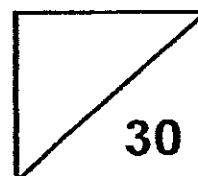




Rosyth School
Topical Test for 2014
SCIENCE
Primary 3

Name: _____

Total
Marks:



Class: Pr 3 _____

Register No. _____ Duration: 50min

Date: 3 March 2014

Parent's Signature: _____

Instructions to Pupils:

1. Do not open the booklet until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 sections, Part I and Part II.
4. For questions 1 to 7, write the correct answer in the brackets provided.
5. For questions 8 to 12, give your answers in the spaces provided in Part II.

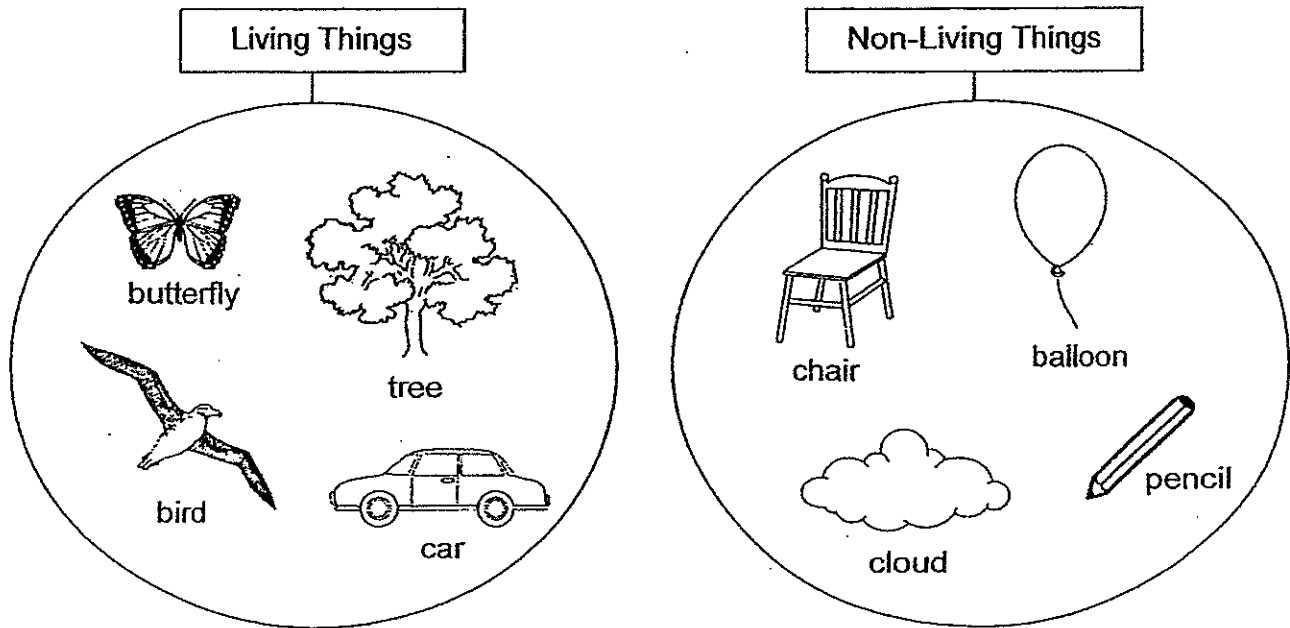
	Maximum	Marks Obtained
Part I	14 marks	
Part II	16 marks	
Total	30 marks	

* This booklet consists of 9 pages.

Part I (14 marks)

For each question from 1 to 7, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Write the correct answer in the bracket provided.

1. Look at the classification below.



Which one of the things above has been grouped wrongly?

- (1) Car
- (2) Tree
- (3) Cloud
- (4) Butterfly

()

2. Alice was at a park and noticed that there were birds chirping nearby and the park was very crowded. Which of the following senses were Alice using?

- (1) Smell and sight
- (2) Sight and touch
- (3) Sight and hearing
- (4) Smell and hearing

()

3. Which of the following statements are true about both plants and animals?

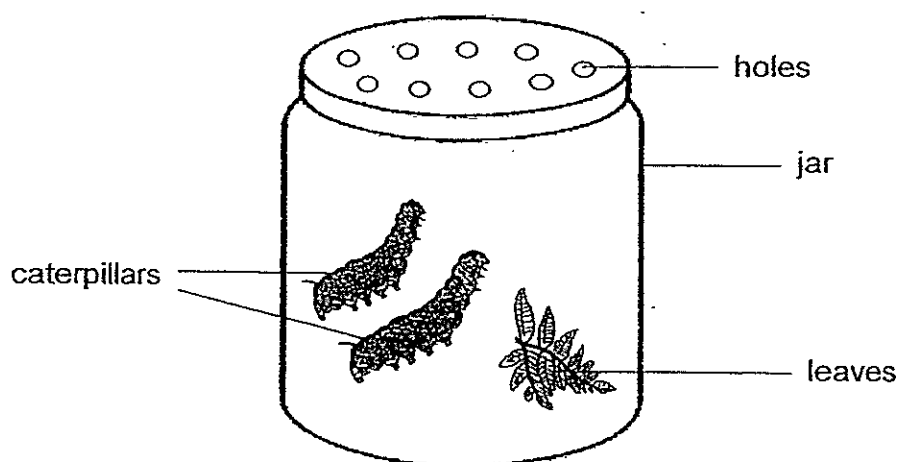
- A: Both can grow and die.
- B: Both can reproduce by seeds.
- C: Both can make their own food.
- D: Both can move by themselves.

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

- (2) C and D only
- (4) B, C and D only

()

4. Ken placed two caterpillars in a jar with some leaves as shown in the picture below.

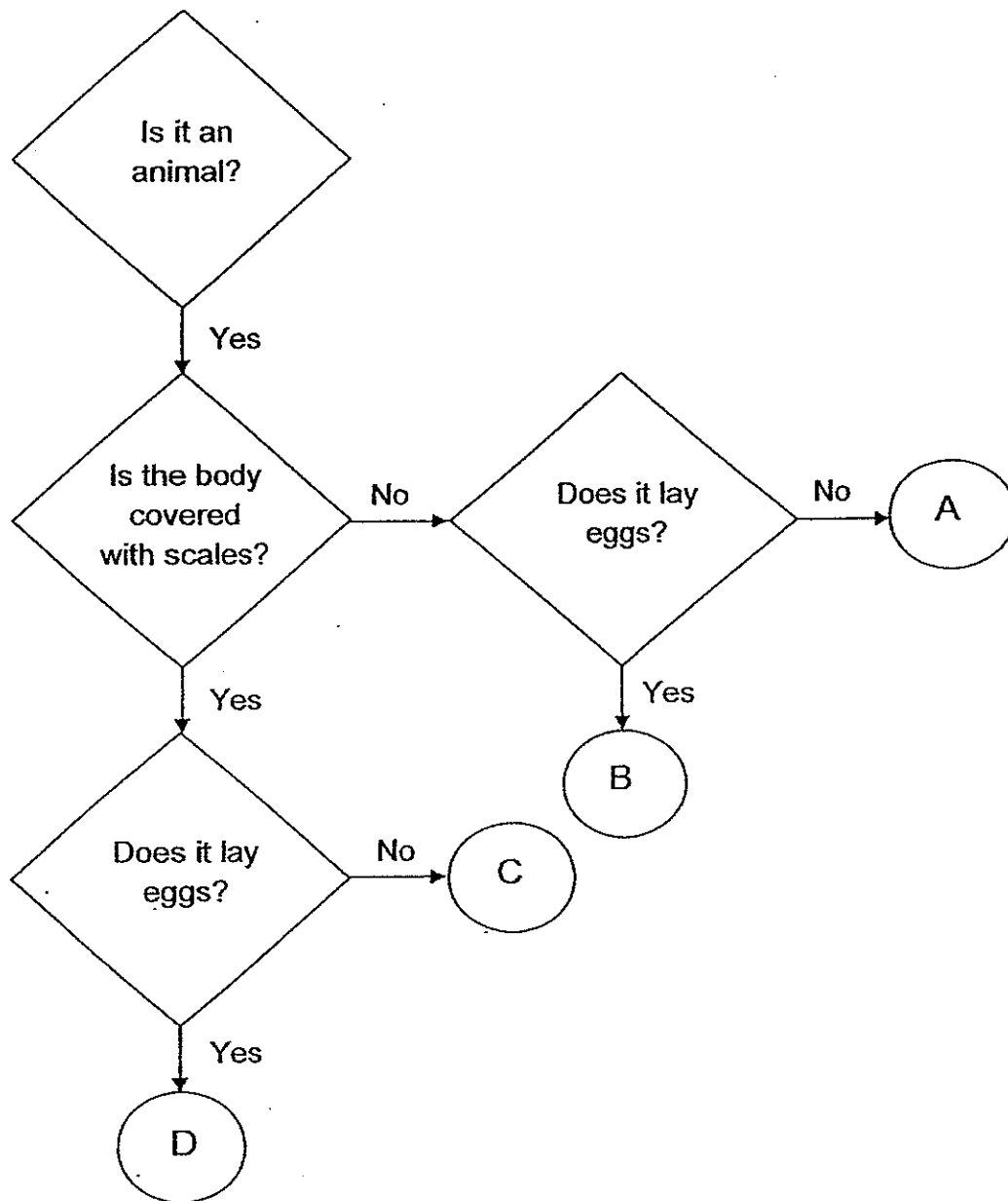


After two days, what would most likely happen to the number of leaves and the caterpillar?

	Number of leaves	Number of caterpillars
(1)	Decrease	Increase
(2)	Decrease	Remain the same
(3)	Remain the same	Decrease
(4)	Remain the same	Remain the same

()

5. Study the flowchart below.



Which one of the letters (A, B, C or D) best represents a reptile?

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

()

6. The picture below shows two types of land plants.



Based on observation, in what way are they similar?

- (1) Both plants produce flowers.
- (2) Both plants have weak stems.
- (3) Both plants have big flower petals.
- (4) Both plants have the same shaped leaves.

()

7. Adrian observed and recorded the characteristics of a plant in his garden as shown in the table below.

A	It is a land plant.
B	It does not have flowers.
C	It has spores underneath the leaves.

Which of the above statement(s) can tell that the plant is definitely a non-flowering plant?

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

()

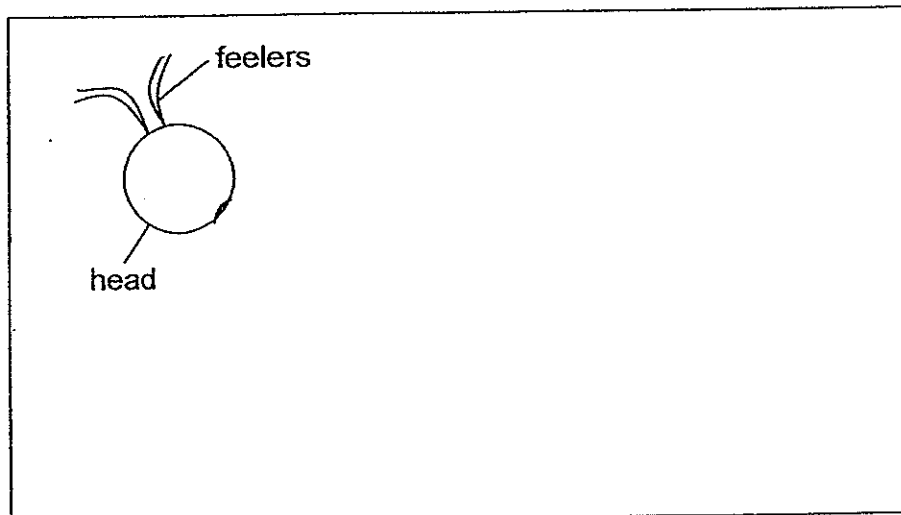
End of Part I

Part II (16 marks)

For questions 8 to 12, write your answers in the blanks provided.

8(a) State two common characteristics of an insect. (1m)

(b) Complete the picture below by drawing the legs and the rest of the body parts of an insect as shown below. (1m)



9. Haris found three things, K, L and M with the characteristics as shown in the table below. A tick (✓) shows that the thing has the characteristic and a cross (X) shows that it does not have the characteristic.

Things	Grow	Reproduce	Move from place to place
K	X	X	✓
L	✓	✓	✓
M	✓	✓	X

- (a) State all the characteristics of M. (1m)

- (b) State a similarity between K and L. (1m)

- (c) Which is most likely to be a non-living thing? Explain why. (1m)

10. Rajes planted a chilli plant over a period of 6 months. She watered the plant every day and recorded the height of the plant as shown in a table below.

Number of months	Height of plant (cm)
1	30
2	40
4	50
6	70

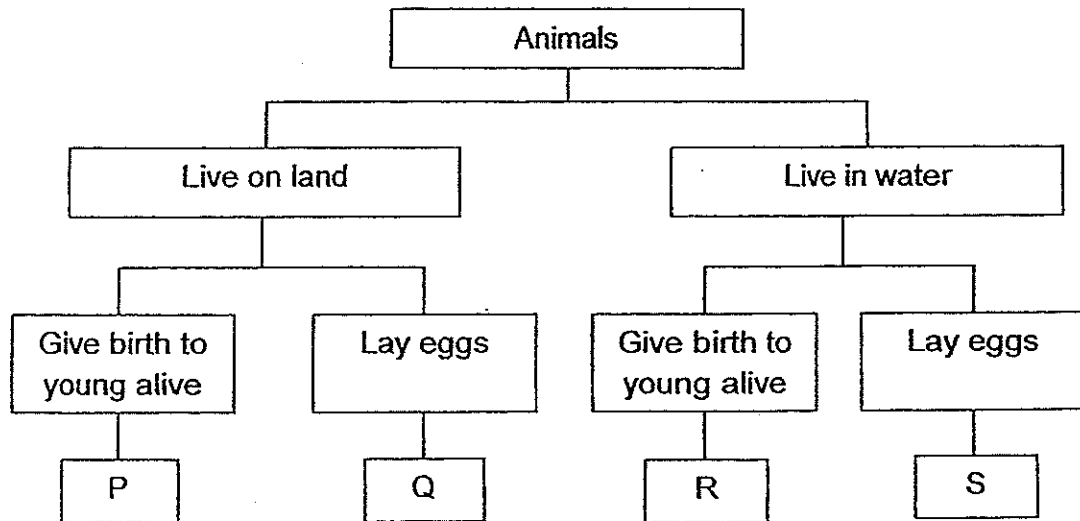
- (a) What do plants need to survive? Tick (✓) in the boxes below. (1m)

Air	<input type="checkbox"/>
Water	<input type="checkbox"/>
Food	<input type="checkbox"/>

- (b) What do you observe about the height of the plant from month 1 to month 6? (1m)

- (c) Based on the information found in the table above, what is the characteristic of living things shown by the plant? (1m)

11. Study the classification chart as shown below.

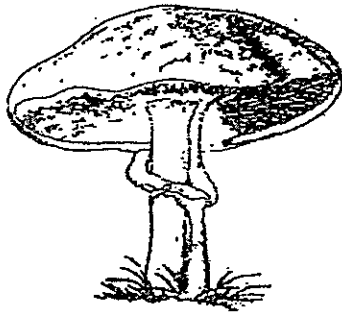


(a) Based on the chart above, state a similarity between Animal R and Animal S. (1m)

(b) State two differences between Animal Q and Animal R. (2m)

(c) Lina says that Animal P is likely a mammal. Do you agree with her? Explain why. (1m)

12. Alex saw the pictures of two organisms, E and F as shown below.



E



F

(a) Which group of living things do Organisms E and F belong to? (2m)

Organism E: _____

Organism F: _____

(b) State the difference between the organisms, E and F, in how they obtain food and reproduce. (2m)

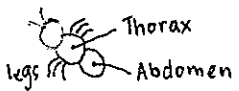
(i) How they obtain food:

(ii) How they reproduce:

End Of Paper

EXAM PAPER 2014**LEVEL : PRIMARY 3****SCHOOL : ROSYTH SCHOOL****SUBJECT : SCIENCE****TERM : TERM 1 – TOPICAL TEST**

Q1	Q2	Q3	Q4	Q5	Q6	Q7
1	3	1	2	4	1	3

Q8	(a)	It has 6 legs and 3 body parts
	(b)	
Q9	(a)	Thing M can grow, reproduce but cannot move from place to place.
	(b)	Thing K and L can move from place to place.
	(c)	Thing K will most likely be a non-living thing because it cannot grow and reproduce.
Q10	(a)	Air <input checked="" type="checkbox"/> Water <input checked="" type="checkbox"/> Food <input checked="" type="checkbox"/>
	(b)	The height of the plant increased.
	(c)	Living things grow.
Q11	(a)	Animal R and S live in water.
	(b)	Animal R lives in water and give birth to young alive while animal Q lives on land and lay eggs.
	(c)	Yes. Animal P is likely a mammal because it gives birth to young alive.
Q12	(a)	Organism E : Fungi Organism F : Plant
	(b)	(i) Organism E feeds on plant and animals while organism F makes its own food, (ii) Organism E reproduces by spores while organism F reproduces by seeds.



Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2014
SCIENCE
PRIMARY THREE
(BOOKLET A)

Name: _____ ()

Class: Primary 3

Date: 8 May 2014

Duration of paper: 1 h 15 min

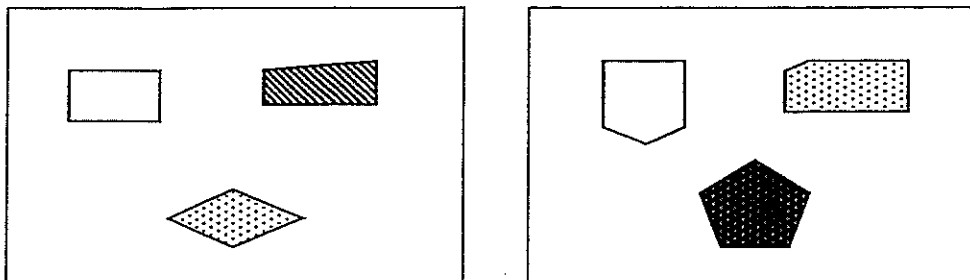
Parent's/Guardian's signature

INSTRUCTION TO CANDIDATES

1. This question paper consists of 9 printed pages including this cover page.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answer on the Optical Answer Sheet (OAS) provided.

For each of the following questions from 1 to 15, 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. [30 marks]

- 1 Study the objects below carefully. They have been put into two groups.



The above objects are grouped according to their _____.

- (1) shape only
 - (2) pattern only
 - (3) number of sides only
 - (4) shape and number of sides only
- 2 An ambulance can sound its siren and flash its lights. However, it is not a living thing because it cannot _____.
- A. grow
 - B. reproduce
 - C. move from place to place on its own
- (1) A only
 - (2) B only
 - (3) A and B only
 - (4) A, B and C

- 3 The table below records the weight and height of Jenny for the past four years.

Year	Weight (kg)	Height (cm)
2010	27	127
2011	30	129
2012	32	132
2013	35	134

What is the main process that causes Jenny's weight and height to increase?

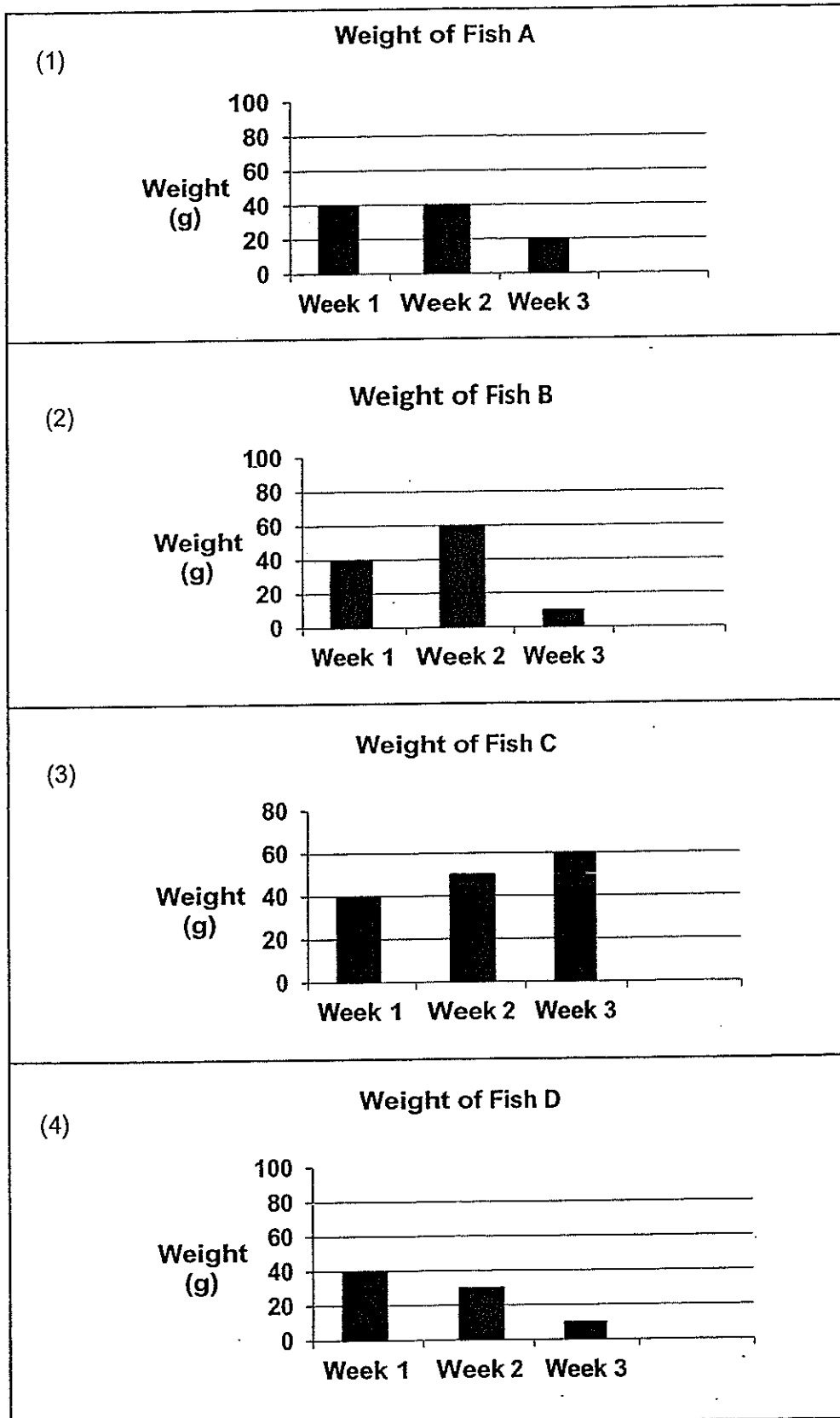
- (1) Growth
 - (2) Breathing
 - (3) Reproduction
 - (4) Responding to changes around her
- 4 Peter planted four chilli plants, A, B, C and D, in four similar pots. He placed the plants under different conditions as represented in the table below.

Chilli Plant	Air	Sunlight	Water
A	No	Yes	No
B	Yes	No	No
C	No	Yes	Yes
D	Yes	Yes	Yes

Which plant(s) would have died after two weeks?

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

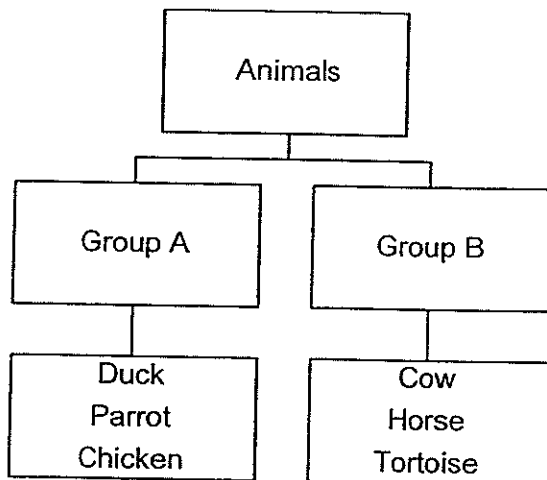
- 5 Janice had four tanks of water. She placed one fish in each tank. The fish were of the same type and similar size. The conditions in the tanks were the same. She fed the fish with different amounts of food. Over the next three weeks, Janice recorded the weight of the four fish in the graphs below. Which one of the fish has most likely been given the correct amount of food?



- 6 Study the table below carefully. Which one of the following animals is **wrongly** matched to its outer covering?

	Animal	Outer Covering
(1)	Goldfish	Scales
(2)	Frog	Moist skin
(3)	Tiger	Feathers
(4)	Polar bear	Fur

- 7 Study the classification chart below carefully.



Which headings correctly represent Groups A and B?

	Group A	Group B
(1)	Have a tail	Have no tail
(2)	Cannot fly	Can fly
(3)	Have two legs	Have four legs
(4)	Have feathers as outer covering	Have hairs as outer covering

8 Which one of the following statements about plants is correct?

- (1) All plants can be eaten.
- (2) All plants grow from seeds.
- (3) All plants grow and reproduce.
- (4) All plants produce flowers and fruits.

9 Which of the following statement(s) is/are true about a fern?

- A. It produces flowers.
- B. It feeds on other plants.
- C. It can make its own food.

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

10 Dennis carried out an experiment with four similar slices of fresh bread, D, E, F and G. He sprinkled different amounts of water on each slice of bread and placed them on the dining table. The observations are recorded in the table below.

Bread slice	Amount of water sprinkled (ml)	Number of days needed for the bread mould to form on the bread
D	0	14
E	5	10
F	10	?
G	20	4

Based on the table above, predict how many days were needed for bread mould to form on Bread F?

- (1) 2
- (2) 6
- (3) 12
- (4) 16

- 11 The table below shows the similarities and differences between bread mould and moss. Which one of the following is correct?

	Similarities	Differences
(1)	Both have leaves.	Moss has flowers but mould does not.
(2)	Both are living things.	Moss reproduces from seeds but mould reproduces from spores.
(3)	Both reproduce by spores.	Moss can make its own food but mould cannot.
(4)	Both cannot make its own food.	Moss has leaves but mould does not.

- 12 An experiment was carried out to find out if bread mould grows faster in a black box or in the garden. Which of the following variables must be kept the same to ensure a fair test?

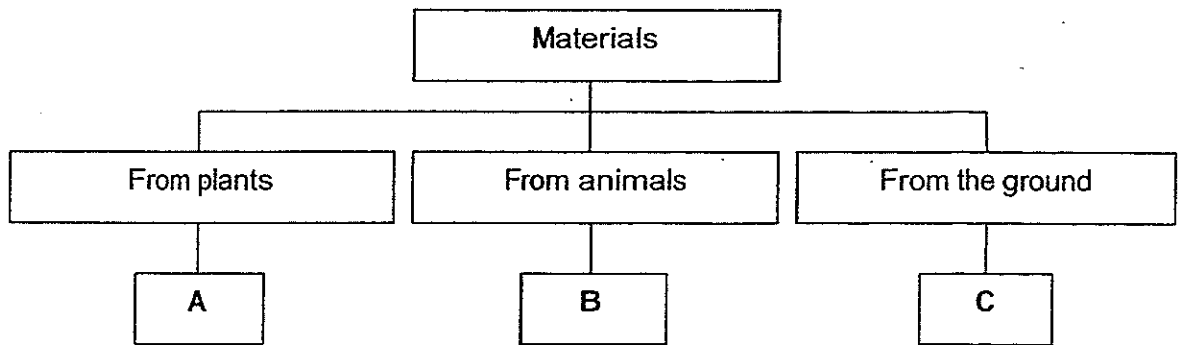
- A. Size of bread
- B. Type of bread
- C. Length of time of the experiment
- D. Place where the experiment was conducted

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

- 13 Alan needs a bag to carry heavy items for an outdoor camp. Which one of the following properties should he consider when choosing a suitable material to make this bag?

- (1) Strength
- (2) Flexibility
- (3) Transparency
- (4) Ability to float or sink

14 Study the classification chart below carefully.



Which of the following could A, B and C be?

	A	B	C
(1)	Wood	Cotton	Iron
(2)	Cotton	Silk	Ceramic
(3)	Rubber	Ceramic	Wood
(4)	Wood	Silk	Iron

- 15 The set-up below is used to find out which material, W, X, Y or Z absorbs water the fastest.

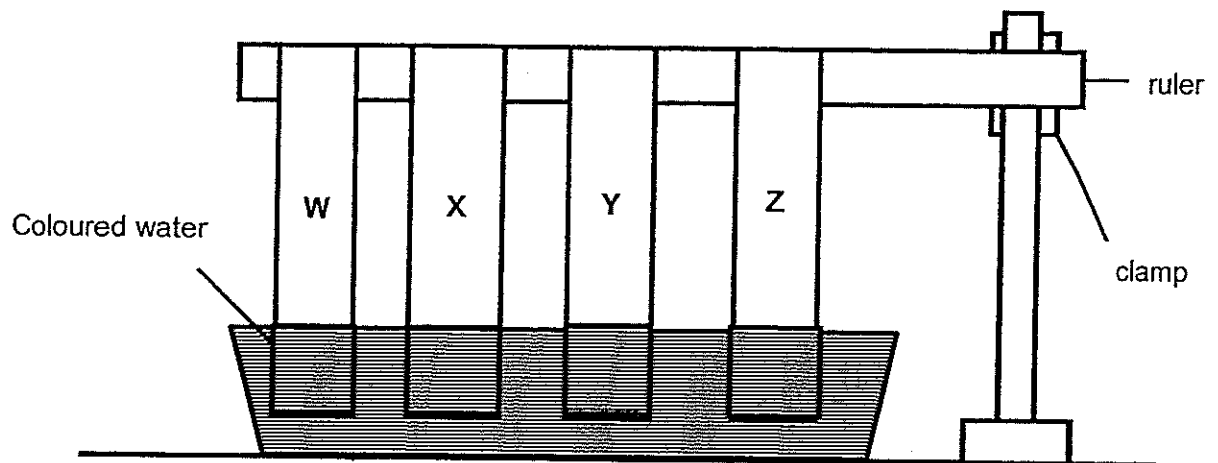


Fig. 1 Before the experiment

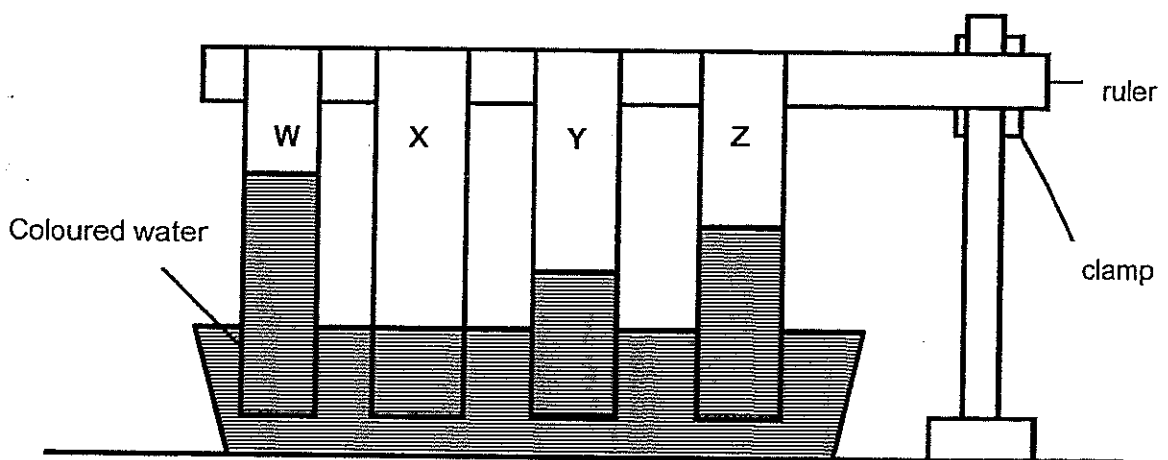


Fig. 2 After the experiment

Based on observations shown on fig. 2, which one of the materials (W, X, Y or Z) is most suitable for making a diaper?

- (1) W
- (2) X
- (3) Y
- (4) Z

END OF BOOKLET A

Please go onto Booklet B



Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2014
SCIENCE
PRIMARY THREE
(BOOKLET B)

Name: _____ ()

Class: Primary 3 _____

Date: 8 May 2014

Duration of paper: 1 h 15 min

Parent's/Guardian's signature

INSTRUCTION TO CANDIDATES

1. This question paper consists of 6 printed pages.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write all your answers in this booklet.

Booklet	Maximum marks	Marks obtained
A	30	
B	20	
Total	50	

For questions 16 to 22, write your answers in the spaces provided in this booklet. The number of marks available is shown in brackets [] at the end of each question or part question. [20 marks]

- 16 Study the statements in the table below. Put a (✓) in the correct boxes below to indicate whether the statements are true or false. [2]

	Statements	True	False
(a)	Plants need water and air to stay alive.		
(b)	Plants can be categorised into flowering and non-flowering plants.		
(c)	All fruits are edible.		
(d)	Plants are important for the survival of other living things.		

- 17 Ali conducted an experiment with two similar pots of plants, Plant A and Plant B. The plants were given five hours of sunlight every day for three days. He watered Plant A with equal amount of water every day. Plant B was not given any water for the three days.

- (a) What would happen to Plant B after three days? [1]

- (b) What was the aim of Ali's experiment? [1]

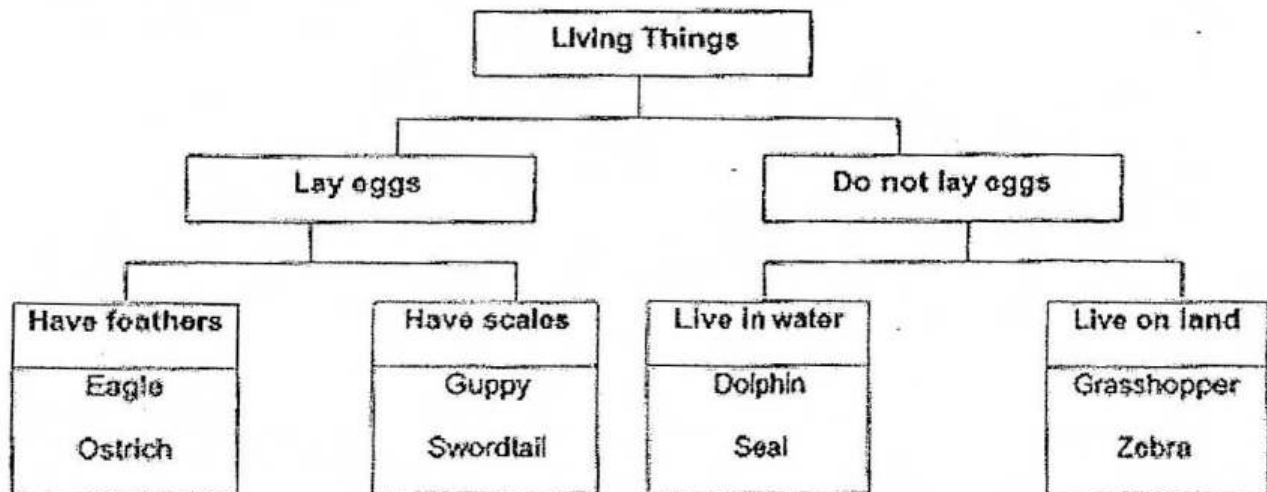
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Score	4
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- 18 Susan wanted to carry out an experiment to find out whether plants need sunlight to survive. She prepared four set-ups for her experiment. The table below shows the conditions in her experiment. Put a (✓) in the correct boxes below to indicate whether the conditions should be changed or kept the same. [2]

	Conditions	To be changed	Keep the same
(a)	Type of soil used		
(b)	Type of plant used		
(c)	Amount of soil used		
(d)	Where the plants are placed		

- 19 Study the classification chart below carefully.



- (a) Based on the classification chart above, which animal has been wrongly classified? [1]

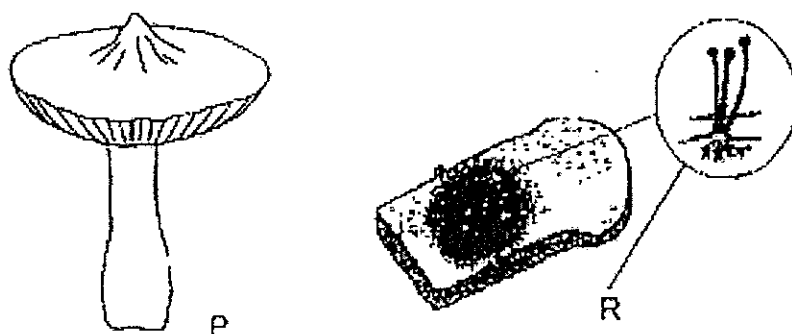
- (b) Explain your answer in (a). [1]

- (c) Based on the classification chart above, name two characteristics of the eagle. [2]

(Go on to the next page)

Score	
	6

20 Study the diagrams below carefully.



(a) Identify the two of fungi shown in the diagrams above. [2]

P: _____

R: _____

(b) List two similarities of the fungi shown above. [2]

i. _____

ii. _____

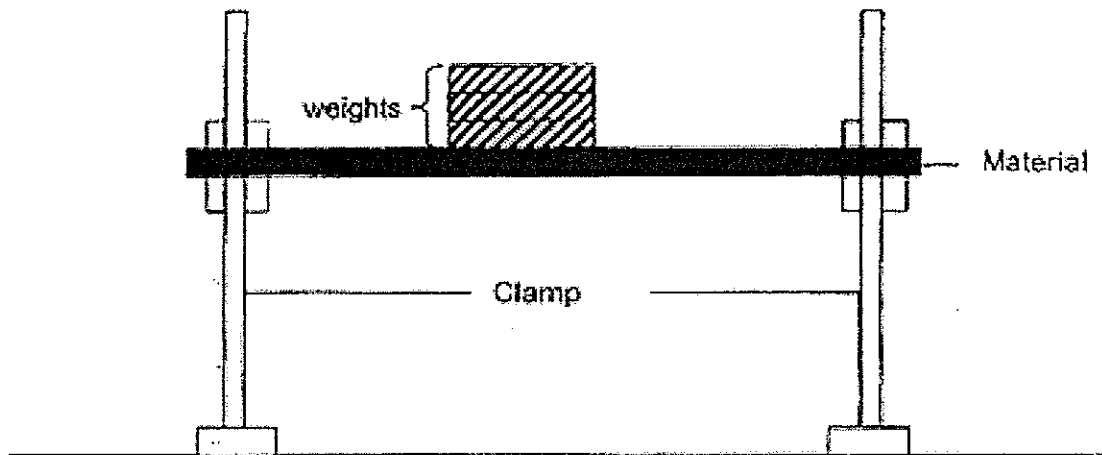
21 An experiment was conducted to find out if the objects shown in the table below would float or sink. A tank was filled with 500 ml of water and all the items were placed into it. Which of the objects would rise to the surface of the water and stay afloat and which would sink to the bottom of the tank? Put a tick (✓) in the correct boxes for each of the object. [3]

	Objects	Sink	Float
(a)	Marble		
(b)	Stone		
(c)	Coin		
(d)	Rubber eraser		
(e)	Wooden block		
(f)	Ping pong ball		

(Go on to the next page)

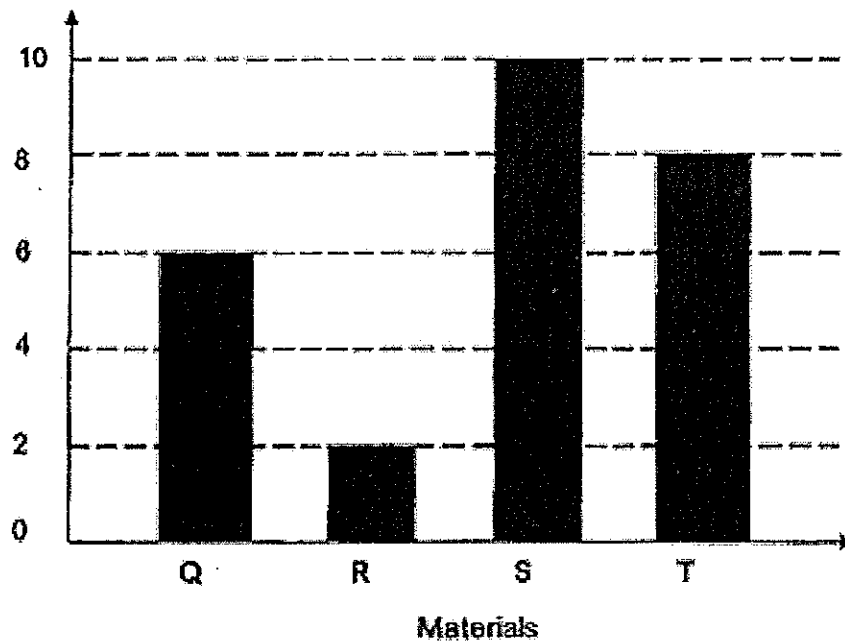
Score _____	7
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- 22 Angela wanted to test the strength of four different sheets of materials, Q, R, S and T. Each sheet was of the same size and thickness. She placed weights on the materials as shown below and noted the least number of weights needed to cause the materials to break.



The results of the experiment are shown in the graph below.

Weights (kg)



Based on the results as shown in the bar graph above, answer the following questions:

- (a) Which one of the materials Q, R, S or T was the weakest?

[1]

(Question 22 continues on page 6)


Score	
	1

- (b) Which one of the materials (Q, R, S or T) could be used to make a bookshelf that could withstand a 9 kg load? [1]

- (c) Explain your answer in (b). [1]

END OF BOOKLET B

Please check all your answers carefully.

Score	
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Year: 2014

Level: Primary 3

School: Anglo-Chinese School (Primary)

Subject: Science

Semester: SA1

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

Q16)a) True b) True c) False d) True

Q17) a) Plant B died.

b) To find out if plants need water to survive.

Q18) a) Keep the same b) To be changed c) To be changed d) Keep the same

Q19) a) Grasshopper

b) It is because grasshopper lays eggs.

c) It lays eggs and has feathers.

Q20)a) P: Mushroom R: Bread Mould

b) i. They reproduce by spores.

ii. They both can't make their own food.

Q21) a) Sink

b) Sink

c) Sink

d) Sink

e) Float

f) Float

Q22)a) Material R is the weakest.

b) Material S.

c) It is the strongest.



**CATHOLIC HIGH SCHOOL
SEMESTRAL ASSESSMENT 1
2014
PRIMARY THREE**

SCIENCE

BOOKLET A

Name: _____ ()

Class: Primary 3 - _____

Date: 16 May 2014

20 questions

40 marks

Total Time for Booklets A and B: 1 hour 15 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.

This booklet consists of 12 printed pages, excluding cover page.

Booklet A (20 × 2 marks)

For each question from 1 to 20, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet. (40 marks)

- 1 Andy touched a snail that he saw in his garden.



snail

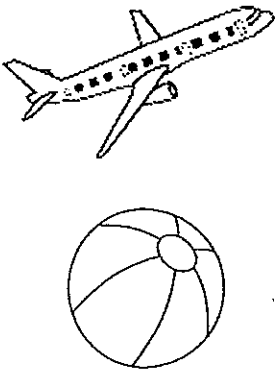

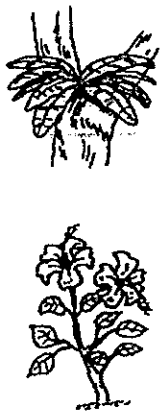


Andy's hand

The snail pulled its head into the shell.
What does this tell him about living things?

- (1) Living things grow.
 - (2) Living things reproduce.
 - (3) Living things respond to changes.
 - (4) Living things need air, food and water.
- 2 Which of the following shows the characteristics of living things?
- A Water flowing in the river.
 - B A giraffe gives birth to its young alive.
 - C A balloon becomes bigger when it is blown.
 - D A kitten changing in its appearance and size over time.
- (1) A and B only
 - (2) B and D only
 - (3) C and D only
 - (4) A, B and C only

- 3 Some things are classified into 3 different groups as shown.

Group E	Group F	Group G
		

Which of the following groups need air, food and water to stay alive?

- (1) E only
 - (2) E and F only
 - (3) E and G only
 - (4) F and G only
- 4 The table below provides information about 4 different living things, V, W, X and Y.

Living thing	Does it make food?	Does it reproduce by spores?
V	Yes	Yes
W	No	Yes
X	No	No
Y	Yes	No

Look at the picture below.









Based on the information provided above, which one of the following best represents the living thing shown in the picture?







- (1) V
- (2) W
- (3) X
- (4) Y

- 5 Leo, Ram, Mary and Ahmad were given some wooden blocks to classify. Their classifications are as shown below.







Leo

A	B
	
	
	







Ram

A	B
	
	
	

Mary

A	B
	
	
	

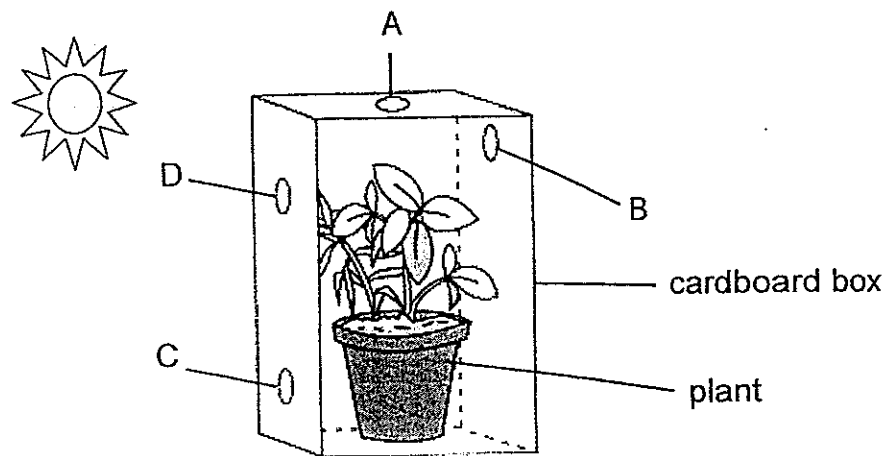
Ahmad

A	B
	
	
	

Who has classified the blocks correctly?

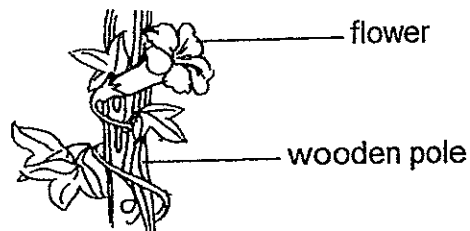
- (1) Leo
 - (2) Ram
 - (3) Mary
 - (4) Ahmad
- 6 Which one of the following statements about ferns and mosses is correct?
- (1) They do not bear flowers.
 - (2) They are found only in water.
 - (3) They do not need air, food and water.
 - (4) They feed on dead animals and plants.

- 7 A young plant was placed in a thick cardboard box as shown below. Four holes, A, B, C and D, were made on the sides of the box to allow light to enter.



Which one of the holes would the plant most likely grow towards?

- (1) Hole A
 - (2) Hole B
 - (3) Hole C
 - (4) Hole D
- 8 The picture below shows a plant growing in the garden.



Which of the following statements is/are correct?

- H It is a flowering plant.
- J The plant is a water plant.
- K The plant reproduces from spores.

- (1) H only
- (2) H and K only
- (3) J and K only
- (4) H, J and K

- 9 The table below shows the characteristics of four plants, K, L, M and N. A tick (✓) represents that the plant has that characteristic.

Characteristic	Plant			
	K	L	M	N
Bears flowers	✓		✓	
Found on land	✓	✓		
Reproduces by spores		✓		✓

Based on the information above, which of the following is the most suitable description for plants K and L?

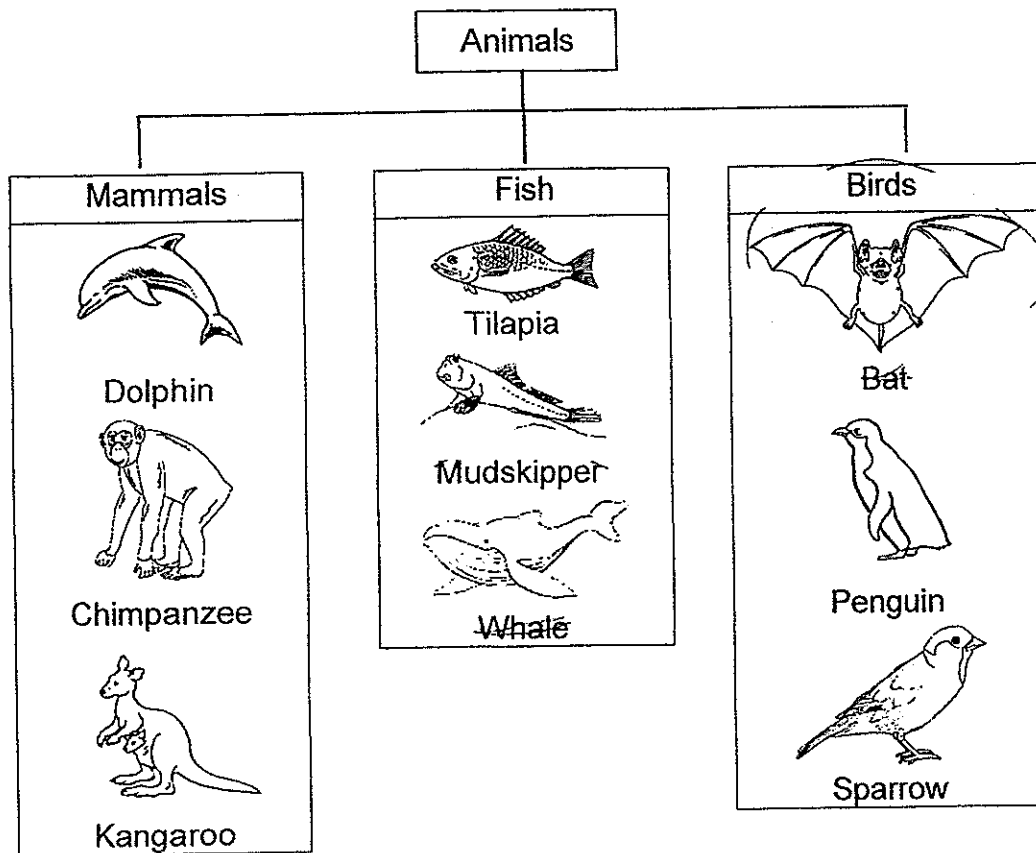
	Plant K	Plant L
(1)	Fungi	Ferns
(2)	Water plant	Land plant
(3)	Flowering plant	Non-flowering plant
(4)	Non-flowering plant	Fungi

- 10 Ray caught two animals that can fly. One of them was an insect. Which of the following characteristics help him identify the insect?

- O Two eyes
- P Two wings
- Q A pair of feelers
- R Three body parts

- (1) O and R only
- (2) Q and R only
- (3) P, Q and R only
- (4) O, P, Q and R

- 11 Fatimah was given a list of 9 animals. She classified them in a classification chart as shown below.



Which animals have been classified wrongly?

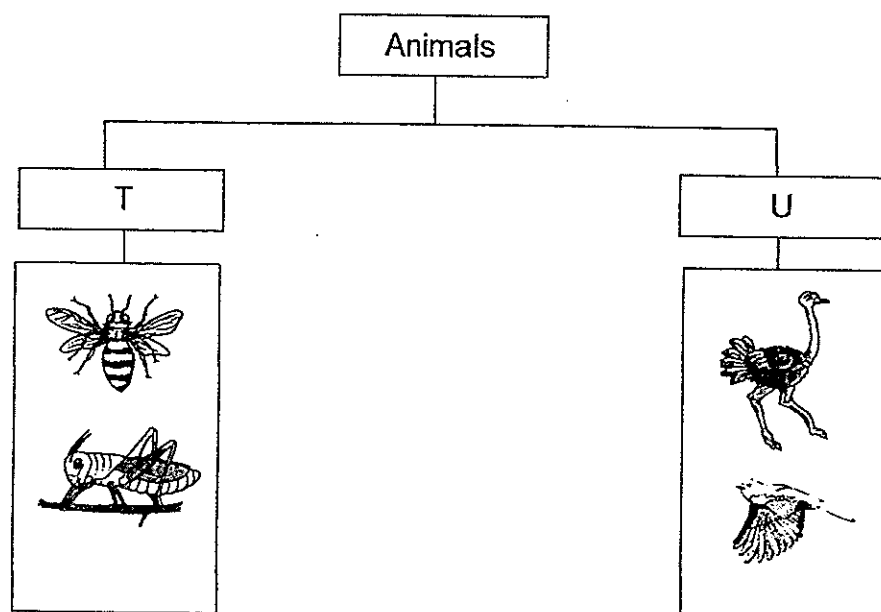
- (1) Bat and Whale
 - (2) Dolphin and Whale
 - (3) Bat and Mudskipper
 - (4) Dolphin and Mudskipper
- 12 Animal S has the following characteristics:

- Has lungs
- Has moist skin
- Lives on land and in water

Which one of the following groups does animal S belong to?

- (1) Fish
- (2) Birds
- (3) Reptiles
- (4) Amphibians

- 13 Zaki classified some animals as shown in the classification chart below.



Which one of the following sub-headings correctly represents T and U?

	T	U
(1)	Lay eggs	Give birth
(2)	Do not have wings	Have wings
(3)	Do not have feelers	Have feelers
(4)	With hard outer covering	With feathers

- 14 Which of the following statements about micro-organisms are true?

- A Bacteria cannot reproduce.
- B All micro-organisms are harmful.
- C Yeast can be used to make bread.
- D Micro-organisms cannot be seen with the naked eye.

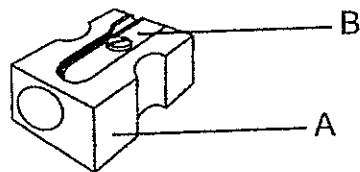
- (1) A and B only
- (2) C and D only
- (3) B, C and D only
- (4) A, B, C and D

15 Fungi need _____ to grow.

- E air
- F food
- G water
- H sunlight

- (1) E, F and G only
- (2) E, F and H only
- (3) E, G and H only
- (4) F, G and H only

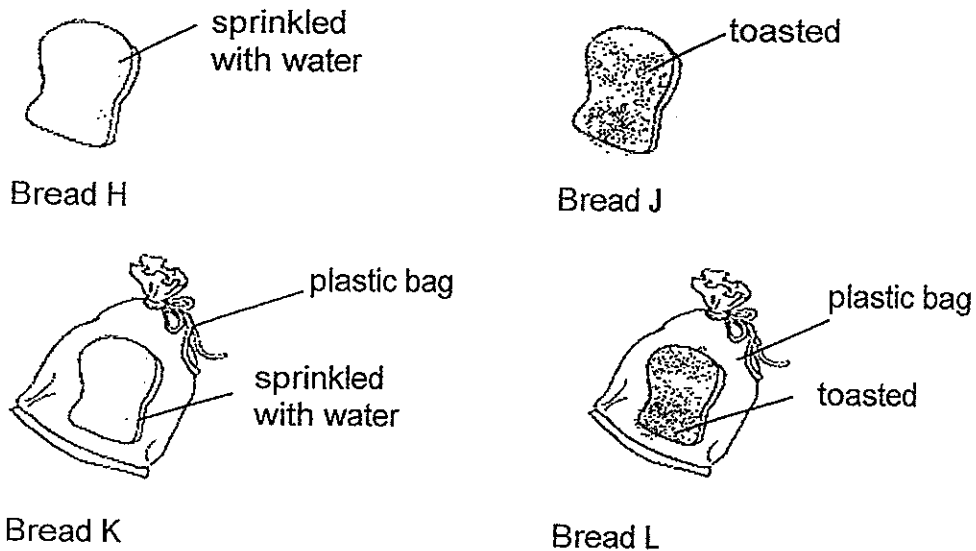
16 The picture below shows a sharpener.



What are parts A and B made of?

	A	B
(1)	Wood	Rubber
(2)	Paper	Metal
(3)	Plastic	Metal
(4)	Rubber	Plastic

- 17 David did an experiment on bread slices as shown below. He placed 4 slices of similar bread on a table and sprinkled some water onto 2 of the slices. He toasted the remaining two slices and left them to cool down. He then tied 2 of the bread slices in plastics bags.



The table below shows the number of days taken for the slices of bread to turn mouldy.

Bread	H	J	K	L
Number of days	2	4	3	8

What can you conclude from the results shown?

- (1) Mould grows best in the open.
- (2) Mould grows best in the presence of water.
- (3) Mould grows best when the bread is sealed in a bag.
- (4) Mould grows best when the bread was left longer in the open regardless of the conditions of the bread.

18 The following table shows the characteristics of 4 different materials.

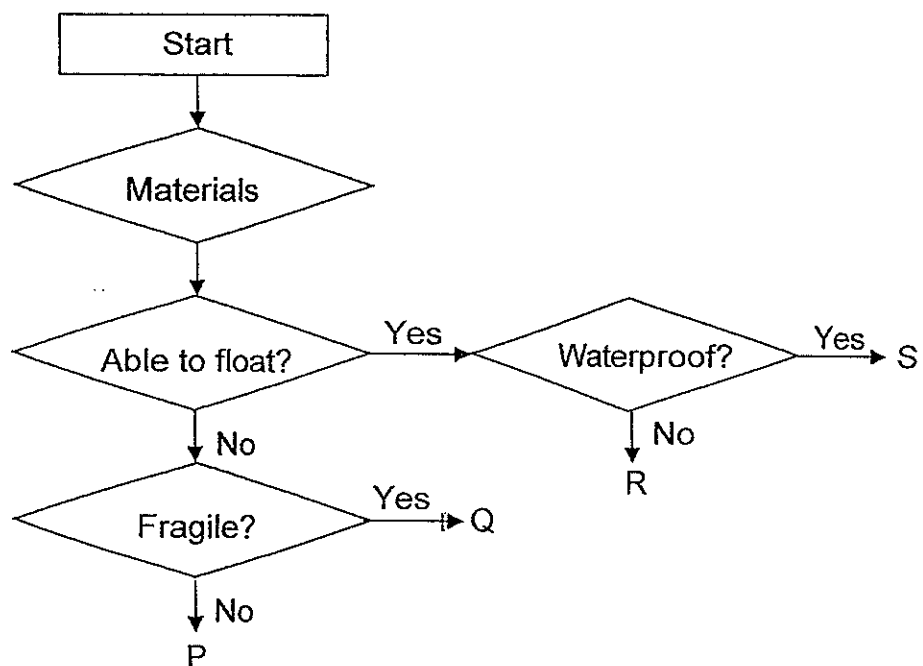
Material	Waterproof	Strong	Breaks easily when dropped
P	✓	✓	
Q	✓		✓
R			✓
S	✓	✓	✓

Which material is the most suitable to make a float, as shown in the picture?



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

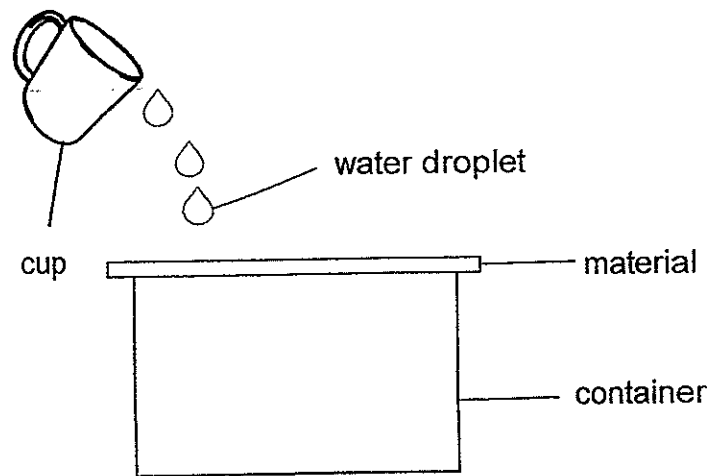
19 The flow chart shows the properties of some materials.



Which material is glass?

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

- 20 James conducted an experiment to find out which material, W, X, Y or Z is the most suitable to make an umbrella. He set up an experiment as shown below. He then poured a cup of water over each material. James measured the water collected in the container after 1 minute.



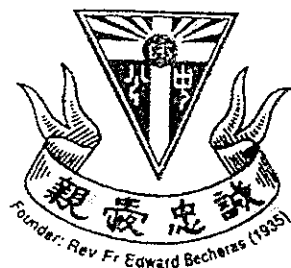
He recorded his findings in the table below.

Material	Amount of water collected in the container (ml)
W	5
X	15
Y	0
Z	10

Which material is the most suitable to make an umbrella?

- (1) W
- (2) X
- (3) Y
- (4) Z

End of Booklet A



**CATHOLIC HIGH SCHOOL
SEMESTRAL ASSESSMENT 21
2014
PRIMARY THREE**

SCIENCE

BOOKLET B

Name: _____ ()

Class: Primary 3 - _____

Date: 29 October 2014

Parent's Signature: _____

Booklet A	48
Booklet B	32
Total	80

10 questions

32 marks

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

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

This booklet consists of 11 printed pages, excluding cover page.

Booklet B (20 marks)

For questions 21 to 27, write your answers in this booklet.

The number of marks available is shown in brackets [] at the end of each question or part question. (20 marks)

- 21 Jeremiah had a pot of plant. He watered the plant everyday and measured the height at the end of every week. He recorded his results in a table as shown below.

	Week 1	Week 2	Week 3	Week 4
Height of plant (cm)	2	6	11	18

- (a) Based on the table above, what can you tell about the height of the plant from Week 1 to Week 4? [1]

- (b) What does the experiment show about plants? [1]

- (c) What do you think will happen to the height of the plant at week 5, when Jeremiah stops watering it at week 4? [1]

(Go on to the next page)

SCORE	3
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22 Study the two plants below.



Sunflower



Lotus

- (a) State one similarity between the two plants.
(Do not compare shape and size)

[1]

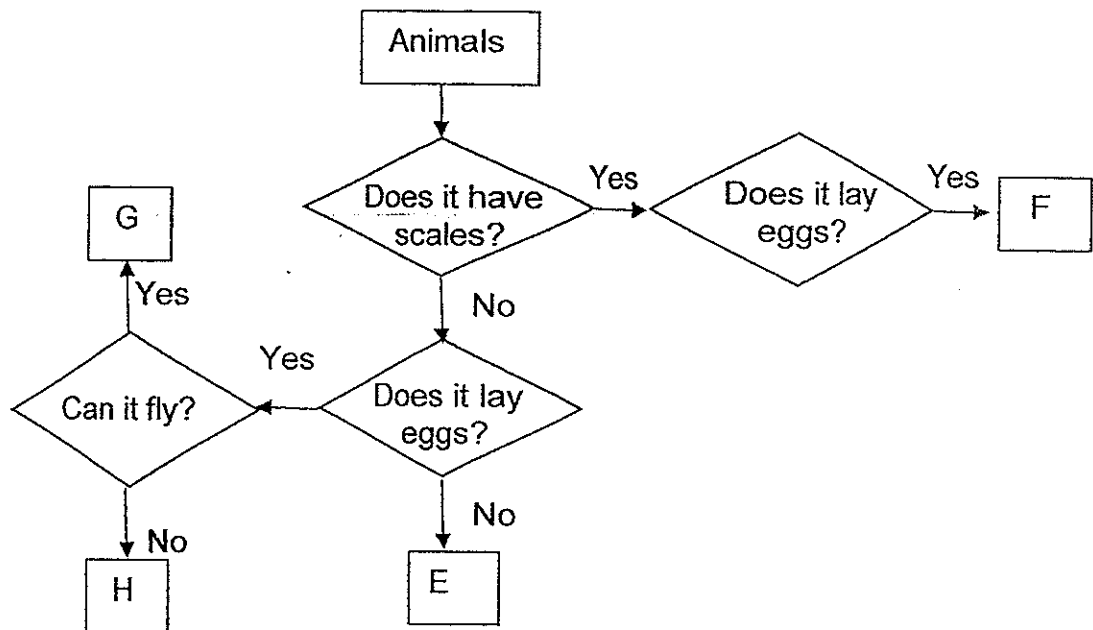
- (b) State one difference between the two plants.
(Do not compare shape and size)

[1]

(Go on to the next page)

SCORE	2
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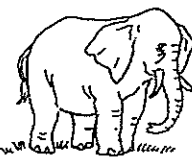

23 Study the flow chart below.



(a) Based on the flow chart above, how is animal G different from animal F?

[1]

(b) Which of the following animals could be E, F, G or H? Write the correct letter in the box below. [2]

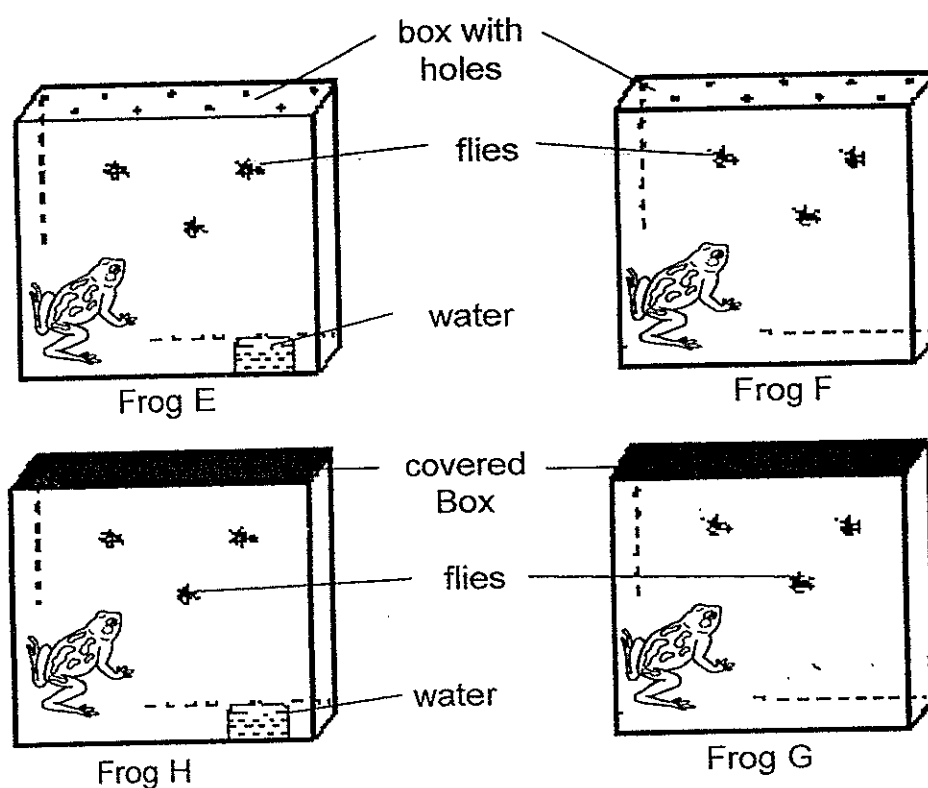
			
Frog	Sparrow	Elephant	Crocodile

Frog:	
Sparrow:	
Elephant:	
Crocodile:	

(Go on to the next page)

SCORE	3
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24 Mariam set up an experiment as shown below.



(a) Based on the pictures above, which frog will live the longest? [1]

(b) Explain your answer in (a). [1]





(Go on to the next page)

SCORE	2
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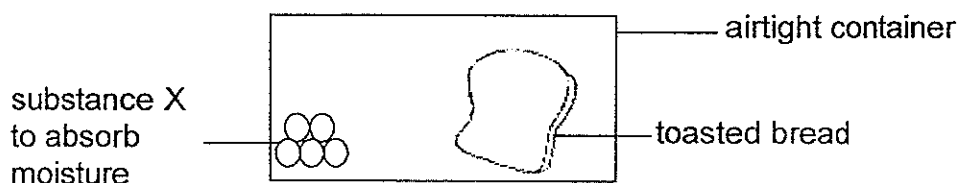
- 25 Mary had 4 slices of plain bread, Q, R, S and T. She added 2 drops of water, 5 drops of water and 8 drops of water to 3 slices of bread and did not add water to the remaining slice. She then left them in the open and went for a holiday.

She returned from the holiday and saw green patches on the bread slices.

- (a) Refer to the diagram below. Match the drops of water to the most suitable bread slices. [2]

	green patches	•	•	No drops of water added.
Bread Q				
	green patches	•	•	2 drops of water added.
Bread R				
	green patches	•	•	8 drops of water added.
Bread S				
	green patches	•	•	5 drops of water added.
Bread T				

- (b) Mary took another piece of bread and toasted it. She cooled the bread and then placed it in an airtight container. She added substance X to absorb the moisture in the container as shown below.



- What would you expect to see after 2 days? Give a reason for your answer. [2]

(Go on to the next page)

SCORE	4
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- 26 Suresh used three different materials to make similar bags, L, M and N. In each bag, he added one can of drink at a time until the bag broke.



He then recorded the number of cans needed to break each bag, in a table as shown below.

Bag	Number of cans added
L	12
M	23
N	16

- (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]

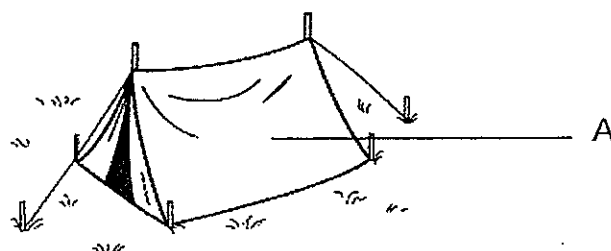
- (c) Give a reason for your answer in part (b). [1]

(Go on to the next page)

SCORE	3
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- 27 Devi conducted an experiment using materials W, X, Y and Z. She recorded her results in the table below.

Materials Property	W	X	Y	Z
Strong	Yes	Yes	No	Yes
Flexible	No	Yes	No	Yes
Waterproof	Yes	Yes	Yes	No
Transparent	No	No	Yes	No



- (a) Which one of the materials is most suitable to make part A of the tent? [1]
- _____
- (b) Explain your answer for (a). [1]
- _____
- (c) Based on the table above, state the differences between material W and Z. [1]

End of Booklet B

SCORE	3
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Year: 2014
 Level: Primary 3
 School: Catholic High School
 Subject: Science
 Semester: SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	2	4	2	3	1	4	1	3	2
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	4	4	2	1	3	2	1	2	3

Q21) a) The height of the plant increased.

b) Plants need water to grow.

c) The height of the plant decreases.

Q22) a) Both are flowering plants.

b) The Sunflower lives on land but the Lotus lives in water.

Q23) a) Animal F has scales but animal G does not have scales.

b) Frog: H Sparrow: G Elephant: E Crocodile: F

Q24) a) Frog E.

b) Frog E has air, food and water but the other three frogs only have some of the elements.

Q25) a)

Bread Q → 8 drops of water

Bread R → 2 drops of water

Bread S → 5 drops of water

Bread T → No drops of water

b) No mould would be seen on the bread. Mould needs water to grow but substance X absorbed all the moisture.

Q26) a) Bag L

b) Bag M

c) Bag M is the strongest as it is able to carry the most number of cans before it breaks.

Q27) a) Material X

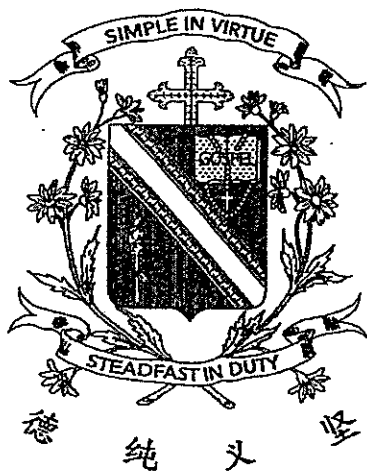
b) Material X is strong, flexible, waterproof and not transparent.

c) Material W is not flexible but material Z is flexible. Material W is waterproof but material Z is not waterproof.

Name: _____ ()

Class: Primary 3 _____

CHIJ ST. NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 1 – 2014

SCIENCE

Booklet A

15 May 2014

Total Time for Booklets A and B: 1 hour 15 minutes

15 Questions

30 Marks

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

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

This paper consists of 13 printed pages including this cover page.

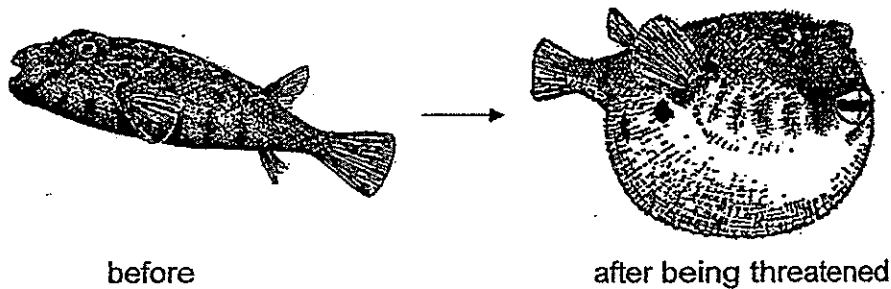
SECTION A (MULTIPLE-CHOICE QUESTIONS) [15 x 2 marks = 30 marks]

For each question from 1 to 15, 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 (OAS) provided.**

1. Which one of the following is classified **incorrectly**?

	Living Things	Non-Living Things
(1)	Cat	Car
(2)	Shark	Dried leaf
(3)	Metal spoon	Grass
(4)	Red bean seed	Toothbrush

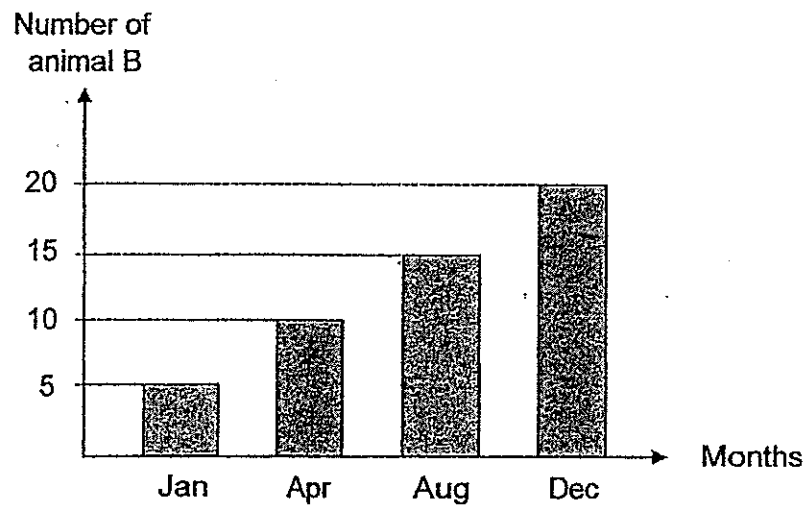
2. The diagram below shows a puffer-fish puffing up its body when it is being threatened.



Based on the above information, which one of the following characteristics of living things is shown by the puffer fish?

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

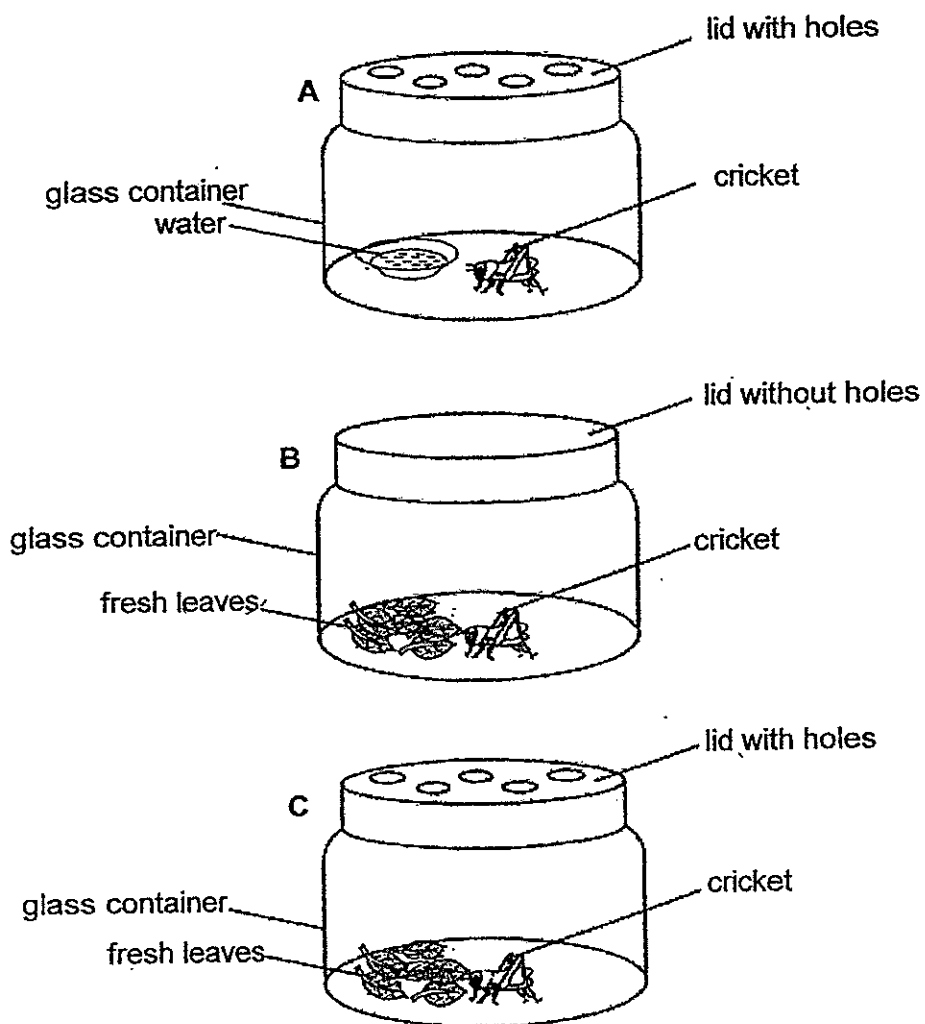
3. The graph below shows the number of animal B over a period of 12 months.



Based on the graph above, which one of the following statements is most likely true?

- (1) Each animal B grew taller every 4 months.
- (2) Each animal B grew bigger every 4 months.
- (3) Animal B reproduced during the 12 months.
- (4) The number of animal B increased the most from August to December.

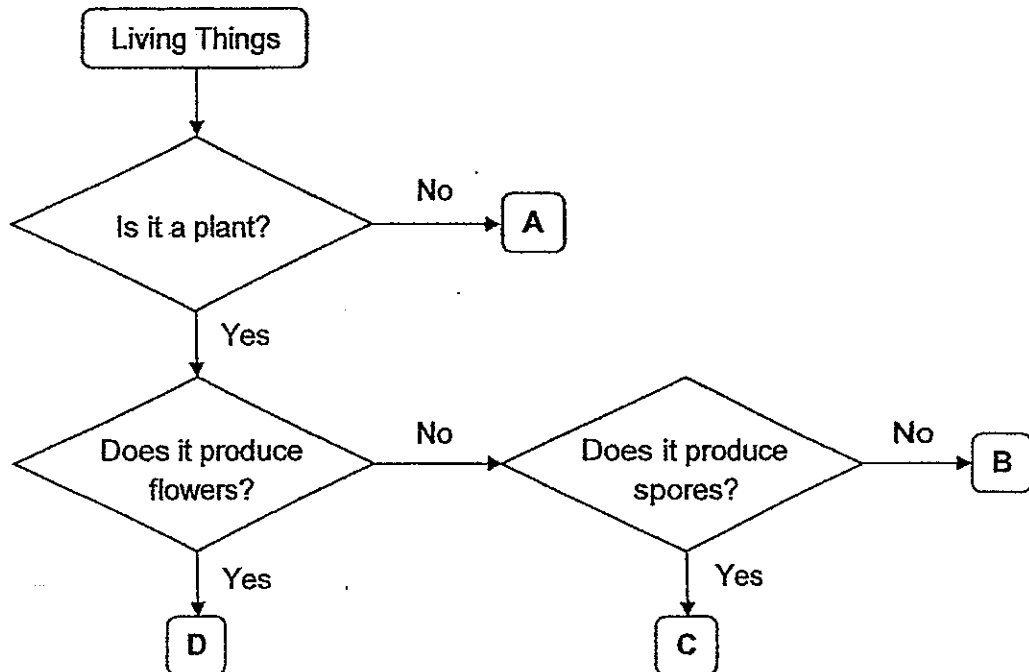
4. Jane kept 3 similar crickets in 3 set-ups, A, B and C, as shown below.



Which one of the following is correct?

	Set-up in which the cricket will live the longest	Set-up in which the cricket will die the fastest
(1)	B	A
(2)	C	B
(3)	C	A
(4)	A	B

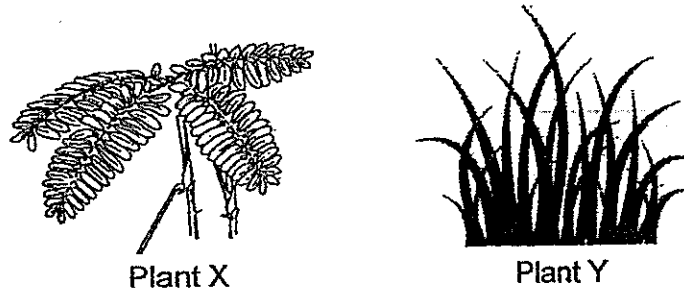
5. Study the flowchart below.



Based on the above flowchart, which one of the following best represents a ladder fern?

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

6. The diagram below shows two plants, X and Y.



Three pupils, Ali, Bala and Clara, made the following statements about the two plants.

Ali They only need air and water to survive.

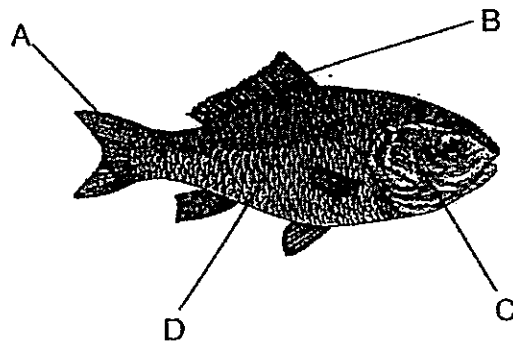
Clara They can make their own food in the presence of light.

Bala They are definitely non-flowering plants as no flowers are seen.

Which of the above pupils has / have made the correct statements?

- (1) Clara only
- (2) Ali and Bala only
- (3) Bala and Clara only
- (4) Ali, Bala and Clara

7. The diagram below shows a fish.



Which of the above parts allow the fish to swim and balance in water?

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

8. A teacher shows her pupils pictures of 4 animals as shown below.



Frog



Crocodile



Terrapin




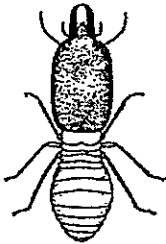


Salamander

What are the similarities among the above animals?

- A They lay eggs.
- B They have scales.
- C They breathe through lungs all the time.
- D They are able to survive both in water and on land.

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

9. Study the classification table below.

Group X	Group Y
 Eagle	 Termite
 Bat	 Spider

Which of the following headings best represent Group X and Group Y?

	Group X	Group Y
(1)	Bird	Insect
(2)	Can fly	Cannot fly
(3)	Covered with feathers	Hard outer covering
(4)	Gives birth to live young	Lays eggs

10. Which of the following statements are **not** true of birds?

- A All birds can fly.
- B All birds have two legs.
- C All birds breathe through lungs.
- D All birds have fur to keep them warm.

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

11. Which of the following can only be seen clearly under a microscope?

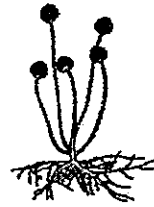
- A Yeast
- B Bacteria
- C Bread mould
- D Button mushroom

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

12. The diagram below shows two living things.



Bird's Nest Fern

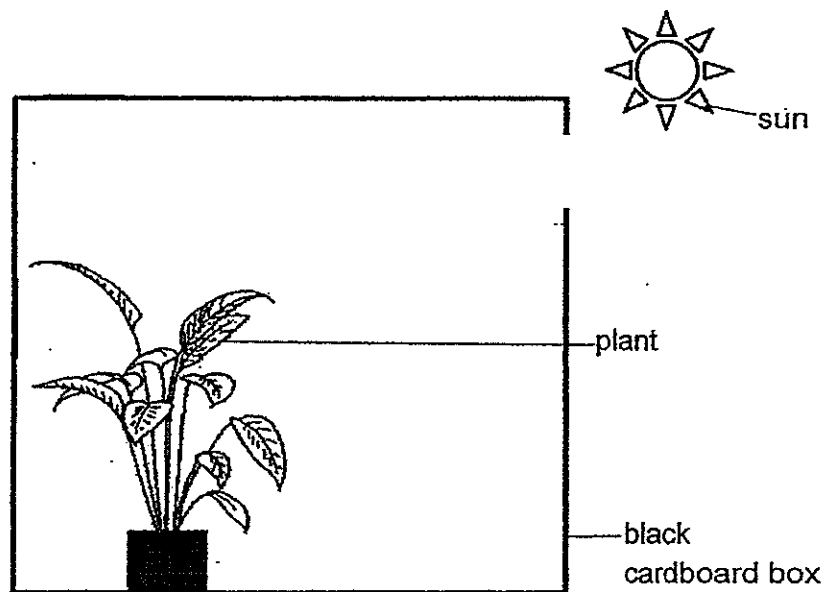


Bread Mould

Which of the following statements are true for both the living things shown above?

- A Both can grow.
 - B Both are plants.
 - C Both can make their own food.
 - D Both are able to respond to changes.
-
- (1) A and D only
 - (2) B and C only
 - (3) A, B and D only
 - (4) A, B, C and D

13. A potted plant was placed inside a black cardboard box with a hole cut out as shown below.



After a week, the plant was observed to grow towards the hole

Which one of the following best explains the above observation?

- (1) The plant is trying to get more air.
- (2) The plant is trying to get more food.
- (3) The plant is trying to get more light.
- (4) The plant is trying to get more moisture.

14. Chloe wants to make a metal key as shown below.

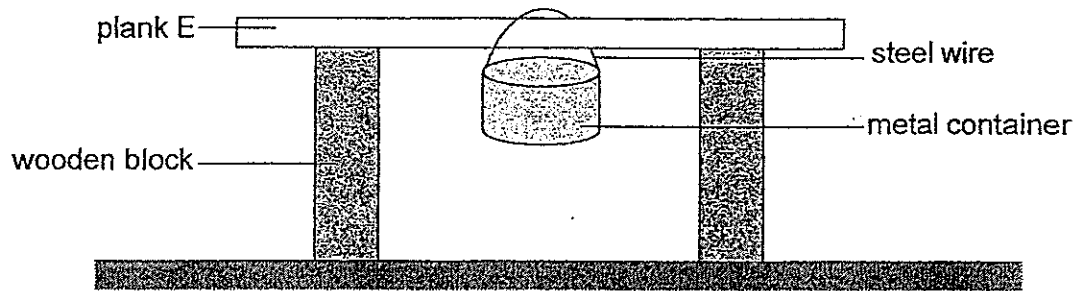


Which of the following properties of metal is/are important for it to be used for making the key shown above?

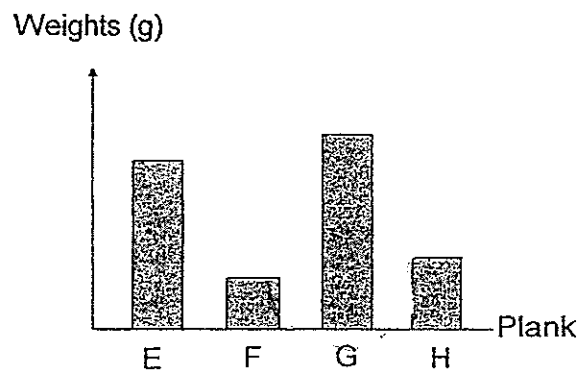
- A Metal is strong.
- B Metal is inflexible.
- C Metal is waterproof.
- D Metal can sink in water.

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

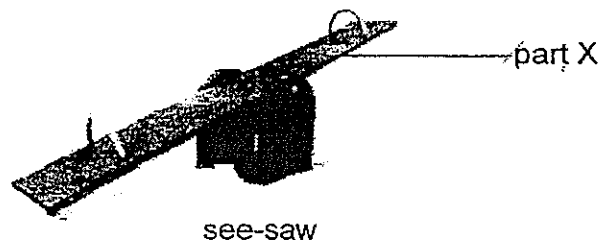
15. Hong Kim set up an experiment to find out the strength of four planks, E, F, G and H, which are made of different materials. He placed plank E on two wooden blocks and hung a metal container in the middle as shown below. He then added metal weights, one at a time, into the container until the plank broke. He repeated the experiment using planks, F, G and H.



He recorded the maximum weight each plank could hold before breaking in the graph below.



Based only on the above results, which one of the planks, E, F, G or H, is most suitable for making part X of the see-saw shown below?



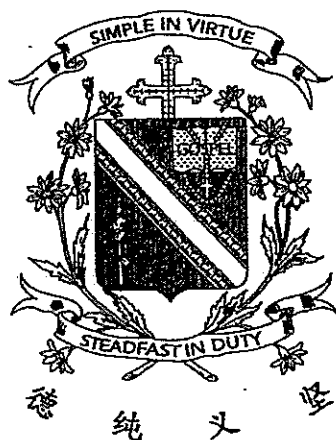
- (1) E
- (2) F
- (3) G
- (4) H

END OF BOOKLET A

Name: _____ ()

Class: Primary 3 _____

CHIJ ST. NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 1 – 2014

SCIENCE

Booklet B

15 May 2014

Total Time for Booklets A and B: 1 hour 15 minutes

7 Questions

20 Marks

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

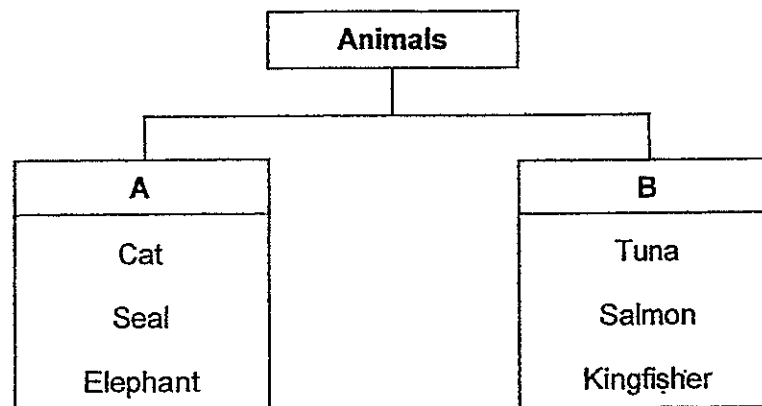
Booklet A	30
Booklet B	20
Total	50
Parent's Signature / Date	

This paper consists of 7 printed pages including this cover page.

SECTION B (OPEN-ENDED QUESTIONS) [20 marks]

For questions 16 to 22, write your answers in this booklet. The number of marks available is shown in the brackets [] at the end of each question or part question.

16. The classification chart given below shows some animals classified according to their animal groups.



- (a) Based on the classification chart above, which animal(s) has / have been classified **wrongly**? Give a reason for your answer. [1]

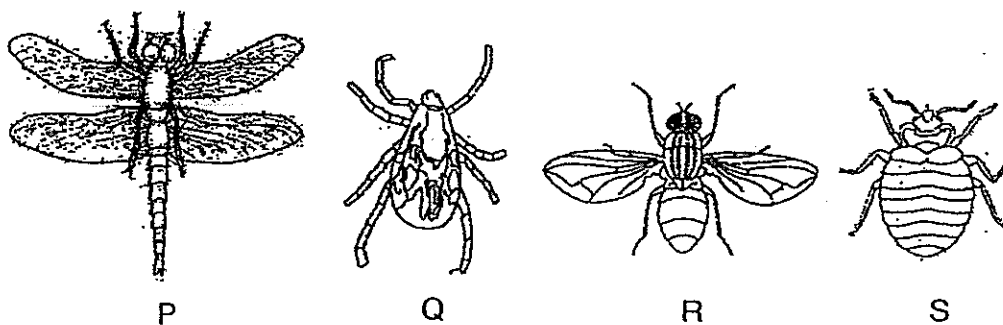
- (b) In the chart above, in which group, A or B, will you place the following animals?

(i) Shark : _____ [1]

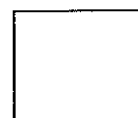
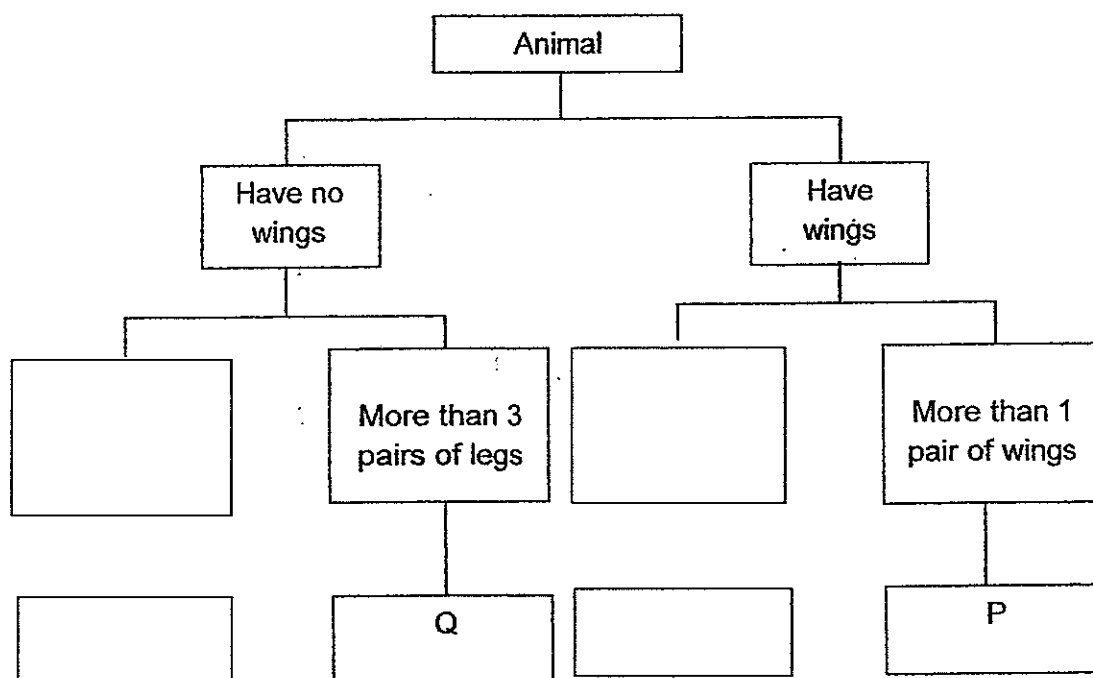
(ii) Dolphin : _____ [1]



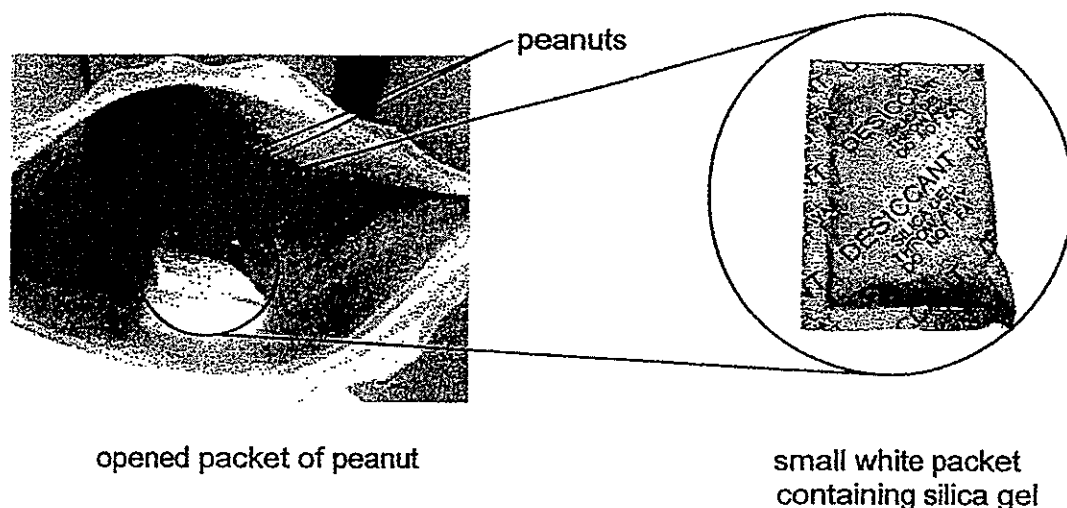
17. The diagram below shows four different animals, P, Q, R and S.



Based on the observations made of the animals given above, complete the classification chart below by filling in the boxes. [2]



18. Su Fen bought a packet of peanuts from the supermarket. Upon opening it, she found a small white packet containing silica gel as shown below.



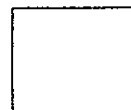
Silica gel is known for its ability to absorb moisture.

Su Fen removed the packet of silica gel before closing the packet. After 3 weeks, she noticed some green patches growing on the peanuts.

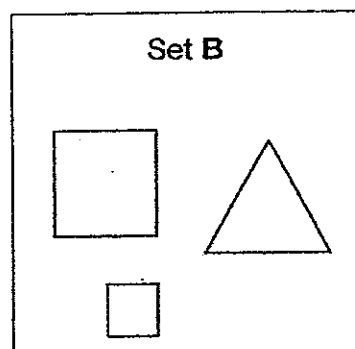
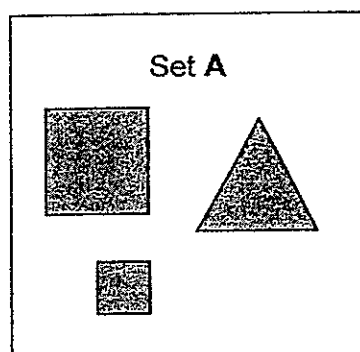
- (a) What do you think the green patches are? [1]

- (b) Based on her observation of the growth of the green patches, Su Fen [1] said, "The removal of the packet of silica gel causes the green patches to grow on the peanuts." Do you agree with her? Explain.

- (c) State **two** other conditions necessary for the green patches to grow on the peanuts. [1]



19. Shanti is given two sets of objects as shown below.

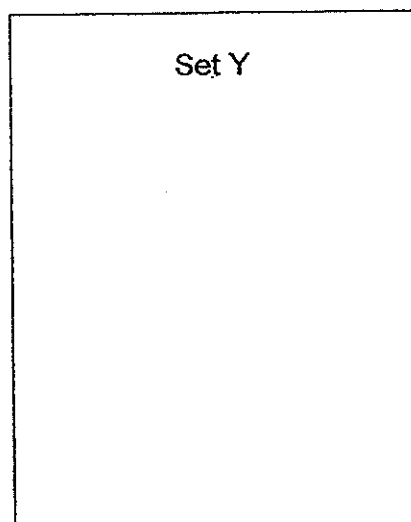
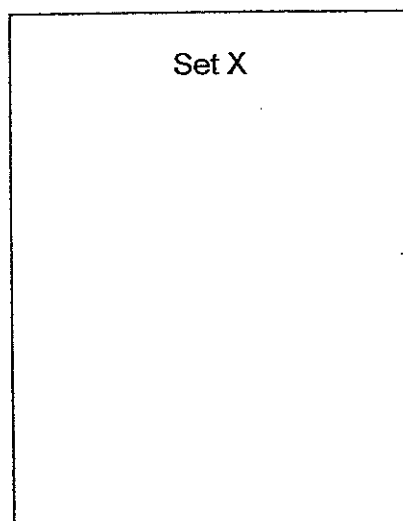


- (a) The objects above are classified according to whether they are

[1]

- (b) Using **another** characteristic, **draw** in the boxes below to show how you would classify all the above objects.

[2]



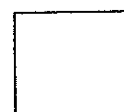
- (c) Based on your answer above, give suitable headings for Set X and Set Y respectively.

(i) Set X : _____

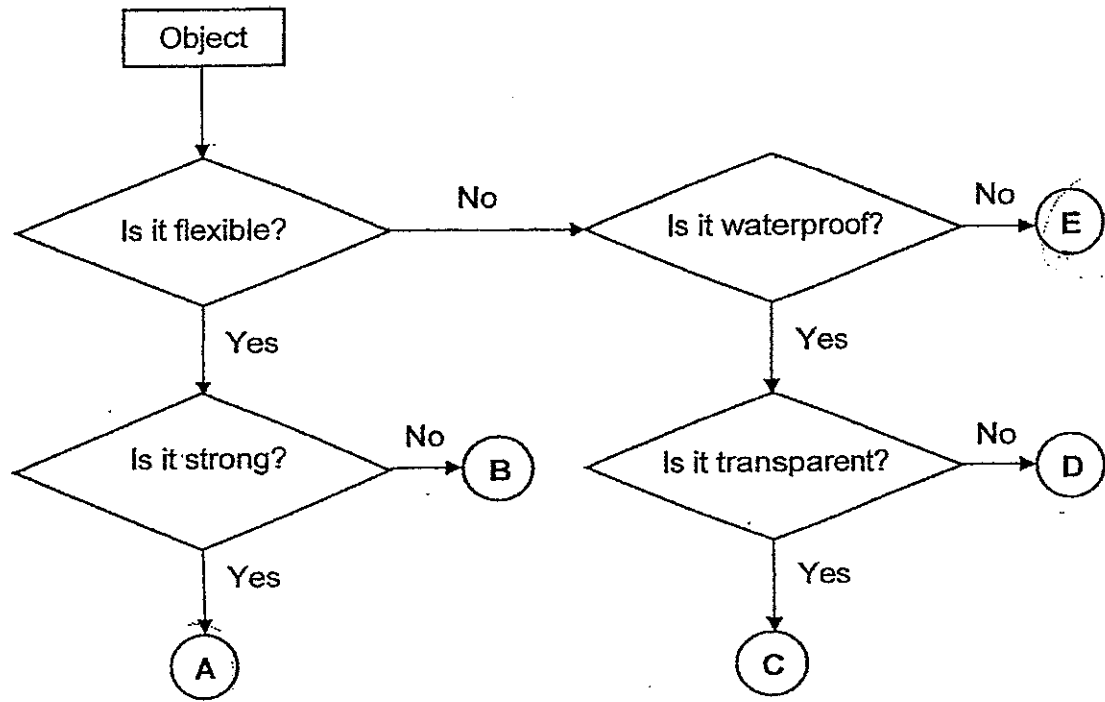
[½]

(ii) Set Y : _____

[½]



20. Study the flowchart given below.



(a) Using the flowchart above, state the similarities between C and D. [2]

(b) Using the flowchart above, state the difference between A and E. [1]

(c) In the flowchart above, where will you place the objects given below?

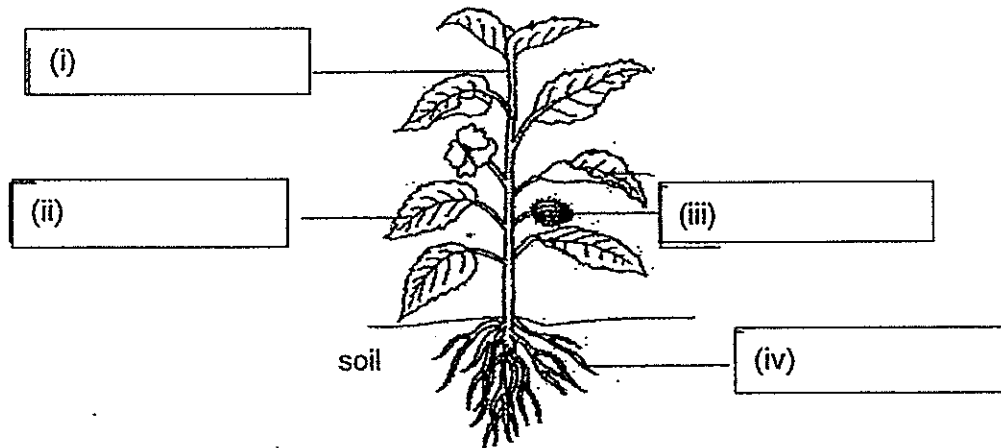
(i) Leather belt : _____ [½]

(ii) Metal spoon : _____ [½]



21. The diagram below shows a plant. Name the parts labelled (i) to (iv).

[2]



22. Kumar observed a bean plant and recorded its height over five weeks in the table shown below.

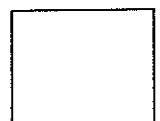
Week	1	2	3	4	5
Height (cm)	3	5	7	?	11

(a) Based on the above table, what do you think the height of the bean plant will be at the end of week 4?

[1]

(b) Kumar's observation shows that living things can

—End of Paper—



EXAM PAPER 2014**LEVEL : PRIMARY 3****SCHOOL : CHIJ ST NICHOLAS****SUBJECT : SCIENCE****TERM : SA1**

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

Q16 (a) The kingfisher. It is a bird not a fish

- (b) (i) B
(ii) A

Q17 3 pairs of legs S
1 pair of wings R

Q18 (a) Mould

- (b) Yes. Moisture is not removed so mould can grow.
(c) Air and warmth

Q19 (a) Shaded or not shaded

- (b) Set X Set Y



- (c) (i) Set X : Big shapes
(ii) Set Y : Small shapes

Q20 (a) Both of them are flexible and waterproof.

(b) A is flexible but E is not.

- (c) (i) A
(ii) D

Q21 (i) Stem
(ii) Leaf
(iii) Fruit
(iv) Roots

Q22 (a) 9cm.
(b) Grow



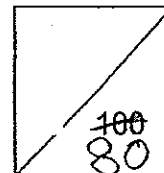
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2014 SEMESTRAL EXAMINATION 1
SCIENCE
PRIMARY 3

Duration of Paper: 1 h 30 min

Name: _____ ()

Class: Pr 3 _____

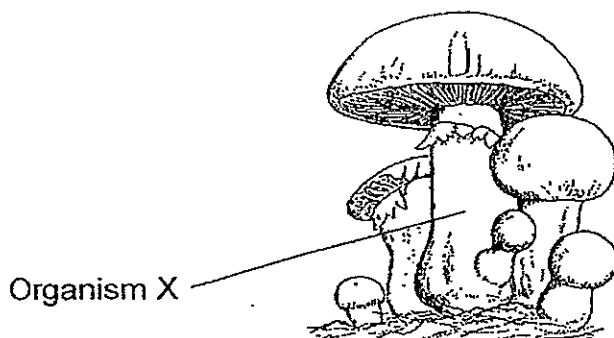
Parent's Signature: _____



Section A Multiple-Choice Questions (40 marks)

For each question from 1 to 20, 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. The diagram below shows Organism X.



Which of the following statements is **correct** about Organism X?

- (1) It has leaves.
- (2) It hunts for food.
- (3) It makes its own food.
- (4) It feeds on dead organisms.

()



2. The table below shows some properties of materials, W, X, Y and Z.

Material	Properties
W	Allows light to pass through
X	Does not allow light to pass through
Y	Not waterproof
Z	Breaks easily

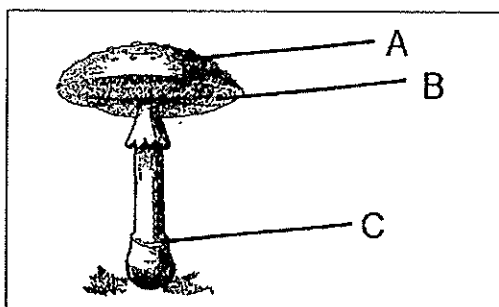
Based on the above properties, which material is **most suitable** for making part X of the spectacles below?



- (1) W
- (2) X
- (3) Y
- (4) Z

()

3. The fungi shown below, has three parts.



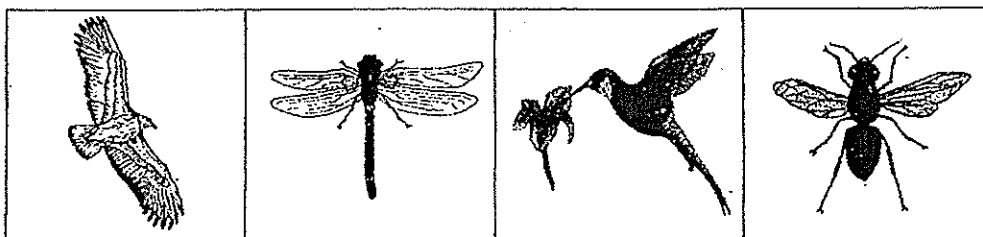
In which one of the following are the parts labelled **correctly**?

	A	B	C
(1)	Cap	Stalk	Gills
(2)	Gills	Cap	Stalk
(3)	Cap	Gills	Stalk
(4)	Gills	Stalk	Cap

()



4. Look at the pictures below.



In what way are the above animals similar?

- (1) They have wings
- (2) They have 2 legs
- (3) They have feelers
- (4) They have feathers

()

5. Which one of the following differences between animals and fungi is correct?

	Animals	Fungi
(1)	Cannot make their own food	Can make their own food
(2)	Need water	Do not need water
(3)	Is not a plant	Is a plant
(4)	Do not reproduce using spores	Reproduce using spores

()

6. A scientist found a new animal and named it **Kihansi**.

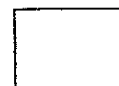
He observed **Kihansi** and recorded its characteristics below.

<u>Characteristics of Kihansi</u>
<ul style="list-style-type: none">• It hatches from eggs.• It has moist skin.• It can live on land and in water.

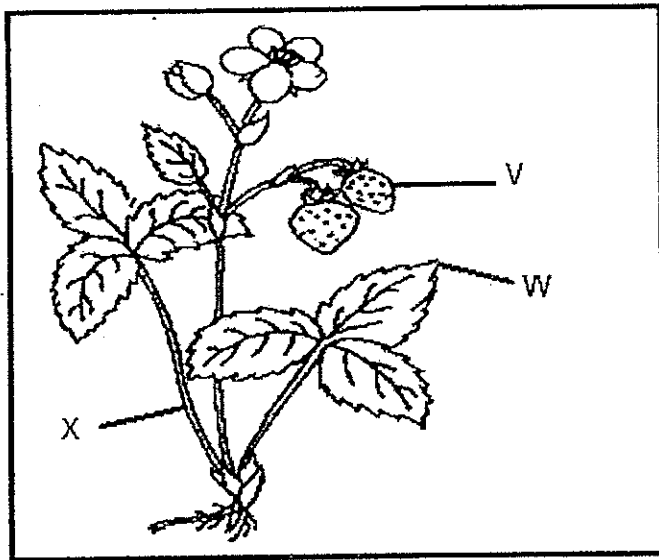
Which group of animals do you think the **Kihansi** is likely to belong to?

- (1) Insects
- (2) Reptiles
- (3) Mammals
- (4) Amphibians

()



7. The diagram below shows a strawberry plant.



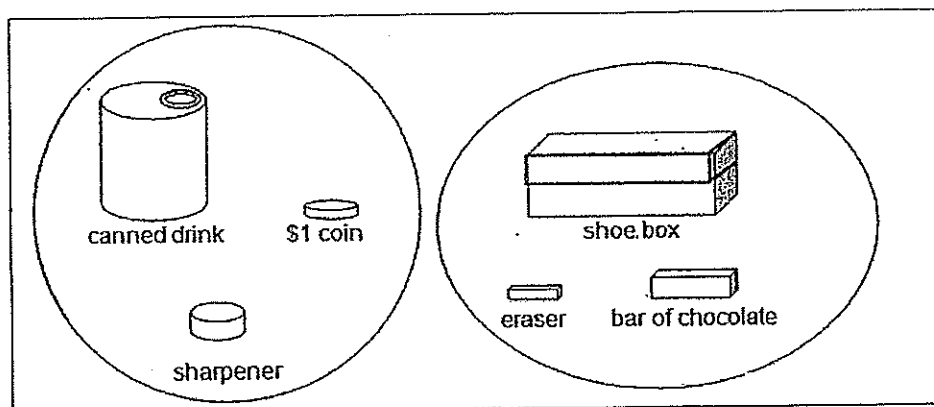
Which of the following is correct?

- (1)
(2)
(3)
(4)

V	W	X
flower	root	leaf
fruit	leaf	root
flower	fruit	leaf
fruit	leaf	stem

()

8. Look at the classification of some objects below.



Choose the **correct description** on how the objects are classified.

- (1) The objects are classified according to their shapes.
(2) The objects in each group do not have any similarity at all.
(3) The objects are placed in the two groups based on their sizes.
(4) The objects are placed in the two groups based on their uses.

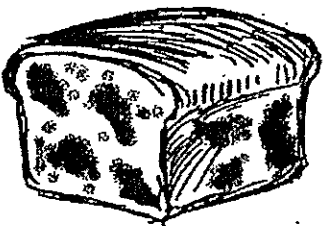



()



9. Some observations about a living thing are stated below.

Observations
It produces spores
It does not make its own food
It needs air, water and food to survive

This living thing is likely to be a/an _____.

(1)	Bread Mould 	(2)	Fern 
(3)	Ixora 	(4)	Insect 

()

10. Which of the following is **NOT** a purpose of classification?

- A To mix things up so that there is diversity.
- B To make it easy to find the things we want.
- C To help us put things in an orderly manner.
- D To find similarities and differences in the diversity of living things.

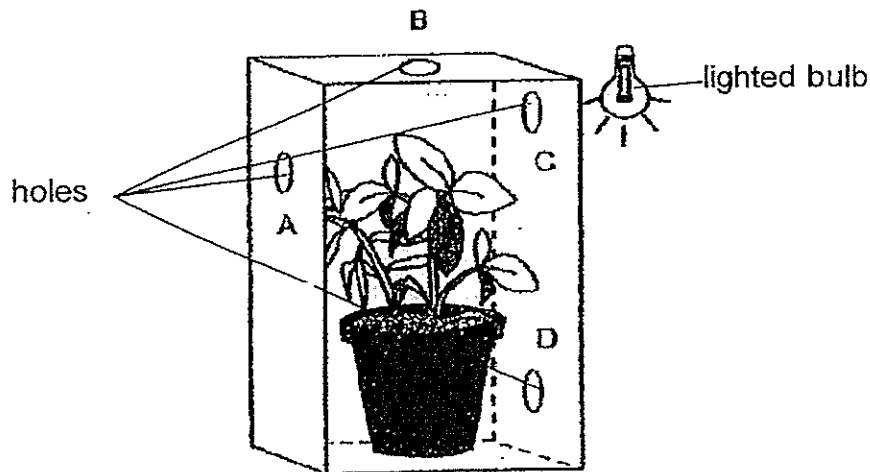
- (1) A only
- (2) A and B only
- (3) B and C only
- (4) C and D only

()



11. A young plant was placed in a thick cardboard box as shown below.

Four holes A, B, C and D, were made on the sides of the box to allow light to enter.

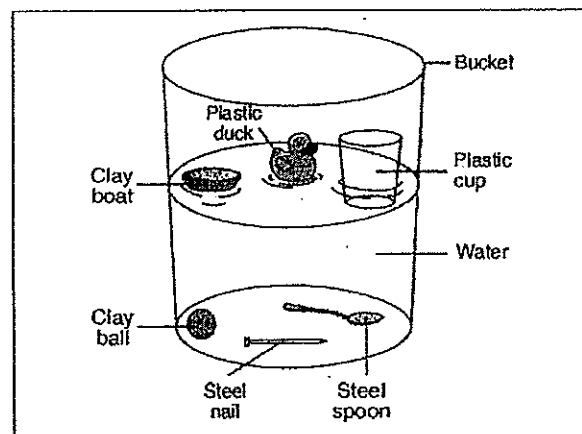


Which one of the holes would the plant **most likely** grow towards?

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

()

12. The picture below shows some items that were dropped into a bucket of water.



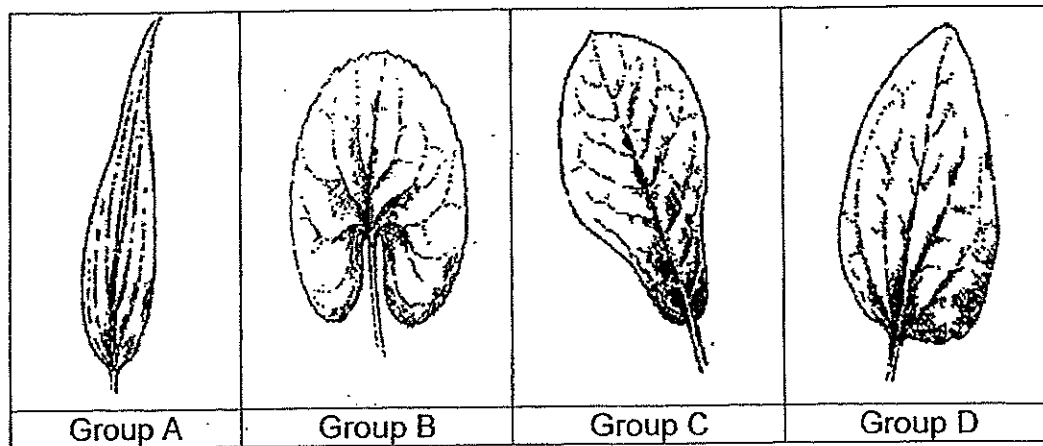
Based on your observation, which statement describes the objects best?

- (1) Objects made of steel sink.
- (2) Objects made of clay always float.
- (3) Objects made of plastic do not float.
- (4) The bucket is not made of a waterproof material.

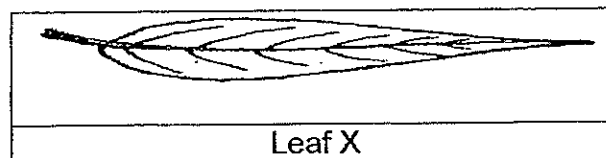
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13. Look at the pictures below.



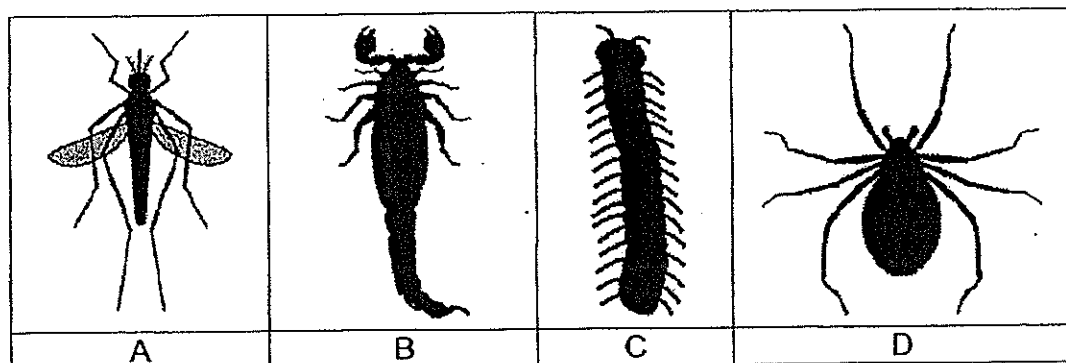
Which group does Leaf X belong to?



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

()

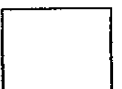
14. The picture below shows the shadows of various types of living things.



Which of the following is an insect?

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

()



15. David planted four balsam plants in 4 similar pots.

He placed the pots under different conditions as shown in the table below.

Plant	Conditions			
	Air	Sunlight	Water	Fertiliser
A	✓	✓	✓	X
B	X	✓	✓	✓
C	✓	X	X	✓
D	X	✓	X	✓

Legend
✓ – present
X – not present

Which of the following plants is likely to live the longest?

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

()

16. Study the characteristics of organisms X and Y in the table below.

Characteristics	X	Y
Able to make food	No	Yes
Able to grow	Yes	Yes
Can reproduce	Yes	Yes
Need air, food and water	Yes	Yes

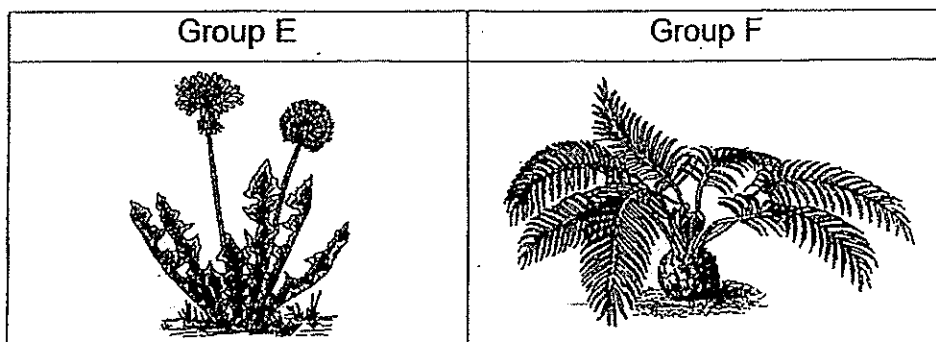
What can Organisms X and Y be respectively?

	X	Y
(1)	Bird's nest fern	Rose plant
(2)	Hamster	Mushroom
(3)	Butterfly	Bird's nest fern
(4)	Rose plant	Tomato plant

()



17. Study the chart below.

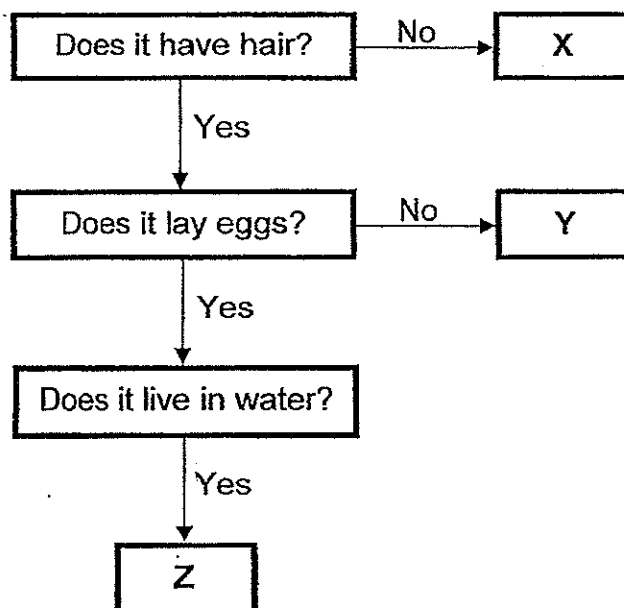


Which one of the following makes a suitable heading for Group E and Group F?

	Group E	Group F
(1)	land plant	water plant
(2)	poisonous plant	non-poisonous plant
(3)	flowering plant	non-flowering plant
(4)	non-flowering plant	flowering plant

()

18. Sam observed three animals and drew the following chart.



Which of the following is **NOT** likely to be a mammal?

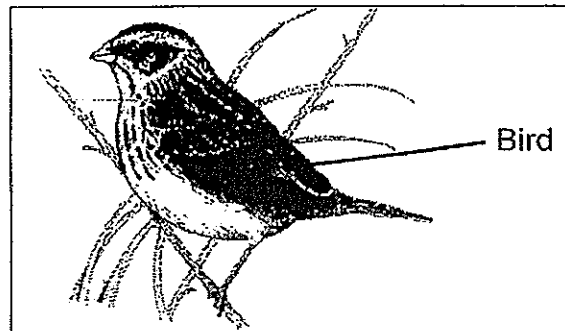
- (1) X only
- (2) Y only
- (3) X and Y only
- (4) Y and Z only

()



19. Sam observed a bird at the Jurong Bird Park.

He wanted to find out if the bird is a living thing.



Sam performed a simple test and recorded his observation and conclusion below.

What I did
I clapped my hands loudly.
My observation
The bird flew away.
My conclusion
The bird is a living thing.

Why did Sam conclude that the bird was a living thing?

- (1) It grew.
- (2) It reproduced.
- (3) It responded to change.
- (4) It needed air, food and water.

()

20. Study the classification table below.

Things	
Living thing	Non-living thing
X	Y

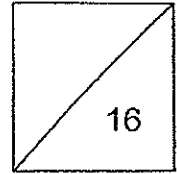
Which one of the following statements about X and Y is **not** correct?

- (1) X can grow.
- (2) X can reproduce.
- (3) Y can move on its own.
- (4) X needs air, food and water.

()



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2014 SEMESTRAL EXAMINATION 1
SCIENCE
PRIMARY 3**



Name: _____ ()

Class: Pr 3 _____

Section B: Structured Questions (16 marks)

For each question from 21 to 27, write your answers in the spaces given.


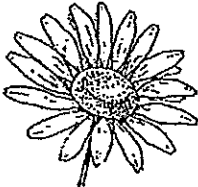
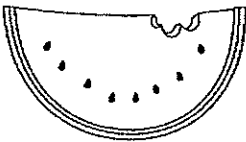
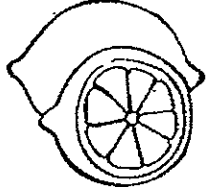
21. Look at the table below.

Tick (✓) in the respective 'True' or 'False' columns for the following statements.

[1m]

	Statement	True	False
a)	Mould is a non-flowering plant.		
b)	Some fungi can be eaten.		

22. The diagrams below show two groups of **plant parts**.

Group A		Group B	
			
Hibiscus	Daisy	Watermelon	Lemon

Write suitable headings for Group A and Group B.

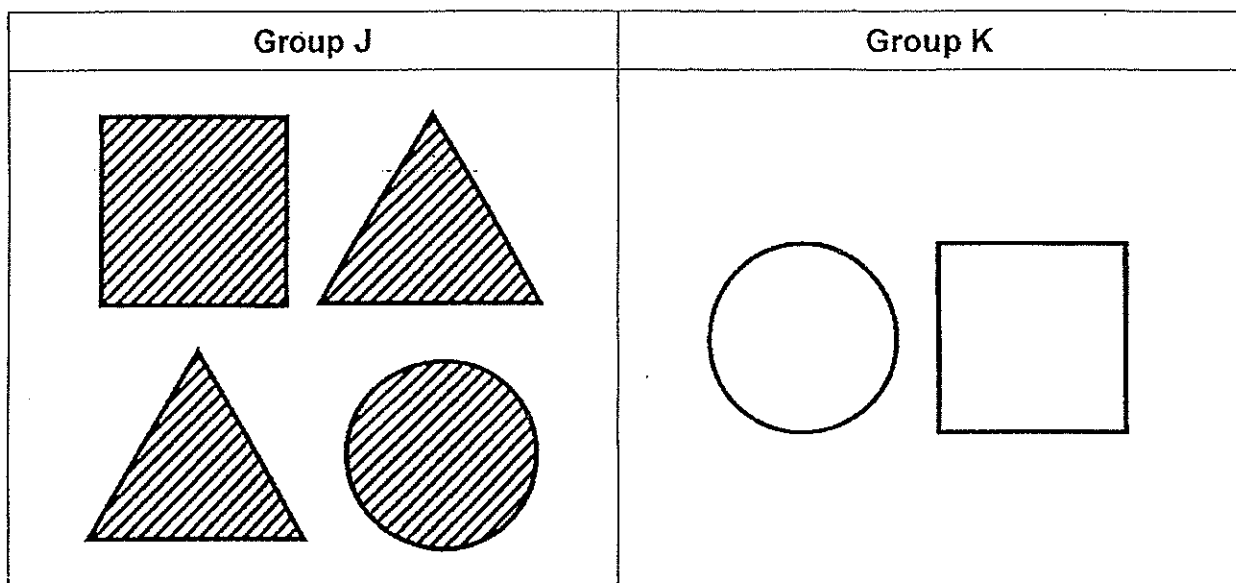
[2m]

Group A: _____

Group B: _____



23. Observe the shapes below.



- a) The shapes shown above are classified into 2 groups. [2m]

How are they classified?

Group J: Shapes that are _____

Group K: Shapes that are _____

- b) How can we classify the same shapes above into 3 groups, A, B and C? [3m]

Write a suitable heading for each group.

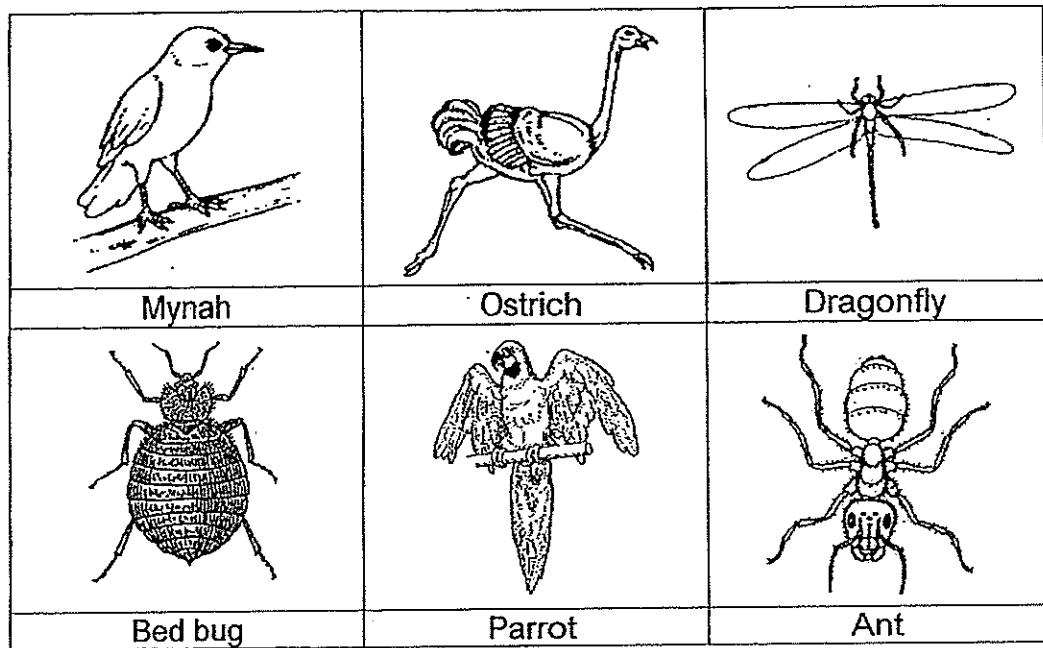
Group A: _____

Group B: _____

Group C: _____

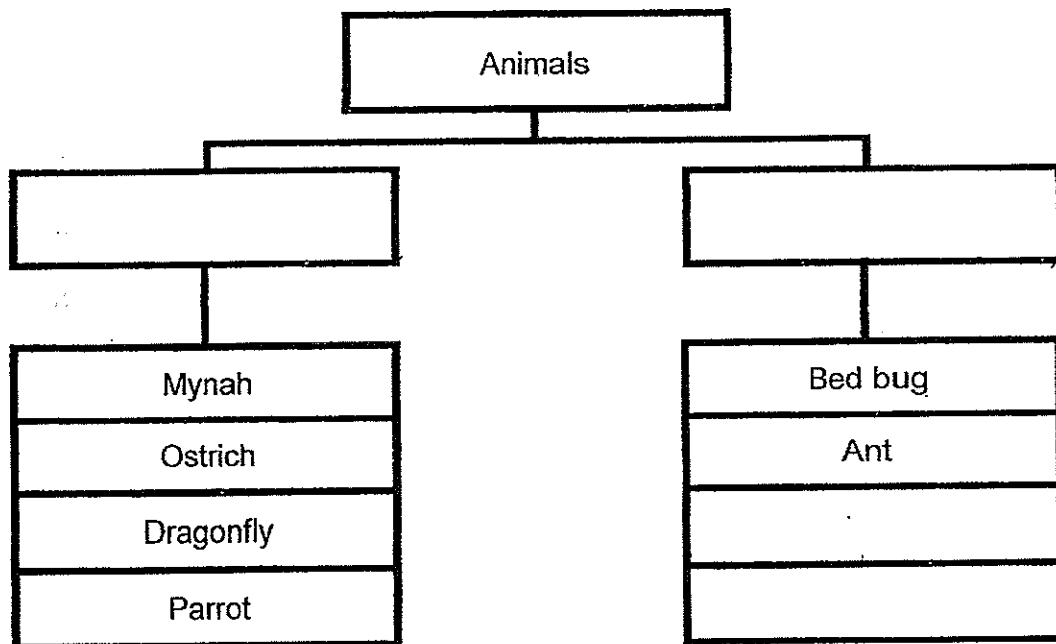


24. Observe the six animals below carefully.



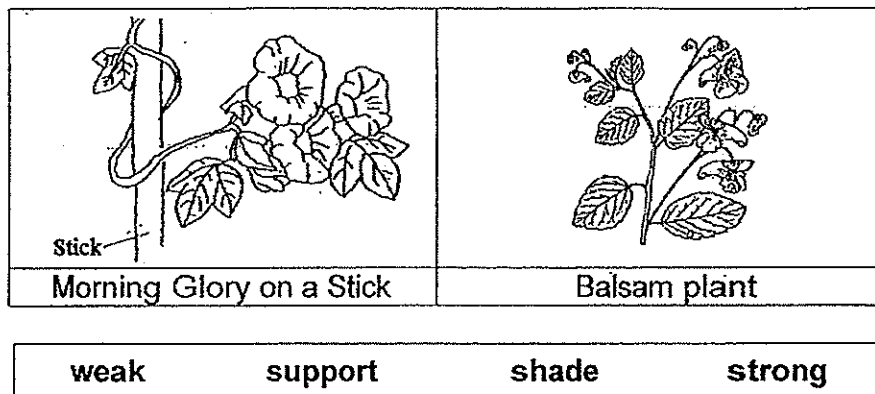
Write suitable headings for the two groups in the boxes below.

[2m]



25. Study the pictures below and fill in the blanks with suitable words from the box provided.

[2m]

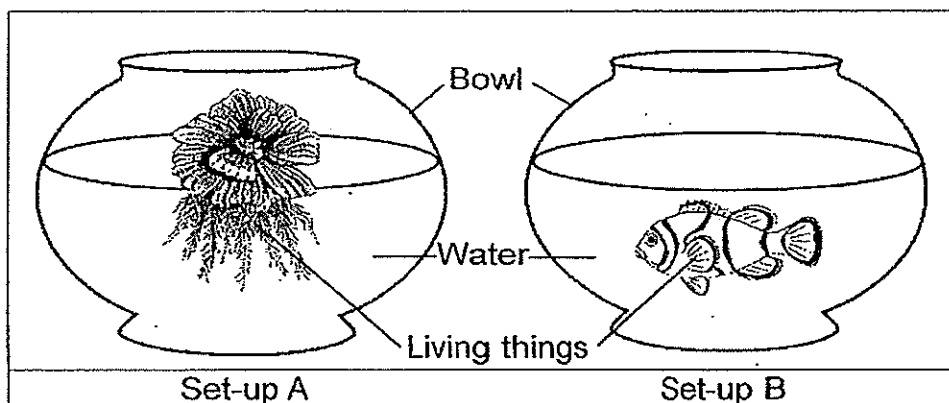


The morning glory plant climbs on the stick so that it can grow towards the sunlight.

The function of the stick is to provide (a) _____ to the plant as it has a (b) _____ stem.

26. Sam placed Set-ups A and B, shown below, by the window.

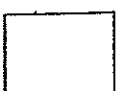
The living things in both set-ups received only water and sunlight for a week.



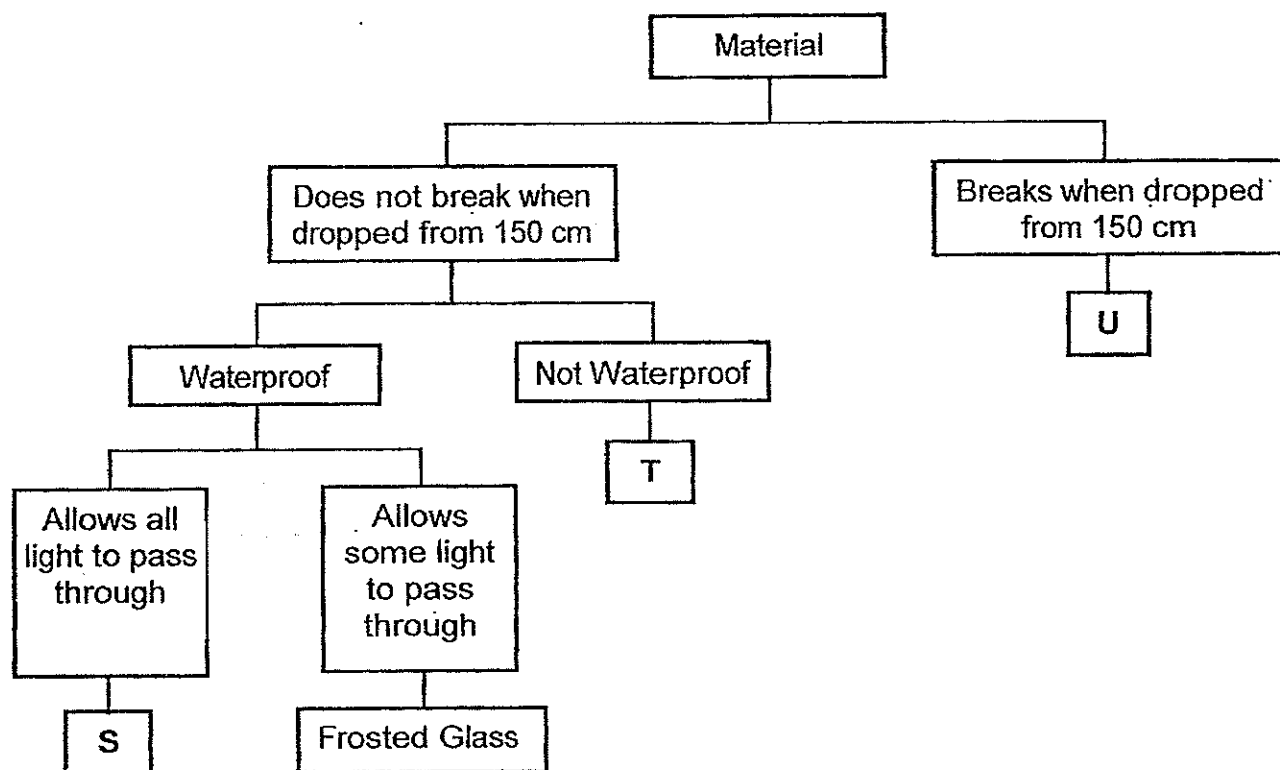
Tick (✓) in the respective 'True' or 'False' columns for the following statements.

[1m]

	Statement	True	False
a)	After 1 week, the living thing in set-up A was still alive.		
b)	After 1 week, the living thing in set-up B was still alive.		



27. The classification chart below is used to classify three materials S, T and U.

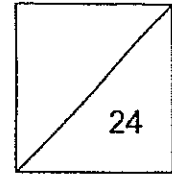


Based on the classification chart above, **write** the alphabets, **S**, **T** or **U** in the correct boxes below. *Use each alphabet once.* [3m]

	Object	Material used to make the object
a)	Clear Plastic File	
b)	Paper Towel	
c)	Glass Cup	



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SCIENCE
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Class: Pr 3 _____

Section C: Open-Ended Questions (24 marks)

For each question from 28 to 35, write your answers in the spaces given.

28. Observe the two types of organisms below.

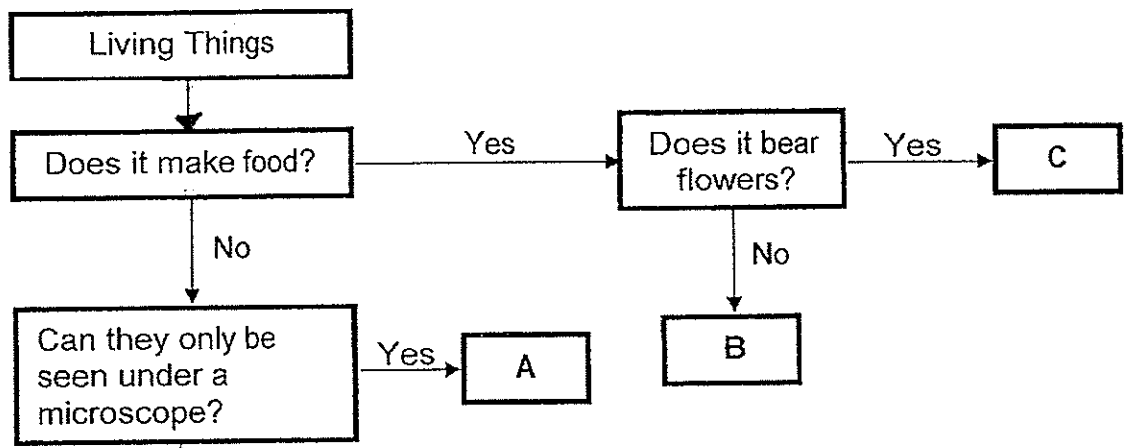


a) State **one similar characteristic** between the Organisms S and T. [1m]

b) John classified Organisms S and T as plants. Is John correct? Explain why. [1m]



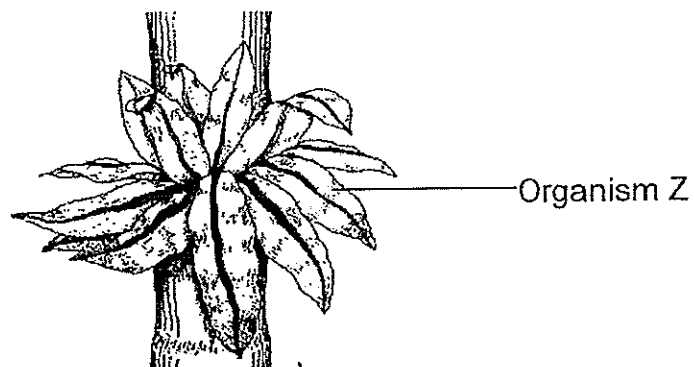
29. Study the flow chart about some living things.



a) From the chart above, describe two characteristics of Living Thing C. [2m]

b) Which of the living things, A, B or C, is a bacteria? [1m]

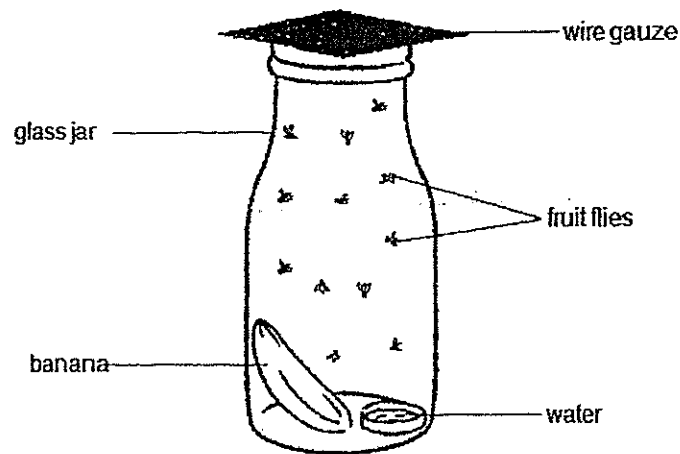
c) Look at Organism Z shown below.



Which living thing, A, B or C is Organism Z likely to be? [1m]



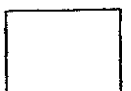
30. Maran observed some fruit flies in a glass jar for 10 days.



a) **Match** Maran's observations on the left to the conclusions on the right

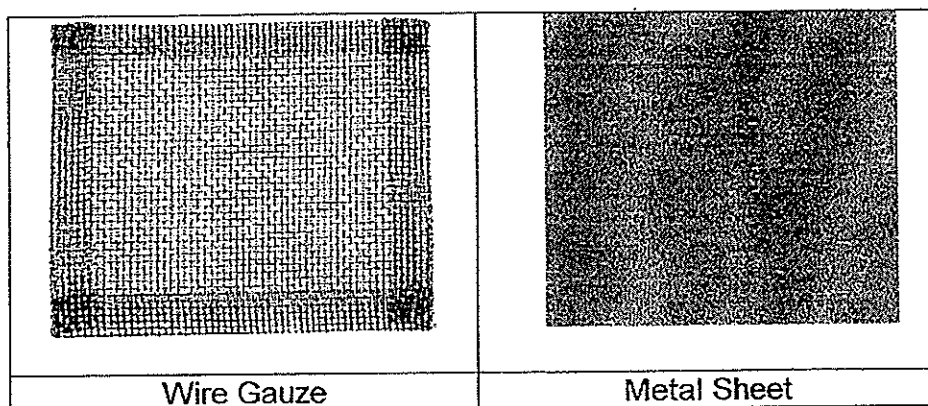
[2m]

<u>Observation</u>		<u>Conclusion</u>
There were more fruit flies in the glass jar after 10 days.	•	• The fruit flies need food and water.
They were feeding on the banana and water.	•	• The fruit flies can reproduce.
Some fruit flies were bigger in size after 10 days.	•	• The fruit flies respond to changes.
When a torch was shone at the glass jar, the fruit flies flew towards the light.	•	• The fruit flies can grow.



Q30 continued

- b) The diagrams below show a wire gauze and a metal sheet



Maran used the wire gauze to cover the jar so that the fruit flies will live longer.

Explain why the fruit flies live longer when the wire gauze is used.

[2m]

31. Professor Albert conducted an experiment to find out how different conditions affect the growth of bacteria.

The results of the experiment are shown in the table below.

Condition	Growth of Bacteria		
	Day 1	Day 3	Day 5
A	•	••	•••
B	-	-	•
C	•	•	•

Legend

- none • very little growth •• some growth ••• a lot of growth

Using the results from the table, answer the following questions.

- a) Which type of condition, A, B or C, best supports the growth of bacteria?

[1m]

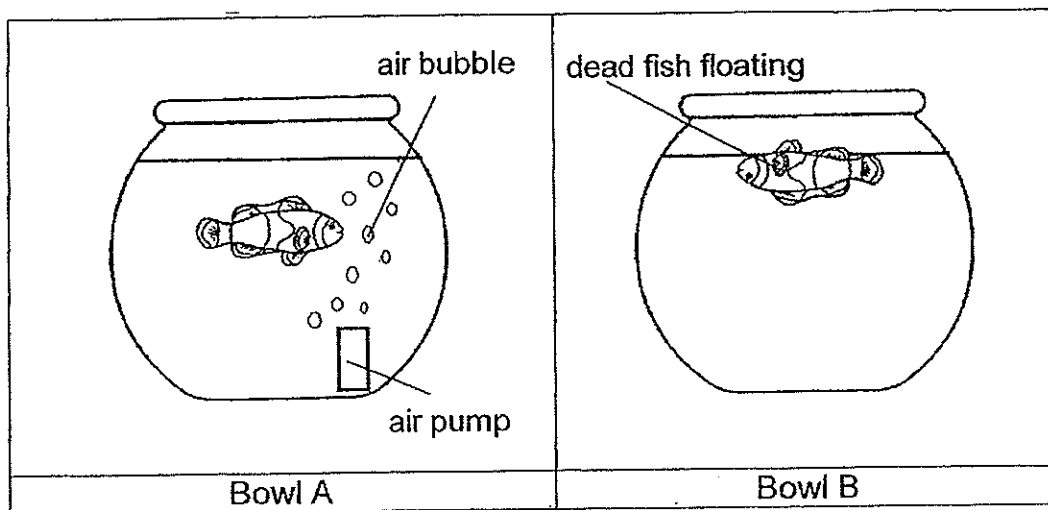


Q31 continued

- b) Name the instrument Professor Albert should use to observe the growth of bacteria.
Give a reason for your answer. [2m]

32. Shiqi placed 2 fish into 2 fish bowls.

The next day, she noticed that the fish in Bowl A is still swimming while the fish in Bowl B has died.



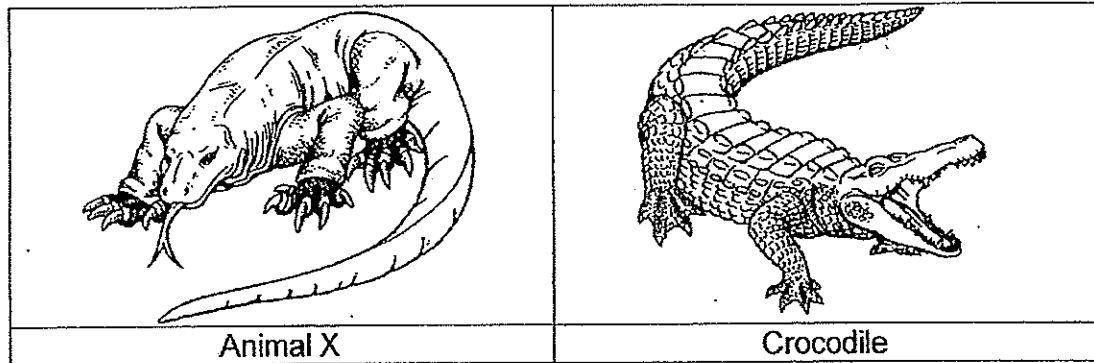
- a) Explain why the fish in Bowl B died. [1m]

- b) What characteristic does the above experiment show about living things? [1m]



33. Jayden went to the zoo and saw Animal X, shown below, moving on the ground.

He noticed that the body covering of the animal looked very similar to the crocodile that he saw earlier.



- a) Name the body covering of Animal X.

[1m]

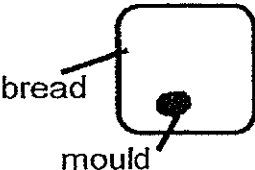
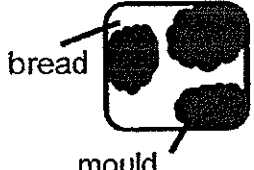
- b) Jayden was then asked to classify Animal X in his school worksheet.

Which animal group would he classify Animal X?

[1m]

34. Nathan wanted to find out if the location where the bread was placed will affect the growth of bread mould.

He added the same amount of water to two pieces of bread. The results of the experiment are shown in the table below.

Setup	A	B
Amount of water added	2 ml	2 ml
Location	Open soccer field	In a dark cupboard
Appearance of bread after 2 weeks		

- a) What can Nathan conclude from the results of the experiment?

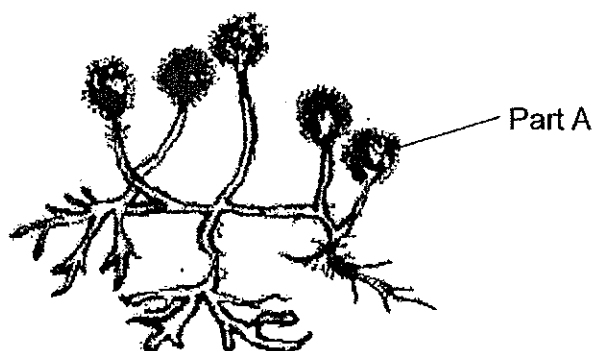
[1m]



Q34 continued

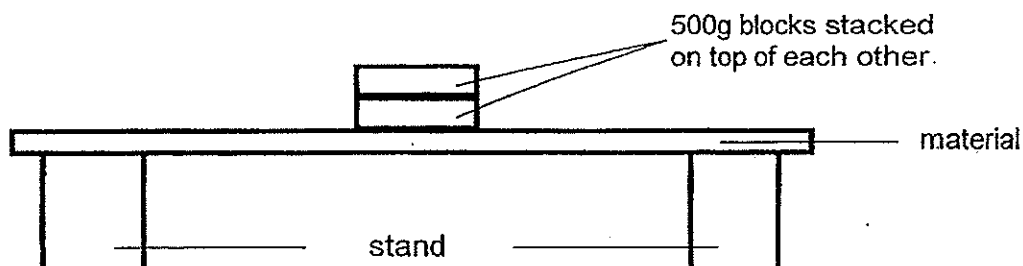
- b) Other than the location of bread in each setup, name ONE other factor that could have caused the mould to grow on the bread. [1m]

- c) Look at the bread mould shown below. Name part A. [1m]



Part A: _____

35. Professor Zuraidah wants to investigate the strengths of 4 materials A, B, C and D.



	Material A	Material B	Material C	Material D
Number of blocks that cause the material to break	1	50	6	20

- a) Which material is the **least** strong? Explain your answer. [2m]



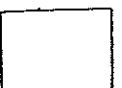
Q35 continued

- b) Arrange Materials A,B, C and D according to their strength. Start from the strongest to the least strong. [2m]

Strongest			Least strong

- End of paper -

Setters: Mr Muhammad Sadhiq
Mdm Nadia Abu Bakar
Mr Nelson Tong Meng Yang



Year: 2014

Level: Primary 3

School: Henry Park Primary School

Subject: Science

Semester: SA1

Section A:

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	1	3	1	4	4	4	1	1	1
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
3	1	1	1	1	3	3	1	3	3

Section B:

Q21)

	Statement	True	False
a)	Mould is a non-flowering plant.		✓
b)	Some fungi can be eaten.	✓	

Q22) Group A: Flowers of the plant

Group B: Fruits of the plant

Q23) Group J: Shaded

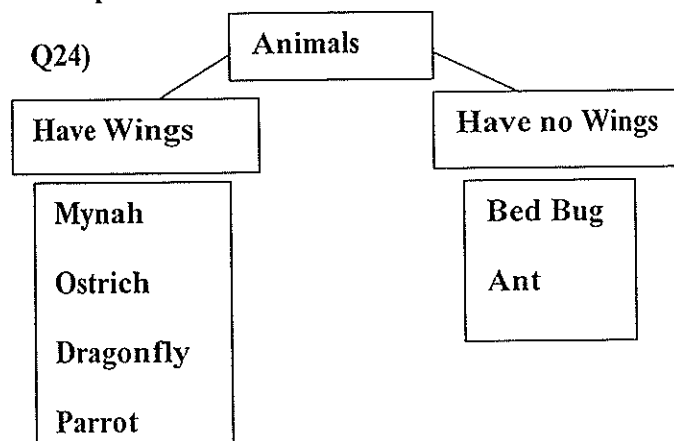
Group K: not shaded

b) Group A: No sides

Group B: Three sides

Group C: Four sides

Q24)



Q25) a) support

b) weak

Q26)

	Statement	True	False
a)	After 1 week, the living thing in set-up A was still alive.	✓	
b)	After 1 week, the living thing in set-up B was still alive.		✓

Q27) a) S

b) T

c) U

Q28) a) They reproduce by spores.

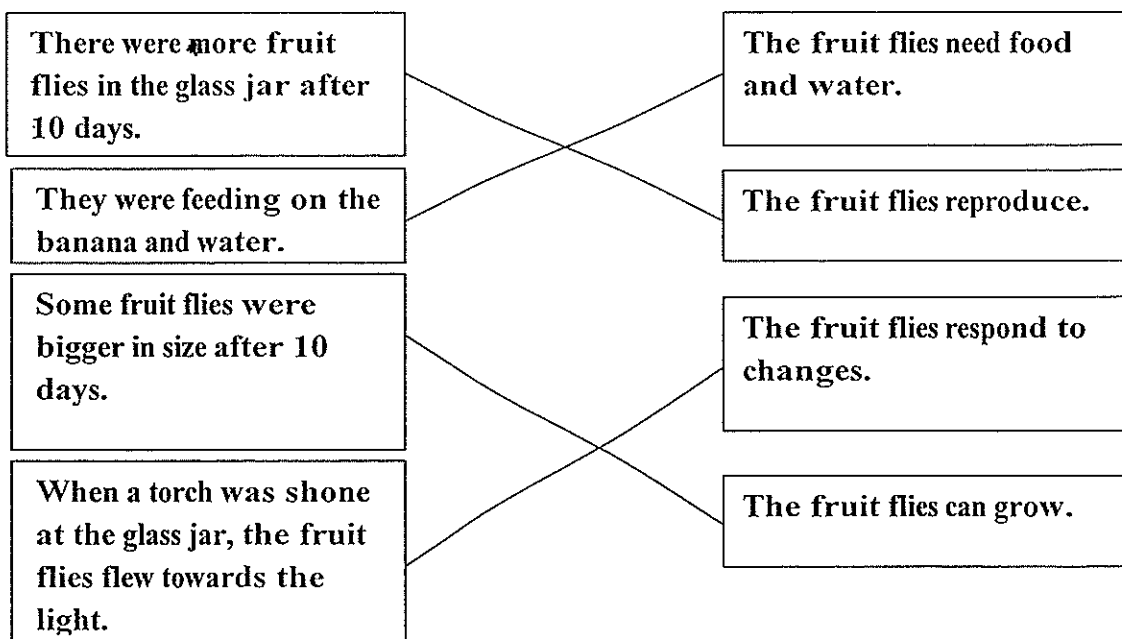
b) John is not correct. Organism T is not a plant and it is a fungi as it does not make its own food.

Q29) a) Living thing C can make its own food and it bears flowers.

b) Living thing A is a bacteria.

c) Living thing B is likely to be organism Z.

Q30) a) Observation



b) The wire gauze has holes to allow air to go into the jar for the fruit flies to breathe in the air and live longer but the metal sheet has no holes for air for the fruit flies to enter.

Q31) a) Condition A best supports the growth of bacteria.

b) Professor Albert should use the microscope to observe the growth of bacteria.
Professor Albert cannot use his naked eye to see the growth of bacteria.

Q32) a) Shiqi did not put the air pump in bowl B and the fish air to breathe in so it will die.

b) Living things need air to survive.

Q33) a) The body covering of animal X is scales.

b) He would classify animal X as a reptile.

Q34) a) Mould grows faster in a dark cupboard than an open field.

b) The bread was sprinkled with water so the mould will grow on the bread.

c) Spore bag

Q35) a) Material A is the least strong. It can hold the least number of blocks before it breaks.

b) B, D, C, A



**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2014
PRIMARY 3**

SCIENCE

BOOKLET A

24 Multiple Choice Questions (48 marks)

Total Time for Booklets A and B : 1 hour 30 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		/ 48
Booklet B		/ 32
Total		/80

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

Date : 16 May 2014

Parent's Signature: _____

Section A: (24 x 2marks = 48marks)

For each question from 1 to 24, 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 (OAS) provided.

1. Which of the following statements are true about all living things?

- A They can grow and reproduce.
- B They can respond to changes around them.
- C They can move from one place to another on their own.

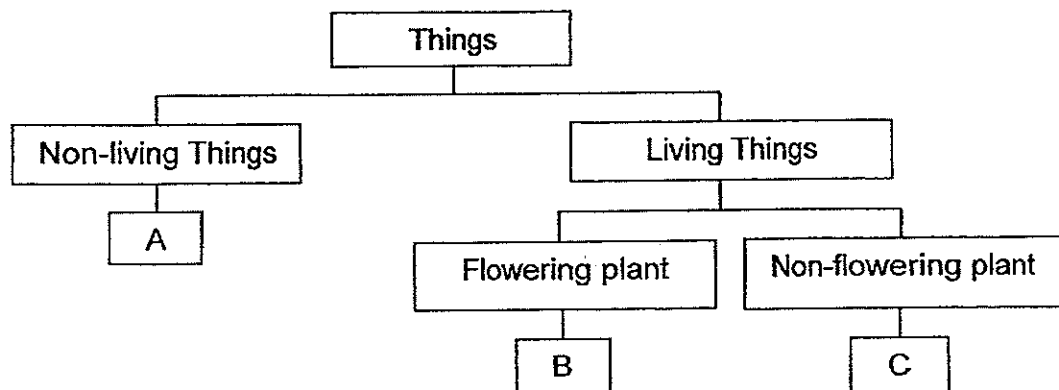
- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) A, B and C only

2. Which of the following would green plants need to grow well?

- A Air
- B Food
- C Water

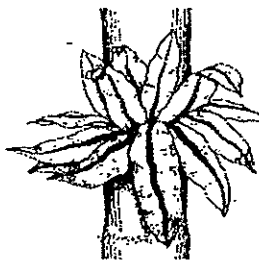
- (1) A and B only
- (2) B and C only
- (3) A and C only
- (4) A, B and C

3. Minghui drew a simple classification chart to group the things he observed during his learning journey.



How would he group the following things into his classification chart?

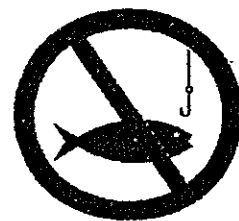
Bird's Nest Fern



Orchid

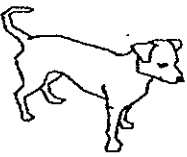

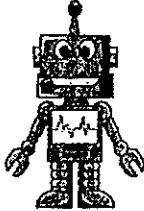



Signboard



	Bird's Nest Fern	Orchid	Signboard
(1)	A	B	C
(2)	B	C	A
(3)	C	B	A
(4)	B	A	C

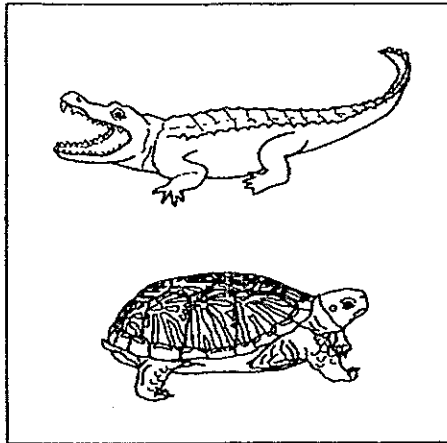
4. The following table shows the characteristics of four things.

	Dog	Clock	Robot	Coconut tree
				
Can die	Yes	No	Yes	Yes
Needs air, food and water	Yes	No	No	Yes
Can move from one place to another on its own	Yes	Yes	Yes	No

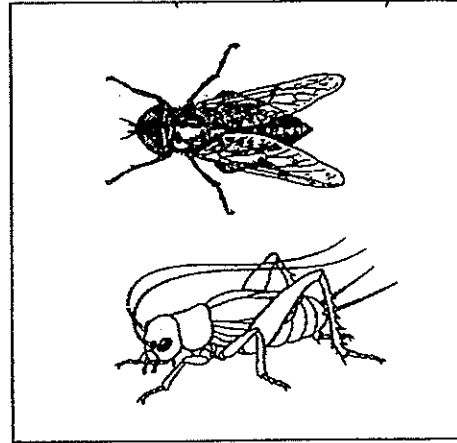
Which of the things in the table above are correctly described?

- (1) dog and clock only
 - (2) clock and robot only
 - (3) dog and coconut tree only
 - (4) robot and coconut tree only
5. Which of the following pairs of living things are micro-organisms?
- (1) bacteria and moss
 - (2) bacteria and yeast
 - (3) mould and toadstool
 - (4) mould and bracket fungus

6. Study the pictures below.



Group X



Group Y

Which of the following are the most suitable headings for Group X and Group Y?

	Group X	Group Y
(1)	Amphibian	Insect
(2)	Reptile	Amphibian
(3)	Insect	Reptile
(4)	Reptile	Insect

7. Four children were made to write down what they have learnt about bacteria.

Alicia	Bacteria can be useful to us.
Ben	Bacteria can make their own food.
Carol	Bacteria can reproduce by laying eggs.
David	Bacteria can be observed through a microscope.

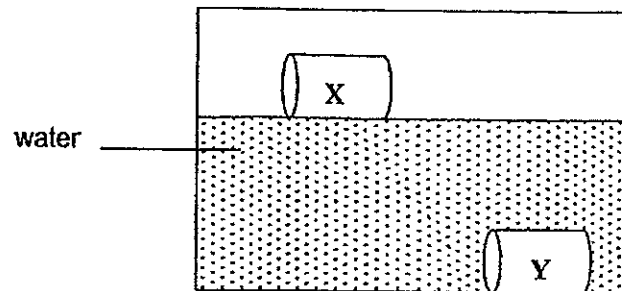
Which of the following children wrote the correct characteristics about bacteria?

- (1) Alicia and Ben only
- (2) Ben and Carol only
- (3) Carol and David only
- (4) Alicia and David only

8. Which one of the following materials does **not** match the object that it can be made into?

	Materials	Objects
(1)	silk	clothes
(2)	rubber	boots
(3)	ceramic	doors
(4)	wood	spoons

9. Shafiq conducted an experiment using two materials (X and Y). He dropped each material into a large container of water. The diagram below shows the position of the materials in the container after ten minutes.



What could **material X** be?

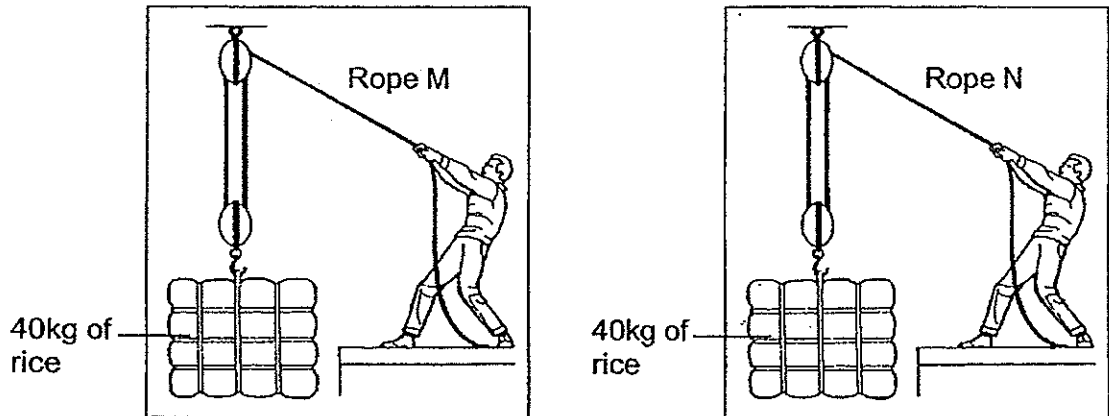
- (1) wood
 - (2) metal
 - (3) glass
 - (4) fabric
10. Raj compared the physical properties of four different objects (A, B, C and D) from his school bag.

Object	Physical properties		
	Strong	Waterproof	Flexible
A	Yes	Yes	Yes
B	Yes	No	No
C	No	Yes	No
D	No	No	Yes

Based on the information in the table above, which object (A, B, C or D) is most likely an exercise book?

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

11. Mr Lee conducted an experiment using two ropes, M and N, that were made from different materials. 40kg of rice was hung from the two ropes as shown in the diagram below.

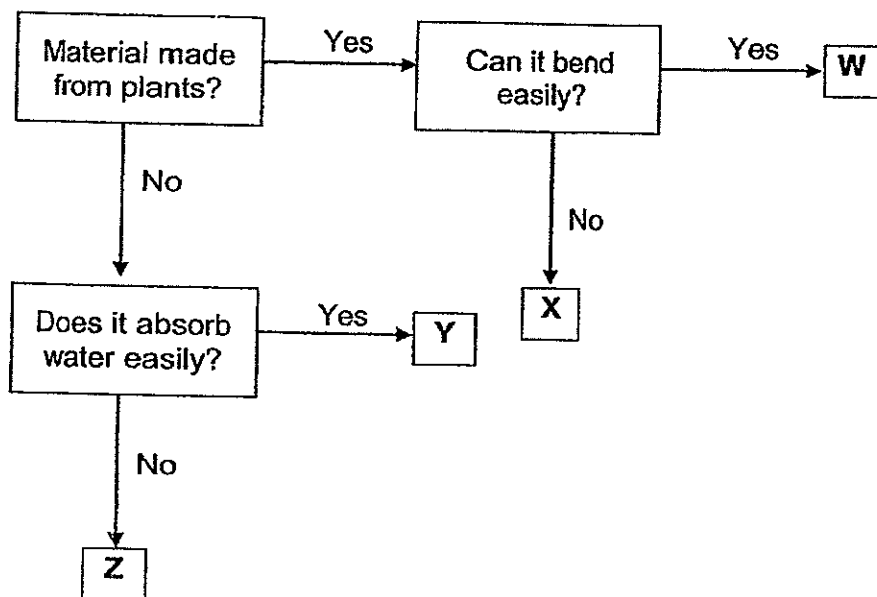


When Mr Lee tried to lift the rice, Rope N snapped while Rope M was still able to hold the 40kg of rice.

Based on the observation, which one of the following statement is correct?

- (1) Rope M is longer than Rope N.
- (2) Rope M is thinner than Rope N.
- (3) Rope M is stronger than Rope N.
- (4) Rope M is more flexible than Rope N.

12. The diagram below shows the properties of different materials which are used to make objects W, X, Y and Z.



Which one of the following best represents the type of material used to make each object?

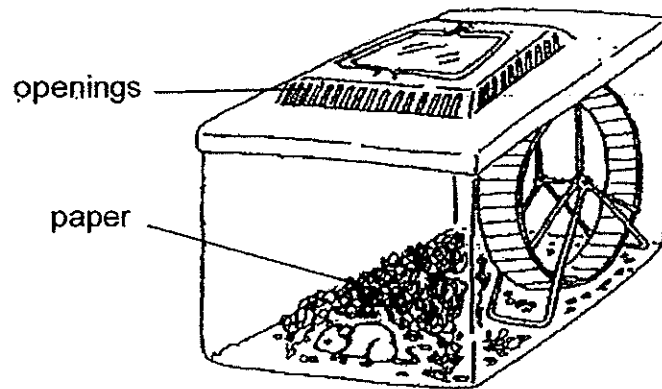
	W	X	Y	Z
(1)	Wood	Rubber	Paper	Metal
(2)	Cotton	Plastic	Wood	Metal
(3)	Rubber	Wood	Wool	Glass
(4)	Plastic	Wool	Cotton	Paper

13. Which of the following statements about living and non-living things are incorrect?

- A Living things can grow and change.
- B Non-living things cannot change their sizes.
- C Plants that are living in water need air to survive.
- D Fungi is not a living thing because it cannot make its own food.

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

14. Widjaya went on an overseas trip during the school holidays and left his pet hamster at home.



When Widjaya came back from his trip two weeks later, he discovered that his hamster had died. The hamster died because it does not have _____.

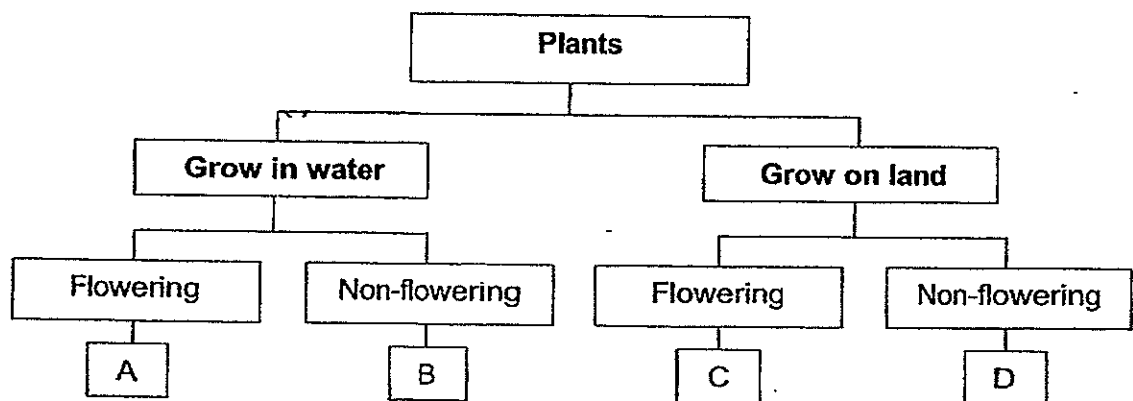
- A air
- B food
- C water
- D warmth

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

15. The following table shows some characteristics of two plants, S and T.

	Plant S	Plant T
Does it grow in water?	Yes	No
Does it bear flowers?	No	Yes

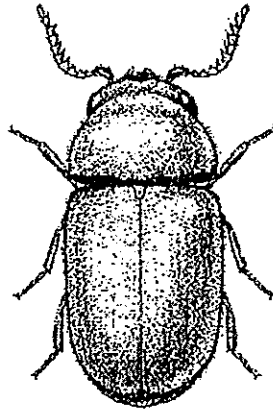
Use the classification chart to find Plant S and T.



Which groups (A, B, C or D) do Plant S and Plant T belong to?

	Plant S	Plant T
(1)	A	B
(2)	D	C
(3)	A	D
(4)	B	C

16. Siti was given the following animal and she wrote down some observations about the animal.



Which one of the following observations can Siti use to identify which group of animals was she given?

- (1) It has hair.
 - (2) It has wings.
 - (3) It has 3 body parts.
 - (4) It has more than 4 legs.
17. Shirley observed Animal X during her learning journey and gave the following description about Animal X.

"Animal X is a small animal that can swim in water.
Animal X feeds on insects when it moved onto land.
Animal X can breathe through its moist skin and lungs"

Which one of the following groups of animals does Organism X belong to?

- (1) fish
- (2) insects
- (3) mammals
- (4) amphibians

18. Study the table below.

Group 1	Group 2
bee	dove
butterfly	parrot
mosquito	pigeon

The animals in the two groups above can be classified according to _____.

- A the way they reproduce
- B the way they move about
- C the type of outer covering
- D the number of legs they have

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

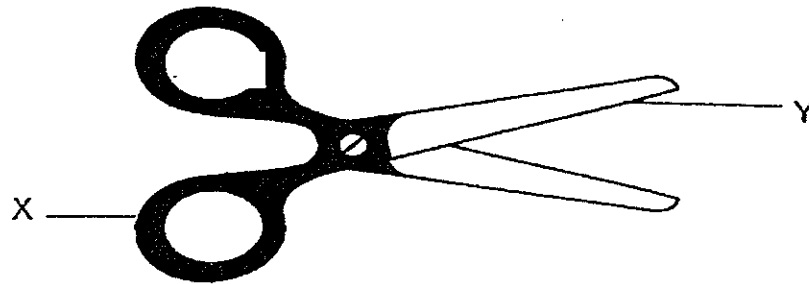
19. The table below shows the characteristics of four living things K, L, M and N. A tick (✓) shows that the living thing has the characteristic.

Living thing	Number of legs			Can fly	Make its own food
	2	4	6		
K	✓			✓	
L					✓
M			✓	✓	
N					

Which living things could K, L, M and N be?

	K	L	M	N
(1)	Eagle	Tree	Cockroach	Bacteria
(2)	Ostrich	Fern	Housefly	Mould
(3)	Penguin	Moss	Grasshopper	Mushroom
(4)	Hawk	Yeast	Beetle	Grass

20. The picture below shows a pair of scissors.



What properties of Materials X and Y make them suitable for making the parts of the scissors?

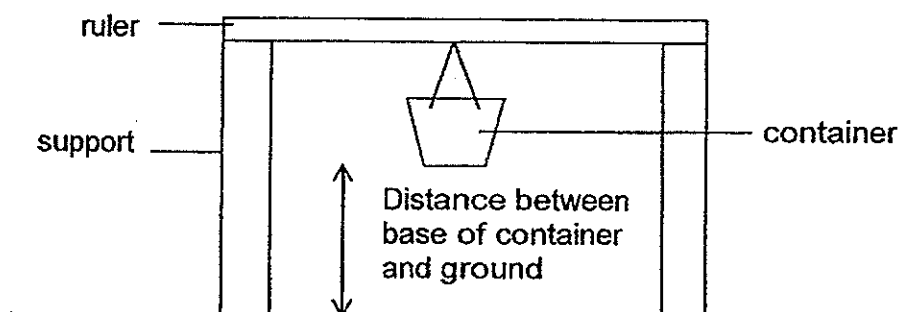
	X	Y
(1)	stiff and sharp	waterproof and light
(2)	shiny and light	sharp and flexible
(3)	stiff and strong	strong and sharp
(4)	flexible and waterproof	light and shiny

21. Mrs Lee wants to make a blouse for herself. Based on the table below, which is the most suitable material for making the blouse.

	Material A	Material B	Material C	Material D
Flexibility	Flexible	Stiff	Flexible	Stiff
Transparency	Allows most light to pass through	Allows some light to pass through	Does not allow light to pass through	Does not allow light to pass through
Waterproof	Absorbs water	Does not absorb water	Absorbs water	Does not absorb water

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

22. An experiment was carried out to test the flexibility of 4 similar rulers that were made of different materials (E, F, G and H). An empty container was hung from the midpoint of the ruler as shown below. The distance between the base of the container and the ground was measured and recorded before 50 marbles were added into the container and after the marbles were added.



Material	Distance between base of container and ground before the marbles were added (cm)	Distance between base of container and ground after the marbles were added (cm)
E	20	20
F	20	0
G	20	15
H	20	5

Based on the above experiment, which is the most suitable material for making a dining table?

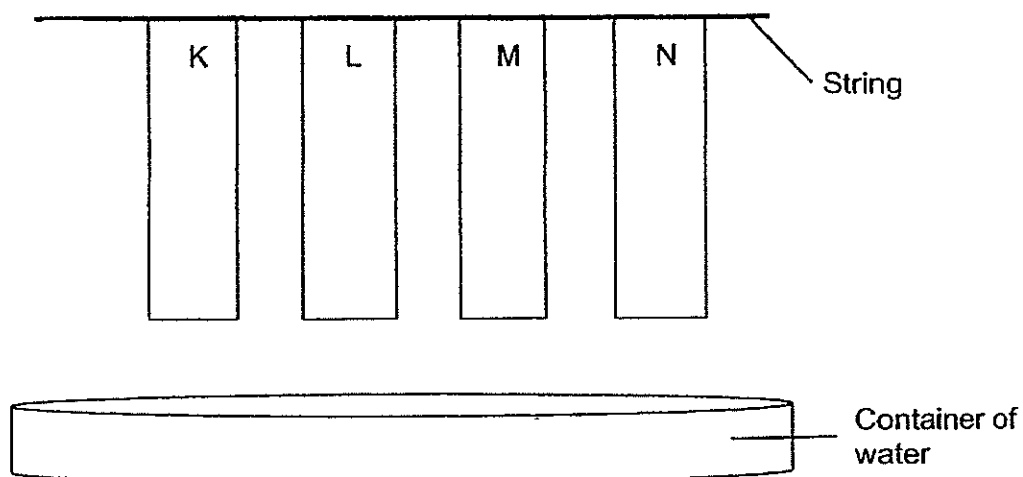
- (1) E
 - (2) F
 - (3) G
 - (4) H
23. The properties of three objects were observed and recorded as follows.

Objects	Properties		
	Flexible	Natural material	X
Bicycle tyre	Yes	Yes	Yes
Iron rod	No	Yes	Yes
Styrofoam cup	No	No	Yes

X is a property of material. What is X?

- (1) Strong
- (2) Waterproof
- (3) Able to float on water
- (4) Allows light to pass through

24. 4 similar strips of material K, L, M and N were held onto a string and hung over a container that was filled with water.



The materials were lowered into the container of water. At the end of 10 minutes, the length of each strip that was wet was measured and recorded in the table below.

Material	Length of strip that was wet (cm)
K	5
L	3
M	0
N	4

Based on the information from the table, which would be the **least suitable** material for making an umbrella?

- (1) K
- (2) L
- (3) M
- (4) N



**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2014
PRIMARY 3**

SCIENCE

BOOKLET B

10 Open-ended questions (32 marks)

Total Time for Booklets A and B : 1 hour 30 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

	/32
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Name: _____ () **Class: P 3** _____

Date : 16 May 2014

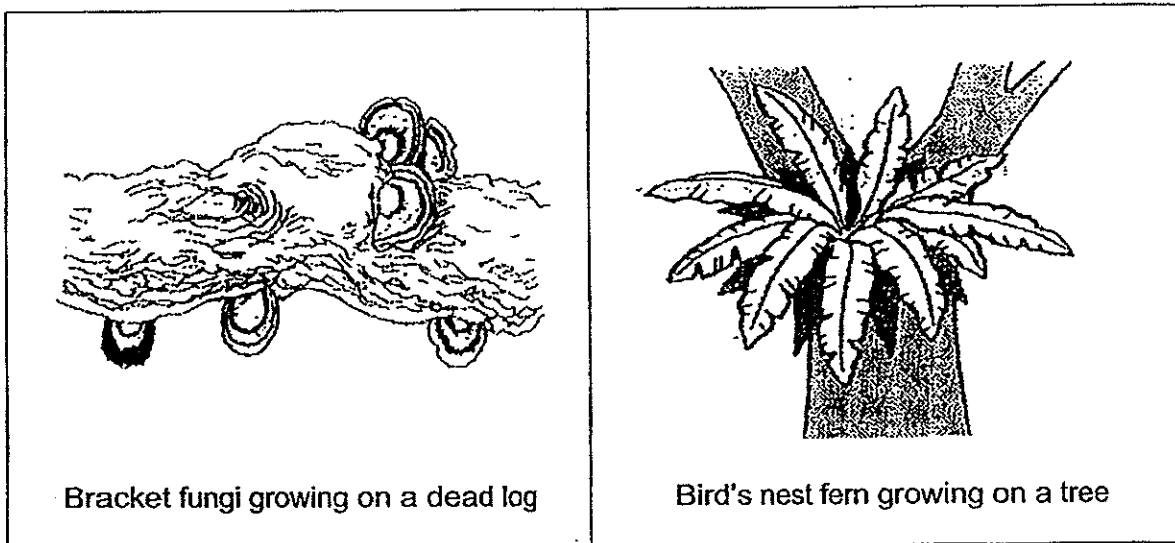
Parent's Signature: _____

Section B: (32 marks)

Write your answers to questions 25 to 34 in the space provided.

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

25. The diagrams below show two living things found in the garden.



- a. How do the living things in the diagrams above obtain food? [1]

Bracket fungi : _____

Bird's nest fern: _____

- b. How do the living things in the diagrams above reproduce? [1]

Bracket fungi : _____

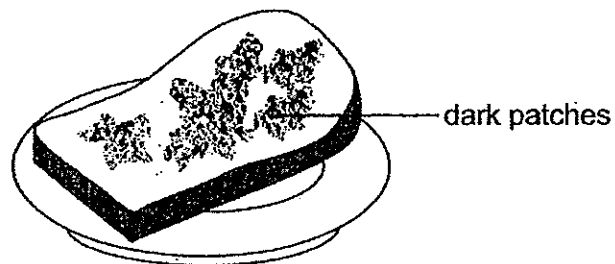
Bird's nest fern: _____

Score	2
-------	---

26. Three slices of bread are each placed in a box with the following conditions. A tick (✓) represents that the condition is present.

Slice	Conditions	
	Bright	Dry
A		
B	✓	✓
C		✓

- a. Which slice of bread would have dark patches on it as shown below after five days? Explain what the dark patches are and why they appear on the slice of bread? [1]



Slice: _____

Explanation: _____


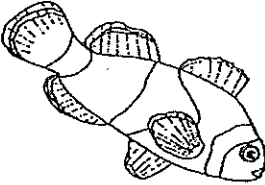
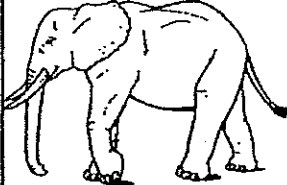

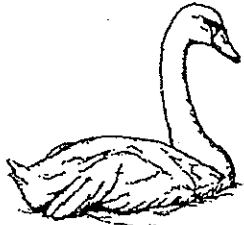

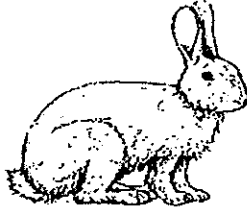

- b. Fungi can be both useful or harmful to humans.
State one way in which it is useful and one way in which it is harmful. [2]

(i) Useful: _____

(ii) Harmful: _____

Score	3
-------	---

27. Refer to the diagrams of animals below.

Group W	Group X	Group Y	Group Z
			
Parrot	Clownfish	Elephant	Butterfly
			
Swan	Crocodile	Rabbit	Bee

a. The animals have been grouped according to their type of outer coverings.

Write suitable headings for Groups W, X, Y and Z.

[2]

Group W: _____

Group X: _____

Group Y: _____

Group Z: _____

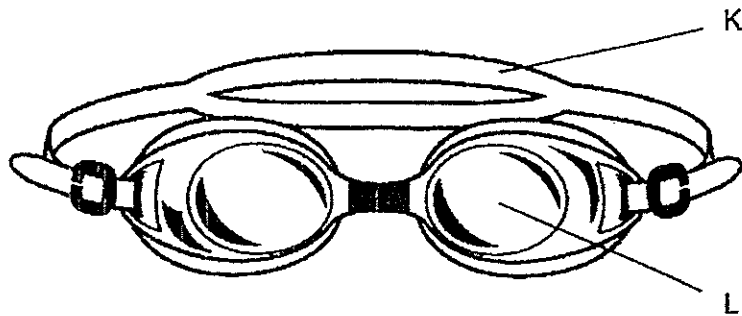
b. Based on the diagrams above, what do the animals in Group W and Group Z have in common? (Do not mention shape, size, colour and pattern)

[1]

c. Based on the diagrams above, state one difference between the characteristics of the two animals (clownfish and crocodile) in Group X. (Do not mention shape, size, colour and pattern)

[1]

28. The following diagram shows a pair of swimming goggles. K and L are made of different materials.



- a. State the type of material that are suitable for making K and L. [1]

K: _____

L: _____

- b. Explain how the physical property of materials K and L makes them suitable for the swimming goggles. [2]

K: _____

L: _____

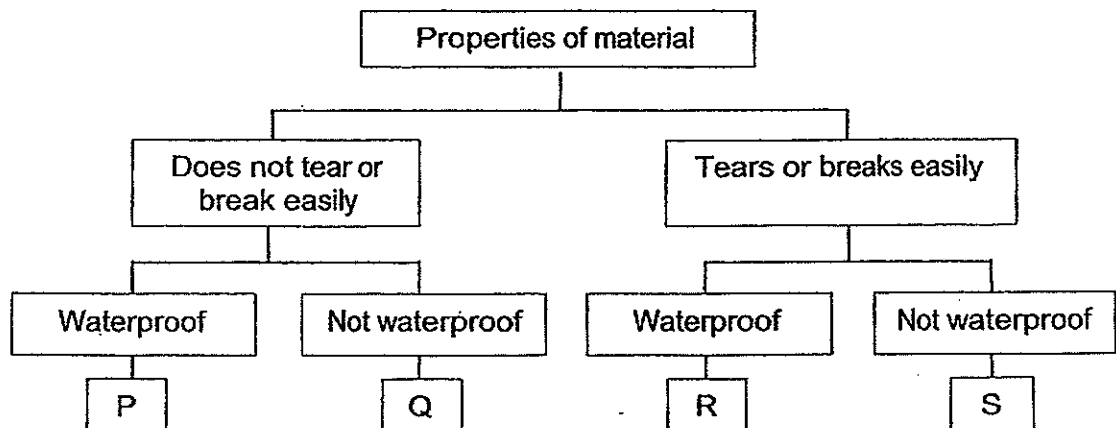
- c. Which material (K or L) would be suitable for making the following items? [1]

Car tyres: Material _____

Balloons: Material _____

Score	4
-------	---

29. Study the classification chart below.



a. State one difference between Group Q and Group S. [1]

b. Which group of material (P, Q, R or S) would you choose to make a waterbottle? Explain your answer. [1]

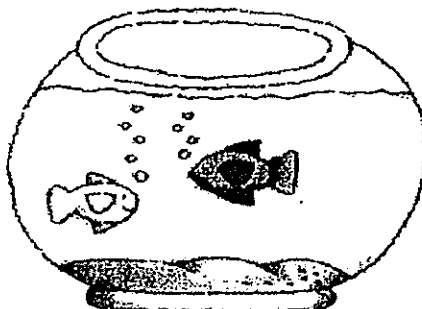
c. Shirley decided to use the classification chart above to group the objects she found in the classroom. The table below shows how the objects were classified.

P	Q	R	S
Table	Curtain	Pen	Newspaper

Which object has been grouped **incorrectly**? Explain your answer. [1]

Score	3
-------	---

30. Chris bought two fishes and placed them in a fish bowl as shown below.



After three days, he observed that the fishes swam close to the surface of the water and were not as active as before.

- a. Suggest a possible reason for Chris' observation.

[1]

- b. Without changing the fish bowl, state two things that Chris could do to ensure that the fishes remain healthy.

[2]

(i) _____

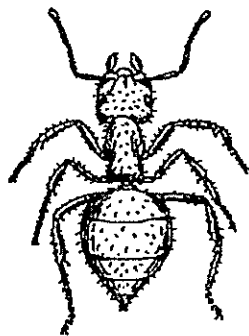
(ii) _____

- c. When Chris tried to touch the fishes that were swimming close to the surface of the water, the fishes swam away. What characteristic of living things is the fishes displaying?

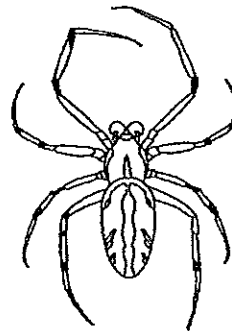
[1]

Score	4
-------	---

31. Refer to the diagrams of Animals X and Animal Y and answer the following questions.



Animal X



Animal Y

- a. Based on the diagrams above, state two differences between Animals X and Animal Y. (Do not mention shape, size, colour and pattern) [2]

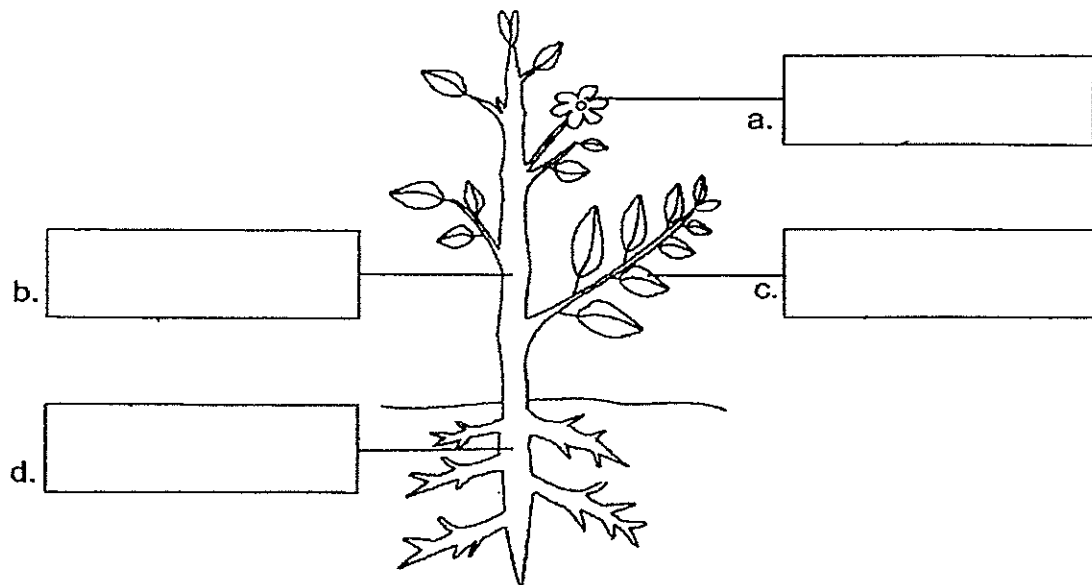
(i) _____

(ii) _____

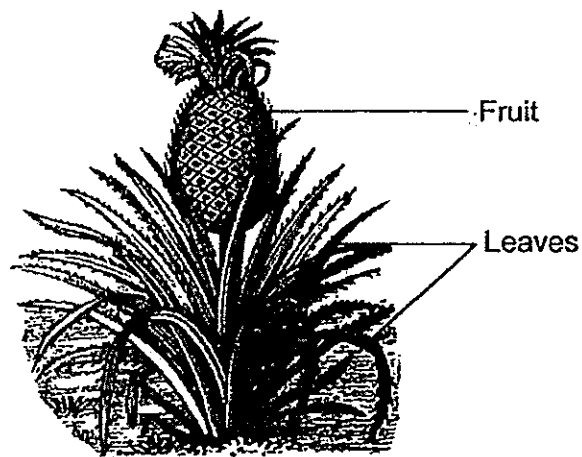
- b. State how Animal X reproduce. [1]

Score	3
-------	---

32. Name the parts (a, b, c and d) of the plant shown below. Write your answer in the boxes provided. [2]



Study the diagram below carefully.



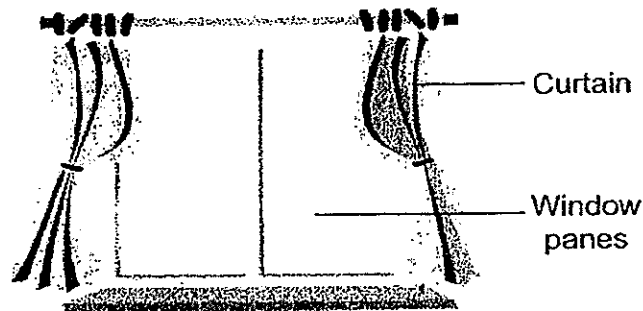
- e. Is the plant shown above a flowering or non-flowering plant. Explain your answer. [1]

Score	3
-------	---

33. Lynn likes to observe the stars from her bedroom window at night. Whenever it rains, she closes the windows quickly so that her room would not be wet. Lynn does not like the morning sun to disturb her sleep so she closes the curtains before she goes to bed. One day, she decided to conduct an experiment to find out the properties of materials K, L and M found in her bedroom. She recorded her findings in the table below.

Property of material	Material K	Material L	Material M
Transparency	Allows light to pass through	Does not allow light to pass through	Allows light to pass through
Waterproof	Absorbs water	Absorbs water	Does not absorb water
Flexibility	Flexible	Flexible	Stiff

- a. Using the information given in the table above, state which material (K, L or M) is used to make the window panes found in her bedroom. Give two reasons why the material is used. [2]



Material: _____

Reason #1: _____

Reason #2: _____

- b. Using the information given in the table above, state which material is used to make the curtains shown above. Give two reasons why the material is used. [2]

Material: _____

Reason #1: _____

Reason #2: _____

34. Four pieces of similar sized materials, W, X, Y and Z were weighed individually to find out their masses at the start of the experiment. The materials W, X, Y and Z were placed into four similar containers with equal amount of water. The materials in each container were completely covered with water. After five minutes, each piece of material was weighed again. The measurements were recorded in the table below.

Material	Mass at the start of the experiment (g)	Mass after five minutes (g)
W	12	19
X	16	19
Y	8	8
Z	20	21

- a. Based on the table above, which material (W, X, Y or Z) is the most suitable material for making a bath towel? Explain your answer. [1]

- b. Based on the table above, which material (W, X, Y or Z) is a plastic sheet? Explain your answer. [1]

End of paper

Score	2
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Year: 2014

Level: Primary 3

School: Nan Hua Primary School

Subject: Science

Semester: SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	4	3	3	2	4	4	3	1	4
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
3	3	4	2	4	3	4	4	1	3
Q21	Q22	Q23	Q24						
3	1	2	1						

Q25) a) Bracket fungi: It feeds on the dead log.

Bird's nest fern: It makes its own food.

b) Bracket fungi: It reproduces from spores.

Bird's nest fern: It reproduces from spores.

Q26) a) A. The dark patches are mould and the black patches appear on the bread as the bread is wet and is placed in a dark place.

b) i) Useful fungi are edible.

ii) Harmful fungi can be poisonous and can harm humans if they are eaten.

Q27) a) Group W: Have feathers.

Group X: Have scales.

Group Y: Have hair.

Group Z: Have wings.

b) They have wings.

c) The clownfish has fins while the crocodile has feet.

Q28)a) K: Rubber L: Plastic

b) K: It must be elastic so it can stretch to fit people's head to wear the goggles.

L: It must be transparent so that people can see underwater.

c) Car tyres: Material K

Balloons: Material L

Q29) a) Group Q does not tear or break easily but group S tears and breaks easily.

b) Material P. It is waterproof and does not tear or break easily.

c) Object R. A pen cannot tear or break easily.

Q30)a) There was not enough air in the fish bowl.

b) i) Put in an air pump.

ii) Give the fish food daily.

c) Living things respond to changes around them.

Q31) a)i) Animal X has three body parts but animal Y has two body parts.

ii) Animals X has six legs but animal Y has eight legs.

b) Animal X reproduce from eggs.

Q32) a) Flowers

b) Stems

c) Leaves

d) Roots

e) The plant above is a flowering plant. Before you have a fruit, you will always have a flower first.

Q33)a) Material M

Reason 1: Material M allows light to pass through so Lynn can see the stars.

Reason 2: Material M is waterproof so the rain will not come into Lynn's house.

b) Material L

Reason 1: Material L does not allow light to pass through so it helps to block out the sunlight in Lynn's house.

Reason 2: Material L is flexible so that the curtains can be closed and opened easily.

Q34) a) Material W. The mass of material W increased the most so it absorbed the most water.

b) Material Y. There is no change in the mass of material Y because plastic does not absorb water.

NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

**SEMESTRAL ASSESSMENT 1
2014**

BOOKLET A

**Date : 8 May 2014
Duration : 1 h 20 min**

Name : _____ ()

Class: Primary 3 ()

Parent's signature:

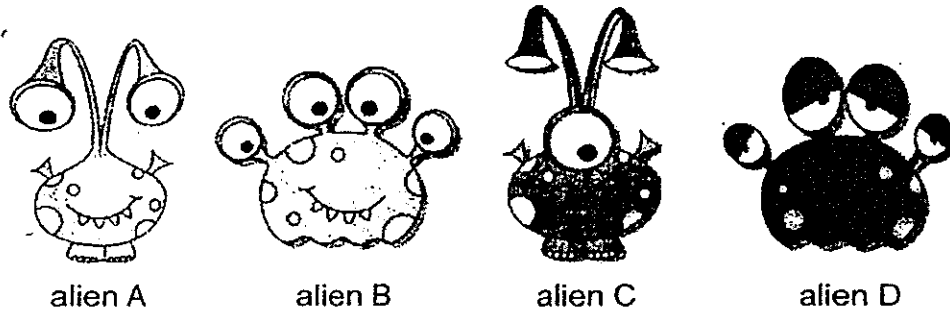
**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.**

Booklet A consists of 13 printed pages including this cover page.

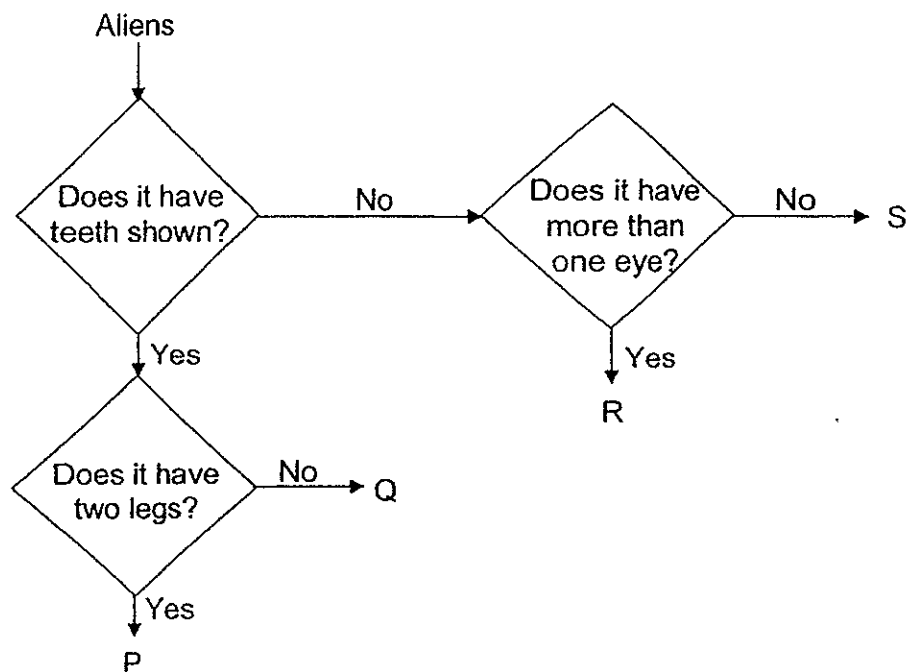
Section A (24 x 2 marks = 48 marks)

For each question from 1 to 24, 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 provided.**

1. Ding En studied the 4 aliens shown below.



He was then given the flowchart below to “classify” the aliens.



Based on the flowchart, which alien could be represented by P, Q, R and S?

- (1) Alien A is Q.
- (2) Alien B is S.
- (3) Alien C is P.
- (4) Alien D is R.

2. Trisha saw a brown 'twig' in a bush. When the wind blew, it swayed sideways. Then a bird flew towards it and the 'twig' suddenly opened up its wings and flew towards a pile of dead leaves. Trisha could not locate the 'twig' anymore.

Trisha concluded that the 'twig' was a living thing.

Which one of the following observations helped Trisha to arrive at her conclusion?

- (1) It swayed sideways which showed it could move.
- (2) It opened up its wings which showed it could grow.
- (3) It flew towards a pile of dead leaves which showed it could reproduce.
- (4) It flew away when the bird flew towards it which showed it could respond to changes in its surroundings.

3. Four children made statements to give examples that living things can grow.

Andre : The caterpillar changed into a butterfly..

Bei Li : Kieran could no longer fit into the shoes he wore last year.

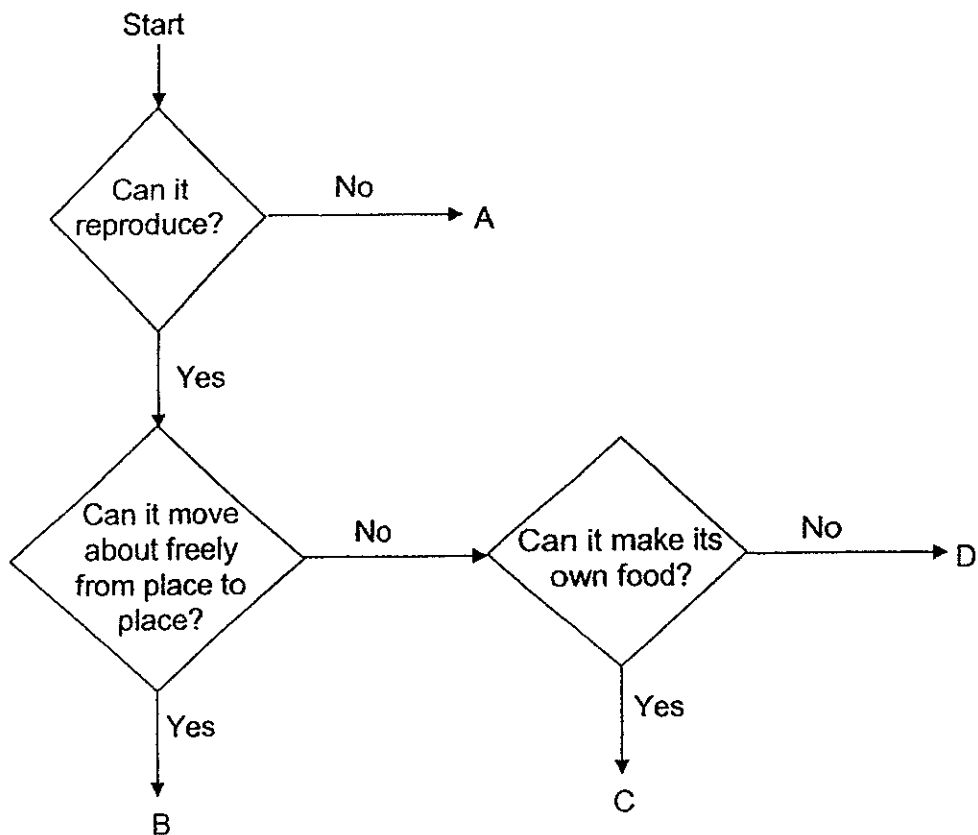
Camille : The pond that only had frogs was now filled with many tadpoles.

Davindar : The pufferfish became bigger when it swallowed water into its stomach.

Which children had given examples that correctly show living things can grow?

- (1) Andre and Bei Li only
- (2) Bei Li and Davindar only
- (3) Camille and Davindar only
- (4) Andre, Bei Li and Camille only

4. Study the flowchart below.



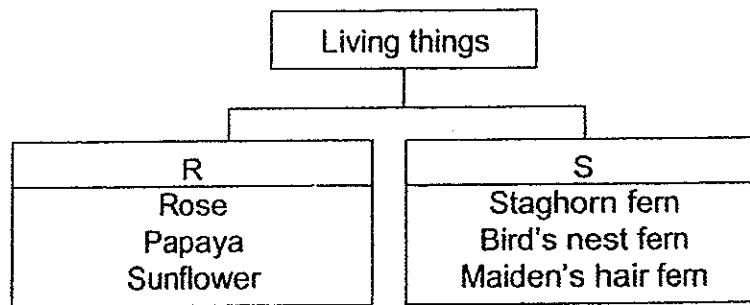
Which of the following, A, B, C or D, best represents a plant?

- | | |
|-------|-------|
| (1) A | (2) B |
| (3) C | (4) D |
5. Which one of the following boys had made a true statement about plants?

Ali: Plants can grow only in soil.
Ben: Plants cannot grow in water.
Chan: Plants can grow on other plants.
David: Plants cannot grow on buildings.

- | | |
|----------|-----------|
| (1) Ali | (2) Ben |
| (3) Chan | (4) David |

6. Study the chart below.



Which of the following are suitable headings to represent R and S?

	R	S
(1)	Plants	Fungi
(2)	Mosses	Ferns
(3)	Flowering plants	Non-flowering plants
(4)	Reproduce by spores	Reproduce by seeds

7. The diagram below shows two types of living things.



Orchid plant



Bird's nest fern

In which of the following way(s) are these two living things similar?

- A They need water to grow.
- B They reproduce by spores.
- C They can make their own food.

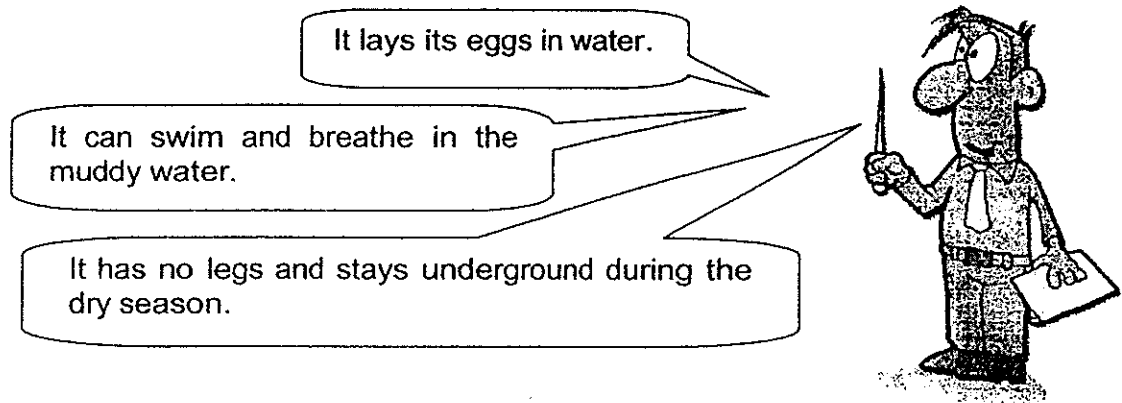
- | | |
|--------------------------------|-----------------------------------|
| (1) A only
(3) A and C only | (2) B only
(4) A, B and C only |
|--------------------------------|-----------------------------------|

8. Which of the following statements are **true** about plants?

- A All plants are edible.
- B All plants reproduce by seeds.
- C Plants can be a source of material.
- D Plants can be used to make medicine.

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

9. Mr Tan described an unknown animal, Animal X, to his class.

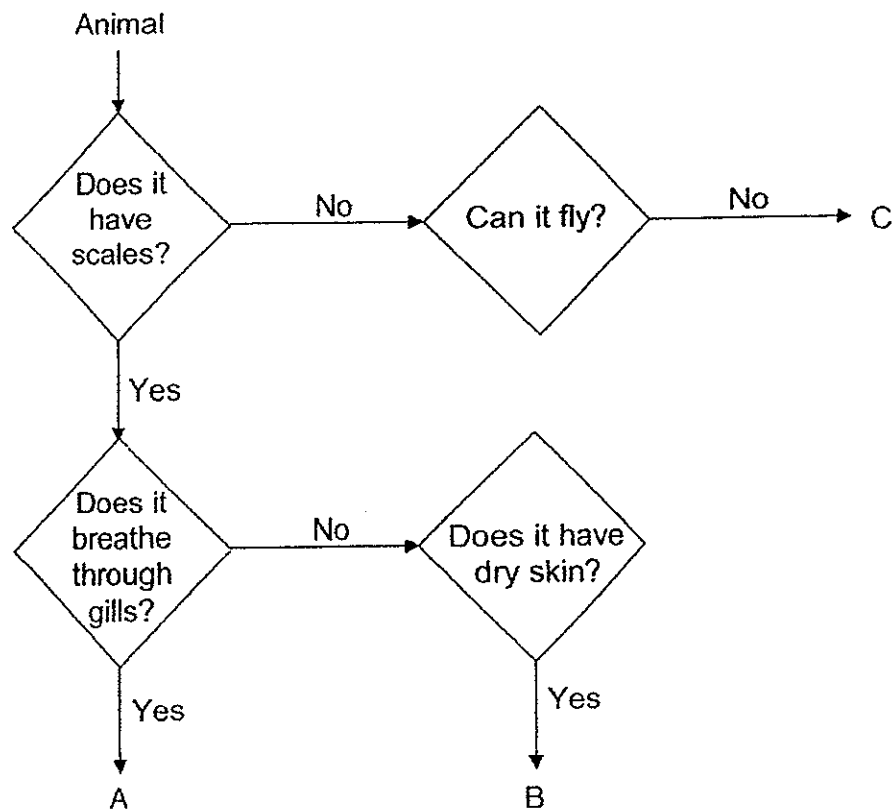


Which of the following reasons can help the class conclude that animal X is an amphibian?

- A Animal X can swim.
- B Animal X has no legs.
- C Animal X lays its eggs in water.
- D Animal X can live both on land and in water.

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

10. Study the flow chart below.



Based on the flowchart, which one of the following animals represent A, B and C correctly?

	A	B	C
(1)	goldfish	salamander	monkey
(2)	dolphin	crocodile	pelican
(3)	dolphin	salamander	pelican
(4)	goldfish	crocodile	monkey

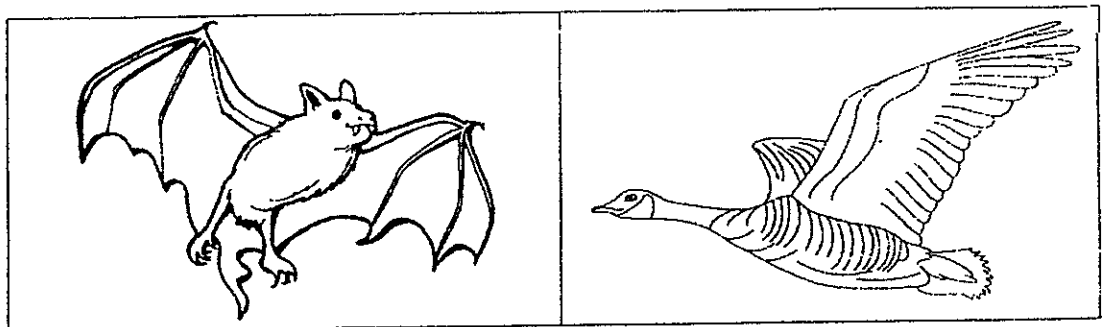
11. Which of the following statements are **true** about seals?



- A They breathe using lungs.
- B They have no outer body covering.
- C The female seals produce milk for their young.
- D They stay under the sun to increase their body temperature.

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

12. Study the diagram below.



Bat

Goose

Which of the following statements about the bat and the goose is/are **false**?

- A Both animals lay eggs.
- B The bat cannot fly but the goose can fly.
- C The bat's body is covered with hair but the goose's body is covered with feathers.

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

13. Which one of the following explains why insects need a hard outer covering?

- A It keeps the insects warm.
- B It gives the insects their shape.
- C It protects the insects' soft bodies.

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

14. Which one of the following statements is **true**?

- (1) Only birds can fly.
- (2) Only fish have gills.
- (3) Only fish have scales.
- (4) Only birds have feathers.

15. Study the information in the table below carefully.

Insect	Has wings	Destroys property	Spreads diseases
A	yes	no	yes
B	no	yes	no
C	yes	no	no
D	no	no	no

Based on the information above, which one of the following could represent insects A, B, C and D?

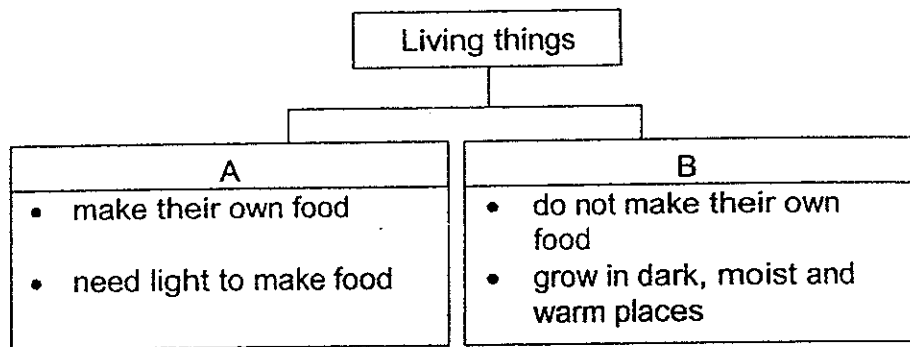
	A	B	C	D
(1)	ladybird	ant	mosquito	silverfish
(2)	silverfish	ladybird	ant	mosquito
(3)	mosquito	silverfish	ladybird	ant
(4)	ant	mosquito	silverfish	ladybird

16. Which one of the following explains why living things die?

- A They die when they become old or fall ill.
- B They die when they are hurt by human activities.
- C They die when they are eaten by other living things.
- D They die when they do not have enough air, food or water.

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

17. Study the chart below.



Which one of the following best represents headings A and B?

	A	B
(1)	Fungi	Animals
(2)	Plants	Fungi
(3)	Bacteria	Plants
(4)	Animals	Bacteria

18. Which one of the following explains why bacteria are classified as living things?

- (1) They can be useful or harmful.
- (2) They feed on other organisms.
- (3) They can be found everywhere.
- (4) They can be seen under the microscope.

19. Which of the following objects will sink in water?

- A Rubber ball
- B Ceramic tile
- C Glass marble
- D Wooden toothpick

- | | |
|---|---|
| <ul style="list-style-type: none"> (1) A and C only (3) A, B and C only | <ul style="list-style-type: none"> (2) B and D only (4) A, B and D only |
|---|---|

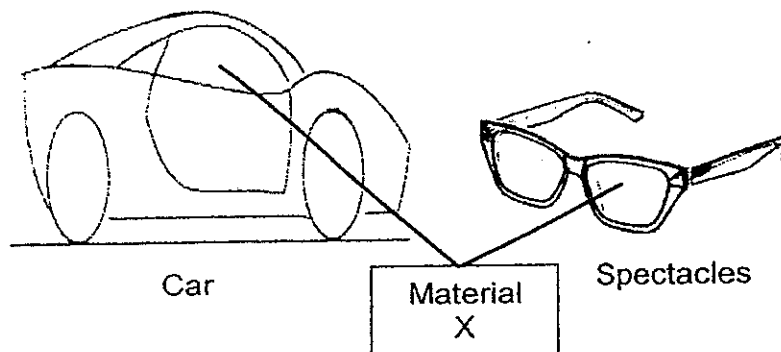
22. Siti tested a material and listed its properties as shown below.

- It is flexible
- It is waterproof

Based on the properties above, which one of the following objects can be made using this material?

- (1) key
- (2) towel
- (3) fish tank
- (4) water hose

23. Material X can be used to make a part of the two objects as labeled below.

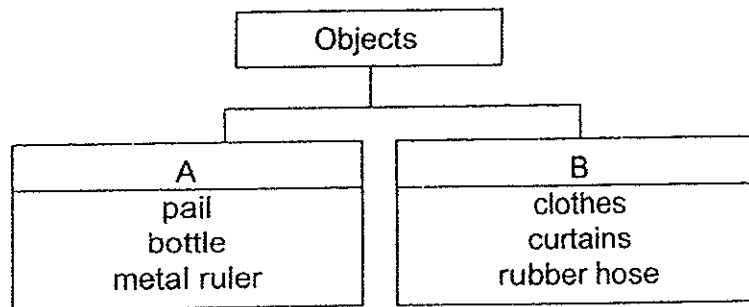


Which of the following properties must Material X have for the parts to function?

- A It is strong so it does not break easily.
- B It is waterproof so it does not absorb water.
- C It is flexible so it can bend without breaking.
- D It is transparent to allow most light to pass through.

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

24. Study the classification chart below.



Which property has been used to classify the objects?

- (1) Flexibility
- (2) Waterproof
- (3) Ability to float on water
- (4) Degree of transparency

NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

SEMESTRAL ASSESSMENT 1 2014

BOOKLET B

Date : 8 May 2014

Duration : 1 h 20 min

Name : _____ ()

Class: Primary 3 ()

Marks Scored:

Booklet A:		48
Booklet B :		32
Total :		80

Any query on marks awarded should be raised by 20 May 2014.

We seek your understanding in this matter as any delay in the confirmation of marks will lead to delays in the generation of results.

Parent's signature:

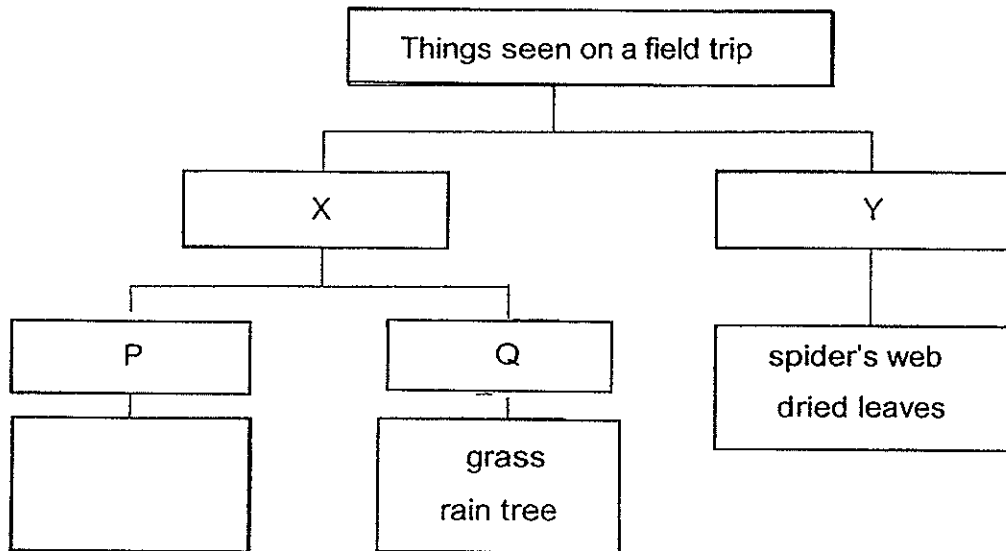
**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.**

Booklet B consists of 10 printed pages including this cover page.

Section B (32 marks)

Write your answers to questions 25 to 34 in the spaces provided.

25. Trevor classified some things he had seen on a field trip using the diagram below.



- (a) Give a suitable heading for X and Y. [1]

(i) X : _____

(ii) Y : _____

- (b) State one difference in characteristics between the things in groups P and Q.

[1]

26. Andy found two living things, A and B, and recorded the following observations.

A	B
<ul style="list-style-type: none">• It has roots, stem and leaves• It grows towards light	<ul style="list-style-type: none">• It has a cap, stalk, gills and spores• It grows in a dark, moist and warm place

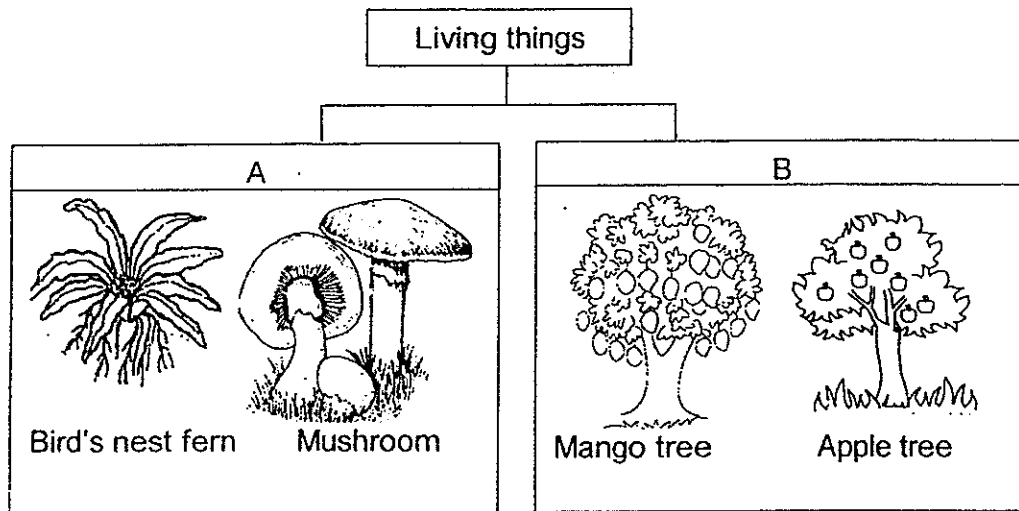
- (a) Which **group** of living things do A and B belong to? [2]

A: _____

B: _____

- (b) Andy classified some ferns in group B because the ferns have spores. Give a reason, based on a characteristic of ferns, to explain why he is wrong. [1]

27. Study the diagram below.



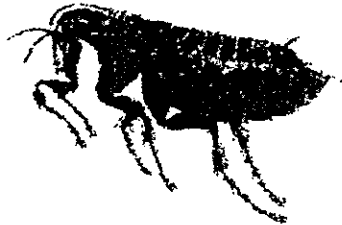
(a) State the correct headings to represent A and B [2]

A: _____

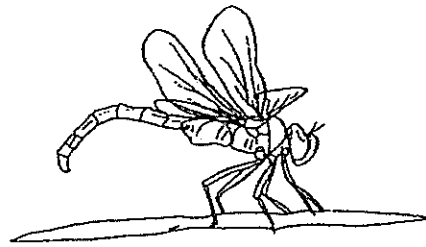
B: _____

(b) Although they are in the same group, state a characteristic that is different between Mushroom and Bird's nest fern. [2]

28. Study the two animals shown below.



Animal A



Animal B

- (a) Which group of animals do they belong to? Give a reason for your choice. [1]

- (b) Based only on what can be seen in the diagram, state two differences between animal A and animal B. [2]

(i) _____

(ii) _____

29. A team of scientists found a strange animal as described below.

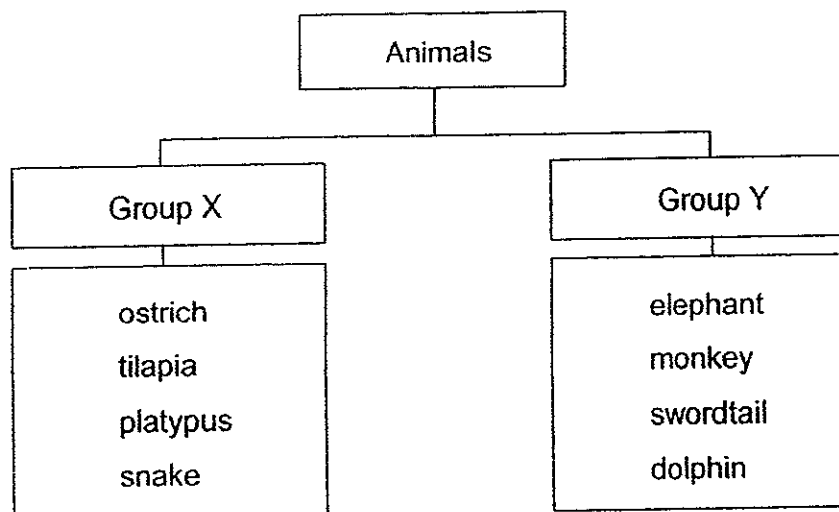
It has fins to swim and walk on land.
It has gills to breathe underwater.
It breathes through its moist skin when out of water.

The scientists have difficulty grouping the animal.
Some scientists grouped them as fish while others grouped them as amphibians.

- (a) Give 2 reasons why the animal can be grouped as 'Fish'. [2]

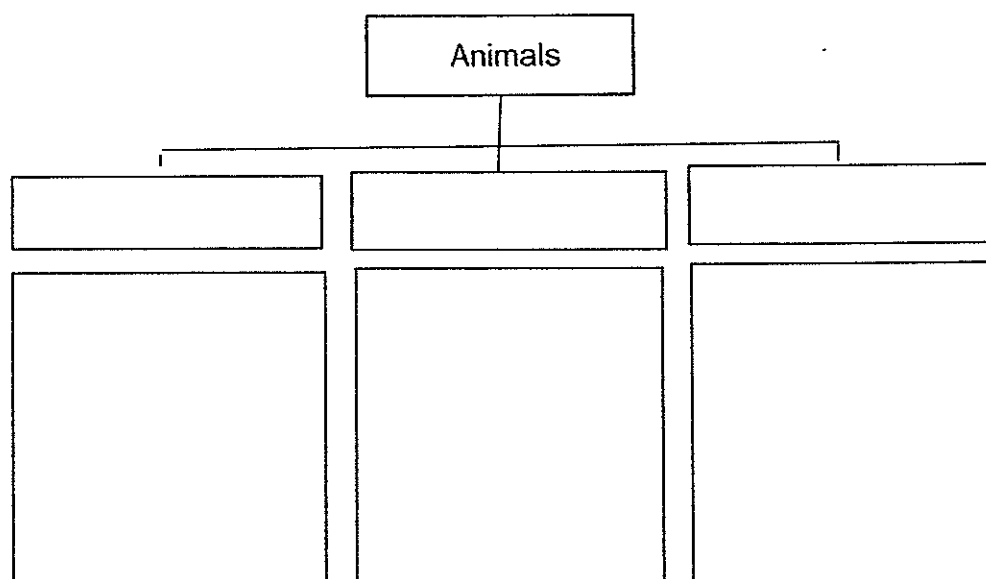
- (b) Give 2 reasons why the animal can be grouped as 'Amphibian'. [2]

30. Eight animals have been classified in the chart below.



- (a) How are the animals in group X different from the animals in group Y? [1]

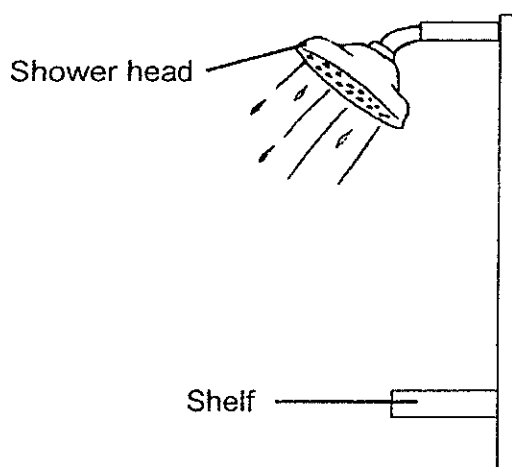
- (b) Reclassify all the eight animals into three groups in the chart below, based on their outer covering. Give a suitable heading for each group. [3]



31. Study the statements about bacteria below. Put a (tick) in the correct column for each statement. [3]

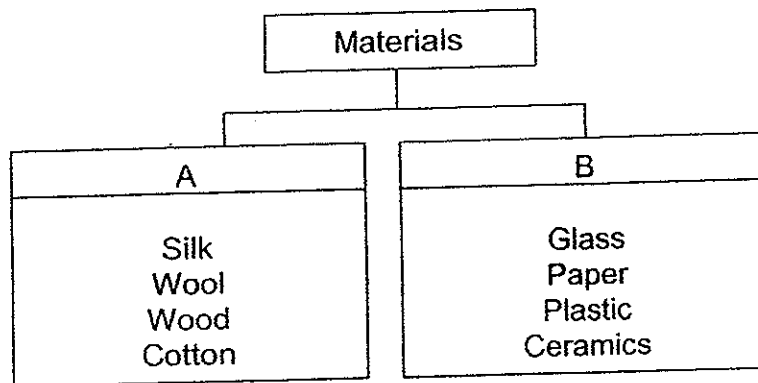
Statements	True	False
(a) Bacteria can be seen using a magnifying glass.		
(b) Bacteria come in different shapes.		
(c) All bacteria are harmful.		

32. Anna needed to make a shelf to put a shampoo bottle in her shower room.

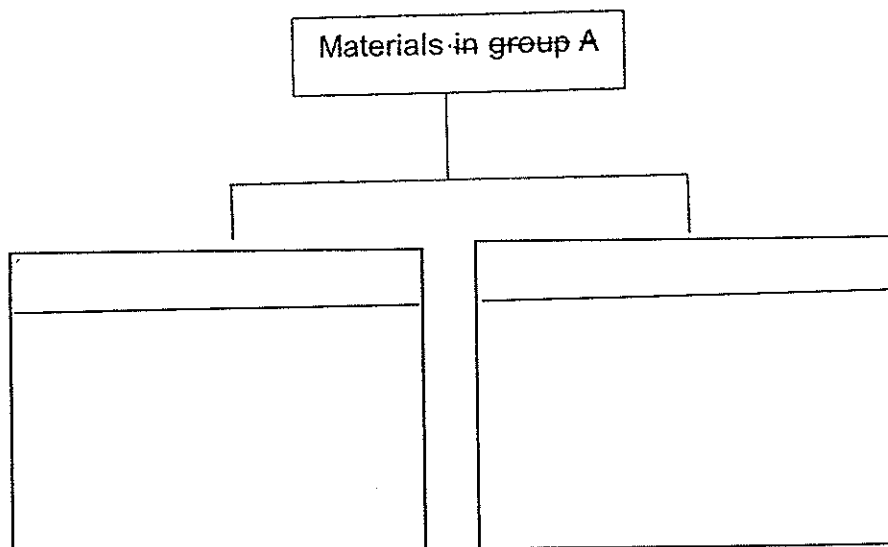


Give two reasons why metal is suitable for making the shelf. [2]

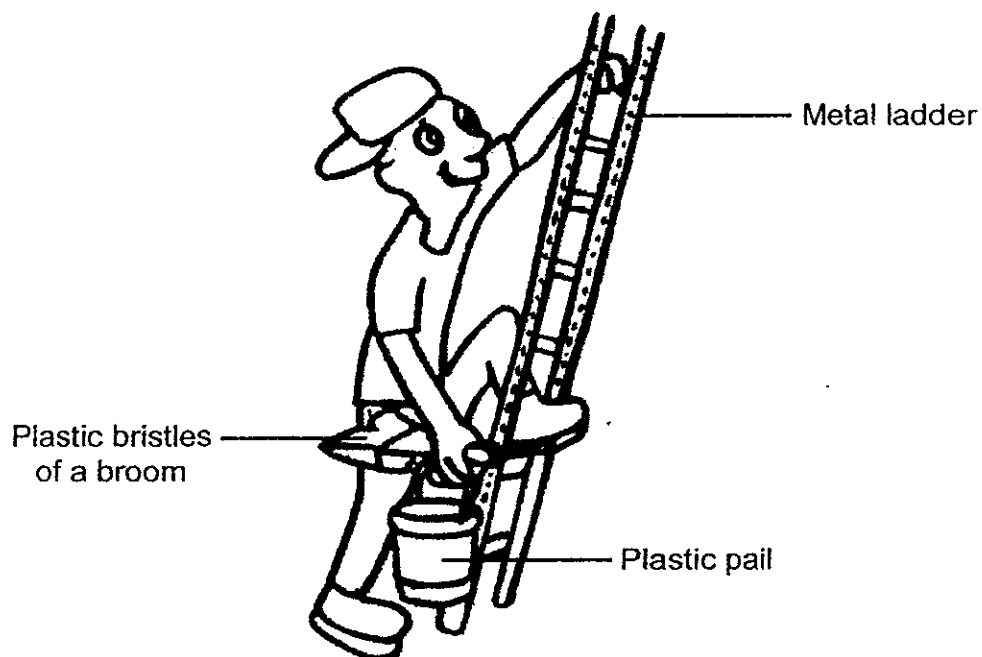
33. The diagram below shows the classification of some materials.



- (a) State the suitable headings for groups A and B [2]
- Group A: _____
- Group B: _____
- (b) Reclassify all the eight materials into two groups in the chart below. Give a suitable heading for each group. [2]



34. Study the picture of the cleaner below.



- (a) Give a reason, based on their properties and the function of the objects, why the materials are suitable for making the three objects above. [3]

(i) Metal ladder

(ii) Plastic bristles

(iii) Plastic pail

EXAM PAPER 2014

LEVEL : PRIMARY 3
SCHOOL : NANYANG
SUBJECT : SCIENCE
TERM : SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
4	4	1	3	3	3	3	2	1	4	1	3
Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24
3	4	3	4	2	2	3	4	4	4	4	1

- Q25 (a) (i) X: Living things
(ii) Y: Non-living things
(b) Things in group P can move freely from place to place but things in group Q are rooted to one spot.
- Q26 (a) A: Plants
B: Fungi
(b) Ferns make their own food while fungi absorbs food from their surroundings.
- Q27 (a) A: Reproduce by spores
B: Reproduce by seeds
(b) Mushroom do not make their own food while bird's nest fern make their own food.
- Q28 (a) Insects. Insects have a pair of feelers, three body parts and six legs.
(b) (i) Animal A has no wings but animal B has wings.
(ii) Animal A has hairy legs but animal B does not have hairy legs.
- Q29 (a) Fish have fins to swim and fish have gills to breathe.
(b) They have moist skin to breathe when out of water and they can live both on land and in water.
- Q30 (a) Group X lay eggs but group Y give birth to young alive.
(b) Feathers – Ostrich
Scales – Tilapia, Snake, Swordtail
Hair – Platypus, Elephant, Monkey, Dolphin
- Q31 (a) False
(b) True
(c) False
- Q32 It needs to be waterproof as it is exposed to water in the bathroom and it needs to be strong to hold the toiletries place on it.
- Q33 (a) Group A: Natural
Group B: Man-made
(b) Man-made – Flexible, Silk, wool, cotton, paper
Once Alive – Stiff, wood, glass, ceramics
- Q34 (a) (i) Metal is strong. It can withstand the weight of the cleaner without breaking.
(ii) Plastic is flexible. It allows the bristles to bend, sweeping the dirt away.
(iii) Plastic does not break easily so when the person use it, it would not fall.

Pei Chun Public School
Semestral Assessment 1 – 2014
Science
Primary 3

Name : _____ () Date : 16 May 2014

Class : Pri. 3 ()

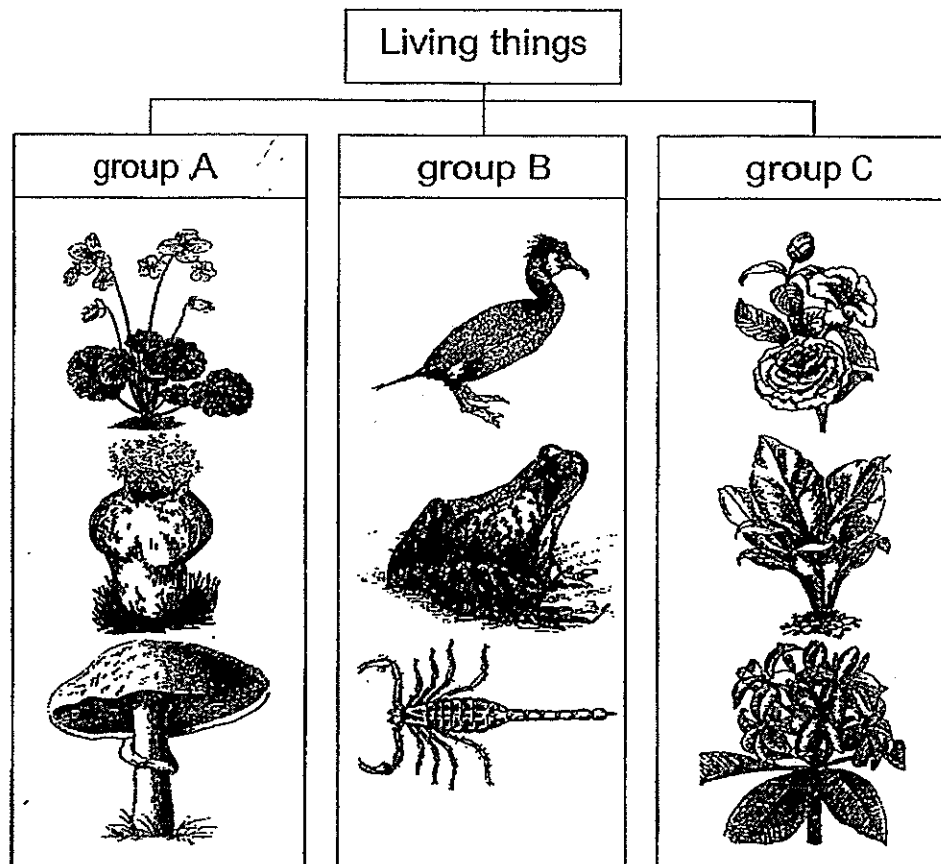
Science Teacher : _____

Time : 50 min

Section A (15 × 2 marks)

For questions 1 to 15, choose the most suitable answer and shade its number (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. Study the classification diagram below.

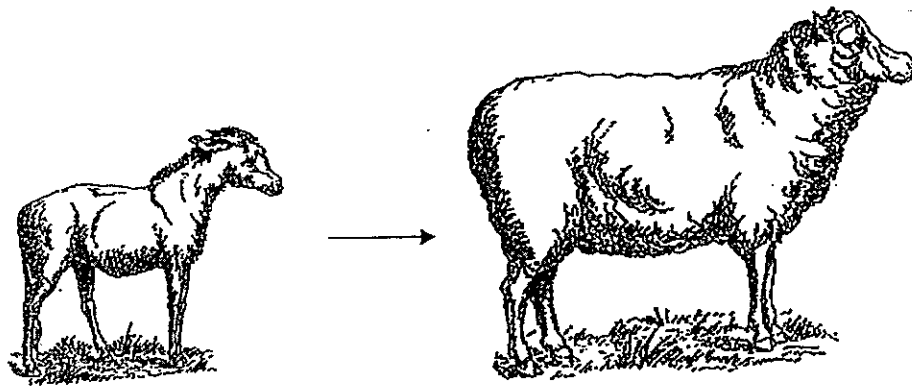


Which group(s) has/have a living thing wrongly classified?

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

()

2. The diagrams below show an animal.

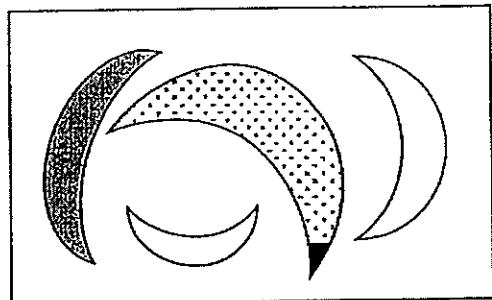
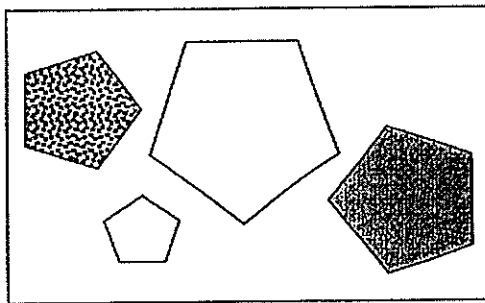


Based on the diagrams above, which characteristic of living things does the animal show?

- (1) It needs air, food and water to survive.
- (2) It moves by itself.
- (3) It grows.
- (4) It dies.

()

3. Study the diagrams below carefully.

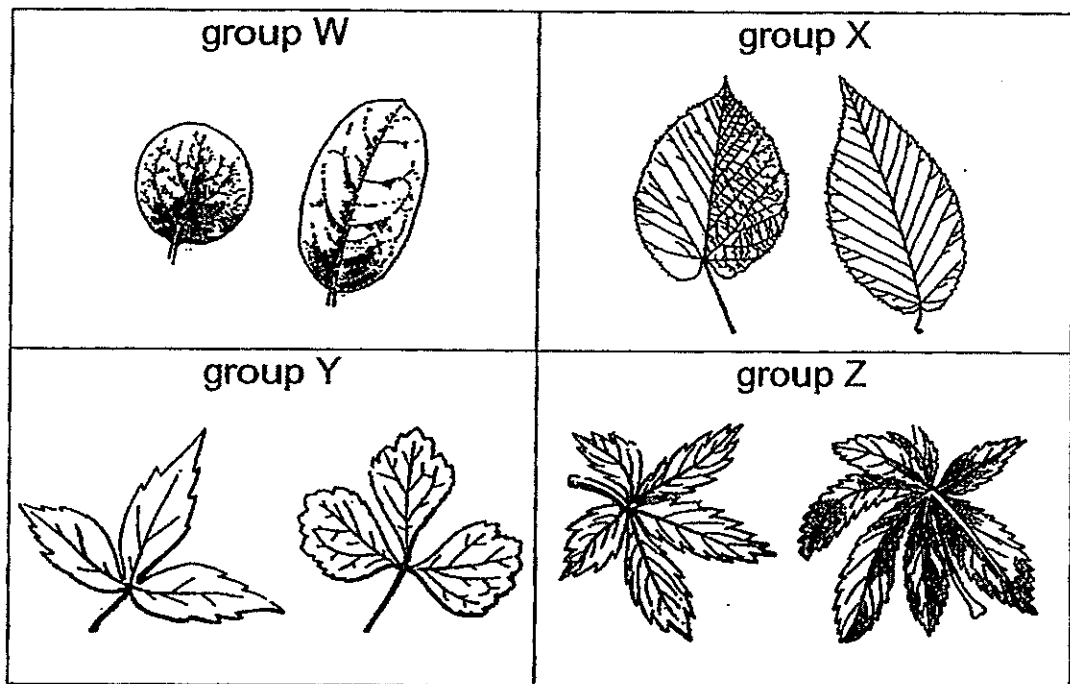


The objects are grouped according to their _____.

- (1) patterns
- (2) shapes
- (3) colours
- (4) sizes

()

4. The diagrams below show four different groups of leaves.

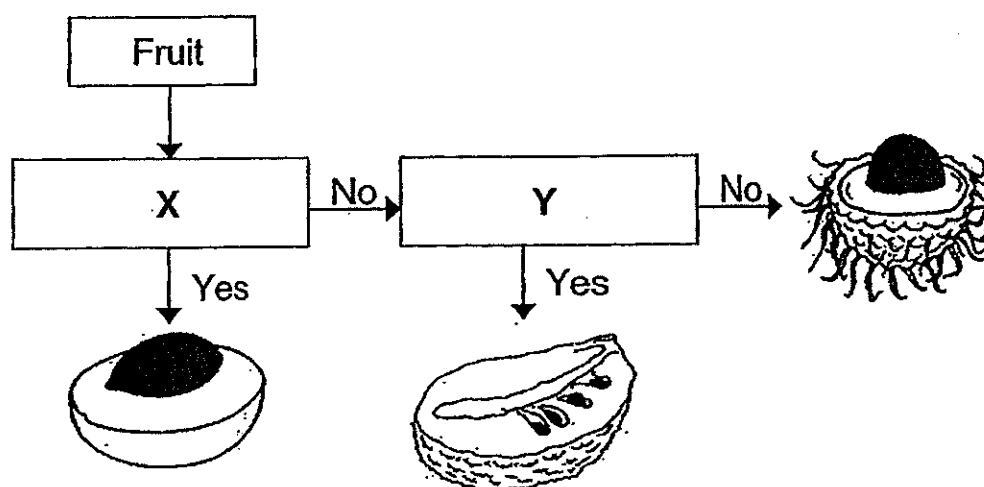


In which group would you classify the leaf shown above?

- (1) Group W
- (2) Group X
- (3) Group Y
- (4) Group Z

()

5. Study the flowchart of some fruits below.



Which of the following are suitable characteristics for X and Y?

	X	Y	
(1)	Does it have rough skin?	Does it have one seed?	
(2)	Does it have many seeds?	Does it have smooth skin?	
(3)	Does it have one seed?	Does it have rough skin?	
(4)	Does it have smooth skin?	Does it have many seeds?	()

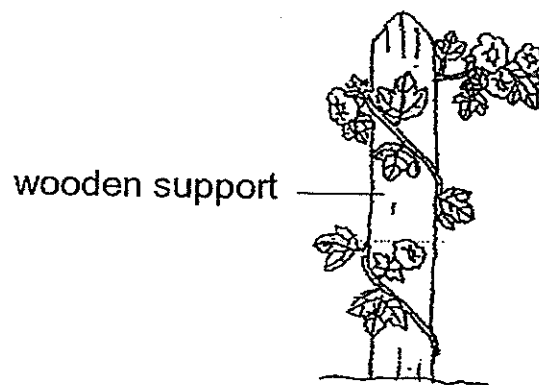
6. Study the classification table below.

Animals	
Give birth	Lay eggs
elephant seal	goose whale

Which of the animals above has been classified wrongly?

- (1) elephant
 - (2) goose
 - (3) whale
 - (4) seal
- ()

7. The diagram below shows a plant.



Based on the diagram above, which of the following statements are correct about this plant?

- A : It has leaves.
- B : It has a weak stem.
- C : It is a flowering plant.
- D : The stem enables the plant to stand upright.

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

()

8. The diagrams below show three animals.



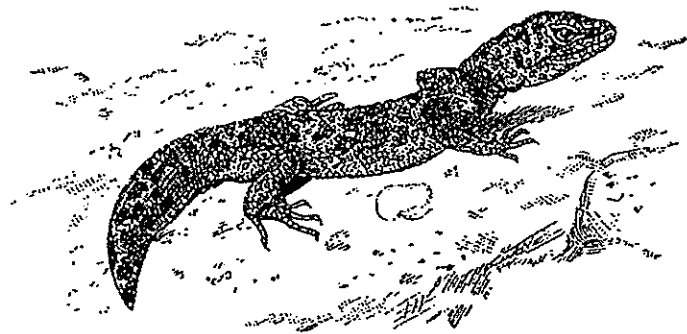
Based on the diagrams above, what common characteristics do these animals have?

- A : They have wings.
- B : They have feelers.
- C : They have six legs.

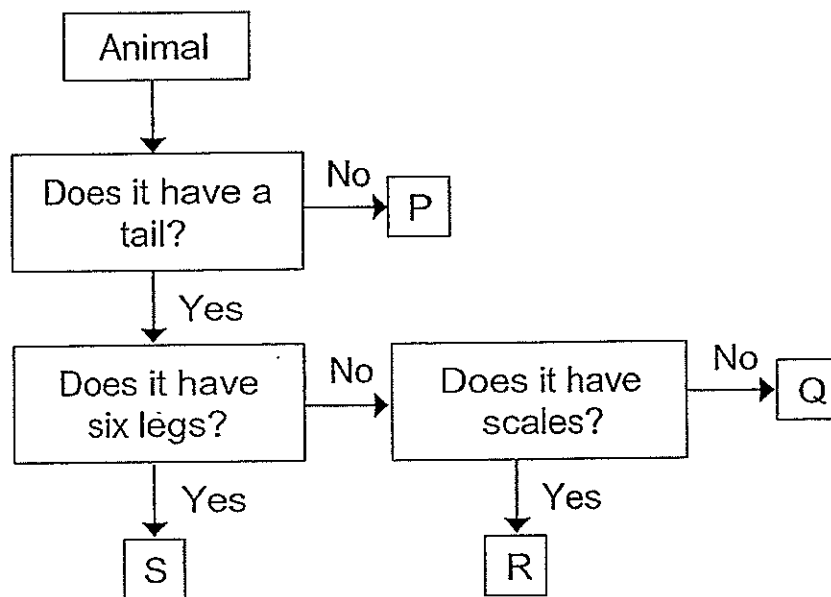
- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) A, B and C

()

9. Study the animal carefully.



Which of the letters in the flowchart represents the animal above?



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

()

10. Kerry made the following statements about the characteristics of bacteria.

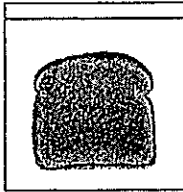
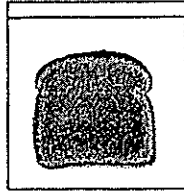
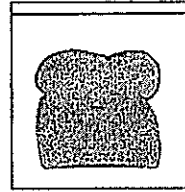
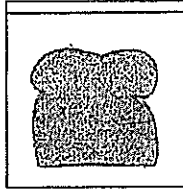
P : All bacteria are harmful to us.
Q : All bacteria reproduce from spores.
R : Most bacteria can make their own food.
S : Bacteria can only be seen using a microscope.

Which of the statement(s) is/are true about bacteria?

- (1) S only
(2) P and S only
(3) Q and R only
(4) P, Q, R and S

()

11. Jie Yi took four slices of bread from the same loaf of bread and placed them under the following conditions as listed in the table below.

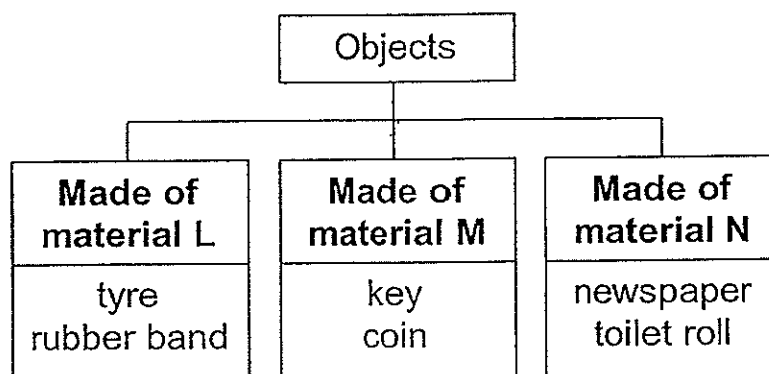
Set-up A	Set-up B	Set-up C	Set-up D
			
toasted bread 25°C	toasted bread 10°C	moist bread 25°C	moist bread 10°C

Which set-up would she see the most amount of mould growing on the bread?

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

(3/)

12. The classification chart below shows how some objects have been grouped according to their materials, L, M and N.

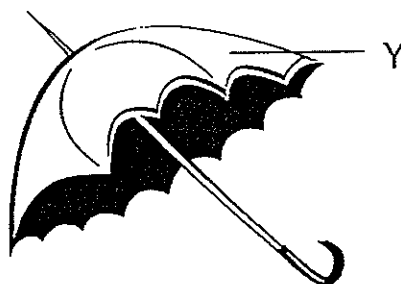


Which of the following objects are correctly classified?

	Made of material L	Made of material M	Made of material N
(1)	eraser	cap	envelope
(2)	shirt	cap	cork
(3)	shirt	iron nail	envelope
(4)	eraser	iron nail	cork

()

13. The diagram below shows an umbrella with a part marked Y.

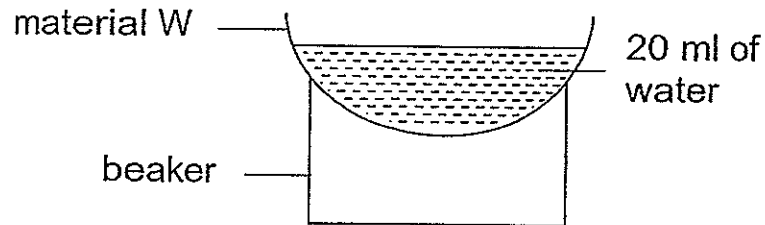


Based on the information below, which material is most suitable for making part Y for use on both rainy and sunny days?

	Material	Allows most light to pass through	Waterproof	Flexible
(1)	A		✓	✓
(2)	B		✓	
(3)	C			✓
(4)	D	✓	✓	

()

14. Aisyah set up an experiment as shown below. A sheet of material W was put over a beaker and 20 ml of water was poured onto it. She carried out this experiment with three other different materials of the same thickness, X, Y and Z.



She recorded the amount of water that remained on the material as shown below.

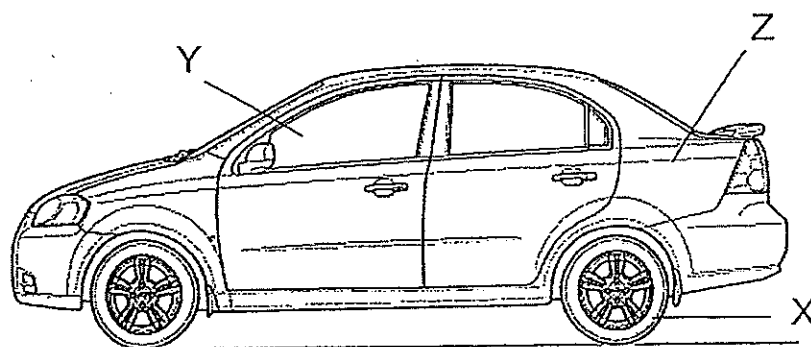
Material	Amount of water collected on the material (ml)
W	15
X	0
Y	9
Z	20

Based on the table, which material is waterproof?

- (1) W
- (2) X
- (3) Y
- (4) Z

()

15. The diagram below shows a car.



The parts labelled X, Y and Z are made of certain materials. The table below shows the reason why they are chosen.

Part	Why this material is chosen
X	It is waterproof and flexible.
Y	It does not allow light to pass through it.
Z	It is waterproof and strong.

Which of the parts are matched to the correct reasons?

- (1) X and Y only
- (2) X and Z only
- (3) Y and Z only
- (4) X, Y and Z

()

End of Section A

Pei Chun Public School
Semestral Assessment 1 – 2014
Science
Primary 3

Name : _____ ()

Class : Pri. 3 ()

Date : 16 May 2014

Time : 50 min

Science Teacher : _____

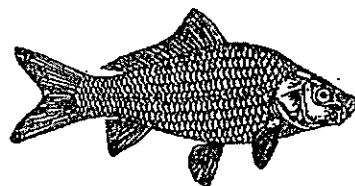
Parent's signature: _____

Section A	30
Section B	20
Total	50

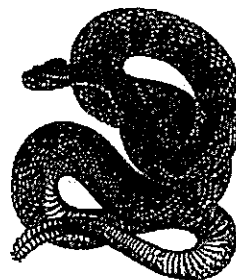
Section B (20 marks)

For questions 16 to 22, write your answers in the spaces provided.

16. Study the diagrams below.



carp



rattlesnake

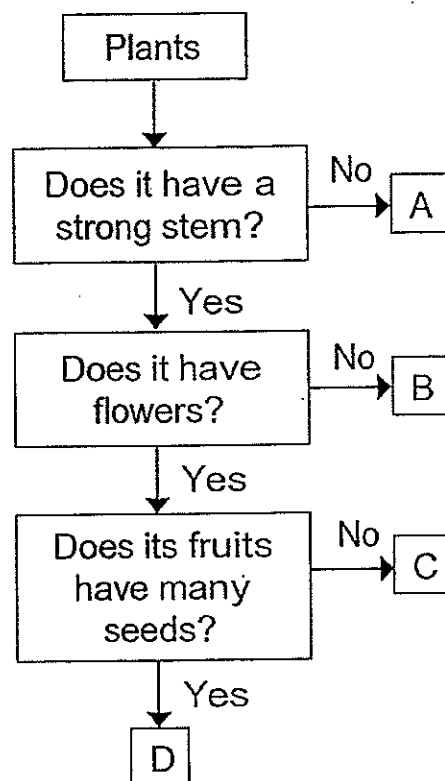
both the

a) Which group of living things do ^{both the} carp and rattlesnake belong to? [1]

b) State the body covering these two living things have in common.

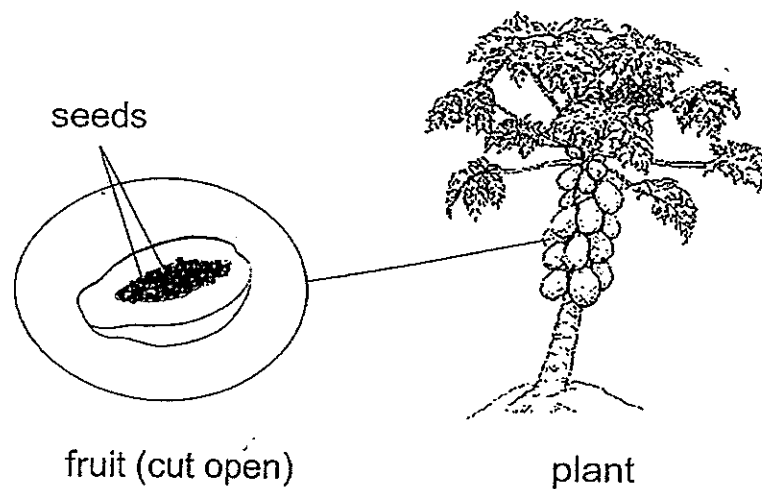
[1]

17. Study the flowchart below.



a) Based on the flowchart above, name two characteristics of plant B. [1]

b) The diagram below shows a plant.



- i) Based on your observation of the diagram above, which of the following statements about the plant is/are true? Put a tick (✓) in the correct box(es). [1]

Statement	True?
Its fruits have many seeds.	
It has a strong stem.	
It has flowers.	

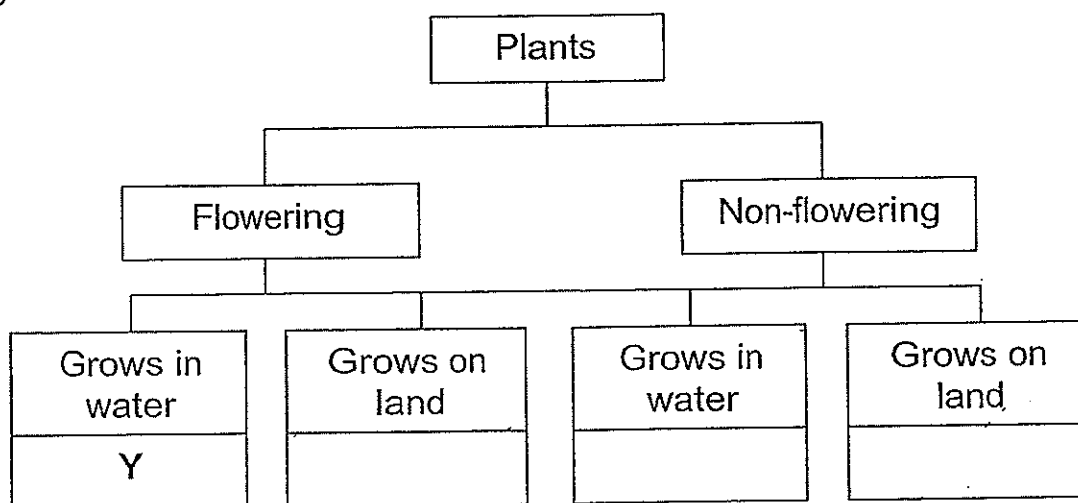
- ii) Based on the flowchart, which letter, A, B, C or D, represents the plant? [1]

Letter _____ represents the plant.

18. The table below provides information on four plants, W, X, Y and Z, based on two characteristics. A tick (✓) shows that the plant has the characteristic.

Characteristics	W	X	Y	Z
Bears fruit	✓		✓	
Grows in water		✓	✓	

The four plants are classified in the chart below. Write the letters, W, X, Y and Z in the correct box. The letter, Y, has been written for you. [3]



19. The diagrams below show a group of animals.



A



B



C



D

- a) One animal does not belong to the group. Identify the animal by writing the letter A, B, C or D. [1]

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

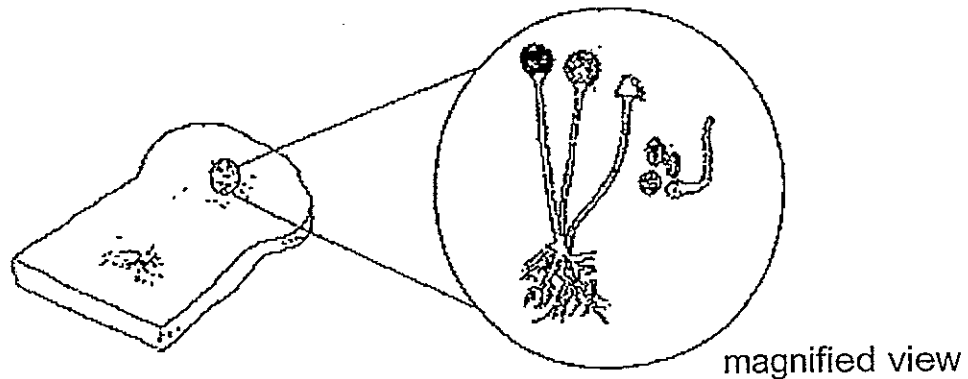
- c) The diagram below shows animal X.



animal X

State the part of its body that the animal uses to breathe when it is underwater. [1]

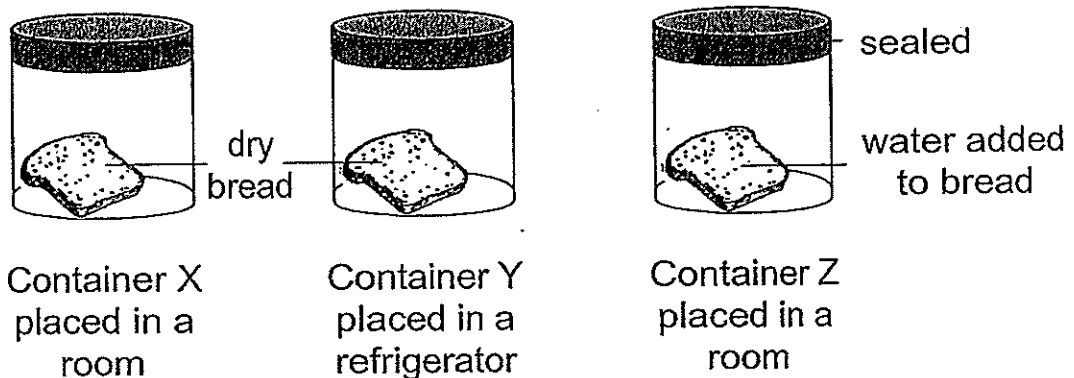
20. The picture below shows bread mould seen under the microscope.



a) How does the bread mould reproduce? [1]

b) Paul said, "The bread mould is a plant." Do you agree with him? Give a reason for your answer. [1]

c) The diagrams below show three sealed containers, X, Y and Z, with a piece of bread each.

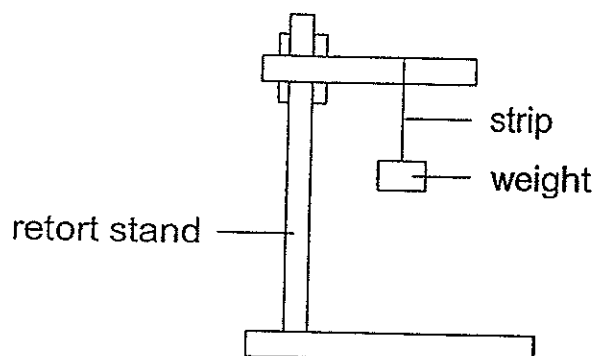


Arrange the letters, X, Y and Z, below, starting from the bread that will grow mould the slowest to the bread that will grow mould the fastest. [1]

(slowest)

(fastest)

21. Hwa Yong set up an experiment as shown below. He used four strips of different materials, P, Q, R and S. All four strips are of the same length.



He recorded the total number of weights on the strip just before it breaks, in the table below.

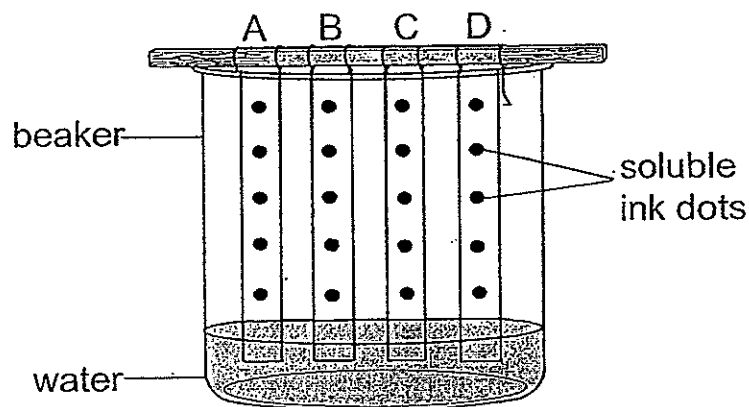
Material	P	Q	R	S
Number of weights before material breaks	4	9	18	12

- a) Which property of the materials was he trying to test? [1]

- b) Hwa Yong wanted to make a grocery bag that can hold 15 weights without breaking. Which material, P, Q, R or S, should he use for the grocery bag? [1]

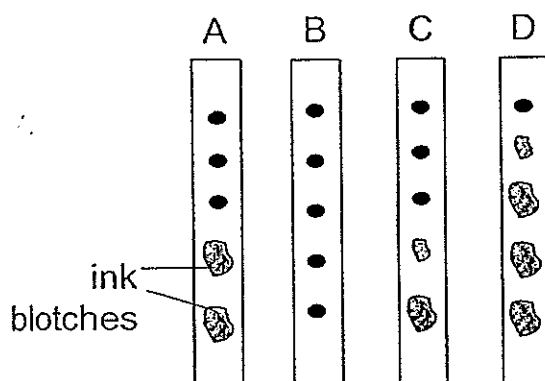
- c) Give a reason for your answer in (b). [1]

22. John wanted to find out which material absorbs the most amount of water. Strips of materials, A, B, C and D, were dotted with ink that can dissolve in water. He hung them in a beaker of water as shown below.



The water absorbed by the materials would smudge the ink dots along the length of each strip, creating blotches of ink.

The diagram below shows what was observed after some time.



- a) ~~Diapers keep babies dry.~~ Based on the above observation, which material, A, B, C or D, is the most suitable for making bath towel? [1]

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

- c) Which material would be suitable for making a raincoat? [1]

End of Section B

Pei Chun Public School

Science SA1 2014

Section A

Q1) 1	Q2) 3	Q3) 2	Q4) 4	Q5) 5
Q6) 3	Q7) 2	Q8) 3	Q9) 3	Q10) 1
Q11) 3	Q12) 4	Q13) 1	Q14) 4	Q15) 2

Section B

- 16) (a) They belong to the animals group.
(b) Both animals have scales.

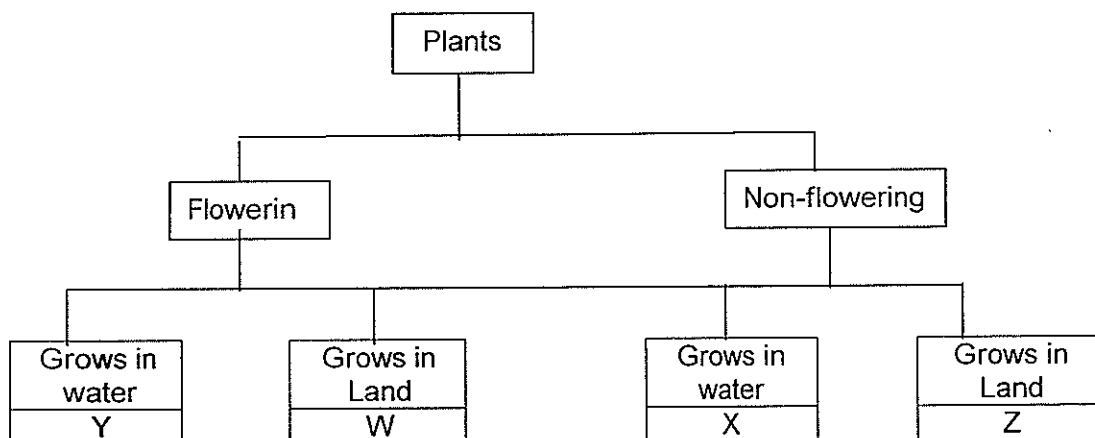
- 17) (a) B has a strong stem and B does not have flowers.

(b) (i)

Statement	True?
Its fruits have many seeds.	/
It has a strong stem.	/
It has flowers.	

(ii) D

18)



- 19) (a) D

- (b) Animal D is a mammal but the others are birds.
(c) It uses its moist skin to breathe underwater.

- 20) (a) It reproduces by spores.

- (b) No. Bread mould cannot make its own food, but plants can.
(c) Y, X, Z

- 21) (a) He was trying to test the strength of the materials.

- (b) R
(c) Only R can hold 15 weights without breaking.

- 22) (a) D

- (b) D could absorb the most amount of water.
(c) B



RAFFLES GIRLS' PRIMARY SCHOOL
SEMESTRAL ASSESSMENT (1)

2014

Name: _____ Index No: _____ Class: P3 _____

6 May 2014

SCIENCE

Att: 1 h 15 min

Section A	16
Section B	24
Your score out of 100 marks	
Parent's signature	

SECTION A (18 x 2 marks)

For each question from 1 to 18, 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 (OAS) provided.

1. Which one of the following is not a characteristic of all living things?

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

2. Which one of the following is not a living thing?

- (1) Fire
- (2) Goldfish
- (3) Mushroom
- (4) Bread mould

3. Which one of the following shows how living things respond to the changes around them?

- (1) A boy becoming heavier.
- (2) A cow giving birth to a young.
- (3) A flower developing into a fruit.
- (4) A snail hiding in its shell when touched.

4. Some things are classified into group A and B as shown in the table below.

A	B
ball	cat
pen	fungi
paper	bacteria

Which of the following headings best describe the objects in A and B?

	A	B
(1)	Living things	Non-living things
(2)	Non-living things	Living things
(3)	Things that were never alive	Things that were once alive
(4)	Things that were once alive	Things that were never alive

5. Which of the following statement(s) is/are true about **all** insects?

- A They have wings.
- B They have 6 legs.
- C They have 3 body parts.
- D They reproduce by giving birth to their young alive.

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

6. The following table describes the characteristics of animal groups, X and Y.

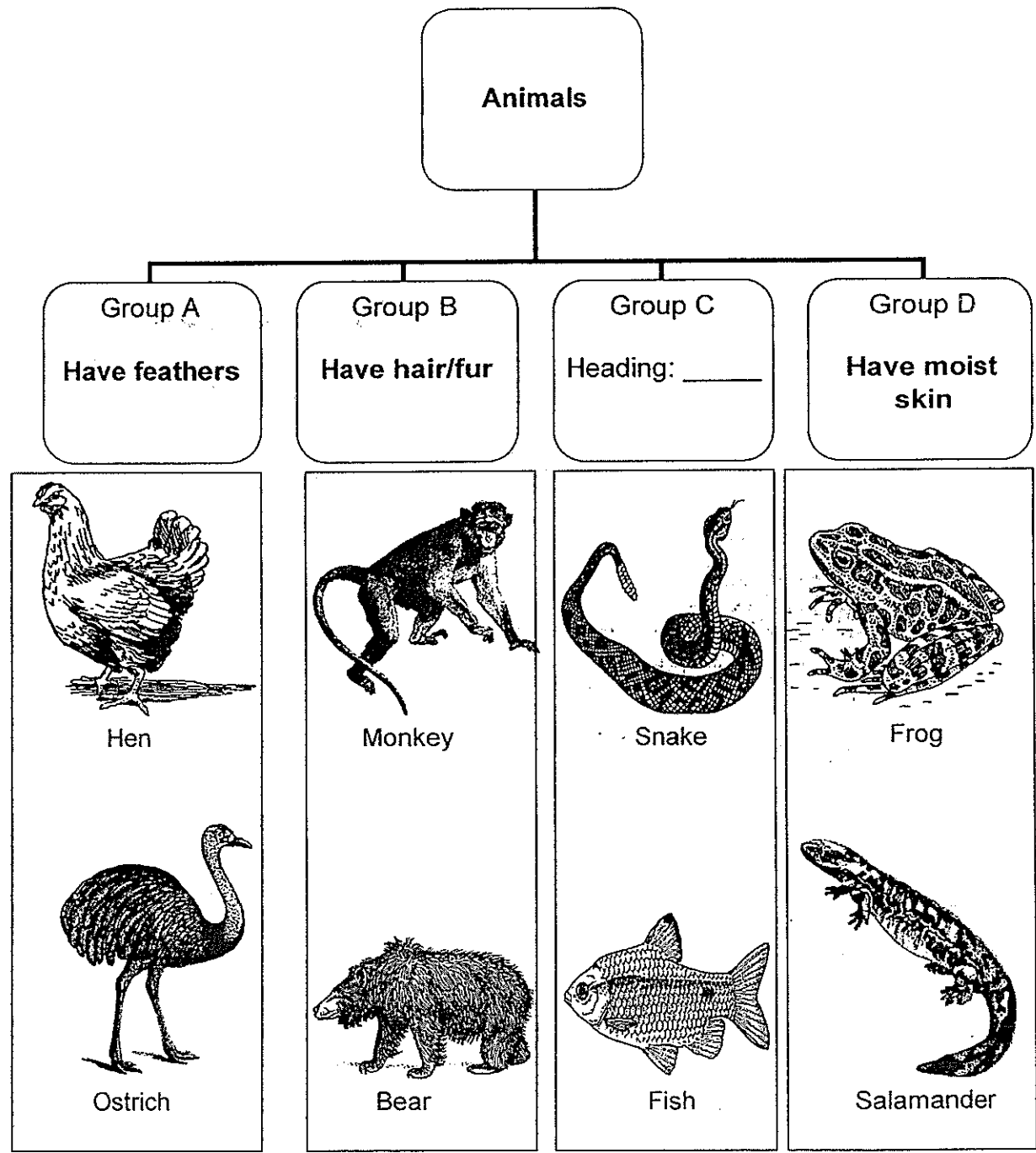
Characteristics	X	Y
Have moist skin		√
Have hair on its body	√	
Give birth to young alive	√	
Live on water and on land		√

Which one of the following best represents animal groups, X and Y?

	X	Y
(1)	Birds	Reptiles
(2)	Mammals	Fish
(3)	Insects	Reptiles
(4)	Mammals	Amphibians

For questions 7 and 8, refer to the classification chart below.

The animals in the classification table below are grouped according to their similarities.
(Note: The animals are not drawn to scale)

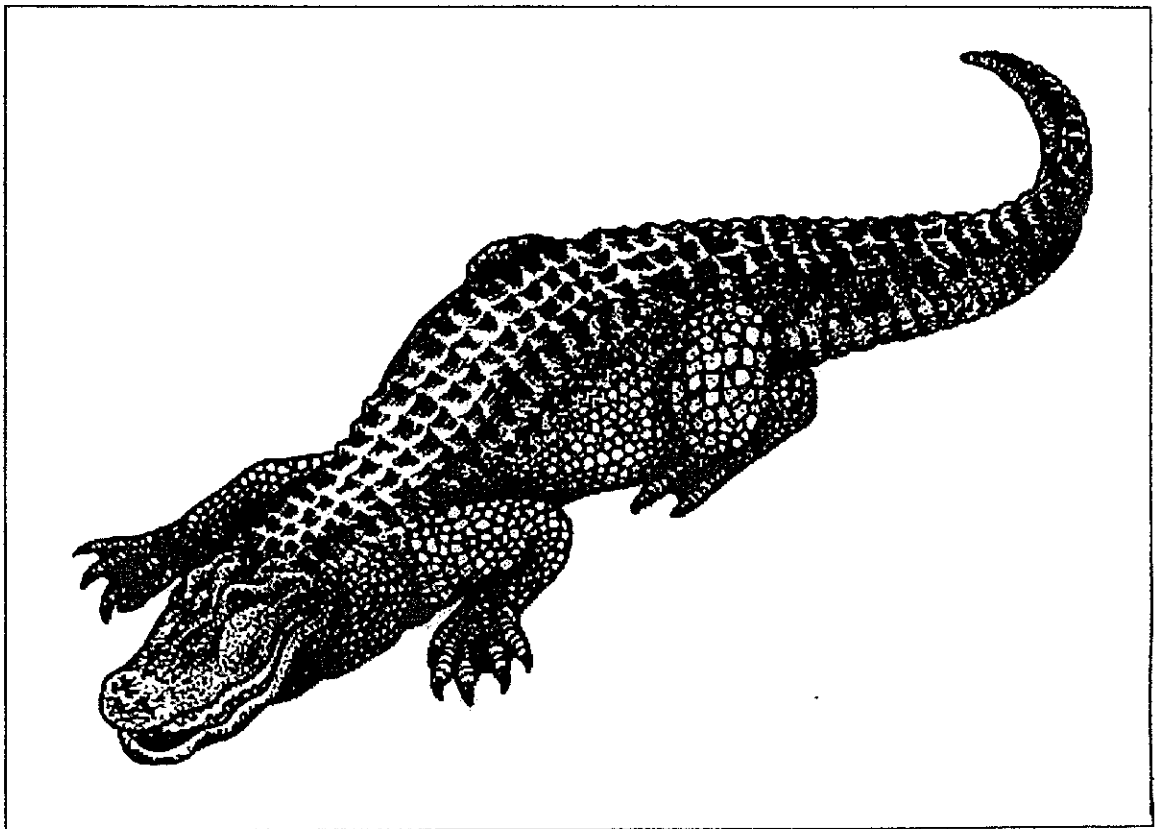


Continue on Pg. 5

7. What is a suitable sub-heading for Group C?

- (1) Have gills
- (2) Have wings
- (3) Have scales
- (4) Have six legs

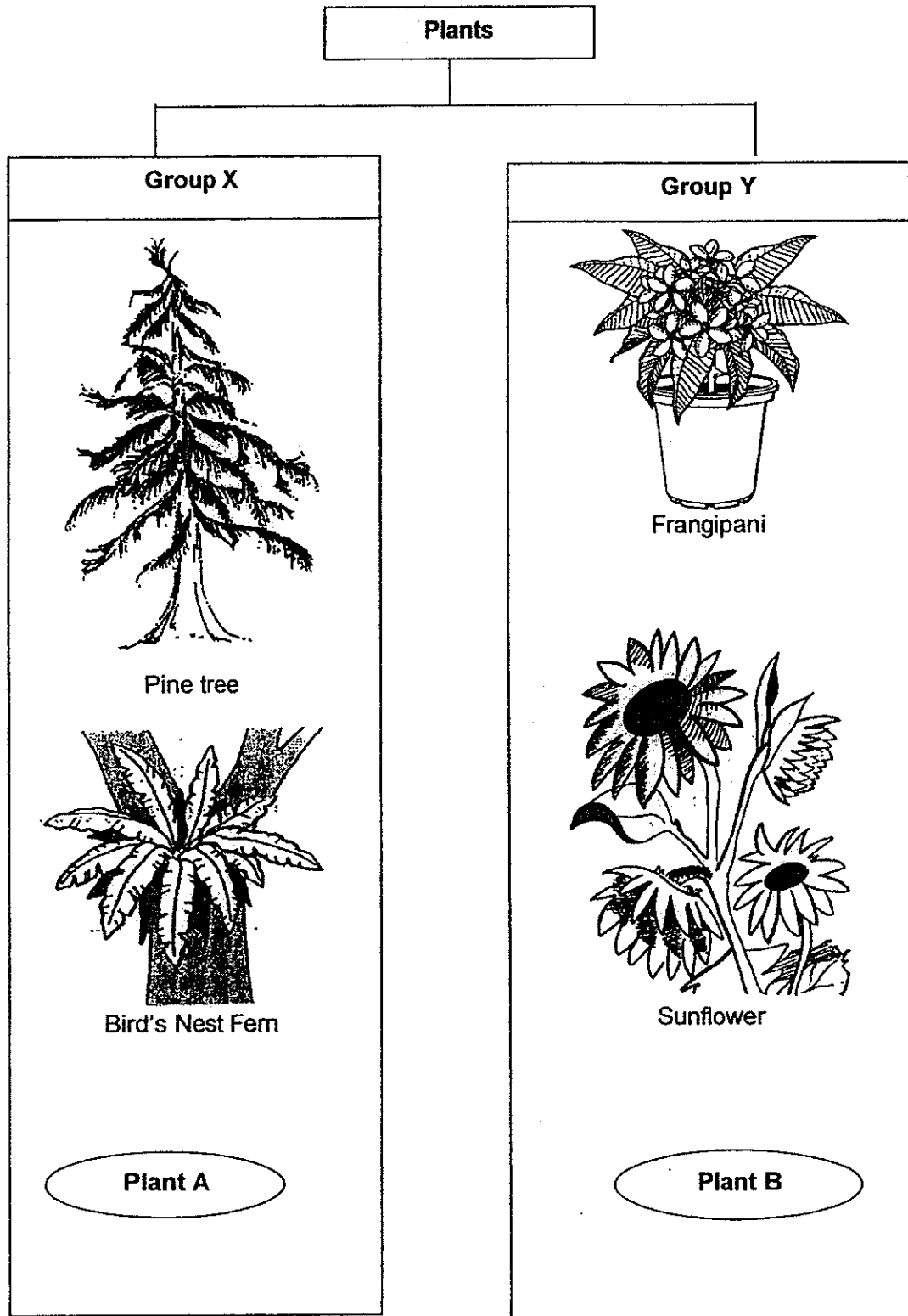
8. Study the animal shown below carefully.



In which group, A, B, C or D, in the classification table would you place the animal shown above?







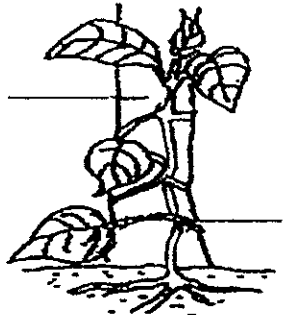

- (1) A
- (2) B
- (3) C
- (4) D

9. Study the classification chart below.
(Note: The plants are not drawn to scale)

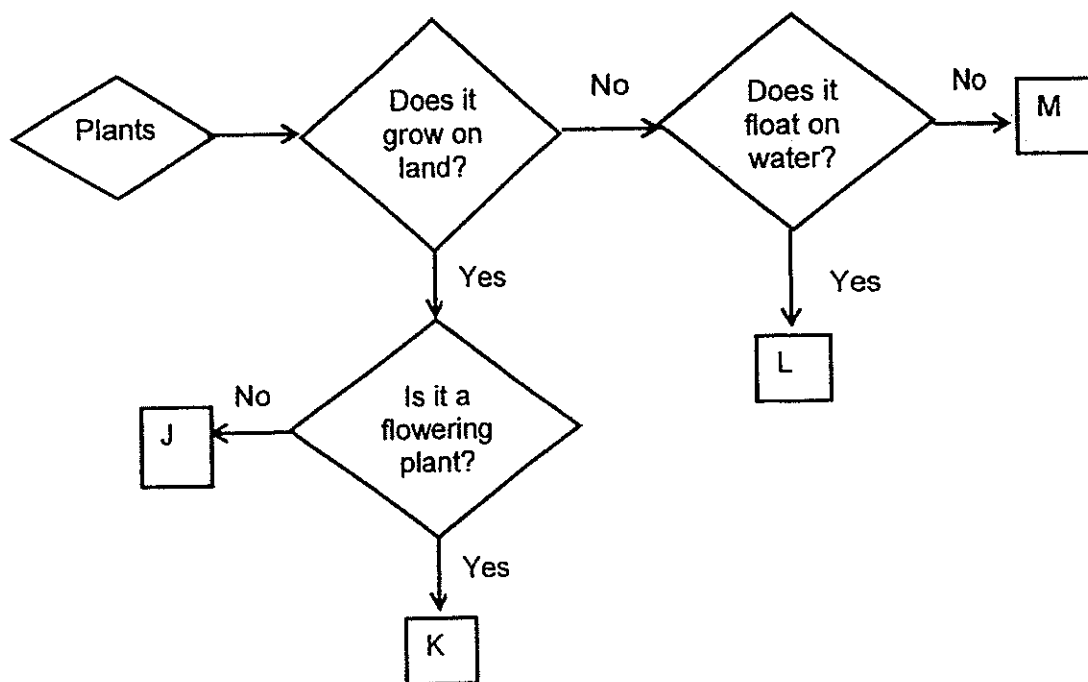


Continue on Pg 7

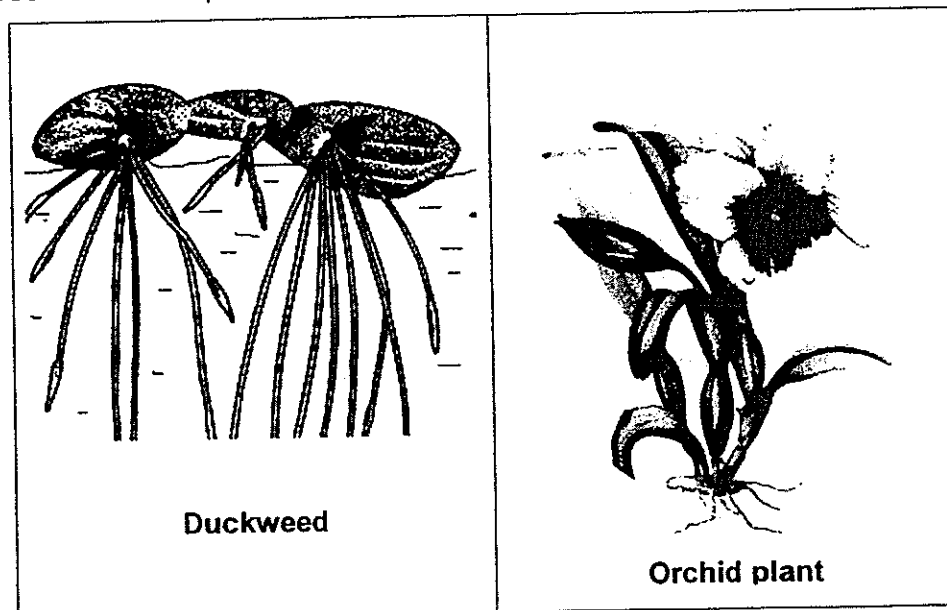
Based on the information provided in the classification chart,
Which one of the following best represents plant A and B respectively?

	A	B
(1)	 <p>Rose</p>	 <p>Mushroom</p>
(2)	 <p>Grass</p>	 <p>Carnation</p>
(3)	 <p>Staghorn fern</p>	 <p>Hibiscus</p>
(4)	 <p>Money Plant</p>	 <p>Sword fern</p>

10. The flow chart below shows how 4 plants, J, K, L and M, are being grouped.



Based on the information above, which one of the following best represent duckweed and orchid plant?



(1)	L	K
(2)	L	J
(3)	K	J
(4)	M	K

11. In the table below, which of the following show the similarities and differences between a non-flowering plant and fungi correctly?

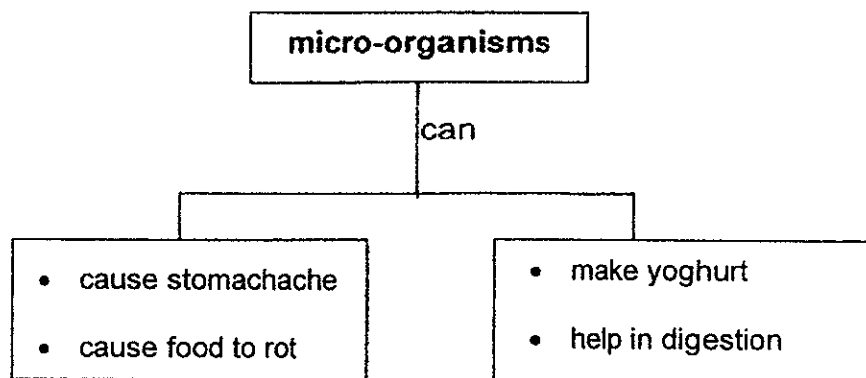
	Similarities	Differences
(1)	Both cannot make their own food.	Non-flowering plants reproduce by spores but fungi reproduce by seeds.
(2)	Both can make their own food.	Non-flowering plants do not bear fruits but fungi bear fruits.
(3)	Both reproduce by spores.	Fungi cannot make its own food but the non-flowering plant can make its own food.
(4)	Both bear flowers.	Non-flowering plants have leaves but fungi do not have leaves.

12. Which of the following statements are true about **all** kinds of bacteria?

- A Bacteria are harmful.
- B Bacteria can reproduce.
- C Bacteria is a group of living things.
- D Bacteria can be seen using magnifying glass.

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

13. The chart below shows how we can group micro-organisms.

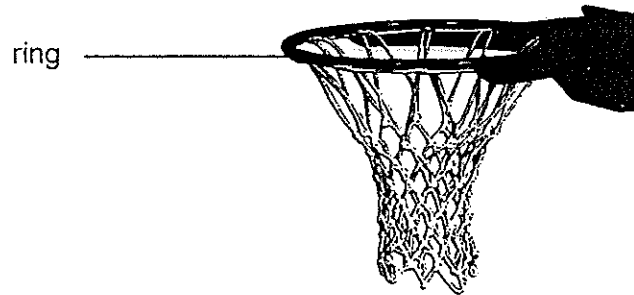


Based on the information above, how are the micro-organisms grouped?

The micro-organisms are grouped according to _____.

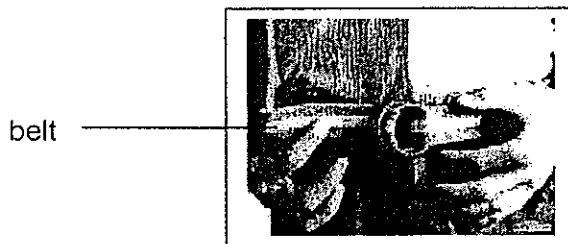
- (1) their size
- (2) whether they are useful to man
- (3) whether they reproduce from spores
- (4) whether they need food to grow well

14. Which one of the following materials is most suitable for making the ring of a basketball hoop found in a basketball court?



- (1) Glass
- (2) Metal
- (3) Fabric
- (4) Cardboard

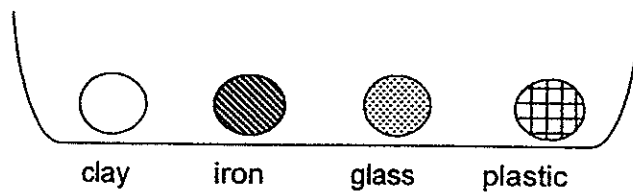
15. Sam needs a belt to hold his pants up.



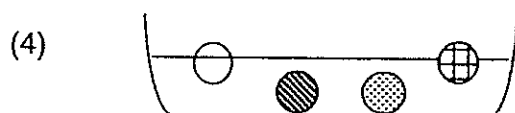
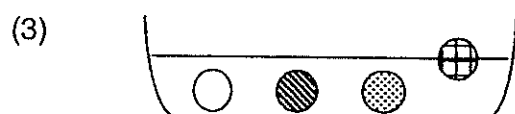
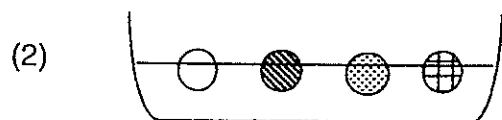
- Which one of the following properties of the material is most important to be taken into consideration for it to be chosen to make a belt?

- (1) flexible
- (2) waterproof
- (3) breaks easily
- (4) allow light to pass through

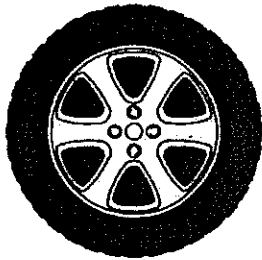
16. 4 solid balls of identical size made of different materials were left in a container as shown below.



Which one of the following correctly shows the position of the balls when the container is half filled with water?



17. The pictures show 3 objects that are made of rubber.



tyre



glove



elastic band

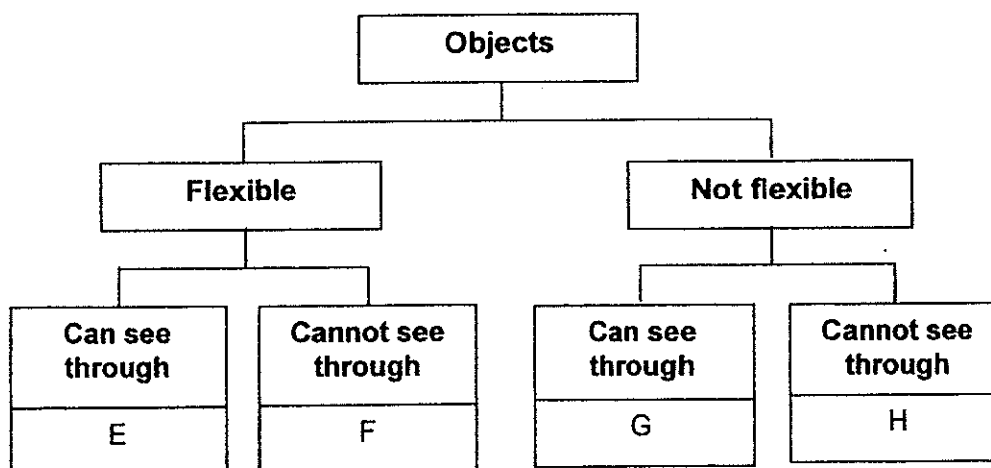
Which of the following are most likely to be the reasons for using rubber to make the above objects?

They are made of rubber because it _____.

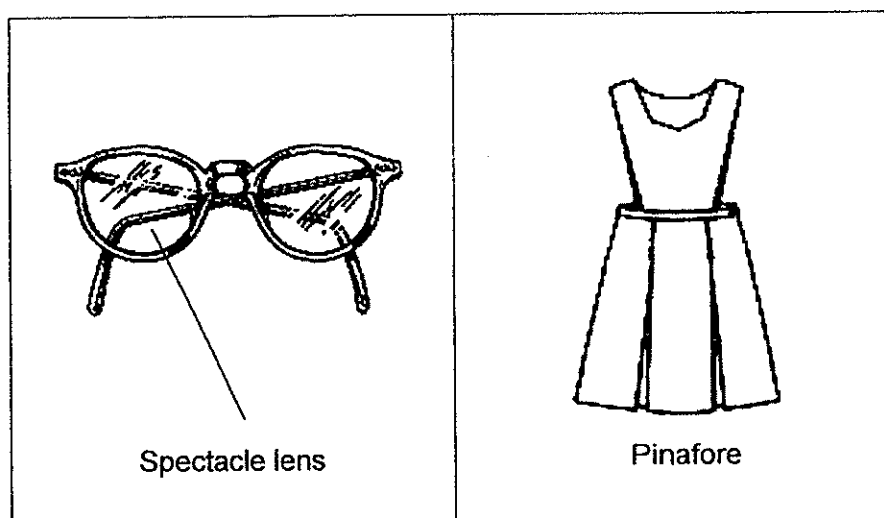
- A is flexible
- B is waterproof
- C breaks easily

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

18. Study the classification chart below carefully.

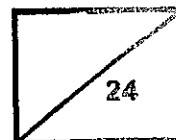


In which groups, E, F, G or H, should the spectacle lens and pinafore be placed?



	Spectacle lens	Pinafore
(1)	G	H
(2)	G	F
(3)	E	F
(4)	E	G

Name : _____ Index No: _____ Class: P3 _____



SECTION B (24 marks)

For questions 19 to 30, write your answers clearly in the spaces provided.

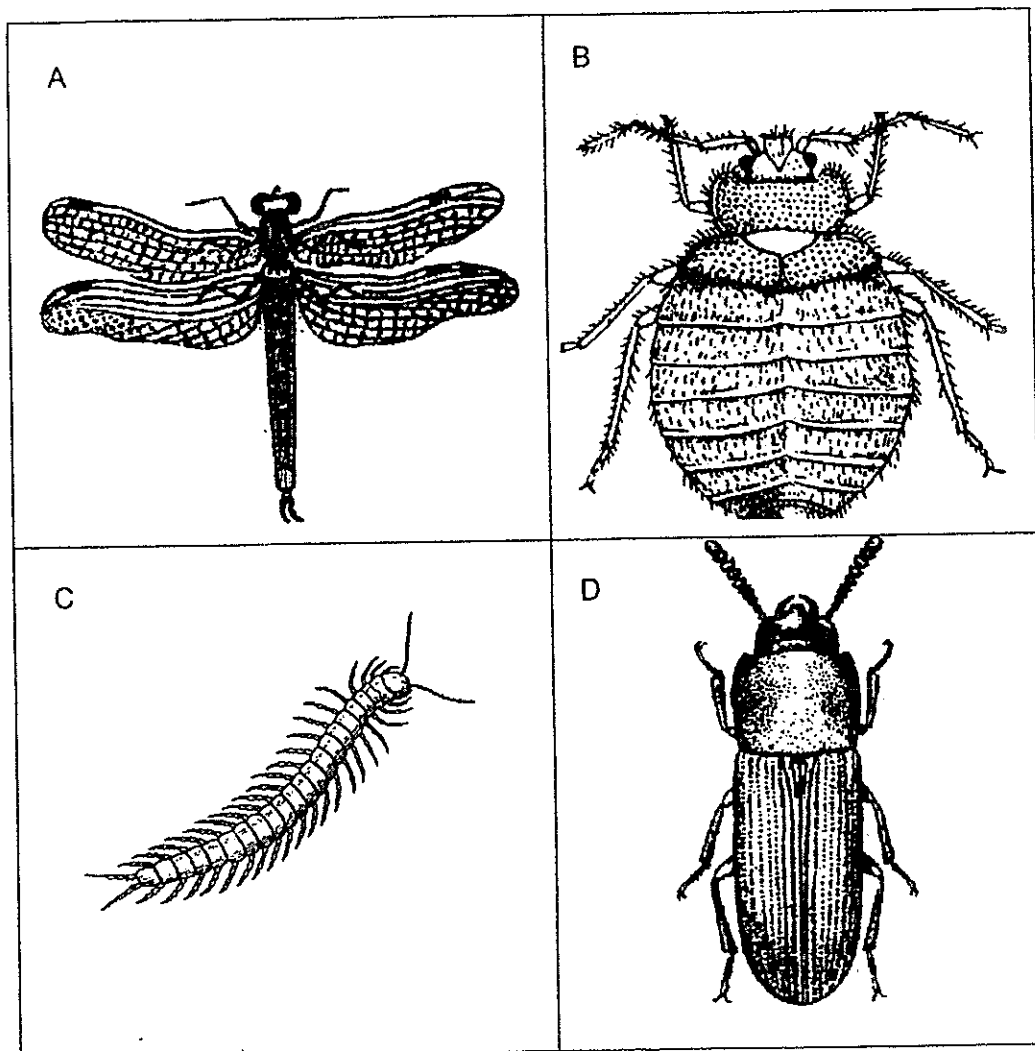
The number of marks available is shown in brackets [] at the end of each question or part question.

19. Study the following statements. Write 'True' or 'False' against each statement in the boxes below. [2]

	Statements	True/False
(a)	Some living things can reproduce.	
(b)	Living things need air, food and water.	
(c)	All living things respond to changes around them quickly.	
(d)	All living things can move by themselves from place to place.	

Score	2
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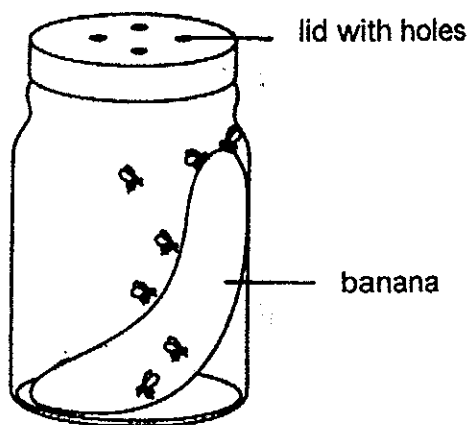
20. Study the organisms (*not drawn to scale*) shown below carefully.



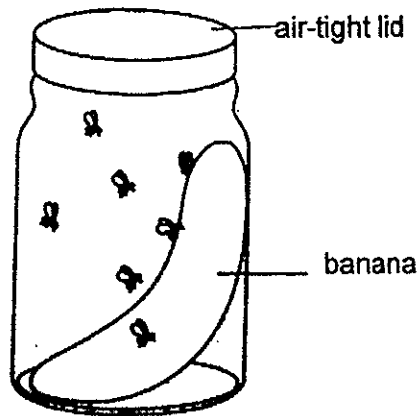
- (a) Based on the diagrams above, which one of the animals, A, B, C or D, is not an insect? Give two reasons for your answer. [2]

Score	2
-------	---

21. Sara prepared 2 similar containers, X and Y. She put a banana and 7 flies in each container as shown in the diagrams below. Container X has a lid with holes while Container Y has an air-tight lid. She placed both containers by an open window for 2 days.



Container X



Container Y

At the end of 2 days, she observed that all the flies in one container had died while all the flies in the other container were still alive.

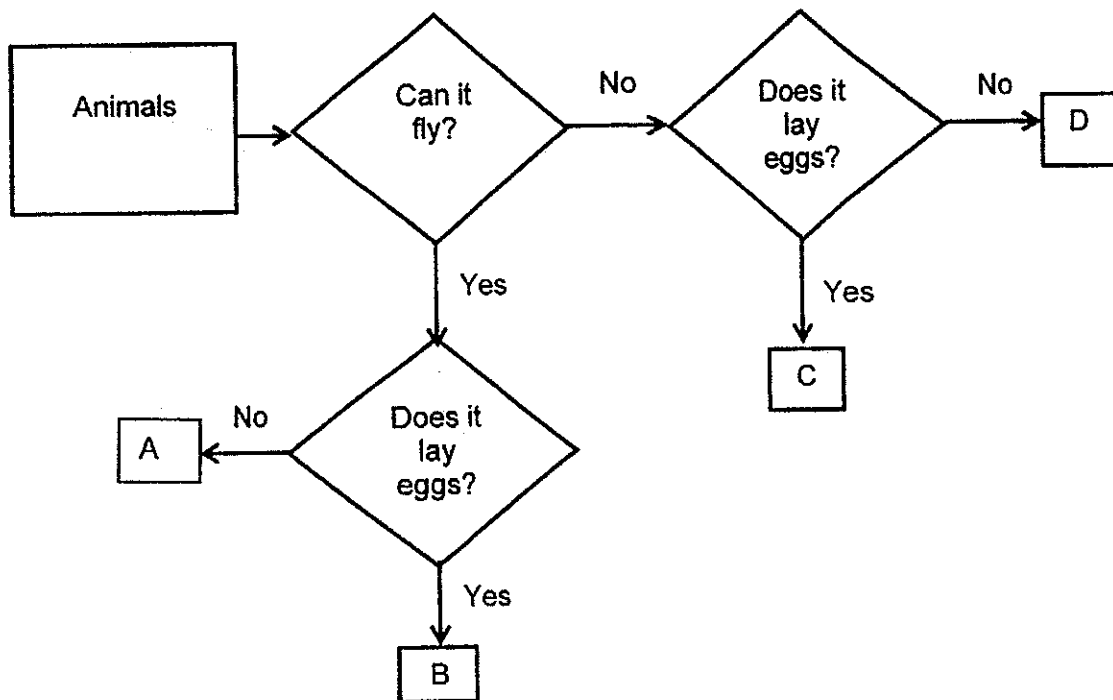
In which of the containers, X or Y, did the flies die?

Explain your answer clearly.

[2]

Score	2
-------	---

22. Study the classification chart below carefully.

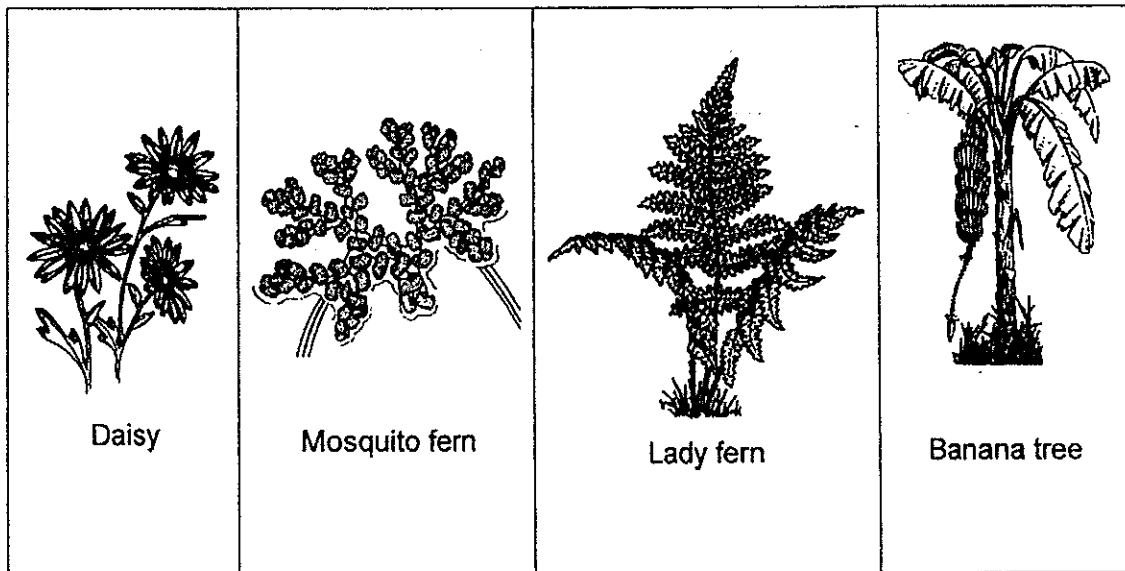


Based on the classification chart above, name two characteristics of Animal A. [2]

Characteristic 1	
Characteristic 2	

Score	2
-------	---

23. The diagram below shows 4 organisms. (not drawn to scale)



In the classification table below:

- (a) **classify** the 4 organisms correctly into 2 groups and
 (b) **write suitable headings** for each group.

[2]

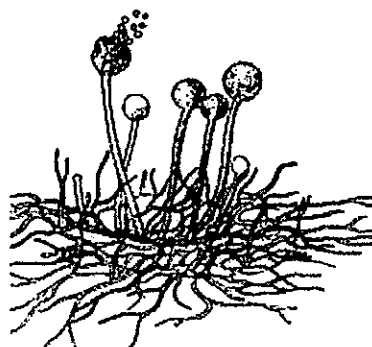
Organisms	
<div style="border-bottom: 1px solid black; margin-bottom: 5px;">Heading: _____</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px; height: 20px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px; height: 20px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px; height: 20px;"></div> <div style="border-bottom: 1px solid black; height: 20px;"></div>	<div style="border-bottom: 1px solid black; margin-bottom: 5px;">Heading: _____</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px; height: 20px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px; height: 20px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px; height: 20px;"></div> <div style="border-bottom: 1px solid black; height: 20px;"></div>

Score	2
-------	---

24. The pictures below show a bird's nest fern and bread mould. (not drawn to scale)



Bird's nest fern



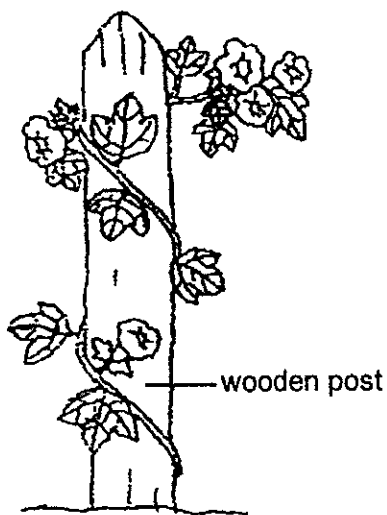
Bread mould

- (a) State one similarity between the characteristics of the bird's nest fern and the bread mould. [1]

- (b) How are they different in the way they obtain their food? [1]

Score	2
-------	---

25. The diagrams below show Plant G and Plant H.



Plant G



Plant H

Based on the information shown in the diagrams above, state one similarity and one difference between Plant G and Plant H.

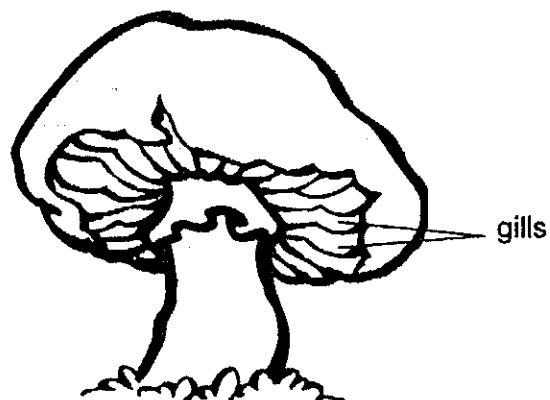
(Do not compare their shape, size or colour)

[2]

Similarity	
Difference	

Score	2
-------	---

26. The diagram below shows Organism P.



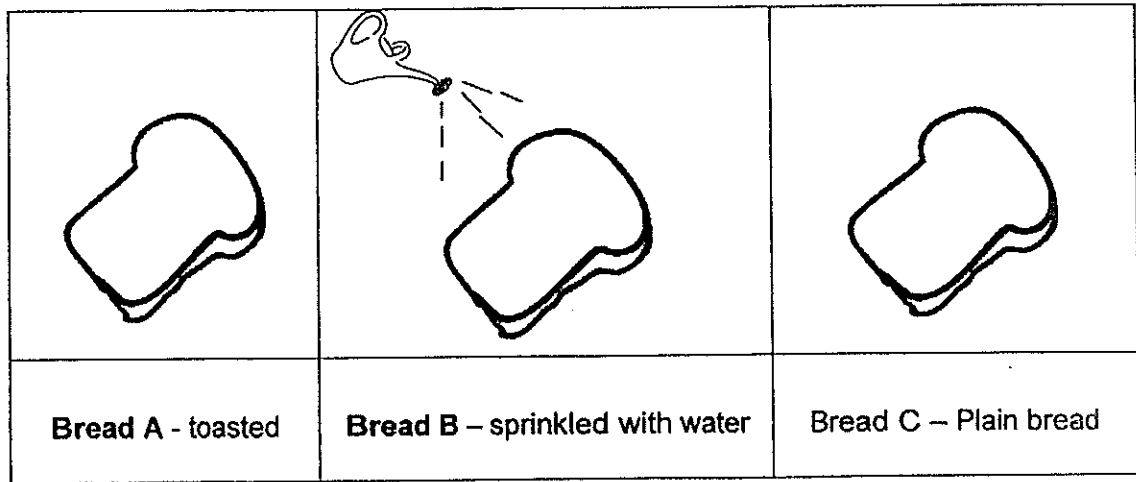
- (a) Name the substance that can be found in between the gills of Organism P. [1]

When the substance identified in your answer in (a) were scattered on the ground, it was observed that many of organisms P were found growing on the ground after one week.

- (b) Give a reason for the observation made above. [1]

Score	2
-------	---

27. Jenny had three identical slices of bread, A, B and C. She toasted Bread A, sprinkled water on Bread B and left Bread C in the original state. Then she put Bread A, B and C, in a warm, dark corner for 5 days.



She recorded her observations in the table below.

Day	Bread A	Bread B	Bread C
1	No change	No change	No change
3	No change	No change	No change
4	No change	A few dark spots on the bread	No change
5	No change	More dark spots on the bread	A few dark spots on the bread

- (a) These dark spots belong to a group of organisms called fungi.

Name these dark spots.

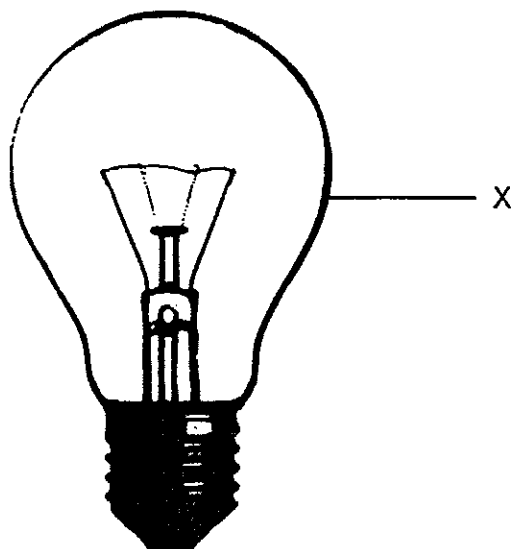
[1]

- (b) Based on the Jenny's observations, what condition would help to increase the growth of the dark spots?

[1]

Score	2
-------	---

28. The diagram below shows a bulb.



(a) Suggest a material that is most suitable to make part X of the bulb. [1]

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

Score	2
-------	---

29. The table below shows properties of materials P, Q, R and S.

Materials Properties	Material P	Material Q	Material R	Material S
Breaks easily			✓	
Flexible		✓		✓
Able to see through			✓	
Waterproof	✓	✓	✓	

Based on the information in the table above, which material is most suitable to be chosen to make a raincoat?

Give a reason for your answer.

[2]

Material	_____
Reason	_____ _____ _____ _____

Score	2
-------	---

30. Danny used three different materials, X, Y and Z, to make into 3 bags of the same size. In each bag, he added identical cans of drinks one at a time until the bag started to break.

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

Material	Minimum number of cans added until the bag started to break
X	10
Y	25
Z	17

- (a) Arrange the materials, X, Y, Z, in descending order starting with the strongest material. [1]



strongest → weakest

- (b) Which material, X, Y, Z, is most suitable for making a shopping bag.

Give a reason for your answer. [1]

Year: 2014

Level: Primary 3

School: Raffles Girls' Primary School

Subject: SCIENCE

Semester: SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	1	4	2	2	4	3	3	3	1
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18		
3	3	2	2	1	3	1	2		

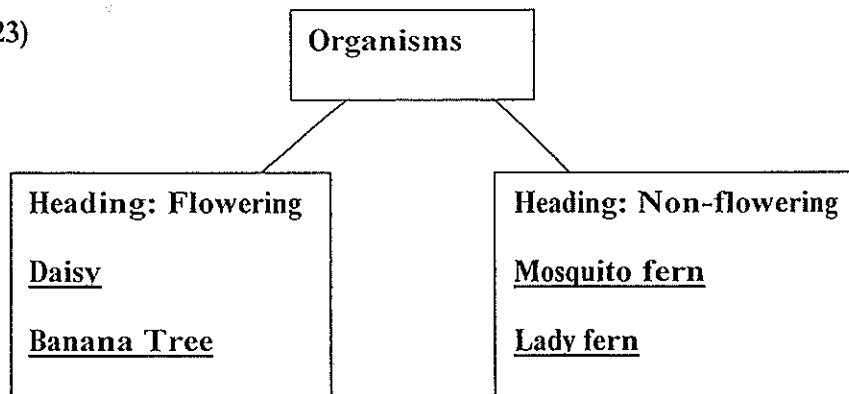
Q19) False, True, False, False

Q20) a) Animal C is not an insect as it does not have three body parts and six legs.

Q21) Container Y. The flies in container A do not have air.

Q22) characteristic 1: can fly characteristic 2: does not lay eggs

Q23)



Q24) a) Bird's nest and bread mould reproduce by spores.

b) Bird's nest fern makes its own food while bread mould gets its food from the bread that it's growing on.

Q25) Similarity: Both grow on land.

Difference: Plant G needs support to grow on but plant H does not need support to grow on.

Q26) a) The substance is spores.

b) Organism P reproduces by spores so when the spores were scattered on the ground, many of organism P was growing after one week.

Q27) a) These dark spots are bread mould.

b) The bread needs to be put in a warm place and water has to be put on the bread.

Q28) a) The material most suitable to make part X is glass.

b) Glass is hard and transparent.

Q29) Material: Material Q Reason: Material Q is flexible and waterproof.

Q30) a) Y, Z, X

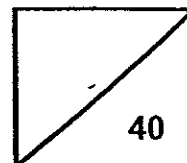
b) Material Y. It can hold the most number of cans before it starts to break so it is the strongest material.



Rosyth School
Semestral Examination 1 for 2014
SCIENCE
Primary 3

Name: _____

Total
Marks:



Class: Pr 3 _____ Register No. _____ Duration: 1 h 30 min

Date: 15 May 2014

Parent's Signature: _____

BOOKLET A

Instructions to Pupils:

1. Do not open the booklets until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 booklets, Booklet A and Booklet B.
4. For questions 1 to 20 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.
5. For questions 21 to 32, give your answers in the spaces given in Booklet B.

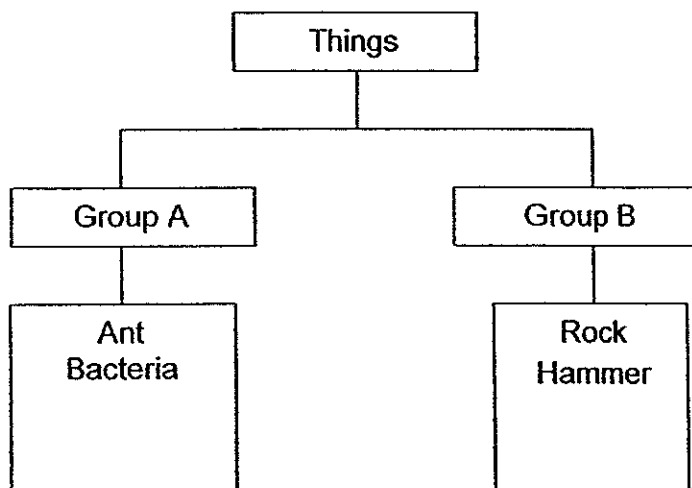
* This booklet consists of 11 pages.

For each question from 1 to 20, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). (40 marks)

1. Which one of the following statements is not true of all living things?

- (1) They respond to changes.
- (2) They can reproduce and die.
- (3) They can make their own food.
- (4) They can move by themselves.

2. Study the classification diagram below.

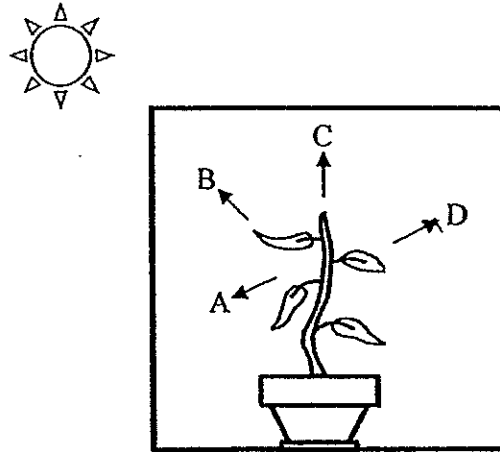


Which of the following thing/s can be classified under Group A?

- A: Dog
- B: Teddy bear
- C: Bench
- D: Hibiscus plant

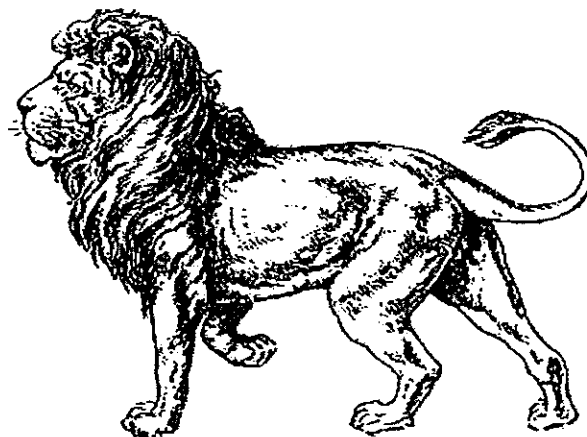
- (1) A only
- (2) B only
- (3) A and D only
- (4) B and C only

3. Suzy placed a pot of plant in a darkened box with an opening as shown in the diagram below. The box was placed in a sunny spot and was watered daily.



Which direction will the plant grow towards after a few days?

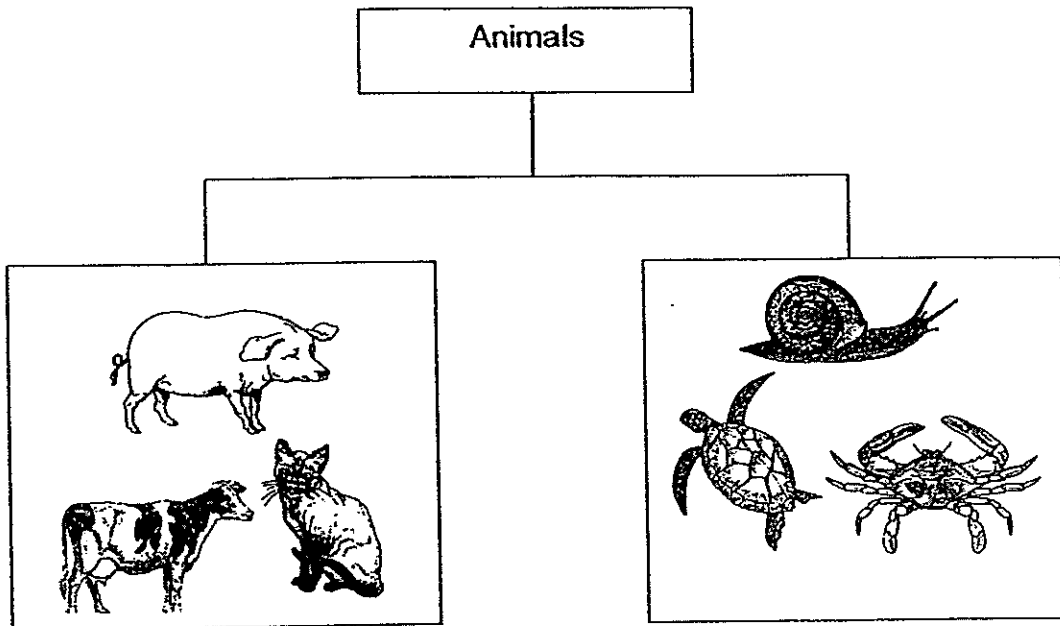
- | | |
|-------|-------|
| (1) A | (2) B |
| (3) C | (4) D |
- 4.



Based on the picture above, which one of the following is most helpful in identifying that the above animal is a mammal?

- (1) The animal has hair.
- (2) The animal has four legs.
- (3) The animal has two body parts.
- (4) The animal can take care of its young.

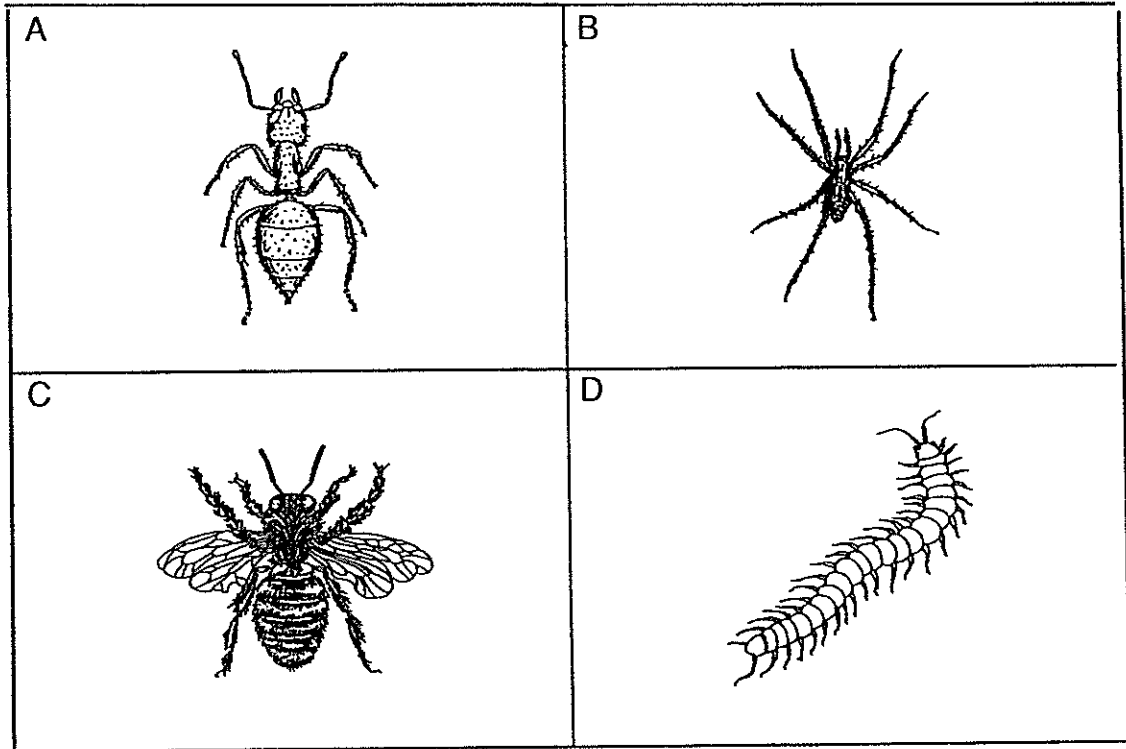
5. Some animals are grouped as shown below.



Which of the following is a possible grouping for the animals in the chart above?

- (1) They are grouped according to what they eat.
- (2) They are grouped according to where they live.
- (3) They are grouped according to their outer covering.
- (4) They are grouped according to how they move about.

6. The diagram below shows some animals.



Which of these animals are insects?

- (1) A and B only (2) A and C only
(3) A, B and C only (4) A, B, C and D
7. Study the description of an animal given below.

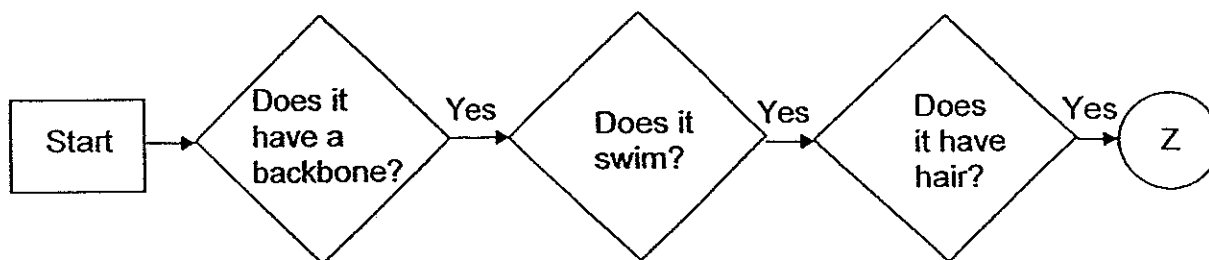
Description of animal

It has feathers.
It has a pair of wings.
It reproduces by laying eggs.

Which one of the following groups of animals does the animal belong to?

- (1) Bird (2) Fish
(3) Reptile (4) Insect

8. Study the flow chart below.



Which animal group does Z belong to?

- | | |
|------------|---------------|
| (1) Fish | (2) Insect |
| (3) Mammal | (4) Amphibian |

9. Ethan wanted to send a pot of plant to his aunt living in London. He carefully packed the pot of plant in a box and sealed it before sending it. When his aunt received the pot of plant one week later, she discovered that it had died. Which of the following explained what had happened?

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

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

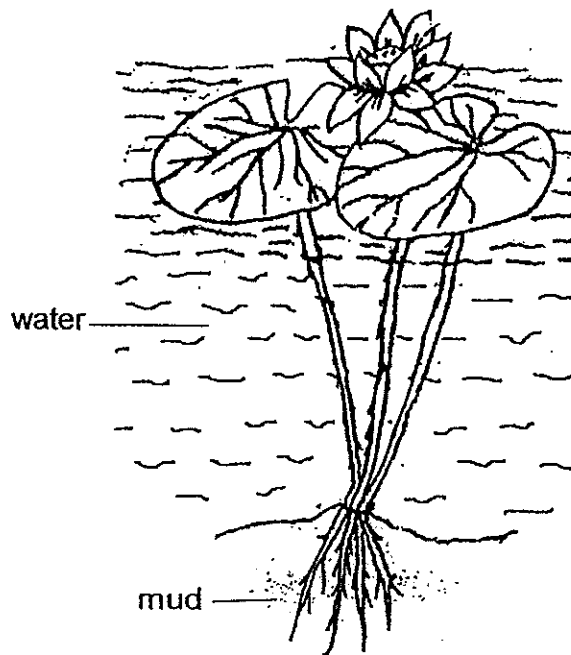
10. 4 children each wrote a sentence to describe a living thing.

- Alice: It is green.
 Bobby: It can reproduce.
 Charlie: It makes its own food.
 Danny: It needs air, water and food.

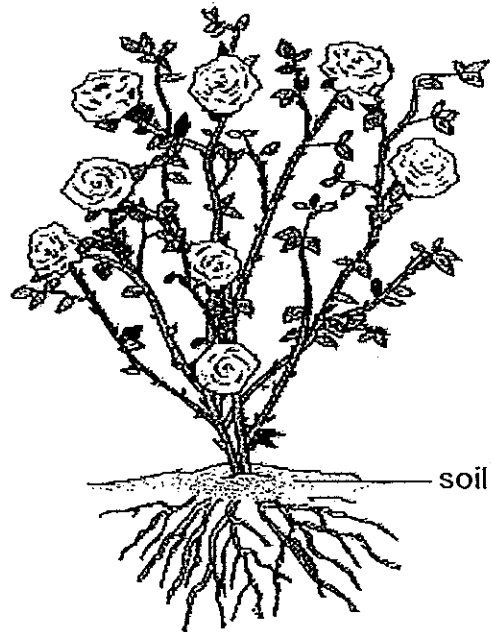
Which child's statement tells us that the living thing is a plant?

- | | |
|-------------|-----------|
| (1) Alice | (2) Bobby |
| (3) Charlie | (4) Danny |

11. Look at the pictures below.



Water lily

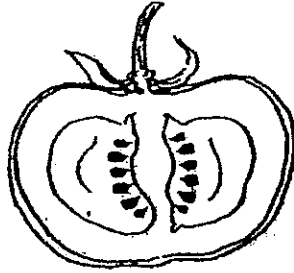


Rose plant

The water lily and rose plant have similar characteristics. How are they similar?

- 1) Both are land plants.
- 2) Both are water plants.
- 3) Both are flowering plants.
- 4) Both are non-flowering plants.

12. Study the diagram below.



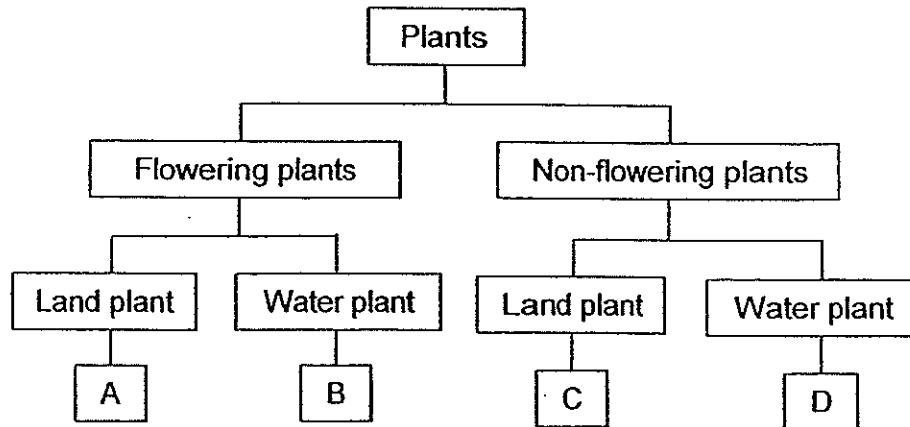
By looking at the diagram of the cross-section of the tomato, you can say that the tomato _____.

- A: is red
- B: is sweet
- C: has several seeds

- | | |
|------------------|------------------|
| (1) A only | (2) C only |
| (3) A and B only | (4) B and C only |
13. Afiq recorded the following statements about the characteristics of bacteria. Which of the above statement is correct?

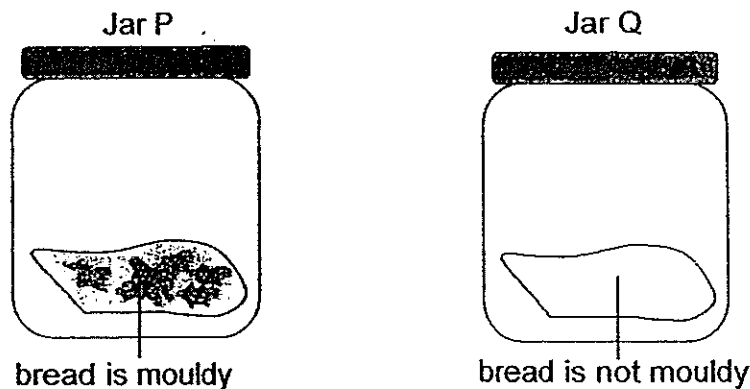
- (1) They are living things.
- (2) They reproduce by spores.
- (3) All bacteria are harmful to us.
- (4) All bacteria can make their own food.

14. Study the classification diagram below.



Sarah saw a plant growing on a tree. She found spores on the underside of its leaves. Based on the classification diagram, which one of the following groups can this plant be placed in?

- (1) (2) B
(3) (4) D
15. John placed one slice of bread in jar P and toasted another slice of bread before putting it in jar Q. Then he covered the jars tightly. The pictures below show the results of the experiment after five days.



Based on the experiment above, which of the following statement/s is/are true?

- A: Bread mould needs water to grow.
B: Bread mould needs air to grow well.
C: Bread mould can make its own food.

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

16. Crystal described the properties of a material as shown below.

It is flexible. It is waterproof.

Which of the following is most likely to be the material she described above?

- | | |
|------------|-------------|
| (1) Wood | (2) Fabric |
| (3) Rubber | (4) Ceramic |

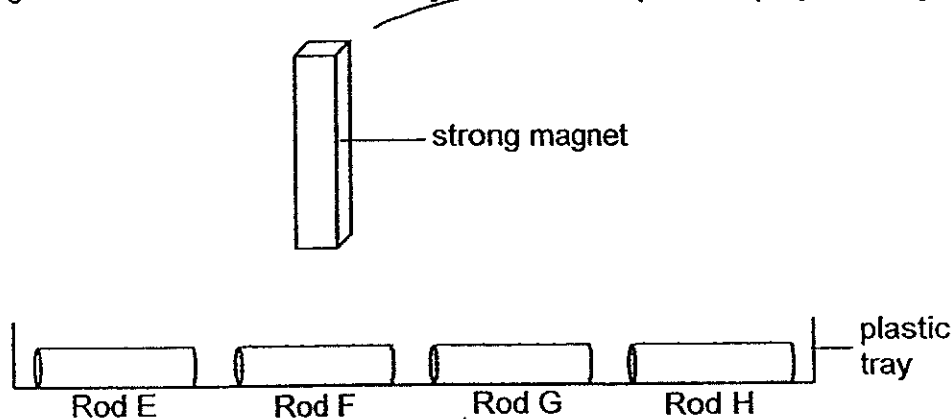
17. Study the table below.

	Material A	Material B	Material C	Material D
Strength	No	No	Yes	Yes
Flexibility	No	Yes	Yes	No
Absorbs water	No	Yes	No	No
Allows light to pass through	Yes	Yes	No	No

Based on the table above, which material is most suitable for making a table?

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

18. Tiara had four rods E, F, G and H which are made of different materials. She tried to pick up each rod from a plastic tray using a strong magnet as shown in the diagram below. She found that only **rod G** can be picked up by the magnet.



What material is rod G likely to be made of?

- | | |
|-------------|---------------|
| (1) Wood | (2) Steel |
| (3) Plastic | (4) Aluminium |

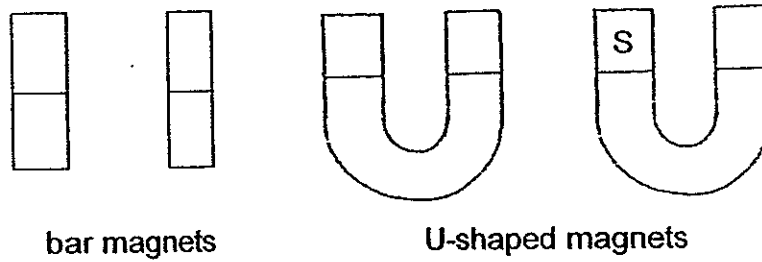
19. Study the classification table below.

Group X	Group Y
light bulb glass fish tank	metal spoon wooden table

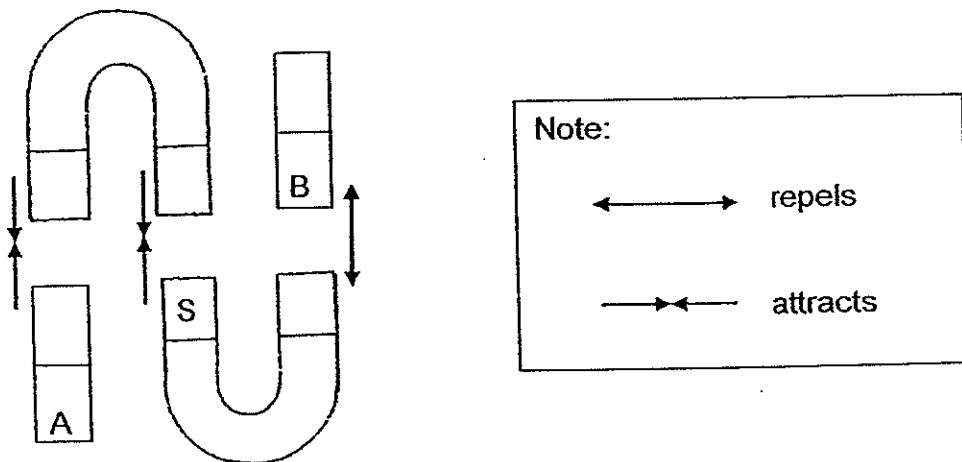
How are the objects in Group X and Y classified?

- (1) According to their strength
- (2) According to their flexibility
- (3) According to their transparency
- (4) According to their ability to float or sink in water

20. David has four magnets as shown below. He only labelled one south-pole of a U-shaped magnet, 'S', as shown in the diagram below.



He arranges the four magnets and notes his observations as shown in the diagram below.



What could the poles at A and B be?

	A	B
1)	North	North
2)	North	South
3)	South	South
4)	South	North

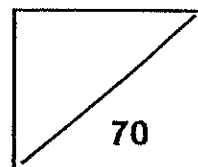
End of Booklet A



Rosyth School
Semestral Examination 1 for 2014
SCIENCE
Primary 3

Name: _____

Total
Marks:



Class: Pr 3 _____ Register No. _____ Duration: 1 h 30 min

Date: 15 May 2014

Parent's Signature: _____

BOOKLET B

Instructions to Pupils:

For questions 21 to 32, give your answers in the spaces given in this Booklet B.

	Maximum	Marks Obtained
Booklet A	40 marks	
Booklet B	30 marks	
Total	70 marks	

* This booklet consists of 10 pages.

For questions 21 to 32, write your answers in this booklet. (30 marks)

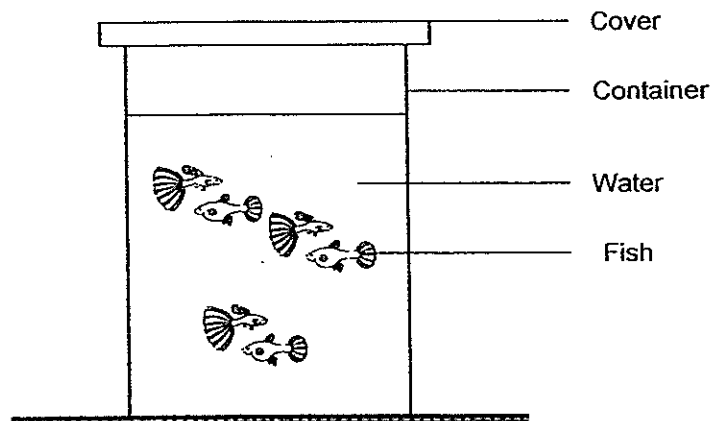
21. Suzy told Jialing that her baby brother would close his eyes and turn away whenever she blows into his face.

Based on what Suzy had told Jialing, state two characteristics of living things that can be observed from the above. (2m)

Characteristic 1: _____

Characteristic 2: _____

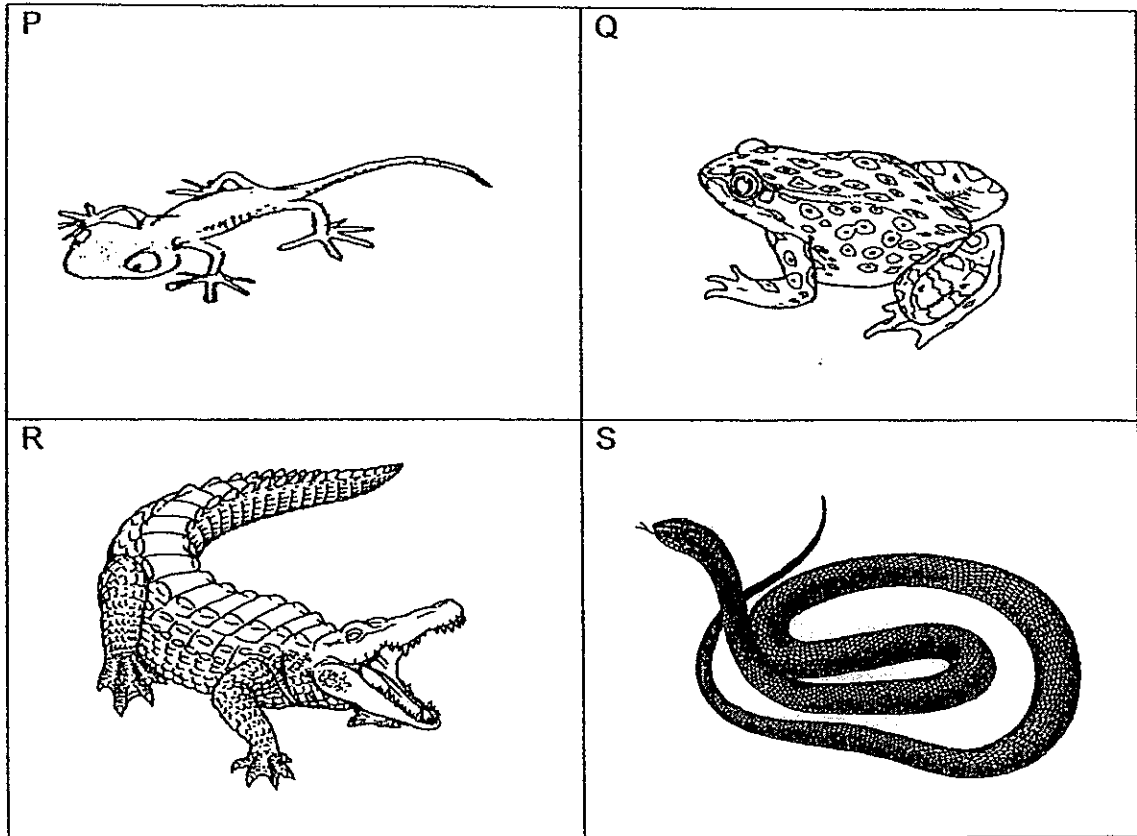
22. Siti set up a mini aquarium for her class. She filled a glass container with water and put six fishes in it. She put in some fish food and placed a cover over the container. After one week, she found that all the six fishes in the container had died.



- (a) Why did the fishes die? (1m)

- (b) What should Siti have done to prevent the fishes from dying? (1m)

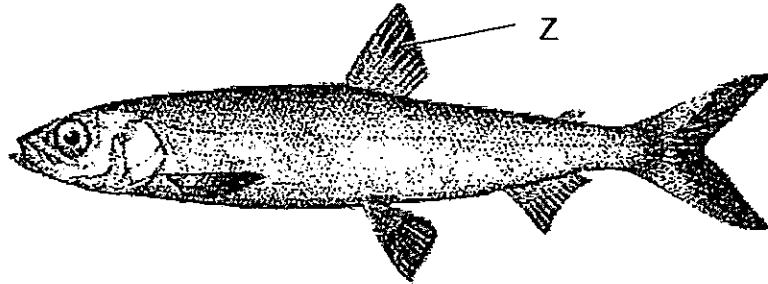
23. The pictures below show four animals, P, Q, R and S.



- (a) Animals P, R and S belong to the reptile group. What is their outer-body covering? (1m)

- (b) Which animal group does animal Q belongs to? (1m)

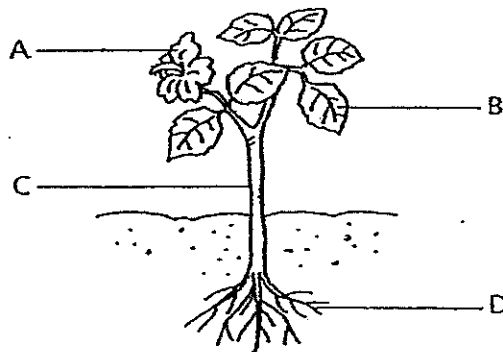
24. A diagram of a fish is shown below.



(a) Name the part Z and state its function. (2m)

(b) Which part of the fish helps it to breathe? (1m)

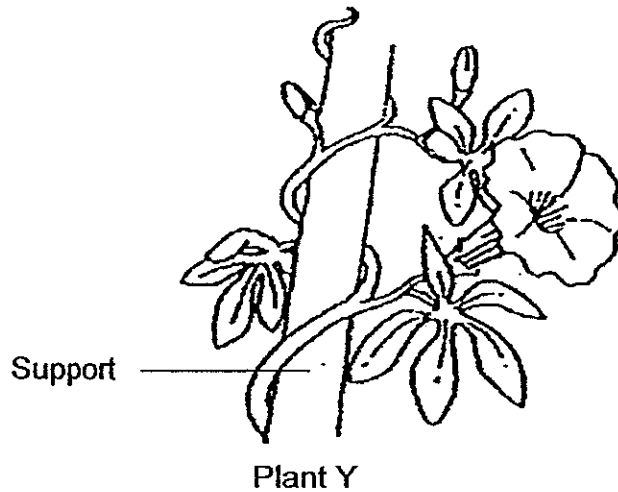
25. Look at the diagram of the plant shown below.



(a) Name part D. (1m)

(b) What is the function of part B? (1m)

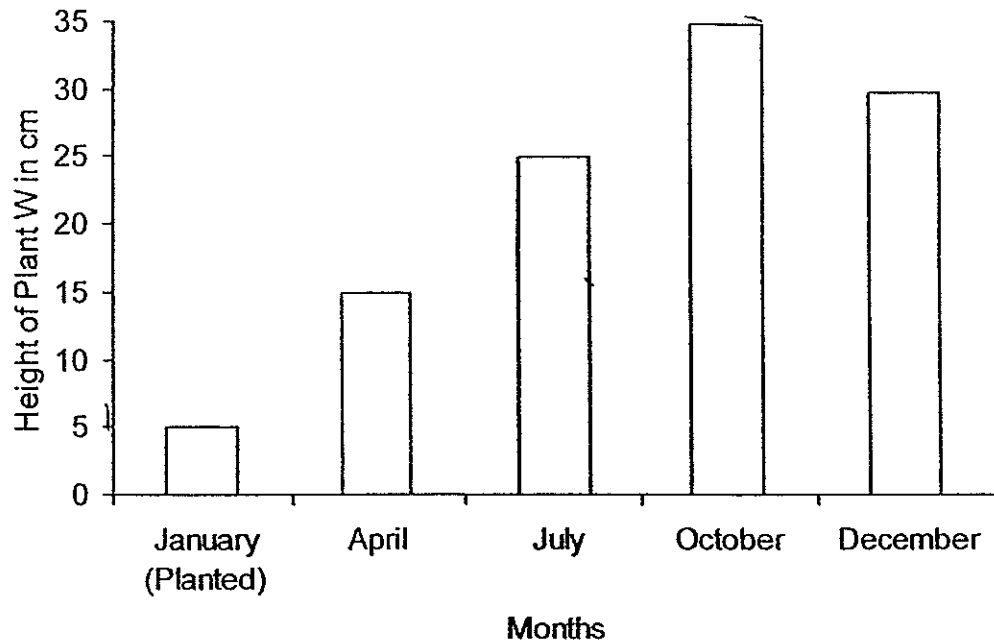
26. Study the picture below carefully.



- (a) What kind of stem does Plant Y have? (1m)

- (b) Why does Plant Y need to be upright? (1m)

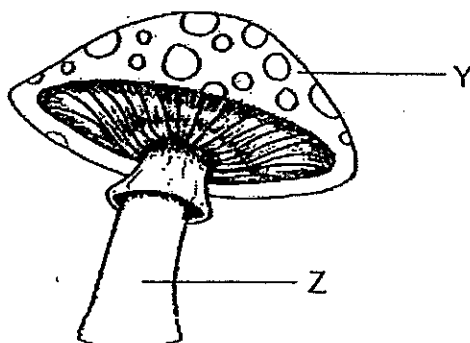
27. The graph below shows the height of Plant W over 12 months. The height of the plant is recorded at the beginning of each month.



- (a) What was the height of Plant W in January? (1m)

- (b) Based on the graph above, what can you conclude about the height of Plant W over the 12 month period? (1m)

28. Look at the diagram of the mushroom shown below.



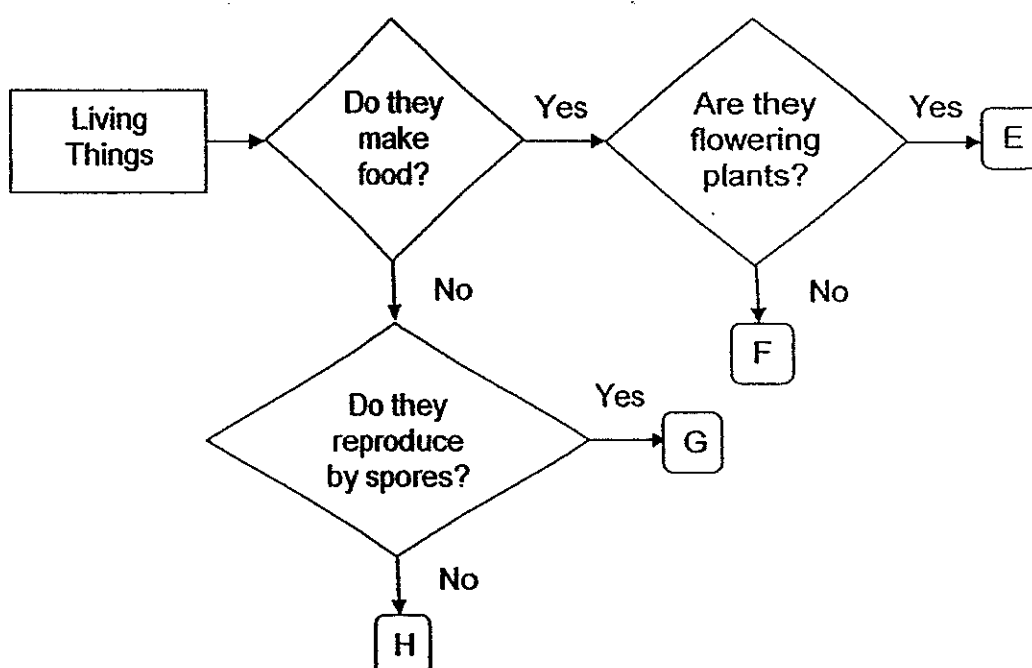
(a) Name the parts of the mushroom. (1m)

Y: _____

Z: _____

(b) How does mushroom reproduce? (1m)

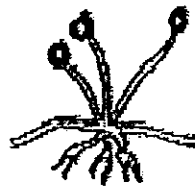
29. The flow chart below shows how living things are classified.



Question 29 continues on page 7

- (a) Which of the above letters (E, F, G or H) best represent the following living things? Write E, F, G or H in each of the boxes provided. (2m)

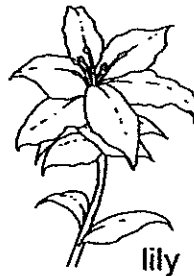
(i)



bread mould



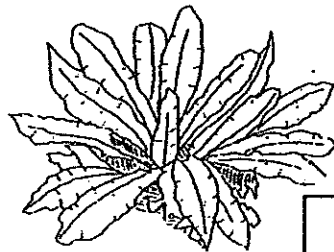
(ii)



lily



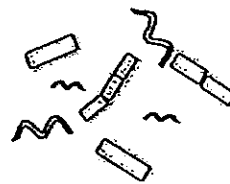
(iii)



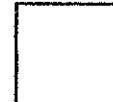
fern



(iv)



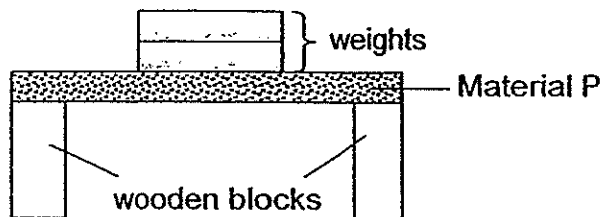
bacteria



- (b) Based on the flow chart above, state a difference between living things, E and F. (1m)

- (c) Diana said that toadstool should be placed in living thing H. Do you agree with her? Give a reason for your answer. (1m)

30. Jacky carried out an experiment with 4 pieces of materials, P, Q, R and S. He placed material P on top of two wooden blocks. Then, he kept adding weights to the centre of each material as shown in the diagram below, until the piece of material broke. He repeated the experiment for the rest of the materials Q, R and S.



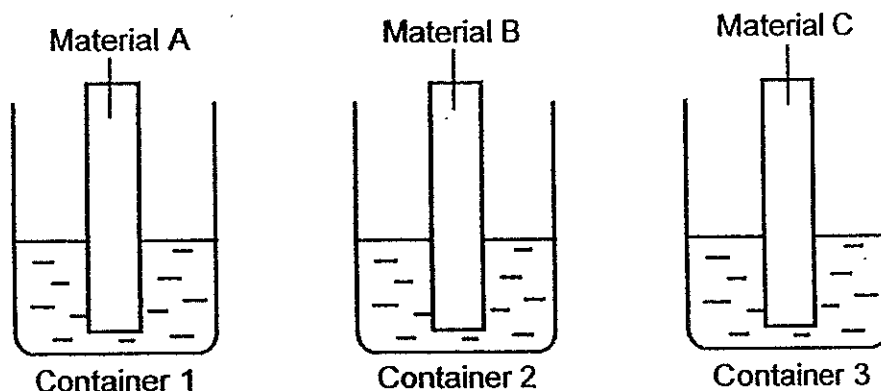
The table below shows the amount of weight required to break each material.

Materials	Amount of weight required to break the material (kg)
P	9
Q	18
R	5
S	13

- (a) Arrange the materials (P, Q, R and S) according to their strength. Start from the strongest. (1m)

- (b) Based on the information given in the table above, which material (P, Q, R or S) is most suitable for making a box to carry heavy objects? Support your choice. (1m)

31. Amelia placed three pieces of material A, B and C (30g each) into 3 containers, 1, 2 and 3 as shown in the diagram below. Each container contains 100 ml of water. After 15 minutes, Amelia removed the materials and measured the amount of water left in the containers.



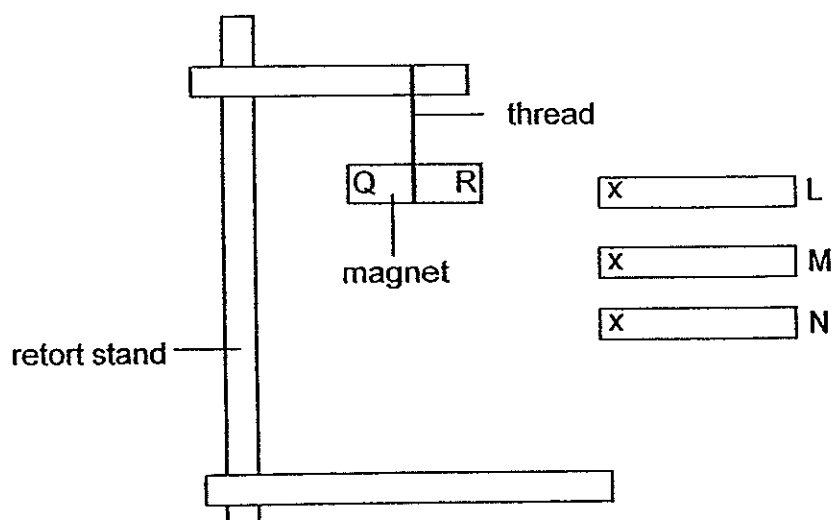
The table below records the amount of water left in the containers.

Containers	1	2	3
Amount of water left in the container (ml)	20	70	100

- (a) At the end of the experiment, material A was the heaviest? Explain why. (1m)

- (b) Which material (A, B or C) is most suitable for making a raincoat? Explain your choice. (2m)

32. Tim hung a magnet freely from a retort stand using a piece of thread as shown below. He then moved the ends of the objects L, M and N marked with 'x' near the poles of the magnet, Q and R.



He then recorded his observations as shown below.

Object L was attracted to Q and R. It does not repel Q and R.

Object M was not attracted to Q and R. It does not repel Q and R.

Object N was not attracted to Q but was attracted to R. It repelled Q but does not repel R.

- (a) Based on the results, which of the following objects (L, M or N) is most likely to be a magnet, an iron nail and aluminium foil respectively? (3m)

(i) Magnet : _____

(ii) Iron nail : _____

(iii) Aluminium foil : _____

- (b) Can the iron nail be made into a temporary magnet? Explain why. (1m)

End of Paper

EXAM PAPER 2014**LEVEL : PRIMARY 3****SCHOOL : ROSYTH SCHOOL****SUBJECT : SCIENCE****TERM : SA1**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	3	4	1	3	2	1	3	4	3
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
3	2	1	3	1	3	4	2	3	4

Q21		Characteristic 1: Living things move.
		Characteristic 2 : living things respond to changes in the environment.
Q22	(a)	There was no air.
	(b)	Place a water plant in the glass container or air pump.
Q23	(a)	Scales
	(b)	Amphibian
Q24	(a)	Fin. To help the fish swim, balance and steer their bodies in the water.
	(b)	Gills
Q25	(a)	Roots
	(b)	It helps the plant to make food.
Q26	(a)	A weak stem
	(b)	To get sunlight
Q27	(a)	5 cm
	(b)	The height of plant W increased from January to October and decreased between October and December.
Q28	(a)	Y : cap
		Z: stalk
	(b)	A mushroom reproduce by spores.
Q29	(a)	(i) G (ii) E (iii) F (iv) H
	(b)	Living thing E is a flowering plant but living thing F is not a flowering plant.
	(c)	No. Toadstool reproduces by spores and living thing H does not reproduce by spores.
Q30	(a)	Q, S, P, R
	(b)	Material Q. It is the strongest material as it could hold the most weights before it broke.

Q31	(a)	It absorbed most water.
	(b)	Material C. It is waterproof cause it does not absorb any water.
Q32	(a)	(i) Magnet : N (II) Iron Nail : L (III) Aluminium foil : M
	(b)	Yes. It is a magnetic material.

FIRST SEMESTRAL ASSESSMENT 2014

SCIENCE

PRIMARY THREE

NAME: _____ ()

DATE: _____

CLASS: PRIMARY 3 SY / C / G / SE / P

BOOKLET A

15 questions

30 marks

Total time for Booklets A & B: 1 h

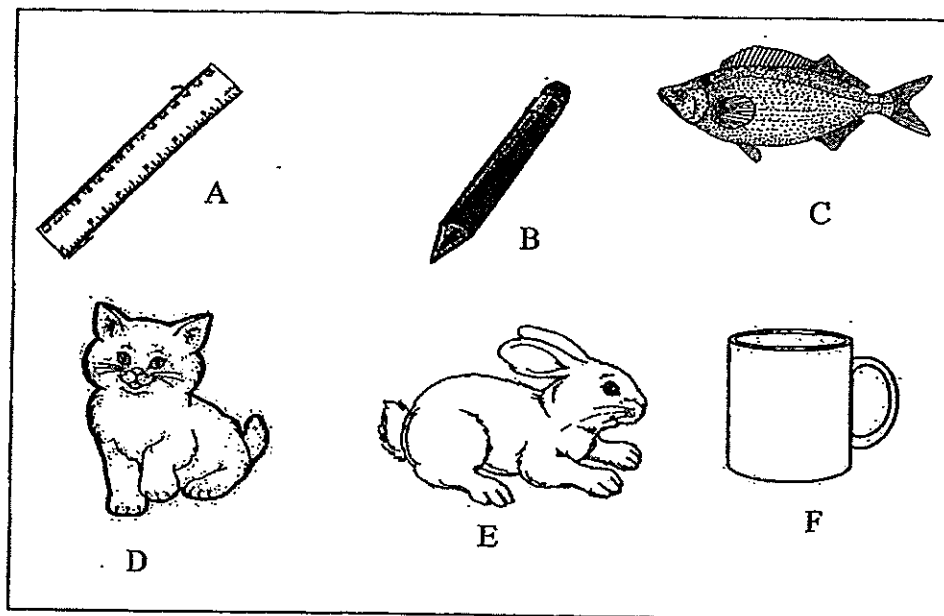
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

Part I (15 x 2 marks)

For each question from 1 to 15, 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.**

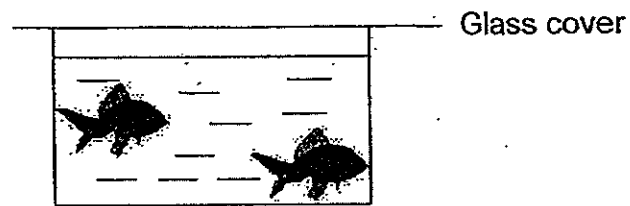
1. Jane wanted to help her younger sister sort the things out as shown below.



Which of the following shows that she has correctly classified the things under the correct headings?

	Non-living Things	Living Things
1)	A, C and D	B, E and F
2)	A, B and F	C, D and E
3)	C, D and E	A, B and F
4)	D, E and F	A, B and C

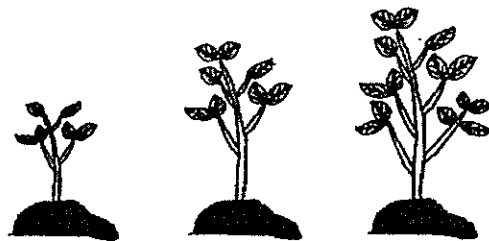
2. Look at the picture below.



What would happen to the fish in the fish tank if they were left alone for a week?

	Would the fish be alive?	Reason
1)	Yes	There is enough air and water.
2)	Yes	There is enough food.
3)	No	There is no water and food.
4)	No	There is not enough air.

3. The diagram shows what happens to a plant over 5 weeks.

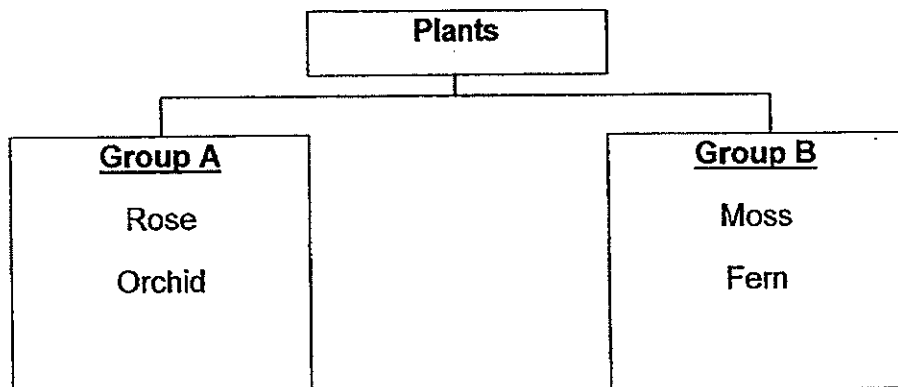


Which of the statements correctly describe what you can observe?

A	It increases in height.
B	It grows more leaves.
C	It reproduces
D	It dies.

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

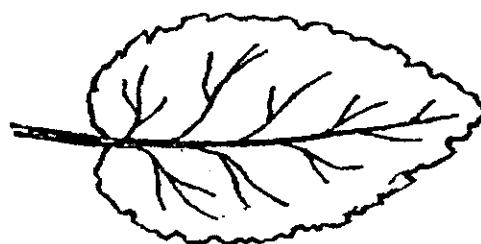
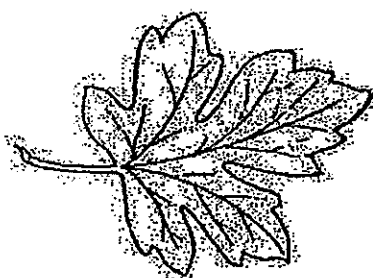
4. Study the classification chart.



Which of the following are suitable headings for Groups A and B?

	A	B
1)	Grow from spores	Grow from seeds
2)	Flowering	Non-flowering
3)	Grow in water	Grow on land
4)	Have no fruits	Have fruits

5. Shirley collected 2 leaves from her school garden.



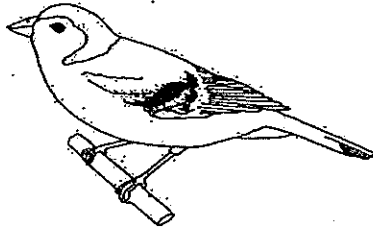
Based on what you can see only in the diagrams, how are the 2 leaves similar?

- 1) Both are edible.
- 2) Both are heart shaped.
- 3) Both have a leaf stalk.
- 4) Both the leaves are of the same size.

6. Three animals are shown below.



Dragonfly



Robin



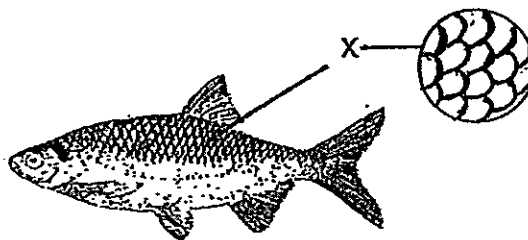
Bat

Which of the following statement(s) is / are true for all the 3 animals?

- A. They can fly.
- B. They have a pair of legs only.
- C. They lay eggs for reproduction.
- D. They have feathers as their outer covering.

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

7. The diagram shows a fish. The part marked X helps the fish to _____.



- 1) get food
- 2) change direction
- 3) breathe in the water
- 4) protect its soft body

8. Study the characteristics of A, B, C and D.

	Can swim	Has 3 body parts	Lay eggs	Has hair
A	✓		✓	
B		✓	✓	
C			✓	✓
D	✓			✓

Which one of them is most likely to be a turtle?

- 1) A
 - 2) B
 - 3) C
 - 4) D
9. Sharon wrote a riddle about an animal for her friend to guess.

I live on land and in water.
My body is moist.
I breathe through my skin and lungs.
What am I?

What is the likely animal Sharon has in mind?

- 1) goldfish
- 2) crocodile
- 3) salamander
- 4) terrapin

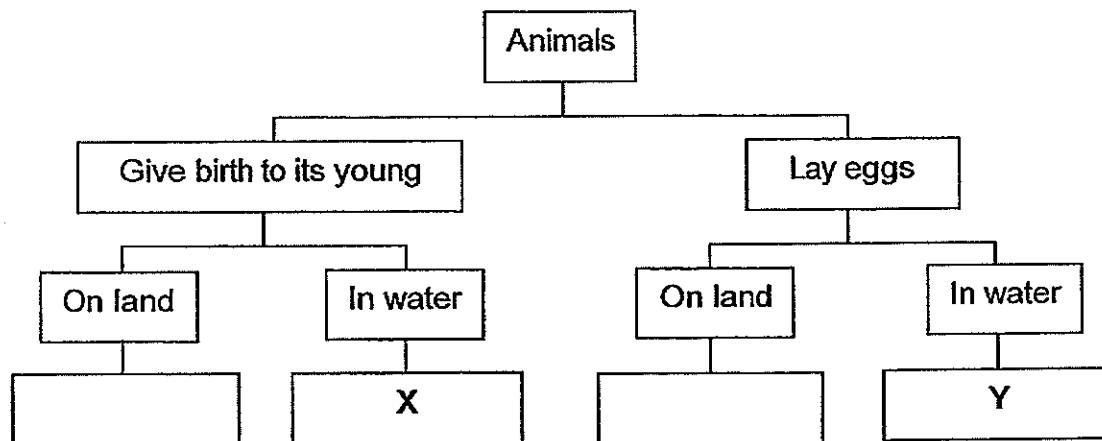
10. 4 children were told to write a statement each about Animal X.

- A: It has hair.
- B: It can swim.
- C: It has 4 legs.
- D: It feeds its young with milk.

Which of the 2 statements tell you that Animal X is a mammal?

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

11. Study the chart below carefully.



Which of the following is a correct representation of **Animals X and Y**?

	Animal X	Animal Y
1)	Dolphin	Goldfish
2)	Frog	Snake
3)	Monkey	Duck
4)	Grasshopper	Mudskipper

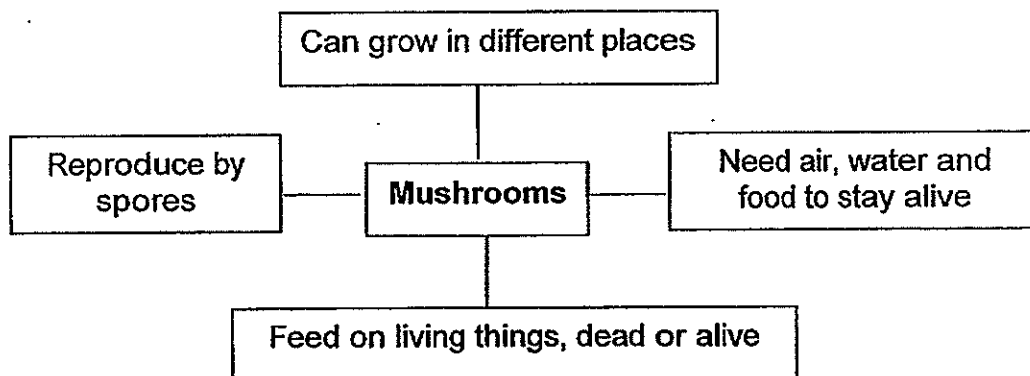
12. Study the table below.

	Does it make its own food?	Can it move from place to place on its own?
A	Yes	No
B	No	Yes
C	No	No

Which of the following is the correct representation of A, B and C?

	A	B	C
1)	plant	animal	fungi
2)	fungi	animal	plant
3)	fungi	plant	animal
4)	animal	plant	fungi

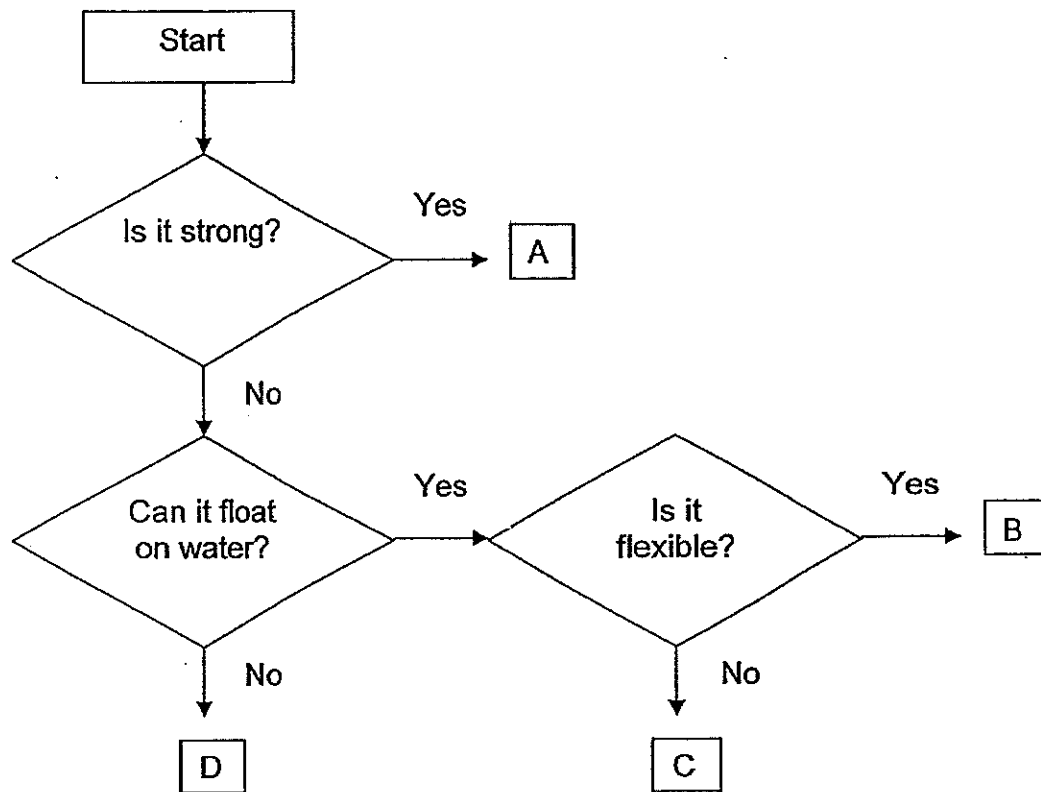
13. Sue examines some mushrooms and records the following information.



Based only on the information given by Sue, which of the following is true?

- 1) Mushrooms are edible.
- 2) Mushrooms are colourful.
- 3) Mushrooms are living things.
- 4) Mushrooms can make their own food.

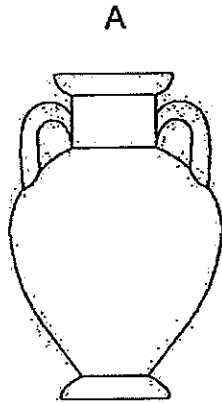
14. The flow chart below shows the characteristics of some balls made of different materials.



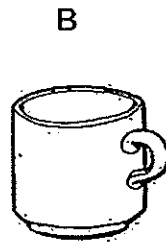
Which of the following is a possible material for **Ball C**?

- 1) rubber
- 2) cork
- 3) ceramic
- 4) metal

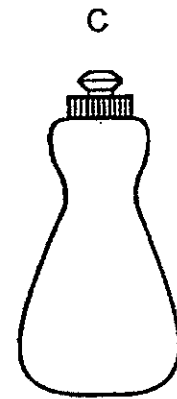
15. Which of the following object/s will not break if it/they is/are dropped from the table onto the floor?



ceramic vase



glass mug



rubber bottle

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

FIRST SEMESTRAL ASSESSMENT 2014

SCIENCE

PRIMARY THREE

NAME: _____ ()

DATE: _____

CLASS: PRIMARY 3SY / C / G / SE / P

Booklet A		30
Booklet B		20
Total		50

Parent's Signature

BOOKLET B

9 questions

20 marks

Total time for Booklets A & B: 1 h

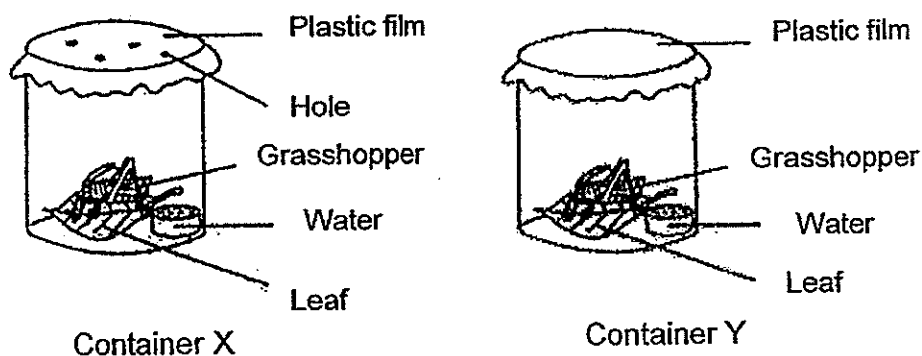
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

Part II (20 marks)

Answer all the following questions.

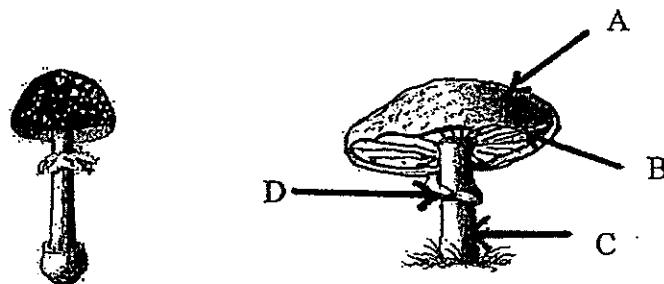
16. Peter conducted an experiment to find out if the grasshopper from Container X or Container Y can live longer.



- a) Which grasshopper is able to live longer? [1]

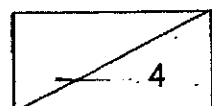
- b) Give a reason to your answer in (a). [1]

17. Look carefully at the diagrams below.

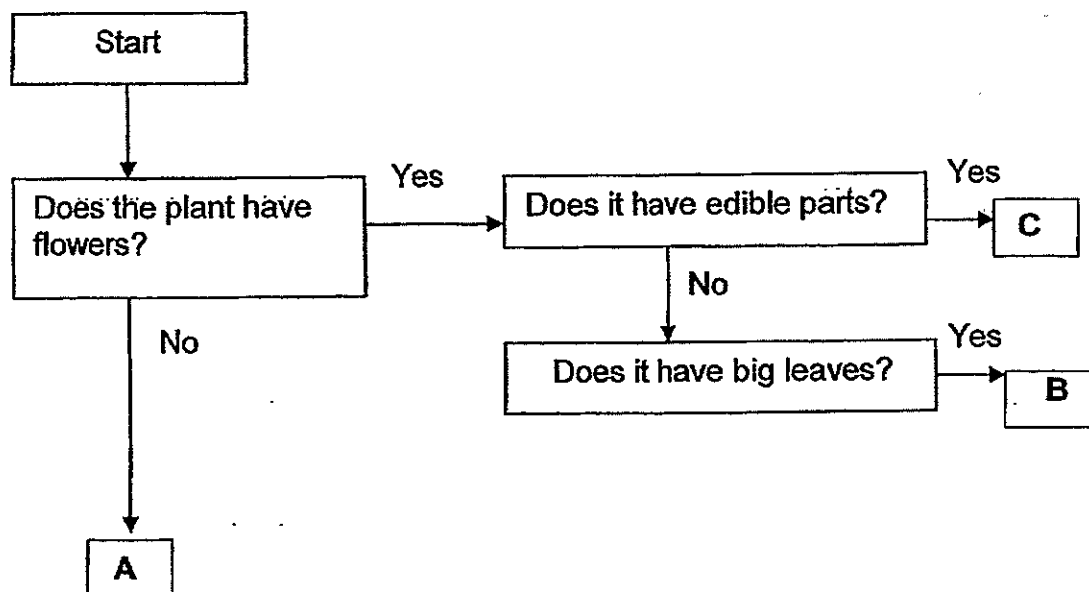


- a) Which group of living things do the organisms above belong to? [1]

- b) Which arrows, A, B, C or D in the diagram above, shows where spores can be found ? [1]



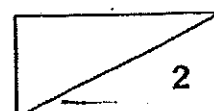
18. Study the flow chart below which represents plants A, B and C.



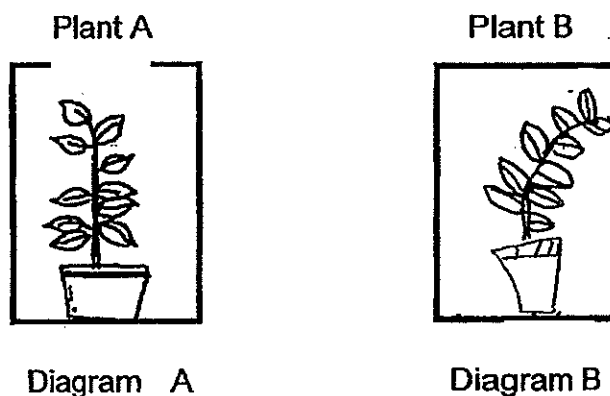
Write down 2 characteristics of Plant C. (2m)

(i) _____

(ii) _____



19. Sally grew 2 identical plants in 2 different cardboard boxes in her garden. After 1 week, she found Plant A growing in the manner as shown in diagram A. How would Plant B look like?



- a) Help her to draw how the plant in Diagram B would look like. [1]
- b) What caused Plant B to look like the way you have drawn in **Diagram B**? [1]

20. Janice wanted to choose a material to make the lenses of her spectacles. Look carefully at the descriptions and help her make the correct decision.



Material X	Does not allow light to pass through
Material Y	Allows most light to pass through

- a) Which material, X or Y, is more suitable for making the lenses of her spectacles? [1]

- b) Name a material that is suitable for making her lenses. [1]

21. Kelvin toasted 3 similar slices of bread and sprinkled different amounts of water on them before putting them into 3 sealed bags. The 3 bags were then placed in a cupboard for 5 days.

	Amount of water added / ml	Amount of mould found on Day 5
Bread X	0	No mould
Bread Y	5	Small patches
Bread Z	10	Large patches

Study the table above and fill in the blanks with the suitable words as given in the boxes below. [2]

- a)

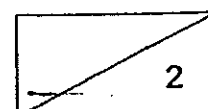
decreases	remains the same	also increases
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As the amount of water added to the different pieces of bread increases, the amount of mould found growing on them _____

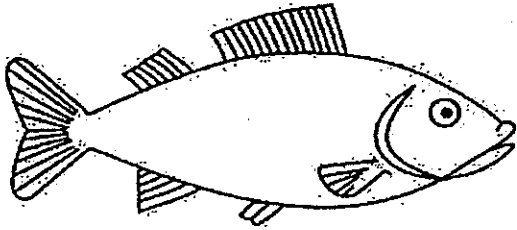
- b)

in his cupboard	in his refrigerator	in his school bag
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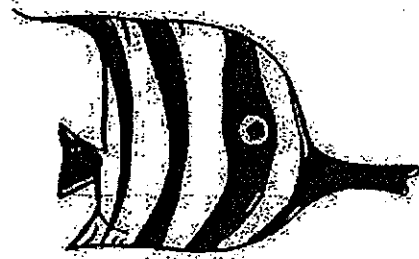
If Kelvin wanted to keep his bread fresh for as long as possible, he should keep his bread _____



22. Look carefully at the 2 animals. [Do not compare the shape and size of the animals]



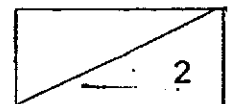
Fish A



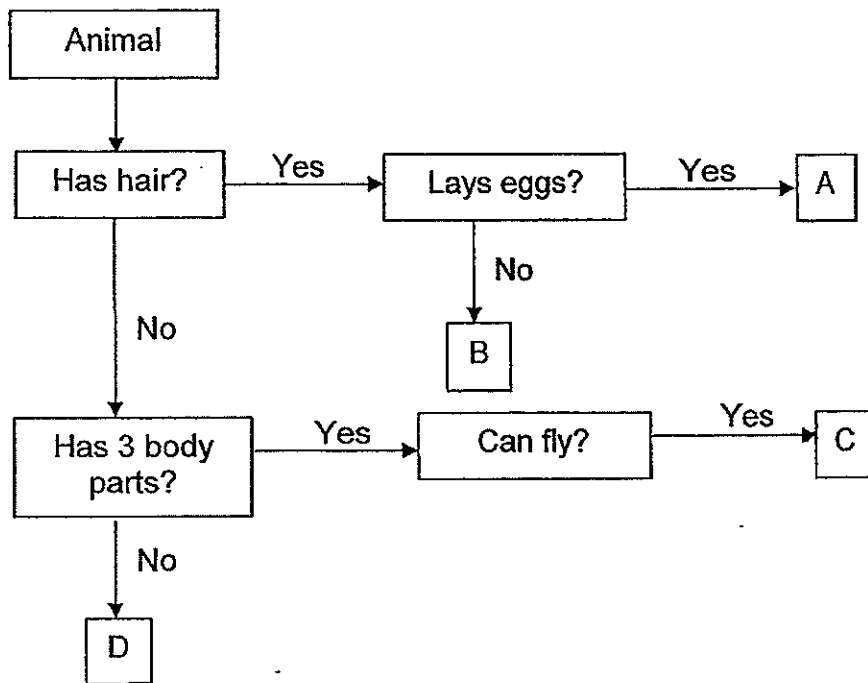
Fish B

- a) Based on what you can see only, besides the eyes, write down a similarity between Fish A and Fish B. [1]

- b) Based on what you can see only, besides the fins, write down a difference between Fish A and Fish B. [1]



23. Study the flowchart below carefully.



a) Circle the letter that represents a bee. [1]

b) Circle all the other characteristics of the animals that can be found in Group C in the box as shown below. [1]

a pair of feelers	no feelers
8 legs	6 legs
3 body segments	2 body segments

24. The properties of 3 materials P, Q and R are written in the table as shown below.

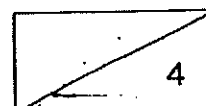
Property Material	Waterproof	Flexible	Floats on water
P	No	No	Yes
Q	Yes	Yes	No
R	Yes	No	Yes

Study the table carefully.

- a) Describe Material P. [1]

- b) Which material, P, Q or R is the most suitable to make a toy boat? [1]

- c) Which material, P, Q or R ^{is} the most suitable to make a raincoat? Explain your answer. [2]



Singapore Chinese Girls' School

Science SA1 2014

Section A

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

Section B

- 16) (a) Grasshopper X
(b) Grasshopper X has more or unlimited air but Grasshopper Y has less/limited air.
- 17) (a) Fungi
(b) B
- 19) (a) Diagram shows the stem of plant bent towards the hole
(b) The plant is responding to light/growing towards light.
- 20) (a) Material Y
(b) Glass/Plastic
- 21) (a) also increases
(b) in his refrigerator
- 22) (a) Both have fins/tails.
(b) Fish A has no stripes but Fish B has stripes.
OR: Fish B has elongated mouth but Fish A doesn't.
- 23) (a) C
(b) A pair of feelers and 6 legs.
- 24) (a) P is not waterproof, not flexible but floats on water.
(b) R
(c) Material Q. It is flexible and waterproof.



PRIMARY 3 MID-YEAR EXAMINATION 2014

Name : _____ () Date: 19 MAY 2014

Class : Primary 3 ()

Time: 8.00a.m. to 9.15 a.m.

Parent's Signature : _____

Duration: 1 h 15 min

Marks: _____ / 50

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.

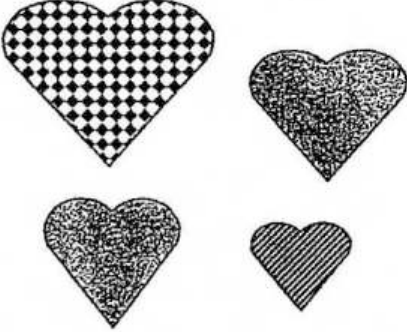
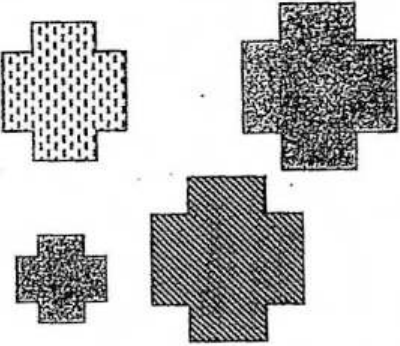
Follow all instructions carefully.

Answer all questions.

Booklet A (25 x 2 marks = 50 marks)

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

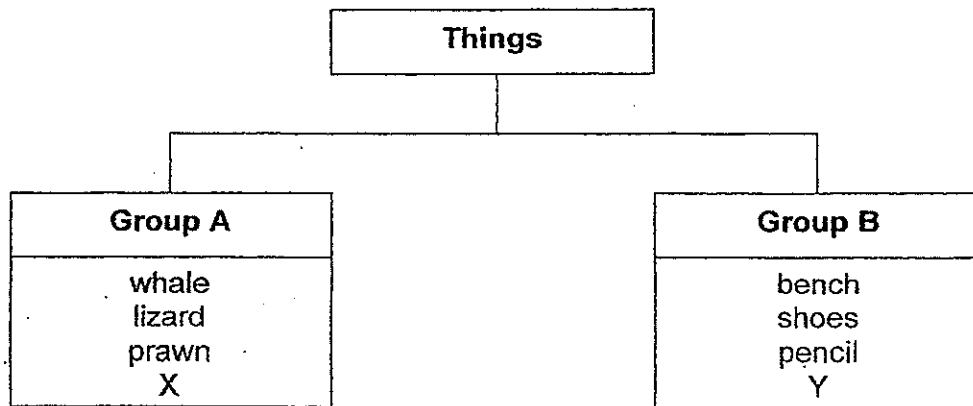
1. Study the classification table below.

Group A	Group B
	

How are the things in Group A and Group B classified?

- (1) Things in Group A and Group B are grouped according to their sizes.
- (2) Things in Group A and Group B are grouped according to their shapes.
- (3) Things in Group A and Group B are grouped according to their colours.
- (4) Things in Group A and Group B are grouped according to their patterns.

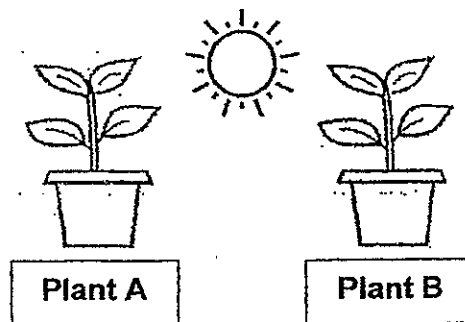
2. Study the classification chart below.



Which of the following represents X and Y correctly?

	X	Y
(1)	frog	tree
(2)	ruler	fish
(3)	yeast	scissors
(4)	button	raincoat

3. Brendan placed two similar pots of plants, Plant A and Plant B, at the same place in his school garden as shown below. He watered Plant B but not Plant A.



After some time, he noticed that Plant B grew taller but Plant A died. He concluded that plants need _____ to stay alive.

- (1) air
- (2) food
- (3) water
- (4) sunlight

4. Chloe went camping and sat very close to the fire at the start of the campfire sing-along session. She moved away from it when it got too warm. This shows that living things can _____

- (1) grow
- (2) reproduce
- (3) need air, food and water
- (4) respond to changes around them

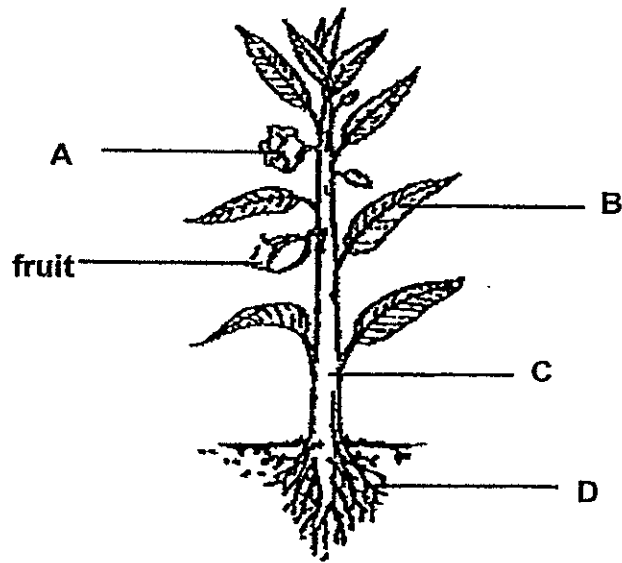
5. Celine placed two things, P and Q, separately into two containers. Both P and Q were given the same amount of air, food and water. She then made some observations of P and Q after a week as shown in the table below.

P	Q
Fed on food and water	Did not feed on food and water
Grew bigger after a week	No change in size after a week

Which of the following could P and Q be?

	P	Q
(1)	snail	rabbit
(2)	stone	pencil
(3)	marble	terrapin
(4)	hamster	storybook

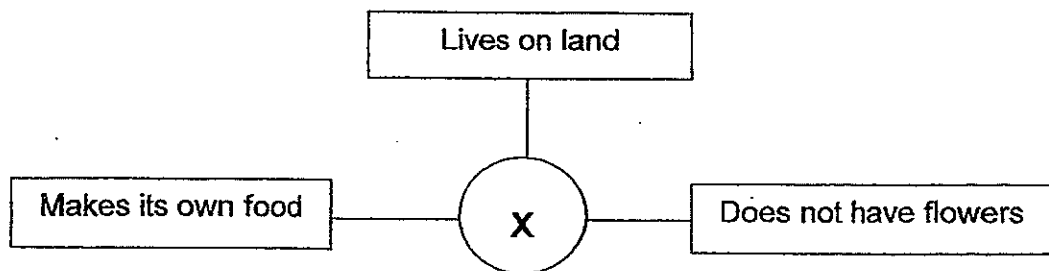
6. Study the plant below.



Which of the following represents the plant parts correctly?

	Roots	Stem	Leaf	Flower
(1)	C	A	D	B
(2)	B	D	A	C
(3)	A	B	C	D
(4)	D	C	B	A

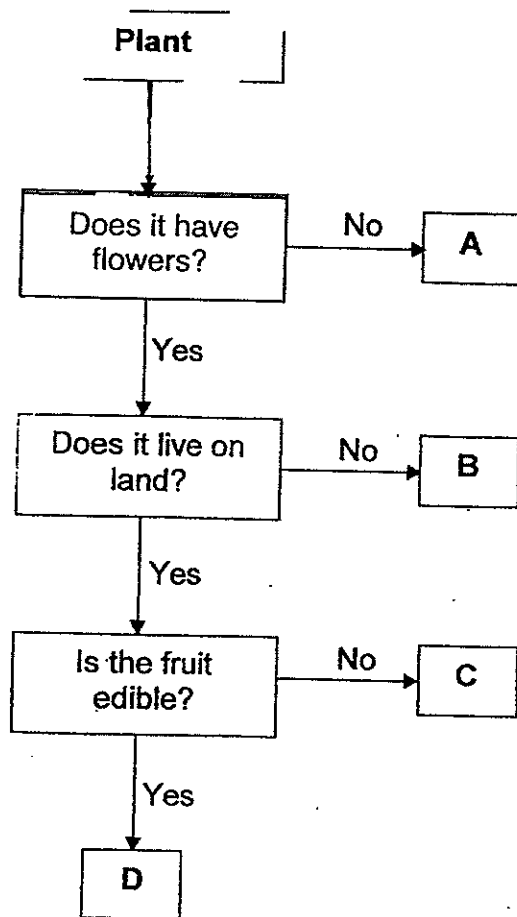
7. Study the diagram below.



Which one of the following best represents X?

- (1) hydrilla
- (2) mushroom
- (3) rose plant
- (4) bird's nest fern

Plant be



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

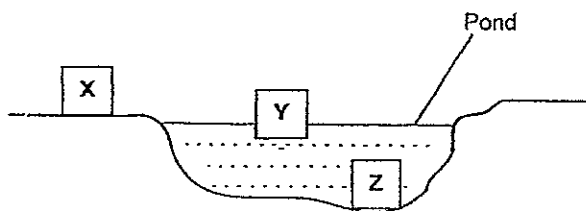
	A	B	C	D
(1)	mango tree	water lily	rubber tree	moss
(2)	mango tree	rubber tree	moss	water lily
(3)	moss	water lily	rubber tree	mango tree
(4)	moss	rubber tree	water lily	mango tree

9. The following table shows some information on 3 plants, X, Y and Z.
A tick (✓) shows that the living thing has the characteristic(s).

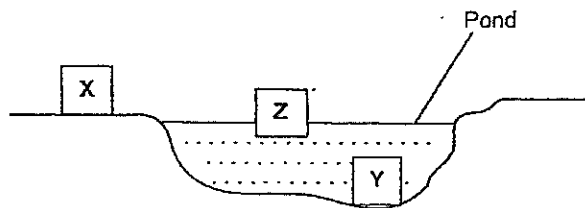
Characteristics	Plants		
	X	Y	Z
It is a land plant.	✓		
It floats in water.		✓	

Which one of the following shows the possible places where these plants can be found?

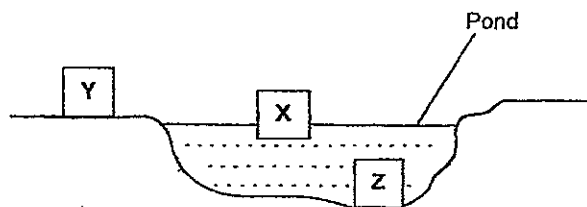
(1)



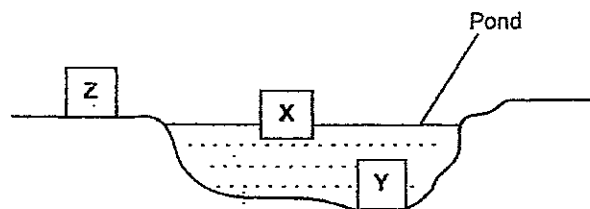
(2)



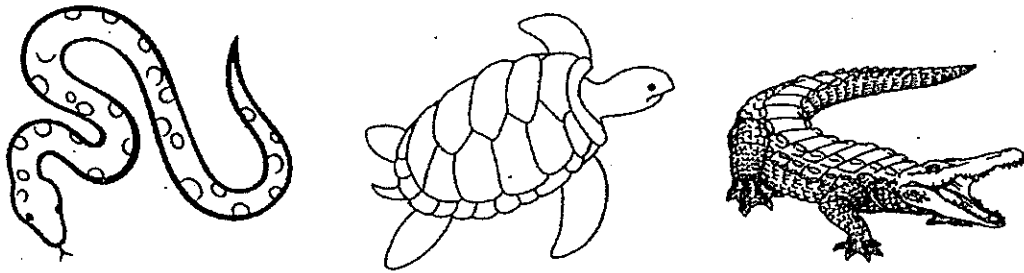
(3)



(4)



10. Study the pictures below.



The animals above are placed under the same group. Based on their body covering, how are these animals being grouped?

- (1) They have hair as their body covering.
- (2) They have scales as their body covering.
- (3) They have feathers as their body covering.
- (4) They have moist skin as their body covering.

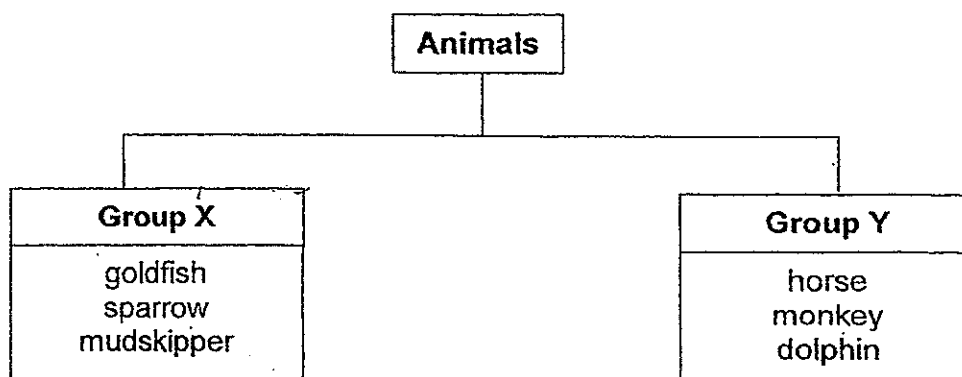
11. Serene grouped the animals as shown in the table below.

Group X	Group Y
owl	man
eagle	dog
platypus	whale

The animals are grouped according to _____.

- (1) the way they move
- (2) their body covering
- (3) the way they reproduce
- (4) the type of food they eat

12. Study the diagram below.



Which of the following animals belongs to Group Y?

- (1) parrot
- (2) snake
- (3) giraffe
- (4) grasshopper

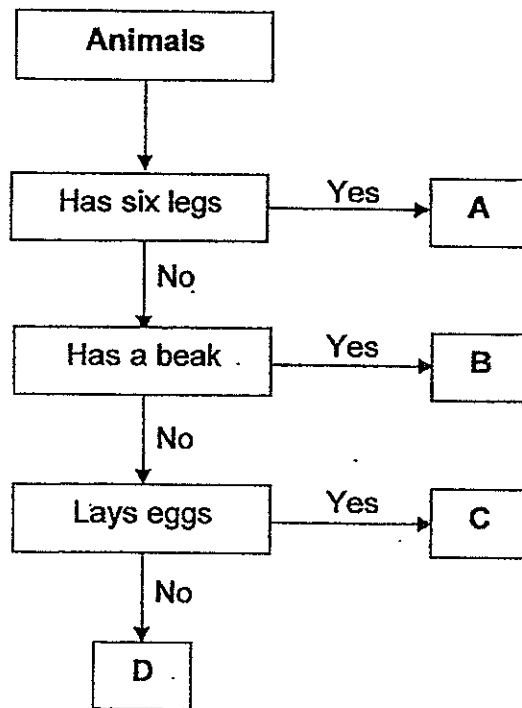
13. The table below shows the characteristics of four animals, A, B, C and D. A tick (✓) shows that the animal has the characteristic.

Animals	Number of legs			Has wings	Has feelers
	2	4	6		
A	✓			✓	
B		✓			
C			✓	✓	✓
D			✓		✓

Which animals, A, B, C or D could the ladybird and ostrich be?

	Ladybird	Ostrich
(1)	C	A
(2)	B	A
(3)	D	C
(4)	B	D

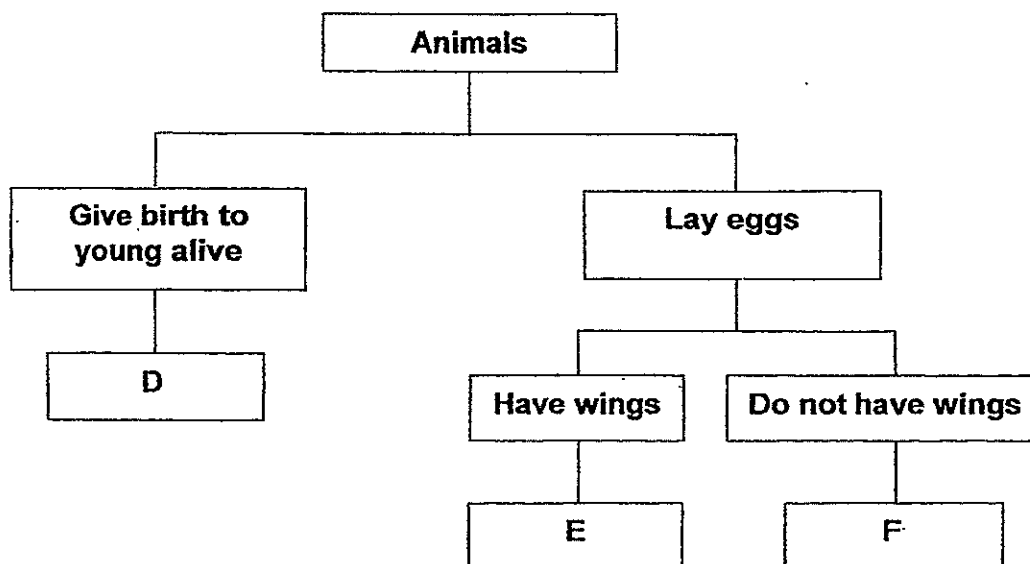
14. Study the flowchart below.



Which of the following correctly identifies the animals A, B, C and D?

	A	B	C	D
(1)	elephant	kingfisher	frog	housefly
(2)	housefly	kingfisher	elephant	frog
(3)	housefly	kingfisher	frog	elephant
(4)	housefly	elephant	frog	kingfisher

15. Study the classification table below.



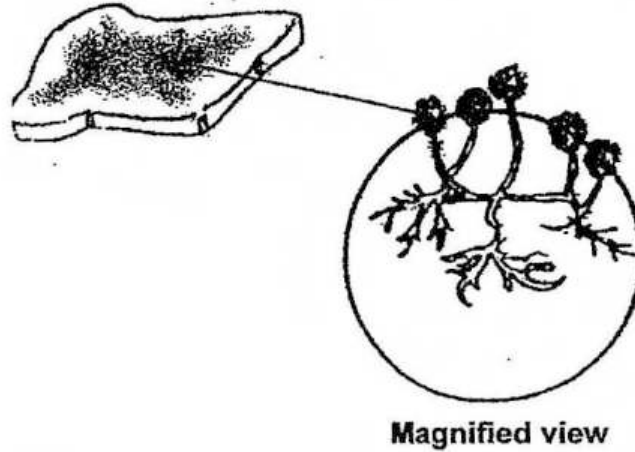
Which of the following represents D, E and F?

	D	E	F
(1)	penguin	seahorse	giraffe
(2)	zebra	penguin	seahorse
(3)	giraffe	zebra	penguin
(4)	seahorse	giraffe	zebra

16. Which one of the following statements about bacteria is true?

- (1) Bacteria reproduce by spores.
- (2) Bacteria can make its own food.
- (3) Bacteria respond to changes around them.
- (4) Bacteria can be seen with our naked eyes.

17. Isaac left a piece of bread in a plastic bag for a week. When he opened the bag, he saw some spots on the bread. His mother told him that it was bread mould.



Which of the following is/are the characteristics of the bread mould?

- A. It is a flowering plant.
- B. It reproduces by spores.
- C. It gets food from the bread it grows on.

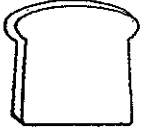
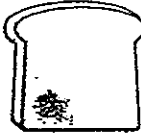

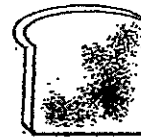
- (1) A only
 - (2) C only
 - (3) B and C only
 - (4) A and B only
18. Eugene placed some bacteria under a microscope and observed them for 30 minutes.

Time	0 minute	10 minutes	20 minutes	30 minutes
Amount of bacteria reproduced	2	4	8	16

What does the observation tells us about the bacteria?

- (1) Bacteria can reproduce.
- (2) Bacteria need time to grow bigger.
- (3) Bacteria will continue to grow in size.
- (4) Bacteria need air, food and water to grow.

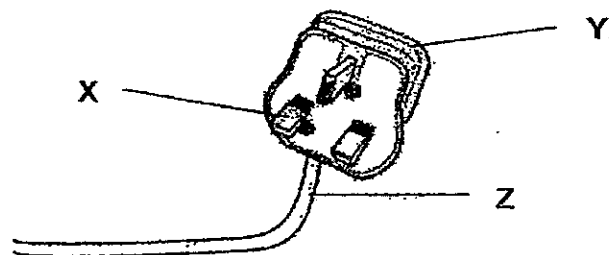
19. Joelle wanted to find out if the different amount of water affects the growth of the bread mould on 4 similar slices of bread. The diagrams below show the result of the growth of the bread mould after the bread slices were left on the kitchen table for a week.

			
Bread Slice V	Bread Slice X	Bread Slice Y	Bread Slice Z
10 ml of water	20 ml of water	30 ml of water	40 ml of water

Which of the following statements about the experiment is true?

- (1) The amount of water does not affect the growth of the bread mould.
- (2) The higher the temperature of the water, the larger the amount of bread mould growing on the bread.
- (3) The greater the amount of water sprinkled on the bread, the larger the amount of bread mould growing on bread.
- (4) The greater the amount of water sprinkled on the bread, the smaller the amount of bread mould growing on bread.

20. The diagram below shows an electrical plug.



Which of the following correctly shows the materials used for part X, Y and Z?

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

21. Study the objects below.



ceramic plate



ceramic bowl



glass cup

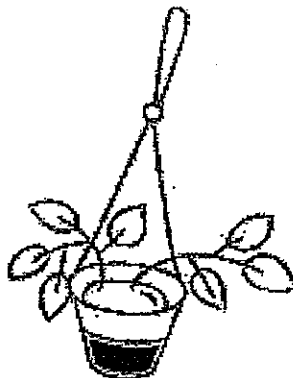


glass jar

Which of the following physical properties best describe all the objects?

- (1) They are flexible.
- (2) They are transparent.
- (3) They can float in water.
- (4) They can break easily when dropped.

22. Dylan wants to hang some flower pots in the school garden. The flower pots must not break easily when dropped to the ground.



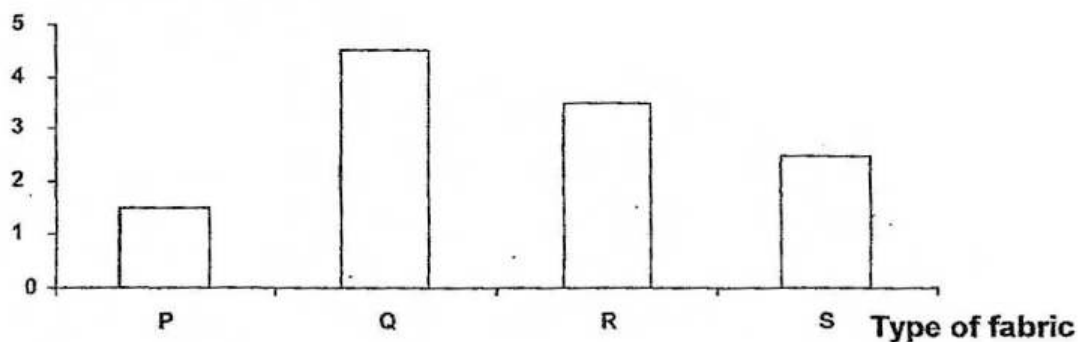
Hanging flower pot

Which of the following material is most suitable for making the flower pot?

- (1) glass
- (2) paper
- (3) cotton
- (4) plastic

23. Four different types of fabric, P, Q, R and S of the same size and thickness were placed in four containers for two minutes. Each container contains 50 ml of water. The bar graph below shows the amount of water left in the four containers after the fabrics were taken out of the water.

Amount of water left in the container (ml)



Which fabric absorbs the most amount of water?

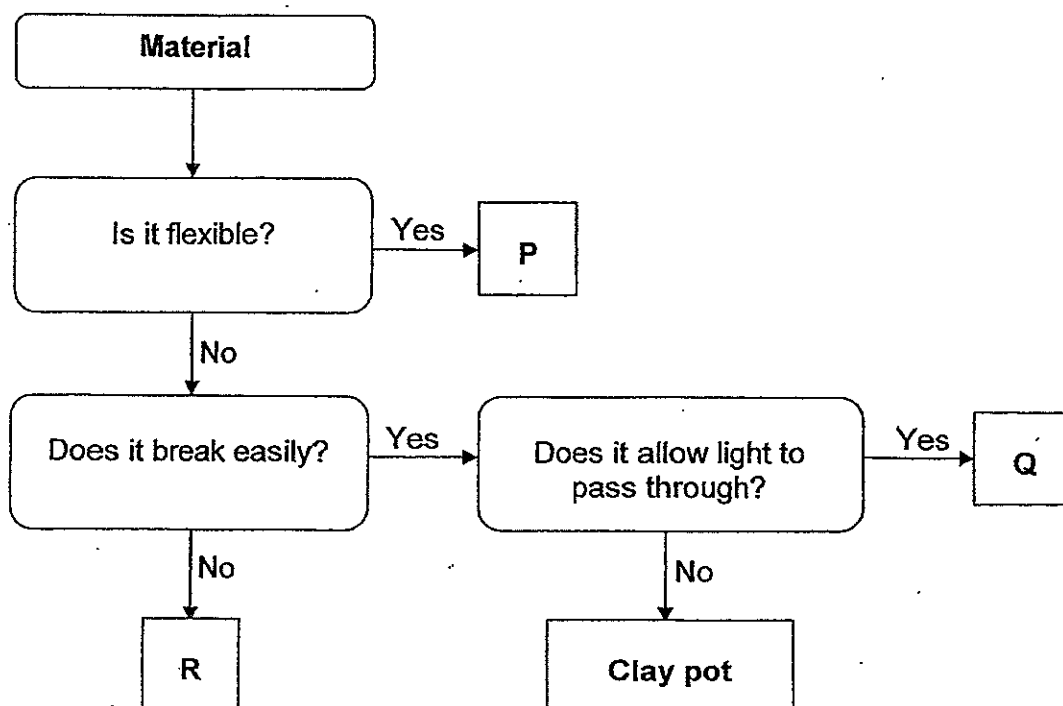
- (1) P
 - (2) Q
 - (3) R
 - (4) S
24. The objects below are classified into 2 groups, A and B. The objects in each group are made of materials with a similar property.

Group A	Group B
cork ping pong ball polystyrene ball	eraser metal key glass marble

What can be used to describe the properties of Groups A and B?

	Group A	Group B
(1)	flexible	stiff
(2)	strong	weak
(3)	float in water	sink in water
(4)	waterproof	not waterproof

25. Study the flowchart below.



Which of the letters in the flowchart correctly represents a wine glass, a bath towel and a metal ruler?

	Wine Glass	Bath Towel	Metal Ruler
(1)	R	P	Q
(2)	R	Q	P
(3)	Q	P	R
(4)	Q	R	P



PRIMARY 3 MID-YEAR EXAMINATION 2014

Name : _____ () Date: 19 MAY 2014

Class : Primary 3 ()

Time: 8.00a.m. to 9.15 a.m.

Parent's Signature : _____

Duration: 1h 15min

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.

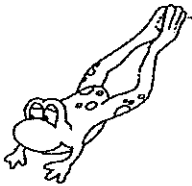

Booklet B (30 marks)

Write your answers in the spaces provided.

26. Kelly observed some animals in the eco-garden and recorded her observations in the table below.

Animal	Legs	Wings	Antennae	Tail
A	4	0	0	✓
B	6	4	2	✓
C	6	2	2	
D	0	0	0	✓
E	4	0	0	
F	2	2	0	✓

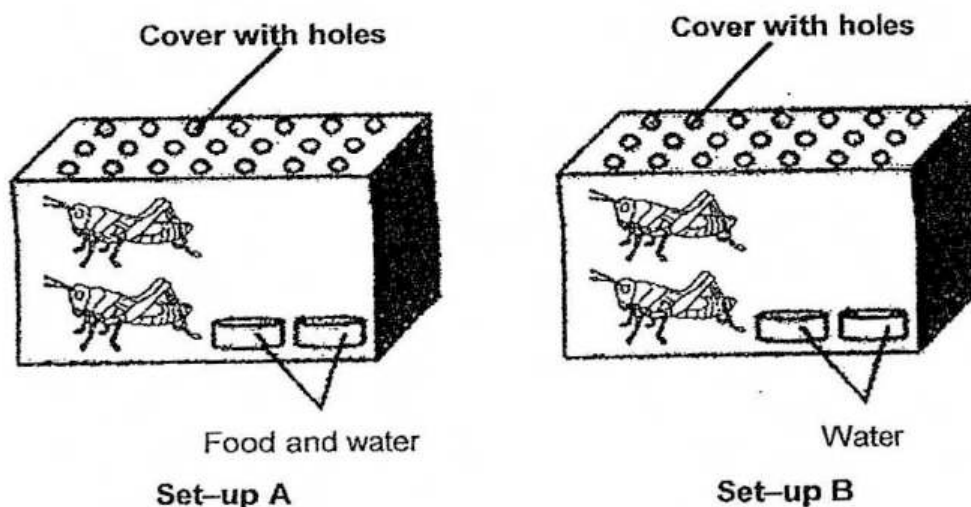
- (a) Based on the table above, use letters A, B, C, D, E, or F to identify the following animals. (1m)

Picture of Animal	Animal
	
	

- (b) Based on the table above, state one difference between Animal B and Animal C. (1m)

- (c) Based on the table above, can Animal D be classified as a fish? Give a reason for your choice of answer. (1m)

27. Isabelle placed two similar grasshoppers in each of the two separate glass containers as shown below.



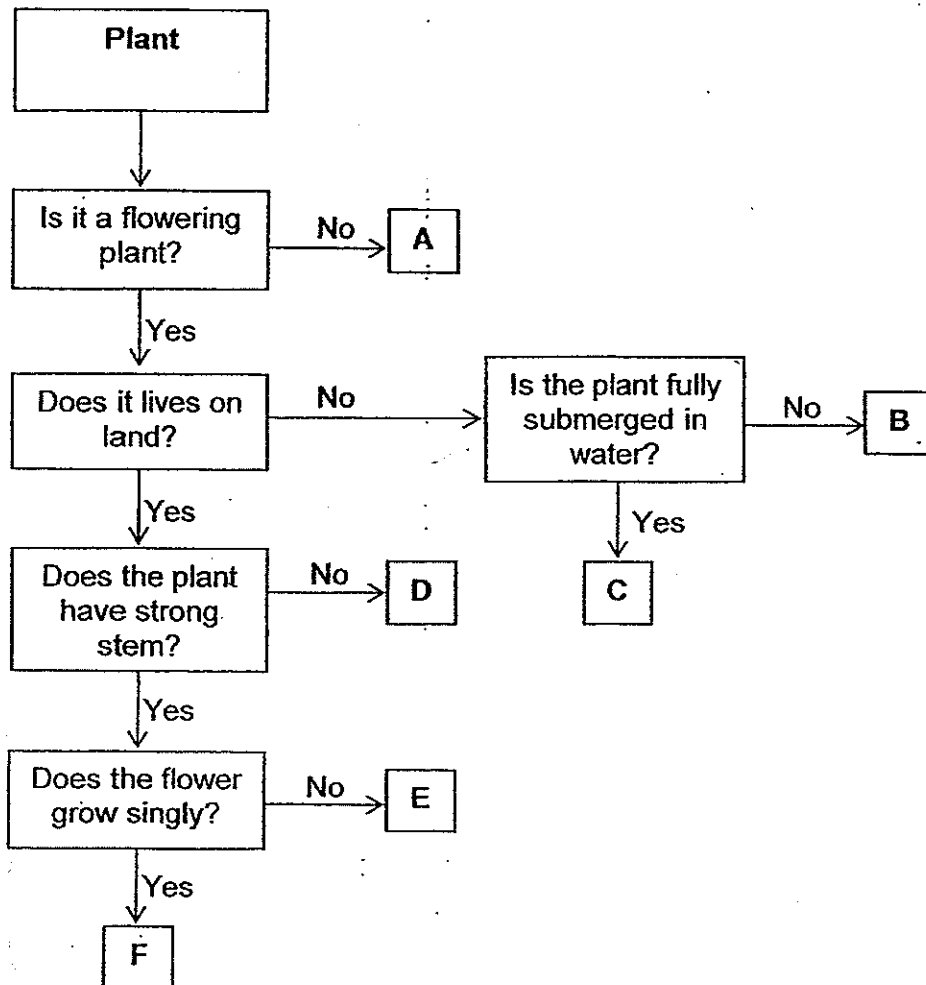
- (a) What was the aim of Isabelle's experiment? Place a tick (✓) in the table given below. (1m)

Aim of the experiment	Tick (✓)
The aim of the experiment is to find out if the presence of air affects the survival of the grasshoppers.	
The aim of the experiment is to find out if the presence of food affects the survival of the grasshoppers.	
The aim of the experiment is to find out if the presence of water affects the survival of the grasshoppers.	

- (b) After two weeks, Isabelle observed that the grasshoppers in one of the set-ups were dead. In which set-up would the grasshoppers still be alive? Explain your answer. (1m)

- (c) Isabelle observed that the number of grasshoppers in Set-up A increased after two weeks. State the characteristic of living things which the grasshoppers were showing. (1m)

28. Look at the classification chart below.



Identify objects A to F and write the letter that represents each object in the box provided. (3m)

Hibiscus:

Moss:

Coconut Palm:

Elodea:

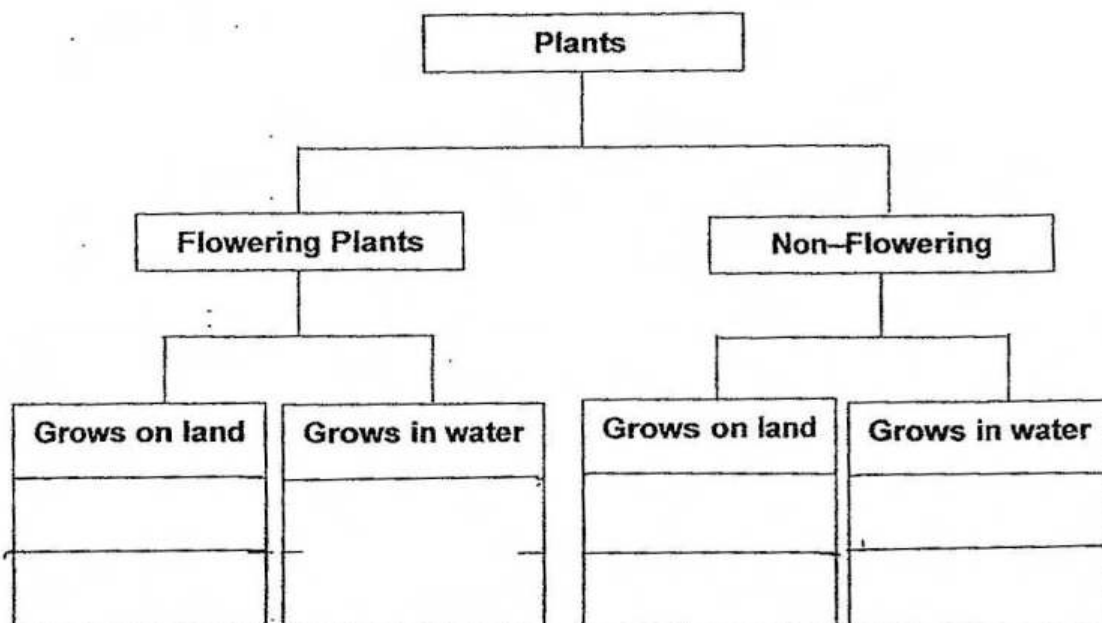
Morning Glory:

Duckweed:

29. The characteristics of the Plant A, B, C and D are listed in the table below.

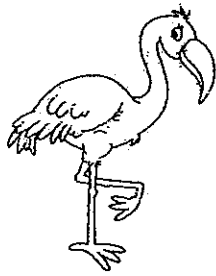
Characteristics	Plant			
	A	B	C	D
Has flowers	✓	×	×	✓
Has fruits	✓	×	×	✓
Reproduces by seeds	✓	×	×	✓
Grows on land	✓	×	✓	×

(a) Use the information above to complete the classification chart below. (2m)

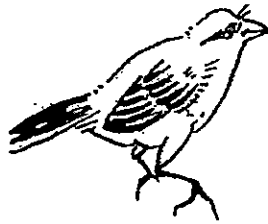


(b) Based on the table above, state one difference between Plant C and Plant D (1m)

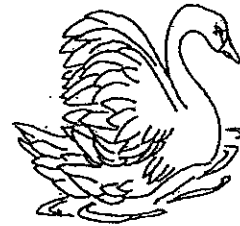
30. Study the animals shown below.



Flamingo



Sparrow



Swan

(a) Based on the pictures above, state two characteristics which all the three animals above have. (2m)

- (i) _____

- (ii) _____

(b) Study the list of animals below. Circle the animal that can be grouped with the animals above. (1m)

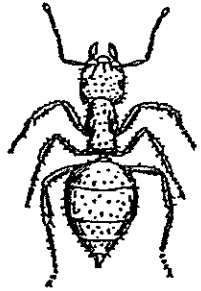
Kangaroo

Penguin

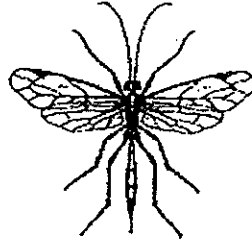
Bat

Seahorse

31. Observe the two animals as shown in the diagrams below.



Animal X



Animal Y

- (a) Based on your observations, which group of animals do Animal X and Animal Y belong to? (1m)

- (b) Explain your answer in (a). (1m)

- (c) State one difference between Animal X and Animal Y. (1m)

32. Joshua placed a bowl of cooked rice beside a window. Three days later, he noticed that the rice started to give out a sour smell. Joshua's mother explained to him that bacteria had caused the rice to turn bad.

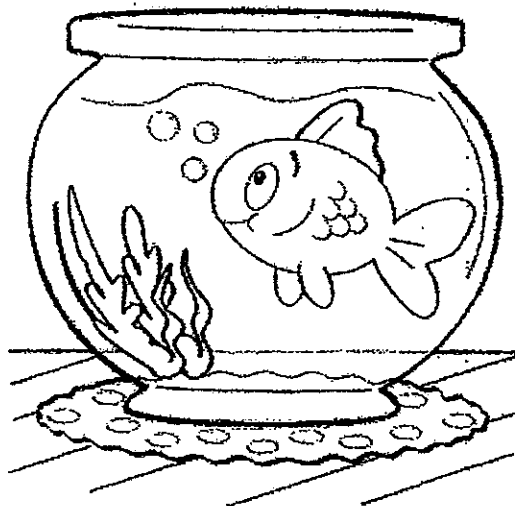


- (a) Where do you think the bacteria came from? (1m)

- (b) Where should Joshua place the bowl of rice to prevent it from turning bad? Explain your choice. (1m)

- (c) Some bacteria are useful. Name one useful function of such bacteria in our daily lives. (1m)

33. Winston kept a fish in a fish bowl as shown in the picture below. He was able to see the fish from any part of the bowl.



- (a) Name one material that can be used to make a fish bowl.

(1m)

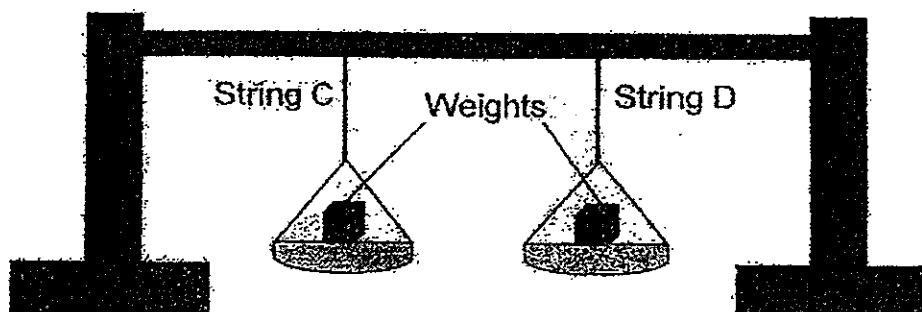
- (b) State two properties that the material in (a) have which makes it suitable for making the fish bowl.

(2m)

(i)

(ii)

34. Wendy set up an experiment to test the strength of two strings which was made of different materials, C and D.



She added weights until the string broke. The table below shows the mass of the weights that each string could hold before it broke.

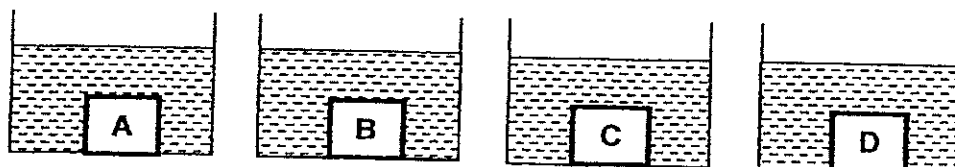
String	Mass of Weights (g)
C	80
D	30

- (a) Which string, C or D, is stronger? Explain your answer. (1m)

- (b) Tick (✓) the variables that must be kept the same in order for this experiment to be a fair test. (2m)

Variable	Variable that must be kept the same
Material of pan	
Length of string	
Mass of weights	
Material of string	

35. Irene 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 separate container as shown in the diagram below. Each container was filled with 60 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 below.



Materials	Amount of water left in the container (ml)
A	50
B	25
C	45
D	60

- (a) Which of the materials, A, B, C or D, is most suitable to make into a raincoat and a mop? Give your reason for choosing the material for each object. (3m)

Object	Material	Reason
Mop		
Raincoat		

– End of Paper –

EXAM PAPER 2014**SCHOOL : TAO NAN PRIMARY SCHOOL****SUBJECT : PRIMARY 3 SCIENCE****TERM : SA1****BOOKLET A**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	3	3	4	4	4	4	3	1	2	3	3	1	3	2
Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25					
3	3	1	3	3	4	4	1	3	3					

BOOKLET B

Q26

- a) E, F
- b) Animal B have a tail but animal C does not have a tail.
- c) Animal D can be classified as a fish because it have a tail and have no legs, wings or antennna.

Q27

- a) The aim of the experiment is to find out if the presence of food affects the survival of the grasshoppers.
- b) The grasshoppers in set-up A would still be alive because it has air, food and water.
- c) Living things reproduce.

Q28

Hibiscus: F

Moss: A

Coconut Palm: E

Elodea: C

Morning Glory: D

Duckweed: B

Q29

- a) Flowering Plants - Grows on land: Plant A. Grows in water: Plant D.
Non-flowering - Grows on land: Plant C. Grows in water: Plant B.
- b) Plant D is a flowering plant but Plant C is a non-flowering plant.

Q30

- a) (i) They have wings.
(ii) They have feathers as their outer covering.
- b) Penguin

Q31

- a) Insects
- b) Both Animal X and Animal Y have 3 pairs of legs and have feelers.
- c) Animal Y has wings but Animal X does not have wings.

Q32

- a) The bacteria came from the air.
- b) Joshua should place it in the fridge because the fridge has cold air and less bacteria.
- c) Bacteria can make cheese.

Q33

- a) Glass
- b)(i) Glass is transparent so that Winston is able to see the fish from any part of the bowl.
(ii) Glass is waterproof so that it can hold water.

Q34

- a) String C is stronger because it can hold more mass of the weights than string D.
- b) Material of pan, Length of string

Q35

- a) Mop: Material - B
Reason - Material B absorb the most amount of water.
- Raincoat : Material - D
Reason - It is waterproof so that when wearing the raincoat will not get wet.



Anglo-Chinese School (Primary)

END-OF-YEAR EXAMINATION 2014
SCIENCE
PRIMARY THREE
BOOKLET A

Name: _____

Class: Primary 3 _____

Date: 30 October 2014

Duration of paper: 1 h 30 min

Parent's/Guardian's signature

INSTRUCTION TO CANDIDATES

1. This question paper consists of **13** printed pages including this cover page.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answer on the Optical Answer Sheet (OAS) provided.

For each of the following questions from 1 to 24, 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. [48 marks]

1 Study the classification table below carefully.

A	B	C	D
Wine	Butter	Tyres	Wires
Beans	Eggs	Newspapers	Needles
Raisins	Milk	Erasers	Buttons

Which one of the groups contains items that come from non-living things?

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

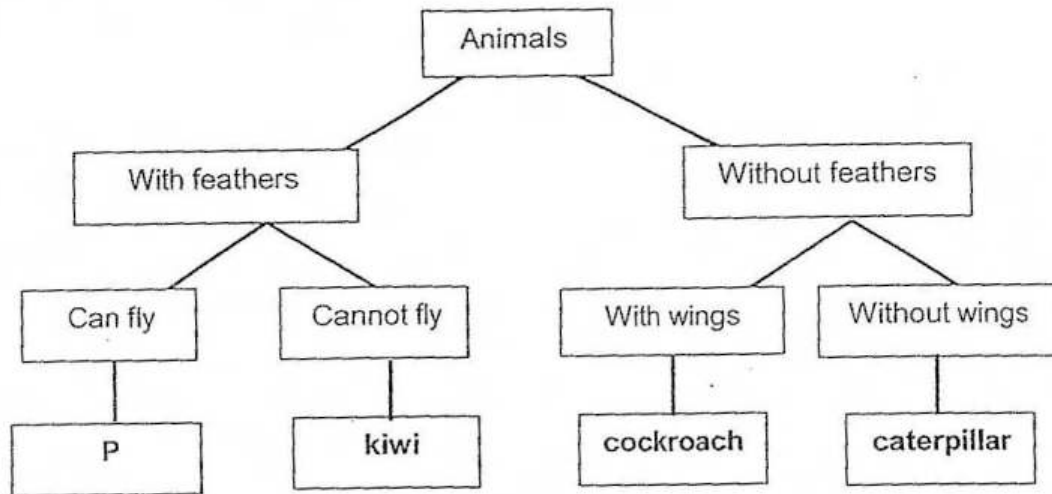
2 Which of the following characteristics do insects have?

- A They lay eggs.
- B They are warm-blooded.
- C They are covered with fur.
- D They have three body parts.

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

(Go on to the next page)

3 Study the classification chart below.



Which one of the following animals is likely to be P?

- (1) Moth
- (2) Eagle
- (3) Ostrich
- (4) Butterfly

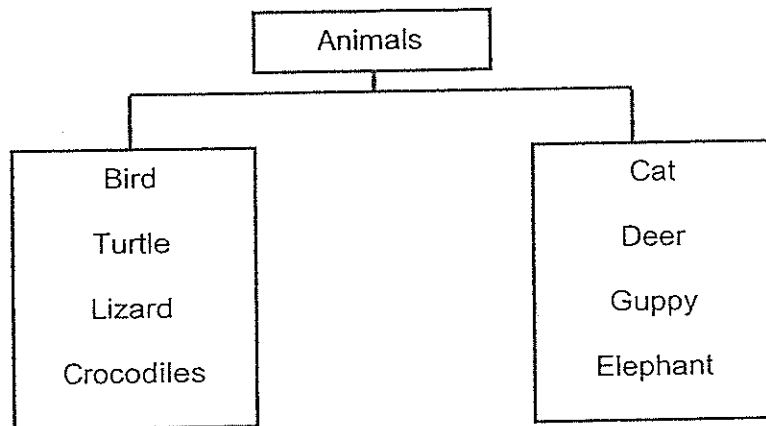
4 Peter planted four chilli plants, A, B, C and D, in four similar pots. He placed the plants under different conditions as represented in the table below.

Chilli Plant	Air	Sunlight	Water
A	No	Yes	No
B	Yes	No	No
C	No	Yes	Yes
D	Yes	Yes	Yes

Which plants will most likely die after two weeks?

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

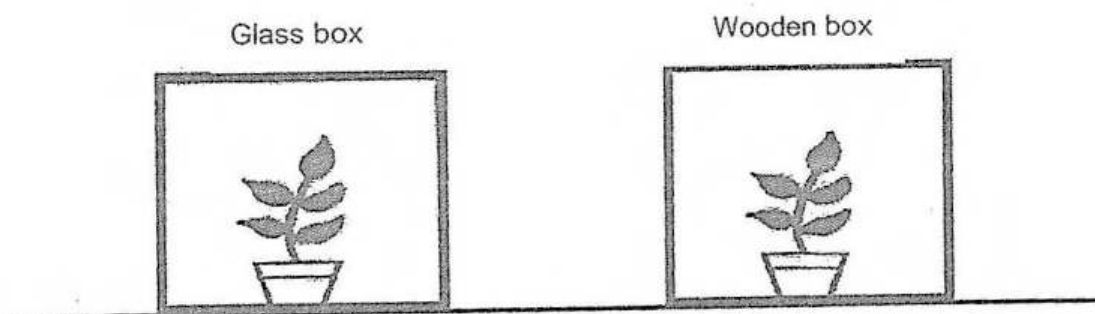
- 5 Study the classification chart below.



Based on the classification chart above, how are the animals grouped?

- (1) The way they move
 - (2) The way they reproduce
 - (3) The type of food they eat
 - (4) The type of outer covering
- 6 Which of the following object(s) is/are made from living things?
- A Paper
 - B Metal ruler
 - C Cotton wool
 - D Plastic straw
- (1) A only
 - (2) C only
 - (3) A and C only
 - (4) B and D only

- 7 Two pots of similar plants were given the same amount of water and covered with boxes made from different materials but of the same size. They were then placed in an open field for one week.



After one week, three pupils observed that only the plant in the wooden box died.

The three pupils made the following statements on why the plant in the wooden box died.

Alice : The plant in the wooden box did not have enough air.

Brandon : The plant in the wooden box did not receive enough water.

Candice : The plant in the wooden box did not receive sunlight.

Whose statement(s) correctly explain(s) why the plant had died?

- (1) Alice only
 - (2) Brandon only
 - (3) Alice and Candice only
 - (4) Brandon and Candice only
- 8 A compass, like a freely-suspended magnet, always comes to rest in a _____ position.
- (1) East-West
 - (2) North-East
 - (3) South-West
 - (4) North-South

- 9 Zachary observed the characteristics of four animals and recorded his observations in the table shown below. A tick (✓) indicates that the animal has the described characteristic.

Characteristics Animal	Has legs	Lays eggs	Has hair
Monkey	✓		✓
Ostrich	✓	✓	
Mosquito		✓	✓
Elephant	✓		✓

Which one of the following animals' characteristics has Zachary recorded incorrectly?

- (1) Ostrich
 - (2) Monkey
 - (3) Elephant
 - (4) Mosquito
- 10 Tim took a bar magnet and divided it into four equal parts, A, B, C and D with a marker. He placed the bar magnet in a box of iron nails and then took it out. He recorded the number of iron nails the bar magnet attracted in the table below.

Part of the magnet	Number of iron nails attracted
A	1
B	6
C	7
D	3

Which parts of the magnet are most likely its poles?

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

(Go on to the next page)

11 Ming Ming wanted to separate two different types of materials using a magnet. Which one of the following sets of materials would he be able to separate using his magnet?

- (1) Sand and plasticine
- (2) Steel clips and iron nails
- (3) Copper wire and steel staples
- (4) Paper strips and aluminium

12 Which two objects make use of magnets?

- A Balloon
- B Compass
- C Refrigerator
- D Styrofoam cup

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

13 Study the classification table below carefully.

Group A	Group B	Group C
Wood	Frosted glass	Clear window glass
Metal	Tracing paper	Clear spectacle lenses

Which one of the following objects can be placed in Group C?

- (1) Metal plate
- (2) Handkerchief
- (3) Wooden door
- (4) Glass aquarium

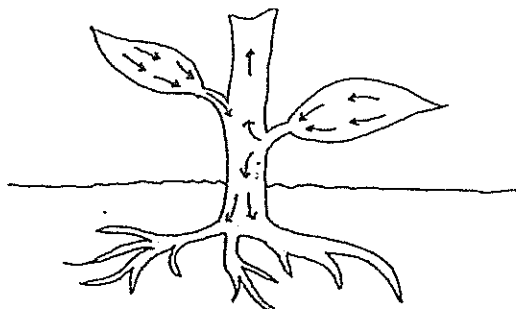
- 14 John has four electromagnets, A, B, C and D. The table below shows the number of paper clips each electromagnet can attract with different number of coils of wire coiled around them.

Electromagnet	Number of coils of wire	Number of clips attracted
A	10	3
B	20	12
C	30	?
D	40	20

What is the likely number of clips attracted by electromagnet C?

- (1) 8
- (2) 10
- (3) 15
- (4) 29

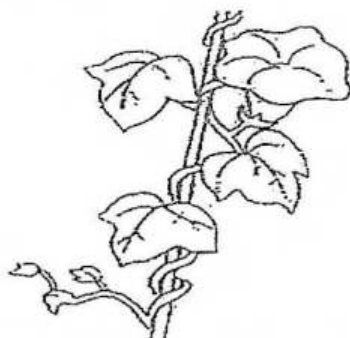
- 15 The diagram below shows part of a plant.



The arrows show the path taken by the _____ in the plant.

- (1) food
- (2) water
- (3) colours
- (4) mineral salts

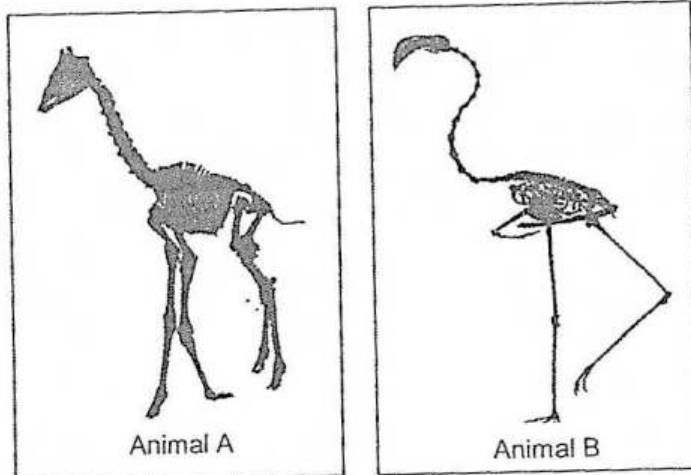
16 Study the picture below carefully.



Some plants with weak stems climb up a support in order to get _____.

- (1) air
- (2) food
- (3) water
- (4) sunlight

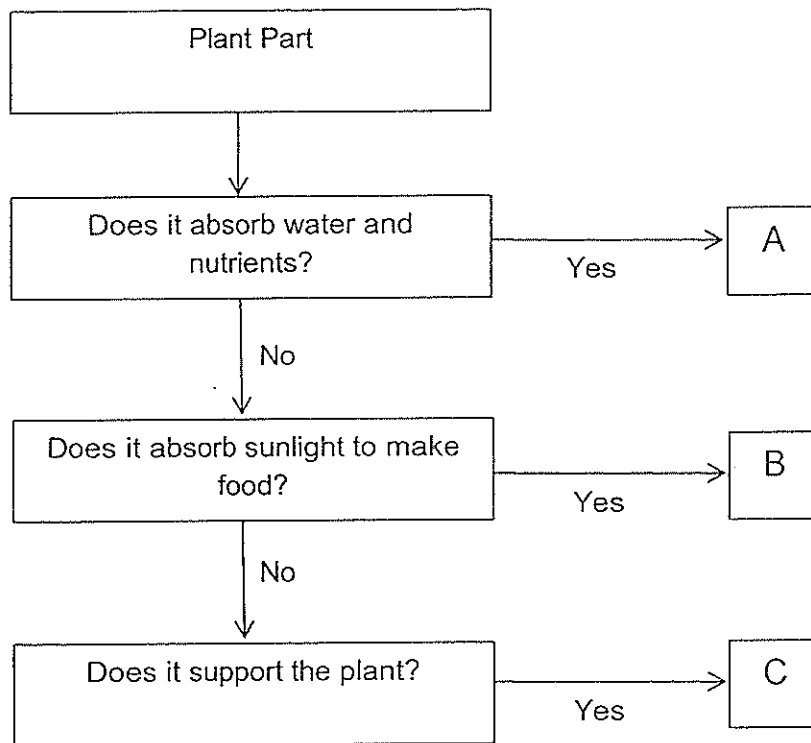
17 Study the diagrams below carefully. They show the skeleton of two different animals.



Which one of the following conclusions is not possible to make from looking at the diagrams alone?

- (1) Both animals have a backbone.
- (2) Both animals have a long neck.
- (3) Both animals feed on plants only.
- (4) Both animals are supported by their skeletal systems.

18 Study the flow chart below carefully.



Which plant parts are A, B and C likely to be?

	A	B	C
(1)	Stem	Leaf	Roots
(2)	Roots	Leaf	Stem
(3)	Leaf	Stem	Roots
(4)	Stem	Roots	Leaf

19 Which one of the following is not a system?

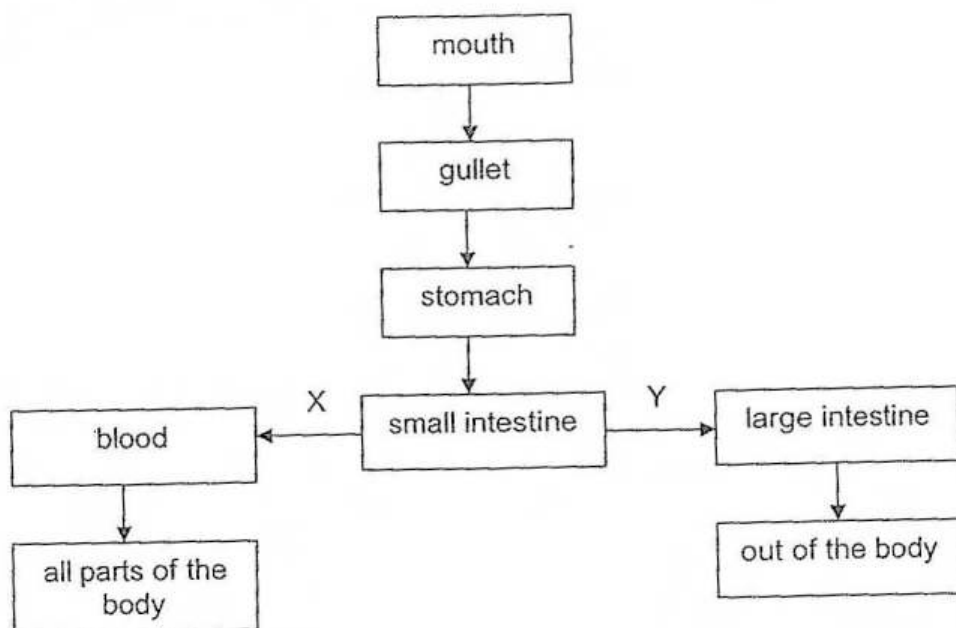
- (1) Piano
- (2) Marble
- (3) Camera
- (4) School shoes

20 Thomas took part in a 100 m race. Which of the following body systems did he use when he was running?

- A Circulatory system
- B Muscular system
- C Respiratory system
- D Skeletal system

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

21 The diagram below shows the movement of food through some parts of the body in the digestive system.



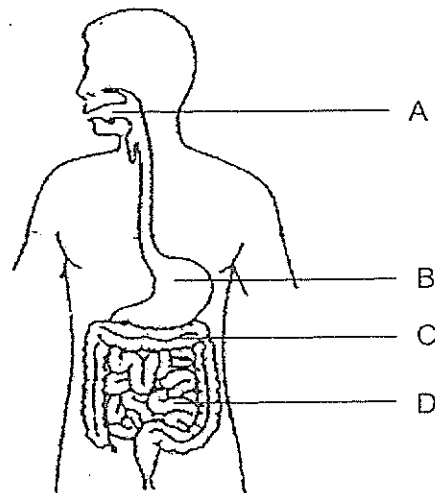
What do X and Y represent?

	X	Y
(1)	Water	Digested food
(2)	Digested food	Undigested food
(3)	Undigested food	Water
(4)	Water	Undigested food

- 22 The table below shows one organ that can be found in the different body systems. Which one of the following incorrectly matches the organ to the system that it is found in?

	System	Organ
(1)	Respiratory	Lungs
(2)	Skeletal	Small intestine
(3)	Circulatory	Heart
(4)	Digestive	Stomach

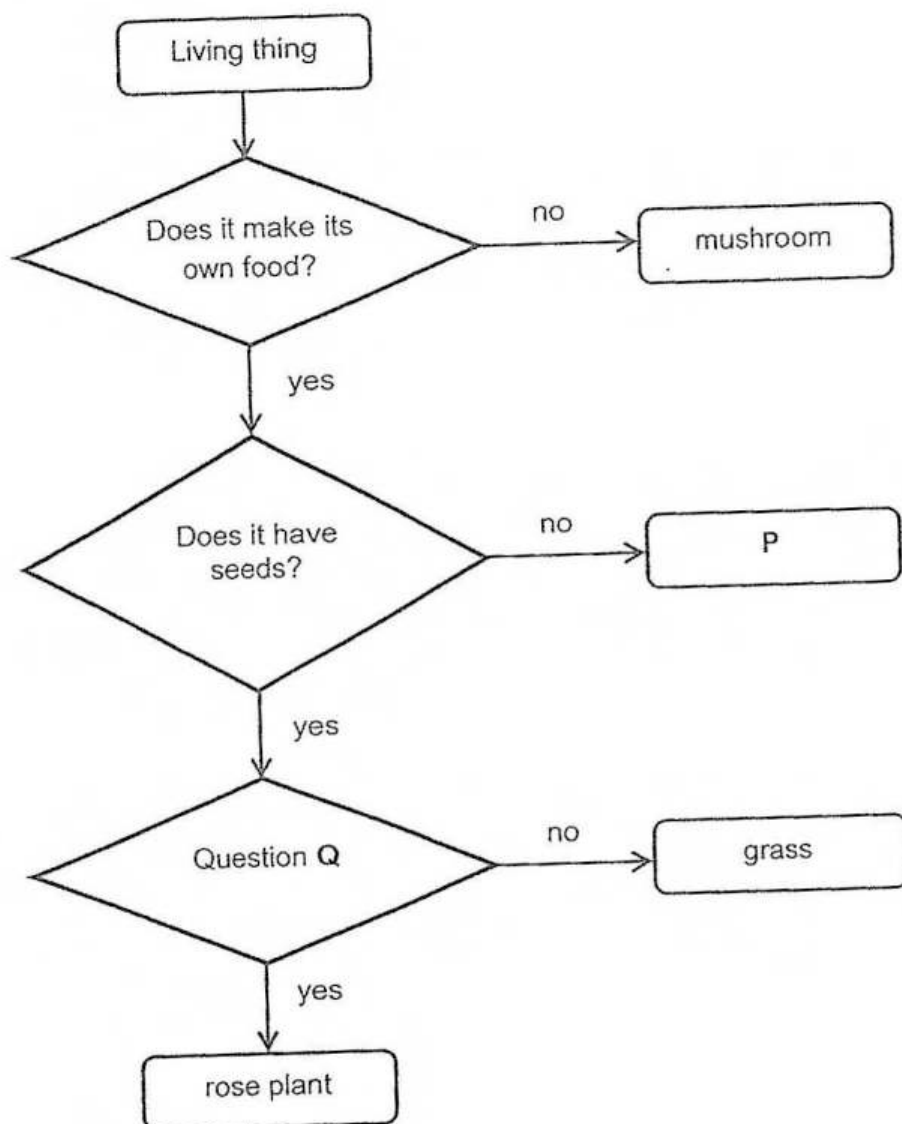
- 23 The diagram below shows the human digestive system.



In which of the parts, A, B, C and D does digestion take place?

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

24 Study the flow chart below.

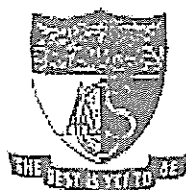


Which one of the following is correct?

	P	Question Q
(1)	P is a type of fungi.	Does it have bright-coloured flowers?
(2)	P is a type of bacteria.	Does it have strong stem?
(3)	P is a type of flowering plant.	Does it have strong stem?
(4)	P is a type of non-flowering plant.	Does it have bright-coloured flowers?

END OF BOOKLET A

Please go onto Booklet B



Anglo-Chinese School (Primary)

END-OF-YEAR EXAMINATION 2014
SCIENCE
PRIMARY THREE
BOOKLET B

Name: _____ ()

Class: Primary 3 ____

Date: 30 October 2014

Duration of paper: 1 h 30 min

Parent's/Guardian's signature

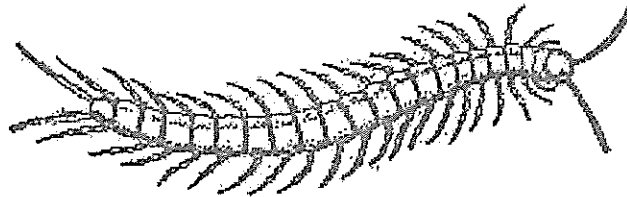
INSTRUCTION TO CANDIDATES

1. This question paper consists of 9 printed pages.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write all your answers in this booklet.

Booklet	Maximum marks	Marks obtained
A	48	
B	32	
Total	80	

For questions 25 to 35, write your answers in the spaces provided in this booklet. The number of marks available is shown in brackets [] at the end of each question or part question. [20 marks]

- 25 Observe the picture of the animal below.



Based on your observation of the picture only, state two characteristics of the animal to show that it is **not an insect**. [2]

- (i) _____

- (ii) _____

- 26 Jayvlon set up an experiment to find out whether plants need water to survive.

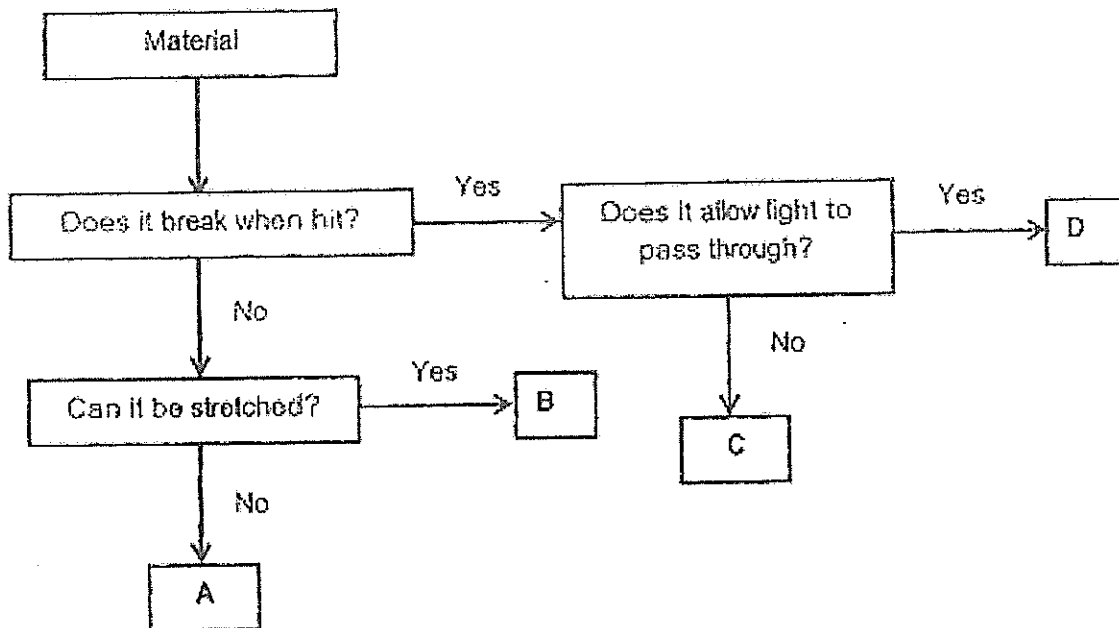
Which of the following variables below should he keep the same or changed? [2]

Variables	Keep the same	Change
Type of plant		
Type of soil		
Amount of water		
Amount of sunlight		

(Go on to the next page)

Score	4
-------	---

- 27 The flow chart below provides information on four different materials A, B, C and D. Use the information in the flow chart to answer the questions.



- (a) Based on the flow chart above, describe Material A. [1]

- (b) State one difference between Material B and Material C.

- (c) Give an example of Material D.

(Go on to the next page)

Score	
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- 28 (a) Label the plant parts below using the given words.

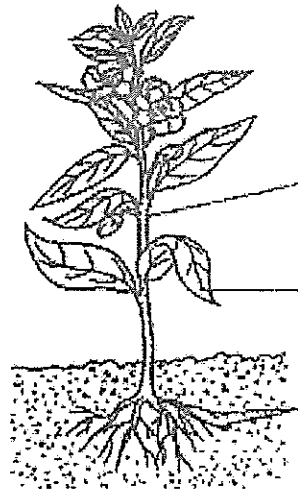
[3]

roots

leaf

stem

flower



Part A: _____

Part B: _____

Part C: _____

- (b) What is the function of Part C?

- 29 Read the statements below carefully and put a tick (✓) in the correct boxes.

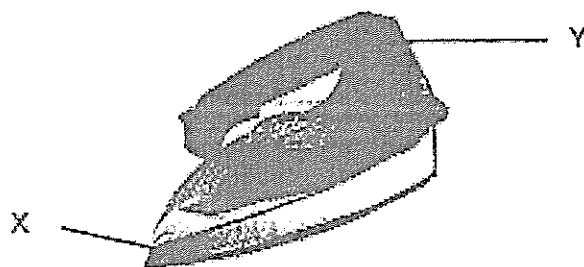
[3]

	Statement	True	False
(a)	The ribcage in our body protects the lungs and heart.		
(b)	The blood brings digested food to all parts of the body.		
(c)	The saliva in our mouth softens the food so we can swallow it.		
(d)	The large intestines absorb water and undigested food.		
(e)	The respiratory system consists of the nose, gullet and lungs only.		
(f)	When food gets into our windpipe by mistake, we choke and try to cough it out.		

(Go on to the next page)

Score	7
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- 30 The picture below shows an electric iron.



- (a) What are the materials used to make Part X and Y? [2]

Part X: _____

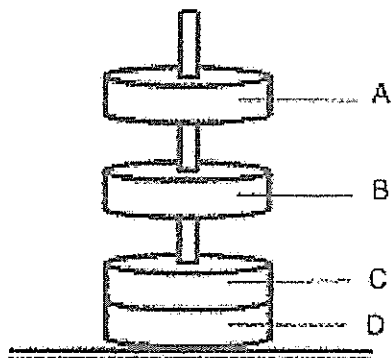
Part Y: _____

- (b) Explain why the material you have chosen for Part Y is suitable for making the handle of the electric iron. [1]

(Go on to the next page)

Score	<div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"><div style="position: absolute; top: 0; right: 0; text-align: right; padding-right: 5px;">3</div></div>
-------	--

- 31 The diagram below shows four ring shaped objects, A, B, C and D, placed through a rod.



Study the statements below carefully. For each statement, determine whether it is true, false or not possible to tell. Put a tick (✓) in the correct box. [2]

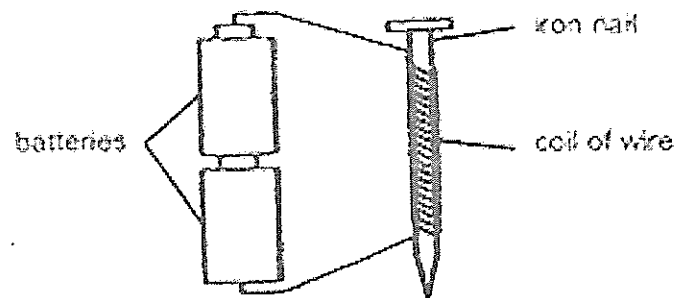
	Statement	True	False	Not possible to tell
(a)	All four objects are definitely magnets.			
(b)	The like poles of A and B are facing each other.			
(c)	Object B is attracting object C.			
(d)	Object C is attracting Object D.			

- (e) What happens when the unlike poles of two magnets face each other? [1]

(Go on to the next page)

Score	
	3

- 32 Jenny used an iron nail, two batteries and a coil of wire to set up an experiment as shown in the diagram below.



- (a) What is Jenny trying to turn the iron nail into? [1]

- (b) What can Jenny do to test whether her set-up is successful? [1]

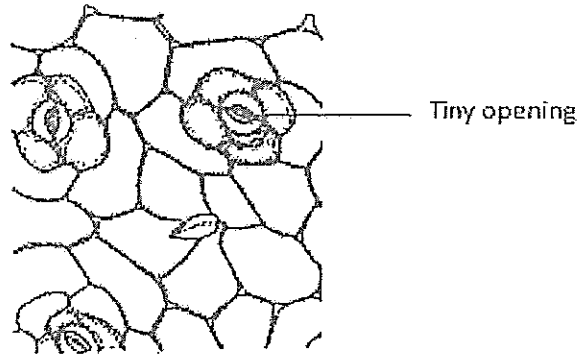
- (c) What will happen if Jenny coils double the amount of wire around the iron nail? [1]

- (d) Besides iron, what other materials can the nail be made from? [1]

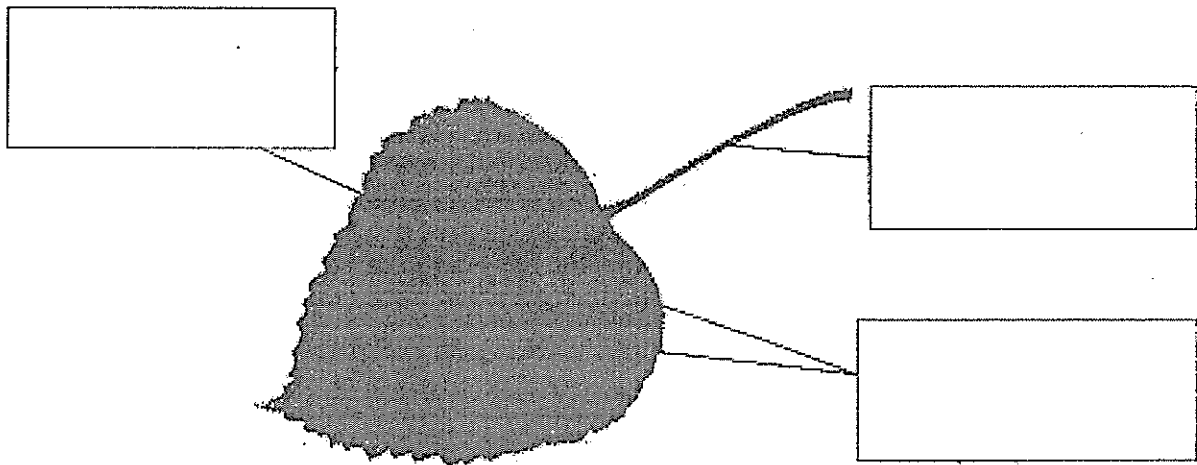
(Go on to the next page)

Score	
	4

- 33 Peter learnt that plants have tiny openings like the ones shown in the diagram below.



- (a) Which part of the plant are these tiny openings mainly found in? [1]
- _____
- (b) Name one function of these tiny openings. [1]
- _____
- _____
- 34 Label the parts of the leaf in the boxes below. [3]



(Go on to the next page)

Score	
	5

35 Different systems in our body work together to ensure that we are able to function properly.

- (a) Which two body systems work together to ensure that we are able to move, bend and stretch our body? [1]

- (b) Which two body systems work together to ensure that all parts of our body receive digested food to give us energy for our daily activities? [1]

- (c) What will happen to the food we eat if the muscles in the gullet are not working properly? [1]

END OF BOOKLET B

Please check all your answers carefully.

Score	<div style="text-align: right;">3</div>
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YEAR: 2014

LEVEL: P3

SCHOOL: ACS

SUBJECT: SCIENCE

SEMESTER: SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	2	2	3	2	3	3	4	4	2

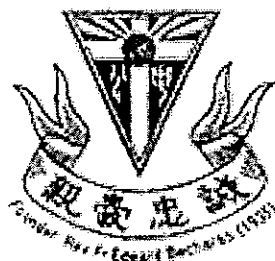
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
3	3	4	3	1	4	3	2	2	4

Q21	Q22	Q23	Q24
2	2	3	4

25. i) It has more than six legs.
ii) It has more than 3 body parts.
26. Type of plant: Keep the same
Type of soil: Keep the same
Amount of water: Change
Amount of sunlight: Keep the same
27. a) Material A cannot be stretched.
b) Material B does not break when hit while Material C breaks when hit.
c) Ceramic
28. Part A: Stem
Part B: Leaf
Part C: Roots
b) Part C absorbs nutrients and water and holds the plant to the ground.
29. a) True
b) True
c) True
d) False
e) False
f) True

30. a) Part X: Metal
Part Y: Plastic
b) It is a poor conductor of heat.
31. a) Not possible to tell
b) True
c) False
d) Not possible to tell
e) They will attract.
32. a) Magnet
b) Put a few steel paper clips beside it and try to attract them.
c) It makes the magnet stronger.
d) Steel, and nickel
33. a) leaves
b) For the exchange of gases.
34.

Blade	Stalk
	Vein
35. a) Muscular and skeletal system
b) Circulatory and digestive system
c) Food will not get to the stomach



**CATHOLIC HIGH SCHOOL
SEMESTRAL ASSESSMENT 2
2014
PRIMARY THREE**

SCIENCE

BOOKLET A

Name: _____ ()

Class: Primary 3 - _____

Date: 29 October 2014

24 questions

48 marks

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

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

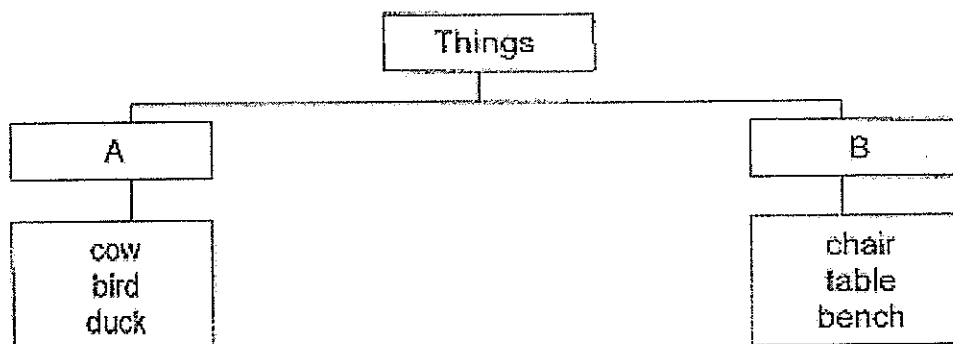
Shade your answers in the Optical Answer Sheet (OAS) provided.

This booklet consists of 12 printed pages, excluding cover page.

Booklet A (24 × 2 marks)

For each question from 1 to 24, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet. (48 marks)

- 1 Study the classification chart below.




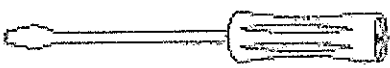
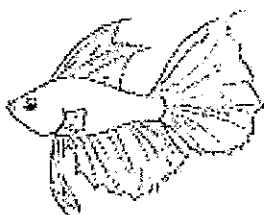
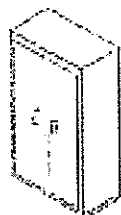


Which of the following do A and B represent?

	A	B
(1)	Living things	Non-living things
(2)	Cannot move	Can move
(3)	Have four legs	Have two legs
(4)	Cannot reproduce	Can reproduce

- 2 Which one of the following statements about plants is true?

- (1) Plants do not make food.
- (2) Plants respond to sunlight.
- (3) Plants get food from animals.
- (4) Plants can only reproduce from seeds.

3 Study the table below carefully.

P	Q
 bird	 screwdriver
 fish	 cupboard
 mushroom	 bracket fungus

Which one of the following is grouped wrongly?

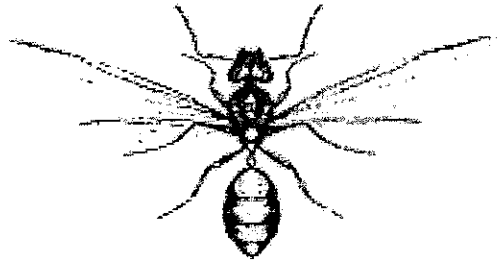
- (1) bird
- (2) mushroom
- (3) screwdriver
- (4) bracket fungus

4 Which of the following statements are true about ferns?

- A It is a water plant.
- B It can make its own food.
- C It does not produce flowers.

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

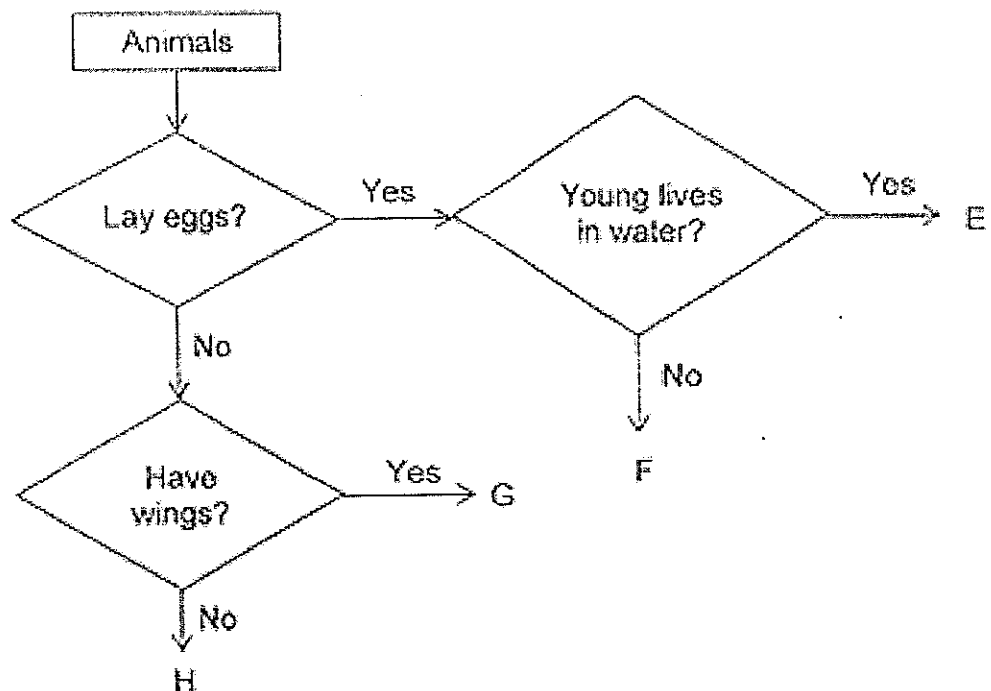
- 5 Look at the picture of an animal below.



Which one of the following statements explains why the animal above is definitely an insect?

- (1) It has three body parts.
- (2) It has two pairs of wings.
- (3) It feeds its young with milk.
- (4) It has an outer covering of hair.

- 6 Study the flow chart below.



Which one of the following correctly represents a chicken?

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

7 Which of the following statements about fungi is/are true?

- A They bear fruits.
- B They have flowers.
- C They reproduce from seeds.
- D They cannot make their own food.

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

8 Which of the following is/are necessary for bread to turn mouldy?

- A Light
- B Water
- C Oxygen
- D Carbon dioxide

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

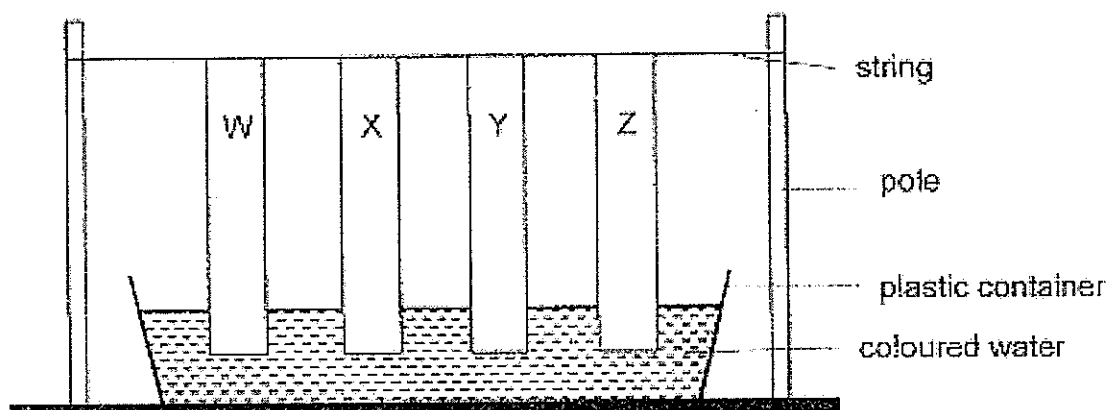
9 Mrs Tan wears a pair of rubber gloves to wash dishes so that her hands will not get wet.



Which one of the following is another suitable material for making gloves that can prevent her hands from getting wet?

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

- 10 Four different materials, W, X, Y and Z, of similar shape and size, were used in the set-up as shown below.



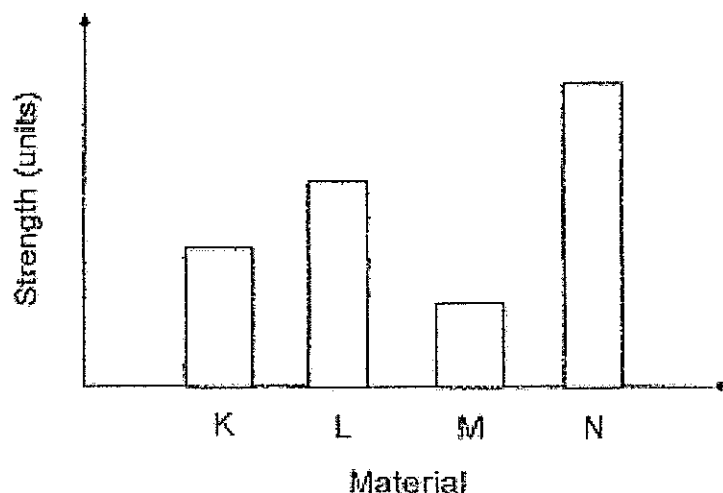
The height in which the coloured water rose to on each strip of material after 5 minutes is recorded in the table below.

Material	Height (cm)
W	3
X	6
Y	1
Z	0

Based on the results above, which material is most suitable to be used to absorb milk spilled on a table?

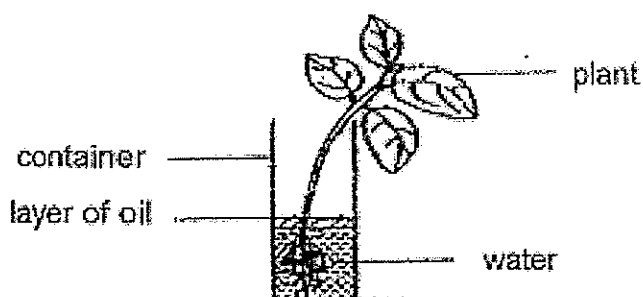
- (1) W
- (2) X
- (3) Y
- (4) Z

- 11 Mei carried out an experiment to test the strength of 4 different materials, K, L, M and N. She then drew a graph to show the results of her experiment as shown below.



Which one of the following is the most suitable to make a fishing line?

- (1) K
 - (2) L
 - (3) M
 - (4) N
- 12 Weiming set up the experiment as shown below. He placed a plant in a container filled with water. Then he put a layer of oil on the water and left the set-up next to the window for one day.



At the end of the experiment, he observed that the water level in the container had decreased. What was Weiming trying to find out from this experiment?

- (1) To find out if the roots take in water.
- (2) To find out if the plant can take in air.
- (3) To find out if the plant can reproduce.
- (4) To find out if the plant can make food.

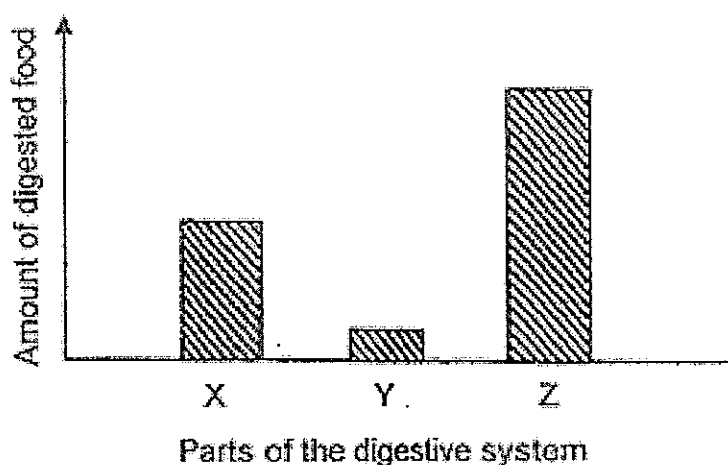
13 Which one of the following represents the path taken by the food we eat?

- (1) Mouth → windpipe → gullet → stomach → large intestine → anus
- (2) Mouth → windpipe → gullet → stomach → small intestine → anus
- (3) Mouth → gullet → stomach → large intestine → small intestine → anus
- (4) Mouth → gullet → stomach → small intestine → large intestine → anus

14 Which one of the following is correct?

	Organ involved in digestion of food	Organ involved in absorption of food
(1)	mouth	large intestine
(2)	stomach	large intestine
(3)	small intestine	small intestine
(4)	large intestine	small intestine

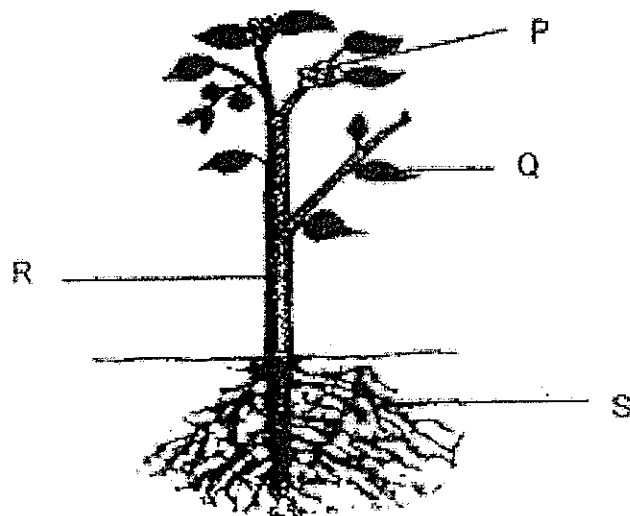
15 Ali had his breakfast. X, Y and Z are parts of the digestive system. The graph below shows the amount of digested food in the different parts of the digestive system.



Which one of the following correctly identifies organs X, Y and Z?

	X	Y	Z
(1)	Stomach	Mouth	Small intestine
(2)	Stomach	Large intestine	Mouth
(3)	Large intestine	Gullet	Mouth
(4)	Small intestine	Mouth	Stomach

- 16 Study the picture of a plant carefully.



Which of the following correctly matches the parts labelled above?

	P	Q	R	S
(1)	leaf	flower	root	stem
(2)	root	stem	leaf	flower
(3)	flower	leaf	stem	root
(4)	flower	stem	leaf	root

- 17 3 children, Hal, Kai and Leo, each made a statement about the leaves of plants.

Hal They make food for the plants.

Kai They take in water for the plants.

Leo They exchange gases with the surroundings.

Who made the correct statement(s)?

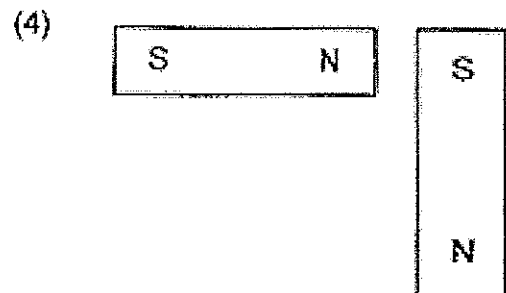
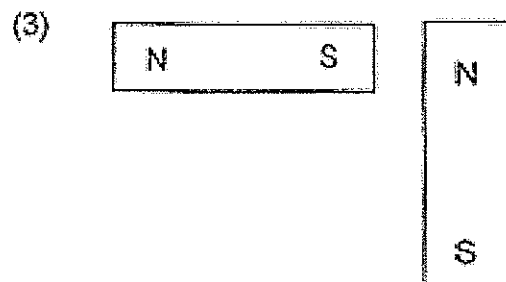
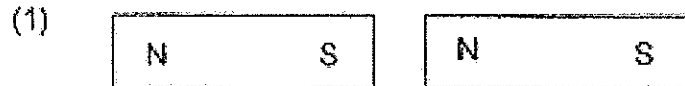
- (1) Hal only
- (2) Kai only
- (3) Hal and Leo only
- (4) Kai and Leo only

- 18 Jack wanted to find out if the location of the pots of plants S and T affects their growth. The table below shows what he had done.

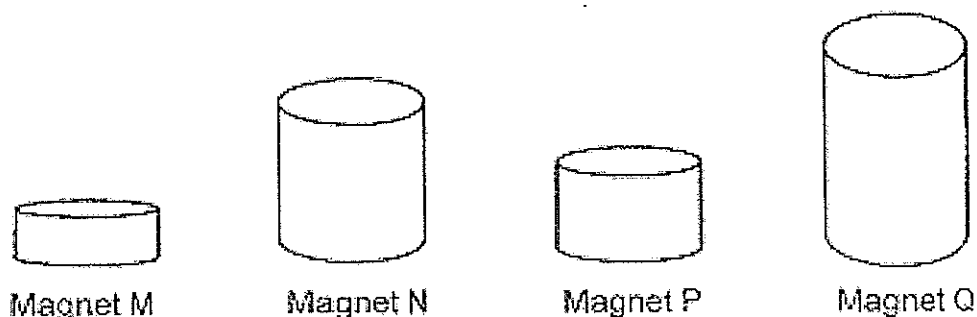
Variables	Plant S	Plant T
Number of plants in pot	5	5
Size of pot	small	big
Location of pot	cupboard	garden
Duration of experiment	1 week	1 week

Jack's teacher told him he did not conduct a fair test. Which variable should he change to make his experiment a fair one?

- (1) Use pots of the same size
 - (2) Put the pots at the same location
 - (3) Conduct the experiment over 5 days
 - (4) Use a different number of plants for each pot
- 19 In which one of the following arrangements will the two magnets repel each other?



- 20 Wilson had four magnets as shown below. He brought them close to some paper clips.

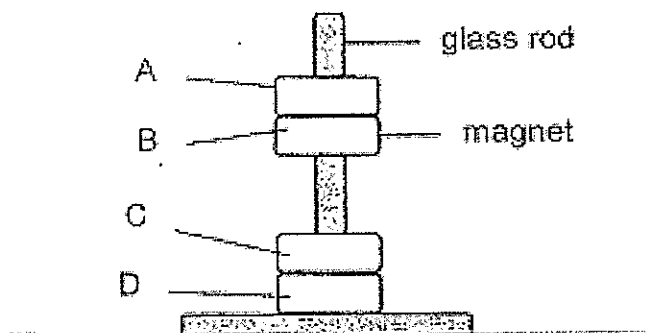


He observed the number of paper clips attracted by each magnet and recorded the results in the table below.

	Magnet M	Magnet N	Magnet P	Magnet Q
Number of paper clips attracted	25	17	11	15

What can he conclude from the results above?

- (1) Magnet P is stronger than Magnet M.
 - (2) The strength of a magnet depends on its shape.
 - (3) Bigger magnets are stronger than smaller magnets.
 - (4) The strength of a magnet does not depend on its size.
- 21 In the set-up below, A, B, C and D are 4 rings which pass through a smooth glass rod. Ring B is a magnet.



Which one of the following is not possible?

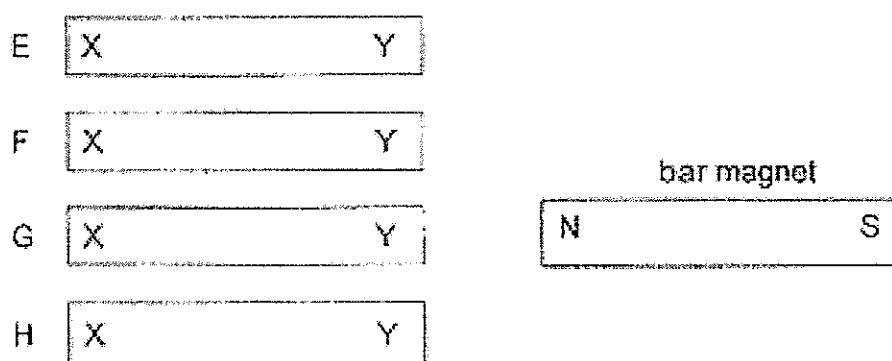
	A	C	D
(1)	steel	magnet	steel
(2)	rubber	steel	steel
(3)	rubber	magnet	rubber
(4)	rubber	magnet	magnet

22 Which one of the following things does not make use of magnets?

- (1) Computer
- (2) Telephone
- (3) Newspaper
- (4) Refrigerator

23 Suling had four metal bars, E, F, G and H, and a bar magnet. She wanted to find out which metal bars are magnets.

She brought the north pole of the bar magnet near to the ends of each metal bar.



She recorded her observations in the table below.

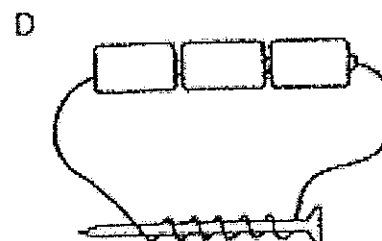
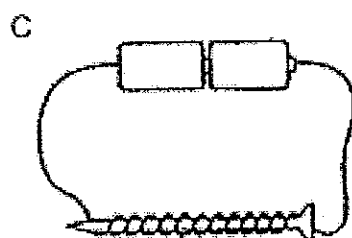
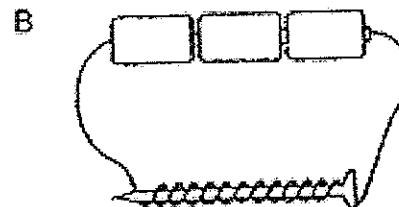
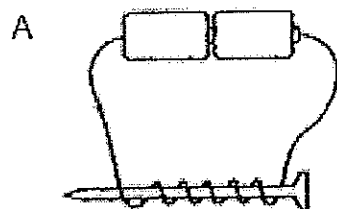
Metal bar	Observations	
	N-pole and end X	N-pole and end Y.
E	attracted	repelled
F	repelled	attracted
G	attracted	attracted
H	no reaction	no reaction

Which one of the following statements about the metal bars is correct?

- (1) Bar G is a magnet.
- (2) Bar H is a weak magnet.
- (3) Bars E and F are magnets.
- (4) None of the metal bars is a magnet.

- 24 Jasmine wants to find out if the number of times an electrical wire is coiled around an iron nail affects the strength of the magnet.

Which two arrangements below should she set up in order to carry out a fair test?



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

End of Booklet A

Booklet B (32 marks)

For questions 25 to 34, write your answers in this booklet.

The number of marks available is shown in brackets [] at the end of each question or part question. (32 marks)

25 Alice wrote the following in her Science journal.

Animal X

- It has a beak.
- It has a pair of wings.
- It has feathers on its body.
- It reproduces by giving birth to its young alive.

- (a) Based on Alice's journal, she concluded Animal X is a bird.
Write down one characteristic to support her conclusion.

[1]

- (b) Her teacher told her that she had made a mistake with one of its characteristics.

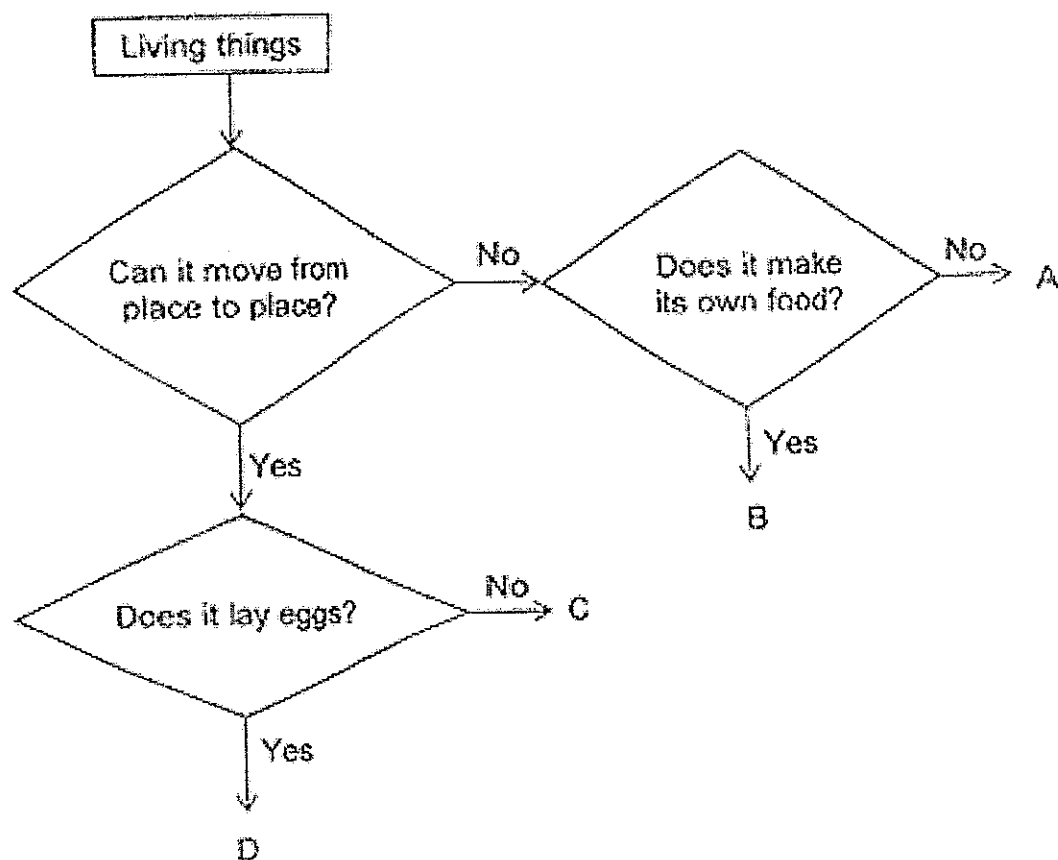
Write the correct characteristic below.

[1]

(Go on to the next page)

SCORE	2
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26 Study the flow chart below.



(a) Write the letter that best represents each of the following:

[2]

- (i) Plants - _____
- (ii) Fungi - _____
- (iii) Mammals - _____
- (iv) Birds - _____

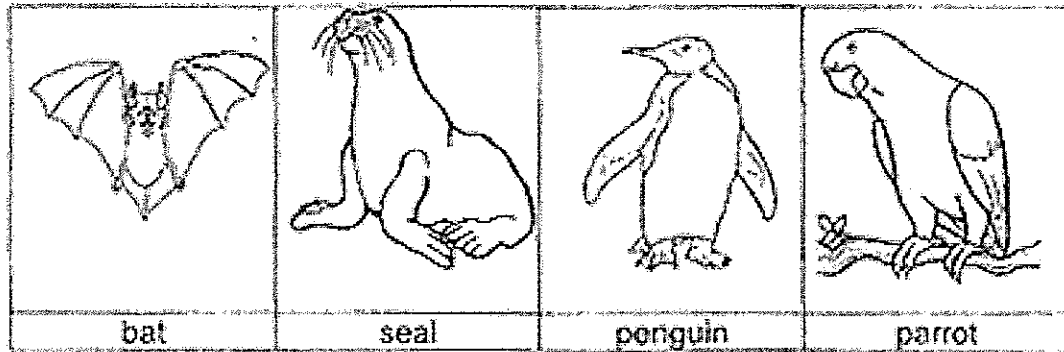
(b) What is the difference between A and B?

[1]

(Go on to the next page)

SCORE	3
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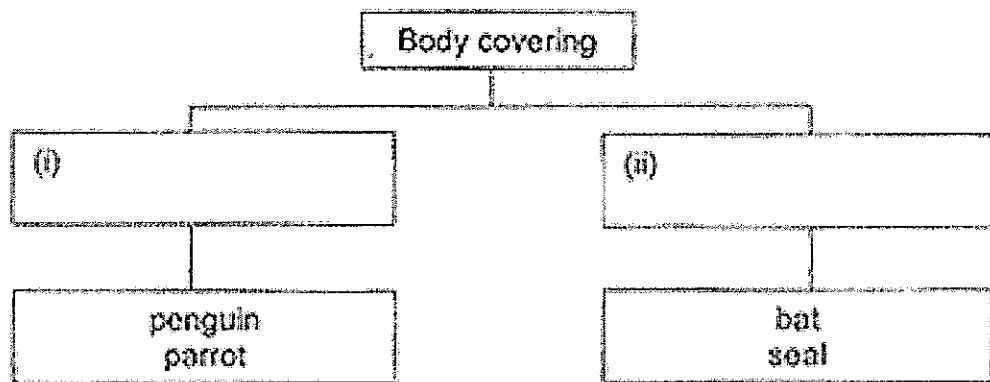
- 27 Felicia was asked to classify the following animals into two groups based on their characteristics.



She said that she could classify them in 2 different ways.

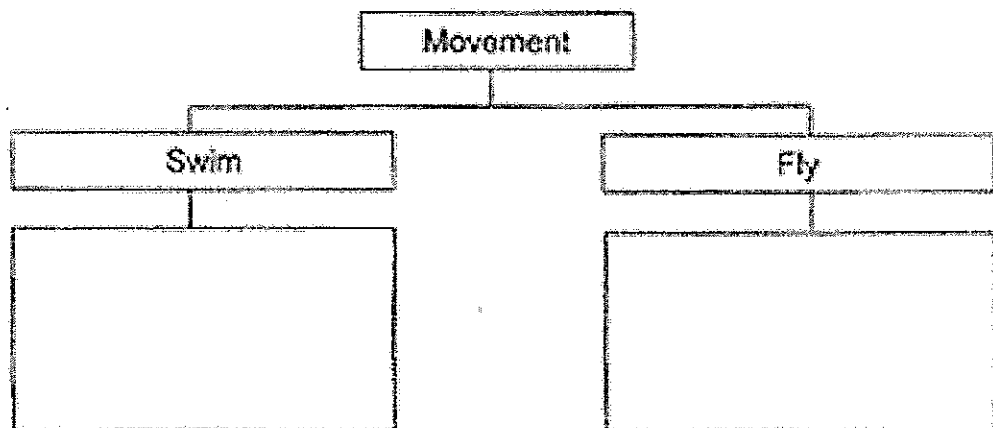
1st way

- (a) Write the headings for the classification chart below in the boxes provided. [1]



2nd way

- (b) She then classified the animals according to the way they moved. Place the four animals in the correct boxes below. [2]



(Go on to the next page)

SCORE	3
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- 28 (a) The diagram below shows a mushroom and bread mould.



mushroom

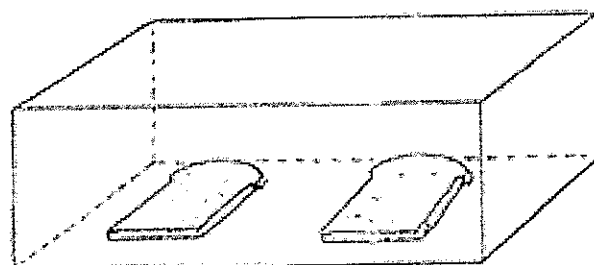


mould

State one common characteristic between them.

[1]

James conducted an experiment. He had two similar pieces of bread, A and B. He toasted Bread A and added water to Bread B. He then put both pieces of bread inside a box.



Bread A
- toasted

Bread B
- with water

- (b) What was James trying to find out in this experiment?

[1]

- (c) What would he notice about the two pieces of bread after a few days?

[1]

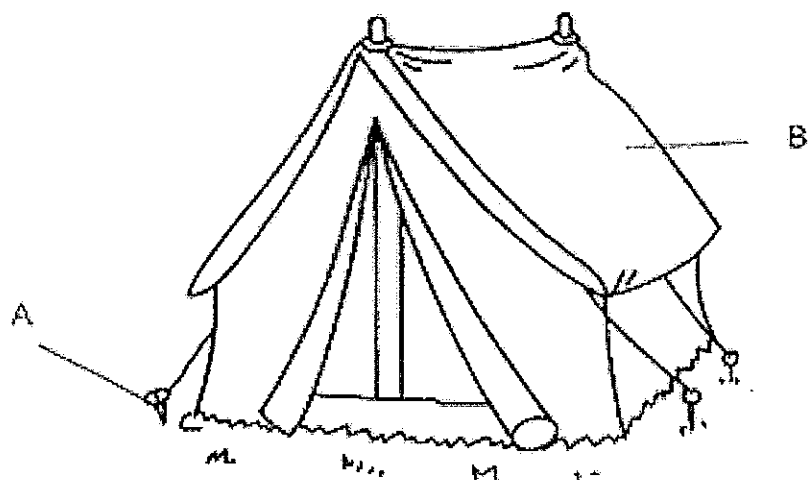
- (d) Besides water, state one other condition bread mould needs in order to grow.

[1]

(Go on to the next page)

SCORE	4
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- 29 (a) Mr Tan made a tent for his camping trip.



The properties of the three materials X, Y and Z are shown in the table below.

Material	Properties
X	<ul style="list-style-type: none"> • Stiff • Strong
Y	<ul style="list-style-type: none"> • Waterproof • Allows light to pass through
Z	<ul style="list-style-type: none"> • Strong • Waterproof

Which materials X, Y or Z is the most suitable to make the two labelled parts, A and B?

(i) Part A - _____

[1]

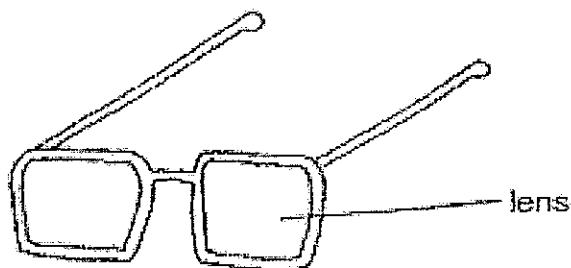
(ii) Part B - _____

(Go on to the next page)

SCORE	1
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- (b) Mr Tan has two materials, G and H. The properties of the two materials are shown in the table below.

Material G	Material H
Is not flexible	Is flexible
Allows light to pass through	Does not allow light to pass through



- (i) Which material, G or H, is suitable to make the lens of a pair of spectacles? Explain your answer.

[1]

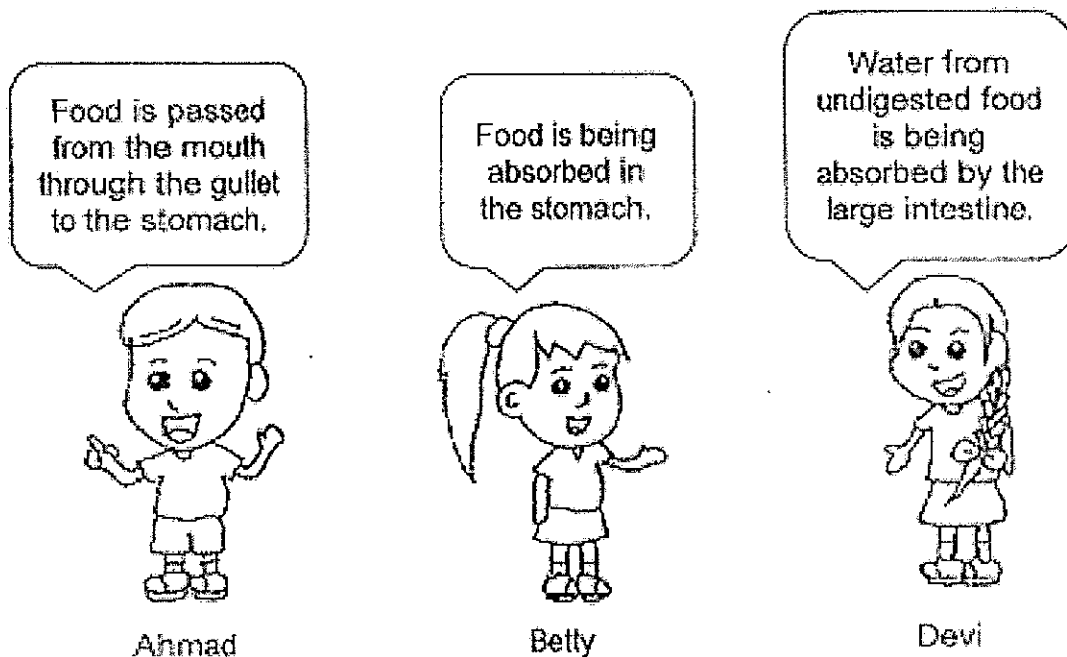
- (ii) Write one suitable material for Material G.

[1]

(Go on to the next page)

SCORE	<div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"><div style="position: absolute; top: 0; right: 0; bottom: 0; left: 0;">2</div></div>
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- 30 Three friends, Ahmad, Betty and Devi, were sharing their knowledge about the human digestive system in the diagram below.



- (a) Whose statement(s) is/are correct? [1]

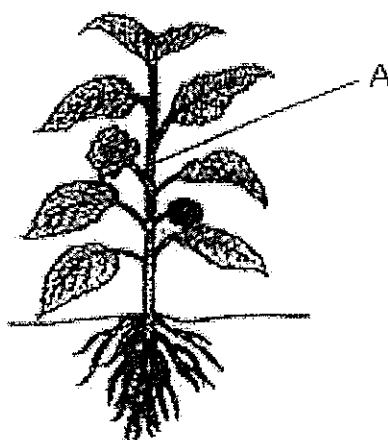
- (b) State one function of the small intestine. [1]

- (c) Which part of the digestive system is not working well when we have diarrhoea (watery faeces)? [1]

(Go on to the next page)

SCORE	3
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31 The diagram below shows a plant.



(a) State one function of the part labelled A. [1]

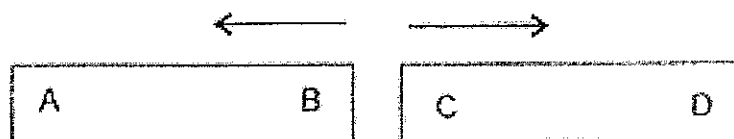
(b) The plant will die if the roots were to be removed. Explain why. [1]

(c) Give another function of roots. [1]

(Go on to the next page)

SCORE	3
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- 32 (a) Adam brought two bar magnets near to each other. He observed that they moved in the directions indicated by the arrows.



Indicate the poles "N" or "S" represented by parts B and C.

(i) B - _____ C - _____ [1]

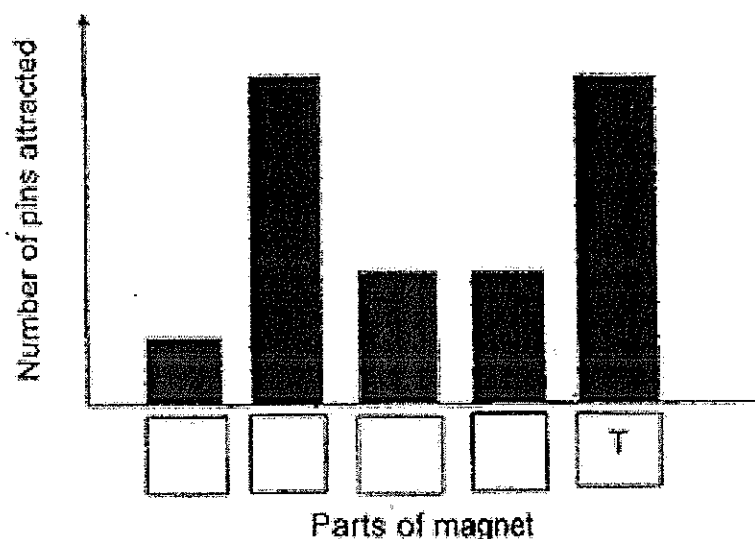
(ii) What does this tell you about magnets? [1]

- (b) Adam then marked a bar magnet into five parts P, Q, R, S and T as shown in the diagram below.



Next, he lowered the bar magnet into a tray of pins and then counted the number of pins attracted to the different parts of the bar magnet.

His observation is recorded in the bar graph below.

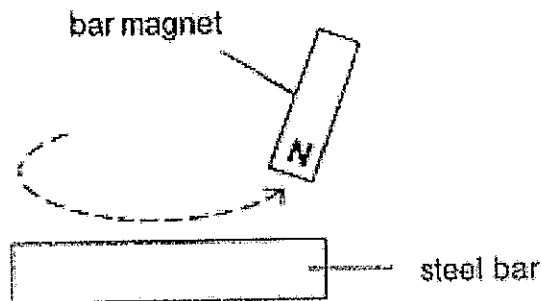


In the graph above, match the parts (P, Q, R and S) of the magnet to the bars by filling in the boxes provided. [2]

(Go on to the next page)

SCORE	4
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- 33 John used a bar magnet to magnetise a steel bar in the direction as shown in the diagram below.

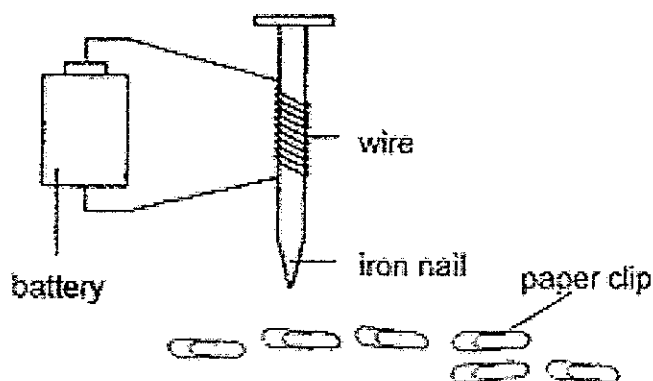


- (a) What will John observe if he places the steel bar near a plate of pins? [1]
- _____
- _____
- (b) Using the method shown above, how can he increase the magnetism of the steel bar? [1]
- _____
- _____
- (c) After increasing the magnetism of the steel bar, what will happen when the steel bar is brought near to the plate of pins again? [1]
- _____
- _____
- (d) State one way how John can make a magnet lose its magnetism. [1]
- _____
- _____

(Go on to the next page)

SCORE	4
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- 34 Jimmy coiled a wire around an iron nail and connected the ends of the wire to a battery. He repeated this several times with a different number of turns around the iron nail. With each different number of turns of wire around the nail, the number of paper clips picked up was different.



- (a) What would happen to the iron nail when the set-up was connected? [1]

- (b) If the iron nail was replaced by a copper rod, would it still be able to attract any paper clips? Explain. [1]

- (c) Look at the results of the experiment in the table below.

Number of turns of wire around the iron nail	Number of paper clips picked up by the iron nail
10	1
15	3
20	7
25	12

From the results above, what happened to the number of paper clips attracted when the number of turns of wire around the iron nail increased?

[1]

End of Booklet B

SCORE

3

YEAR: 2014

LEVEL: P3

SCHOOL: CATHOLIC HIGH

SUBJECT: SCIENCE

SEMESTER: SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	3	4	3	1	2	2	3	4	2

Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
4	1	4	3	1	3	3	1	2	4

Q21	Q22	Q23	Q24
2	3	3	4

25. a) It has a beak.

b) It lays eggs.

26. a) i) B

ii) A

iii) C

iv) D

b) A cannot make their own food but B can make their own food.

27. a) i) Feathers

ii) Hair

b) Swim: Seal, Penguin

Fly: Bat, Parrot

28. a) Both reproduce by spores

b) If mould needs water to grow

c) There would be bread mould growing on Bread B but not on Bread A.

d) Warmth

29. a) i) X

ii) Z

b) i) G. It allows light to pass through so that users can see what is in front of them.

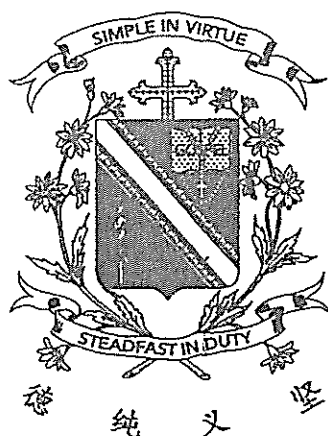
ii) Glass

30. a) Ahmad, Devi
b) It absorbs the digested food into the bloodstream.
c) Large intestine
31. a) A holds the plant upright
b) There will be no roots to absorb water for the plant
c) It holds the plant firmly to the ground
32. a) i) B: S
C: S
ii) When the like poles are facing each other they repel.
b) R P Q S
33. a) It will attract a few pins
b) He can stroke it more times using the same pole of the magnet.
c) It will attract more pins
d) He can heat it up.
34. a) The iron nail will become an electromagnet and it will attract the paper clips
b) No. Copper is not a magnetic material. Thus, it cannot be magnetized.
c) It could pick up more paper clips.

Name: _____ ()

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 2 – 2014

SCIENCE

Booklet A

30th October 2014

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

24 Questions

48 Marks

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

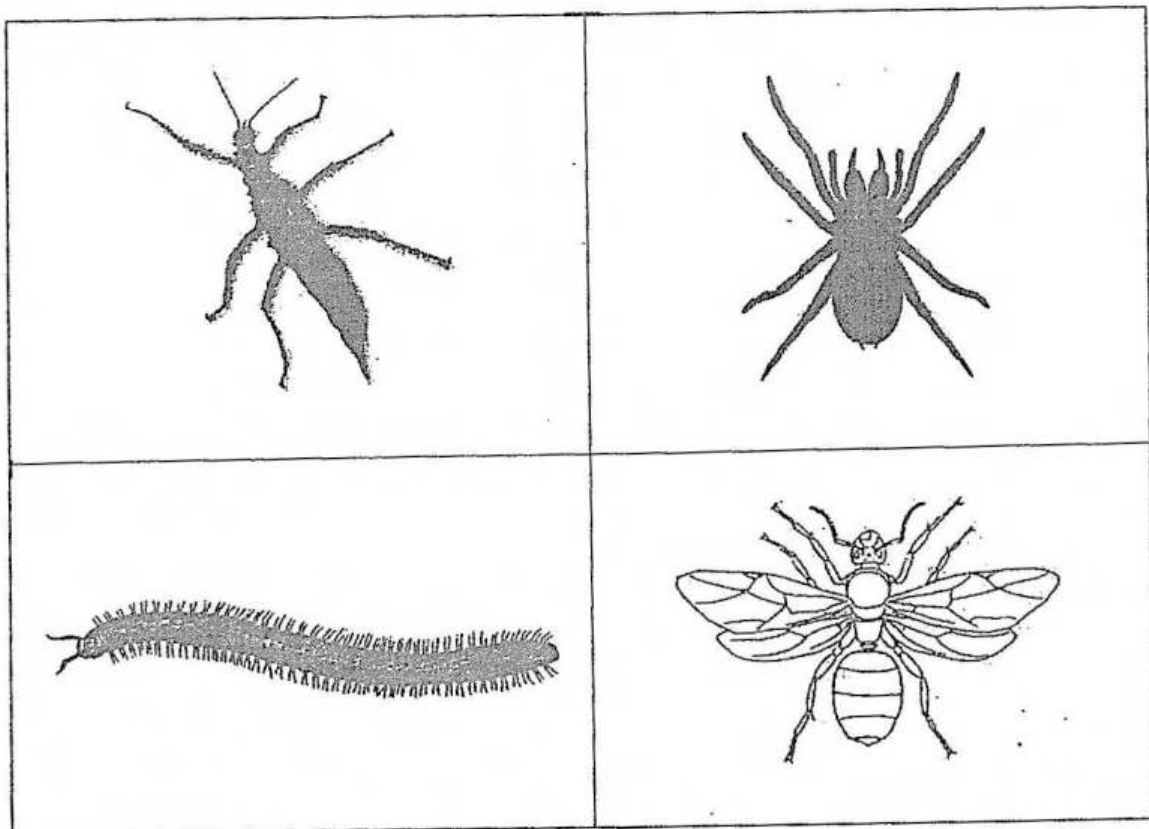
Shade your answers in the Optical Answer Sheet (OAS) provided.

This paper consists of 18 printed pages including this cover page.

SECTION A (MULTIPLE-CHOICE QUESTIONS) [24 x 2 marks = 48 marks]

For each question from 1 to 24, 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 (OAS) provided.

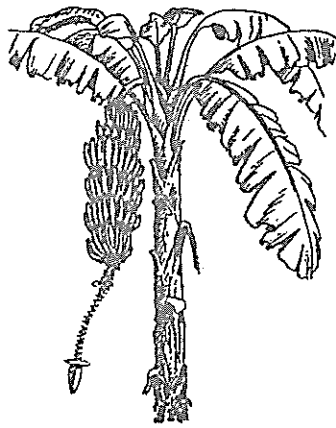
1. The diagram below shows 4 organisms.



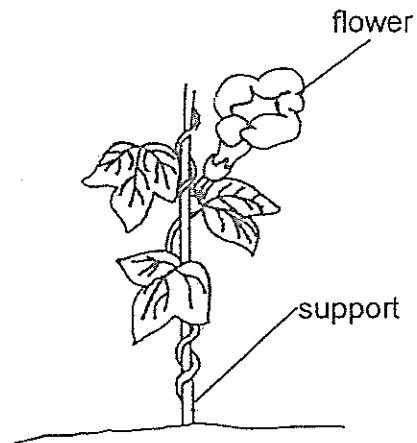
Sharon wants to classify the above animals into 2 groups with only 2 organisms in each group, which one of the following sets of headings will not be appropriate?

	Group 1	Group 2
(1)	Have more than 6 legs	Have 6 legs
(2)	Insects	Non-insects
(3)	Have more or less than 3 body parts	Have 3 body parts
(4)	Have wings	Do not have wings

2. The diagram below shows two plants.



Banana plant



Morning glory plant

Based only on what is **observable** in the diagram above, how is the banana plant similar to the morning glory plant?

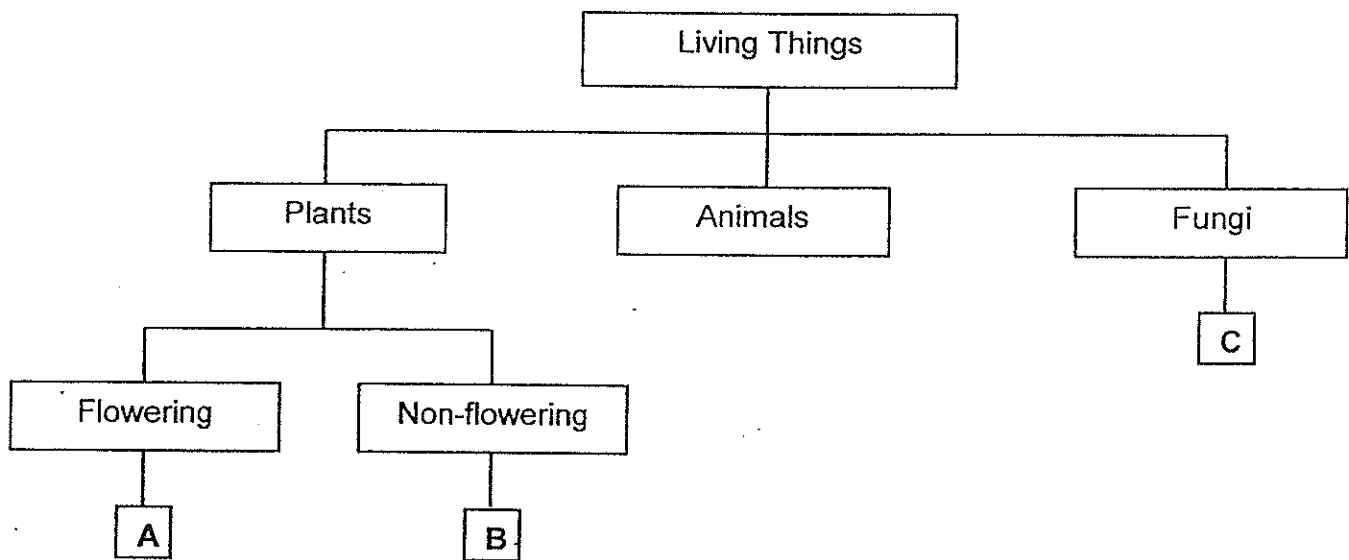
- ☒ A Both have roots
 - ☒ B Both have fruits.
 - ☒ C Both have stems.
 - ☒ D Both have leaves.
-
- (1) A and B only
 - (2) C and D only
 - (3) A, C and D only
 - (4) A, B, C and D

3. Which of the following statements are true of all living things?

- A They are able to grow.
- ☒ B They can move freely from place to place.
- ☒ C They reproduce by giving birth to live young.
- D They can respond to changes in the environment.

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

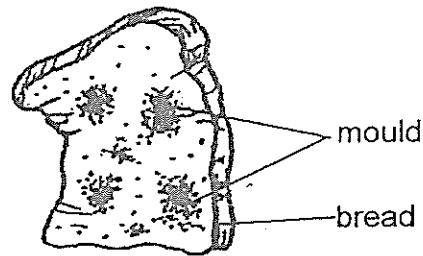
4. The classification chart below shows how organisms, A, B and C, have been classified.



Which one of the following identifies A, B and C correctly?

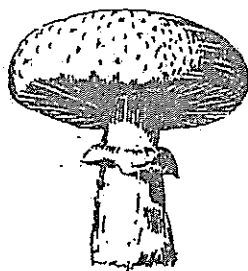
	A	B	C
(1)	papaya tree	balsam plant	yeast
(2)	rain tree	toadstool	moss
(3)	sunflower plant	staghorn fern	mushroom
(4)	bracket fungus	bread mould	staghorn fern

5. Harry placed a piece of bread on the dining table. After one week, he observed mould growing on the bread as shown below.

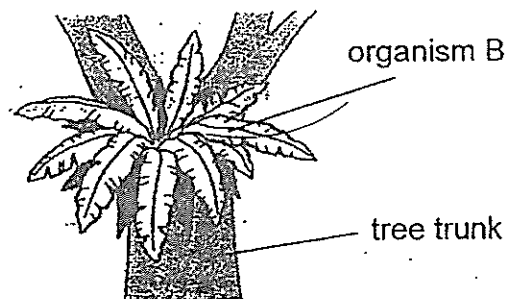


What can Harry do to slow down the growth of mould on his bread?

- (1) Add water to the bread.
 - (2) Place the piece of bread in the fridge
 - (3) Cover the piece of bread with a cloth.
 - (4) Place the piece of bread in the cupboard.
6. The diagram below shows two organisms, A and B.



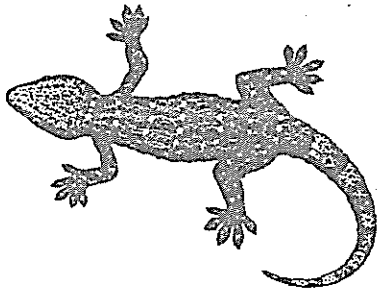
organism A



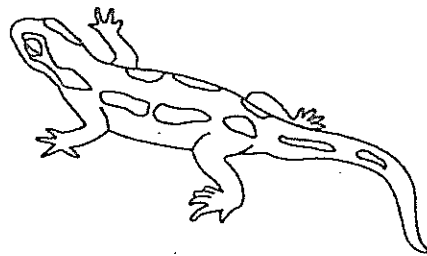
Based only on your observation of the above diagram, which one of the following statements about organisms A and B is correct?

- (1) Organisms A and B have stems.
- (2) Organisms A and B reproduce from spores.
- (3) Organism A has no leaves but organism B has leaves.
- (4) Organism A is an adult plant but organism B is a young plant.

7. The diagram below shows two animals, a lizard and a salamander.



Lizard



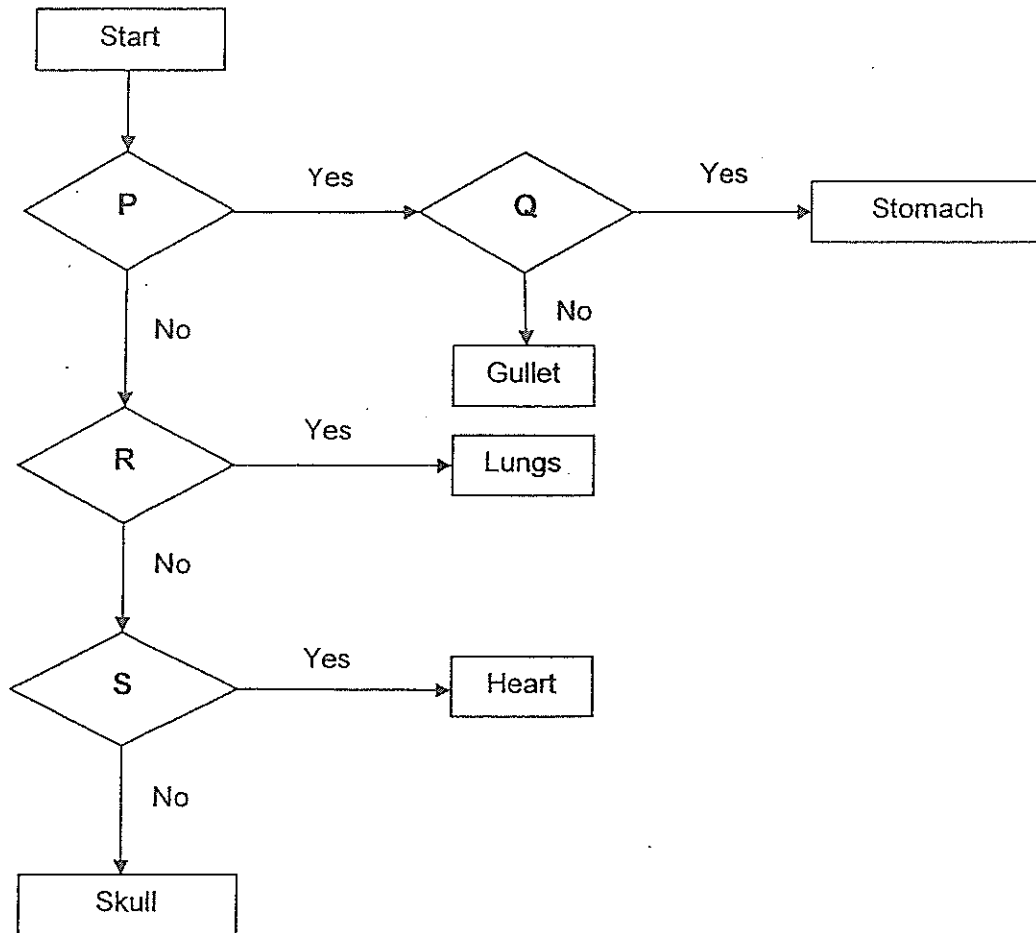
Salamander

Which of the following statements about the above animals are **incorrect**?

- A Both reproduce by laying eggs.
- B Both breathe through their skin.
- C The lizard lives on land but the salamander lives only in water.
- D The lizard's dry skin is covered with scales but the salamander has moist skin.

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

8. Study the flowchart below carefully.



With reference to the above flowchart, which one of the following best represents P, Q, R and S?

	P	Q	R	S
(1)	Is it part of the circulatory system?	Does it break down food?	Is it part of the human body system?	Is it part of the respiratory system?
(2)	Is it part of the human body system?	Is it part of the digestive system?	Is it part of the circulatory system? /	Is it part of the respiratory system? /
(3)	Does it break down food? /	Is it part of the digestive system? /	Is it part of the respiratory system?	Is it part of the circulatory system?
(4)	Is it part of the digestive system? /	Does it break down food? /	Is it part of the respiratory system?	Is it part of the circulatory system?

9. The classification table shows some animals grouped according to their animal groups.

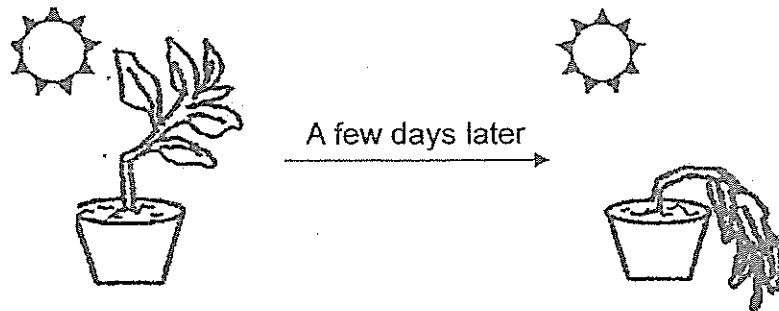
Animals		
Group A	Group B	Group C
bear	ant	salmon
rabbit	bee	whale
dolphin	cockroach	goldfish

Which one of the above animals has been grouped wrongly?

- (1) bee
 - (2) whale
 - (3) dolphin
 - (4) cockroach
10. Alan draws up a classification table as shown below. Which one of the following sets is not correct?

	Living things	Non-living things
(1)	Deer	Paper
(2)	Breadmould	Plastic bottle
(3)	Wooden chair	Chalk
(4)	Rose plant	Pencil

11. The diagram below shows a plant whose stem was accidentally bent while it was being planted in a pot. The plant was watered daily and it was placed at a sunny spot in the garden. It was observed that the plant died a few days later.



Which one of the following statements best explains why the plant died after a few days?

- (1) The plant was not held firmly to the soil.
 - (2) The plant was not held upright to receive sunlight.
 - (3) The stem was not able to transport water to other parts of the plant.
 - (4) The roots did not take in enough mineral salts and water from the soil.
12. Charlene observed four organisms, A, B, C and D, during an excursion to the zoo and recorded her observations in the table below. A tick (✓) shows the characteristic that the organism has.

Characteristic	Organisms			
	A	B	C	D
It lays eggs.	✓	✓		✓
It has scales.		✓		✓
It feeds its young with milk.			✓	
It breathes through lungs.	✓	✓	✓	

Which one of the above organisms is most likely a swordfish?

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

13. Which one of the following statements best describes bacteria?

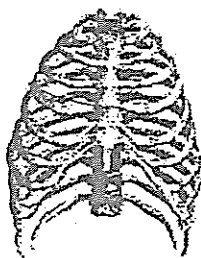
- (1) Bacteria are all harmful.
- (2) Bacteria reproduce by spores.
- (3) Bacteria do not come in different shapes.
- (4) Bacteria can only be seen under a microscope.

14. Which of the following are characteristics of all birds?

- A They can fly.
- B They lay eggs.
- C They have a beak.
- D They are covered with feathers.

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

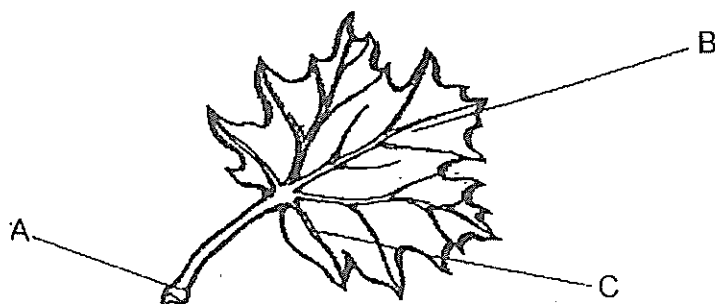
15. The diagram below shows part of the skeletal system.



Which of the following organs is/are protected by the above part?

- A brain
 - B lungs
 - C heart
 - D small intestines
- (1) A and D only
- (2) B and C only
- (3) B, C and D only
- (4) A, B, C and D

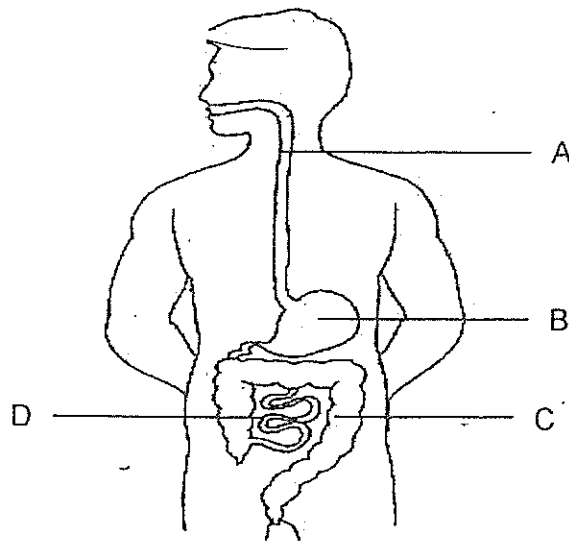
16. The diagram shows a leaf.



Which one of the following correctly identifies parts A, B and C of the leaf given above?

	Part A	Part B	Part C
(1)	Leaf vein	Leaf stalk	Leaf blade
(2)	Leaf stalk	Leaf blade	Leaf vein
(3)	Leaf stalk	Leaf vein	Leaf blade
(4)	Leaf vein	Leaf blade	Leaf stalk

17. The diagram below shows the human digestive system.



Which one of the following shows the incorrect function of the parts, A, B, C or D?

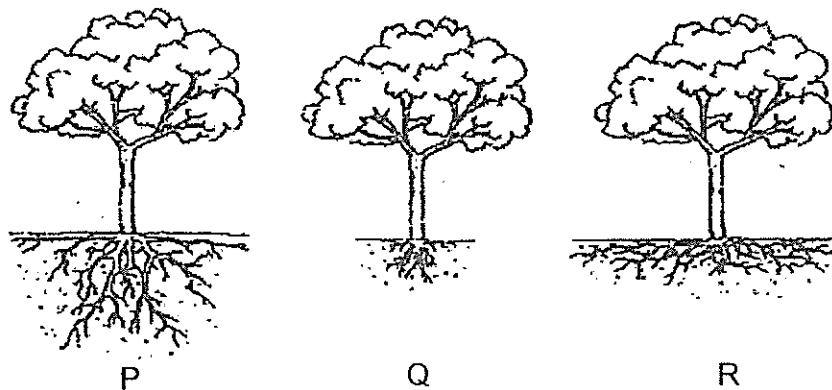
	Parts	Functions
(1)	A	Contract and expand to push food down into the stomach
(2)	B	To completely digest the food
(3)	C	To remove water from the undigested food
(4)	D	To absorb digested food into the bloodstream

18. Laura planted a kang kong plant and observed it over a period of three weeks. The kang kong plant was 8cm tall at the beginning. She recorded the height of the plant at the end of each week in a table shown below.

Number of weeks	Height of plant (cm)
1	12
2	16
3	20

Based on the results in the table above, Laura can conclude that the kang kong plant has _____.

- (1) grown
 - (2) reproduced
 - (3) become an adult plant
 - (4) responded to changes
19. The diagram below shows 3 similar trees P, Q and R.

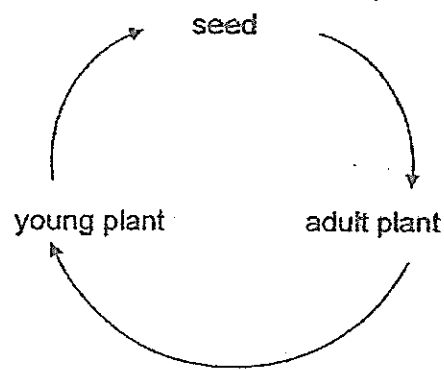


Based on observation of the root system of the trees, which of the above trees is/are likely to be uprooted in a storm?

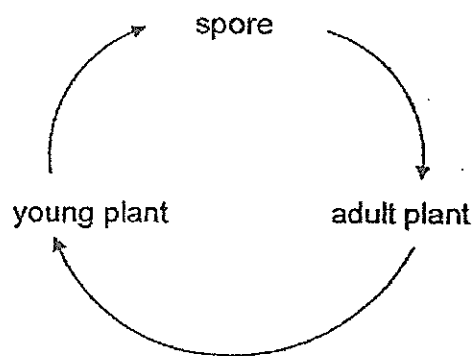
- (1) Q only
- (2) R only
- (3) Q and R only
- (4) P, Q and R

20. Which one of the following diagram shows the life cycle of a flowering plant?

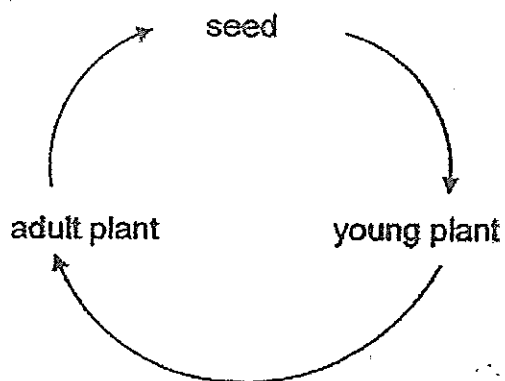
(1)



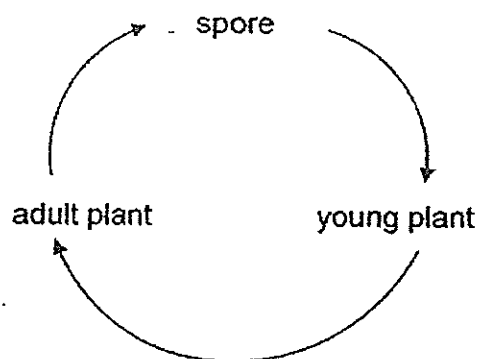
(2)



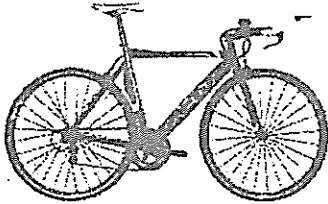
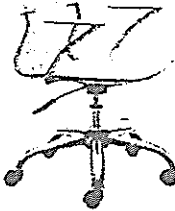
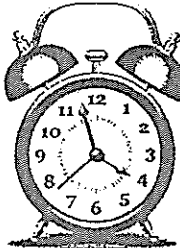
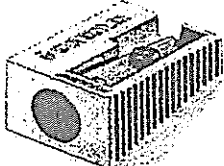


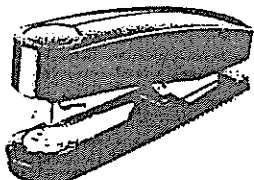
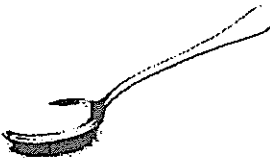
(3)



(4)



21. Which one of the following pairs of objects correctly shows a system and a non-system?

	System	Non-system
(1)		
(2)		
(3)		
(4)		

22. Sheila has boxes of 3 different sizes, large, medium and small, that can be used to pack Christmas gifts. The table below shows the maximum weight each box can hold before it breaks.

Size of box	Maximum weight (g)
Small	300
Medium	500
Large	900

Sheila bought three gifts for her friend, Joe. The gifts can be packed together or separately depending on the weight the box can hold. The gifts weigh 500g, 400g and 200g respectively.

Which one of the following combinations of boxes should she use so that all three gifts are packed?

- (1) 1 large-sized box
- (2) 3 small-sized boxes
- (3) 1 large-sized box and 1 small-sized box
- (4) 1 medium-sized box and 2 small-sized boxes

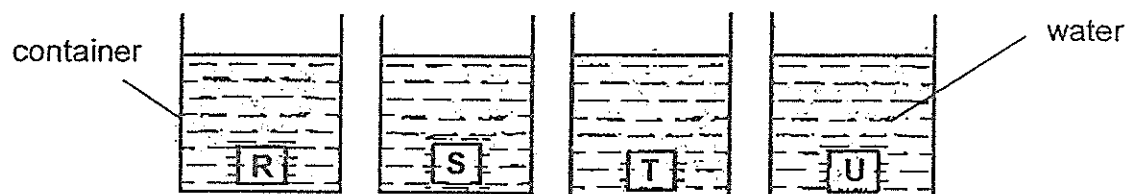
23. The properties of three objects are recorded in the table as shown below.

Characteristics	Objects			
	Window pane	Towel	Wooden chopsticks	Gloves
Waterproof	Yes	No	No	No
Flexible	No	Yes	No	Yes
R	No	No	Yes	No

Which one of the following is characteristic R?

- (1) Float
- (2) Stiff
- (3) Strong
- (4) Transparent

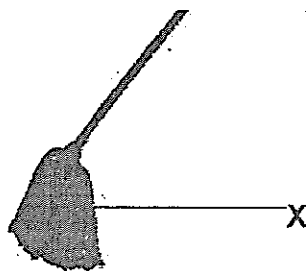
24. David weighed four different materials R, S, T and U, of the same size before putting each of them into a container containing the same amount of water as shown below.



He then weighed the materials after removing them from the water. The table below shows the results of his experiment.

Materials	Mass of materials (g)	
	Before soaking in water	After soaking in water
R	50	90
S	90	100
T	100	150
U	150	180

Based on the results in the above table, which material R, S, T or U is most suitable for making part X of the mop shown below?



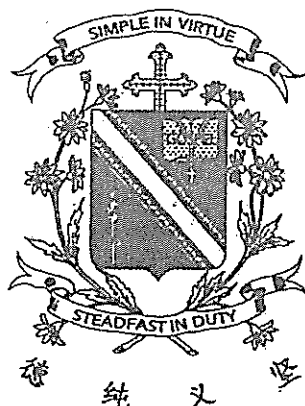
- (1) R
- (2) S
- (3) T
- (4) U

END OF BOOKLET

Name: _____ ()

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 2 – 2014

SCIENCE

Booklet B

30th October 2014

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

10 Questions

32 Marks

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

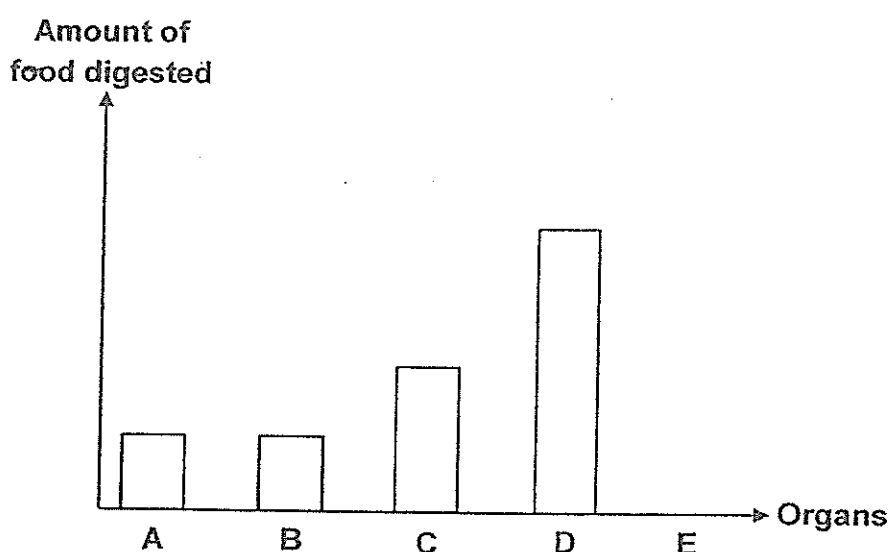
This paper consists of 11 printed pages including this cover page.

Booklet A	48
Booklet B	32
Total	80
Parent's Signature / Date	

SECTION B (OPEN-ENDED QUESTIONS) [32 marks]

For questions 25 to 34, write your answers in this booklet. The number of marks available is shown in the brackets [] at the end of each question or part question.

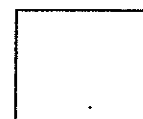
25. Sam ate a hamburger during lunch. The graph below shows the amount of food digested as it moves through organs, A, B, C, D and E, of Sam's digestive system.



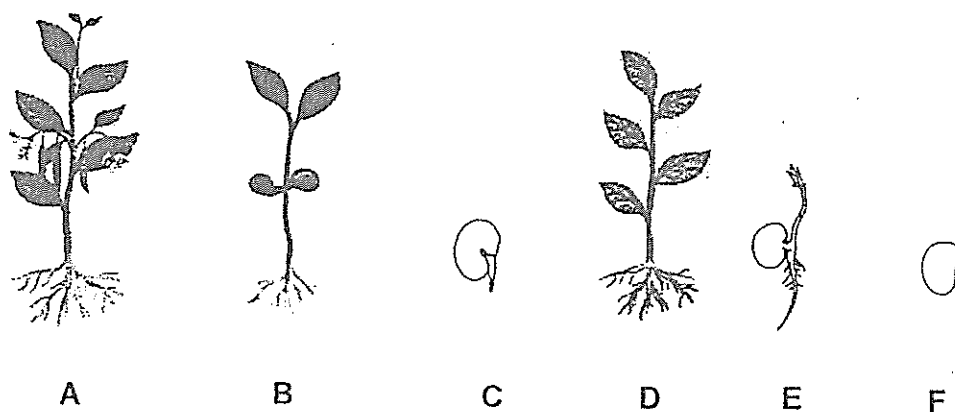
- (a) Based on the graph above, which organ, A, B, C, D or E best represents the small intestines? Give a reason for your answer. [2]

- (b) Give a reason why the amount of digested food in B remains the same as in A. [1]

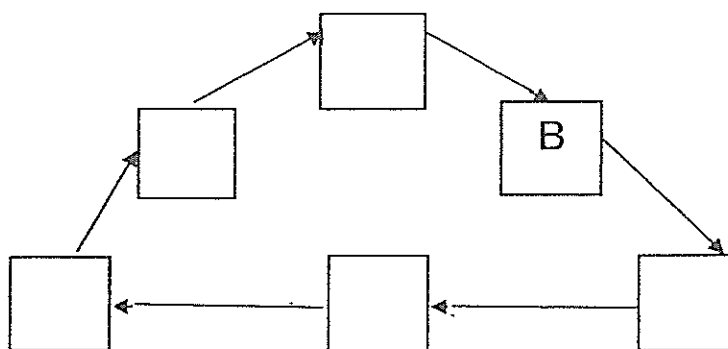
- (c) What is the function of organ E of the digestion system? [1]



26. The diagram below shows a pea plant at different stages of its life cycle.

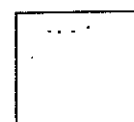


- (a) Fill in the boxes in the diagram below with A, C, D, E and F to show the stages of the life cycle in the correct order. [1]

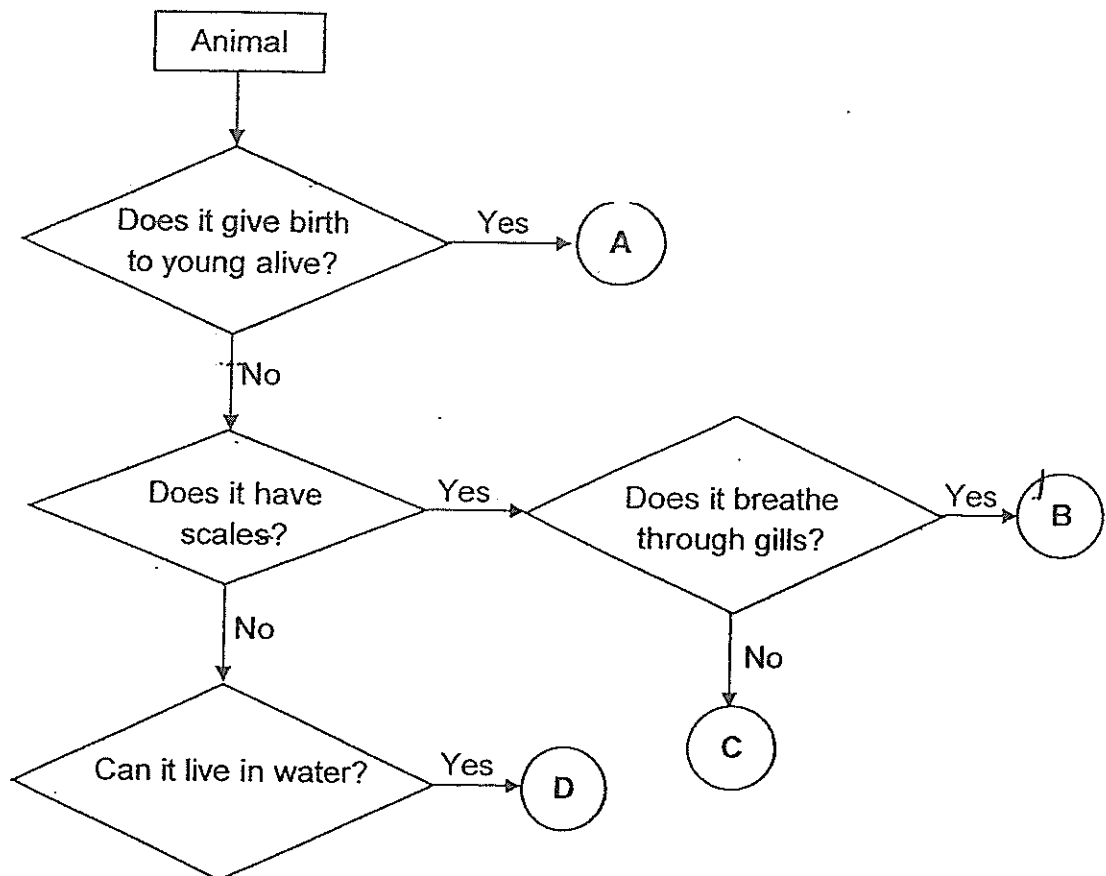


- (b) Is the pea plant at stage E able to make its own food? Give a reason for your answer. [1]

- (c) Suggest a reason why the roots in stage C grow downwards. [1]

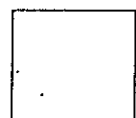
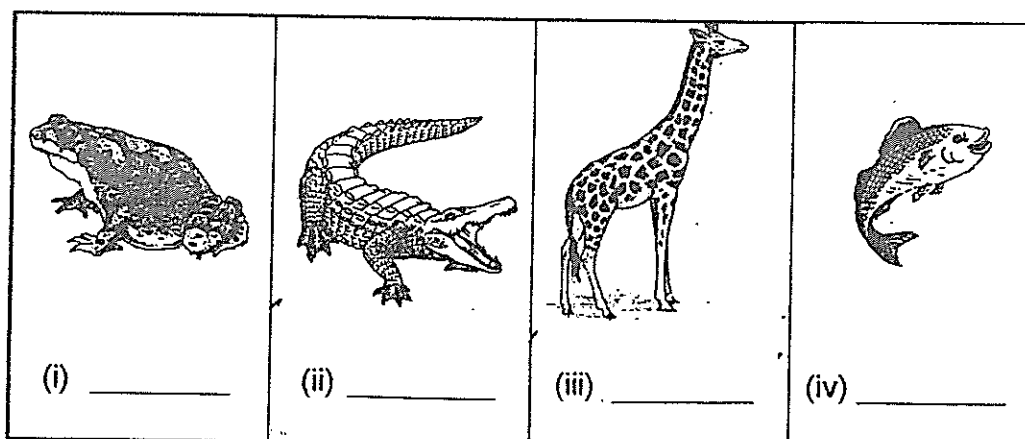


27. Study the flowchart given below.



(a) Based on the flowchart above, state the similarity between B and D. [1]

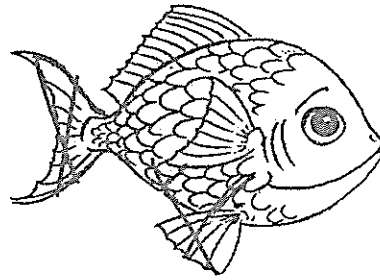
(b) Based on the flowchart above, which of the above letters, A, B, C or D, best represents the animals shown below? [2]



28. The diagram below shows animals X and Y.



Animal X



Animal Y

- (a) Based on your observation of the above diagram, how are the two animals different in terms of their body covering? [1]

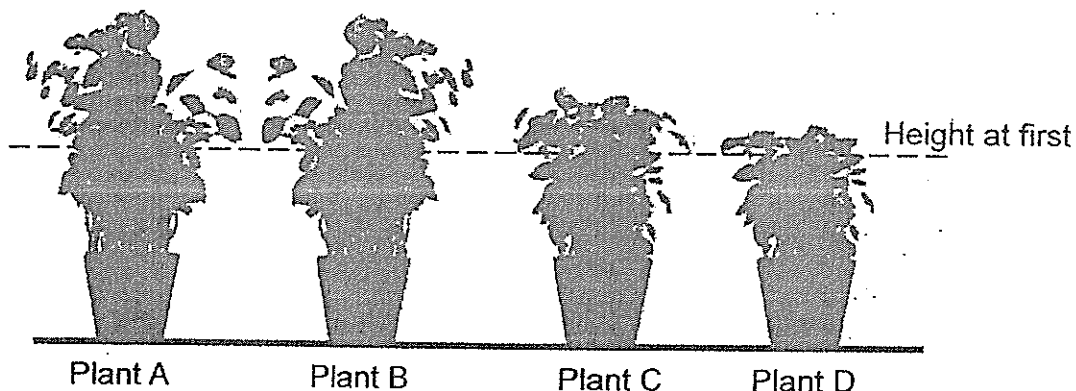
- (b) Suggest the difference in the breathing methods for animals X and Y. [1]

- (c) Which animal group does animal X belong to? Give a reason for your answer based on the observable characteristics of the animal in the above diagram. (Do not mention body covering.) [1]

- (d) On the diagram above, use crosses (X) to indicate two different parts of animal Y that helps it to swim in water. [1]



29. Lucy placed 4 pots of similar plants, A, B, C and D, in her garden. The diagram below shows her observation of the potted plants a month later.

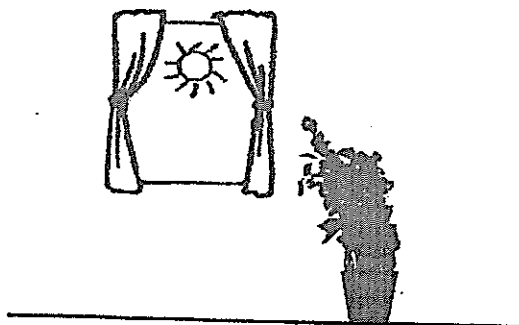


- (a) Based on observation of the above diagram, state the similarity between Plant A and Plant B in terms of their growth. [1]

- (b) After observing the plants for 3 months, Lucy concluded that plants, A, B, C and D, are flowering plants.

What observation do you think she has made to come to this conclusion? [1]

- (c) Lucy then placed plant A near her bedroom window. After a week, plant A grew in the direction as shown in the diagram below.

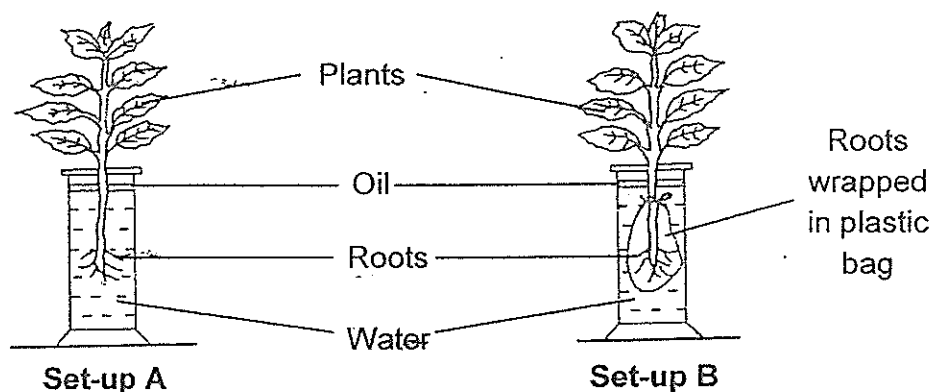


What characteristic of living things has Plant A shown?

[1]



30. Two similar plants were placed in 2 jars filled with 200ml of water each. In each set-up, a layer of oil covered the surface of the water. In Set-up A, the roots of the plant were left untouched. In Set-up B, the roots were wrapped in a plastic bag. The two set-ups were placed next to the window for 3 days.



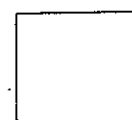
At the end of the experiment, the volume of water in each jar was measured and recorded in the table below.

Set-up	Volume of water (ml)	
	Start of Experiment	End of Experiment
A	200	170
B	200	

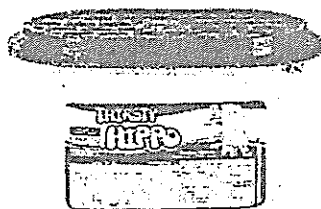
- (a) The volume of water in set-up A had decreased. Give a reason for this. [1]

- (b) Write in the table above to indicate the volume of water recorded at the end of the experiment for set-up B. [1]

- (c) Explain your answer for (b). [1]

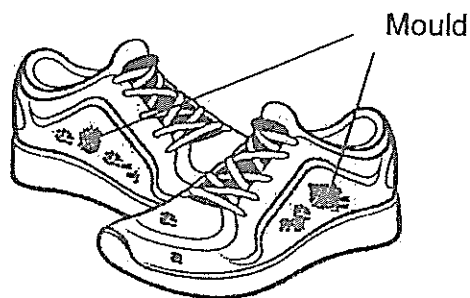


31. Harry placed two pairs of similar shoes in cupboards, A and B, respectively. He put a moisture absorber, as shown below, in cupboard A.



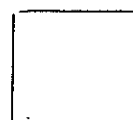
Moisture-absorber

After a month, he observed mould growing on one of the pairs of shoes as shown in the diagram below.



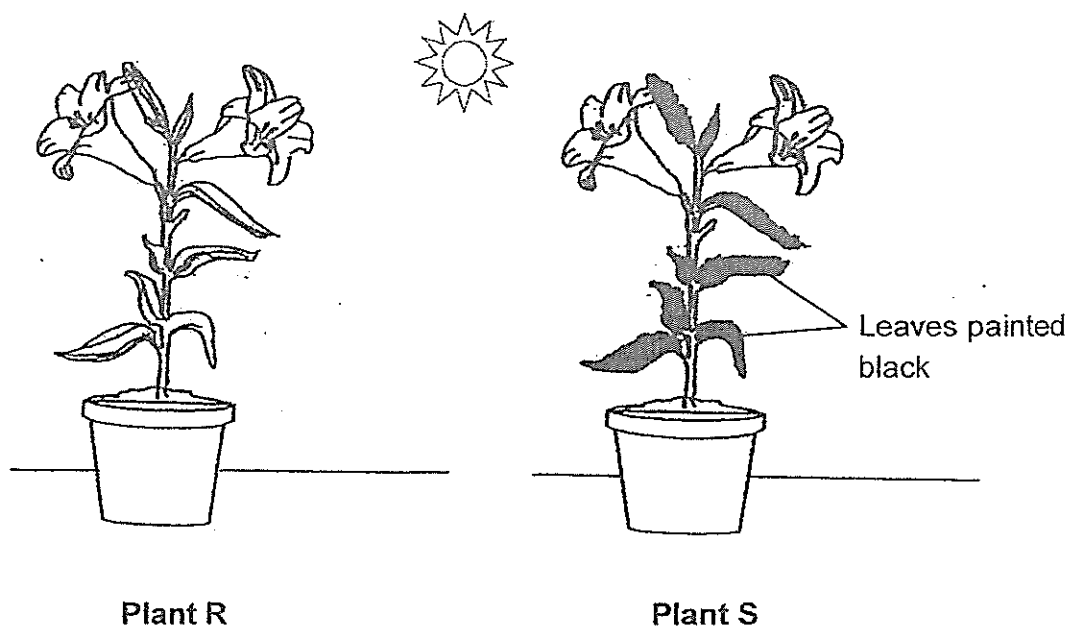
- (a) Based on his observation, in which cupboard, A or B, was the above pair of shoes placed? [1]

- (b) Explain your answer in (a). [1]



32. Rajesh placed 2 similar potted plants, R and S, in the garden as shown in the diagram below. He had painted all the leaves of Plant S black and both plants were given the same amount of water each day.

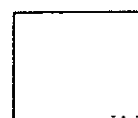
(Note: The black paint is not harmful to the plant.)



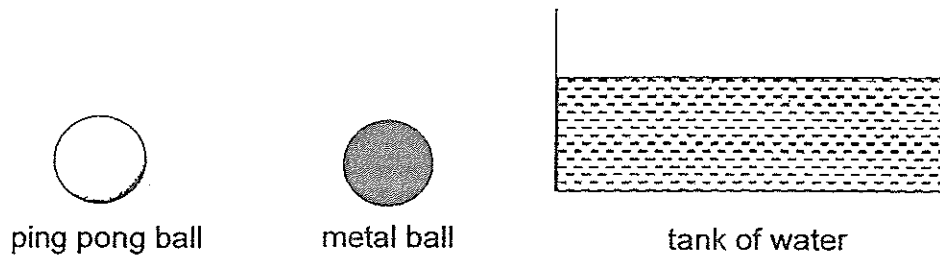
- (a) What do you think is the aim of the above experiment? [1]

- (b) Which plant, R or S, will more likely die after one week? [1]

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

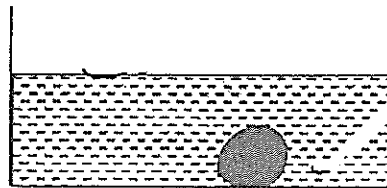


33. Daniel had two objects, a ping pong ball and a metal ball, as shown in the diagram below.

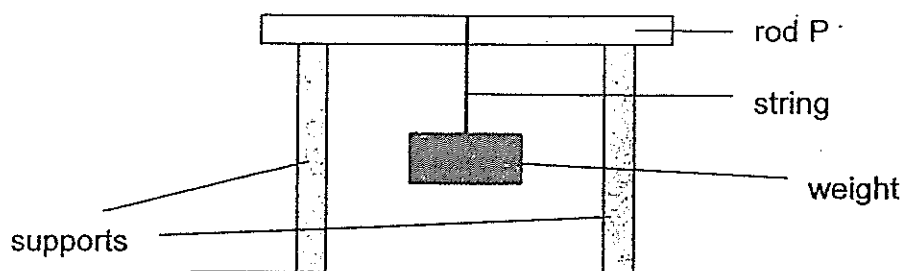


He dropped both objects into the tank of water.

- (a) Draw in the diagram below to show the positions of the ping pong ball and the metal ball after they have been dropped into the tank of water. [2]



Daniel has 4 rods, P, Q, R and S, made of different materials. He placed some weights on rod P, one at a time, as shown in the diagram below. He recorded the mass of the weights added before the rod broke. He then repeated the experiment using rods Q, R and S.



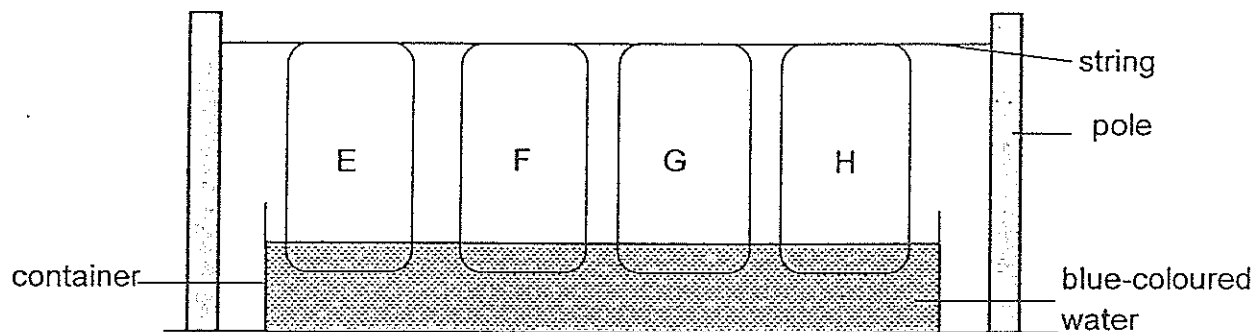
The table below shows the results of his experiment.

Rod	Mass of weight added before the rod broke (g)
P	1100
Q	300
R	650
S	810

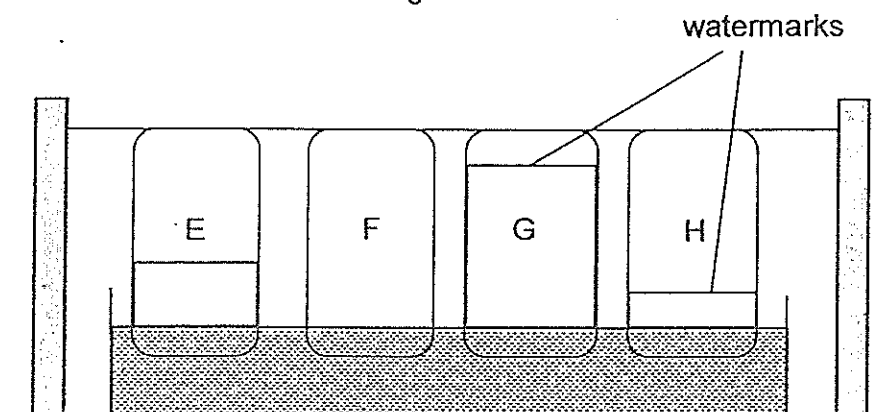
- (b) Based on the results recorded in the table above, which material, P, Q, R or S, is most suitable for making a bag used to carry 1kg of oranges? [1]



34. Catrina carried out an experiment by placing the ends of 4 pieces of different materials, E, F, G and H, into a container of water as shown in the diagram below. The materials were of the same size and shape.



After 10 minutes, Catrina observed the height of watermark on each of the four materials as shown on the diagram below.

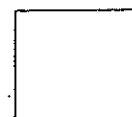


- (a) Based on the results shown above, which material, E, F, G or H, is most suitable to be made into a bath towel? [1]

- (b) Explain your answer for (a) [1]

- (c) Suggest what material is F made of?

End of Paper



Year: 2014

Level: P3

School: CHIJ St Nicholas Girls' School

Subject: Science

Semester: SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	3	1	3	2	2	1	4	2	3

Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
3	4	4	3	2	2	2	1	1	3

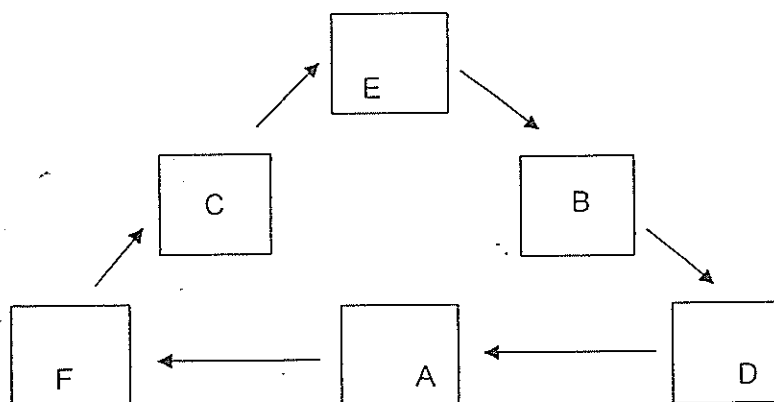
Q21	Q22	Q23	Q24
3	3	1	3

Q25a) D. The small intestines is where most chemical digestion take place as it contains most of the digestive enzymes.

Q25b) B is the oesophagus that does not have any enzymes to digest food.

Q25c) E absorbs all the water from the undigested food.

Q26a)



Q26b) The pea at stage E is unable to make its own food as it has not grown leaves which are necessary to photosynthesize to make food.

Q26c) Roots grow downwards into the soil to prevent uprooting of the plant and maximise water uptake.

Q27a) B and D both does not give birth to young alive.

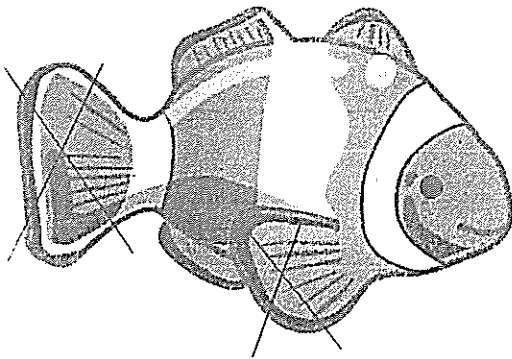
Q27b) i: D ii: C iii: A iv: B

Q28a) Animal X has feathers whereas animal Y has scales.

Q28b) Animal X breathe through lungs whereas animal Y breathe through gills.

Q28c) Animal X belongs to the birds group as it has a beak.

Q28d)



Q29a) Plant A and B have the same height.

Q29b) The plants produced flowers.

Q29c) Living things are affected by the changes in environment.

Q30a) Water in set-up A was absorbed by the roots of the plant.

Q30b) 200ml

Q30c) The water in set-up B did not decrease as the roots of the plant were wrapped in plastic bag, preventing the roots to absorb water.

Q31a) The above pair of shoes were placed in cupboard B.

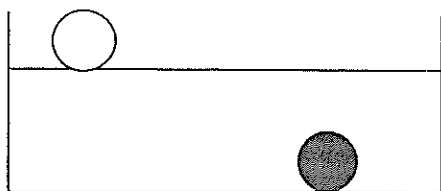
Q31b) Mould needs moisture to grow and reproduce.

Q32a) The aim of the above experiment is to find out whether plants require sunlight to photosynthesize.

Q32b) Plant S is more likely to die after one week.

Q32c) The leaves painted black are unable to absorb sunlight which is a condition for photosynthesis, when the plant does not make its own food, it will die.

Q33a)



Q33b) Rod P.

Q34a) Material G.

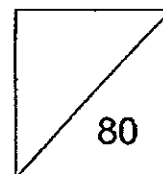
Q34b) Material G is most water absorbent.

Q34c) Material F is made of plastic.



**HENRY PARK PRIMARY SCHOOL
2014 SEMESTRAL EXAMINATION 2
SCIENCE
PRIMARY 3**

Duration of Paper: 1 h 30 min



Name: _____ ()

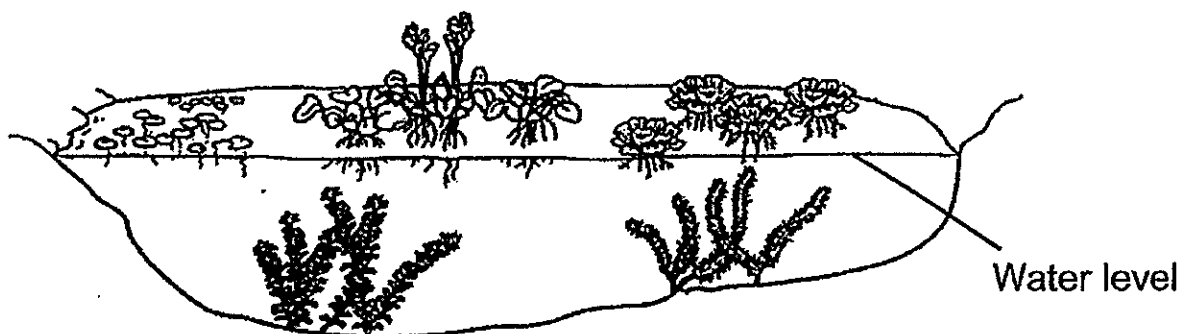
Parent's Signature: _____

Class: Pr 3 _____

Section A : Multiple-Choice Questions (40 marks)

For each question from 1 to 20, 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.

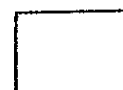
1. Study the plants found in the pond below.



How can we classify the plants shown above into two groups?

- (1) Ferns and mosses
- (2) Water plants and land plants
- (3) Floating plants and underwater plants
- (4) Plants with roots and plants without roots

()



2. Diagram A shows a puffer fish. When the puffer fish is attacked, it makes itself look bigger as shown in Diagram B.

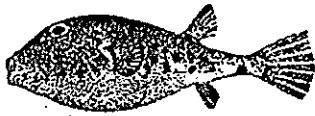


Diagram A

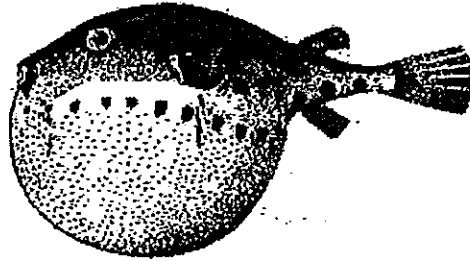


Diagram B

Based on the observation above, we can conclude that the puffer fish is a living thing because it can

- (1) die
- (2) grow
- (3) respond to changes
- (4) attack other living things

()

3. Study the statements made by the four pupils below.

Aqil: When I press some clay, it will change its shape. Therefore, it is a living thing because it responded to my touch.

Balu: When I touch the leaves of a mimosa plant, it will close its leaves. Therefore, a mimosa is a living thing.

Chun Li: My toy robot can speak and move from place to place. Therefore, it is a living thing.

Desmond: Only animals and plants are living things.

Whose statement is correct?

- (1) Aqil
- (2) Balu
- (3) Chun Li
- (4) Desmond

()

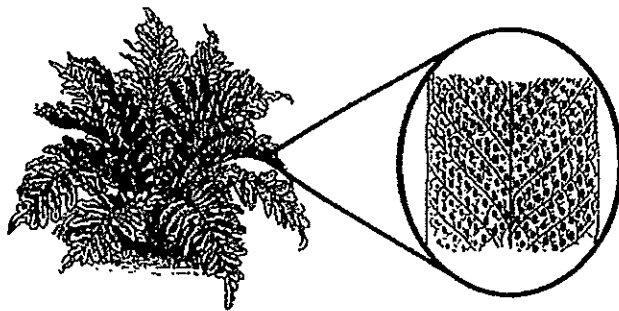


4. Both reptiles and fish have _____.

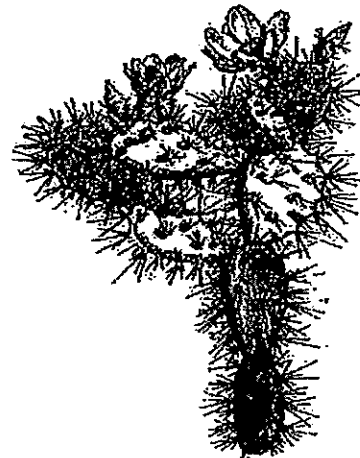
- (1) fins
- (2) gills
- (3) shells
- (4) scales

()

5. Observe the organisms below.



Organism Y

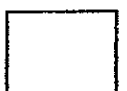


Organism Z

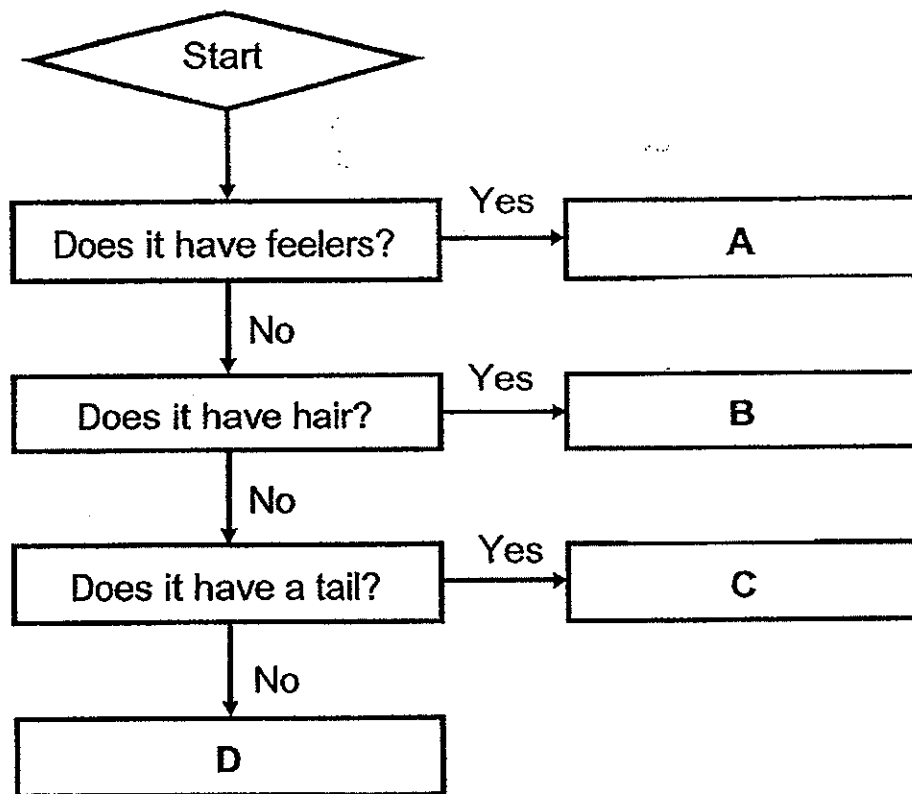
How do organisms Y and Z reproduce?

	By spores	By seeds
(1)	Y	Z
(2)	Z	Y
(3)	Y and Z	-
(4)	-	Y and Z

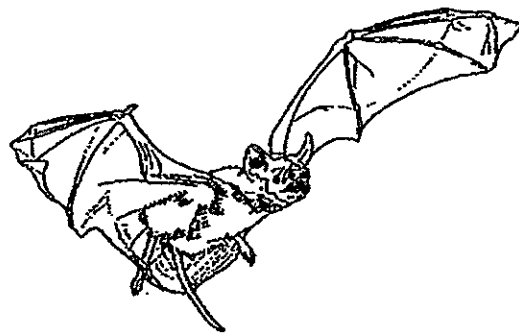
()



6. The flowchart below shows characteristics of animals A, B, C and D.



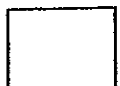
The diagram below shows a bat.



Based on the flowchart, which of the following letters most likely represents the bat?

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

()



7. Which of the following living things reproduce from spores?



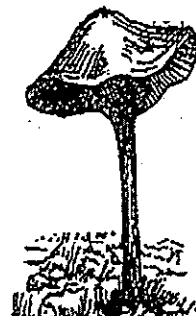
A



B



C

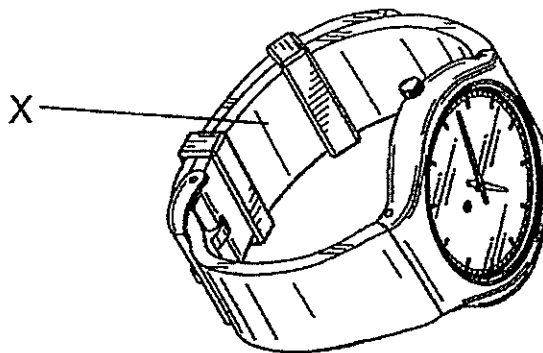


D

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

()

8. The picture below shows a watch.



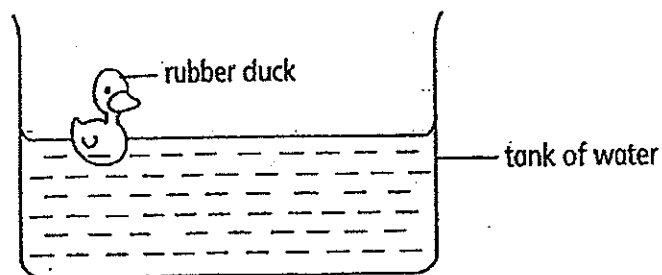
Part X fits around the wrist of a person because it

- (1) is strong
- (2) is flexible
- (3) is waterproof
- (4) floats on water

()



9. Ernie has a rubber duck. He places the rubber duck into a tank of water as shown below.



In which group(s) can the rubber duck be put in?

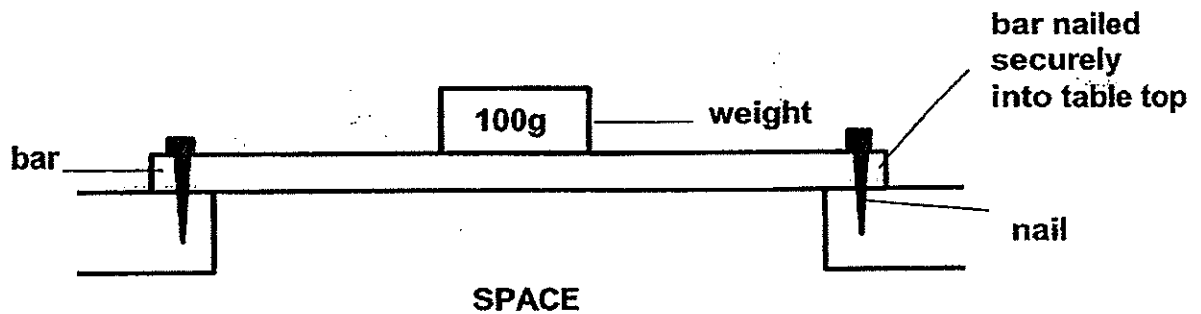
Group A	Group B	Group C
Iron nail	Wooden cork	Steel ball
Needle	Plastic bottle	Table tennis ball

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

()



10. Siva carried out an experiment to investigate the strength of three bars of different materials A, B and C as shown below.



He placed 100g weights one by one on the materials until the bar broke.

He recorded the results as shown in the table below.

Bar	Maximum weight before the bar broke
A	600 g
B	2000 g
C	1400 g

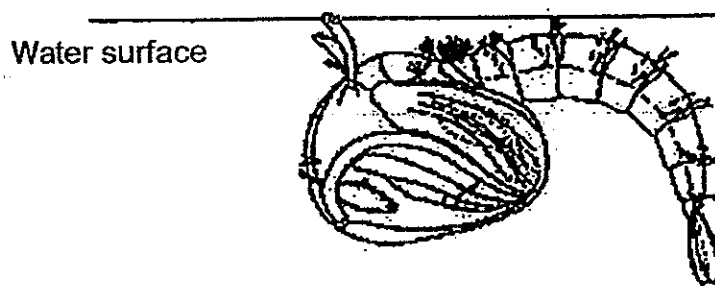
What can Siva conclude from this experiment?

- (1) Bar A is stronger than Bar B.
- (2) Bar B is stronger than Bar C.
- (3) Bar A is stronger than Bar B and C.
- (4) Bar C is stronger than Bar A and B.

()



11. The diagram below shows a stage in the life cycle of a mosquito.



Which of the following statements about the organism at this stage is correct?

- (1) It reproduces.
- (2) It does not breathe.
- (3) It stops developing at this stage.
- (4) It will turn into an adult after this stage.

()

12. Which of the following statement(s) is/are correct about the young of a cockroach?

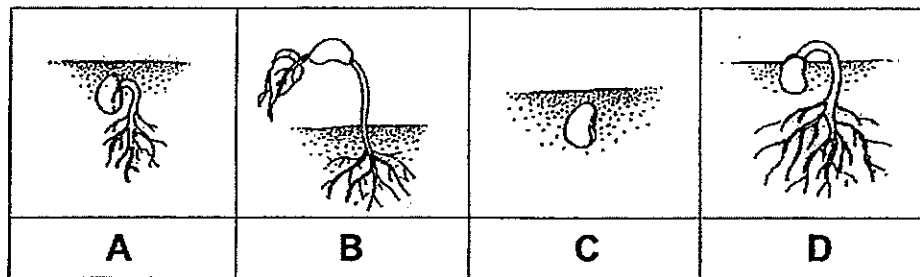
A: It does not moult as it grows.
B: It undergoes similar stages of growth as its parents.
C: It flies around to look for food immediately after it hatches from an egg.

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

()



13. The diagram below shows the different stages of a plant's growth.



Which of the following represents the correct order of growth of the plant shown above?

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

()

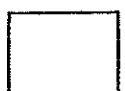
14. Daniel set up P, Q, R and S with different conditions present for his seeds to germinate in the following table:

Setups	Conditions			
	Water	Air	Light	Warmth
P	✓			
Q		✓		✓
R		✓	✓	
S	✓	✓		✓
✓ - condition present				

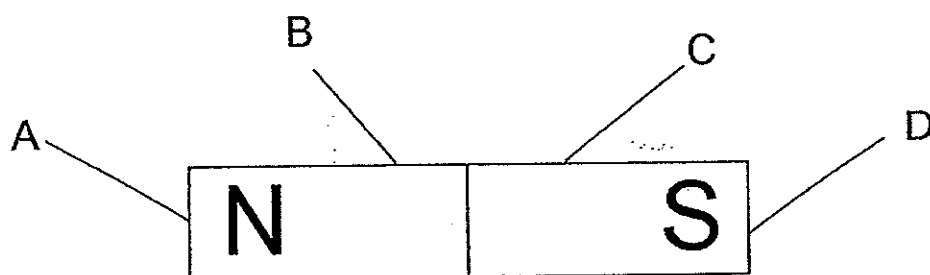
In which setup will the seeds most likely germinate in?

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

()



15. The diagram below shows a bar magnet.



Part C of the bar magnet is able to attract 8 iron nails.

Which of the following shows the likely results for the number of nails attracted by parts A, B and D of the bar magnet?

	A	B	D
(1)	13	7	14
(2)	7	13	15
(3)	8	13	7
(4)	14	13	8

()

16. Ailing conducted an experiment to observe how three objects X, Y and Z, would interact with a magnet. Ailing brought the magnet close to each of the three objects X, Y and Z. She then recorded her observations in the table below.

Object	Observations
X	It moved towards the magnet
Y	It did not move
Z	It moved away from the magnet

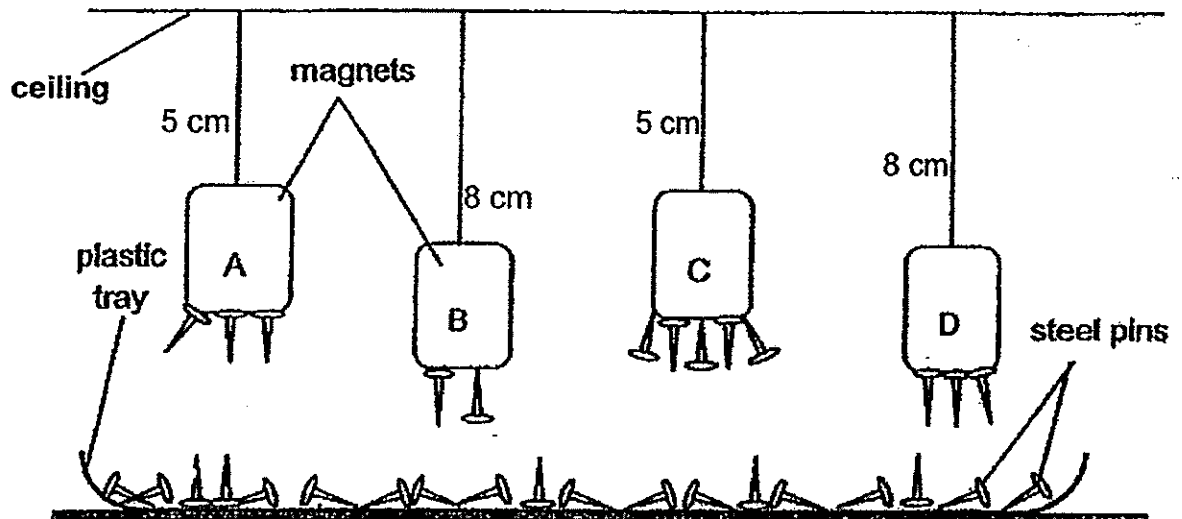
Based on the above observations, which one of the following most likely represents object X, Y and Z?

	X	Y	Z
(1)	Iron Nail	Copper Wire	Magnet
(2)	Aluminium Foil	Iron	Eraser
(3)	Copper Wire	Eraser	Magnet
(4)	Magnet	Aluminium Foil	Iron Nail

()



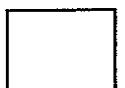
17. Four identical bar magnets A, B, C and D are hanging from strings of different lengths from a ceiling as shown in the drawing below.



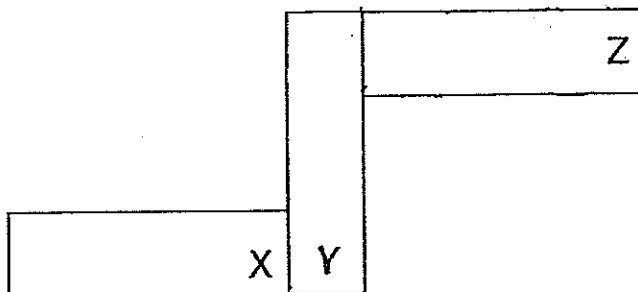
Arrange the above magnets according to their magnetic strength from the strongest to the weakest.

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

()



18. The diagram below shows the arrangement of three bar magnets, each with a pole labelled as X, Y and Z respectively.



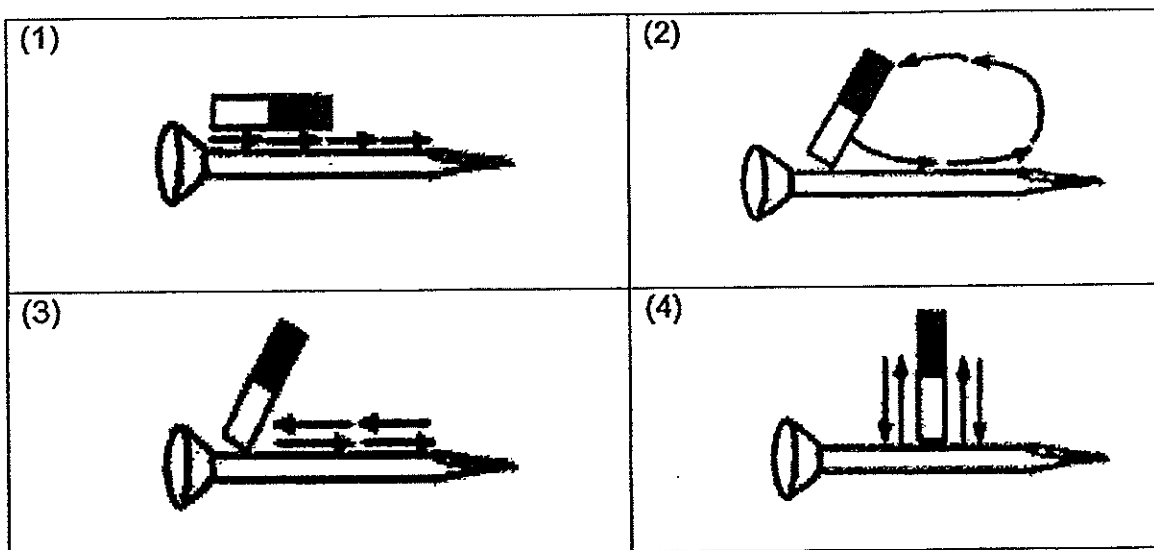
Which of the following shows the poles X, Y and Z correctly?

	X	Y	Z
(1)	North	South	South
(2)	South	North	South
(3)	North	North	South
(4)	South	South	North

()

19. Clariss learnt that a nail can be made into a magnet by stroking it with a magnet.

Which is the correct way of doing it?

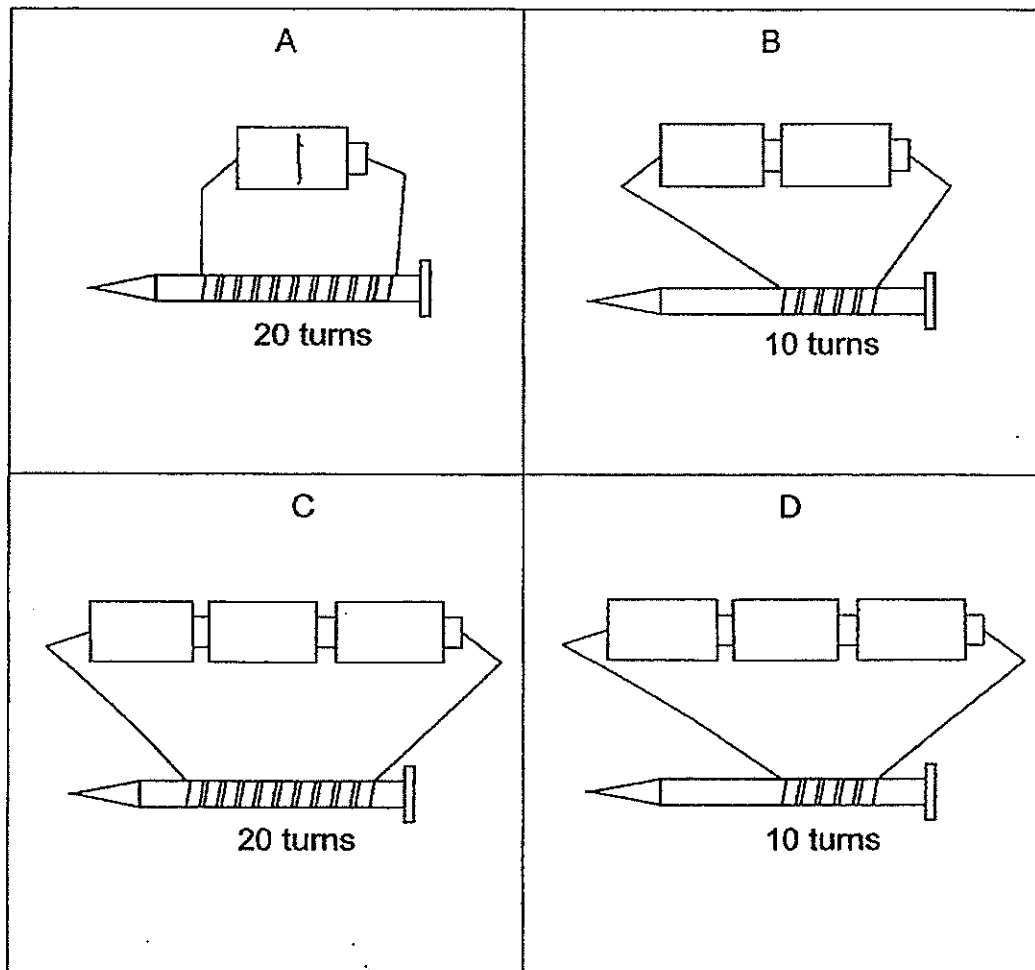


()



20. Jie Min learnt that an iron nail is magnetised when it is wound with a coil of wire connected to batteries.

She wanted to find out whether the number of turns of the coil of wire affected the strength of the magnetised iron nail. She set up four arrangements as shown in the diagrams below.

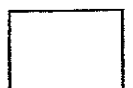


Which two arrangements should she use for a fair test?

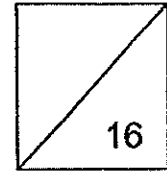
- (1) A and B
- (2) A and C
- (3) B and C
- (4) C and D

()

End of Section A



**HENRY PARK PRIMARY SCHOOL
2014 SEMESTRAL EXAMINATION 2
SCIENCE
PRIMARY 3**



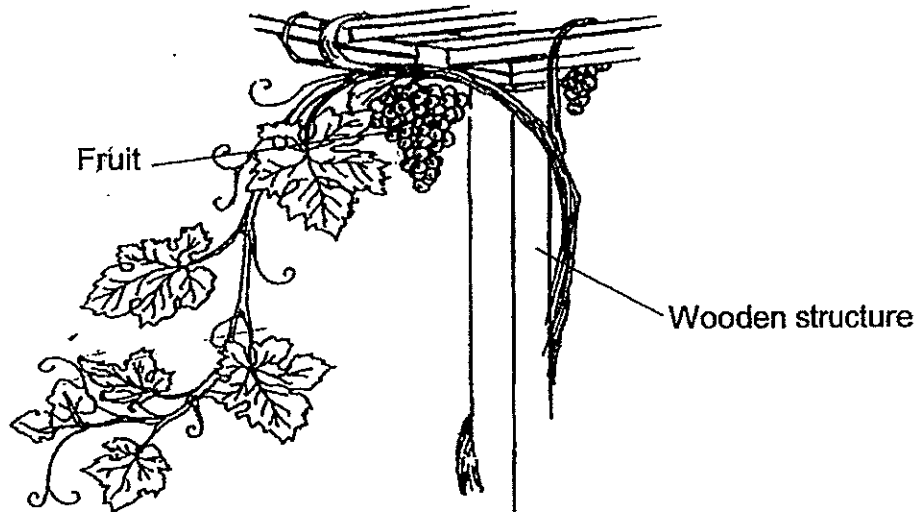
Name: _____ ()

Class: Pr 3 _____

Section B: Structured Questions (16 marks)

For each question from 21 to 28, write your answers in the spaces given.

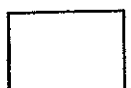
21. The diagram below shows a plant growing in a park.



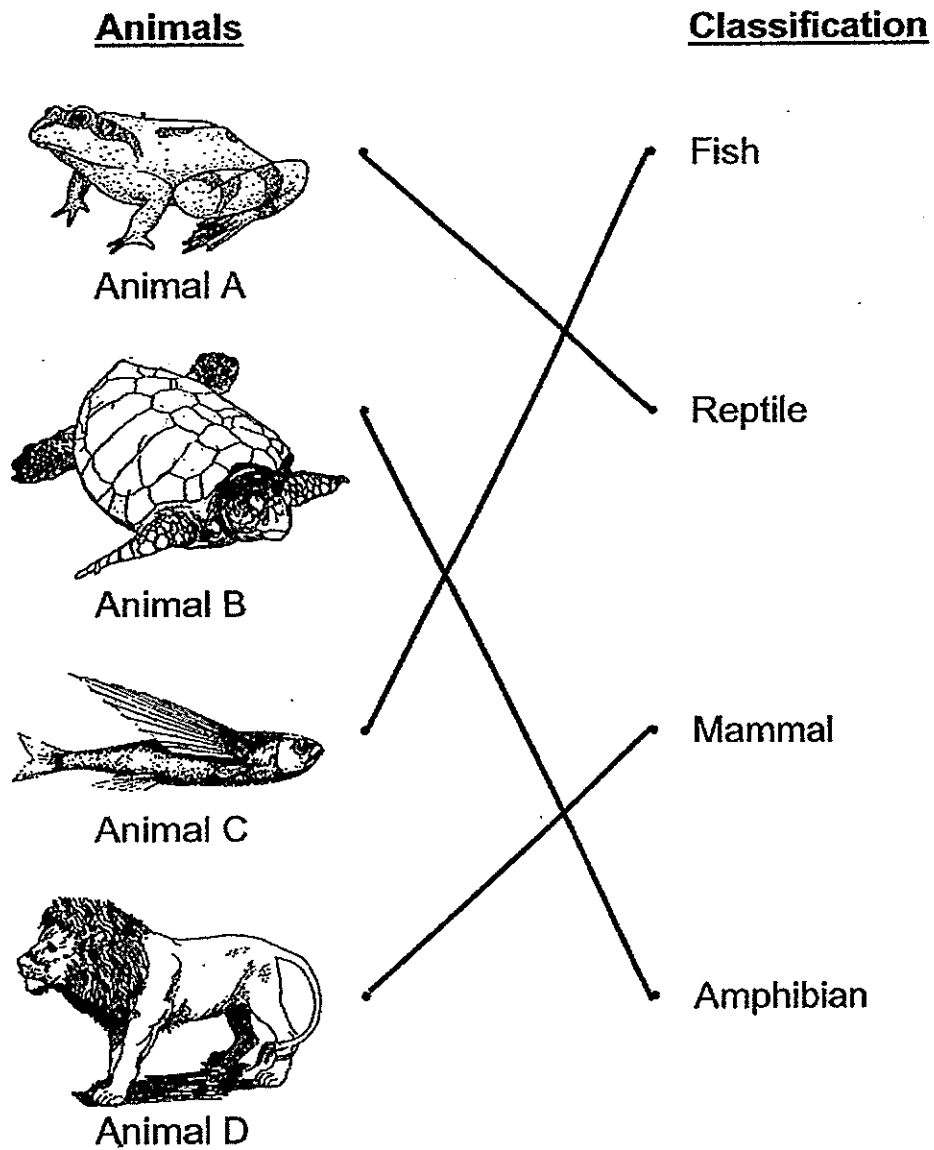
Complete the table below.

Statements	Put a tick (✓) if the statement is correct
(a) This plant has no roots.	
(b) This plant has a weak stem.	
(c) This plant is a flowering plant.	
(d) This plant reproduces by spores.	

(2m)



22. Tim did the matching shown below.



Which two animals did Tim match **wrongly**?
Write the correct letter (A, B, C or D) in the boxes below.

(2m)

Animal and Animal



23. Write True (T) or False (F) for the following sentences.

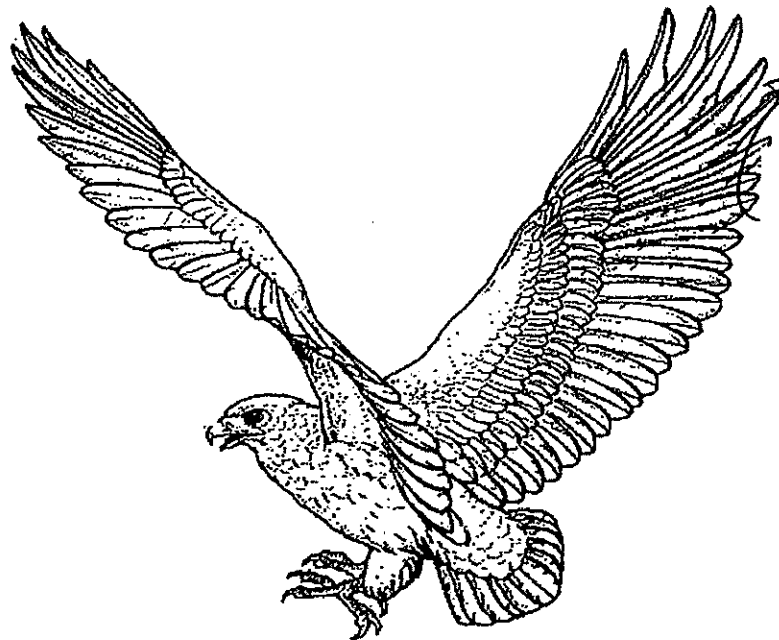
(2m)

Sentences	T / F
Yeast is a type of fungi.	
All bacteria are harmful to humans.	
Some fungi can be eaten.	
Yogurt contains useful bacteria.	

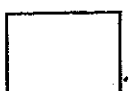
24. Study the picture of a bird shown below.

(2m)

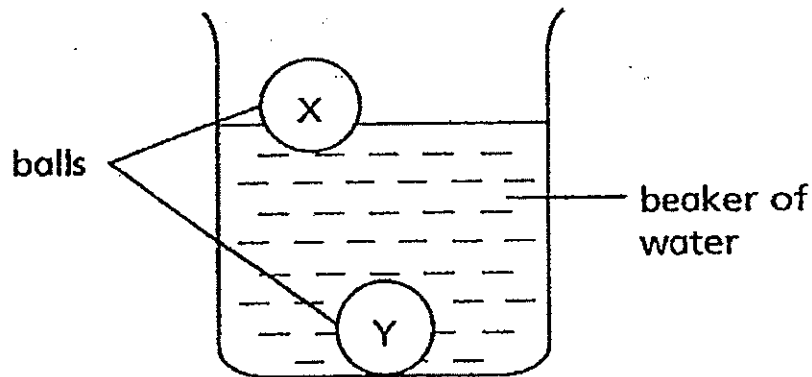
a) On the picture, **label** the beak of the bird.



b) On the picture, **label** another characteristic common to birds only.



25. Kimberly conducted a test on two balls of different materials X and Y to find out whether they will float or sink in water. The diagram below shows her results.



Put a tick (✓) for the variable(s) shown below that Kimberly must keep the same for a fair experiment.

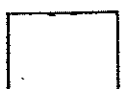
(2m)

Variables	Tick (✓)
Material of the balls	
Size of the balls	
The way the balls are released into the beaker	

26. Label the parts of the plant using the helping words given below.

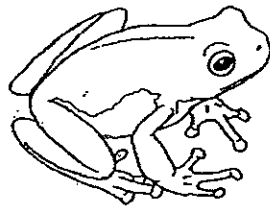
(2m)

<u>Helping Words</u>				
Stem	Leaf	Flower	Roots	Fruit

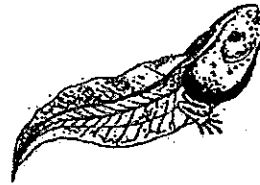


27. Compare a frog and a tadpole.

(2m)



Frog



Tadpole

Helping Words

lungs

skin

gills

legs

tail

insects

plants

The tadpole breathes through its _____ while the frog
breathes with its _____ and _____. The tadpole
feeds mainly on tiny _____ while the frog feeds on small
animals.



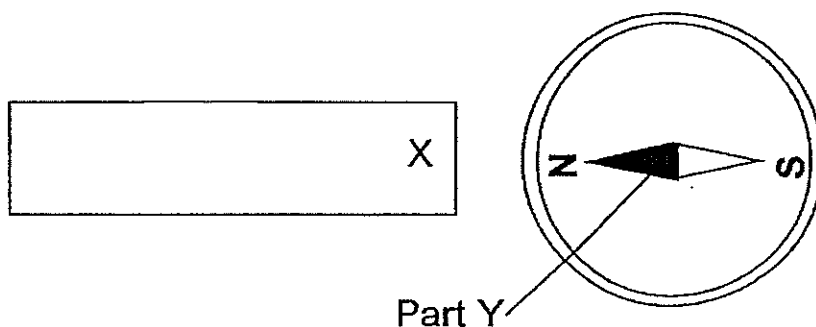
28. a) Put a tick (✓) in the box for the correct statement(s).

(1m)

Statements		Tick (✓)
(i)	A magnet is able to repel a piece of cotton.	
(ii)	A magnet can attract and repel another magnet.	
(iii)	A magnet can attract a copper rod.	
(iv)	There are some metals that are not attracted by the magnet.	

b) Look at the diagram of the magnet and the compass placed near each other as shown below.

(1m)



Part Y of the compass is a magnet.
Name the pole at X.

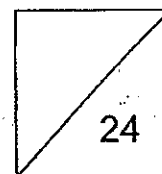
End of Section B



HENRY PARK PRIMARY SCHOOL
2014 SEMESTRAL EXAMINATION 2
SCIENCE
PRIMARY 3

Name: _____ ()

Class: Pr 3 _____

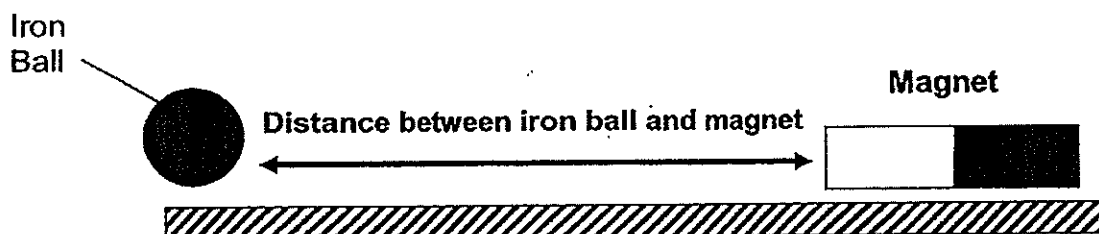


Section C: Open-Ended Questions (24 marks)

For each question from 29 to 36, write your answers in the spaces given.

29. Deepa wanted to investigate the strength of different types of magnets by observing whether the iron ball is attracted to the magnet at different distances between them.

Her experimental setup and results are shown below.



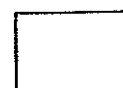
✓ - attracted the iron ball

X - did not attract the iron ball

Distance between iron ball and magnet	Rod Magnet	Ring Magnet	U-shaped magnet
5 cm	✓	✓	✓
10 cm	✓	✓	X
15 cm	✓	✓	X

- a) Based on Deepa's results above, which is the weakest magnet?

_____ (1m)



b) Explain your answer in (a)

(1m)

c) Using the same experimental setup, what can Deepa do to find out which is the strongest magnet?

(1m)



30. Jennifer kept similar pots of plants, X and Y, in the garden. The plants were grown in the same type of soil. Each day, Jennifer used 200 ml of water to water plant X but only used 50 ml of water to water plant Y. The table below shows the height of the plants over the ~~one week~~.

four days

	Height of plant / cm	
Day	X	Y
0	12	12
1	13	13
2	15	14
3	16	15
4	17	16

- a) Which plant has grown more? (1m)

- b) What is the variable that is changed in this experiment? (1m)

- c) In the above experiment, which characteristic of plants shows that they are living things? (1m)



31. Janet was given rods A, B and C. The three rods were made of different materials.

X Y

Rod

She was told to find out which rod(s) is/are magnet(s). She held the same pole of a magnet near the ends of each rod, first at X and then at Y. The following table shows the observations she made.

Rods	<u>Observations at X</u>	<u>Observations at Y</u>
A	Attracted by the magnet	Attracted by the magnet
B	Repelled by the magnet	Attracted by the magnet
C	Was not attracted or repelled by the magnet	Was not attracted or repelled by the magnet

- a) Which rod(s) is/are definitely magnet(s)? (1m)

- b) Explain your answer in (a). (2m)



32. Study the organisms shown below.



Organism A



Organism B



Organism C

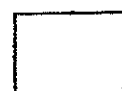
The three organisms shown above obtain their food in different ways.

- a) Which organism feeds on decaying matter? (1m)

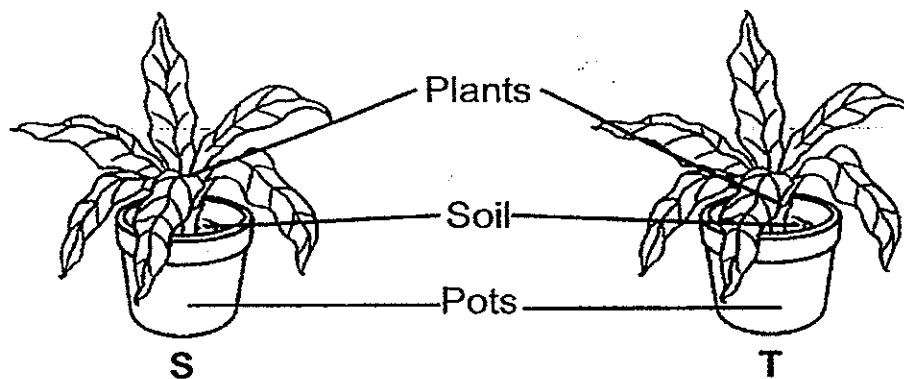
- b) Which organism needs to move from place to place for food? (1m)

- c) There was no rain for two months in Singapore and ferns found along the roadsides received lots of sunlight. However, many of these ferns were dying.

How did the weather over the two months affect the survival of these ferns?



33. Alex wanted to find out what type of soil was suitable for growing plants. For his experiment, he set-up two pots, S and T, as shown below.



Which variable(s) should Alex keep the same and which variable(s) should he change?

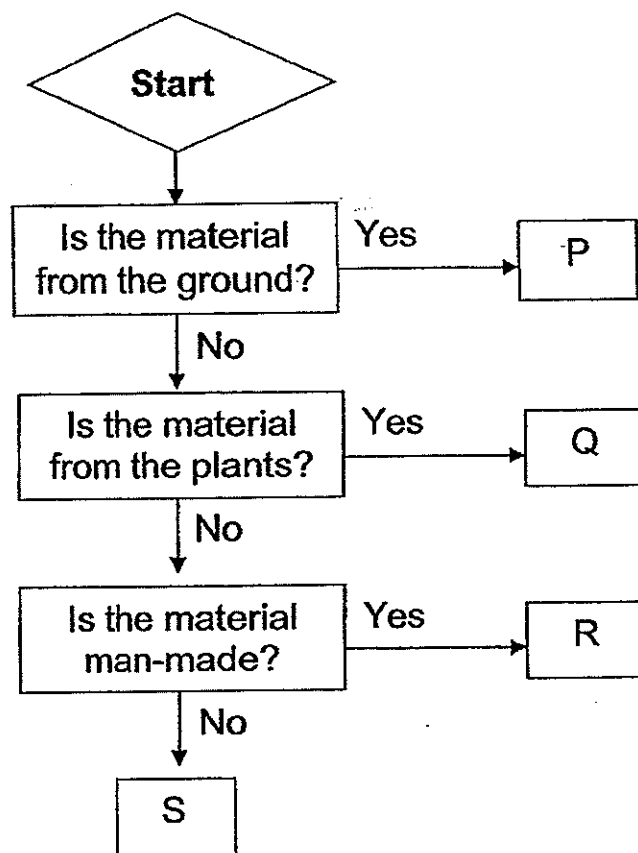
(3m)

Put a tick (✓) in the correct boxes below.

Variable	Keep the same	Change
i) Size of the plants		
ii) Location of the plants		
iii) Type of soil in each pot		
iv) Amount of soil in each pot		
v) Amount of water given to each plant		
vi) Amount of sunlight received by each plant		



34. The flowchart below shows properties of material P, Q, R and S.



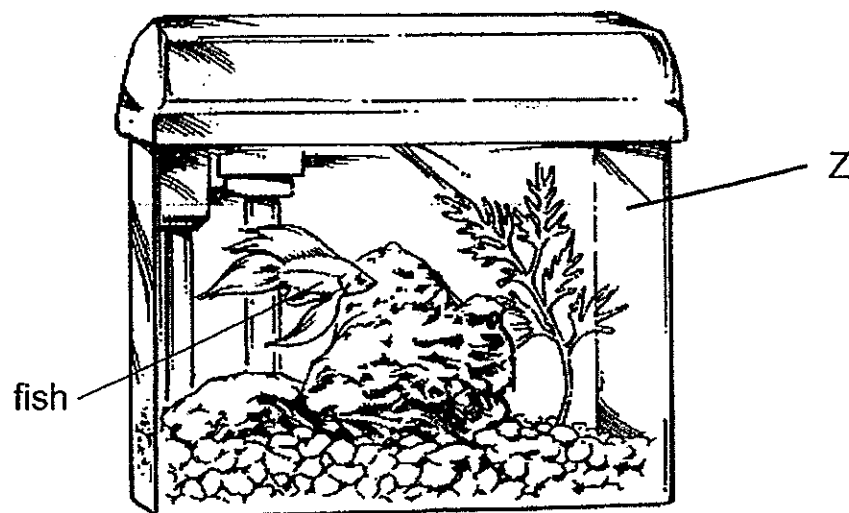
- a) Based on the flow chart, how are Materials Q and R similar? (1m)
- _____
- _____
- b) Based on the flow chart, complete the sentences below using letters P, Q, R or S. (2m)

Material _____ is likely to be cotton.

Material _____ is likely to be plastic.



35. The diagram below shows a fish tank.



Material Z is usually made of glass.

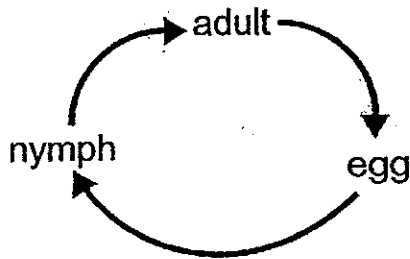
- a) Which property of glass allows us to look at the fish in the tank clearly? (1m)

- b) State another property of glass which makes it a suitable material for making part Z. (1m)

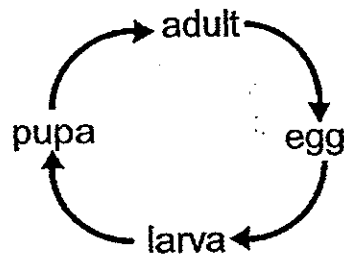
- c) Name another material that can be used to make Part Z. (1m)



36. The diagrams below show the life cycles of two insects, X and Y. (3m)



Life cycle of insect X



Life cycle of insect Y

Based on the information above, give one similarity and one difference between the life cycles of insect X and insect Y.

- a) Similarity:

- b) Difference (do not compare number of stages in each life cycle):

- c) Name one example of an insect that has the same life cycle as insect Y.

-END OF PAPER-

SETTERS: Mr Sadhiq, Mr Nelson Tong & Mdm Nadia



Year: 2014

Level: Primary 3

School: Henry Park Primary School

Subject: Science

Semester: SA2

Section A:

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	3	2	4	1	2	3	2	2	2
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
4	2	2	4	1	1	3	2	2	4

Section B:

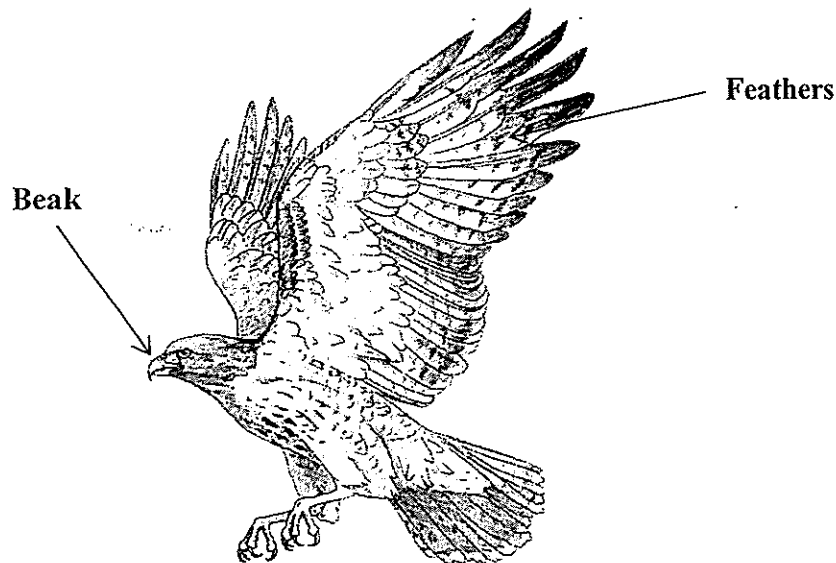
Q21)

Statement	Put a tick if statement is correct
(a)	
(b)	✓
(c)	✓
(d)	

Q22) A and B

Q23) T, F, T, T

Q24) a) b)



Q25)

Variables	Tick
Material of the balls	
Size of the balls	✓
The way the balls are released into the beaker	✓

Q26) a) Flower

b) Stem

c) Leaf

d) Fruit

Q27) gills, skin, lungs, plants

Q28) a)

Statements	Tick
i) A magnet is able to repel a piece of carbon.	
ii) A magnet can attract and repel another magnet.	✓
iii) A magnet can attract a copper rod.	
iv) There are some metals that are not attracted by the magnet.	✓

b) South pole

Q29) a) The weakest magnet is the U-shaped magnet.

b) The U-shaped magnet could only attract the iron ball at a distance of 5cm but the rod magnet and the ring magnet could attract the iron ball from a further distance than the U-shaped magnet.

c) Move the ball towards the magnet and see the distance where the ball is attracted to the magnet. The furthest distance which the ball was attracted, the magnet is the strongest.

Q30) a) Plant X has grown more.

b) The amount of water given to the plant is changed in this experiment.

c) The plants grow in this experiment.

Q31) a) Rod B

b) Only magnets could attract and repel each other, as rod B was repelled and attracted by the magnet, thus rod B is a magnet.

Q32) a) Organism C feeds on decaying matter.

b) Organism A needs to move from place to place for food.

c) The ferns have not enough water as they need water to survive so they will die.

Q33)

Variable	Keep the same	Change
i) Size of plant	✓	
ii) Location of the plants	✓	
iii) Type of soil in each pot		✓
iv) Amount of soil in each pot	✓	
v) Amount of water given to each plant	✓	
vi) Amount of sunlight received by each plant	✓	

Q34) a) Material Q and R do not come from the ground.

b) Q, R

Q35) a) The glass is transparent.

b) The glass is waterproof.

c) Clear plastic can be used to make part Z.

Q36) a) They both start with an egg stage.

b) Insect X does not have a pupa stage but insect Y has a pupa stage.

c) Mealworm beetle have the same life cycle as insect Y.

METHODIST GIRLS' SCHOOL

Founded in 1887



END-OF-YEAR EXAMINATION 2014 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: 30 October 2014

This booklet consists of 16 printed pages including this page.

For each question from 1 to 25, four options are given. One of them is the correct answer. Make your choice and shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

[50 marks]

1. Tasmin caught a frog and placed it in a jar with some water and fruit flies. She closed the jar tightly with a lid. The next day, the frog was dead. What could have caused the death of the frog?

- (1) There was no light.
- (2) There was insufficient air.
- (3) There was only a little food.
- (4) There was not enough water.

2. Which of the following is grouped correctly?

	Plant	Animal	Fungi	Micro-organism
(1)	Bacteria	Ixora	Guppy	Mushroom
(2)	Mushroom	Bacteria	Ixora	Guppy
(3)	Guppy	Mushroom	Bacteria	Ixora
(4)	Ixora	Guppy	Mushroom	Bacteria

3. Read the following statements carefully.

- A: Ferns are living things because they can reproduce by spores.
- B: Bacteria are non-living things as they do not need air to survive.
- C: Mushrooms are living things which require sunlight to make food.
- D: Clouds are living things because they can move by themselves.

Which of the following statement(s) is/are true about living and/or non-living things?

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

(Go on to the next page)

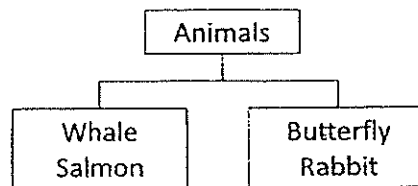
4. Study the table below.

Animal	Outer covering
Frog	Scales
Snake	Scales
Penguin	Fur
Polar bear	Fur

Which of the following animals have been matched with the correct outer covering?

- (1) Frog and Snake
- (2) Frog and Penguin
- (3) Snake and Polar bear
- (4) Penguin and Polar bear

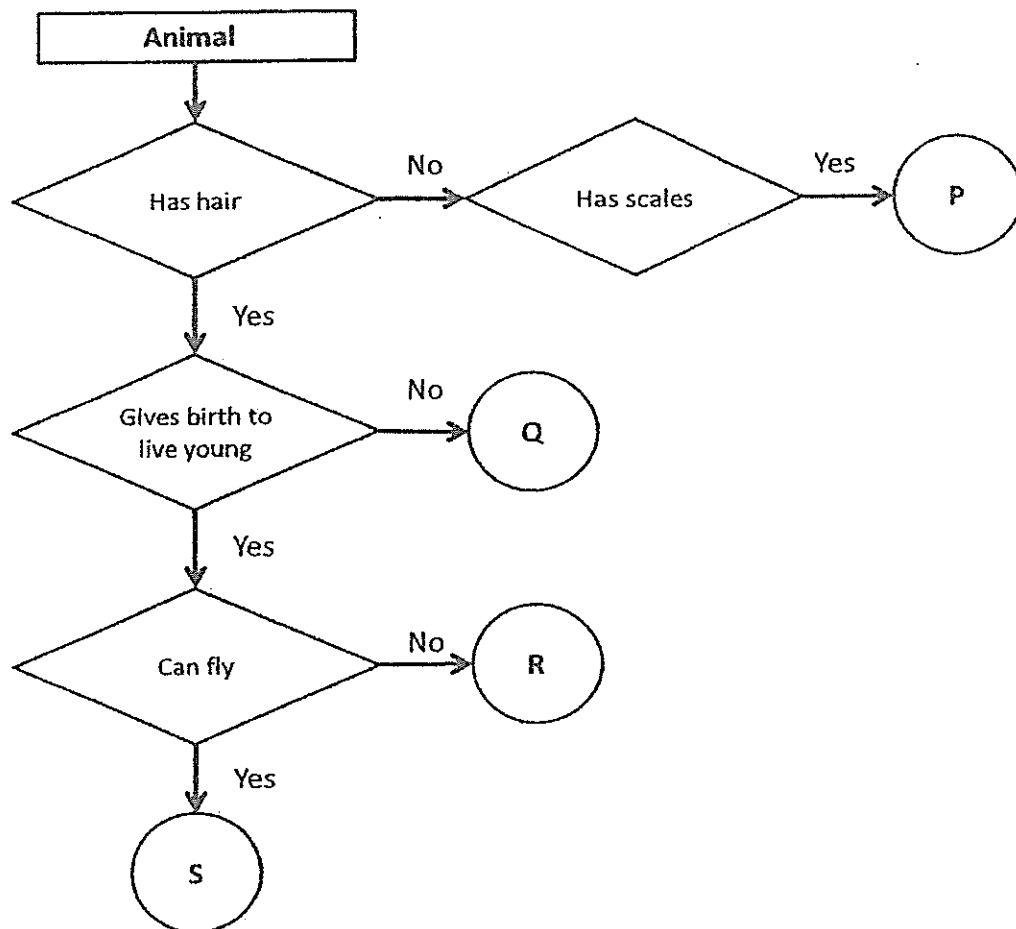
5. Study the classification chart below.



How are these animals classified?

- (1) Where they live
- (2) How they breathe
- (3) Their body covering
- (4) Their reproduction methods

6. Study the flow chart as shown below.

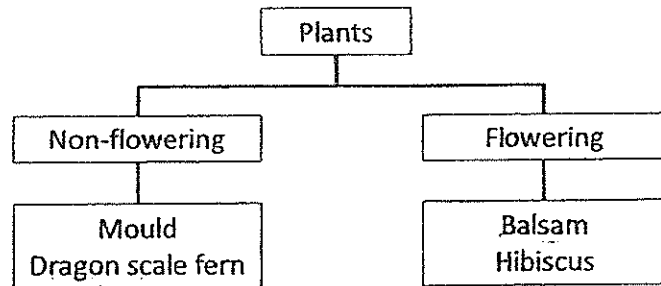


Which of the following animals represent the letters P, Q, R and S?

	P	Q	R	S
(1)	Crocodile	Penguin	Dolphin	Butterfly
(2)	Turtle	Spiny anteater	Mynah	Bat
(3)	Goldfish	Frog	Dog	Eagle
(4)	Salmon	Platypus	Giraffe	Bat

(Go on to the next page)

7. Study the classification chart as shown below.



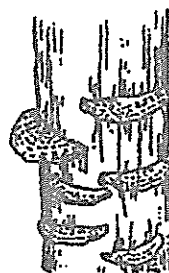
Which of the organisms is incorrectly placed in the classification chart?

- (1) Mould
- (2) Balsam
- (3) Hibiscus
- (4) Dragon scale fern

8. Study the two organisms shown below.



Bird's nest fern

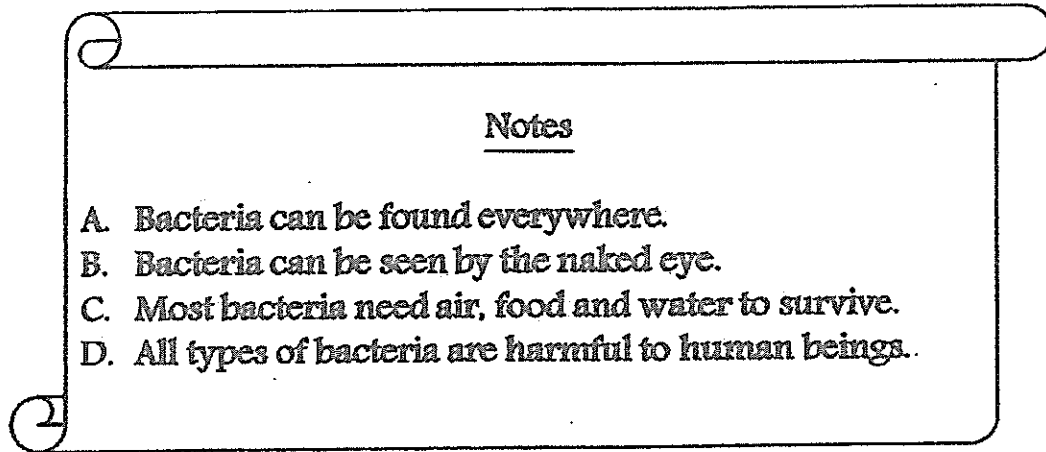


Bracket fungi

Which of the following states the **correct** similarity and difference between these two organisms?

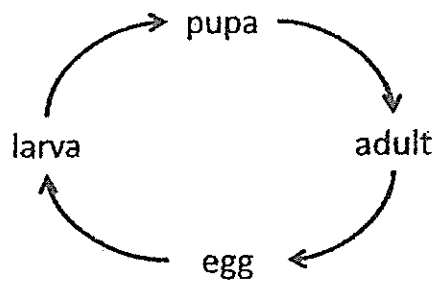
	Similarity	Difference
(1)	Both can make their own food.	The bird's nest fern reproduce by seeds but the bracket fungus reproduce by spores.
(2)	Both can make their own food.	The bird's nest fern produce flowers but the bracket fungus does not produce flowers.
(3)	Both reproduce by spores.	The bird's nest fern can make its own food but the bracket fungus cannot.
(4)	Both can only grow on trees.	The bird's nest fern reproduce by seeds but the bracket fungus reproduce by spores.

9. Rani found a piece of paper with the following notes.



Which of the above statements are true about bacteria?

- (1) A and D
 - (2) A and C
 - (3) B and D
 - (4) B and C
10. Study the diagram below.



Which one of the following animals goes through this life cycle?

- (1) Frog
- (2) Cockroach
- (3) Grasshopper
- (4) Darkling beetle

11. Miss Goh asked a group of students a question.

“How are the life cycles of a chicken and cockroach similar?”

The responses of the students are shown below.

Tim : Both their young hatch from eggs.

Ali : Both have a 4-stage life cycle.

Siti : Both have a 3-stage life cycle.

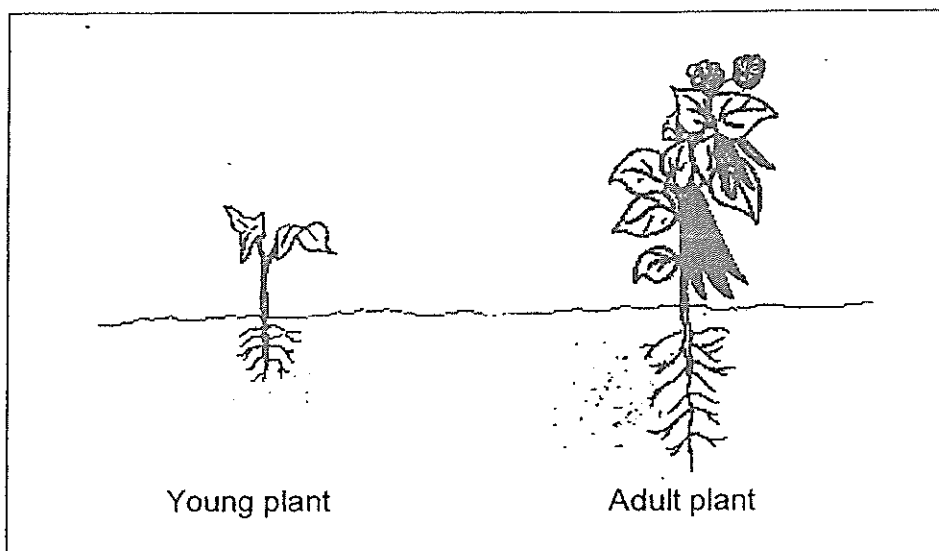
Whose responses are correct?

- (1) Ali only
- (2) Siti only
- (3) Tim and Ali
- (4) Tim and Siti

12. Which of the animals stated below undergo moulting at the young stage?

- (1) Frog and Mosquito
- (2) Frog and Butterfly
- (3) Mosquito and Butterfly
- (4) Mosquito and Chicken

13. The pictures below show a young plant and an adult plant. Which two parts can only be found on an adult plant but not on a young plant?



- (1) Fruits and stem
 - (2) Leaves and roots
 - (3) Flowers and fruits
 - (4) Roots and flowers
14. The table below shows the development process of a flowering plant.

Process	Development
A	Shoot with leaves attached grows upwards.
B	Some flowers develop into fruits with seeds.
C	Plant grows taller and bears flowers.
D	Seeds are planted in the ground.

Which of the following shows the correct order of the development, starting with "Some flowers develop into fruits with seeds"?

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

15. Which of the following statements about some plant life cycles are correct?

- A: Most flowering plants have three stages in their life cycles.
- B: A plant life cycle shows the order of the different stages in plant.
- C: The life cycle of a bean plant consists of the seed, young plant and adult plant.
- D: Different plants take similar period of time to develop from seeds to adult plants.

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

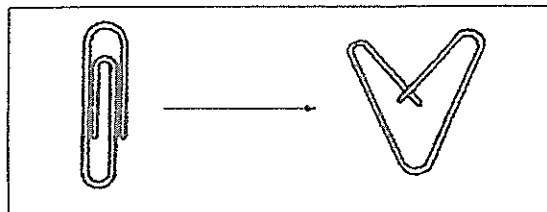
16. Study the classification table below.

Group X	Group Y
A piece of drift wood	A glass vase
An empty plastic bag	A metal fork

What would be the most suitable way to classify the objects in Group X and Group Y?

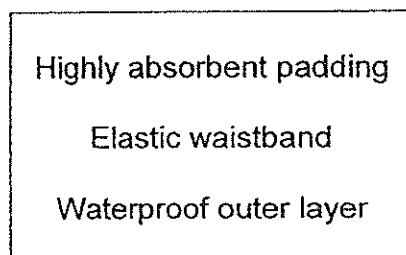
	Group X	Group Y
(1)	Transparent	Opaque
(2)	Waterproof	Absorbent
(3)	Flexible	Stiff
(4)	Float	Sink

17. Aiden bent a large paper clip to form the shape of a heart. The paper clip is made of only one material.



What is the property of the material of the paper clip that enabled him to shape it?

- (1) It is soft
 - (2) It is light
 - (3) It is shiny
 - (4) It is malleable
18. Most disposable diapers have the following features.



Which of the following materials was not used to make the different parts of a diaper?

- (1) Cotton
- (2) Plastic
- (3) Rubber
- (4) Aluminium

19. The table below shows four materials, A, B, C, D and their properties.

	Material A	Material B	Material C	Material D
Strong	Yes	Yes	No	No
Flexible	No	Yes	No	Yes
Waterproof	No	No	Yes	Yes
Transparent	Yes	No	Yes	No

Mrs Nathan wants to make curtains to block off the sunlight for her new house. Which material should she choose?

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

20. A group of students were having a discussion on magnets. They made the following statements:

Paul: All metals are magnets.

Siva: Every magnet has two poles, no matter what shape it is.

Nuru: Like poles of two magnets attract, while unlike poles repel.

Which of the following student(s) is/are correct?

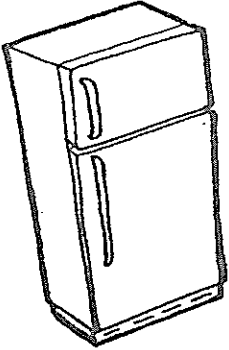
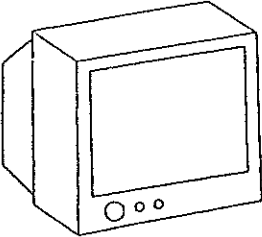
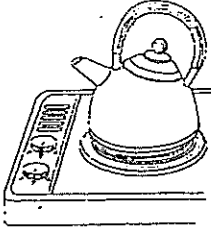

- (1) Siva only
- (2) Paul and Siva only
- (3) Siva and Nuru only
- (4) Paul, Siva, and Nuru

21. Which of the following ways can weaken the magnetism of a magnet?

- A: By hammering it many times
- B: By heating it over a strong flame
- C: By soaking it in oil for a few hours
- D: By dropping it repeatedly on the floor

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

22. Which of the following appliance(s) does/do not have any magnet in it/them?

			
A : Refrigerator	B : Television	C : Kettle	D : Telephone

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

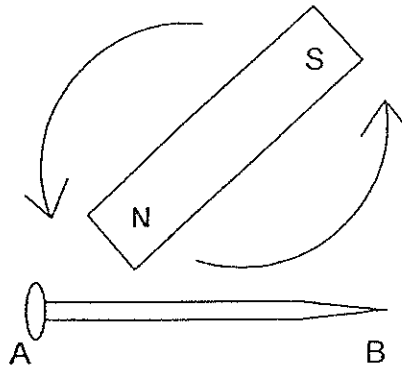
23. Zachary brought a U-shaped magnet near three objects, D, E and F. One is a magnet, one is a magnetic object and one is a non-magnetic object. Each of these objects interacted with the U-shaped magnet and he recorded his observations in the table below.

Object	Upon interaction with U-shaped magnet
D	No movement was observed
E	Moved away from the U-shaped magnet
F	Moved towards the U-shaped magnet

Which object is a magnet and which is a magnetic object?

	Magnet	Magnetic object
(1)	F	E
(2)	D	F
(3)	E	D
(4)	E	F

24. A temporary magnet can be made by stroking an iron nail fifty times with a bar magnet as shown below.

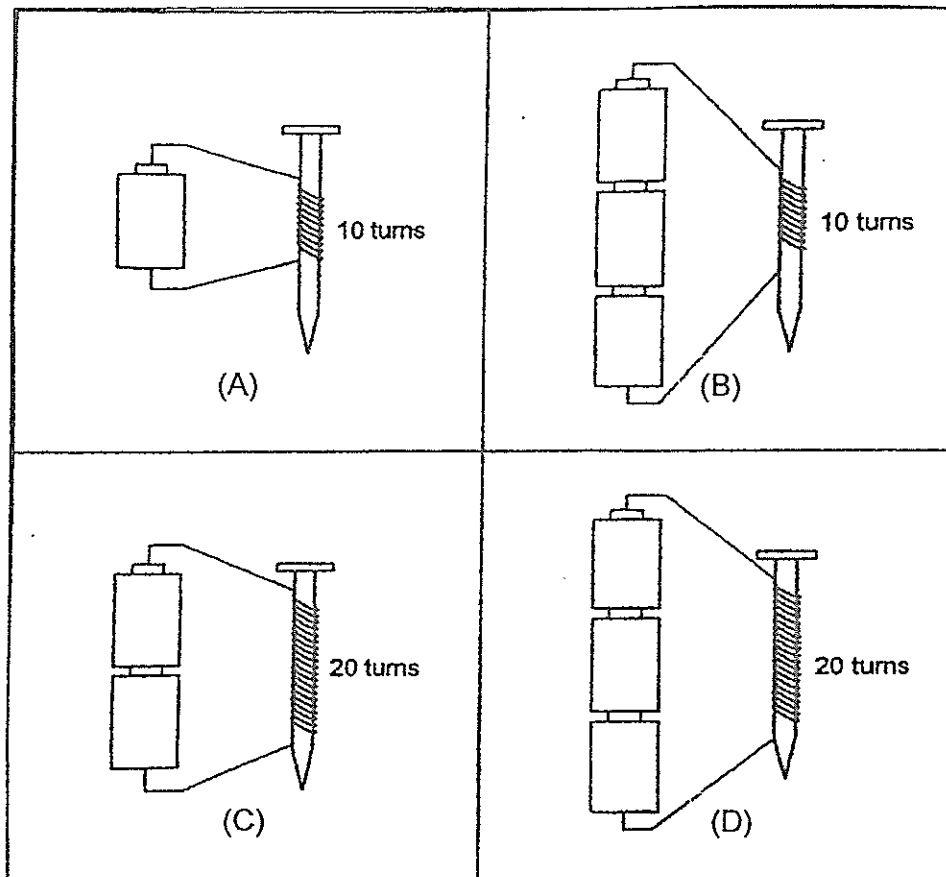


Which of the following could the ends, A and B, of the iron nail be, after it has been magnetised?

	A	B
(1)	North pole	South pole
(2)	North pole	North pole
(3)	South pole	North pole
(4)	South pole	South pole

25. Yusof wants to find out whether the number of coils of the wire affects the strength of a magnet. He sets up two arrangements. For each arrangement, he tests the strength of the magnet by counting the number of paper clips it can pick up.

Which two arrangements below should he set up so that a fair test can be conducted?



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

METHODIST GIRLS' SCHOOL

Founded in 1887



END-OF-YEAR EXAMINATION 2014 PRIMARY 3 SCIENCE

BOOKLET B

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.

Write your answers in this booklet.

Name: _____ ()

Class: Primary 3. _____

Date: 30 October 2014

Booklet A	/ 50
Booklet B	/ 40
TOTAL	/ 90

This booklet consists of 16 printed pages including this page.

For questions 26 to 42, write your answers in this booklet.

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

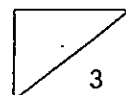
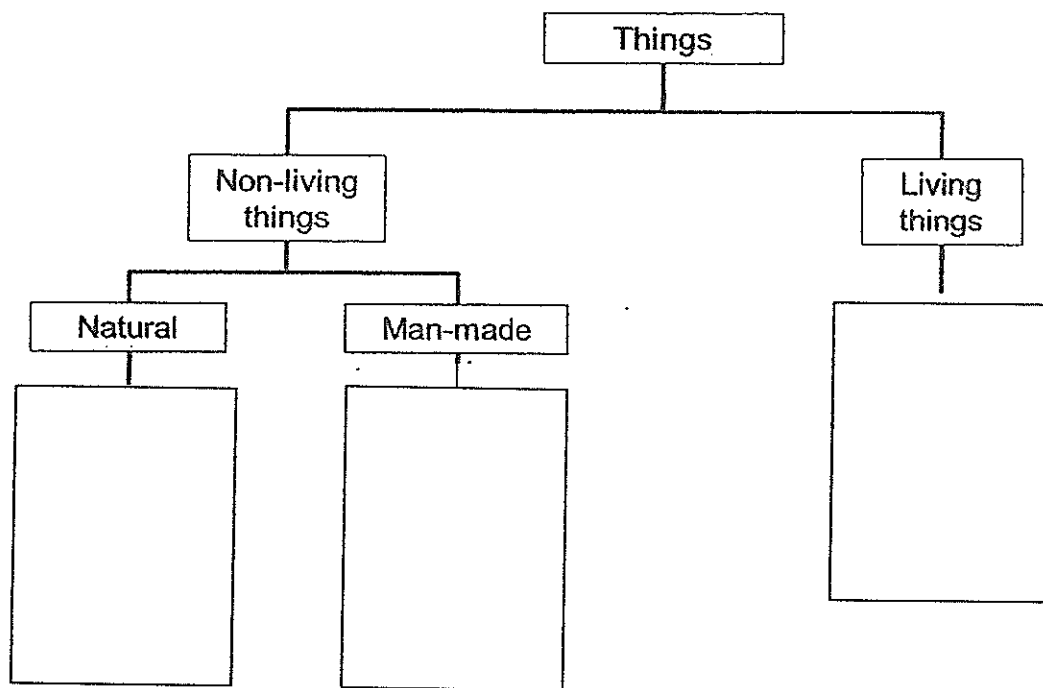
[40 marks]

26. Study the items as shown in the box below.

Styrofoam box	Copper	Cow
Moss	Coin	Salted fish

Classify all of the items correctly in the chart below.

[3]



(Go on to the next page)

27. Lisa was given a young guinea pig in a cage. The cage had holes on top. She provided her guinea pig with hay, carrots and cucumber every day for its meals. She also made sure that it had enough water to drink.

Two weeks later, Lisa realised that her guinea pig was getting too big for its cage and she intended to get a bigger one for it.

Based only on the information above, list two characteristics to show that the guinea pig is a living thing. [2]

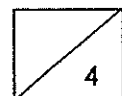
28. Suresh went to the zoo and he recorded some observations in his biology book as shown below.

<p style="text-align: center;"><u>Group R</u></p> <p>Animals have six legs. They have three body parts.</p> <p style="text-align: center;"><u>Group S</u></p> <p>Animals breathe through lungs and moist skin. These animals reproduce by laying eggs.</p>
--

What are the animal groups that Suresh had seen at the zoo?

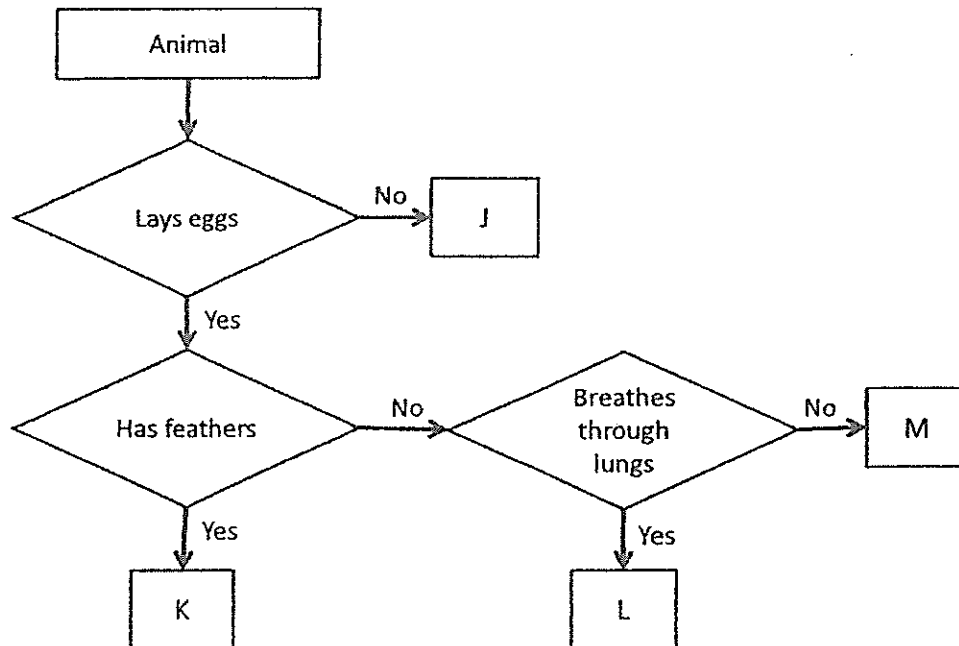
Group R: _____ [1]

Group S: _____ [1]



(Go on to the next page)

29. Study the flow chart below.



(a) Based only on the helping words given in the box below, choose the correct animals that represent J, K, L and M.

Ant	Camel
Lizard	Emu

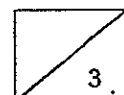
J: _____ [½]

K: _____ [½]

L: _____ [½]

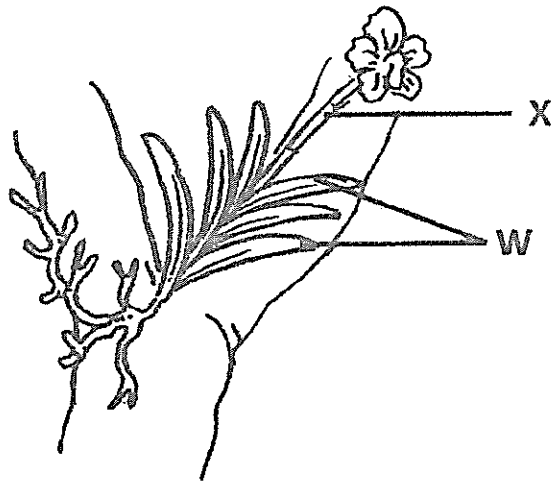
M: _____ [½]

(b) Based only on the flow chart above, state one similarity between K, L and M. [1]



(Go on to the next page)

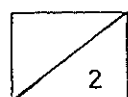
30. The diagram below shows a plant growing on a tree trunk.



Identify the plant parts W and X.

Plant part W: _____ [1]

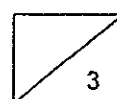
Plant part X: _____ [1]



(Go on to the next page)

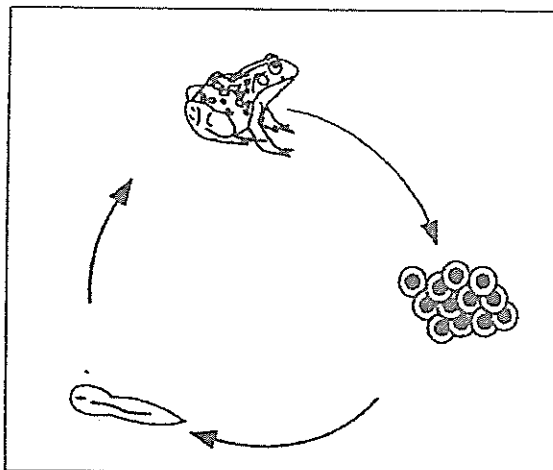
31. Read the statements below. Write "True" in the box for a true statement and "False" in the box for a false statement. [3]

	Statements	True/False
(a)	Some bacteria can cause food poisoning in humans.	
(b)	Yeast is used in some bread-making process.	
(c)	All plants reproduce by seeds.	
(d)	Ferns and mould are non-flowering plants.	
(e)	Mould will grow best in cold and dry places.	
(f)	All mushrooms are non-poisonous.	



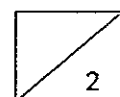
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32. The life cycle of a frog is shown below.



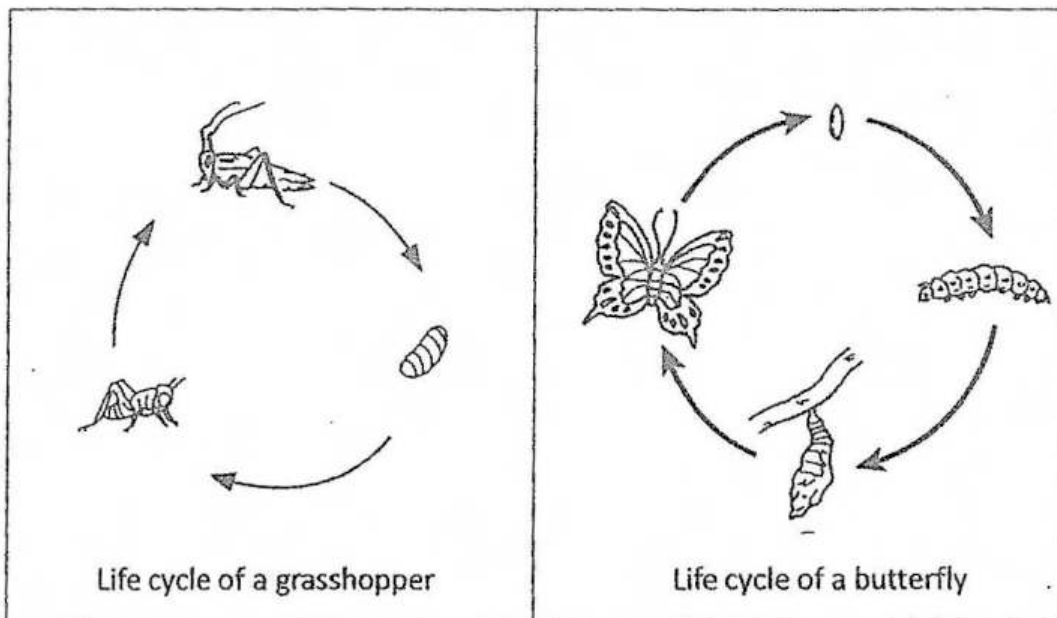
The adult frog and its young differ in some ways. Complete the table below to show the differences. [2]

	Adult	Young
Where it lives		
Breathing method		



(Go on to the next page)

33. The diagrams show the life cycles of two insects.



- (a) Name the stage of the young of the grasshopper.

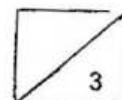
[1]

- (b) What are two differences between the life cycles of these two insects?
(Do not compare the eggs)

[2]

Difference 1:

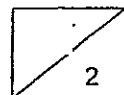
Difference 2:



(Go on to the next page)

34. Complete the statements below by drawing lines to match the words correctly in both columns. [2]

- | | | | |
|--------------------------|---|---|--|
| (a) The seed coat | • | • | air, water and warmth |
| (b) The root | • | • | protects the seed |
| (c) Germination requires | • | • | provide nutrients for the young seedling |
| (d) The seed leaves | • | • | is the first part of a young plant to grow |



(Go on to the next page)

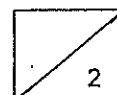
35. On their way to school, four children were caught in the heavy rain. Each of them chose the items as shown in the table to shield themselves from the rain.

	Choice of Items
Ann	Newspapers
Bala	Thin metal sheet
Caleb	Woollen jacket
Daniel	Plastic picnic mat

Only two of the four children remained relatively dry when they reached school. Which two children would most likely have remained dry and state the common property of these two materials that kept them dry.

[2]

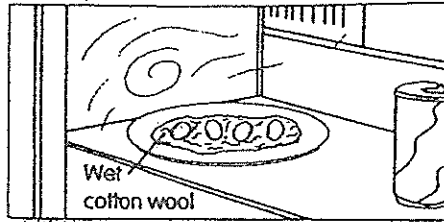
Name of children	Child 1 : _____ Child 2 : _____
Property of materials	



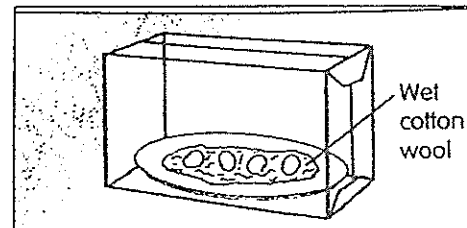
(Go on to the next page)

36. Mei Ling placed some seeds on four plates in different conditions as shown below.

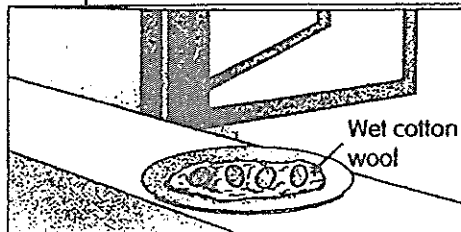
Set-up A: In a refrigerator



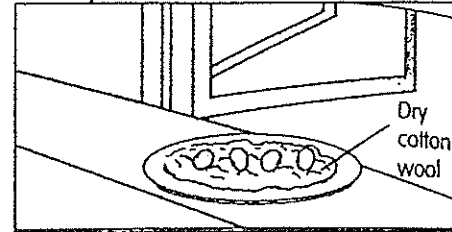
Set-up B: In a sealed box



Set-up C: Near the window



Set-up D: Near the window

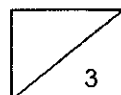


After a week, Mei Ling checked the seeds and found that the seeds in two of the set-ups did not grow into young plants.

In the box below, fill in the answers for the following questions:

- (a) In which two set-ups did the seeds **not** germinate? [1]
- (b) Give a reason each to support your answer in (a) [2]

Set-up	Reason



(Go on to the next page)

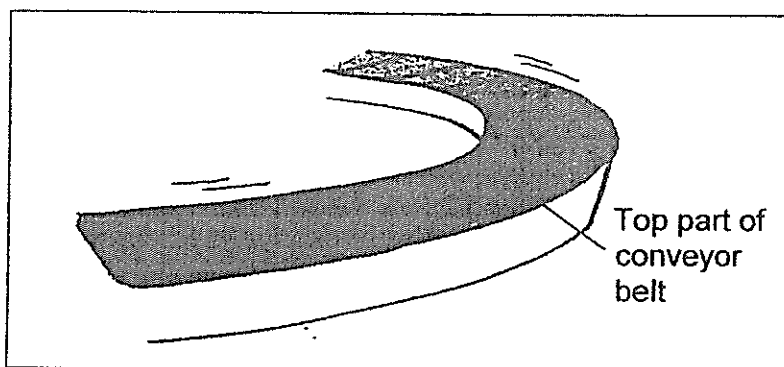
37. Jack wrote down the descriptions of three materials, X, Y and Z, in a table as shown below.

Material	Lightweight	Waterproof	Able to float
X	Yes	No	No
Y	Yes	Yes	Yes
Z	No	Yes	No

- (a) Which is the most suitable material for making an anchor to hold the ship? [1]

- (b) Suggest what material Y could be. [1]

38. The diagram below shows a luggage conveyor belt found in an airport terminal.

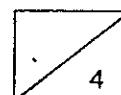


Name the material that is used to make the top part of the conveyor belt. Give a reason for your answer.

Material : _____ [1]

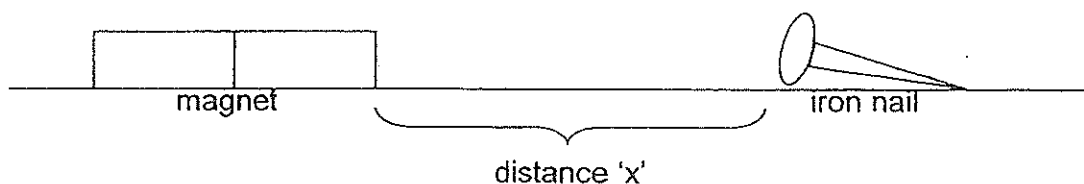
Reason : _____

_____ [1]



(Go on to the next page)

39. Kelvin carried out an experiment to test the strength of magnets as shown below.



He put magnet J on the table and measured the distance 'x' between the magnet and the iron nail just when the iron nail was attracted to the magnet.

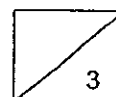
He repeated the experiment using magnets K, L and M and recorded the results in the table below.

Magnet	Distance 'x' (cm)
J	6
K	2
L	4
M	8

- (a) Which magnet has the strongest magnetism? [1]

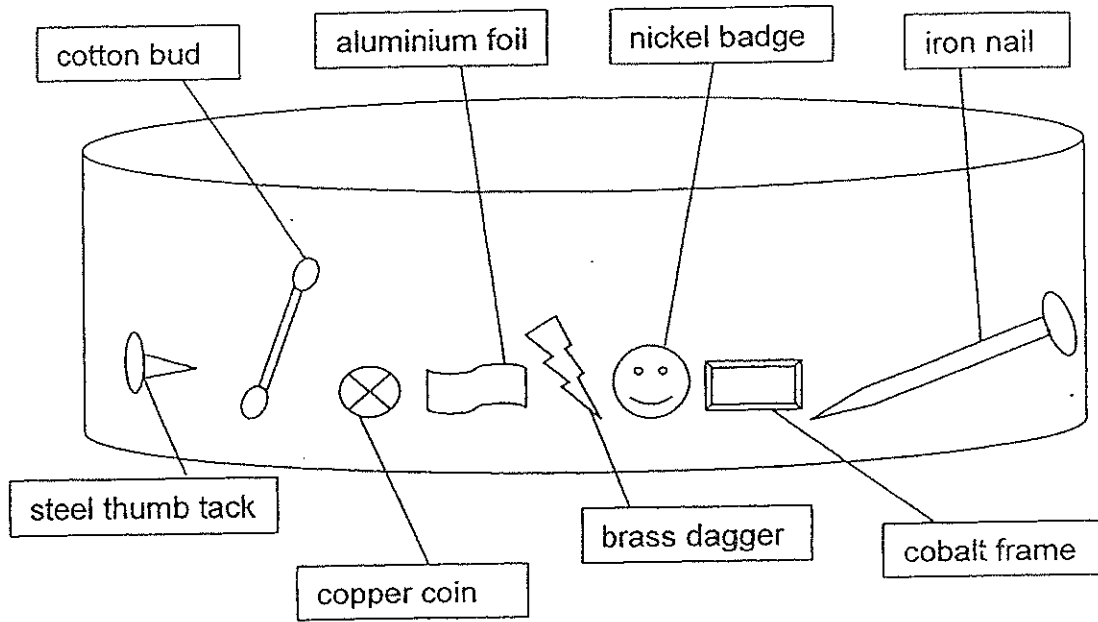
- (b) Name one variable that must be kept the same for the experiment to be considered a fair test: [1]

- (c) What should Kelvin do so that his results would be more reliable? [1]



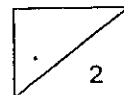
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40. Kavita had a glass tank filled with objects. She wanted to take some objects out of the glass tank without touching them with her hands. Her friend suggested that she tie a strong magnet to a fishing rod to attract the objects that are magnetic.



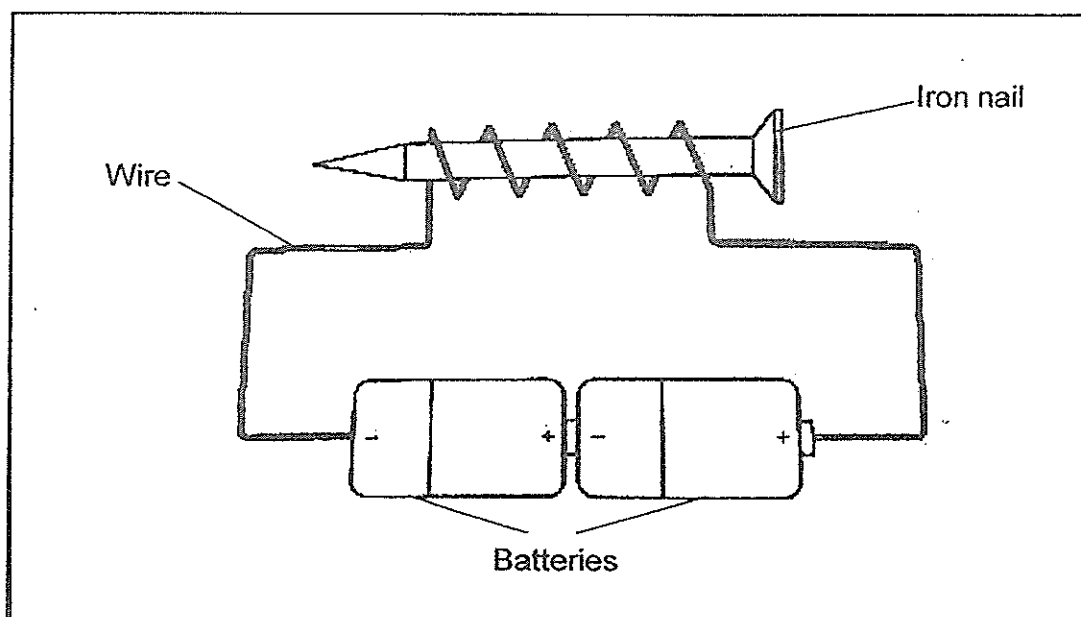
What were the four objects that she could remove from the glass tank? [2]

	Magnetic objects
1	
2	
3	
4	



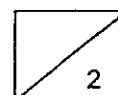
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41. Fatima is using the electrical method to make a magnet as shown below. Suggest two ways in which she can make a magnet with greater magnetic strength. [2]



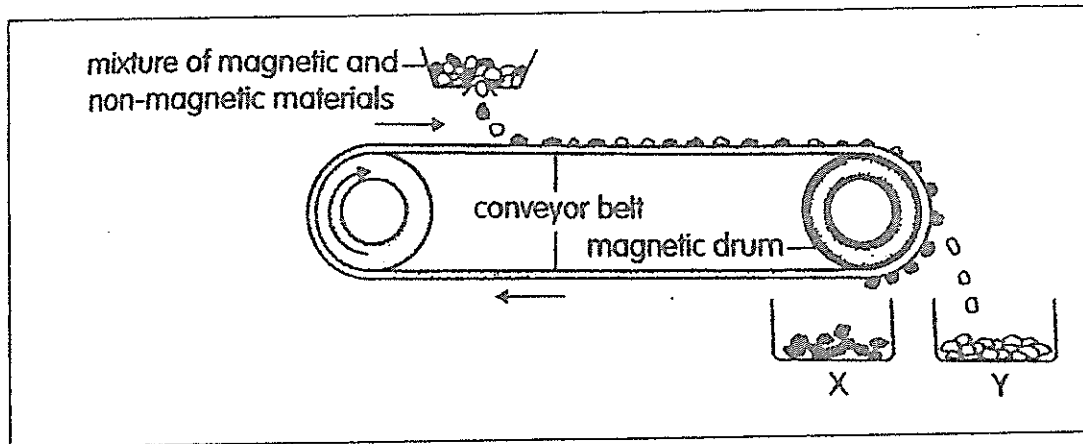
(a) _____

(b) _____



(Go on to the next page)

42. The diagram below shows how a magnetic separator is used to separate useful magnetic materials from non-magnetic materials.



- (a) Write the letters, X and Y, in the table below to show which container the magnetic and non-magnetic materials will fall into.

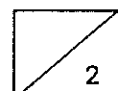
[1]

Type of materials	Container
Magnetic	
Non-magnetic	

- (b) Name a place where you can find a magnetic separator being used.

[1]

End of paper
Have you checked your work?



EXAM PAPER 2014**LEVEL : PRIMARY 3****SCHOOL : MGS****SUBJECT : SCIENCE****TERM : SA2**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	4	1	3	1	4	1	3	2	4
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
4	3	3	2	3	4	4	4	2	1
Q21	Q22	Q23	Q24	Q25					
3	1	4	1	3					

Q26 Natural – salted fish, copper
 Man-made – coin, Styrofoam
 Living things – moss, cow

Q27 It needs air, water and food and it grows.

Q28 Group R: Insects
 Group S: Amphibians

Q29 (a) J: Camel
 K: Emu
 L: Lizard
 M: Ant
 (b) They all lay eggs,

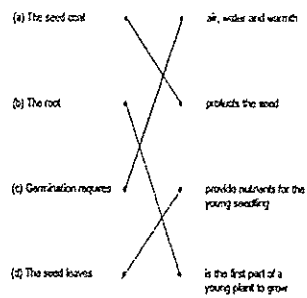
Q30 Plant Part W: leaf
 Plant Part X: stem

Q31 (a) True
 (b) True
 (c) False
 (d) False
 (e) False
 (f) False

Q32		Adult	Young
	Where it lives	Land and water	Water
	Breathing method	Lungs and moist skin	gills

Q33 (a) Nymph
 (b) Difference 1: The butterfly's life cycle has 4 stages but the grasshopper's life cycle has 3 stages.
 Difference 2: The young of a grasshopper looks like the adult but the young of a butterfly does not look like the adult.

Q34



Q35

Child 1: Bala
Child 2: Daniel

Waterproof

Q36

Set-up A: There is no warmth
Set-up D: There is no water.

Q37

- (a) Material Z
- (b) Plastic

Q38

Material: Rubber
Reason: It must be strong for the protection of the luggage.

Q39

- (a) Magnet M
- (b) The same iron nail
- (c) Repeat the experiment several times.

Q40

Steel thumbtack, nickel badge, cobalt frame, iron nail

Q41

- (a) She could use more coils around the iron nail.
- (b) She should add more batteries.

Q42

- (a) Magnetic – container X
Non-magnetic – container Y
- (b) A recycling factory



**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2014
PRIMARY 3**

SCIENCE

BOOKLET A

24 Multiple Choice Questions (48 marks)

Total Time for Booklets A and B : 1 hour 30 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		/ 48
Booklet B		/ 32
Total		/ 80

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

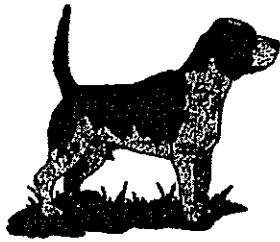
Date : 29 October 2014

Parent's signature: _____

Section A: (24 x 2 marks = 48 marks)

For each question from 1 to 24, 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. Roy saw the following things at a park.



Dog



Ant



Lamp post



Tree

Roy classified these things using the characteristics of living and non-living things. Which of the above does not belong to the same group as the others?

- (1) Ant
- (2) Dog
- (3) Tree
- (4) Lamp post

2. The four plants shown in the diagrams below were placed in the same group.



Plant A



Plant B



Plant C

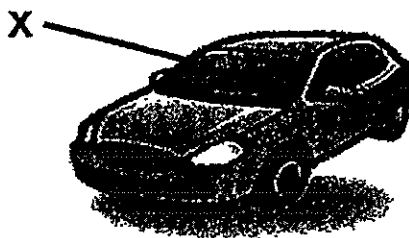


Plant D

The plants belong to the same group because _____.

- (1) they live in water
- (2) they have weak stems
- (3) they are flowering plants
- (4) they reproduce by spores

3. The diagram below shows a car.



Which one of the following materials is suitable for making part X?

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

4. Cotton is a suitable material for making clothing because it _____.

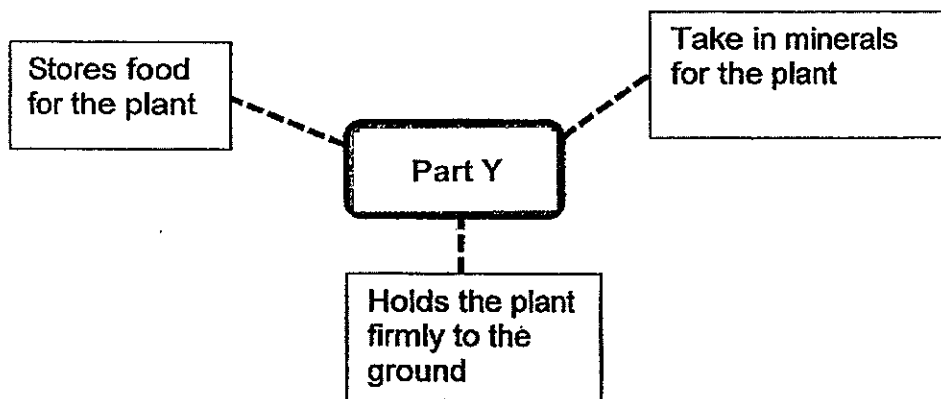
- (1) is weak
- (2) is flexible
- (3) sinks in water
- (4) comes from plants

5. Which of the following is/are **not** the function(s) of the stem of a plant?

- A Holds the plant firmly to the ground.
- B Supports the leaves and helps them to reach for sunlight.
- C Transports food from the leaves to other parts of the plant.

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

6. Study the concept map of one part of the plant (Part Y) below.



Which part of the plant is Part Y most likely to be?

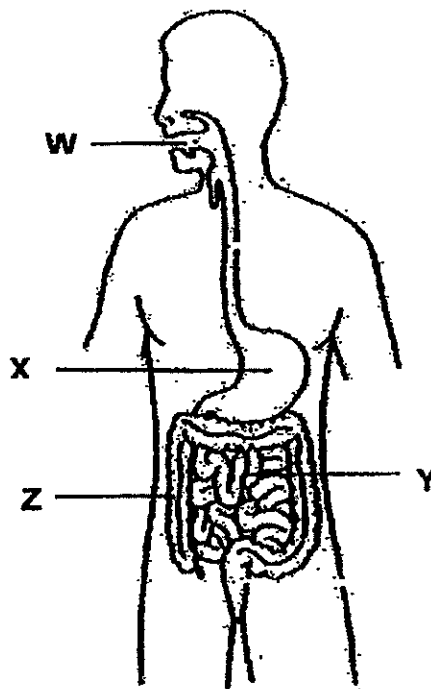
- (1) Leaf
- (2) Root
- (3) Stem
- (4) Flower

7. Which of the following organ(s) is/are part of the skeletal system?

- A Skull
- B Muscles
- C Rib cage
- D Blood vessels

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

8. The diagram below shows a system found in the human body with its parts labelled W, X, Y and Z.



Digestion starts at Part _____ and ends at Part _____.

- (1) W, Y
- (2) W, Z
- (3) X, Y
- (4) X, Z

9. How do our teeth help us in the digestion of the food we eat?

- A It cuts and slices food into smaller pieces.
- B It helps to break down some of the food into simple substances.
- C It makes food moist and soft so that the food can be swallowed easily.

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

10. Linda moves Magnet A slowly towards a piece of aluminium foil as shown in the diagram below.



What will Linda observe when Magnet A is moved closer to the aluminium foil?

- (1) The aluminium foil will turn around.
- (2) The aluminium foil will move towards Magnet A.
- (3) The aluminium foil will stay at the same position.
- (4) The aluminium foil will move away from Magnet A.

11. Which of the following objects can be attracted by a magnet?

- (1) Iron nail
- (2) Copper coin
- (3) Cotton T-shirt
- (4) Silver spoon

12. Which of the following objects contains a magnet?

(1) Pencil



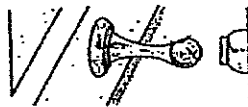
(2) Battery



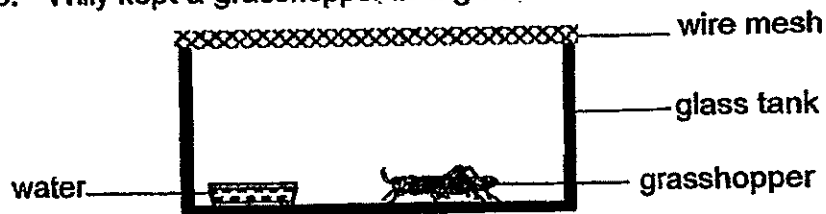
(3) Whiteboard



(4) Doorstop



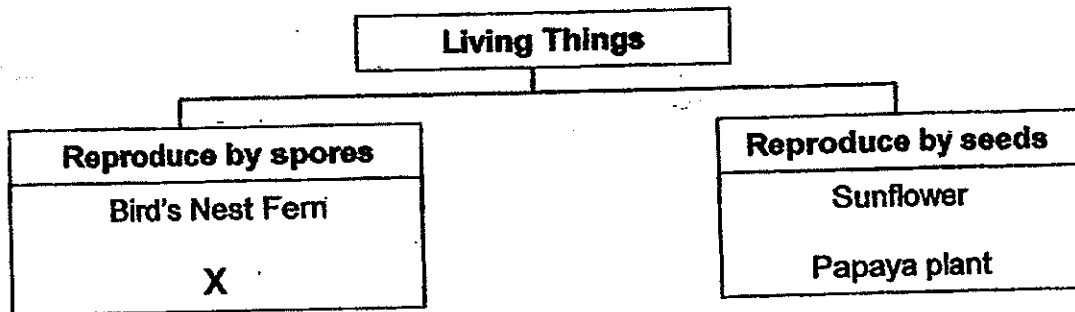
13. Willy kept a grasshopper in a glass tank as shown below.



A few days later, Willy found that the grasshopper had died. Which of the following is the most likely reason for the grasshopper's death?

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

14. Study the classification chart below carefully.



What is "X"?

- (1) Ixora
- (2) Grass
- (3) Bacteria
- (4) Mushroom

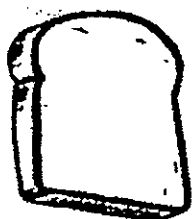
15. Anna observed an animal at the zoo and made the following notes.

It has four legs. It reproduces by laying eggs. It has hair as an outer covering.

The animal that Anna observed is most likely a/an _____.

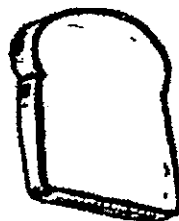
- (1) fish
- (2) bird
- (3) insect
- (4) mammal

16. Dan wanted to find out what is needed for mould to grow. He carried out an experiment with two slices of bread (X and Y) as shown below.



Bread X

Toasted in the oven for 10 min.

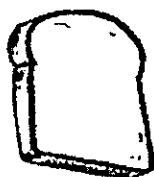


Bread Y

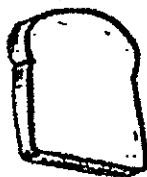
Sprayed with 10ml of water.

Dan put both slices of bread (X and Y) into a cardboard box and left the box at the back of the classroom for one week. Which of the following is Dan most likely to observe after one week?

(1)

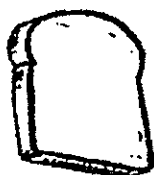


Bread X



Bread Y

(2)



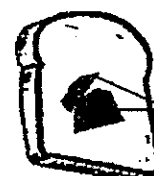
Bread X



Bread Y

mould

(3)



Bread X



Bread Y

mould

(4)



Bread X



Bread Y

mould

mould

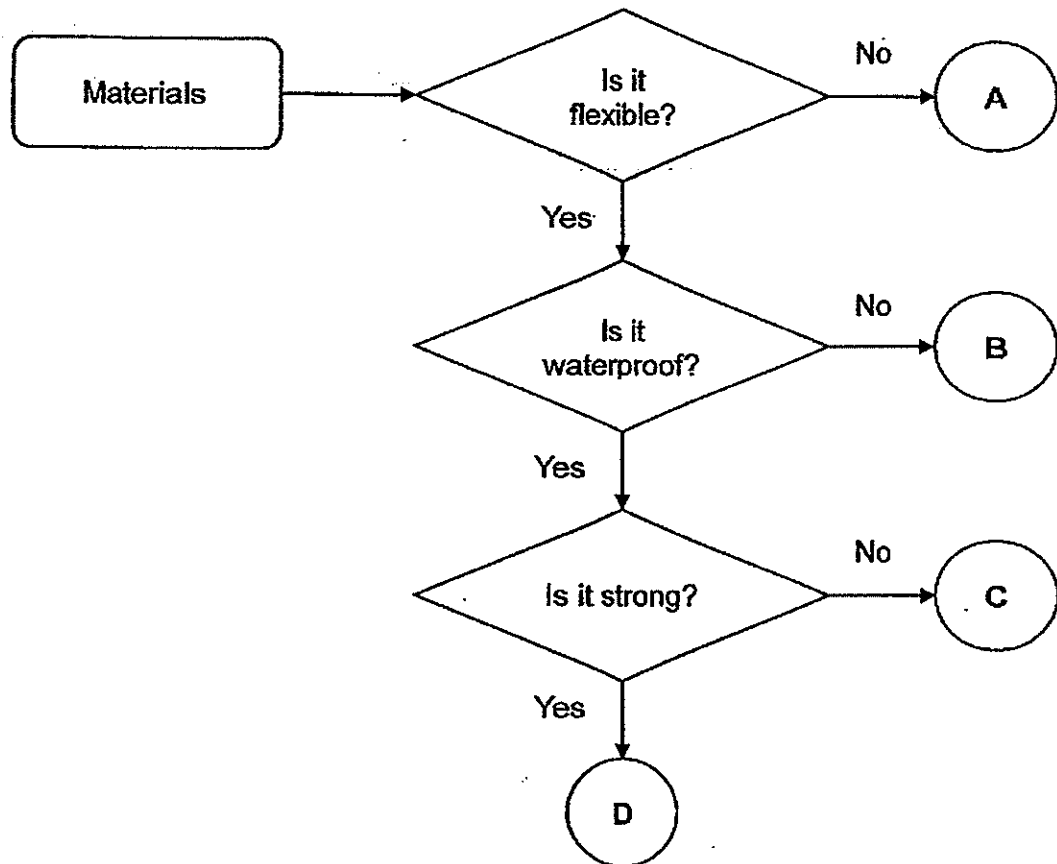
17. Jack wanted to test the strength of four materials (R, S, T and U). He recorded the number of oranges each material can hold before it breaks. His results are shown in the table below.

Meterial	Number of oranges it holds before breaking
R	8
S	2
T	6
U	3

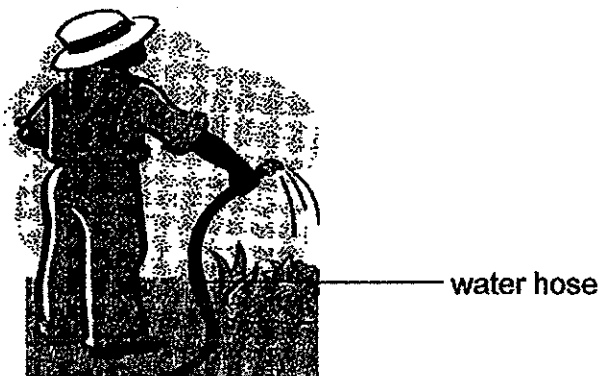
Which of these materials (R, S, T or U) is the strongest?

- (1) R
- (2) S
- (3) T
- (4) U

18. Study the flowchart below.

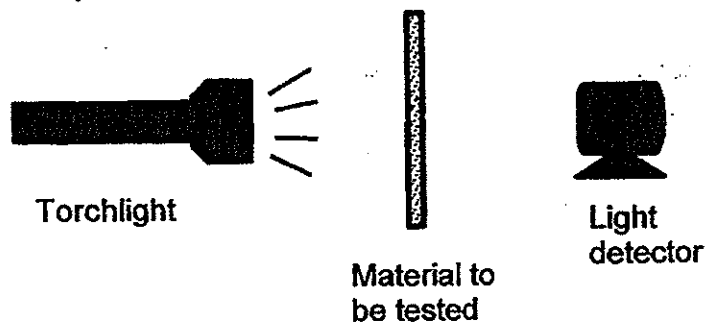


Which of these materials (A, B, C or D) is most suitable for making a water hose?



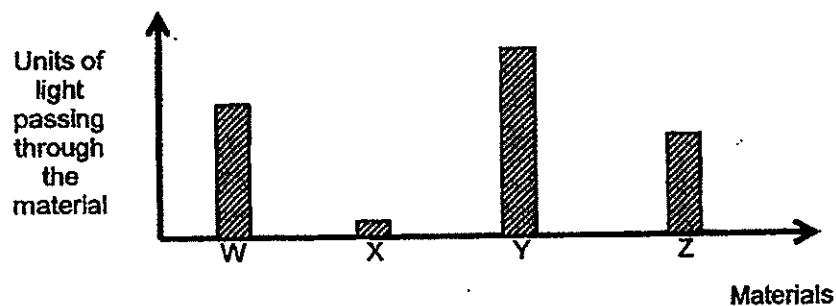
- (1) A
- (2) B
- (3) C
- (4) D

19. Mr Goh wanted to find a suitable material for making curtains. He tested four materials (W, X, Y and Z) with the set-up below.



Mr Goh will shine a torchlight at the material and the light detector will record the units of light that passes through the material.

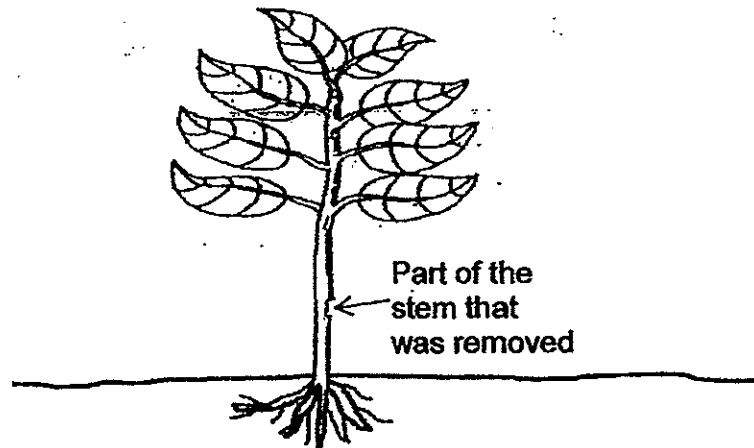
The bar graph below shows the results of his experiment.



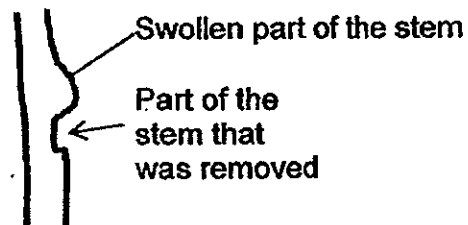
Which material is most suitable for making curtains in Mr Goh's bedroom so that the room will be dark enough for him to take a nap in the afternoon?

- (1) W
- (2) X
- (3) Y
- (4) Z

20. Sam removed a part of the stem as shown in the diagram below.



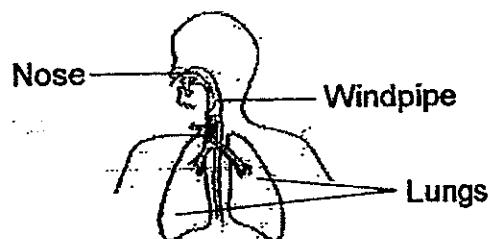
Sam observed the stem after two days and noticed that the part of the stem near the cut was swollen as shown below.



Which of the following best explains why the part of the stem near the cut was swollen?

- (1) A new plant is growing out from the cut part of the plant.
- (2) The cut part of the stem absorbs water and mineral salts from the surroundings.
- (3) The water-carrying tubes of the plant have been removed so the water cannot move down.
- (4) The food-carrying tubes of the plant have been removed so food made by the leaves cannot move down.

21. The diagram below shows the human respiratory system.



Which of the following is/are the function(s) of the respiratory system?

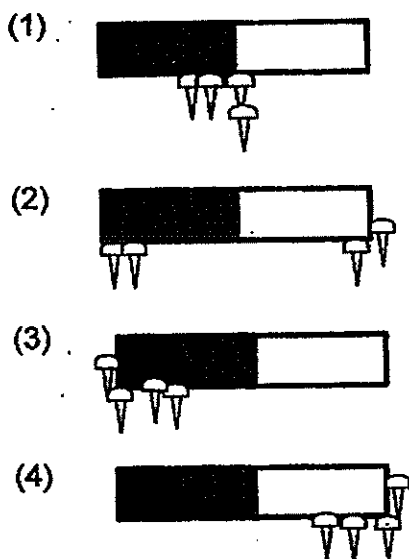
- A Changes the food we eat into simple substances.
- B Takes in oxygen and removes carbon dioxide for the body.
- C Transports oxygen, digested food and waste materials around our body.

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

22. Kiki suffers from food poisoning and passes out watery waste instead of solid waste, which part of her digestive system is not working properly?

- (1) Anus
- (2) Stomach
- (3) Small intestine
- (4) Large intestine

23. Jake lowered a bar magnet into a box of steel thumbtacks. Which one of the following diagrams correctly shows how the steel thumbtacks will be attracted to the bar magnet?



24. Bob moved a rod magnet near two objects (K and L), one at a time, as shown in the diagram below.



He recorded his observations in the table below.

Object	Observation
K	Attracted by the rod magnet.
L	Repelled by the rod magnet.

Which of the following could likely be Objects K and L?

	Object K	Object L
(1)	Nickel bar	Bar magnet
(2)	Steel bar	Iron bar
(3)	Iron bar	Plastic bar
(4)	Glass bar	Wooden bar



**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2014
PRIMARY 3**

SCIENCE

BOOKLET B

10 Open-ended questions (32 marks)

Total Time for Booklets A and B : 1 hour 30 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

	/32
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Name: _____ () **Class: P 3** _____

Date : 29 October 2014

Parent's Signature: _____

Section B: (32 marks)

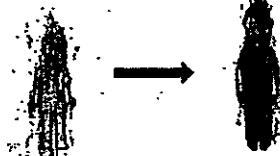
Write your answers to questions 25 to 34 in the space provided.

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

25. Match each diagram on the left to the characteristics of living things on the right. [2]

(a)

A five-year-old boy becoming a man twenty years later.



Living things need air to survive.

(b)

A cat running away from a dog.



Living things grow.

(c)

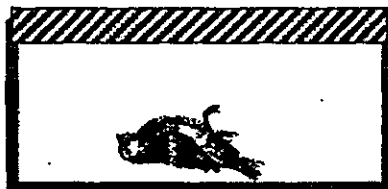
A plant dying during a drought.



Living things respond to changes.

(d)

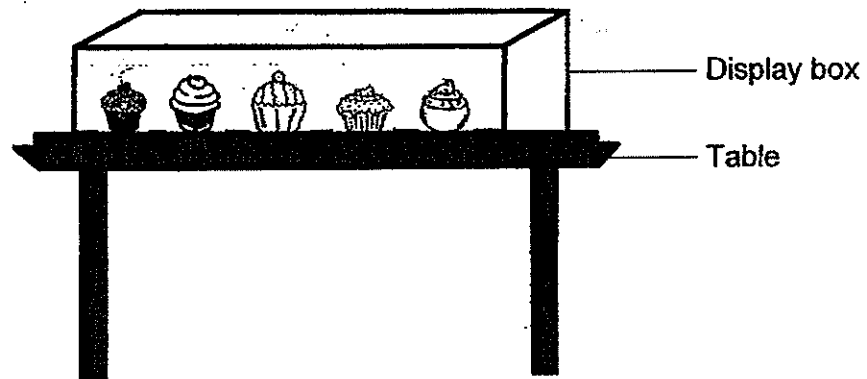
A bird died in a sealed box.



Living things need water to survive.

Score	2
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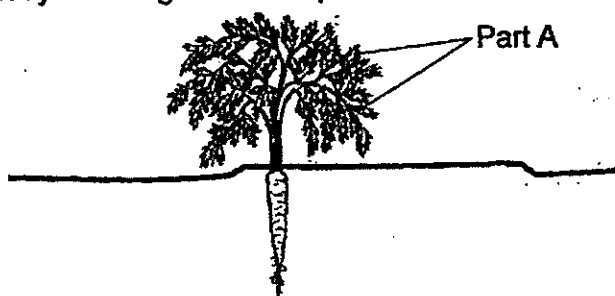
26. Mrs Tan has a cake shop. She displays the cupcakes in her shop in a display box as shown below.



- (a) What is the likely material of the display box? [1]

- (b) Explain why the material stated in (a) is suitable for making the display box. [2]

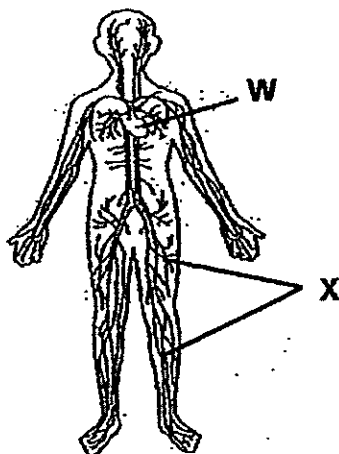
27. Study the diagram of the plant shown below.



(a) Name Part A of the plant. [1]

(b) What does Part A do for the plant? [1]

28. The diagram below shows the human circulatory system.



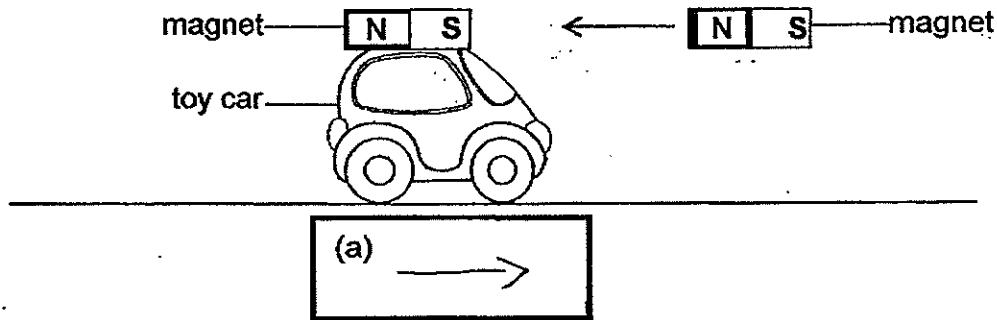
(a) Name Part W and Part X of the human circulatory system above. [2]

W : _____

X : _____

(b) What is the function of the human circulatory system? [1]

29. Wen Jie attached a bar magnet above a toy car. He tried to move the toy car by bringing another magnet close to the toy car as shown in the diagram below.



- (a) Draw an arrow (→ or ←) in the box above to show how the car would move when Wen Jie brought the magnet close to the car as shown above. [1]

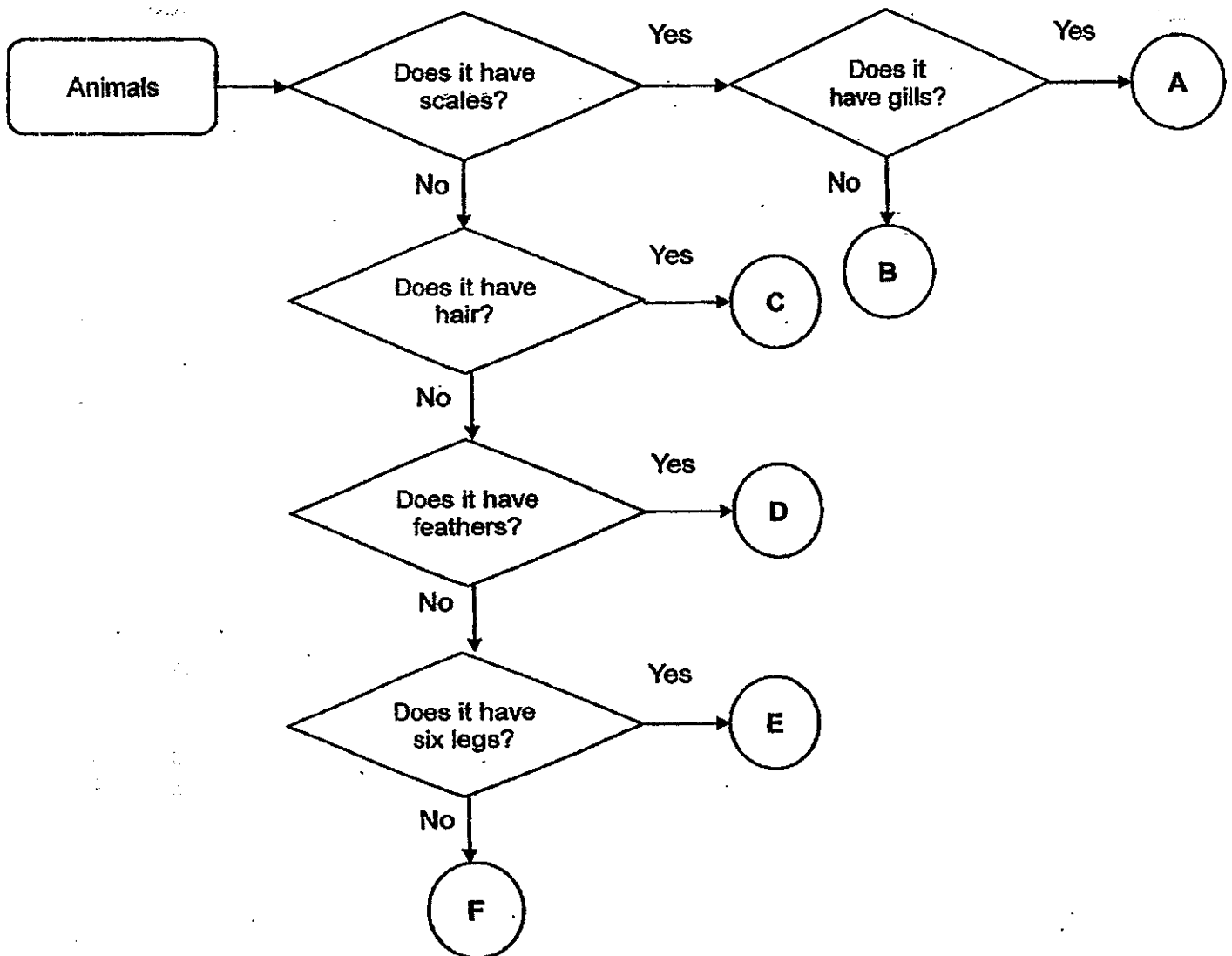
- (b) Explain why the toy car would move in the direction that you have drawn in (a). [1]

- (c) Wen Jie made some changes to his set-up and observed the effect of each change:

Put a tick (✓) in the appropriate box to indicate what would happen to the toy car when the following changes were made to the set-up. [2]

Changes made to the set-up	Toy car will remain at the same position.	Toy car will move towards the magnet.	Toy car will move away from the magnet.
Wen Jie turned the magnet that he was holding around so that the South-pole was facing the South-pole of the magnet on the toy car.			
Wen Jie replaced the magnet above the toy car with a wooden rod.			

30. Study the flow chart below carefully.



(a) Use the helping words in the box below to fill in each blank. [2]

mammal	fish	insect
reptile	bird	amphibian

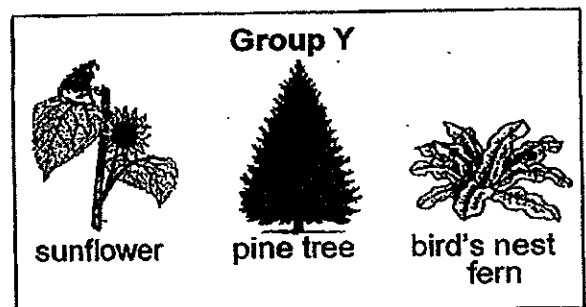
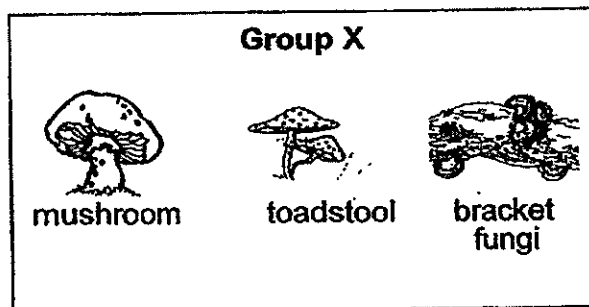
According to the flow chart,

- (i) A is most likely a _____
- (ii) B is most likely a _____
- (iii) C is most likely a _____
- (iv) D is most likely a _____

(b) Based on the flow chart, state one similarity between E and F. [1]

(c) Based on the flow chart, state one difference between E and F. [1]

31. Study the two groups (X and Y) of living things shown below.



(a) Give a suitable heading for each of the groups above. [2]

Group X : _____

Group Y : _____

(b) Which group (X or Y) does the bread mould belong to? [1]

32. Joey conducted some tests on materials A, B, C and D. The results of the tests are shown in the table below. A tick (✓) indicates that the material has the property.

Property	Materials			
	A	B	C	D
Strong	✓		✓	✓
Flexible		✓		✓
Waterproof	✓	✓	✓	
Transparent		✓		
Floats on water		✓	✓	

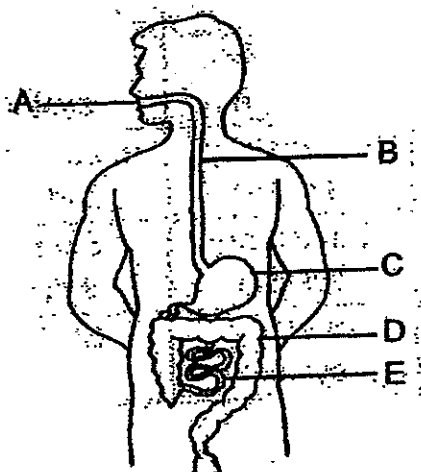
- (a) Based on the table above, state two properties of Material A.

[1]

- (b) Which material (A, B, C or D) is suitable for making a swimming costume?
Give a reason for your answer.

[2]

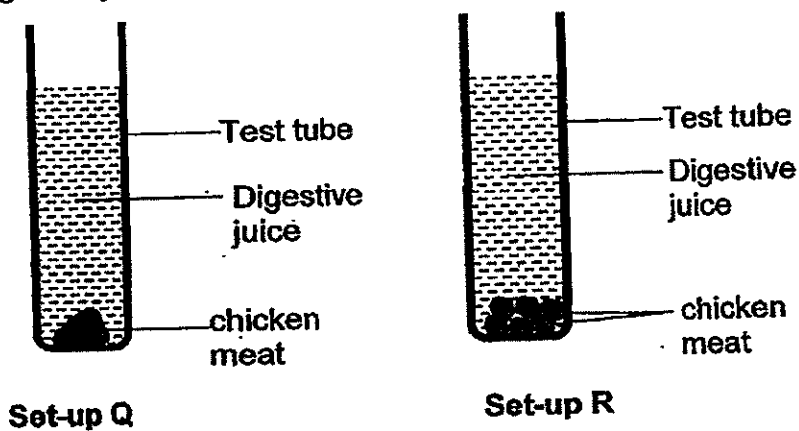
33. The diagram below shows the human digestive system.



(a) Which part (A, B, C, D or E) of the digestive system is not working properly when the following happens? [2]

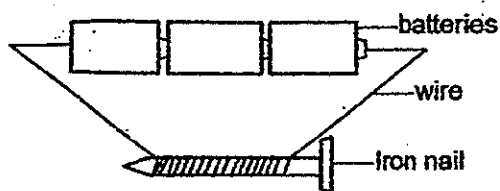
- (i) Digested food is not absorbed by the body. _____
- (ii) Big pieces of food are swallowed into the stomach. _____

(b) Yanling wanted to find out if the size of food affects how fast they digest. She used two set-ups (Q and R) for her experiment. She mixed 100g of chicken meat with digestive juices in each of the test tube as shown below.

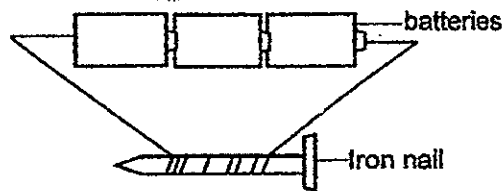


In which set-up (Q or R), will the meat be completely digested first? [2]
Explain your answer.

34. Jerry uses the two set-ups (X and Y) below to make a temporary magnet.



Set-up X



Set-up Y

- (a) Which iron nail (X or Y) will become a stronger electromagnet?
Explain your answer.

[1]

- (b) State two things that Jerry can do to the set-ups above to get a stronger electromagnet.

[2]

(i) _____

(ii) _____

- (c) Using only a box of paper clips, how can Jerry confirm that the electromagnet has become stronger?

[1]

End of paper

Year: 2014

Level: Primary 3

School: Nan Hua Primary School

Subject: Science

Semester: SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	3	2	2	1	2	2	1	1	3
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	4	3	4	4	2	1	4	2	4
Q21	Q22	Q23	Q24						
1	4	2	1						

Q25) a) A five-year-old boy becoming a man twenty years later→ Living things grow

b) A cat running away from a dog→Living things respond to changes

c) A plant dying during a drought→Living things need water to survive

d) A bird died in a sealed box→Living things need air to survive

Q26) a) Glass

b) It is transparent and could let everybody see what cupcakes available.

Q27) a) Leaves

b) They help to make food for the plant.

Q28) a) W: heart X: Veins

b) The circulatory system transport oxygen, digested food, water and waste materials away from the body.

Q29) a) →

b) Unlike poles attract do the car moved toward the magnet.

c)

Changes made to the set-up	Toy car will remain at the same position	Toy car will move towards the magnet	Toy magnet will move away from the magnet
			✓

	✓		
--	---	--	--

Q30) a) i) fish ii) reptile iii) mammal iv) bird

b) They do not have feathers.

c) E has six legs but F does not have six legs.

Q31) a) Group X: Cannot make their own food

Group Y: Can make their own food

b) Group X

Q32) a) It is strong and waterproof.

b) Material D. It is strong so that you cannot tear it easily and flexible so that you can keep it easily.

Q33)a) i) E

ii) A

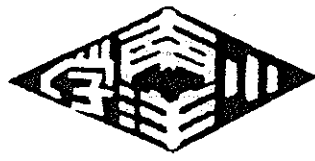
b) Set-up R. R is cut into many smaller pieces so the digestive juices can act on a bigger surface of the meat.

Q34) a) Iron nail X It has more wires coiled around it.

b) i) Coil around the wire more on the iron nail.

ii) Put more batteries.

c) The electromagnet can attract more paper clips.



NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

**SEMESTRAL ASSESSMENT 2
2014**

BOOKLET A

**Date : 29 October 2014
Duration : 1 h 45 min**

Name : _____ ()

Class: Primary 3 ()

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.**

Booklet A consists of 18 printed pages including this cover page.

Section A (30 x 2 marks = 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 provided.**

1. Which one of the following descriptions is an example of living things responding to changes in their environment?

- A A baby crawls towards a ringing bell.
- B A girl closes the window on a windy day.
- C A flock of birds flies away when a cat moves nearer.

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

2. The organisms below had been classified according to their body covering. Which examples had been classified **wrongly**?

Group A	Group B	Group C
turtle	eagle	frog
shark	ostrich	cow
snake	penguin	giraffe
crocodile	orang-utan	elephant

- (1) snake and cow
- (2) shark and eagle
- (3) turtle and ostrich
- (4) orang-utan and frog

3. Plants can be found in many places. Which of these are possible places for plants to grow?

- A on the side of a wall
- B on the roof of houses
- C on the surface of a rock
- D on the stem of another plant

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

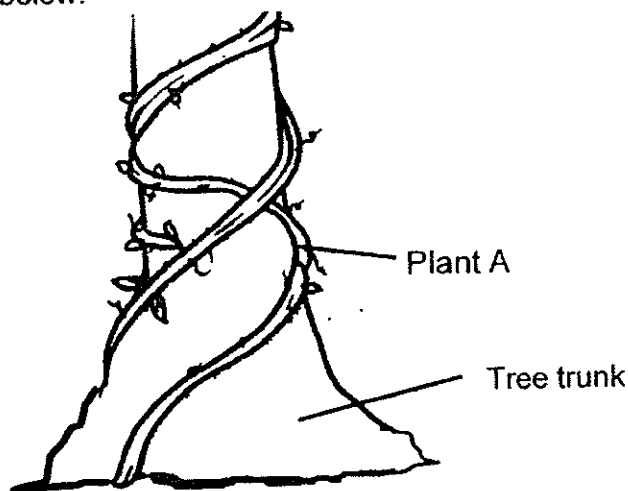
4. During a trip to the botanic gardens, Samuel was asked to look out for a type of plant. Before the trip, his teacher had given him some descriptions about the plant.

Based only on what Samuel could see, which of the following descriptions given by his teacher would help him to identify the plant?

- A It grows on land.
- B Its fruits are edible.
- C Its leaves are oval-shaped.
- D Its flowers are purple and fragrant.
- E It has weak stems that climb up a support.

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

5. Adeline and her friends found plant A growing around a tree trunk as shown below.



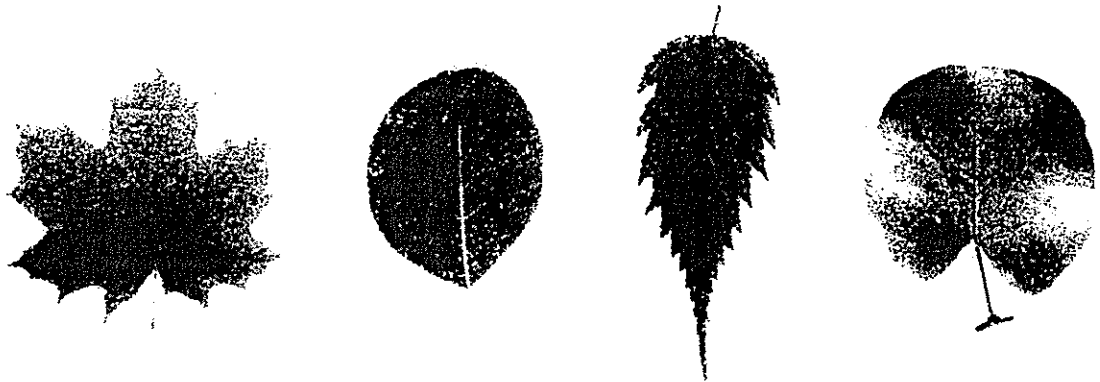
Her friends made the following statements:

- Ali Plant A makes food for the tree.
- Ben Plant A absorbs food from the tree..
- Caixin Plant A supports the tree trunk to stay upright.
- Damon Plant A climbs up the tree trunk for support to get sunlight.

















Which one of her friends had made the **correct** statement?

- (1) Ali
- (2) Ben
- (3) Caixin
- (4) Damon

6. Study the leaves shown below.



Clare found these leaves and decided to classify them into 2 groups. Which is the best way to group the leaves?

	Group X	Group Y
(1)		  
(2)	 	 
(3)	 	 
(4)	 	 

7. Yoyo found an animal during her walk in a park. She described the animal as follows:

- It has four legs.
- It does not have any outer body covering.
- It can move on land and swim in the water.

Which group best fits her description of the animal?

- | | | | |
|-----|---------|-----|------------|
| (1) | Birds | (2) | Fish |
| (3) | Mammals | (4) | Amphibians |

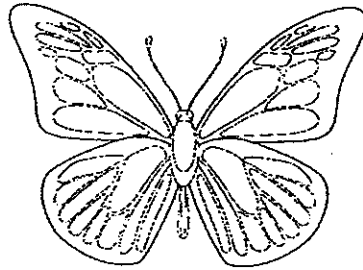
8. Kim bought only 2 animals of the same type as pets and fed them with the same food daily in a tank. She observed the changes that took place for a few months and recorded her observations below.

	Number of animals	Total amount of food eaten monthly
After the first month	2	2kg
After the second month	5	2kg
After the third month	5	2kg
After the fourth month	5	5kg

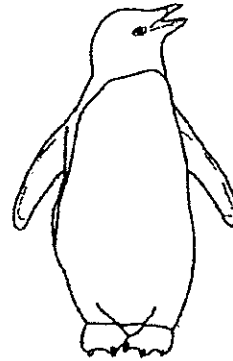
Based on her observations, which one of the following statements is true?

- (1) The pets did not reproduce.
- (2) The pets can make their own food.
- (3) The pets ate less food in the last month.
- (4) The pets produced milk to feed their young.

9. Study the diagrams given below.



Insect



Bird

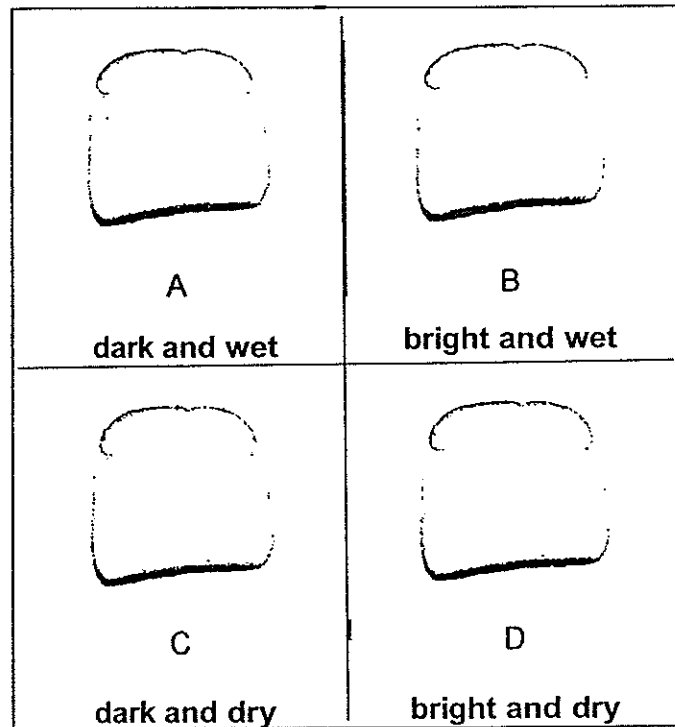
Leela made the following statements about the insect and the bird.

- A Both breathe through gills.
- B Both have hair on their bodies.
- C Both reproduce by laying eggs.
- D Both have two pairs of wings each.

Which statement(s) about the insect and the bird is/are correct?

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

10. Maggie left 4 slices of bread in 4 different locations as shown below. Each location had different conditions.



After one week, she observed the amount of mould that had grown on each bread.

In which location could she most likely find the heavily moulded bread?

- | | |
|------------------|-----|
| (1) A | (2) |
| (3) C | (4) |

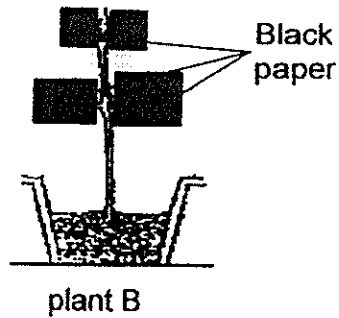
11. Study the statements about plant parts and their functions.

- A Leaves make food for plants.
- B Stems hold plant firmly to the ground.
- C Leaves help plants to take in and give out gases to the surrounding.
- D Stems help to support the plant by trapping light energy to make food.

Which of the statements is/are true?

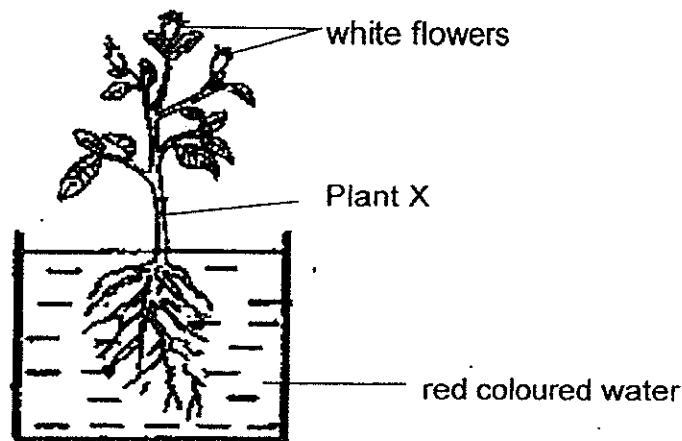
- | | |
|---------------------|-------------------|
| (1) A only | (2) A and C only |
| (3) B, C and D only | (4) A, B, C and D |

12. James placed plant B in the sun and watered it daily. He covered all of its leaves with black paper.



Which of the following could most likely be observed when he removed the black paper after a few days?

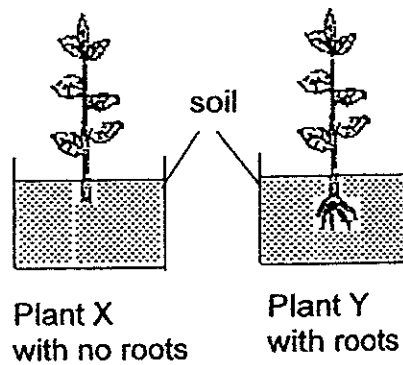
- (1) Plant B has died.
 - (2) Plant B bore flowers.
 - (3) Plant B continued to grow healthily.
 - (4) Plant B stopped growing and remained the same.
13. Ahmad set up an experiment as shown in the diagram below. He placed plant X with white flowers in a beaker of red coloured water. After a week, he observed that the flowers turned red in colour.



Which one of the following is a possible explanation for his observation?

- (1) The flowers were left under the sun for too long.
- (2) The flowers became red because the plant is dying.
- (3) The roots took in water and transported it to other parts of the plants.
- (4) The leaves took in water and transported it to other parts of the plants.

14. The two plants shown below were placed in identical pots of soil for 4 weeks.



Venetta tried to remove the plants from the soil after a few weeks. She observed that plant X could be removed more easily from the soil as compared to plant Y.

Based on her observation, what can she conclude about the function of the roots?

- (1) The roots store food.
 - (2) The roots absorb food and minerals.
 - (3) The roots hold the plant firmly to the soil.
 - (4) The roots transport water to the rest of the plant.
15. Four children shared information with one another about the respiratory system.

Li Wei: It gives the body shape.

Pete: It removes air from the body.

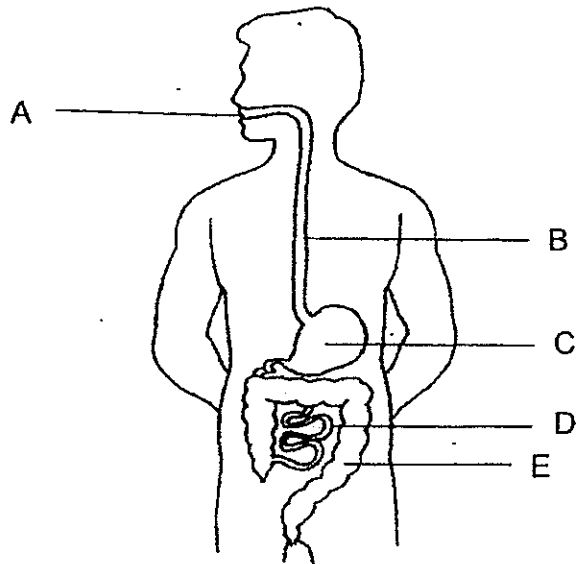
Ali: It helps different parts of the body to move.

May: It breaks down food into simple substances.

Which of the children had made the **correct** statement?

- (1) Ali
- (2) May
- (3) Pete
- (4) Li Wei

Study the diagram below and answer questions 16 and 17



16. What are the functions of parts B and E?

	B	E
(1)	It pushes food down to the stomach.	It crushes food and mixes it with digestive juices.
(2)	It helps to grind and chew food into smaller pieces.	It absorbs digested food into the bloodstream.
(3)	It helps to grind and chew food into smaller pieces.	It mixes food with saliva and breaks it into smaller pieces.
(4)	It pushes food down to the stomach.	It absorbs water from undigested food.

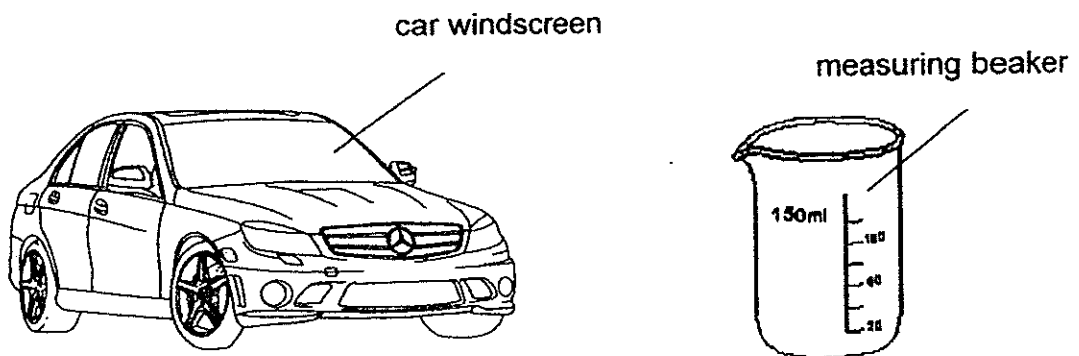
17. At which part of the body does digestion start and at which part is it completed?

	Start	Complete
(1)	A	D
(2)	A	E
(3)	C	D
(4)	C	E

18. Which of the following statements is **true** about the organ systems in our body?

- (1) The respiratory system consists of the nose only.
- (2) Our organ systems stop working when we are sleeping.
- (3) The human body has only the muscular and digestive systems.
- (4) All the organ systems in our body work together to help us function properly.

19. The two objects labelled below are made of clear glass.



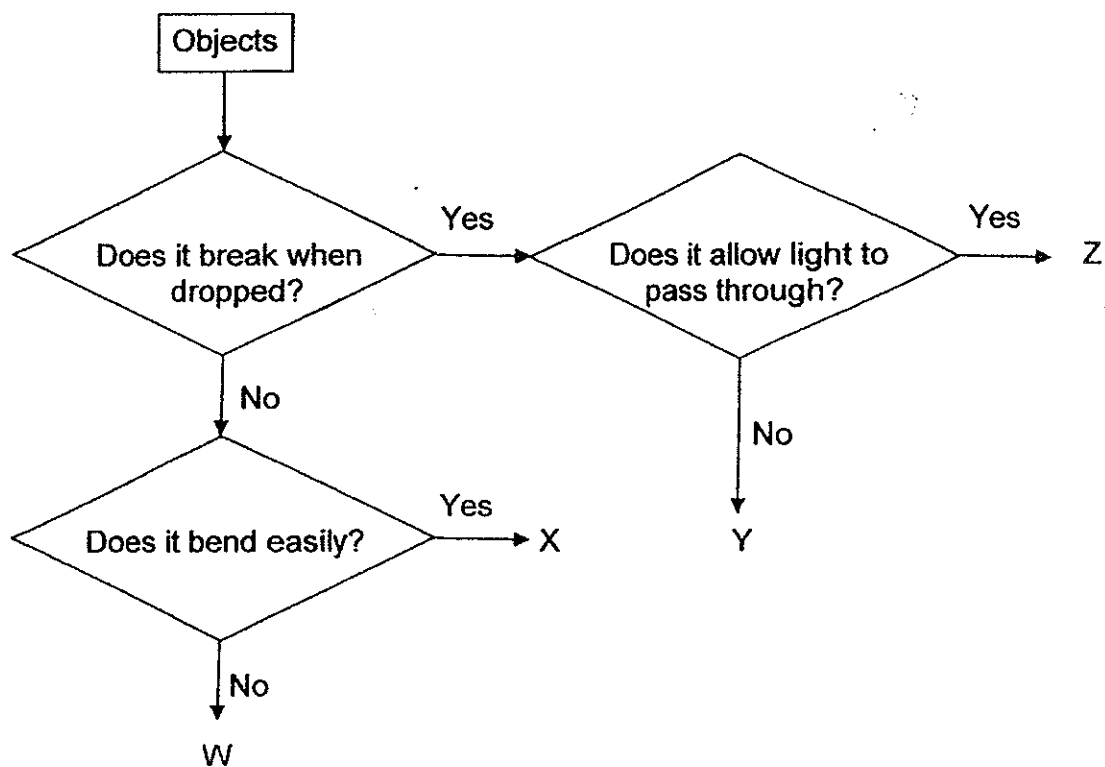
Which of the following properties are common in **both** objects?

- A Flexible
- B Waterproof
- C Allows light to pass through

- (1) A and B only
- (3) B and C only

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

20. Study the flow chart below.



Which of the following could W, X, Y and Z most likely be?

	W	X	Y	Z
(1)	iron rod	rubber band	ceramic tile	spectacle lens
(2)	lock	raincoat	car tyre	fish tank
(3)	iron rod	water hose	cardboard	spectacle lens
(4)	eraser	raincoat	cardboard	toilet roll

Study the table below to answer questions 21 and 22.

Group A	Group B
styrofoam ball	metal coin
wooden toothpick	leather belt

21. How have the objects in groups A and B been classified?

- (1) Objects in group A are flexible but objects in group B are not flexible.
- (2) Objects in group A float on water but objects in group B sink in water.
- (3) Objects in group A does not absorb water but objects in group B absorb water.
- (4) Objects in group A do not break easily when dropped but objects in group B break easily when dropped.

22. Which one of the four objects comes from plants?

- (1) metal coin
- (2) leather belt
- (3) styrofoam ball
- (4) wooden toothpick

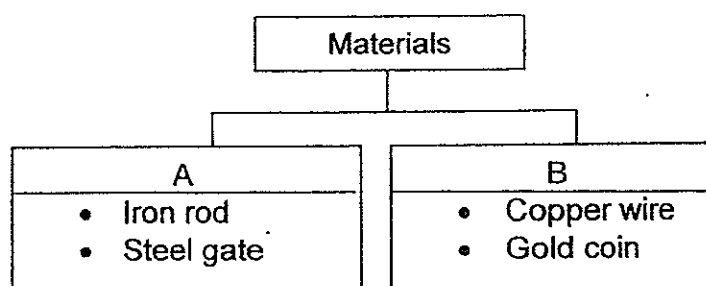
23. The table below shows the properties of materials H, I, J and K.

Properties	Material			
	H	I	J	K
Light	Yes	No	No	Yes
Flexible	Yes	No	No	Yes
Able to keep things warm	No	Yes	No	Yes
Allows light to pass through	Yes	No	No	No

Mrs Lee needs to choose a suitable material to make a sweater for her grandchild. He needs to wear it when he feels cold while camping. Which material should she choose?

- (1) Material H
- (2) Material I
- (3) Material J
- (4) Material K

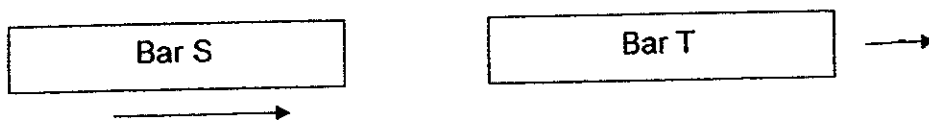
24. The chart below shows how four objects have been classified into two different groups.



Which one of the following is the best heading to represent A and B?

	A	B
(1)	Metal	Non-metal
(2)	Flexible	Non-flexible
(3)	Magnetic	Non-magnetic
(4)	Waterproof	Non-waterproof

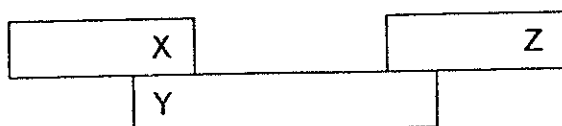
25. Amin has two bars, S and T, as shown below.



As he moved Bar S towards Bar T, Bar T did not move away from Bar S.

Which one of the following conclusion can be made from the above observation?

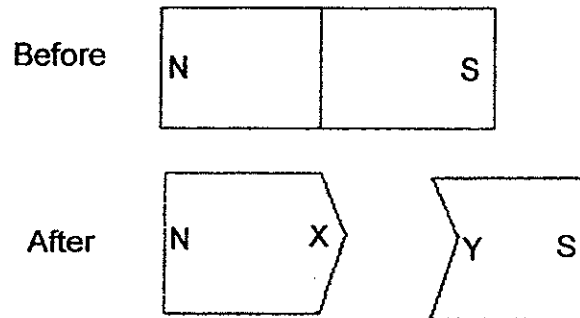
- (1) Bar S is a magnet while Bar T is not a magnet.
 - (2) Bar S has a stronger magnetic force than Bar T.
 - (3) Bar S and T are magnets and their like poles are facing each other.
 - (4) Bar S and T are magnets and their unlike poles are facing each other.
26. Maya placed three bar magnets in the following arrangement. The magnets did not repel each other.



Which one of the following shows the correct poles to represent X, Y and Z?

	X	Y	Z
(1)	South	North	North
(2)	North	South	North
(3)	North	North	South
(4)	South	South	South

27. Noah accidentally dropped his magnet and it broke into two pieces as shown below.



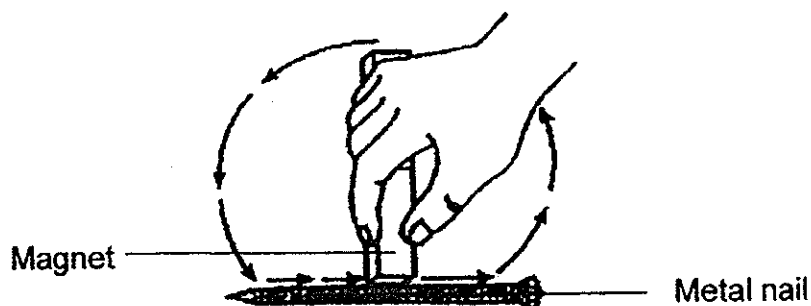
His friends made the following predictions.

Ali	The magnet cannot be used anymore.
Bala	The magnet can be used but part X and Y do not have any poles.
Caili	Part X would be the south pole while Part Y would be the north pole.
David	Part X would be the north pole while Part Y would be the south pole.

Which friend had made the correct prediction?

- (1) Ali (2) Bala
(3) Caili (4) David

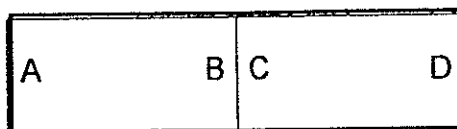
28. Aldo stroked a metal nail repeatedly for a minute using a magnet as shown in the diagram below.



He realised that the metal nail did not become magnetised.

What could be the possible reason why the metal nail was not magnetised?

- (1) He did not stroke hard enough.
 - (2) The metal nail is made of copper.
 - (3) He used the wrong pole to stroke the metal nail.
 - (4) He did not stroke the metal nail in 2 different directions.
29. Jia Ying used a magnet to attract some metal paperclips. A, B, C and D represent parts of the magnet.



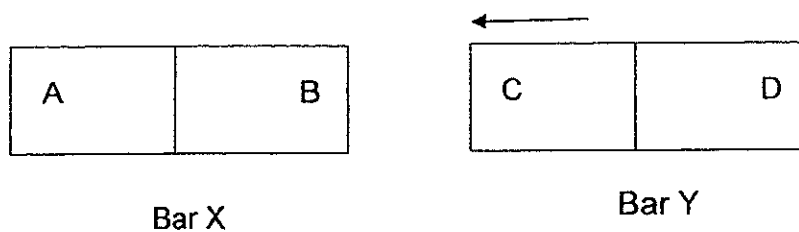
He recorded the number of clips attracted to different parts of the magnet in the table below.

Parts	Number of paper clips.
A	12
B	3
C	1
D	?

What is the most likely number of paper clips attracted to part D?

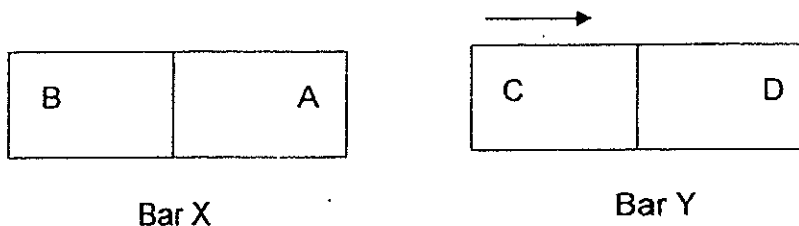
- (1) 1
- (2) 3
- (3) 11
- (4) 30

30. Mandy had two metal bars, bar X and bar Y. In the first experiment, she moved bar X towards Bar Y and observed that bar Y moved towards bar X.



1st experiment

In the second experiment, she then flipped Bar X around and moved it towards bar Y. Bar Y was observed to move away from bar X.



2nd experiment

Which one of the following is **true** about the two metal bars?

- (1) Both metal bars are magnets.
- (2) Both metal bars are not magnets.
- (3) Bar X is not a magnet while bar Y is a magnet.
- (4) Bar Y is not a magnet while bar X is a magnet.



NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

**SEMESTRAL ASSESSMENT 2
2014**

BOOKLET B

Date : 29 October 2014

Duration : 1 h 45 min

Name : _____ ()

Class: Primary 3 ()

Marks Scored:

Booklet A:		60
Booklet B :		40
Total :		100

**Any query on marks awarded should be raised by 7 Nov 2014.
We seek your understanding in this matter as any delay in the
confirmation of marks will lead to delays in the generation of results.**

Parent's signature:

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.**

Booklet B consists of 15 printed pages including this cover page.

Section B (40 marks)

Write your answers to questions 31 to 44 in the spaces provided.

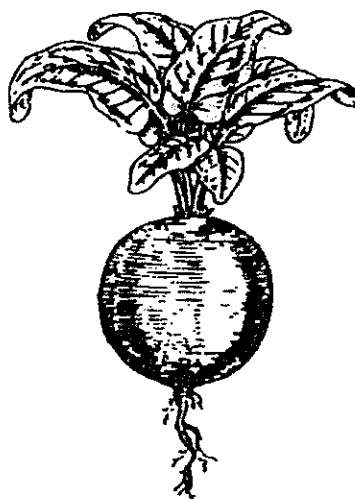
31. Anna put some plants, animal X and animal Y into a tank covered with a wire mesh and observed them over 5 days. She provided the organisms with water every day. She noticed that animal X only fed on plants while animal Y fed on animal X. The chart below shows the number of organisms still alive at the end of each day.

Day	Number of organisms still alive in the tank		
	Plants	Animal X	Animal Y
1	30	15	1
2	25	10	1
3	20	5	1
4	18	0	1
5	18	0	?

- (a) Based on her results, why did the number of plants stop decreasing after day 4? [1]

- (b) What might happen to animal Y after Day 5? Give a reason to support your answer. [1]

32. Belle studied the organism below and concluded that it is not a plant because she could not find any flower on it.



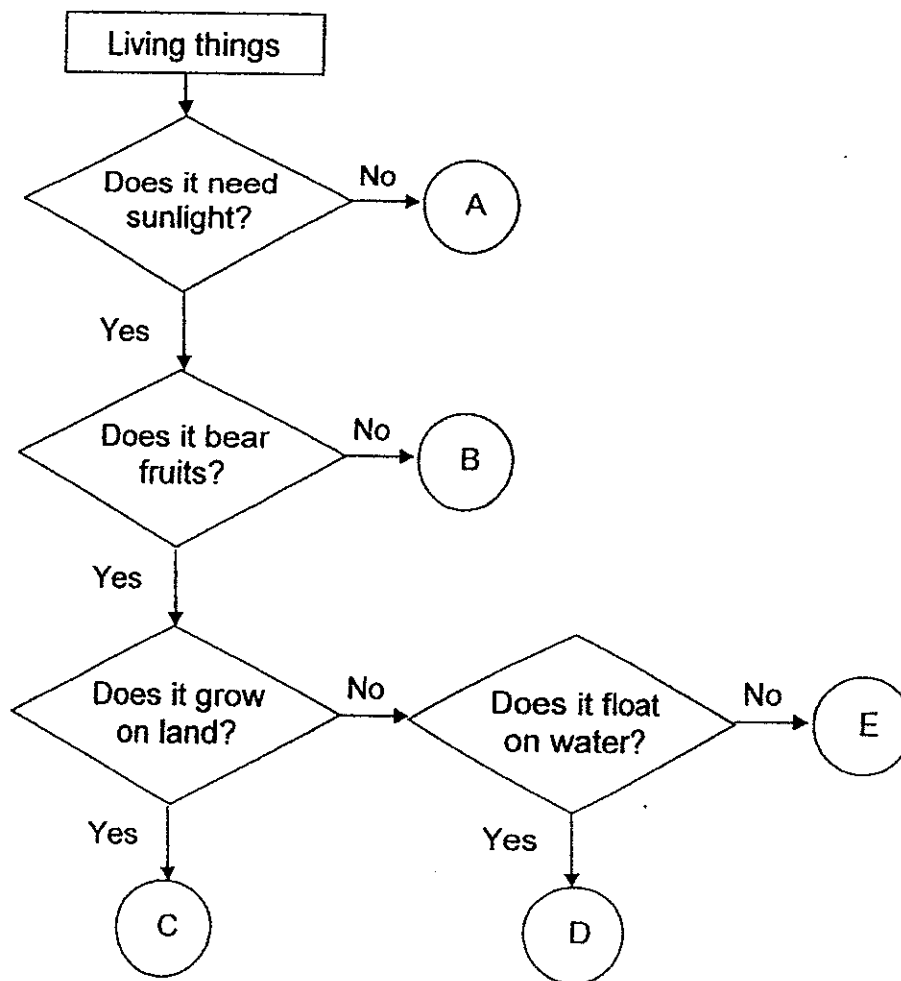
Organism X

- (a) She was told that her conclusion is incorrect. Give a reason, based on the diagram, to explain why she is incorrect. [1]

- (b) How do plants get their food? [1]

- (c) Her friend said that the organism is a type of non-flowering plant. What must they do before making this conclusion? [1]

33. Study the flowchart below.

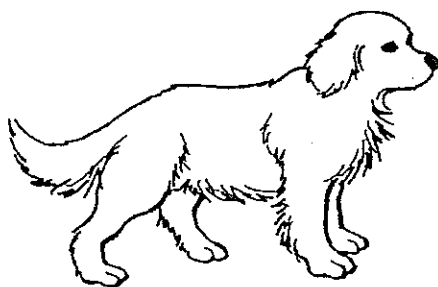


(a) Based on the flowchart, state **all** the characteristics of organism E. [2]

(b) Which organism A, B, C, D or E can represent a moss? [1]

(c) Give an example of organism C. [1]

34. Study and answer the questions below.



Animal A

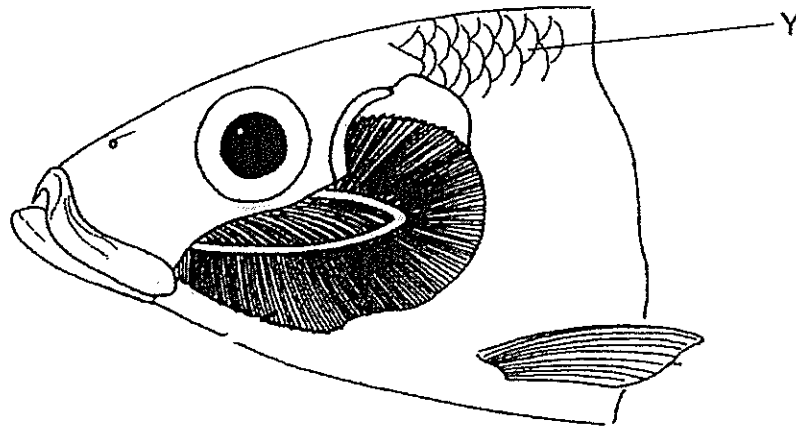


Animal B

- (a) Based only on the characteristics shown in the diagrams, state a similarity between the two animals. [1]

- (b) State two characteristics of the animals that belong in the same group as Animal B. [1]

35. Study the diagram below.



- (a) i) In the diagram, **identify and label** the part of the fish that helps it to move in water. [1]
- ii) In the diagram, **identify and label** the part of the fish that help it breathe in water. [1]
- iii) Name another group of animals that also have the part labelled Y as their outer body covering. [1]
- iv) A frog can also swim and breathe in water. Based on a characteristic of a fish, explain why the frog cannot be classified in the same group. [1]

36. Mrs Meena left a bowl of uncooked meat on the kitchen table. A day later, she found that the meat had turned sticky and smelled bad. She then threw the meat away.

- (a) Which organism had most likely caused the meat to turn sticky and smelly?

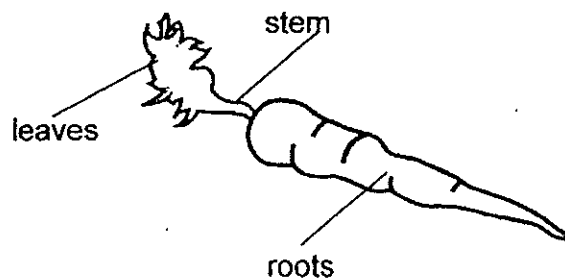
[1]

- (b) Her daughter, Juni, said that the meat still looked the same and should not be thrown away. Explain why Juni could not see the organisms stated in part (a).

[1]

37. May Ling placed plant A in a pot of soil. It was watered daily and left under the sun.

After a few weeks, she observed that the plant was **growing well**. She pulled the plant out of the soil and noticed that the root of the plant was **bigger than before**.



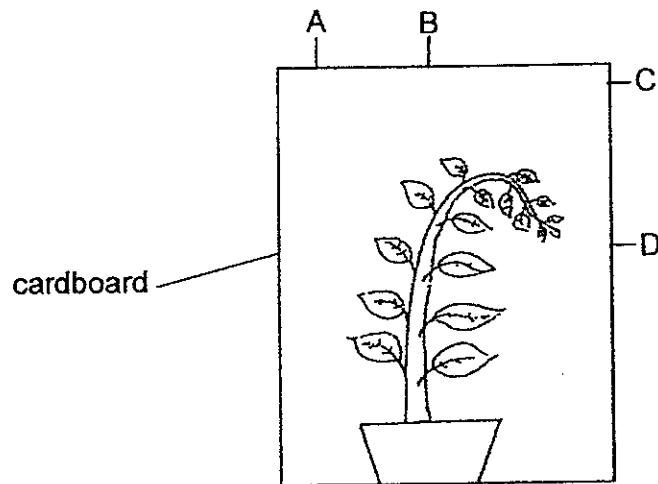
Plant A

Based on the information given above, what can she conclude about the function of the root? [2]

(i) _____

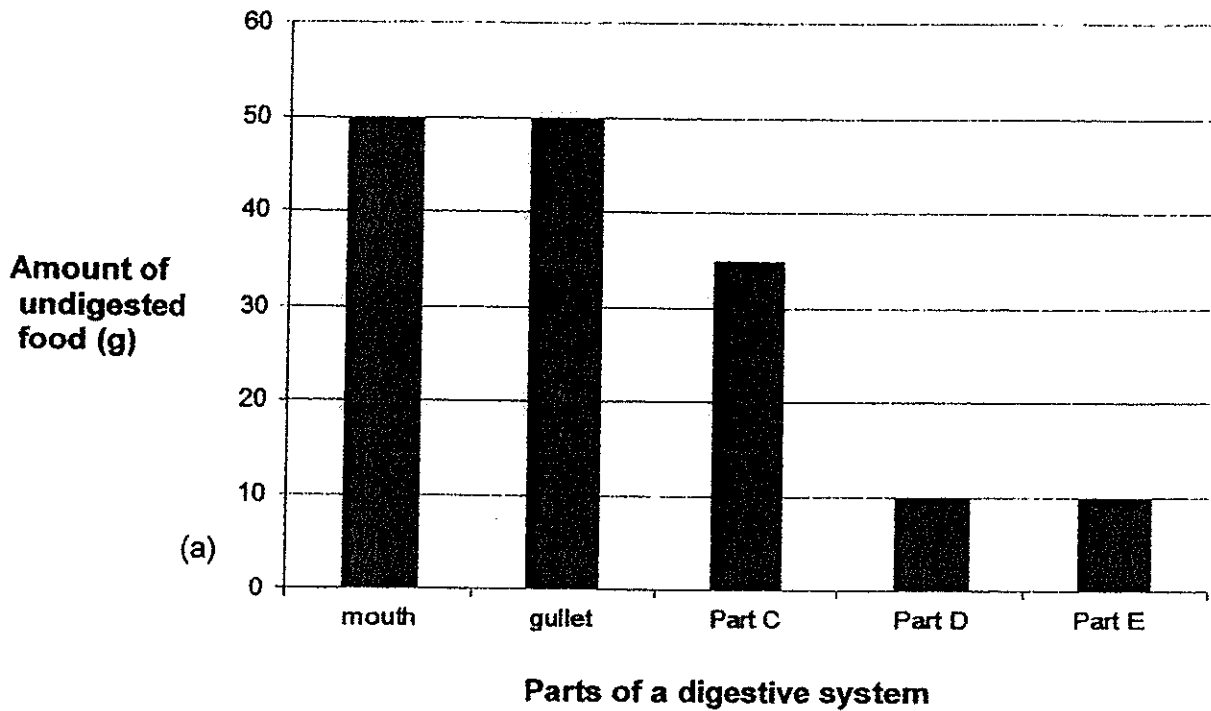
(ii) _____

38. Sanjiv placed a plant in a cardboard box which had a hole in it. After a week, he realized that the plant had grown sideways as shown in the diagram below.



- (a) Based on how the plant was growing, at which part, A, B, C or D, could the hole most likely be found? [1]
- _____
- (b) State 2 things that Sanjiv should do to the box so that the plant would grow upright instead. [2]
- _____
- _____
- (c) Based on the experiment above, what is the function of the stem? [1]
- _____
- _____

39. The graph below shows the amount of undigested food as it leaves each part of the human digestive system.



- (a) Identify parts C and E of the digestive system. [2]

Part C: _____

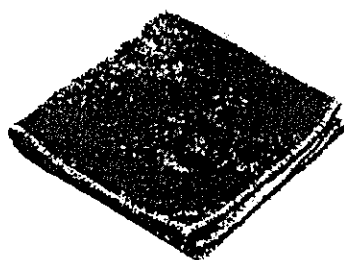
Part E: _____

- (b) What happens to the digested food in part D? [1]

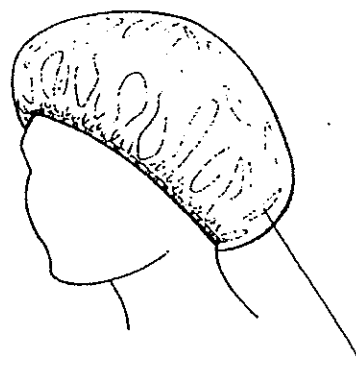
- (c) State what is found in part C that reduced the amount of undigested food that enters it. [1]

40. The diagram below shows a cloth and a shower cap.

The cloth can be used to clean wet surfaces to keep them dry. The shower cap can be used to keep our hair dry while taking a shower.



cloth



shower cap

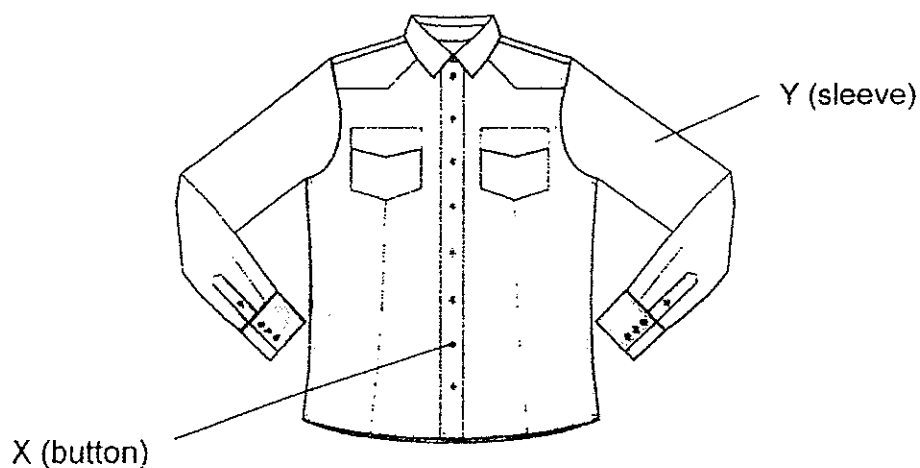
Based on the information given, state **one** similarity and **one** difference in the properties of the two objects. Do not compare size, shape and colour.

[2]

Similarity:

Difference:

41. The diagram below shows a picture of a shirt.



- (a) Identify suitable materials that can be used to make parts X and Y. [1]

X: _____

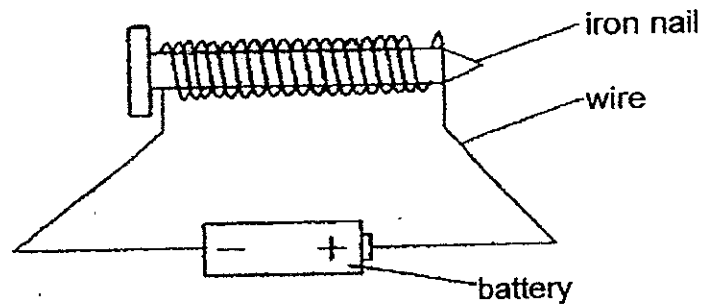
Y: _____

- (b) Based on the properties and the function of the object, state a reason why the materials chosen in (a) are suitable for making the shirt. [2]

X: _____

Y: _____

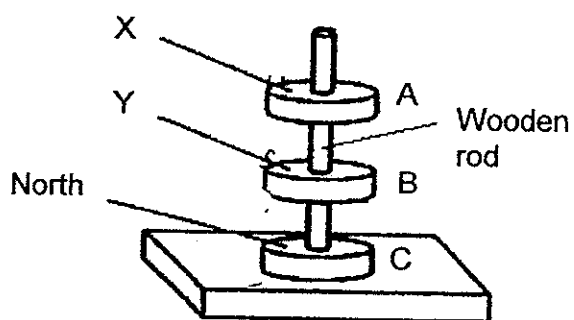
42. Ally wanted to make her own electromagnet. She set up the apparatus as shown in the diagram below.



- (a) Unfortunately, she realized that the electromagnet could not attract any steel paperclip. If she had set up the circuit correctly, give a possible reason why her set-up did not work. [1]

- (b) Ally was given an electromagnet that worked. However, she wanted to make the electromagnet stronger. What are the two changes she could do to make the electromagnet stronger? [1]

43. Munna carried out an experiment using three ring magnets, A, B and C, and a wooden rod as shown below.



She realised that the magnets were 'floating' directly above each other.

- (a) Explain how the magnets were able to float above each other.

[1]

- (b) X and Y represents two poles of magnets A and B. Identify the poles represented by X and Y.

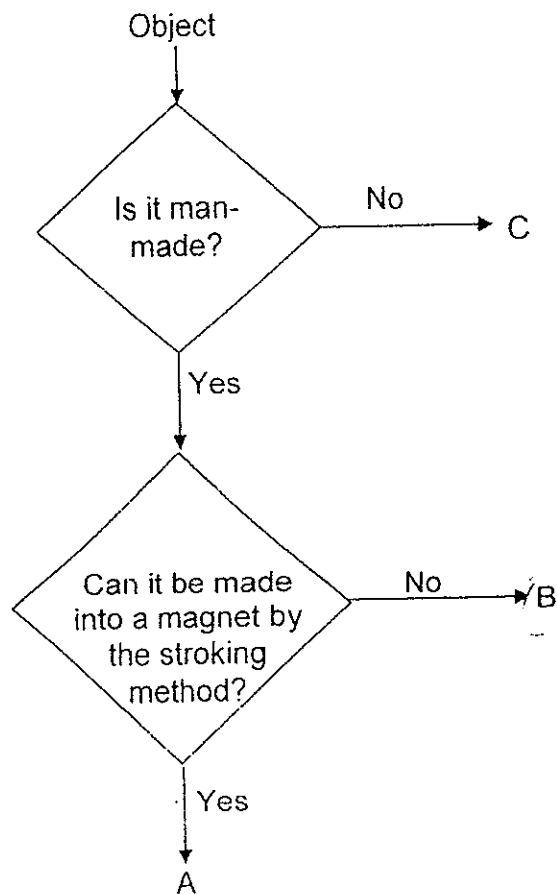
[1]

X: _____ Y: _____

- (c) Munna changed the set-up by flipping magnet A only. What would she observe about magnets A, B and C?

[2]

44. Study the flow chart below.



(a) State the characteristics of object B. [1]

(b) Seri has been given the following objects.

- Iron rod
- Plastic cup
- Lodestone

Which object correctly represent A, B and C?
Fill in your answer in the boxes below.

[1]

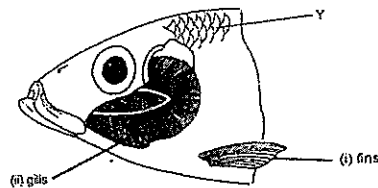
A	B	C

EXAM PAPER 2014

LEVEL : PRIMARY 3
SCHOOL : NANYANG
SUBJECT : SCIENCE
TERM : SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	4	4	3	4	2	4	4	1	1
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
2	1	3	3	3	4	1	4	3	1
Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
2	4	4	3	1	2	3	2	3	1

- Q31 (a) Animal C had died as animal Y ate animal X.
 (b) Animal Y would die after Day 5 as animal Y fed on animal X and animal X had died.
- Q32 (a) Organism X has leaves, stem and roots like a plant.
 (b) Plants make their own food
 (c) They must see if there is fruits in organism X.
- Q33 (a) Organism E needs sunlight, bears fruits, grows in water and sinks in water.
 (b) B
 (c) Sunflower
- Q34 (a) Both have a tail.
 (b) Reptiles lay eggs and have dry skin with scales.
- Q35 (a) (i) and (ii)



- (iii) Reptiles
 (iv) Frog does not have scales and does not have gills to breathe.
- Q36 (a) mould
 (b) Mould can only be seen under a microscope thus Juni could not see the mould with her naked eyes.
- Q37 (i) The roots stores excess food for the plant.
 (ii) The roots absorbs minerals and water and is transported to all parts of the plant and the leaves
- Q38 (a) D
 (b) Cover the hole at D and make a hole on the top part of the box at position B.
 (c) The stem holds the plant upright and helps the leaves to reach out for sunlight to make food,

- Q39 (a) Part C : stomach
Part E : Large intestine
(b) The blood absorbs the digested food and it is carried to all parts of the body by the blood.
(c) More digestive juices is found in part C that reduced the amount of undigested food that enters it.
- Q40 Similarity: Both are flexible
Difference: The cloth is absorbent but the shower cap is waterproof.
- Q41 (a) X: Plastic
Y: Fabric
(b) X is strong so that it does not break easily.
Y is light so that the person who wears it will not feel heavy.
- Q42 (a) She should put more batteries.
(b) She should would more coils of wire around the iron nail and put more batteries.
- Q43 (a) Like poles of the magnets are facing each other, therefore they repel.
(b) X: N
Y: S
(c) Magnet A will be attracted to magnet B while magnet B and C continued to repel.
- Q44 (a) Object B is man-made and cannot be made into a magnet by the stroking method.
(b) A: Iron rod
B: Plastic cup
C: Lodestone

Pei Chun Public School
Semestral Assessment 2 – 2014
Science
Primary 3

Name : _____ () Date : 28 October 2014

Class : Pri. 3 ()

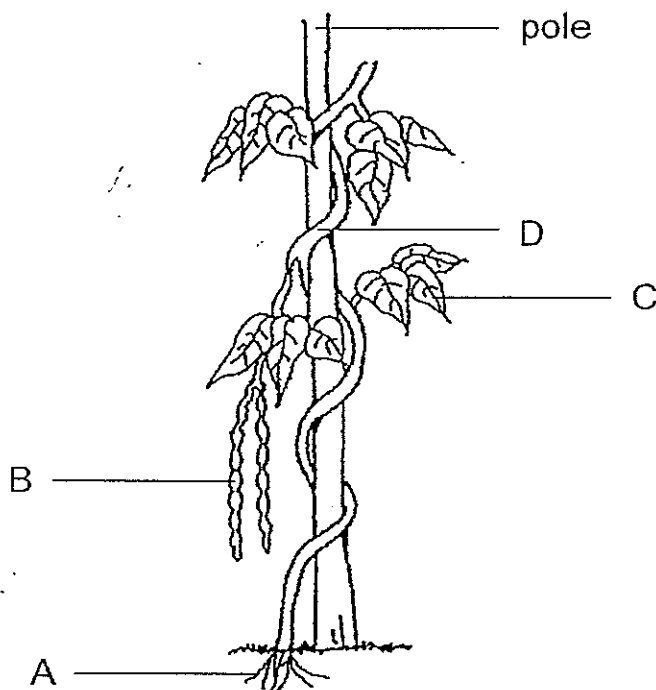
Science Teacher : _____

Time : 1 h 20 min

Section A (24 × 2 marks)

For questions 1 to 24, choose the most suitable answer and shade its number (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. The diagram below shows a bean plant.

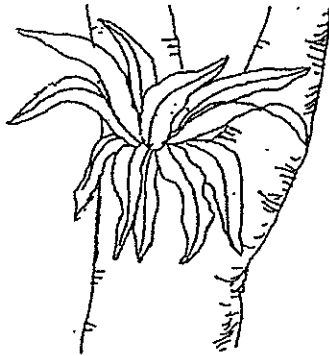


Which part of the plant helps it to climb up the pole to get sunlight?

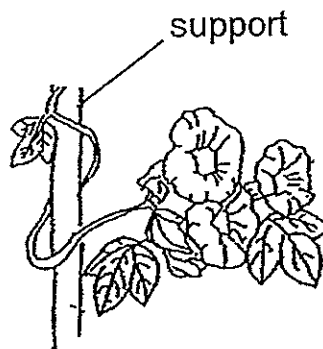
- (1) A
- (2) B
- (3) C
- (4) D

2. Study the table below and diagrams of the plants that follow.

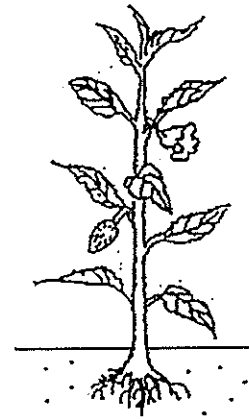
Plant	X	Y	Z
Produces flowers	✓	✓	
Has a strong stem		✓	



bird's nest fern



morning glory



balsam

Which of the following correctly matches the plants to letters X, Y and Z?

	X	Y	Z
(1)	balsam	bird's nest fern	morning glory
(2)	morning glory	bird's nest fern	balsam
(3)	balsam	morning glory	bird's nest fern
(4)	morning glory	balsam	bird's nest fern

3. Which of the animals below gives birth to its young?

(1)



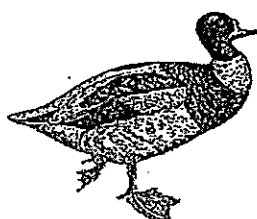
tiger

(2)



goldfish

(3)



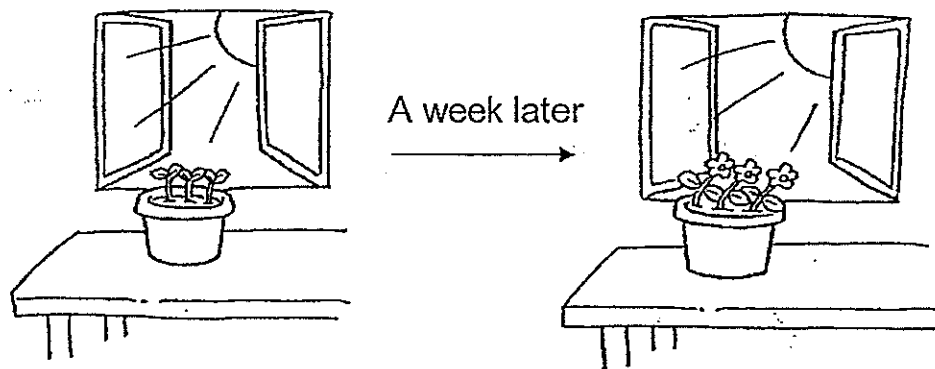
duck

(4)



turtle

4. Felicia placed a pot of plants next to the open window. She watered the plants daily. The diagram below shows what she observed after one week.



Based on her observation, she concluded that the plants are living things because they _____.

- A : grow
- B : reproduce
- C : respond to changes around them

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

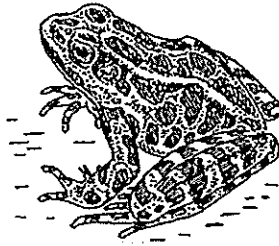
5. The table below shows how some animals can be grouped.

	Has lungs	Has gills
Does not have scales on its body	E	G
Has scales on its body	F	H

Which group of animals do reptiles belong to?

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

6. The diagram below shows an animal.

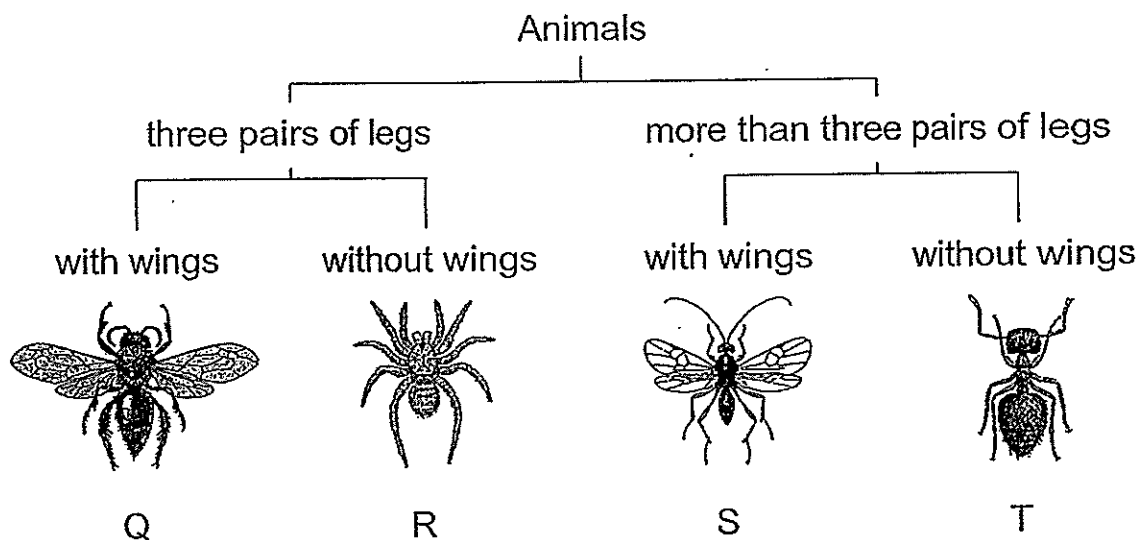


Which of the following statements about the animal are true?

- A : It breathes through its moist skin when it is underwater.
- B : It reproduces by laying eggs.
- C : It lives only in the water.
- D : It has scales.

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

7. Four different animals have been classified as shown below.



Which of the animals above have been classified wrongly?

- (1) R only
- (2) Q only
- (3) R and T only
- (4) R, S and T only

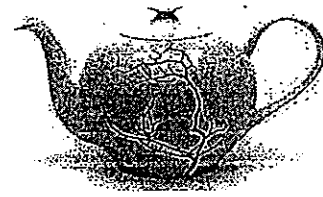
8. Study the objects below.



clear glass bowl



claypot

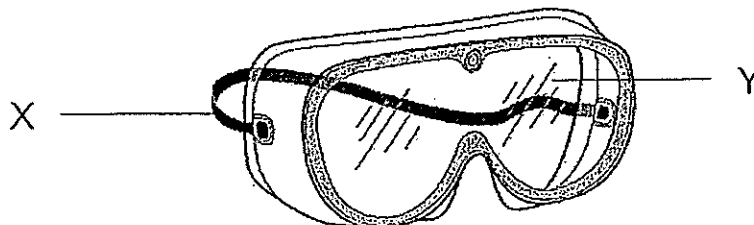


ceramic teapot

In what way are the objects similar?

- (1) They allow light to pass through them.
- (2) They break easily when dropped.
- (3) They are not waterproof.
- (4) They are flexible.

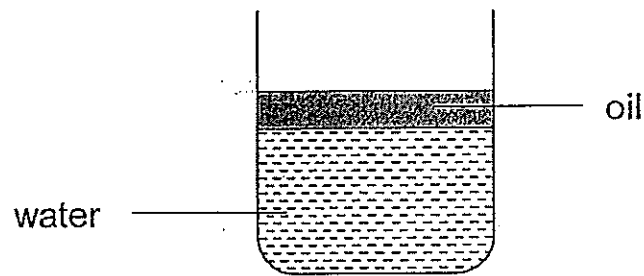
9. The diagram below shows a pair of goggles.



Which materials are used to make parts X and Y?

	X	Y
(1)	plastic	metal
(2)	rubber	metal
(3)	metal	plastic
(4)	rubber	plastic

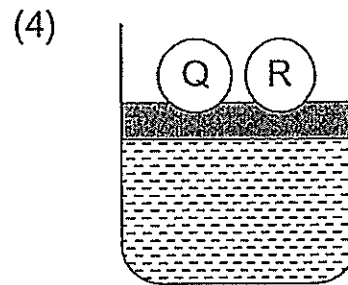
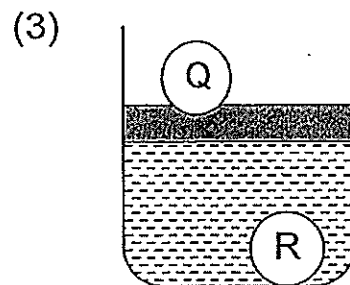
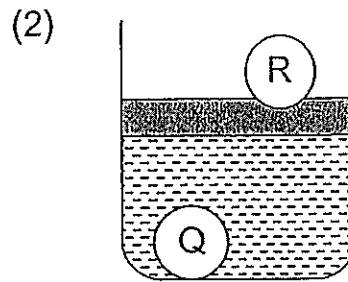
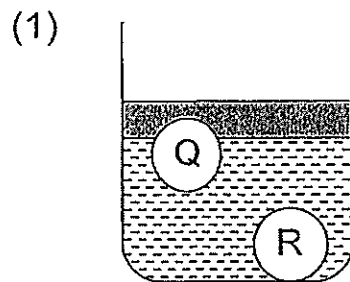
10. Ryan carried out an experiment using the set-up below. Oil always floats on water.



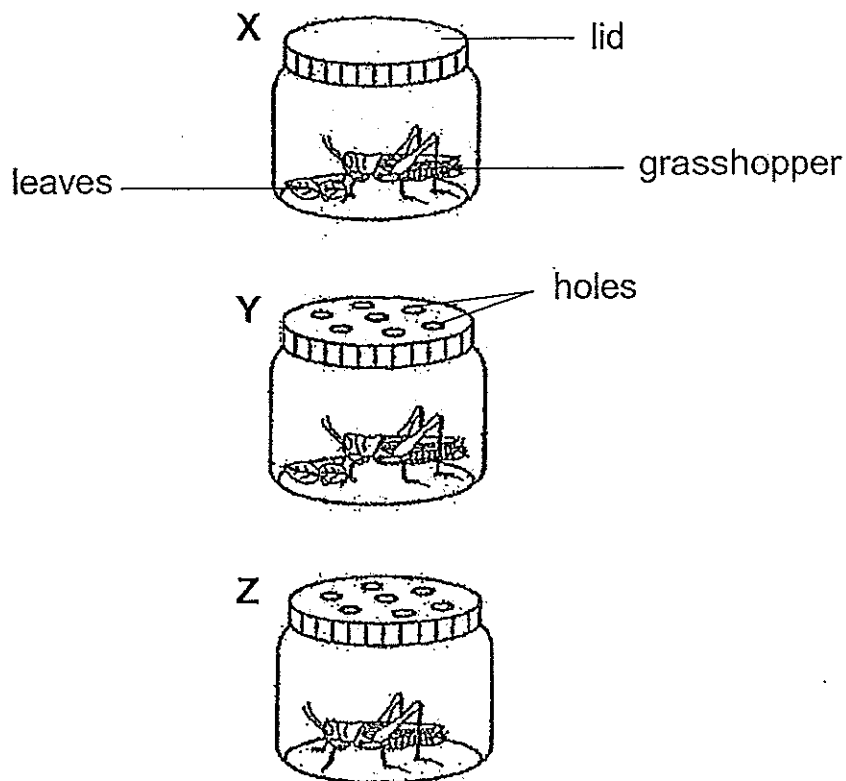
He had two similar balls, Q and R. A table of information about the balls is given below.

	Floats on oil	Sinks in water
Ball Q		✓
Ball R	✓	

Which of the following diagrams correctly shows the position of the two balls when Ryan dropped them into the set-up shown above?



11. Ivan wanted to keep a grasshopper as a pet. He thought of three possible ways, X, Y and Z, to keep his grasshopper.



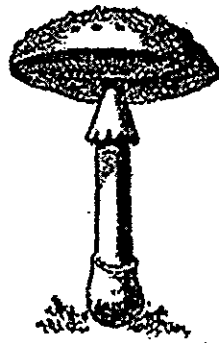
Which of the following is correct?

	Keeps the grasshopper alive for the longest period of time	Keeps the grasshopper alive for the shortest period of time
(1)	Y	X
(2)	X	Y
(3)	Y	Z
(4)	X	Z

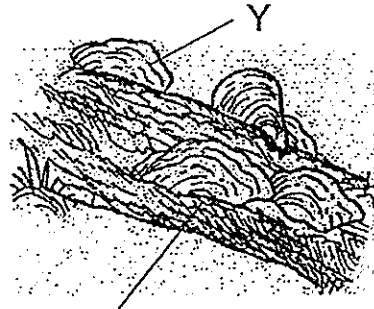
12. Which of the following statements about bacteria is true?

- (1) All bacteria are harmful.
- (2) Bacteria can reproduce.
- (3) Bacteria can make its own food.
- (4) Bacteria can only be seen using a magnifying glass.

13. The diagrams below show two living things, X and Y.



X



dead tree trunk

Which of the statements below correctly describe(s) both living things X and Y?

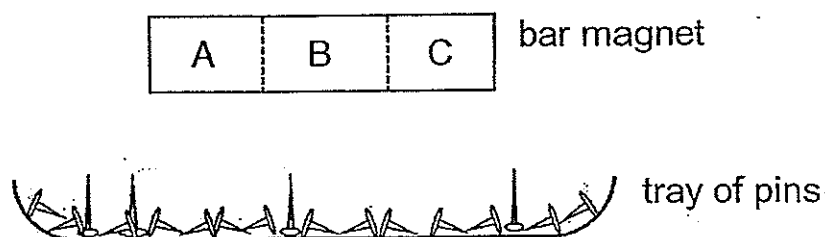
- A : They reproduce by spores.
- B : They can make their own food.
- C : They feed on other living things, dead or alive.

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

14. Juliet wanted to separate two objects which have been mixed together. Which pair of objects can be separated using a magnet?

- (1) rubber bands and copper wire
- (2) rubber bands and sawdust
- (3) iron filings and steel pins
- (4) sawdust and iron filings

15. Bernita placed a bar magnet onto a tray of iron pins as shown in the diagram below.

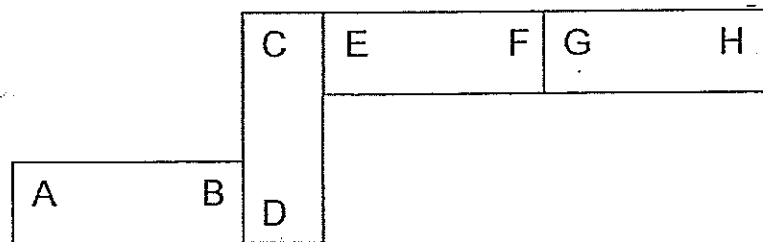


Which of the following shows the likely number of pins attracted to parts A, B and C of the bar magnet?

	A	B	C
(1)	5	5	5
(2)	7	1	7
(3)	9	4	1
(4)	3	9	3

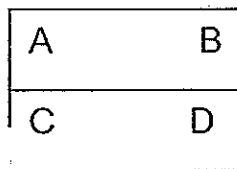
16. Which of the following actions will **not** cause a magnet to lose its magnetism?
- (1) Hitting it repeatedly with a hammer
 - (2) Dropping it from a height repeatedly
 - (3) Heating it over a flame for some time
 - (4) Stroking it with a non-magnetic object
17. Rickie stroked some items with a magnet in one direction for several times. Which of the following items would most likely be magnetised?
- (1) steel bar
 - (2) plastic ruler
 - (3) copper coin
 - (4) aluminium pipe

18. Four identical bar magnets can be arranged as shown in the diagram below.

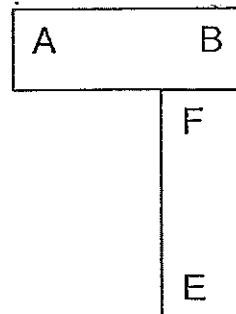


Which of the following arrangements of the magnets is possible?

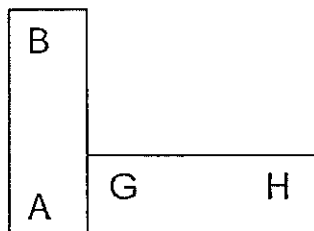
(1)



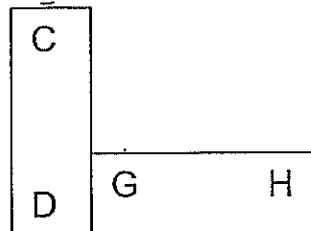
(2)



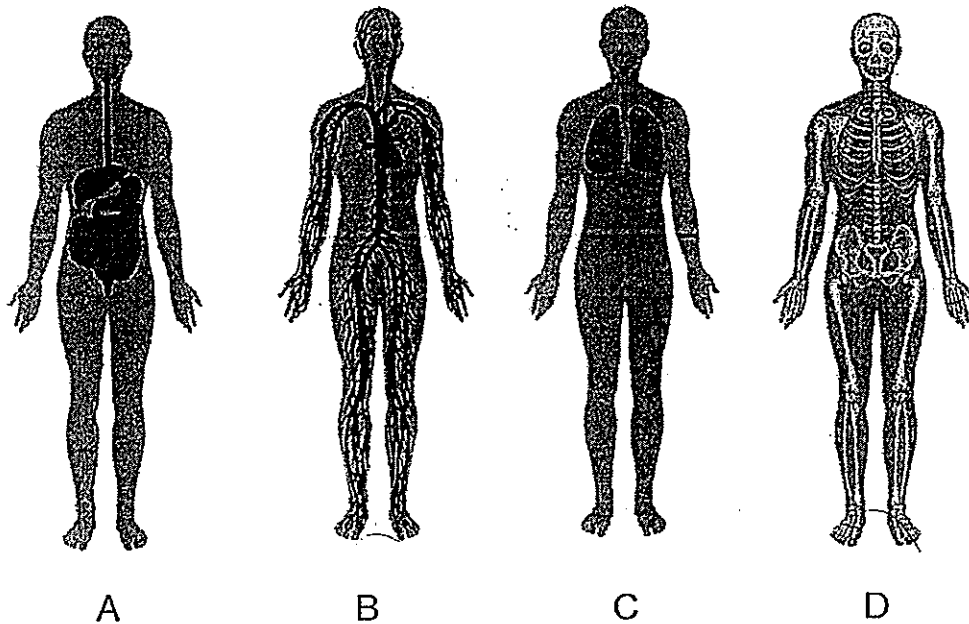
(3)



(4)



19. The diagram below shows different human body systems.



Which of the systems gives the body its shape?

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

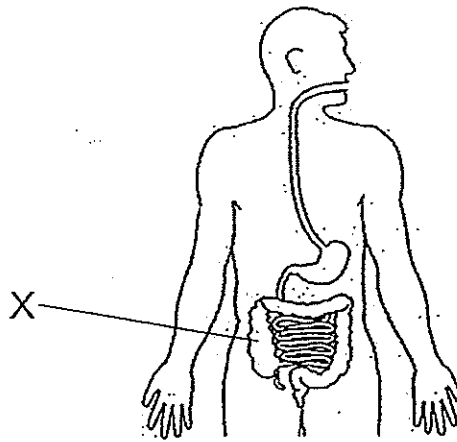
20. Ali made the following statements about the human circulatory system.

- P : Protects the organs in the body
- Q : Carries useful substances to all parts of the body
- R : Removes excess water from the body
- S : Carries waste materials away from different parts of the body

Which of the statements made by Ali is/are true?

- (1) Q only
- (2) Q and S only
- (3) Q, R and S only
- (4) P, Q, R and S

21. Study the diagram below.



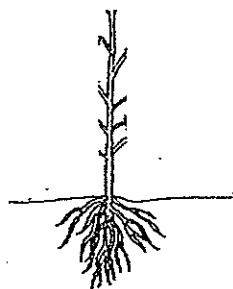
What is the function of part X?

- (1) It carries out digestion.
- (2) It releases digestive juices.
- (3) It helps in absorption of water from undigested food.
- (4) It is where digestion is completed and food is absorbed into the body.

22. Which of the following does **not** take place in the mouth?

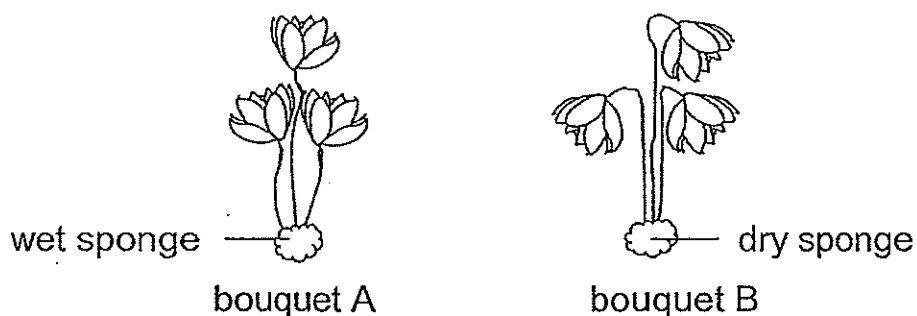
- (1) Digestive juices are released.
- (2) Food is mixed with the saliva.
- (3) Food is absorbed into the body.
- (4) Food is broken down into smaller pieces.

23. John cut off all the leaves of a healthy plant in his garden as shown below.



After two weeks of watering, he noticed that the plant died. The plant died because it could not _____.

- (1) bear fruit
 - (2) make food
 - (3) take in the water from the soil
 - (4) take in the minerals from the soil
24. Caili received two similar flower bouquets for her birthday as shown below. The roots of the flowers in both bouquets have been removed.



Two days later, the flowers in bouquet B withered and died while the flowers in bouquet A stayed fresh. Based on the diagram above, why did the flowers in bouquet B wither and die?

The flowers in bouquet B had no _____ so it withered and died.

- (1) soil
- (2) roots
- (3) water
- (4) minerals

End of Section A

Pei Chun Public School
Semestral Assessment 2 – 2014
Science
Primary 3

Name : _____ ()

Class : Pri. 3 ()

Date : 28 October 2014

Time : 1 h 20 min

Science Teacher : _____

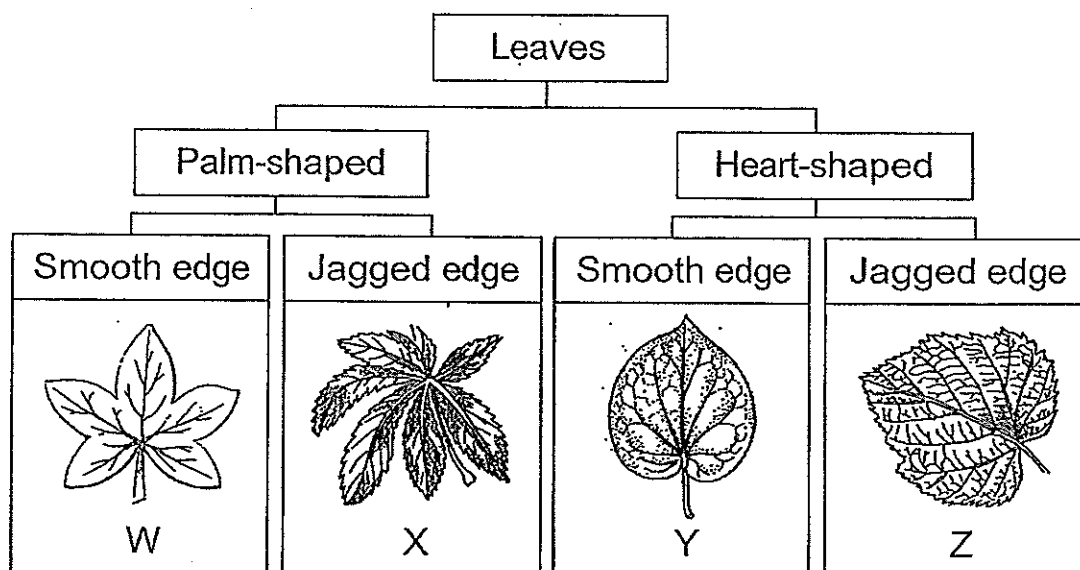
Parent's signature: _____

Section A	48
Section B	32
Total	80

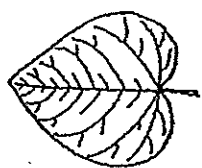
Section B (32 marks)

For questions 25 to 35, write your answers in the spaces provided.

25. Study the classification diagram below.

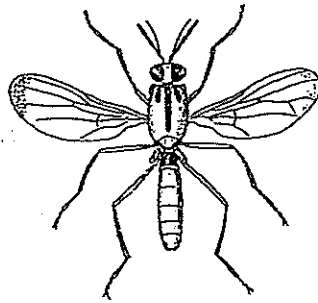


Based on the classification diagram, which two letters, W, X, Y, or Z, represent the leaves shown below? [2]



--	--

26. Study the animal shown below.



Animal Z

Based on the diagram, which of the characteristics listed below show(s) that animal Z is an insect?

Tick (✓) the correct answer(s) in the box(es).

[2]

	Characteristics	Tick (✓)
a)	It has a pair of eyes.	
b)	It has three body parts.	
c)	It has six legs.	
d)	It has wings.	

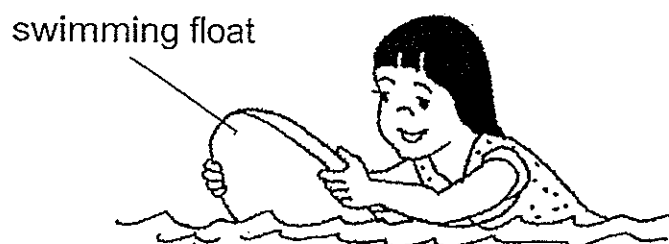
27. The table below shows the properties of materials P, Q and R.

	Sinks in water	Waterproof
P	✓	
Q		✓
R	✓	✓

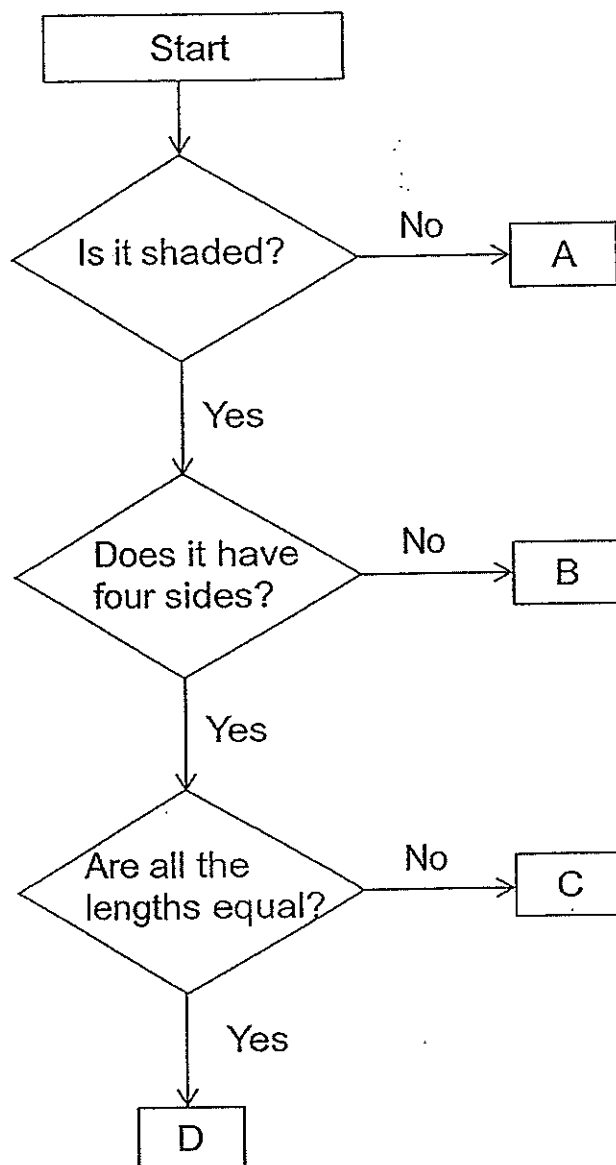
a) State all the properties of material Q. [1]

b) State the common property of materials P and R. [1]

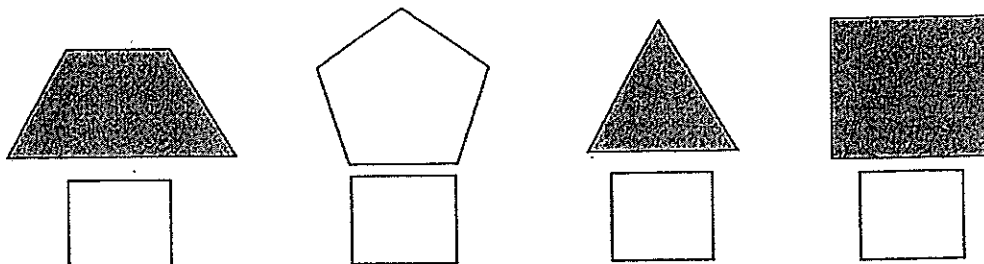
c) Which material, P, Q, or R, is most suitable for making a swimming float as shown below? [1]



28. Study the flowchart given below.

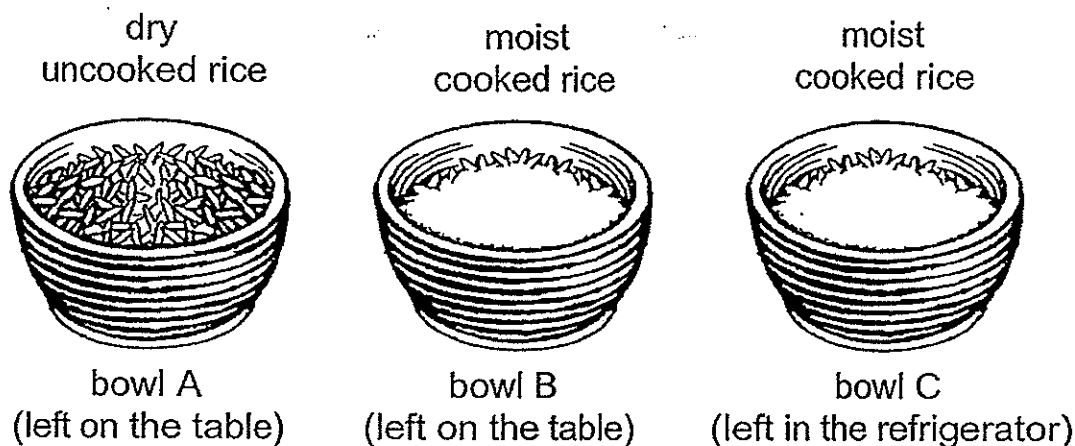


- a) Use the information from the flowchart to identify the shapes below by filling in the blanks with A, B, C or D. [2]



- b) How are shapes C and D similar? [1]

29. Selvi conducted an experiment using three bowls of rice as shown below.



After a few days, she noticed patches of mould growing on the cooked rice. She recorded her results in the table below.

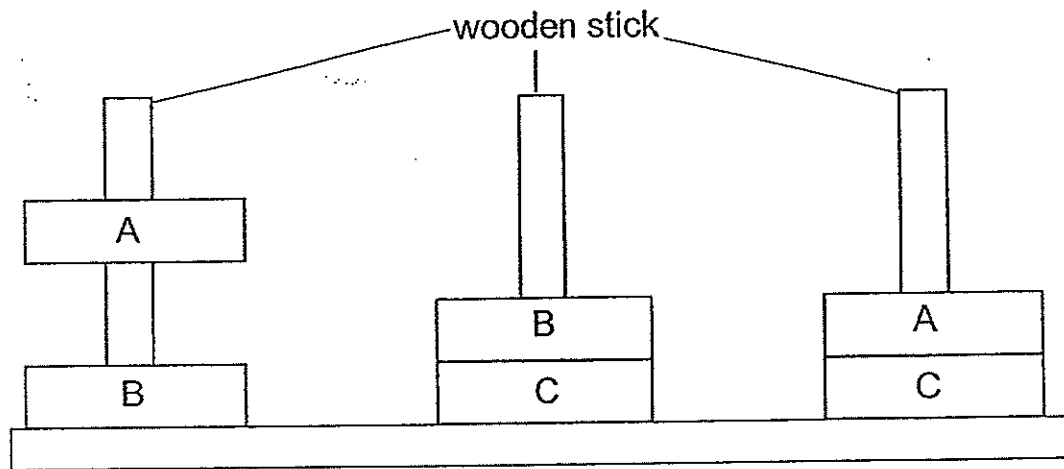
Bowl	Growth of mould				
	Day 1	Day 3	Day 5	Day 7	Day 10
A	nil	nil	nil	nil	nil
B	nil	+	++	+++	+++
C	nil	nil	+	++	+++

Key	
nil	No mould growth
+	Little mould growth
++	Some mould growth
+++	Lots of mould growth

- a) Based on Selvi's results, which bowl of rice, A, B or C, had mould growing on it first? [1]

- b) Explain why the bowl of rice you chose in (a) had mould growing on it faster than the other two bowls. [2]

30. Fazilah placed four metal rings, A, B, C through a wooden stick in different arrangements as shown in the diagram below.

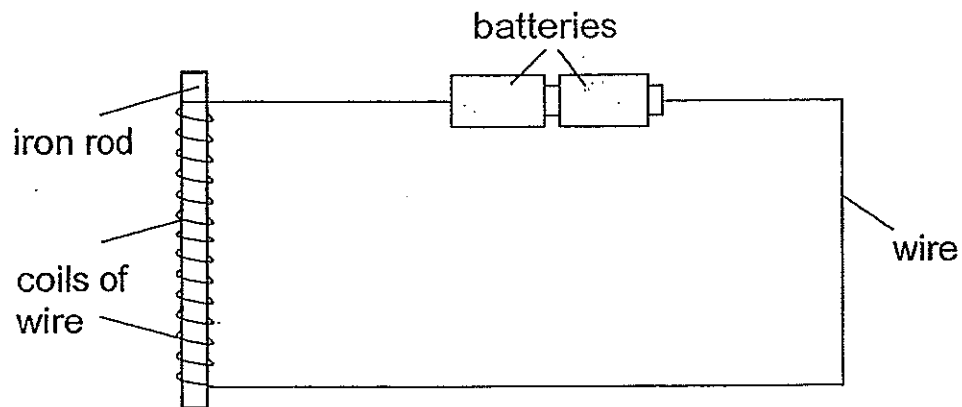


- a) Based on the diagrams above, which of the rings can Fazilah conclude to be magnets? [1]

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

- c) Name a material that can be used to make the metal ring(s) stated in (a). [1]

31. Thomas set up an experiment as shown in the diagram below. When he lowered the iron rod into a tray of steel pins, he observed that it attracted some of the steel pins.



- a) Give a reason why the steel pins were attracted to the iron rod. [1]

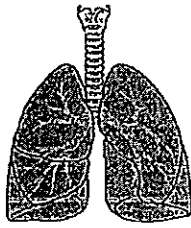
- b) Thomas wanted to increase the number of steel pins attracted to the iron rod. Suggest two ways he could do this. [2]

1st way: _____

2nd way: _____

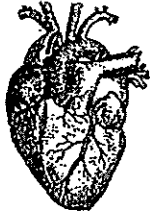
32. Match the parts to the correct body system.

[3]



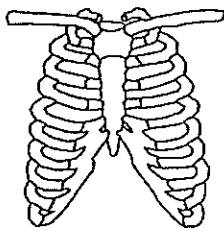
lungs

• circulatory system



heart

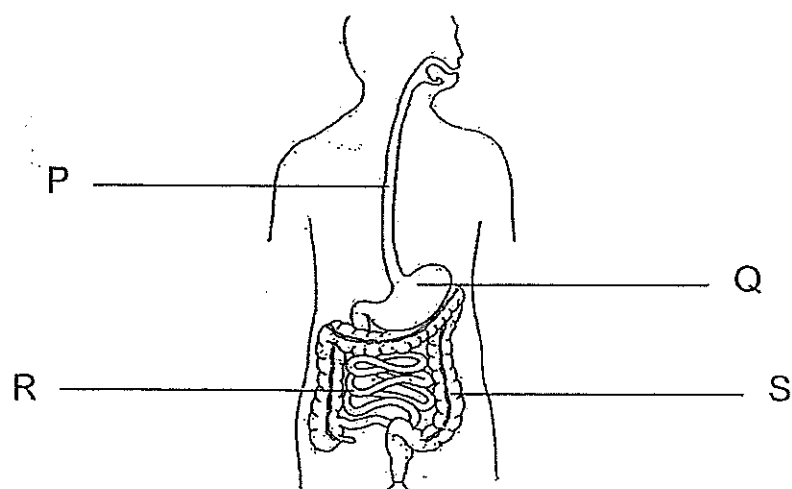
• skeletal system



rib

• respiratory system

33. The diagram below shows the human digestive system.



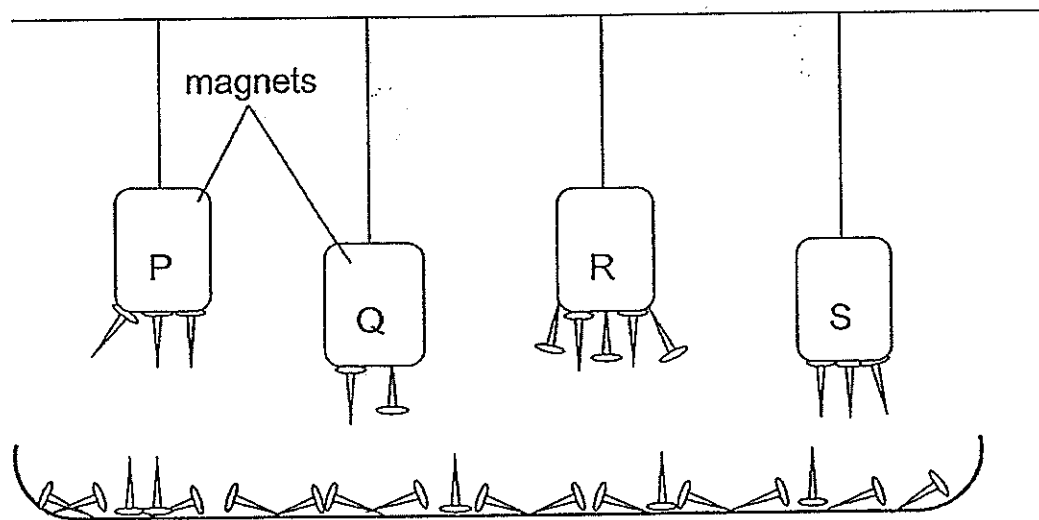
- a) Referring to the diagram, name the parts of the digestive system represented by the letters shown in the table below. [2]

Part	Part of the digestive system
P	
S	

- b) In which parts, P, Q, R and S, are digestive juices added? [1]

- c) In which part, P, Q, R or S, is digestion completed? [1]

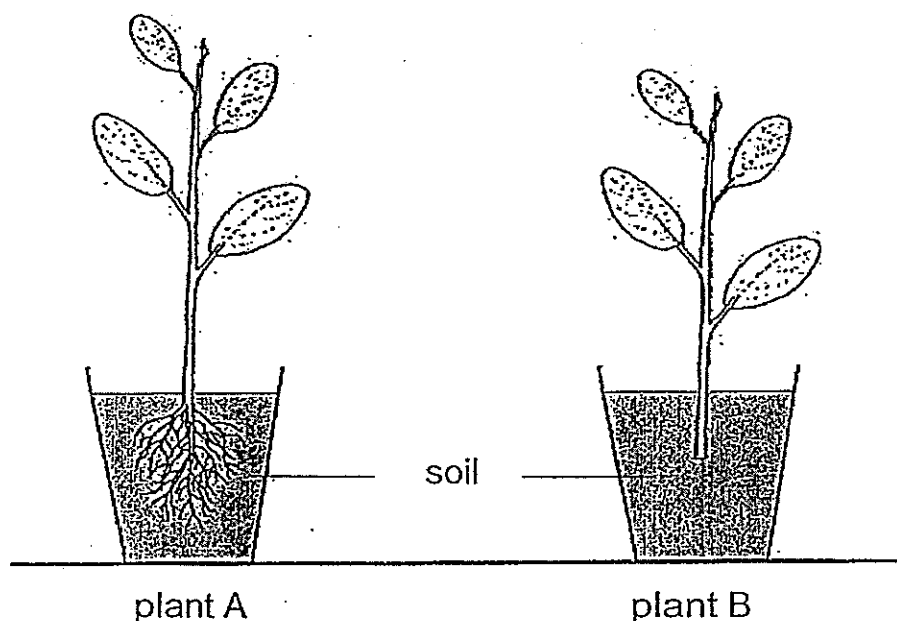
34. P, Q, R and S are magnets hanging from strings of two different lengths as shown in the diagram below. A tray of steel pins is placed below the magnets and different numbers of pins are attracted to the magnets.



- a) Which magnet is the strongest? [1]

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

35. Zaki had two similar plants, A and B. He removed the roots of plant B and planted it back into the pot as shown below.



Zaki observed that plant B fell out of its pot when there was strong wind, but not plant A.

- a) Explain why plant B fell out of its pot when there was strong wind.

[1]

- b) Name two substances that the roots take in for plants to grow well.

[2]

1: _____

2: _____

End of Section B

Set by : Mdm Yogeshwari Manikandan
Mr Zhang Qiyang
Mdm Salmisna Saleh
Vetted by: P3 Science teachers

Year: 2014
 Level: Primary 3
 School: Pei Chun Public School
 Subject: Science
 Semester: SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	4	1	3	2	1	4	2	4	2
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	2	3	4	2	4	1	1	4	2
Q21	Q22	Q23	Q24						
3	3	2	3						

- 25) Y, X
- 26) b) It has three body parts and c) It has six legs
- 27) a) Material Q does not sink in water but is waterproof.
 b) Both of them sink in water.
 c) Q
- 28) a) C, A, B, D
 b) Both of them have four sides and are shaded.
- 29) a) Bowl B
 b) It is because mould needs moisture and warmth to grow, there is moisture in the bowl of rice and there is no moisture in a refrigerator.
- 30) a) A and B
 b) The like poles of A and B are facing each other causing them to repel.
 c) Iron
- 31) a) It is because it was made into an electromagnet.
 b) 1: Add more batteries 2: coil more coils around the iron rod
- 32) lungs→respiratory system
 Heart→circulatory system
 Rib→skeletal system
- 33) a) P – gullet S- large intestine
 b) Q and R
 c) R
- 34) a) R
 b) It was hanging further away from the tray of steel pins than the other magnets and it attracted the most pins.
- 35) a) It did not have its roots to grip firmly into the soil to prevent itself from falling when the strong wind blew.
 b) 1: Minerals 2: Water

