



**AI TONG SCHOOL
2012**

**SEMESTRAL ASSESSMENT ONE
PRIMARY 3 SCIENCE**

Duration: 1 h 45 min

Date: 10 May 2012

INSTRUCTIONS TO CANDIDATES

**Do not open the booklets until you are told to do so.
Follow all instructions carefully.
Answer all questions.**

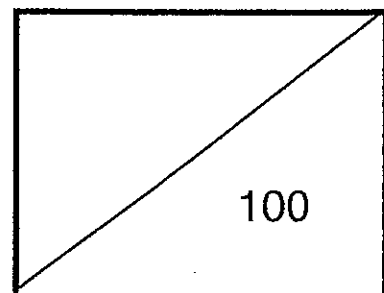
Name : _____ ()

Class : Primary

Parent's Signature : _____

Date: _____

Marks :



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. Megan was given a list of things, A, B, C and D, as shown below.



A



B



C



D

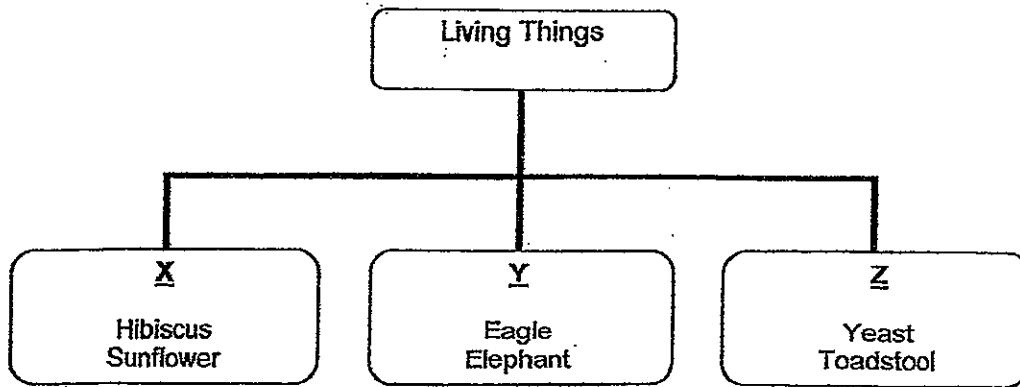
Megan classified the things into 2 different groups. Which one of the following shows the correct classification?

	living things	non-living things
(1)	A, C	B, D
(2)	B, C	A, D
(3)	C, D	A, B
(4)	B, D	A, C

2. Which of the following statements does not describe all living things?

- (1) They grow.
- (2) They reproduce.
- (3) They need air, food and water.
- (4) They can make their own food.

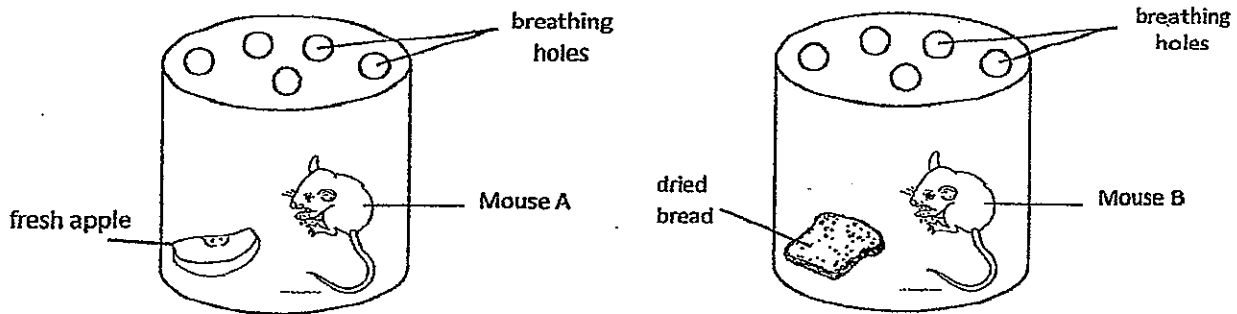
3. The following living things are classified as shown below.



Which of the following does X, Y and Z represent?

	X	Y	Z
(1)	Plants	Animals	Fungi
(2)	Plants	Birds	Micro-organisms
(3)	Flowering plants	Mammals	Plants
(4)	Non-flowering plants	Animals	Fungi

4. Study the following set-ups.



Each mouse is given a fresh supply of the food shown above daily.

Which mouse would survive longer?

- (1) Mouse A because its food has water in it.
- (2) Mouse A because it has food and air.
- (3) Mouse B because it has more food.
- (4) Mouse B because its food is fresh.

5. Jonah touched a snail as shown below.



The snail pulled its head into its shell. What could Jonah conclude about living things from his observation?

- (1) Living things grow.
- (2) Living things reproduce.
- (3) Living things need air, food and water.
- (4) Living things respond to their surroundings.

6. Study the table below carefully. A tick (✓) indicates that a characteristic is observed and a cross (X) means it is not.

Objects	Characteristics		
	Can grow	Can reproduce	Can move by itself
R	X	X	X
Q	✓	✓	✓

Based on the table, what can Objects R and Q represent?

	R	Q
(1)	Cat	Car
(2)	Cup	Ball
(3)	Ring	Turtle
(4)	Worm	Beetle

7. The table shows the number of deer in a jungle over a period of 4 weeks.

Week	Number of Deer
1	50
2	43
3	38
4	30

What is a possible cause for the changes in the number of deer?

- (1) Many of the deer gave birth to young.
- (2) A new pride of lions came into the jungle.
- (3) There was a decrease in the number of birds.
- (4) There was good rainfall resulting in more plants.

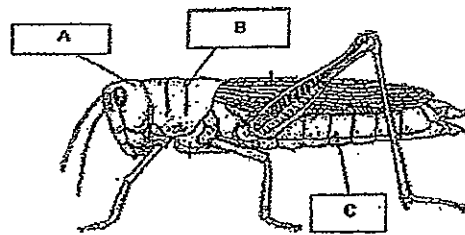
8. Which one of the characteristics is used only to describe birds?

- (1) They can fly.
- (2) They lay eggs.
- (3) They have wings.
- (4) They have feathers.

9. Animals reproduce _____.

- (1) to ensure the survival of their kind
- (2) so that others can eat their young
- (3) so they will continue to grow bigger
- (4) so they can take care of each other

10.



Which of the following shows the correct labels of the different parts of this insect?

	A	B	C
(1)	head	thorax	abdomen
(2)	head	abdomen	thorax
(3)	antenna	body	wings
(4)	antenna	wings	abdomen

11. Study the table below carefully.

	P	Q	R
Does it have feathers?	No	Yes	No
Does it live in water?	Yes	No	No
Does it have legs?	No	Yes	Yes

Which of the following shows correctly what animals, P, Q and R could be?

	P	Q	R
(1)	Butterfly	Snake	Guppy
(2)	Monkey	Penguin	Dog
(3)	Prawn	Whale	Snail
(4)	Goldfish	Ostrich	Elephant

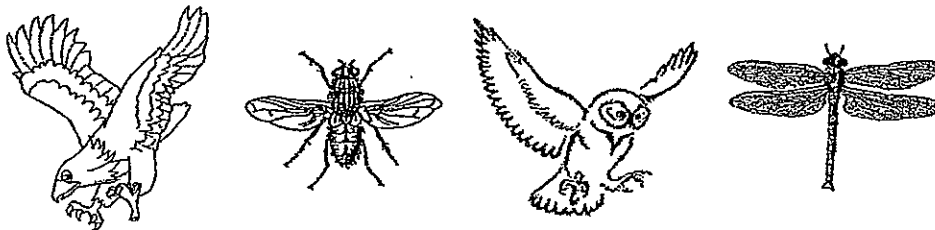
12. The table below shows how some organisms have been grouped according to their characteristics.

Group A	Group B
spiny anteater	guppy
grasshopper	cow
turtle	whale
lizard	human

What would be suitable headings for Groups A and B?

	Group A	Group B
(1)	Insects	Mammals
(2)	Lays eggs	Give birth to their young
(3)	Eats plants	Eats plants and animals
(4)	Have shells on their bodies	Have hair on their bodies

13. Look at the pictures below.

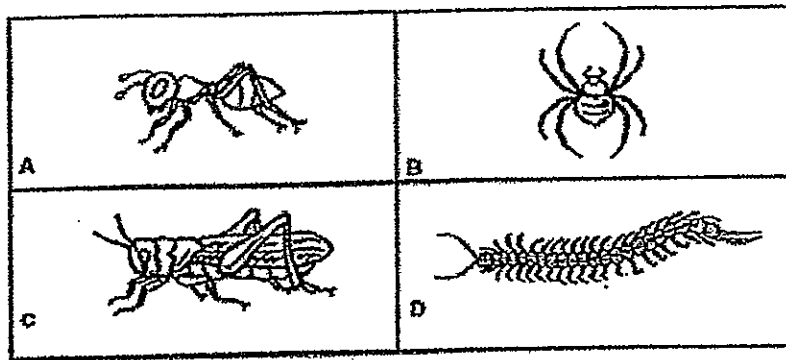


In what ways are the animals above similar?

- A They have wings.
- B They have two legs.
- C They hatch from eggs.
- D They feed on plants only.

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

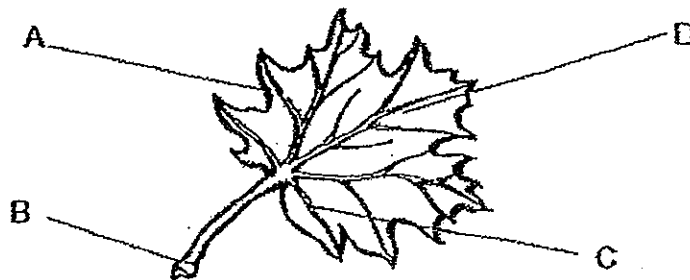
14. The diagram below shows some animals.



Which of these animals are insects?

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

15. Study the leaf shown below.



Which option correctly identifies the parts of the leaf?

	A	B	C	D
(1)	vein	leaf stalk	edge	leaf blade
(2)	vein	edge	leaf stalk	leaf blade
(3)	edge	vein	leaf stalk	leaf blade
(4)	edge	leaf stalk	vein	leaf blade

16. The picture below shows two things.



mushroom

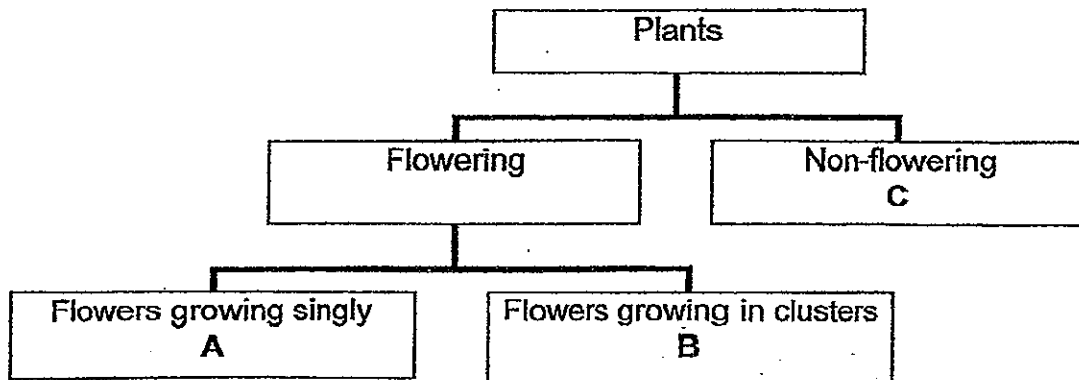


cabbage

Which of the following statements about the above things is true?

- (1) The mushroom has chlorophyll but the cabbage does not.
- (2) The mushroom breathes through gills but the cabbage does not.
- (3) The cabbage makes its own food but the mushroom feeds on other organisms.
- (4) The cabbage reproduces from spores but the mushroom reproduces from seeds.

17. Look at the classification table below.



Which of the following correctly represents A, B and C?

	A	B	C
(1)	frangipani	hibiscus	water lily
(2)	tulip	elephant's ear	ladder fern
(3)	rose	ixora	rabbit's foot fern
(4)	heliconia	carnation	bird's nest fern

18. Which of the following statements correctly describes the stag's horn fern?

- A It bears flowers.
- B It makes its own food.
- C It reproduces by seeds.
- D It can be found growing on trees.

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

19. Look at the pictures below.



Leaf J



Leaf K

Jamal, Ryan and Ali observed leaves J and K as shown above. They each made a statement about the leaves.

Jamal: Both leaves have the same edge.

Ryan: Leaf J has a jagged edge but Leaf K has an entire edge.

Ali: Leaf J has an oval shape but Leaf K has a heart shape.

Which of the following pupil(s) has/have made the correct statement(s)?

- (1) Ali only
- (2) Ryan only
- (3) Jamal only
- (4) Ryan and Ali only

20. Which of the following observation(s) tell(s) us that plants can respond to changes in the environment?

- A Mimosa plants close their leaves when touched.
- B Roses are beautiful and can attract insects to them.
- C Plants in a dark box grow towards the hole where there is light.

(1) A and B only

(2) A and C only

(3) B and C only

(4) A, B and C

21. Ru Xuan notes down some properties of organism X.

<u>Organism X</u>
<ul style="list-style-type: none">• It is a micro-organism.• It needs air, food and water.• It can be used to make bread.

What can organism X be?

(1) fern

(2) yeast

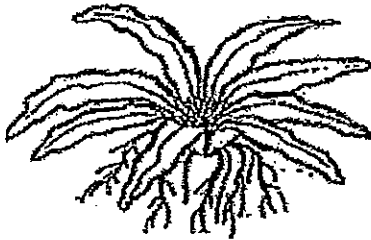
(3) yogurt

(4) bacteria

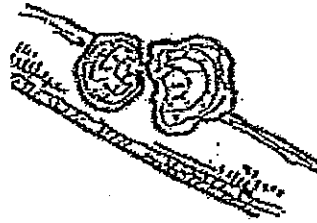
22. Kelly left some strawberries on the table. After a week, she noticed a white layer covering the strawberries. What could this white layer be?

- (1) dust
- (2) yeast
- (3) algae
- (4) mould

23. Study the pictures below.



Bird's Nest Fern



Bracket Fungus

How is the Bird's Nest Fern different from the Bracket Fungus?

	Bird's Nest Fern	Bracket Fungus
(1)	It is a fungi.	It is a plant.
(2)	It reproduces by seeds.	It reproduces by spores.
(3)	It has no flowers.	It has flowers.
(4)	It needs sunlight to grow.	It does not need sunlight to grow.

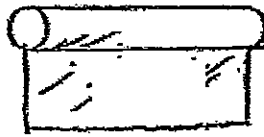
24. Which of the following statement about fungi is true?

- (1) Mushrooms and toadstools feed on dead matters and organisms.
- (2) Mushrooms and toadstools can make their own food.
- (3) Only toadstools have gills that can breathe in water.
- (4) Only mushrooms reproduce from spores.

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



can



foil



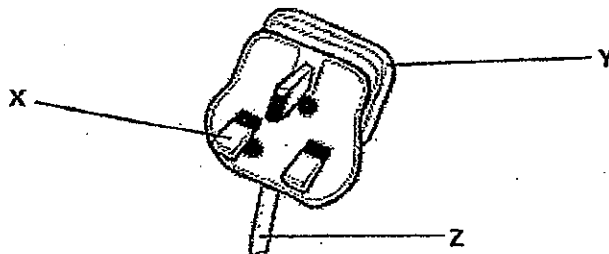
container

Why is aluminium used to make the above objects?

- A It is a light metal.
- B It is waterproof.
- C It is transparent.

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

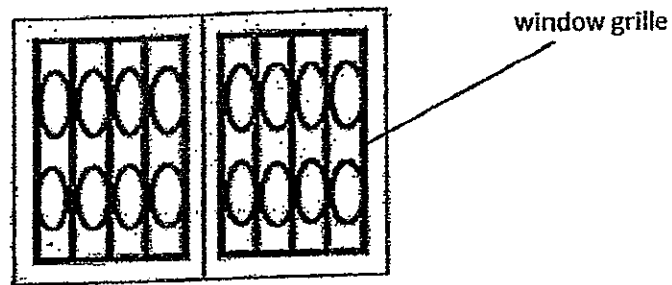
26. The diagram below shows an electrical plug.



Which of the following correctly shows the materials used to make parts X, Y and Z?

	X	Y	Z
(1)	Plastic	Plastic	Clay
(2)	Metal	Nylon	Plastic
(3)	Metal	Plastic	Rubber
(4)	Rubber	Metal	Plastic

27. The diagram shows a window grille.



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

- (1) steel
- (2) glass
- (3) wood
- (4) rubber

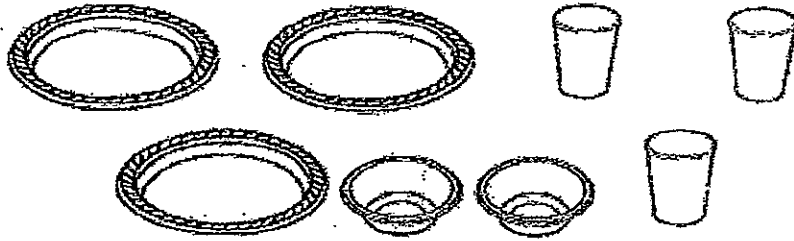
28. The picture below shows a pair of swimming goggles.



Which 2 materials are most suitable for making the goggles?

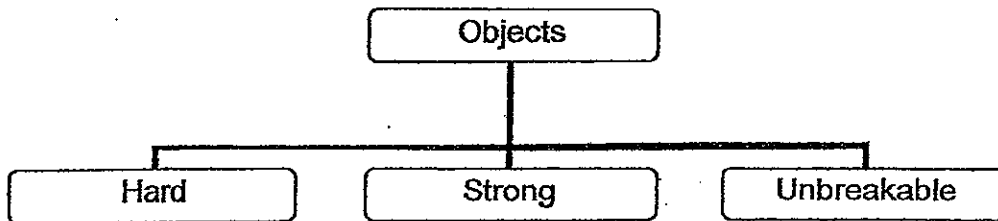
- (1) rubber and plastic
- (2) rubber and glass
- (3) cloth and plastic
- (4) cloth and glass

29. Miss Celeste bought some cups and plates for a birthday party. They were light, cheap and disposable. They did not break easily. What were they made of?



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

30. Look at the classification chart below.



One of the following objects can be placed in both the 'Hard' and 'Strong' groups. What can that object be?

- (1) Paper plate
- (2) Metal spoon
- (3) Cotton shirt
- (4) Rubber bottle

Name: _____ ()

Class: 3 ()

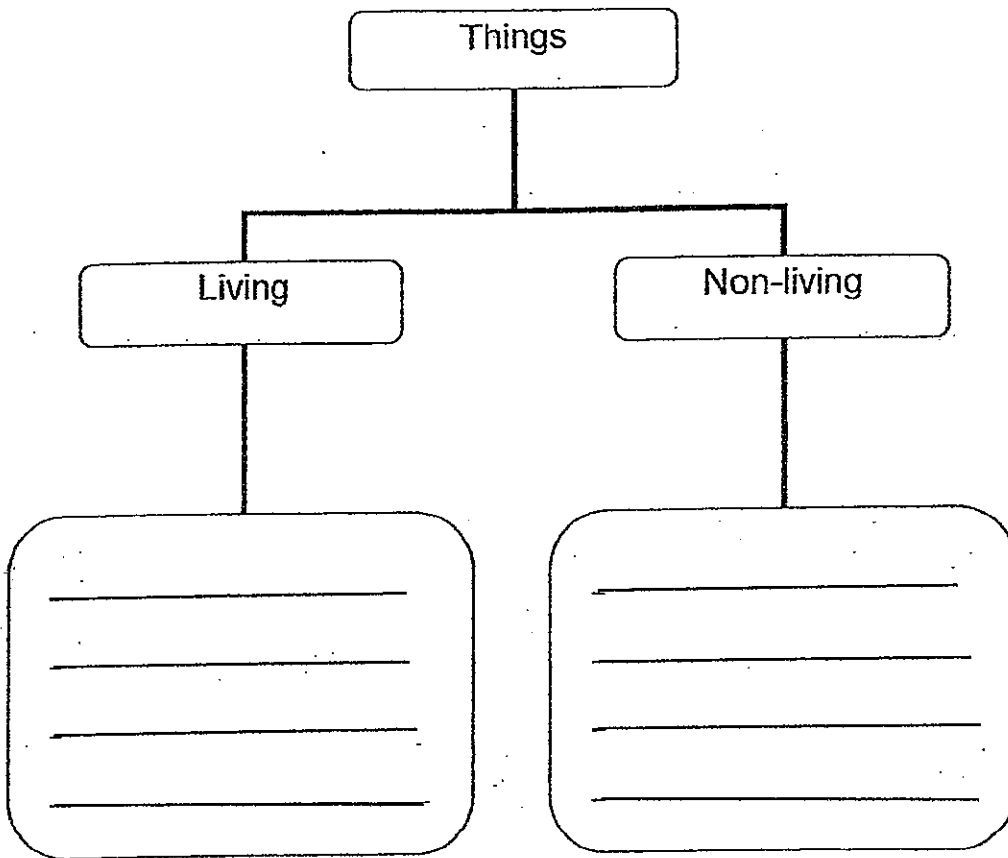
Section B: 40 marks

Read the questions carefully and write your answers in the spaces provided.

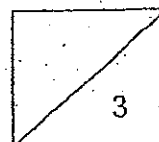
31. Elton has some objects.

candle	hibiscus plant
puffball	cooked seeds
car	fire

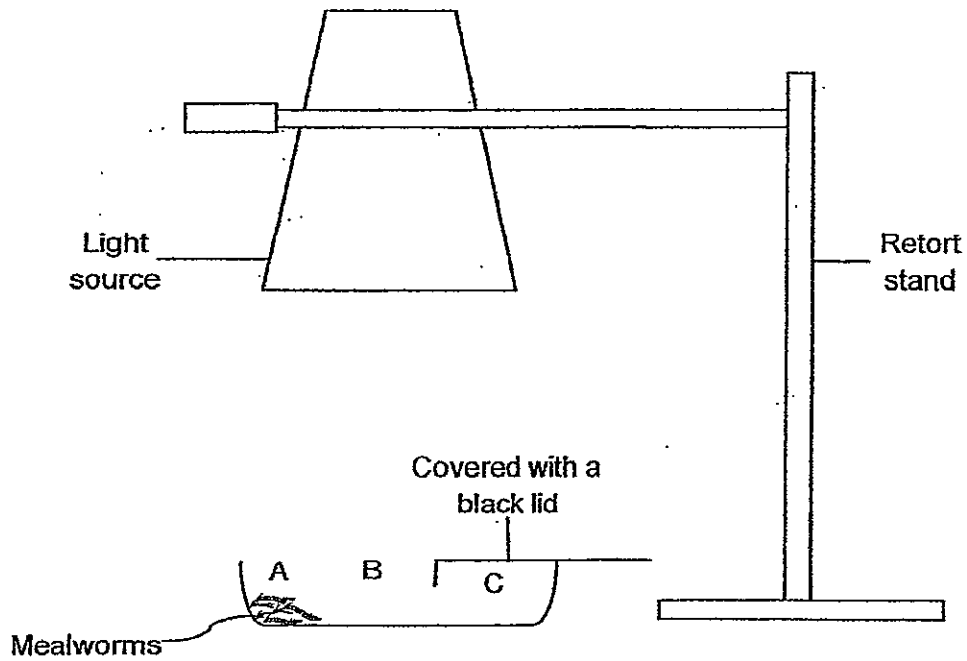
Put the objects correctly into the classification table below.



[3]



32. Mei Xuan carried out an experiment as shown in the set-up below. She placed three mealworms in a partially-covered box. She then switched on the light source and observed the mealworms for 5 minutes.

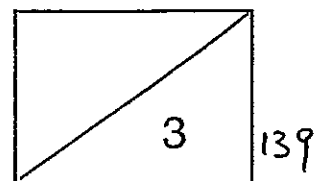


(a) In which position, A, B, or C, will the mealworms be found after 5 minutes? [1]

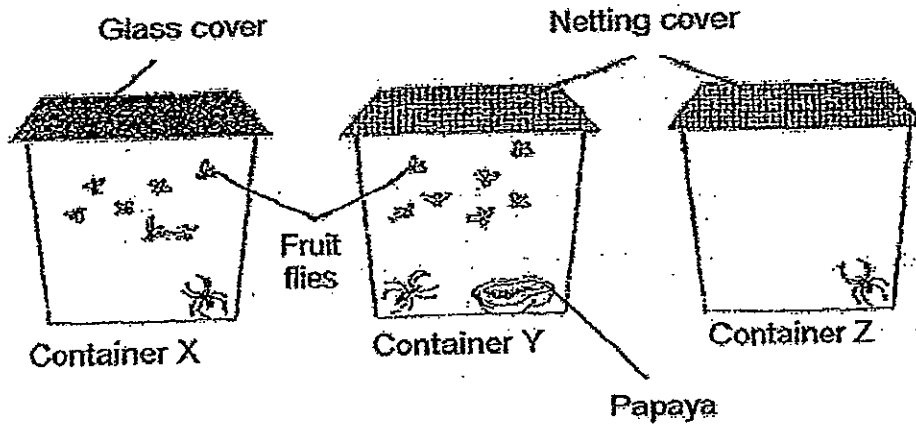
(b) Based on her observation from the above set-up, list two characteristics of living things. [2]

(i) _____

(ii) _____



33. Kevin carried out an experiment as shown in the diagram below. He kept three spiders separately in similar containers.

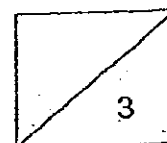


(a) In which container will the spider die first?

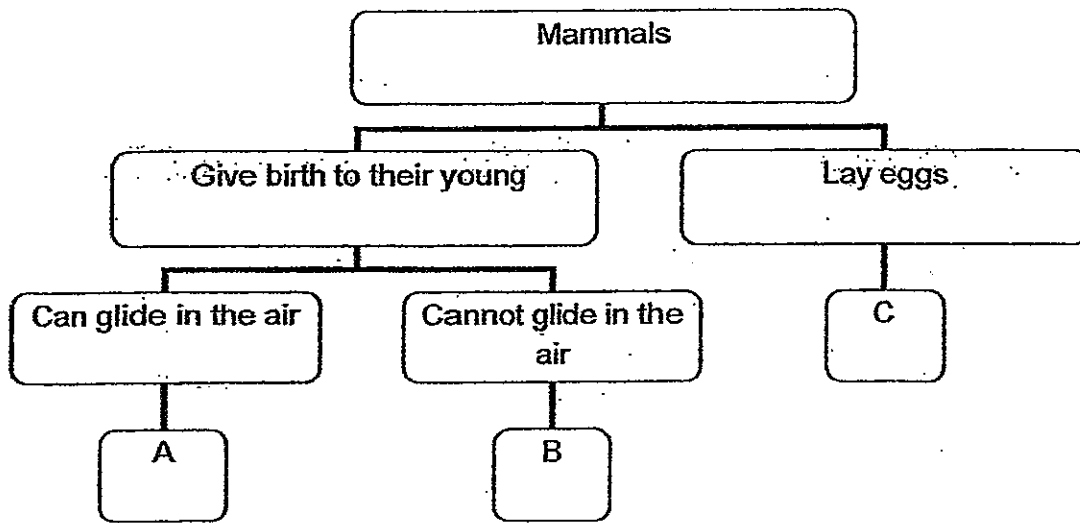
[1]

(b) Explain your answer given in part (a).

[2]



34. Study the classification chart below carefully.

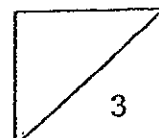


(a) Based on the classification chart above, state a similarity and a difference between Animal B and Animal C.

Similarity: [1]

Difference: [1]

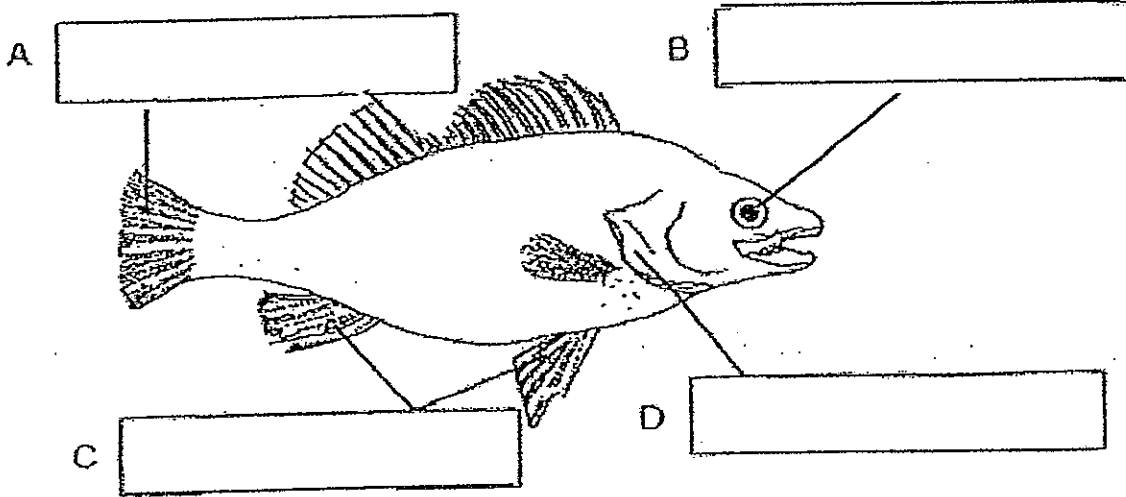
(b) What could Animal A be? [1]



35. Look at the diagram of the fish below.

a) Label the parts of the fish in the blanks provided.

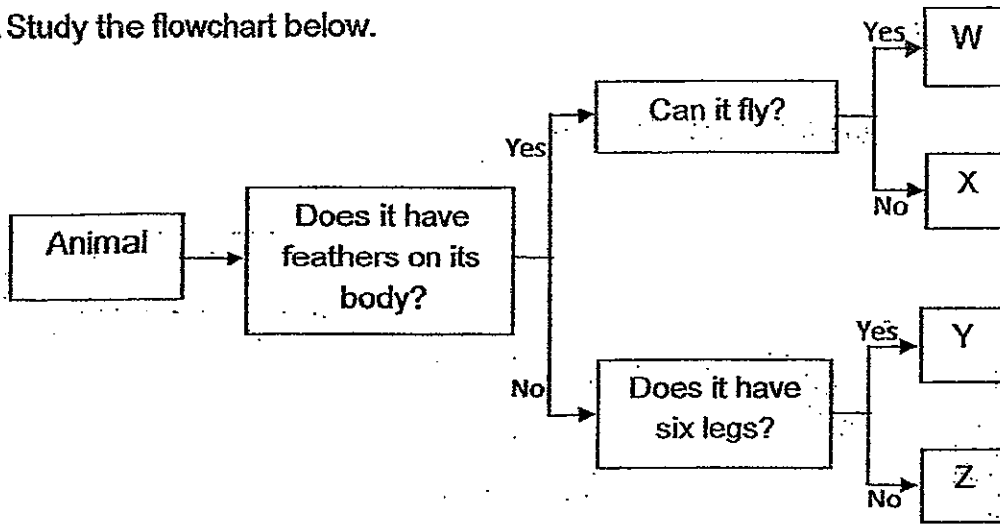
[2]



b) Name the part that can be found under D.

[1]

36. Study the flowchart below.



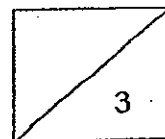
(a) Write W, X, Y or Z in the correct boxes given below.

[2]

Dragonfly	
Penguin	
Sparrow	
Sealion	

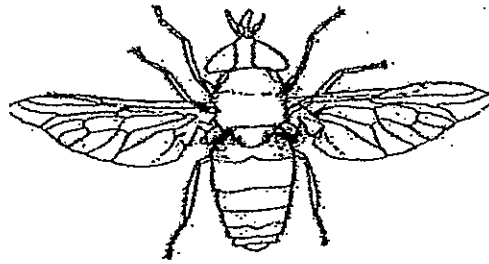
(b) In which group, W, X, Y or Z, would you put a butterfly in?

[1]



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37. Yi Hao found this living thing in his room. He examined it under a magnifying glass.



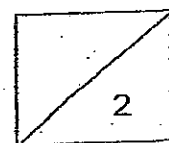
After checking his science book, Yi Hao concluded that this is an insect.

List two characteristics of an insect.

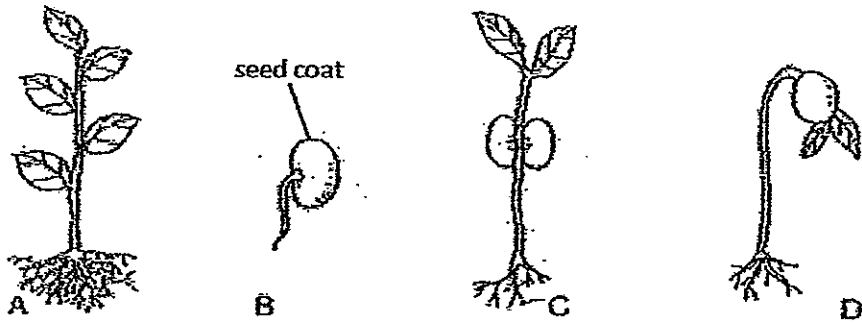
[2]

(i)

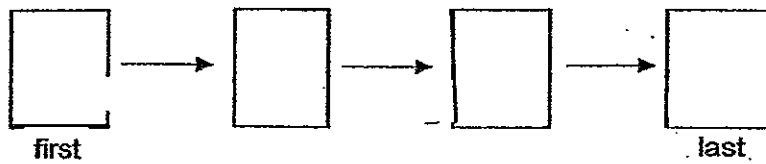
(ii)



38. The pictures below show the growth of a seed into an adult plant.



(a) Arrange the stages of growth of the seed into an adult plant in the correct sequence.

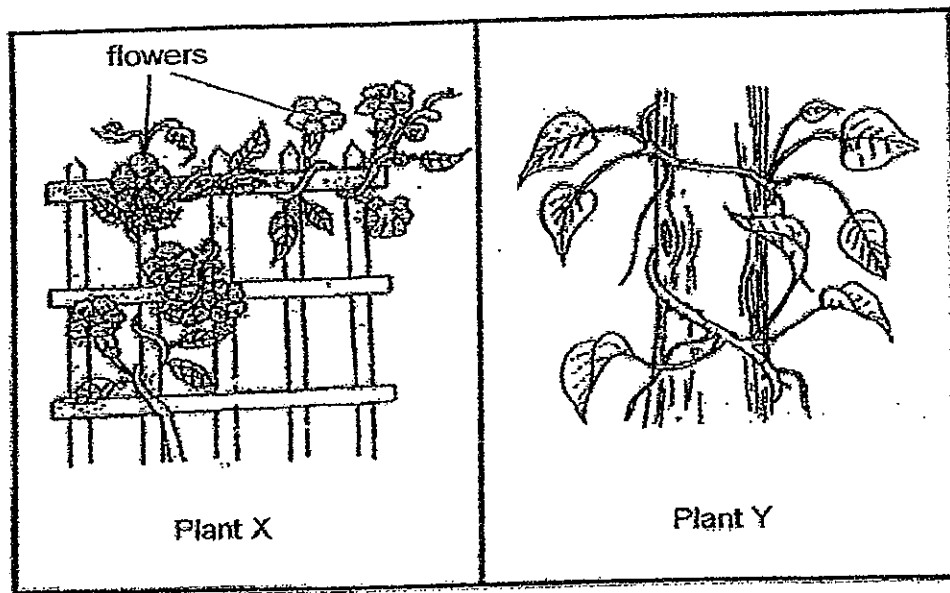


[2]

(b) Study Stage B. What is the function of the seed coat?

[1]

39. Study the diagrams of Plant X and Plant Y. Based on your observations of the plants shown, answer the questions.



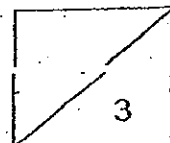
Do not compare shape and size.

(a) State one similarity between Plants X and Y.

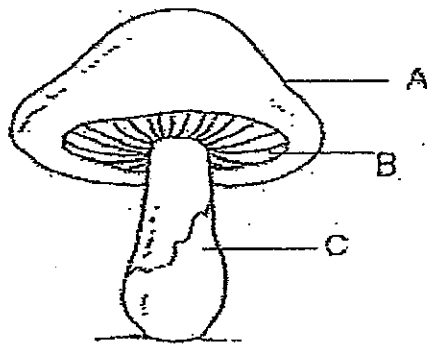
[1]

(b) List one function of the stem.

[2]



40. Look at the picture below.



(a) Name the following parts.

[1 ½]

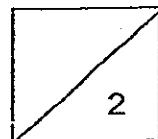
A: _____

B: _____

C: _____

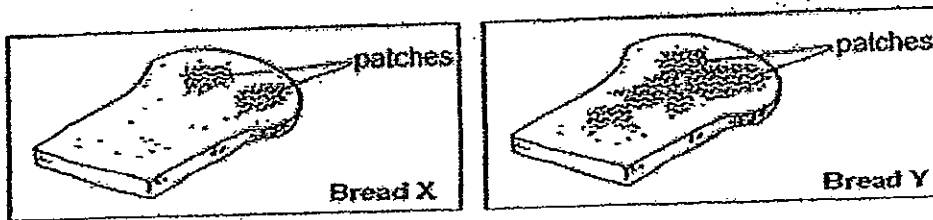
(b) How does the living thing shown above reproduce?

[½]



41. Bread X was kept in a plastic container. A similar slice of bread, Bread Y, was sprayed with some water first before it was kept in another similar plastic container. Both containers were then placed in a cupboard.

The diagrams below show the results a week later.



(a) What are the patches on the bread?

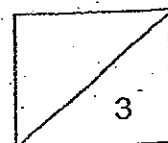
[1]

(b) What difference do you observe about the patches on the 2 slices of bread?

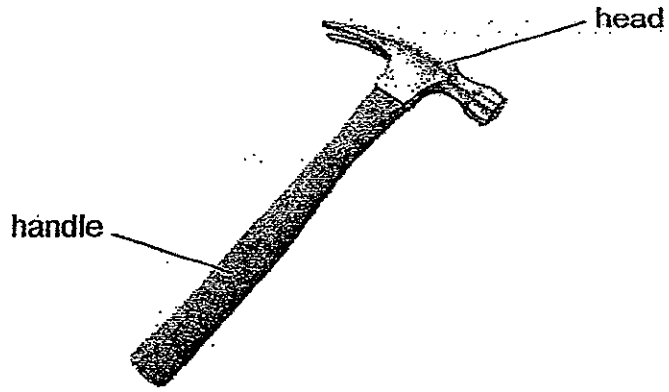
[1]

(c) What is needed for the patches to grow?

[1]



42. The picture below shows a hammer.

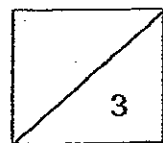


(a) List 2 properties of the material needed to make the head of the hammer. [2]

(i) _____

(ii) _____

(b) Name a suitable material for making the head of the hammer. [1]



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43. Look at the classification table below.

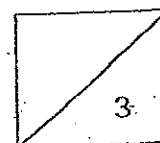
Group X	Group Y	Group Z
wood	clay	leather
cotton	iron	wool
rubber	stone	?

(a) What material can be put in Group Z?

[1]

(b) What is the main difference between the materials in Groups X and Y?

[2]



44. Adrian conducted a few experiments on Materials A, B and C. He recorded the results in the table below.

	Material A	Material B	Material C
Is it flexible?	No	No	Yes
Is it waterproof?	Yes	Yes	No
Can it be stretched?	No	No	No
Will it break when dropped?	Yes	No	No

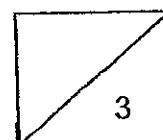
(a) Which material, A, B or C, is most suitable to make children's cups? [1]

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

(c) Give an example of the type of material you would use for children's cups. [1]

The End

☺ Check your paper ☺



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ANSWER SHEET

EXAM PAPER 2012

SCHOOL : AI TONG SCHOOL

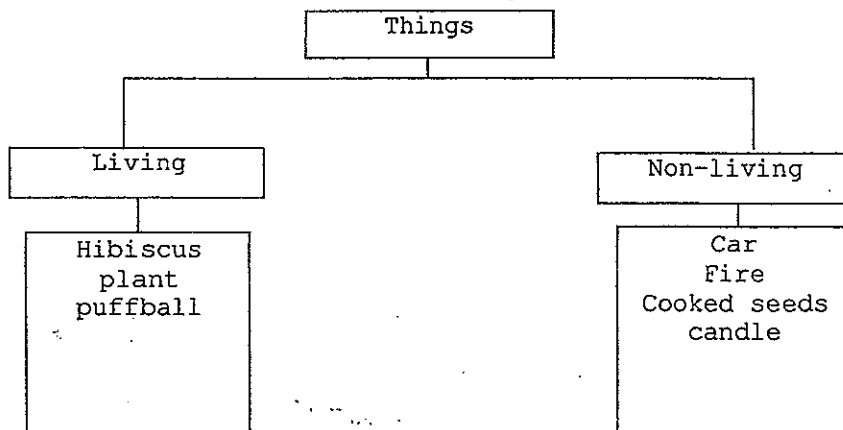
SUBJECT : PRIMARY 3 - SCIENCE

TERM : SA1

Booklet A

1) 4	2) 4	3) 1	4) 1	5) 4	6) 3	7) 2	8) 4	9) 1	10) 1
11) 4	12) 2	13) 2	14) 2	15) 4	16) 3	17) 2	18) 2	19) 2	20) 2
21) 2	22) 4	23) 4	24) 1	25) 1	26) 3	27) 1	28) 1	29) 4	30) 2

31)



32a) The mealworms can be found in position C after 5 minutes.

32bi) Living things respond to changes around them.

32bii) Living things can move.

33a) Container X.

33b) It does not have enough air for the spider to survive as there are no holes in the cover to allow air in.

34a) Similarity: They are mammals.

Difference: Animal B give birth to its young alive but animal C lays eggs.

34b) Animal A could be a bat.

- 35a) A: tail B: eyes C: fins D: gills cover
 35b) Gills
 36a)

Dragonfly	Y
Penguin	X
Sparrow	W
Sealion	Z

36b) The butterfly would be in group Y.

37i) It has six legs.

37ii) It has feelers.

38a) B, D, C, A

38b) It helps to protect the seed.

39a) They have leaves.

39b) It helps to hold the leaves and the flowers.

40a) A: Cap B: Gills C: Stalk

40b) It reproduce by spores.

41a) The patches on the bread are mould.

41b) Bread Y have more mould than bread X.

41c) The patches grow in moist and warm conditions.

42ai) It is strong.

42aii) It is hard.

42b) Metal.

43a) Silk

43b) Group Y is from the ground but group X is from plants.

44a) Material B

44b) It will not break when being dropped.

44c) Plastic.