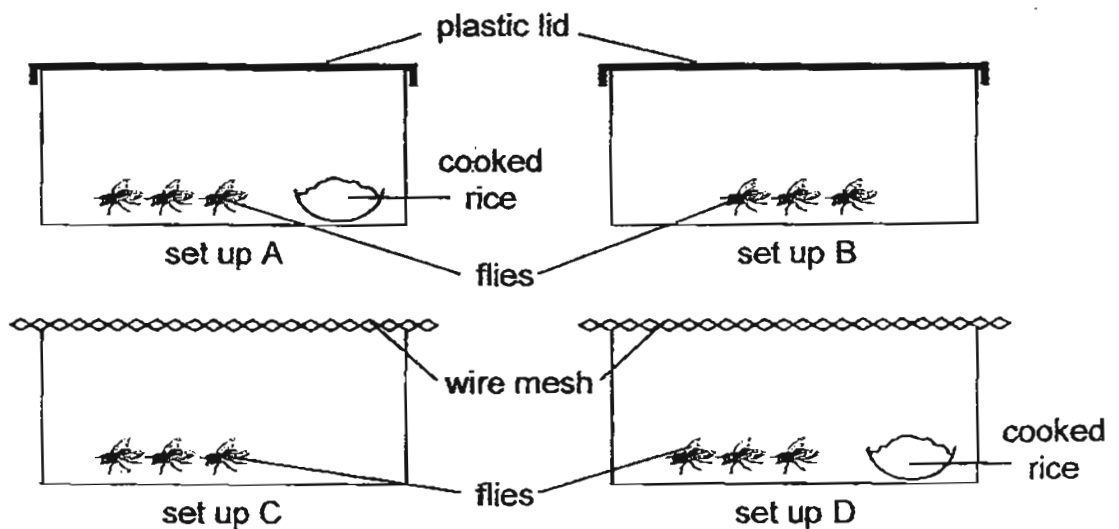
8. Study the classification chart below.



Which of the following animals has been classified incorrectly?

- (1) Emu
- (2) Shark
- (3) Whale
- (4) Spider

9. Li Meng set up the following to find out if insects need food to survive.



Which two set-ups should Li Meng use to conduct his experiment?

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

10. Study the classification table below.

Group P	Group Q
rabbit	ostrich
whale	penguin
monkey	platypus
hamster	mosquito

What is the most suitable heading for each group?

	Group P	Group Q
(1)	plant-eaters	animal-eaters
(2)	move by crawling	move by flying
(3)	body covered with hair	body covered with feathers
(4)	give birth to young alive	lay eggs

11. The diagrams below show a panda and a sparrow.



panda

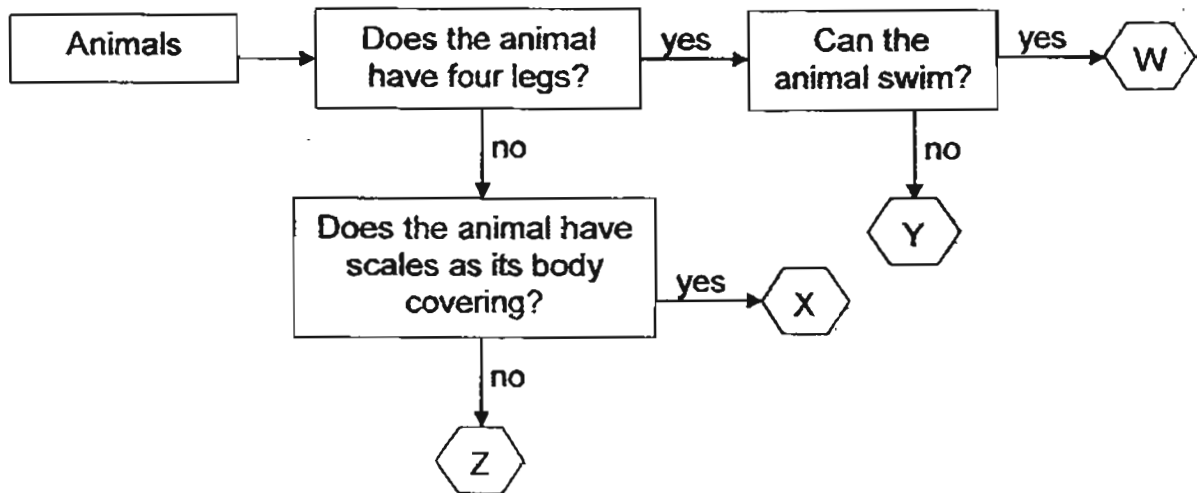


sparrow

Which of the following is a common characteristic to both animals?

- (1) They live on land.
- (2) They are both plant-eaters.
- (3) They reproduce by laying eggs.
- (4) They have hair as their body covering.

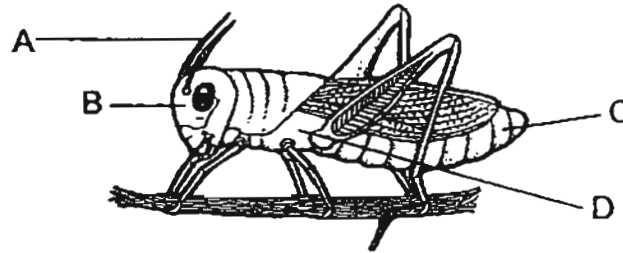
12. Study the flowchart below carefully.



Which of the following is not a characteristic of animal X?

- A It is an animal.
 - B It has four legs.
 - C Its body is covered with scales.
- (1) A only
- (2) B only
- (3) A and B only
- (4) A and C only

13. The diagram below shows a grasshopper.



Which of the following correctly shows the parts of the insect?

	A	B	C	D
(1)	head	feelers	thorax	abdomen
(2)	head	feelers	abdomen	thorax
(3)	feelers	head	thorax	abdomen
(4)	feelers	head	abdomen	thorax

14. Four pupils in a class made the following comments about a cow.

Mandy: It eats grass.

Ken: It has four legs and a tail.

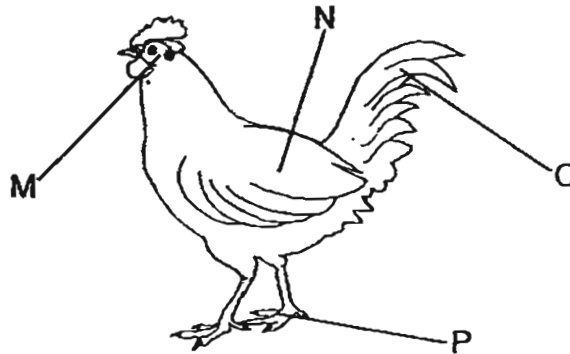
Lynnette: It feeds its young with milk.

Joe: Its layer of hair helps to protect it.

Which of the four pupils have made a comment that a cow is a mammal?

- (1) Ken and Joe only
- (2) Lynnette and Joe only
- (3) Mandy, Lynnette and Joe only
- (4) Mandy, Ken, Lynnette and Joe

15. Study the diagram below of a chicken.



Which part(s) of the chicken help it to move?

- (1) P only
- (2) N and P only
- (3) N and O only
- (4) M and P only

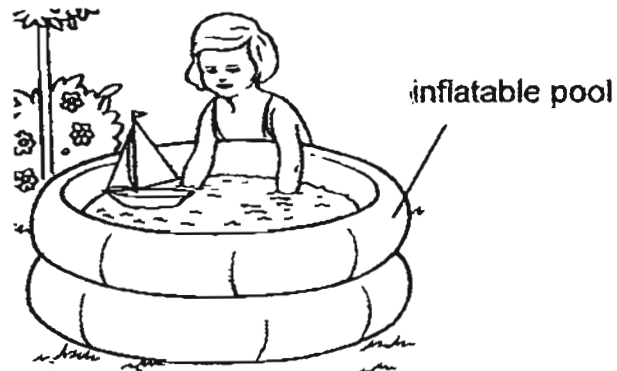
16. The following table shows the characteristics of four different materials.

Material	Waterproof	Light	Breaks easily when dropped
P	✓	✓	
Q	✓		
R		✓	
S	✓		✓

Which material, P, Q, R or S, is the most suitable for making a pair of slippers?

- (1) P
- (2) Q
- (3) R
- (4) S

17. Which of the following characteristics is the most important when choosing a material to make an inflatable pool?



- (1) It must be light.
- (2) It must be strong.
- (3) It must be bendable.
- (4) It must be waterproof.

18. Which of the following objects is likely made of a material that comes from animals?

(1)



screw

(2)



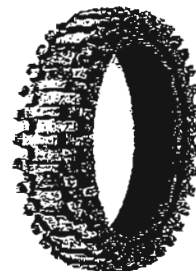
shoes

(3)



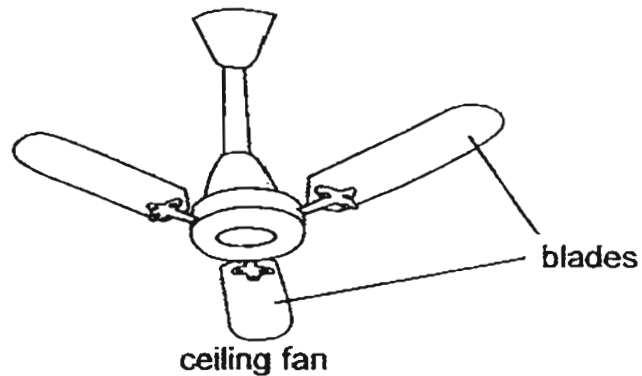
cup

(4)



tyre

19. Which of the following objects is made of the same material as the blades of a ceiling fan?



- (1) window
 - (2) lego block
 - (3) school bag
 - (4) newspapers
20. Study the classification table below.

Group A	Group B	Group C	Group D
eraser	pail	nail	door
balloon	milk bottle	wire	toothpicks
basketball	toothbrush	pencil lead	kitchen cabinet

In which group can we classify aluminium foil?

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

21. Which of the following is/are characteristic(s) of bricks used to make houses?

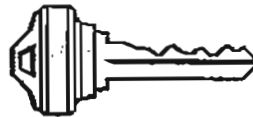
- A hard
- B smooth
- C waterproof
- D breaks easily

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

22. The diagrams below show a soccer ball and a car key.



soccer ball

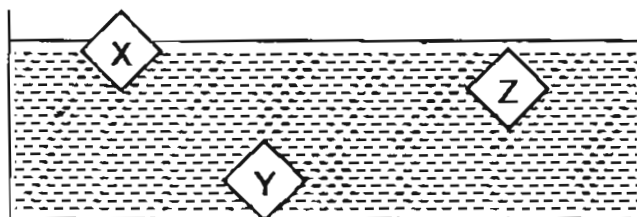


car key

How are the soccer ball and the car key different?

- (1) The soccer ball floats on water but the key sinks in water.
- (2) The soccer ball is not waterproof but the key is waterproof.
- (3) The soccer ball is made of fabric but the key is made of metal.
- (4) The material used to make the soccer ball is harder than the material used to make the key.

23. Debbie placed three objects, X, Y and Z, into a basin of water. The diagram below marks the position of the three objects in the water.



What could the objects be?

	Object X	Object Y	Object Z
(1)	book	metal spoon	plastic fork
(2)	empty water bottle	table cloth	metal ruler
(3)	ping pong ball	metal ruler	plastic bag
(4)	tennis ball	socks	marble

24. Study the flowchart below.

Property of material	Material			
	E	F	G	H
Is it light?	no	yes	no	yes
Is it flexible?	no	no	yes	yes
Is it waterproof?	yes	yes	yes	no
Is it easily scratched?	no	yes	no	yes

Which material, E, F, G or H, is most likely to be wool?

- (1) E
- (2) F
- (3) G
- (4) H

25. Charlie described a material, "It is hard, not easily broken, and is often used to make window frames." Which of the following materials is Charlie describing?

- (1) glass
- (2) metal
- (3) plastic
- (4) ceramic

26. Study the classification table below.

Group A	Group B
knife	mirror
kettle	tin can
floor mat	fish tank
wooden block	crystal ball

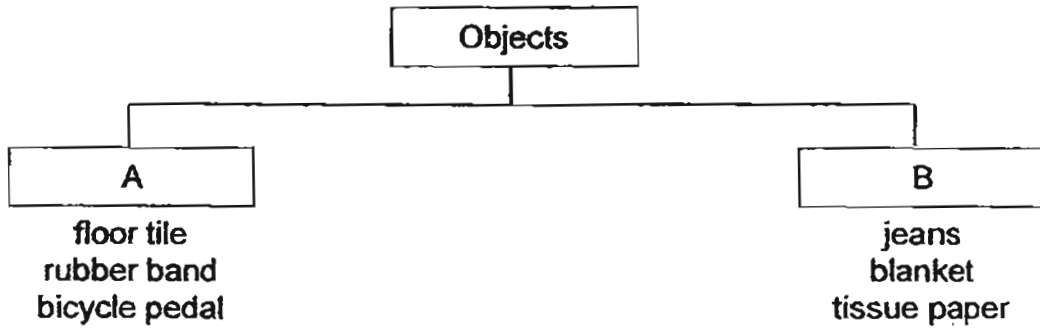
Which object has been wrongly classified?

- (1) knife
- (2) kettle
- (3) tin can
- (4) crystal ball

27. Which of the following materials will you not use to make a pencil holder?

- (1) Wood
- (2) Glass
- (3) Cotton
- (4) Rubber

28. Study the classification chart below.



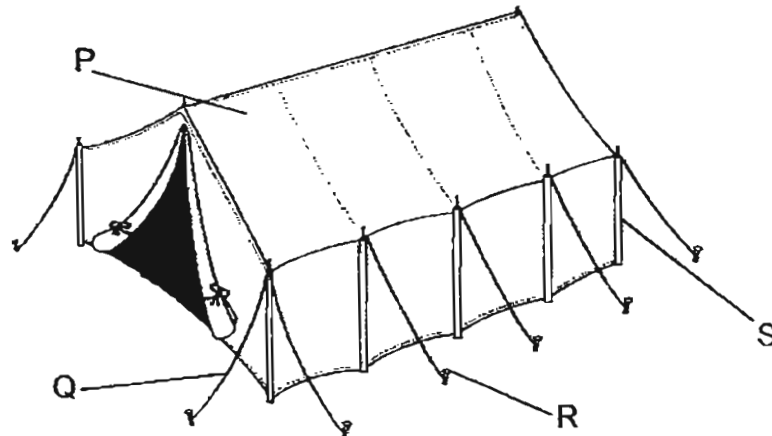
What are suitable headings for each group?

	A	B
(1)	sinks in water	floats on water
(2)	does not bend easily	bends easily
(3)	does not absorb water	absorbs water
(4)	breaks easily when dropped	does not break when dropped

29. Silk is not a suitable material to be used to make a raincoat because

- (1) it is light
- (2) it absorbs water
- (3) it is easily scratched
- (4) it does not float on water

30. The diagram below shows a tent.



Which part, P, Q, R or S, is made of the most flexible material?

- (1) P
- (2) Q
- (3) R
- (4) S

- End of Section A-



**CATHOLIC HIGH SCHOOL
PRIMARY 3
SEMESTRAL EXAMINATION 1
2011**

SCIENCE

Name: _____ ()

Class : Primary 3 _____

Date : 12 May 2011

BOOKLET B

14 Questions
40 Marks

Total Time for Booklets A & B: 1 hour 30 minutes

Instructions to Candidates

Follow all instructions carefully.
Answer all questions.

Parent's Signature: _____

Date: _____

Score	
Section A	60
Section B	40
Total	100

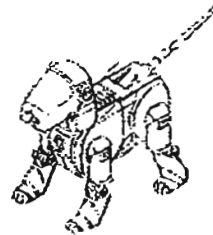
Section B : Open-Ended Questions (40 marks)

Read the following questions carefully and write your answers in the space provided. The maximum marks that can be awarded is shown at the end of each question or part-question.

31. Leo had a pet dog named Milo and a robotic dog.



Milo



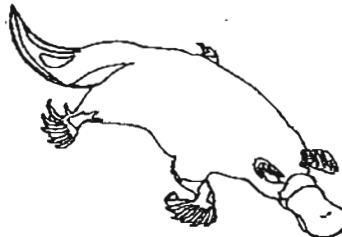
robotic dog

Leo said that Milo is a living thing but the robotic dog is a non-living thing. How did he make this conclusion? List two things that Milo can do but the robotic dog cannot. [2]

(i) _____

(ii) _____

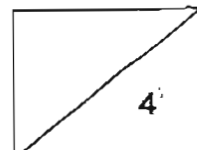
32. The diagram below shows a platypus.



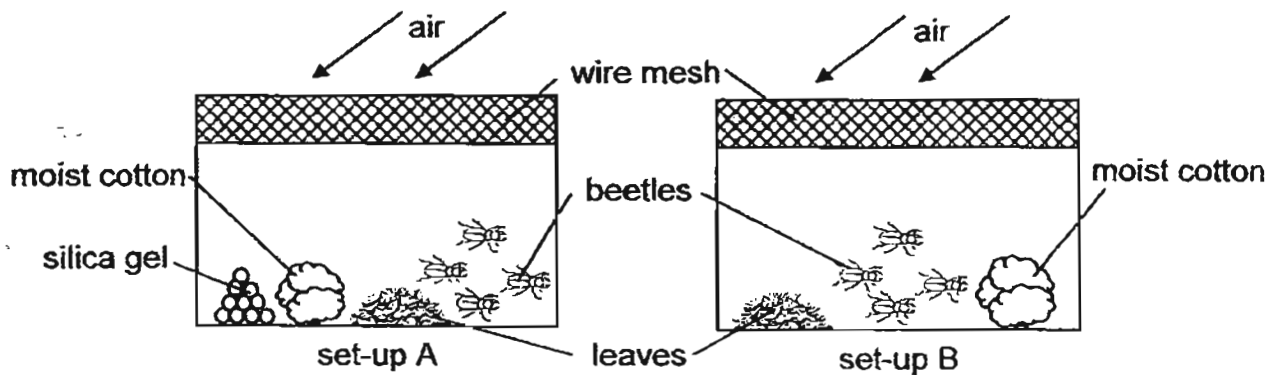
State two reasons to explain why the platypus is a mammal. [2]

(i) _____

(ii) _____



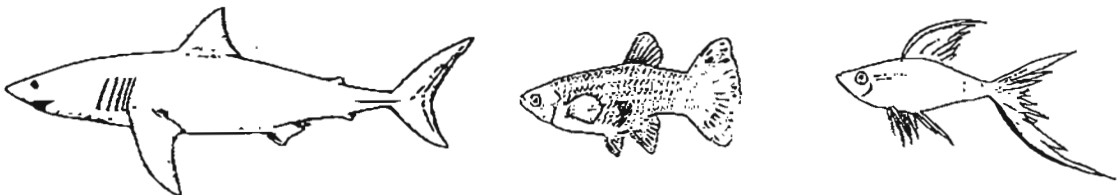
33. Angela placed the following set-ups in the Science Laboratory. In the set-up A, she added some silica gel to absorb the moisture in the container.



- (a) What will happen to the beetles in set-up A and B in two weeks? [1]

- (b) Explain your answer in part (a). [2]

34. The diagrams below show a Great White shark, a guppy and a swordtail.



Put a tick (✓) in the boxes below if all three animals above have the characteristic. [2]

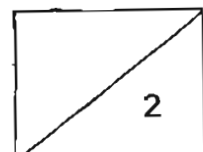
	Characteristics	Tick (✓)
(a)	They can swim.	
(b)	They are fishes.	
(c)	They reproduce by laying eggs.	
(d)	They have the same body covering.	

35. Julian conducted an experiment on four materials and tabulated his findings in the table below.

Material	Properties			
	easily scratched	flexible	sinks in water	waterproof
M		✓	✓	✓
N		✓	✓	
O			✓	✓
P				✓
Q	✓			

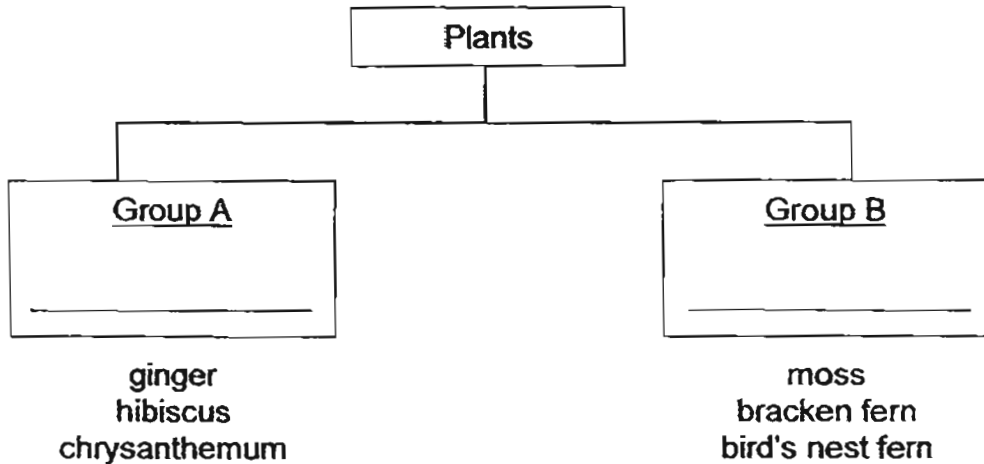
Based on the information above, write "M", "N", "O", "P" or "Q" in the boxes below to show the most suitable material for the making of the objects. [2]

- (a) shower cap —
- (b) kitchen sink —
- (c) rubber band —
- (d) ice cream stick —



36. Study the classification chart below, which shows how plants can be classified into two groups, A and B.

(a) Fill in the boxes with suitable headings for groups A and B. [2]

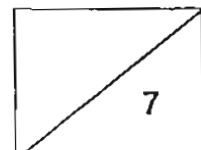


(b) In which group, A or B, should "water lily" be classified in? [1]

37. The diagram below shows a parrot. Label parts (a), (b) and (c) in the boxes provided. [3]



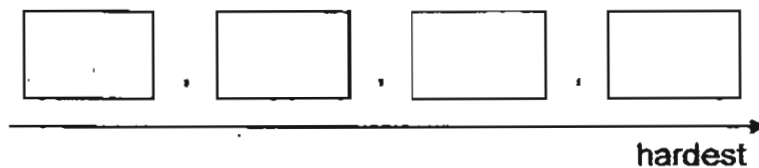
(d) What will happen to the parrot if it does not have the body part labelled (c)? [1]



38. Ahmad compared the hardness of four materials, W, X, Y and Z by scratching them with an iron nail. He recorded his observations in the table below.

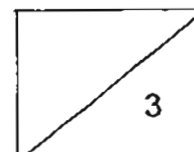
Material	Observations
W	deep scratches
X	no scratches
Y	very deep scratches
Z	shallow scratches

- (a) Arrange materials W, X, Y and Z in ascending order of their hardness. Write the letters "W", "X", "Y" and "Z" in the boxes below to show this arrangement. [1]



- (b) Which material, W, X, Y or Z, is iron? [1]

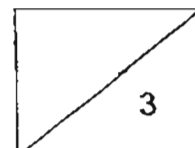
- (c) What would happen to material Z when it is scratched by material W? [1]



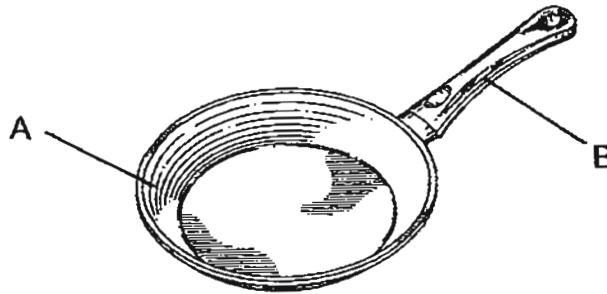
39. Lenny kept similar pots of plants, J and K, in the garden. The plants were grown in the same type of soil. For one week, Lenny watered plant J. He did not water plant K. The table below shows the height of the plants over the one week.

Day	Height of plant / cm	
	J	K
0	12	12
1	13	13
2	15	14
3	16	15
4	17	16
5	19	17
6	22	18
7	24	19

- (a) Which plant has grown more? [1]
-
- (b) What is the variable that is changed in this experiment? [1]
-
- (c) In the above experiment, which characteristic of plants shows that they are living things? [1]
-



40. The diagram below shows a frying pan.



(a) What are the materials used to make A and B? [2]

A: _____

B: _____

(b) Give a reason why the material used to make A is not suitable for making shoes? [1]

41. The diagram below shows a pair of goggles.



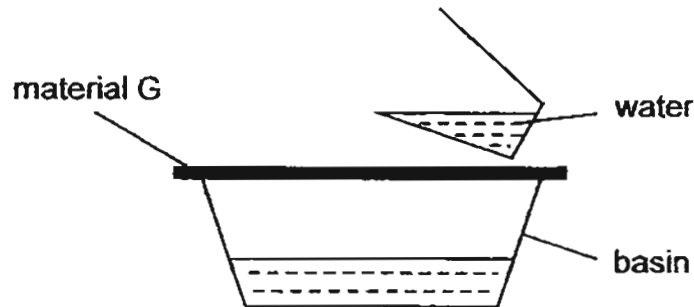
(a) State two reasons why the part of the goggles marked "U" should be made of plastic and not of glass. [2]

(i) _____

(ii) _____

(b) What is the physical property of plastic that helps the goggles protect our eyes when diving? [1]

42. Adeline conducted an experiment to test the physical property of material G. She put the material over a basin and poured water onto it.



- (a) Adeline observed that there was water collected in the basin. What can Adeline conclude about material G? [1]

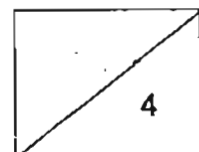
- (b) Name a material that has the same property as material G mentioned in (a)? [1]

- (c)



- In the above experiment, if material G is replaced by the material used to make part Z of the umbrella, what would happen? [1]

- (d) Give a reason for your answer in part (c). [1]



43. Dionne used three different materials to make similar bags, A, B and C. In each bag, she added the same cans of drinks one at a time until the bag broke.



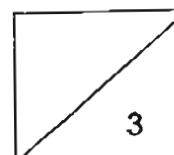
She then recorded the number of cans needed to make each bag break in the table as shown below.

Bag	Number of cans added
A	10
B	25
C	17

- (a) Which bag is made of the weakest material? [1]

- (b) Which bag is made of a material that is most suitable for making a school bag? [1]

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



44. Chiu Yue wanted to classify the following objects into two groups.

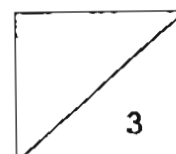
- shoe lace
- drink can
- copper wire
- story book
- diapers
- disposable plate

In the classification table below, classify the above objects into their correct groups.

[3]

Objects made of metal	Objects made of non-metal

- End Of Paper -





ANSWER SHEET

EXAM PAPER 2011

**SCHOOL : CATHOLIC HIGH
SUBJECT : PRIMARY 3 SCIENCE**

TERM : SA1



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

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

- 31)i)Milo can grow but the robotic dog cannot.
ii)Milo can reproduce but the robotic dog cannot.

- 32)i)The platypus had hair on its body.
ii)The platypus feeds its young with milk.

- 33)a)The beetles in set-up A will die the beetles in set-up B will not die.
b)The beetles in set-up A does not have water, but the beetles in st-up B have air, food and water.

34)a,b

35)a)P b)O c)M d)Q

36)a)Group A: Flowering Group B: Non-flowering
b)Group A.

37)a)beak b)legs c)wing
d)It will not be able to fly.

38)a)Y,W,Z,X
b)material.
c)It will have no scratches.

39)a)Plant J.
b)The amount of water that was given to plant J and K.
c)They can grow.

40)a)A: Metal B: Plastic
b)It is inflexible.

41)a)i)plastic is lighter than glass.
ii)Plastic is not easily broken but glass is easily broken when dropped.
b)It is waterproof.

42)a)Material G is water absorbent.
b)Paper.
c)There would be no water in the basin.
Material Z is waterproof.

43)a)Bag A.
b)Bag B.
c)Bag B is the strongest. (or)Bag B's is able to hold the greatest amount of weight before breaking.

44)Object made of metal
copper wire
drink can

Object made of non-metal
disposable plate
shoe lace
story book
diapers