2018

P3 Science

1.	Anglo Chinese School (Junior)	SA1
2.	Catholic High	SA1
3.	CHIJ St Nicholas Girls'	SA1
4.	Maris Stella High	SA1
5.	Methodist Girls'	SA1
6.	Nanyang Primary	SA1
7.	Raffles Girls'	SA1
8.	Rosyth School	SA1
9.	Singapore Chinese Girls'	SA1
10.	Tao Nan School	SA1
11.	Anglo Chinese School (Junior)	SA2
12.	Catholic High	SA2
13.	CHIJ St Nicholas Girls'	SA2
14.	Henry Park Primary	SA2
15.	Maris Stella High	SA2
16.	Methodist Girls'	SA2
17.	Nan Hua Primary	SA2
18.	Nanyang Primary	SA2
19.	Raffles Girls'	SA2
20.	Rosyth School	SA2
21.	Singapore Chinese Girls'	SA2

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

22.	Tao Nan School	SA2

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT 1 (2018)

PRIMARY 3

SCIENCE

BOOKLET A

Friday **11 May 2018** **1 hr 45 min**

Name: _____ ( ) Class: 3.( )

INSTRUCTIONS TO PUPILS

1 Do not turn over the pages until you are told to do so.

2 Follow all instructions carefully.

3 There are 28 questions in this booklet.

4 Answer ALL questions.

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

This question paper consists of 16 printed pages (inclusive of cover page).

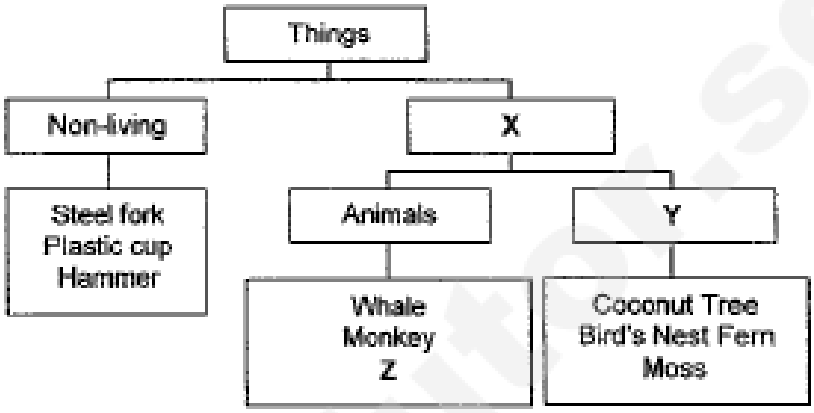
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Booklet A (56 marks)

For each question from 1 to 25, 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. (28 x 2 marks)

1. The classification chart below shows how some things were classified according to certain characteristics.



Which of the following clearly represents letters X, Y and Z?

	X	Y	Z
(1)	Living	Can reproduce	Water lily
(2)	Cannot die	Plants	Banana Tree
(3)	Living	Plants	Shark
(4)	Cannot die	Can reproduce	Cat

2. Evelyn has classified some objects as shown below.

Group A	Group B
White board Students Chairs	Skipping ropes Hockey sticks Tennis balls

Which of the following are the correct headings for Group A and Group B?

	Group A	Group B
(1)	Found in classroom	Found in PE store room
(2)	Non-living	Living
(3)	Found in living room	Found in toilet
(4)	Living	Non-living

Need a home tutor? Visit smiletutor.sg

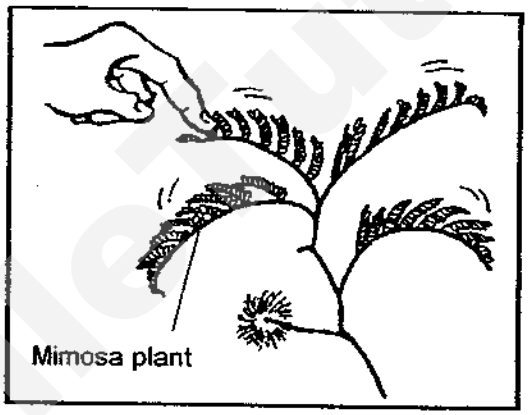
3. Study the two groups of things below.

Group P	Group Q
Mushroom Bacteria Rabbit	Hibiscus plant Rose plant Moss

Which one of the following is true about the two groups of things?

	Group P	Group Q
(1)	Can grow	Cannot grow
(2)	Can reproduce	Cannot reproduce
(3)	Cannot make its own food	Can make its own food
(4)	Cannot respond to changes around them	Can respond to changes around them

4. Peter went to the field and saw some mimosa plants. After he had gently touched the leaves of the mimosa plant, the leaves folded inwards immediately.



Which of the following characteristics is shown when the leaves of the mimosa plant folded inwards?

(1) Living things are shy.
(2) Living things can die.
(3) Living things can respond to changes around them.
(4) Living things can move from one place to another by themselves.

Need a home tutor? Visit smiletutor.sg

5. Some animals are grouped as shown in the classification table below.

Group R	Group P
Horse	Owl
Sheep	Snake
Lion	Seal

These animals are grouped according to _____.

(1) what they eat

(2) where they live

(3) their outer covering

(4) how they move about

6. The table below shows the characteristics of things A and B.

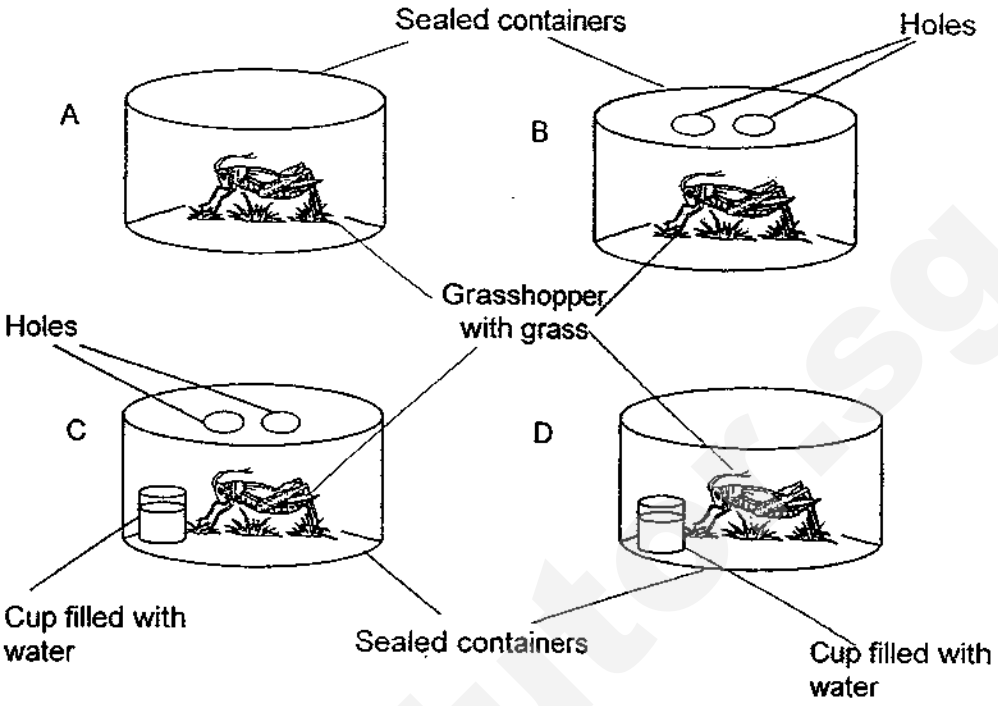
Things	Does it need air?	Can it grow?	Can it fly?
A	No	No	Yes
B	Yes	Yes	Yes

Which one of the following correctly identifies A and B?

	A	B
(1)	Bird	Airplane
(2)	Helicopter	Airplane
(3)	Butterfly	Helicopter
(4)	Airplane	Bird

Need a home tutor? Visit smiletutor.sg

7. Peter wants to conduct an experiment to find out if living things need water to survive.



Which of the two set-ups above should he use to conduct his experiment?

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

8. Which one of the following examples **does not** show the characteristics of a living thing?

(1) A dog has given birth to 5 puppies.
(2) A boy is now 5 cm taller than he was last year.
(3) A school flag is flapping when the wind blows.
(4) A girl moved her hand away after touching a hot kettle.

Need a home tutor? Visit smiletutor.sg

9. Remus has written a riddle that describes a plant. Read the riddle below carefully.

"I grow on a tree.
I cannot bear fruits.
I reproduce from spores.
What am I?"

The riddle best describes a _____.

(1) Mango plant
(2) Cactus plant
(3) Balsam plant
(4) Staghorn fern

10. How is the bird's nest fern **different** from the rose plant?

Bird's nest fern

Rose plant

A It has leaves.
B It reproduces from spores.
C It cannot make its own food.

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

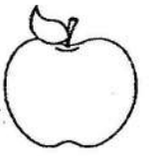
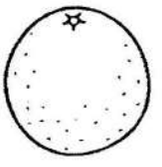
11. Mrs Kang told her students to observe some plants. She then asked the students to find out where the spores were found. Four students have given their responses as shown in the table below.

Whose response is correct?

	Name of student	Where spores are found
(1)	Alan	In the roots
(2)	Beth	On the stem
(3)	Cathy	On the leaf
(4)	Daniel	On the fruit

Need a home tutor? Visit smiletutor.sg

12. Some fruits have been classified in the following groups.

Group A	Group B
 Fruit A	Fruit E
 Fruit B	Fruit F
Fruit C	Fruit G

Based on your observation, which fruit was classified **wrongly**?

(1) A
(2) C
(3) E
(4) G

13. Ben, Helen, Ray and Janet were having a discussion on flowering and non-flowering plants and made the following statements.

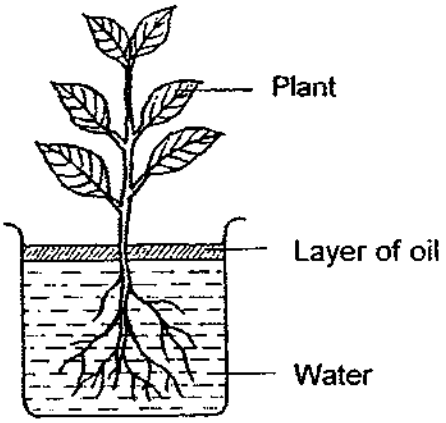
Ben: Flowering plants only grow on land.
Helen: Flowering plants can reproduce by seeds.
Ray: Non-flowering plants cannot produce fruits.
Janet: Non-flowering plants cannot respond to changes around them.

Whose statements are correct?

(1) Ben and Ray
(2) Ben and Janet
(3) Helen and Ray
(4) Helen and Janet

Need a home tutor? Visit smiletutor.sg

14. Kenneth placed a plant in a beaker of water and left it near a window. He then added a layer of oil on the surface of the water.



What did Kenneth observe after 5 days?

(1) The plant wilted and died.
(2) The plant lost all its roots.
(3) The water level in the beaker decreased.
(4) The water level in the beaker remained the same.

15. One morning, Leroy observed that the healthy banana tree in his garden did not have any flowers. What could be the most likely possible reason for his observation?

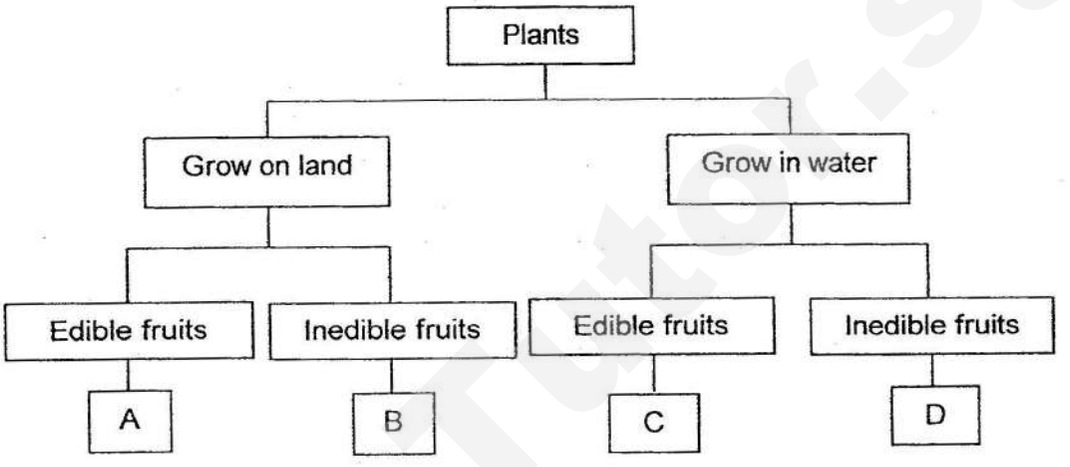
(1) The banana plant is a non-flowering plant.
(2) The banana plant only produces fruits but not flowers.
(3) The banana plant has flowers that only appear at night.
(4) The banana plant only bears flower at a specific time of the year.

Need a home tutor? Visit smiletutor.sg

16. The following table gives 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
Has fruits that are edible		✓		✓
Grows on land	✓			✓

From the information above, in which group, A, B, C or D, do plants W and Z belong in the following classification chart?



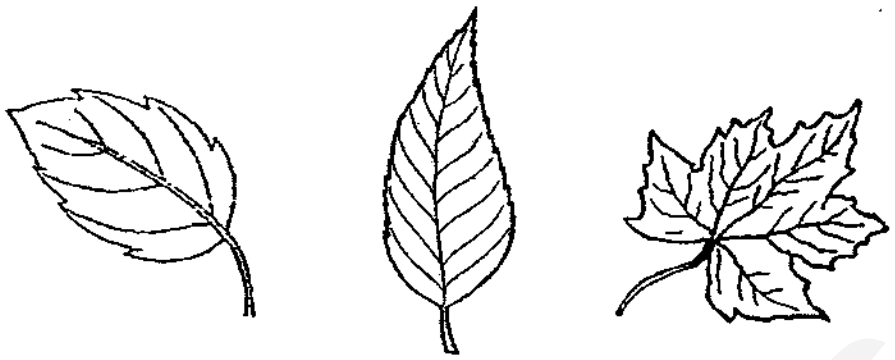
	Plant W	Plant Z
(1)	D	B
(2)	B	A
(3)	C	D
(4)	A	C

17. Which of the following statements about flowering plants is true?

(1) Only plants with flowers can make their own food
(2) Only plants with green leaves can make their own food.
(3) Plants with leaves of any colours can make their own food.
(4) Plants that reproduce from spores cannot make their own food.

Need a home tutor? Visit smiletutor.sg

18. The diagram below shows three leaves, P, Q and R.



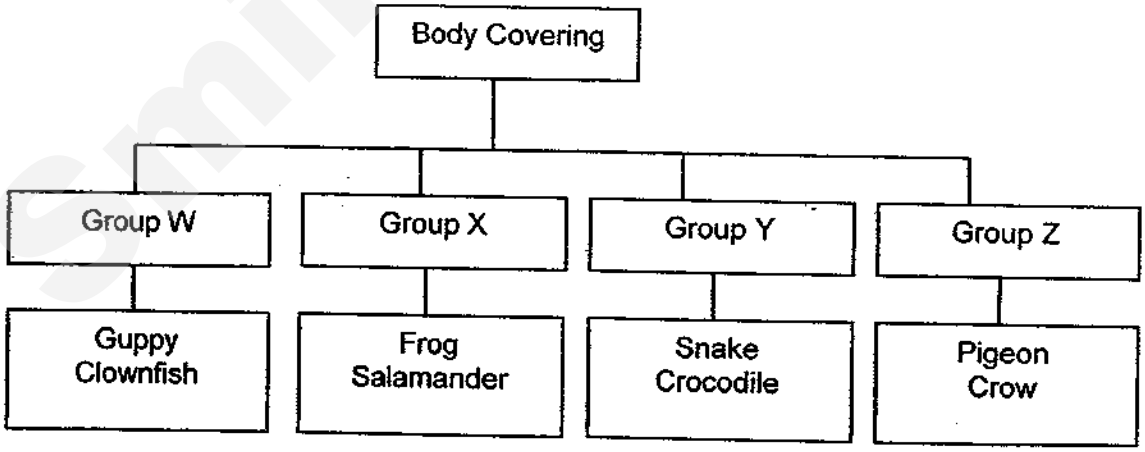
P Q R

Based on your observation, which of the following description(s) of the leaves is/are correct?

A They are palm-shaped.
B They are heart-shaped.
C They have jagged edges.
D They have smooth edges.

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

19. Study the classification chart below.

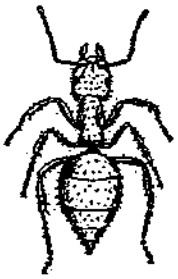


In which group does a toad belong to?

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

Need a home tutor? Visit smiletutor.sg

20. Which of the following is <u>not</u> an insect?

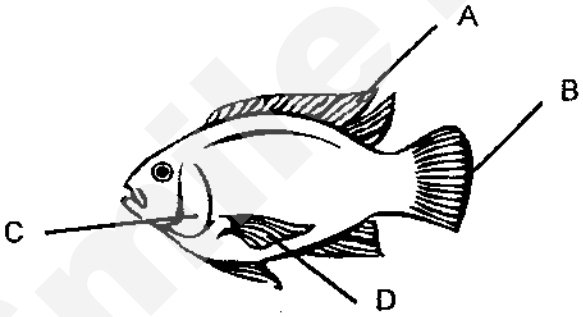
(1) 

(2)

(3)

(4)

21. Study the organism below.

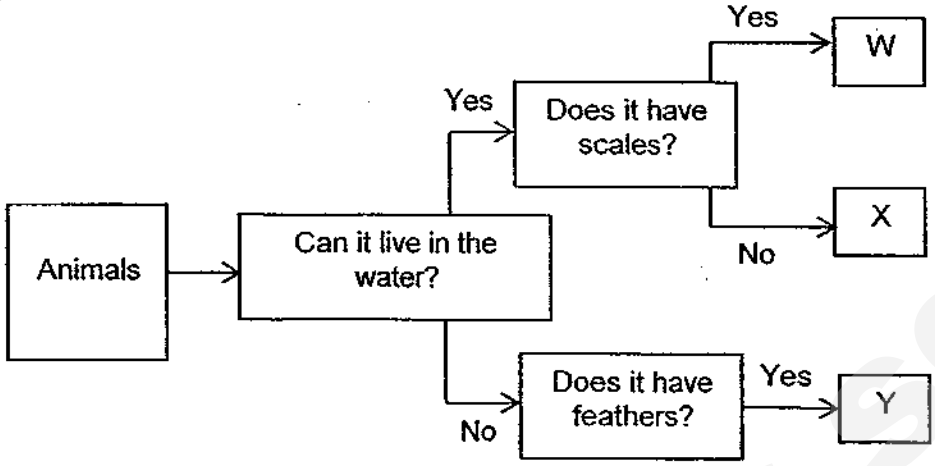


Which of the parts shown above help the organism to swim?

(1) B and C only
(2) A and D only
(3) A, B and D only
(4) All of the above

Need a home tutor? Visit smiletutor.sg

22. Study the flowchart below.

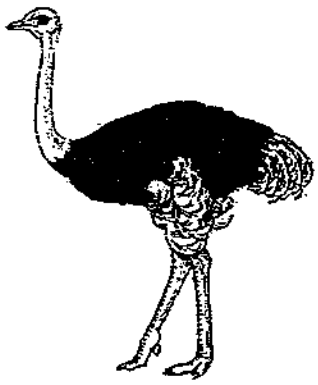


Which one of the following correctly represents the group of animals W,X and Y belong to?

	Bird	Amphibian	Fish
(1)	Y	X	W
(2)	W	Y	X
(3)	Y	W	X
(4)	X	Y	W

Need a home tutor? Visit smiletutor.sg

23. The picture shows an ostrich.



A It is a bird as it has a beak.

B It is a bird as it has feathers.

C It is not a bird as it cannot fly.

D It is not a bird as it can run very fast.

Which of the above statements are true of an ostrich?

(1) D only

(2) A and B only

(3) C and D only

(4) A, B and C only.

24. Several children observed Animal X and made the following statements.

Andy: It lays eggs

Alan: It has a long tail.

John: It has moist skin.

Mark: It can also breathe with lungs.

Which animal group does Animal X most likely belong to?

(1) Fish

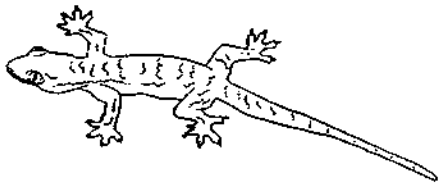
(2) Mammal

(3) Reptile

(4) Amphibian

Need a home tutor? Visit smiletutor.sg

25. Study the animals below.



House Lizard

Frog

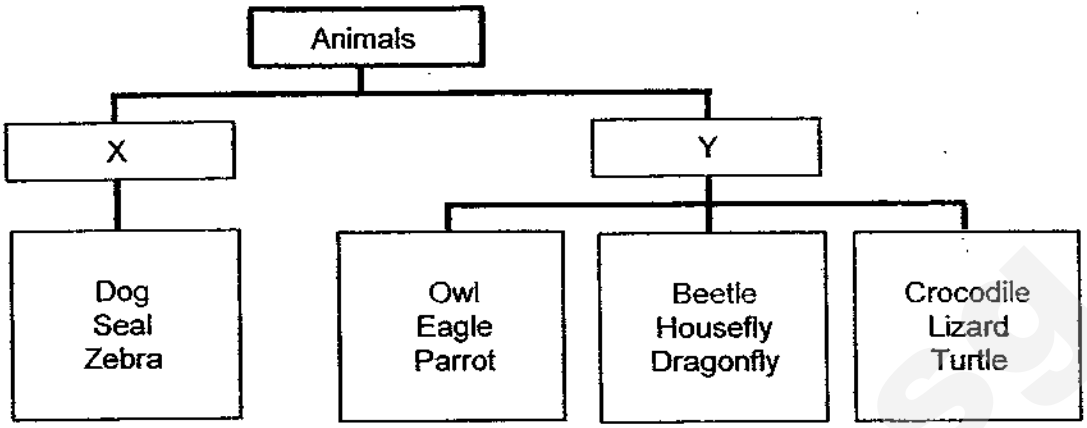
Which of the following is true for house lizard but **false** for frog?

(1) Can live in water only.
(2) Reproduce by laying eggs.
(3) Have dry skin covered with scales.
(4) Have a constant body temperature.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

26. Study the classification chart below.



Which of the following can be the sub-headings X and Y be?

	X	Y
A	Give birth to young alive	Lay eggs
B	Have an outer covering of hair	Do not have an outer covering of hair
C	Have a constant body temperature	Do not have a constant body temperature
D	Suckle their young	Do not suckle their young

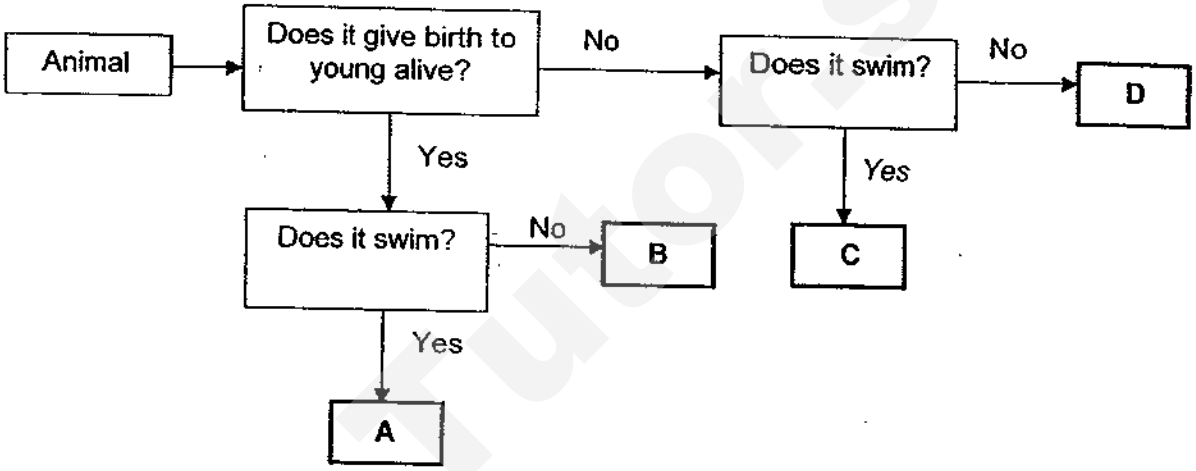
(1) B and C only
(2) C and D only
(3) A, B and D only
(4) All of the above.

Need a home tutor? Visit smiletutor.sg

27. Jason found an animal in a garden and he wanted to find out if it is an insect. What must he do to ensure that it is an insect?

(1) Measure the length of the animal.
(2) Find out whether the animal has wings.
(3) Observe whether the animal lays eggs.
(4) Find out the number of body parts the animal has.

28. Study the flow chart below.



Which of the following letters represent a penguin?

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

End of Booklet A

Need a home tutor? Visit smiletutor.sg

Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT 1 (2018)

PRIMARY 3

SCIENCE

BOOKLET B

Friday **11 May 2018** **1 hr 45 min**

Name: _____ ( ) Class: 3.( ) F

INSTRUCTIONS TO PUPILS

1 Do not turn over the pages until you are told to do so.

2 Follow all instructions carefully.

3 There are 13 questions in this booklet.

4 Answer ALL questions.

5 The marks are given in the brackets [ ] at the end of each question or part question.

Booklet	Possible Marks	Marks Obtained
A	56	
B	44	
Total	100	

This question paper consists of 16 printed pages (inclusive of cover page).

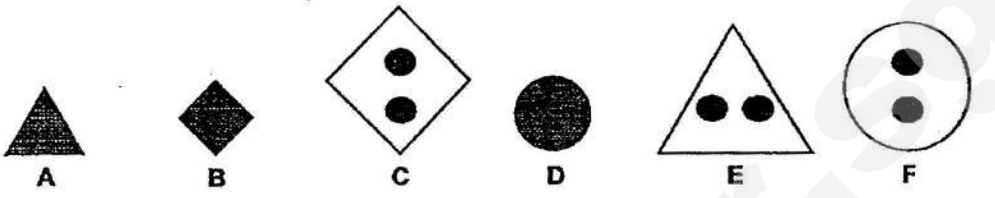
Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

Booklet B (44 marks)

For questions 29 to 41, write your answers in this booklet.
The number of marks available is shown in brackets [ ] at the end of each question or part question.

29. Mrs Lee gave six figures, **A, B, C, D, E** and **F**, to Jerry as shown below.



(a) State one characteristic that Jerry could use to classify the 6 figures into 2 groups so that there is an equal number of figures in each group. [1]

(b) Mrs Lee asked Jerry to use another characteristic to **regroup** the six figures into **2 groups** with an **equal number** of figures in each group. How could Jerry regroup the six figures?
Write the letters (A, B, C, D, E and F) in the boxes provided. [2]

Group 1	Group 2

(Go on to the next page)

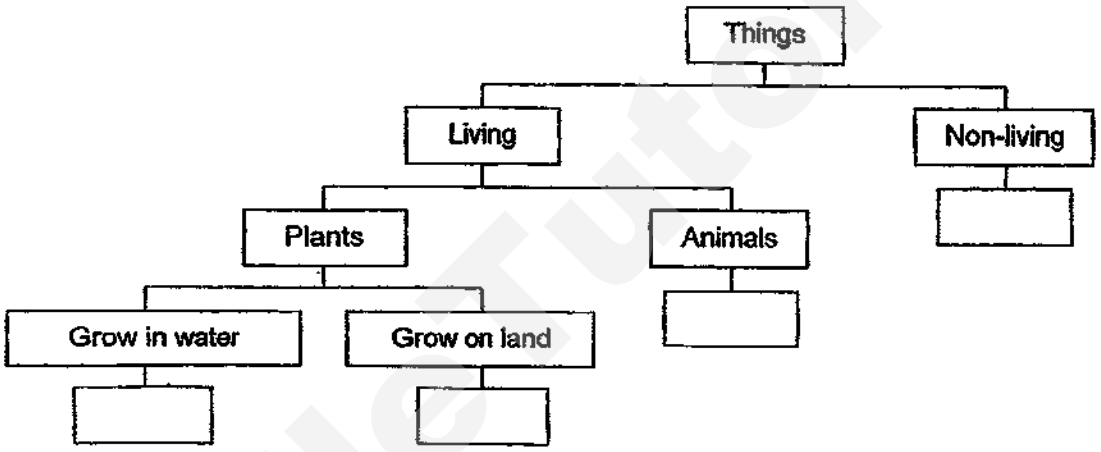
SCORE	3

Need a home tutor? Visit smiletutor.sg

30. The table below gives information about four things based on some characteristics. A tick (✓) shows that the thing has the characteristic.

Characteristic	Thing			
	P	Q	R	S
Needs air, food and water to survive	✓	✓		✓
Can be found inside the pond	✓		✓	✓
Can reproduce and can die	✓	✓		✓
Can make its own food	✓	✓		

(a) Fill in the boxes with the letter, P, Q, R or S in the classification table below. [2]



(b) Name a thing that has the same characteristics as Q. [1]

_____

(Go on to the next page)

SCORE 3

Need a home tutor? Visit smiletutor.sg

31. William observed and classified some things into 2 groups as shown in the table below.

Group X	Group Y
Cockroach	Fork
Elephant	Spoon
Mushroom	Sharpener
Fern	Eraser

Based on the information above, answer the following questions:

(a) Give suitable headings for Group X and Group Y. [1]

Group X : _____

Group Y : _____

(b) Classify the things in Group X in the table below based on the given headings. [2]

Mammal	Insect	Fungi	Plant

c) Help William to classify the objects in Group Y into 2 groups in the table below based on the headings provided. [1]

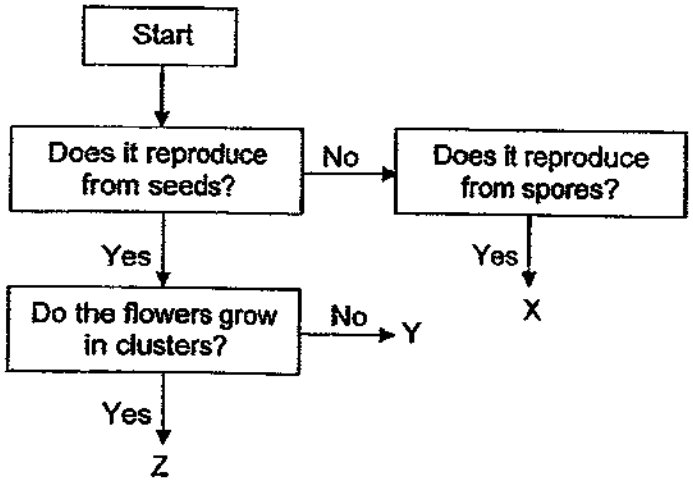
Found in a pencil case	Found in the kitchen

(Go on to the next page)

SCORE	/ 4

Need a home tutor? Visit smiletutor.sg

32. Study the flow chart which shows the characteristics of some plants.



(a) Based on the flow chart, state all the characteristics of Z. [1]

(b) Based on the flow chart, state a difference between X and Y. [1]

(c) The diagram below shows an Ixora plant.

Which letter, X, Y or Z, in the flow chart above represents the Ixora plant? [1]

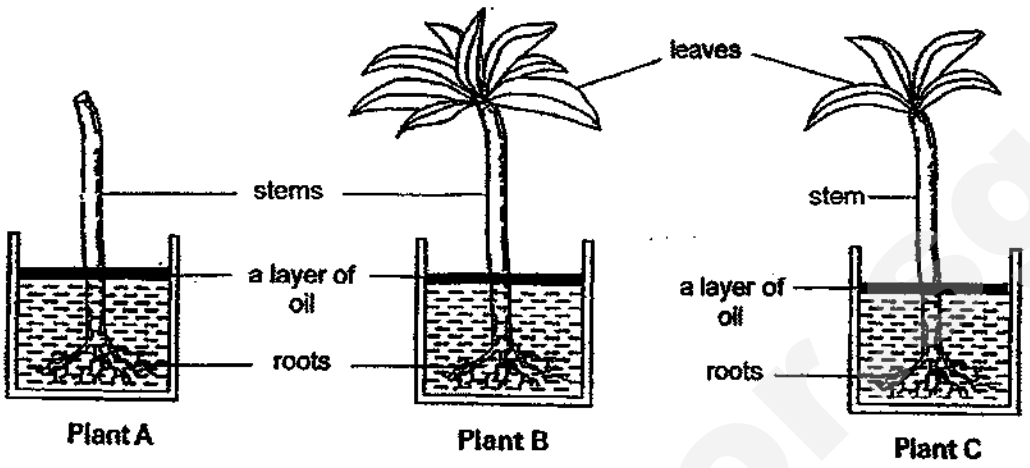
(Go on to the next page)

SCORE / 3

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

33. James used three similar plants, A, B and C, to conduct an experiment. He removed all the leaves from Plant A, and some leaves from Plant C. He then placed each plant in a container filled with 700 ml of water as shown in the diagram below.



After 3 days, James measured the amount of the water in each container. The table below shows the amount of water left in each container.

Amount of water left after 3 days (ml)		
A	B	C
695	520	580

(a) Based on the results in the table, state if each of the following statement is 'True', 'False' or 'Not possible to tell' by putting a tick (✓) in the correct box. [1]

	Statement	True	False	Not possible to tell
(i)	Plant C took in the greatest amount of water.			
(ii)	Plant A took in less water than plant B.			

(Go on to the next page)

SCORE	/ 1

Need a home tutor? Visit smiletutor.sg

33. (b) After 1 week, James recorded his observations of the three plants in the table below.

Plants	Observations
A	It died.
B	All the leaves are still green and healthy.
C	Only a few leaves are still green and healthy.

Why did Plant B grow the best? [1]

_____

_____

(c) The table below shows the different conditions in his experiment. Put a tick (✓) in the correct box(es) to indicate the condition(s) he should keep the same in order to carry out a fair experiment. [1]

Conditions	Keep the same
Amount of roots	
Type of plant used	
Location of the plants	
Number of leaves on the plant	

(Go on to the next page)

SCORE	/ 2

Need a home tutor? Visit smiletutor.sg

34. (a) Study the two fruits based on the characteristics given in the table below.

Papaya

Lychee

Compare the two fruits based on the characteristics given in the table below. [2]

Characteristics	Papaya	Lychee
Texture of outer covering		
Number of seeds		

(b) The diagram below shows a watermelon.

Watermelon

Which fruit is the watermelon similar to, papaya or lychee? Explain why. [1]

_____

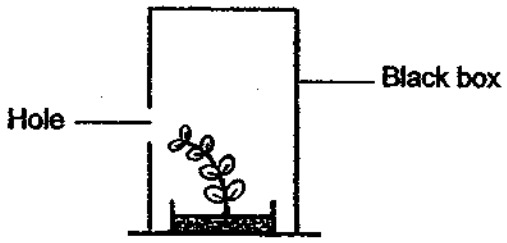
_____

(Go on to the next page)

SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

34. (c) Jason placed a plant which was growing upright in a black box that has a hole on the left side. After 2 days, he noticed that the plant grew towards the left as shown in the diagram below.

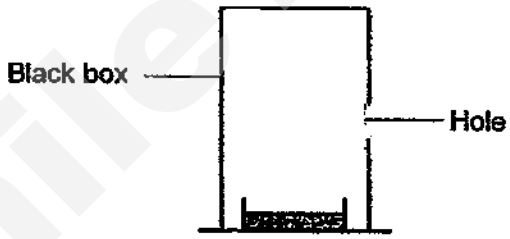


(i) Which characteristic of living things does the experiment show? [1]

_____

_____

(ii) In the diagram below, draw how the same plant will most likely look like after a few days when he placed it in a black box with a hole on the right. [1]



(Go on to the next page)

SCORE	/ 2

Need a home tutor? Visit smiletutor.sg

35. Nathan planted a seed in a pot with soil and placed it near the window in his room to receive sunlight. He then observed the seed growing into a plant over 8 weeks. He measured and recorded the height of the plant over 8 weeks in the table as shown below.

Week	Height (cm)
1	2
2	3
3	7
4	10
5	13
6	?
7	19
8	22

(a) Based on the results in the table, what would be the height of the plant in week 6? [1]

The height of the plant in week 6 would be _____ cm.

(b) State the characteristic of living thing that the plant shows. [1]

_____

_____

(c). After week 8, Nathan went on a trip with his entire family for 2 weeks and there was no one at home during that time. When Nathan returned home, he observed that the plant withered and died at the same location. What could be a likely reason for the plant to die? [1]

_____

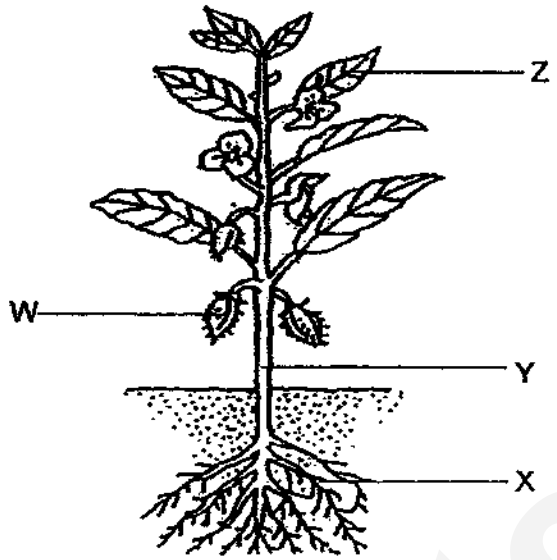
_____

(Go on to the next page)

SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

36. The diagram below shows a plant with different parts, W, X, Y and Z.



(a) Names the parts of the plant in the table below. [2]

Letter	Name of the part of the plant
W	
X	
Y	
Z	

(b) Why are plants important to the survival of other living things? [1]

_____

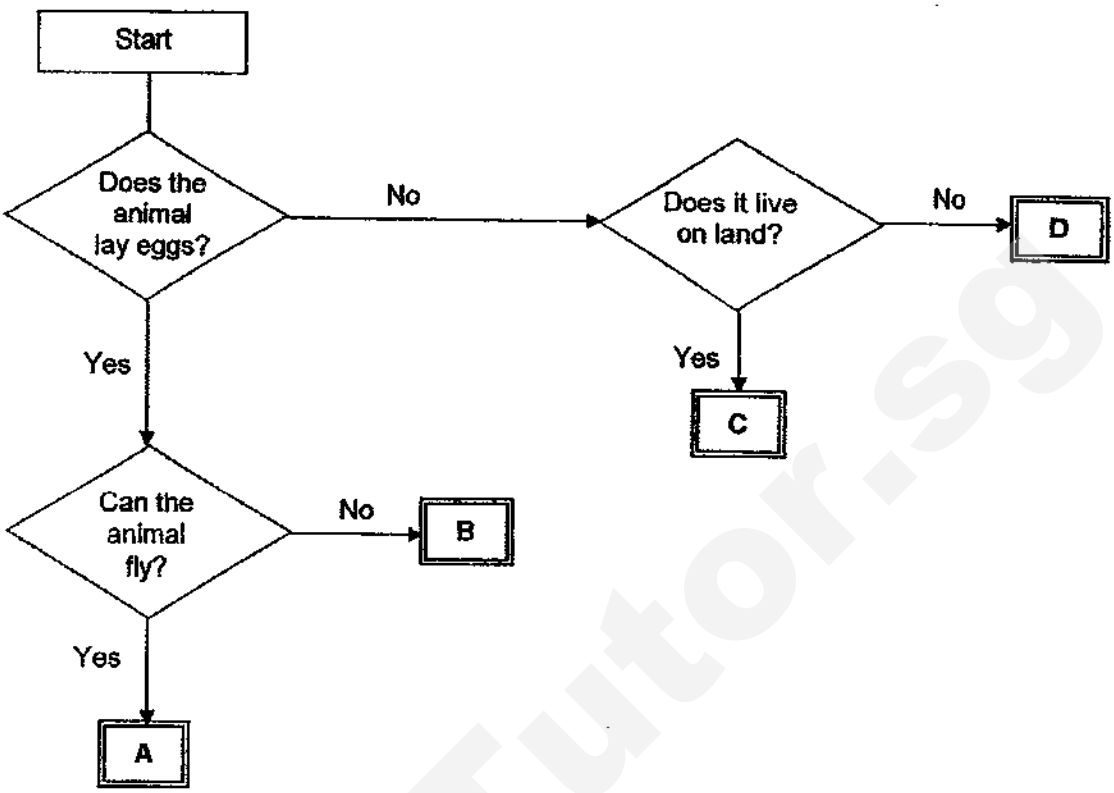
_____

(Go on to the next page)

SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

37. Study the flow chart on animals A, B, C and D.



(a) Based on the flow chart, which animal A, B, C or D is most likely an Eagle? [1]

_____

(b) Based on the flow chart, state two characteristics of Animal D. [1]

_____

_____

(c) Give an example of animal B. [1]

_____

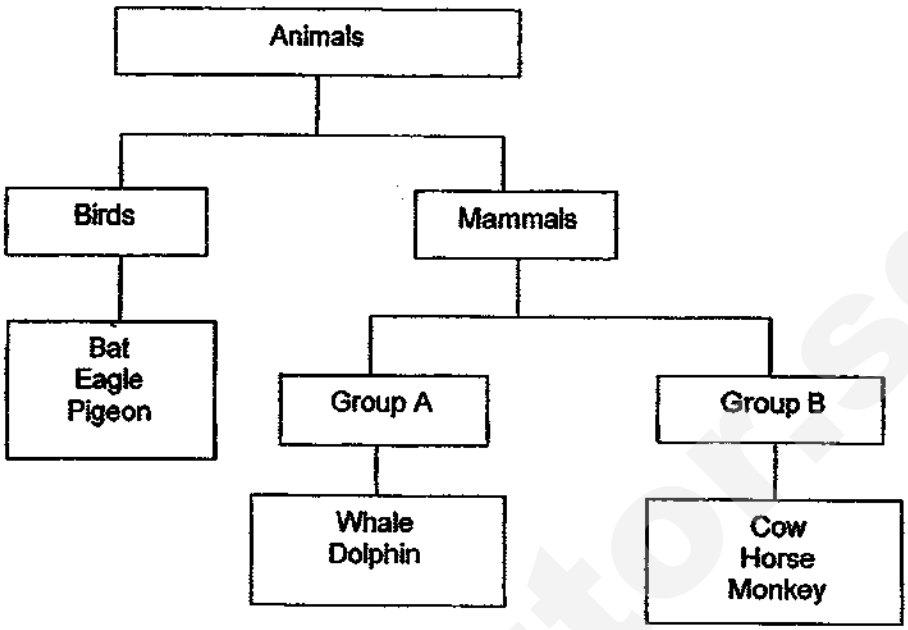
_____

(Go on to the next page)

SCORE ___/3

Need a home tutor? Visit smiletutor.sg

38. Study the classification chart given below.



(a) Which one of the animals is classified wrongly? [1]

_____

_____

(b) Explain clearly based on its characteristics why the animal you chose in (a) is classified wrongly? [Do not compare the animal group they belong to]. [1]

_____

_____

(c) Give suitable sub-headings for Group A and Group B. [1]

Group A : _____

Group B : _____

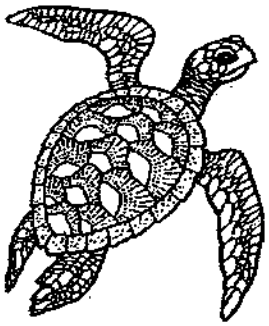
(Go on to the next page)

SCORE	/ 3

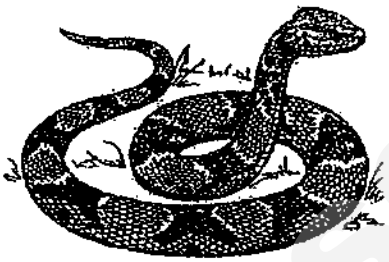
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

39. Observe animals E and F carefully.



Animal E



Animal F

(a) How do animal E and F reproduce? [1]

_____

_____

(b) Based only on your observation, state one similarity between animal E and animal F. [1]

_____

_____

(c) Based only on your observation, state one difference between animal E and animal F. [1]

_____

_____

(Go on to the next page)

SCORE	/ 3

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

40. Study Animal Y below.

Animal Y

(a) Based on your observation, which animal group does Animal Y belong to? [1]

_____

(b) State two reasons for your answer in part (a). [2]

_____

_____

(c) Name the outer covering of Animal Y. State its function. [1]

_____

_____

(d) The diagram below shows a spider.

Does the spider belong to the same animal group as Animal Y? [1]
Give a reason for your answer.

_____

_____

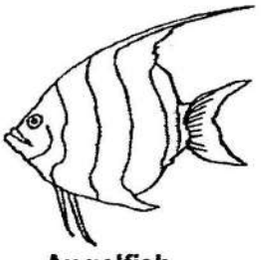
(Go on to the next page)

SCORE	/ 5

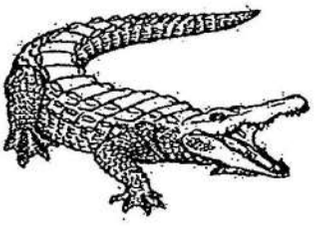
Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

41. The pictures below show an angelfish and a crocodile.



Angelfish



Crocodile

(a) What animal group do the Angelfish and Crocodile belong to? [1]

Angelfish : _____

Crocodile : _____

(b) Based on the characteristics of the animal groups that the angelfish and crocodile belong to, state two similarities between the angelfish and the crocodile. [2]

(i) _____

_____

(ii) _____

_____

End of Paper

SCORE	/ 3

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : ACS

SUBJECT : SCIENCE

TERM : SA1

ORDER CALL :

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	1	3	3	4	4	3	3	4	2
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
3	4	3	3	4	2	3	1	2	2
Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28		
3	1	2	4	3	3	4	3		

Q29) a) They can be grouped by dots or shaded.

b) Group 1 : C , E , F

Group 2 : A , B , D

Q30) a) Grow in water – P Grow on land – Q

Animals – S Non-living – R

b) Bird's nest fern

Q31) a) Group X : living things

Group Y : Non-living things

Smiletutor.sg

Need a home tutor? Visit smiletutor.sg

b) Mammal – Elephant Insect – Cockroach

Fungi – Mushroom Plant – Fern

c) Found in a pencil case – Sharpener , Eraser

Found in the kitchen – Fork , Spoon

Q32) a) Z reproduce by seeds but does not reproduce by spores.

b) X reproduces by spores but Y reproduces by seeds.

c) Z

Q33) a) (i) False

(ii) True

b) Because it did not have any of its leaves plucked out.

c) Amount of roots , Type of plant used , Location of the plants

Q34) a) Papaya

Texture of outer covering – smooth

Number of seeds – many

Lychee

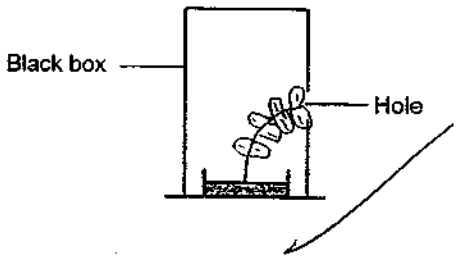
Texture of outer covering – rough

Number of seeds – one

b) Papaya, because it was many seeds and a smooth skin.

c) i) living things respond to changes.

ii)



SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Q35) a) 16 cm

b) living things grow

c) Because it had not enough water.

Q36) a) W – fruit X – roots Y – stem Z – leaf

b) Because they provided food, shelter, materials and medicine.

Q37) a) Animal A is likely to be an Eagle.

b) Animal D does not lay eggs and does not live on land.

c) snake

Q38) a) Bat

b) Because it does not have feathers.

c) Group A : live in water

Group B : live on land

Q39) a) They reproduce by laying eggs.

b) Both of them have eyes.

c) Animal E has legs but Animal F has no legs.

Q40) a) Animal Y belongs to insects.

b) Because it has three body parts and it can fly.

c) It has a hard outer covering to protect its body.

d) It does not belong to the same animal group as Y because it has two body parts.

Q41) a) Angelfish : fish

Crocodile : Reptiles

b) i) Both of them lay eggs.

ii) Both of them have scales.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

CATHOLIC HIGH SCHOOL

SEMESTRAL ASSESSMENT ONE (2018)

PRIMARY THREE

SCIENCE

BOOKLET A

Name: _____ ( )

Class: Primary 3 - _____

Date: 11 May 2018

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 the cover page.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

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 On a rainy day, Sanjay observed that his puppy shivered when the cold wind blew.

puppy

What did Sanjay's observation tell you about living things?

(1) Living things can grow.

(2) Living things can reproduce.

(3) Living things can move around on their own.

(4) Living things can respond to changes around them.

2 Study the table below.

Things	
Group A	Group B
chair	crocodile
lunch box	rose plant
G	H

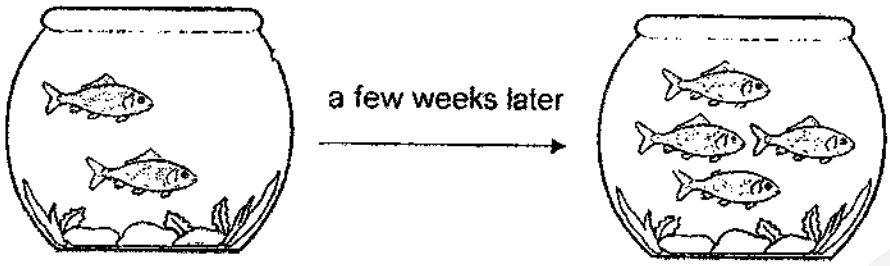
Which of the following represents G and H?

	G	H
(1)	paper	moss
(2)	pencil	train
(3)	butterfly	stone
(4)	mushroom	dog

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

3 Wei Li had two pet fish in her fish tank. A few weeks later, the number of fish in her tank increased.



Which of the following statements best explains why there is an increase in the number of fish?

(1) Fish grow as it is a living thing.

(2) Fish lay eggs to ensure that their own kind will continue to exist.

(3) Fish can move on their own to escape from danger and look for food.

(4) Fish reproduce to respond to the changes in their surroundings.

4 The picture below shows a sunflower and a fern.

sunflower fern

Which of the following statements about the plants is correct?

(1) Both are flowering plants.

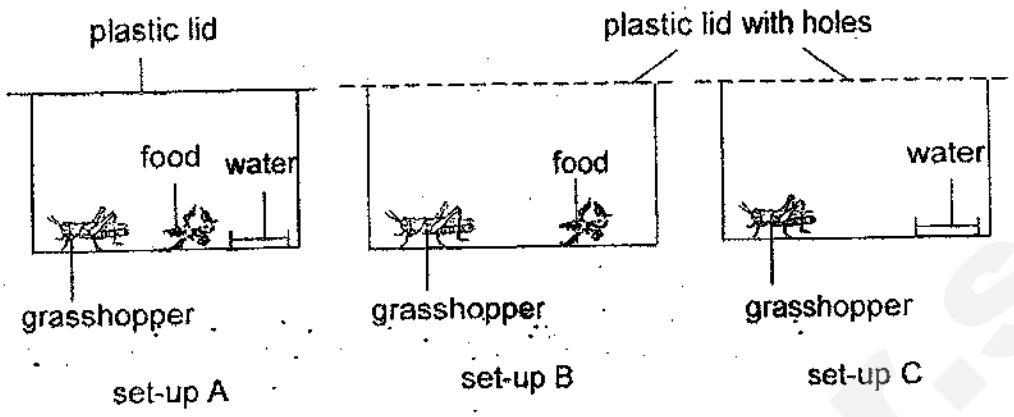
(2) Both can move freely from one place to another.

(3) The sunflower reproduces from seeds but the fern reproduces from spores.

(4) The sunflower makes its own food but the fern does not make its own food

Need a home tutor? Visit smiletutor.sg

5 Micheal prepared three set-ups, A, B and C, as shown below.



After a few weeks, he observed that the grasshoppers in all the three set-ups died. Which of the following explains what Micheal observed?

	Set-up A	Set-up B	Set-up C
(1)	no air	no water	no food
(2)	no air	no food	no water
(3)	no food	no air	no water
(4)	no water	no air	no food

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

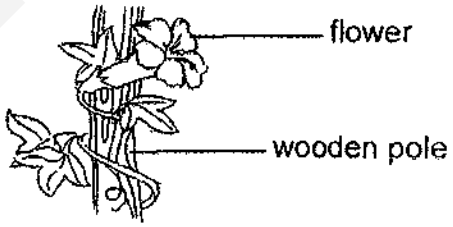
6 The table below shows the characteristics of two plants, K and L. A tick (✓) represents that the plant has that characteristic.

Characteristic	Plant	
	K	L
Bears flowers	✓	
Grows on land	✓	✓
Reproduces by spores		✓

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

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

7 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

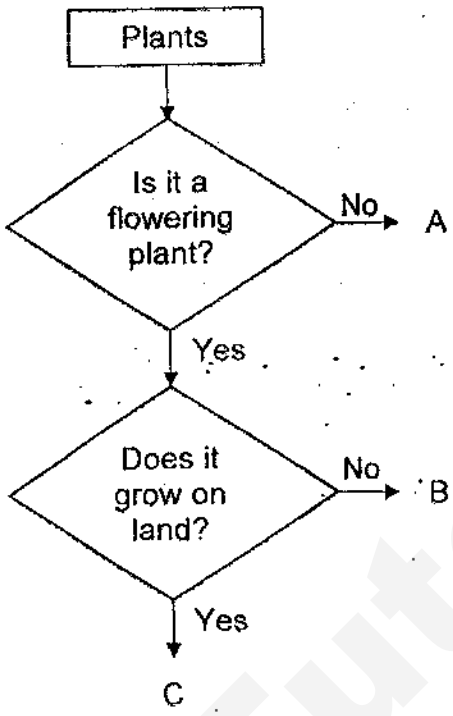
(2) J only

(3) H and K only

(4) J and K only

Need a home tutor? Visit smiletutor.sg

8 Study the flow chart below.



plant W plant X plant Y

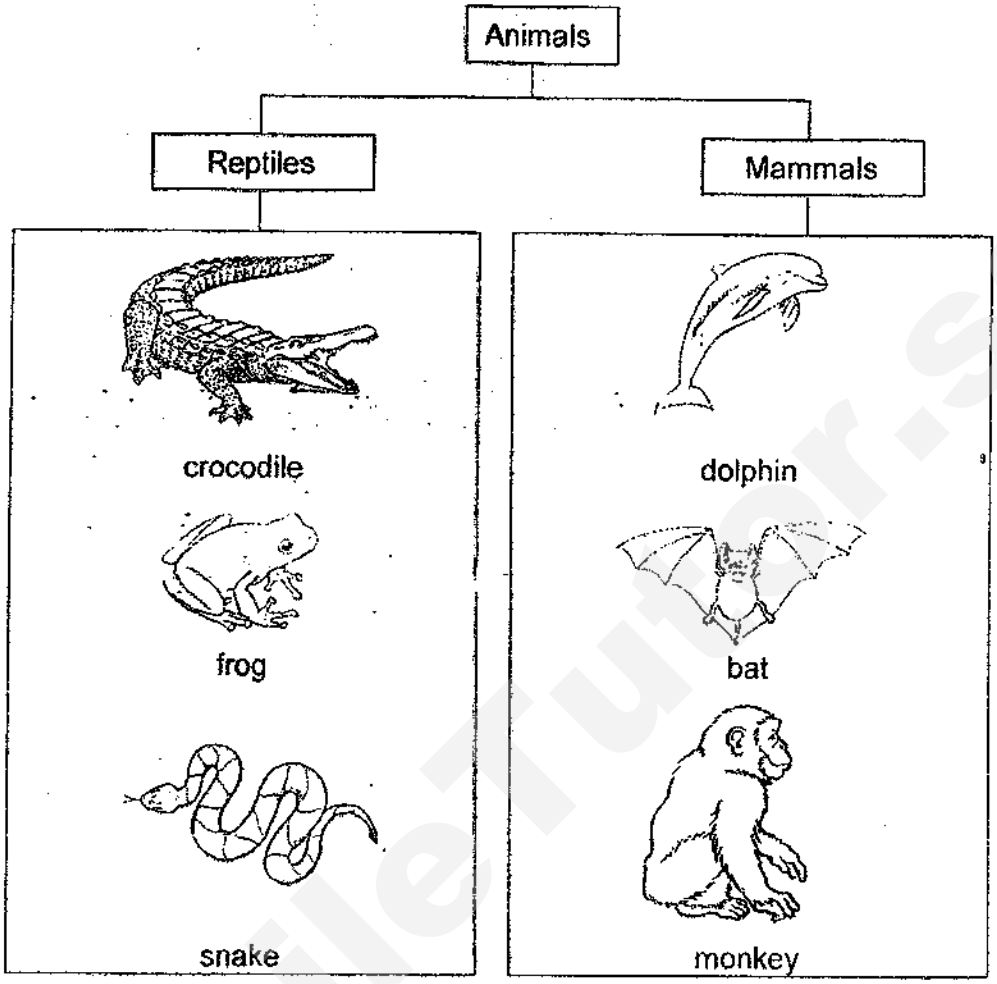
Which of the following represents A, B and C correctly?

	A	B	C
(1)	W	X	Y
(2)	X	Y	W
(3)	Y	W	X
(4)	X	W	Y

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

9 The animals below are classified into two groups as shown below.

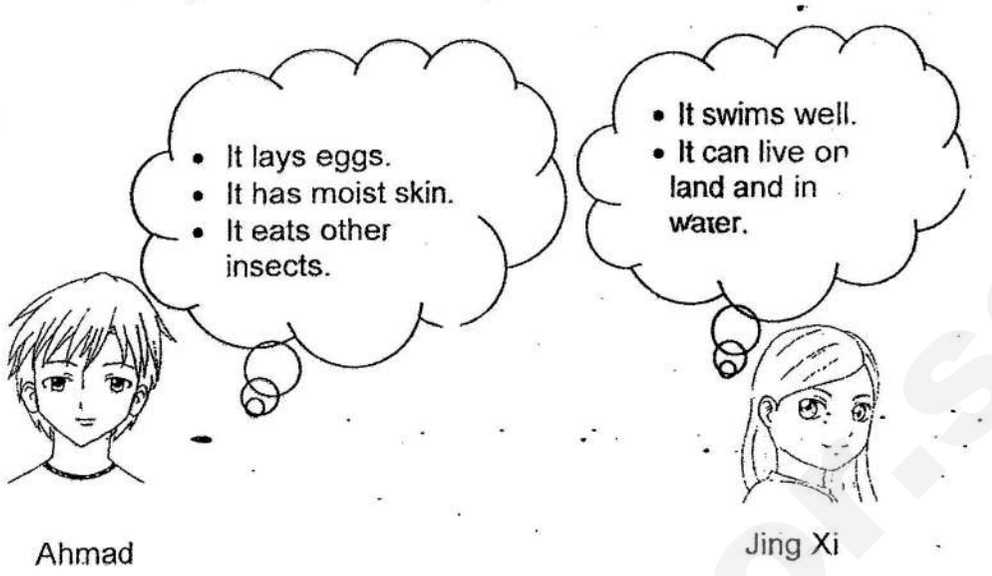


Which animal above is placed in the wrong group?

(1) bat
(2) frog
(3) dolphin
(4) crocodile

Need a home tutor? Visit smiletutor.sg

10 Ahmad and Jing Xi made the following observations about Animal C.



Animal C is most likely to be a/an_____.

(1) fish
(2) reptile
(3) mammal
(4) amphibian

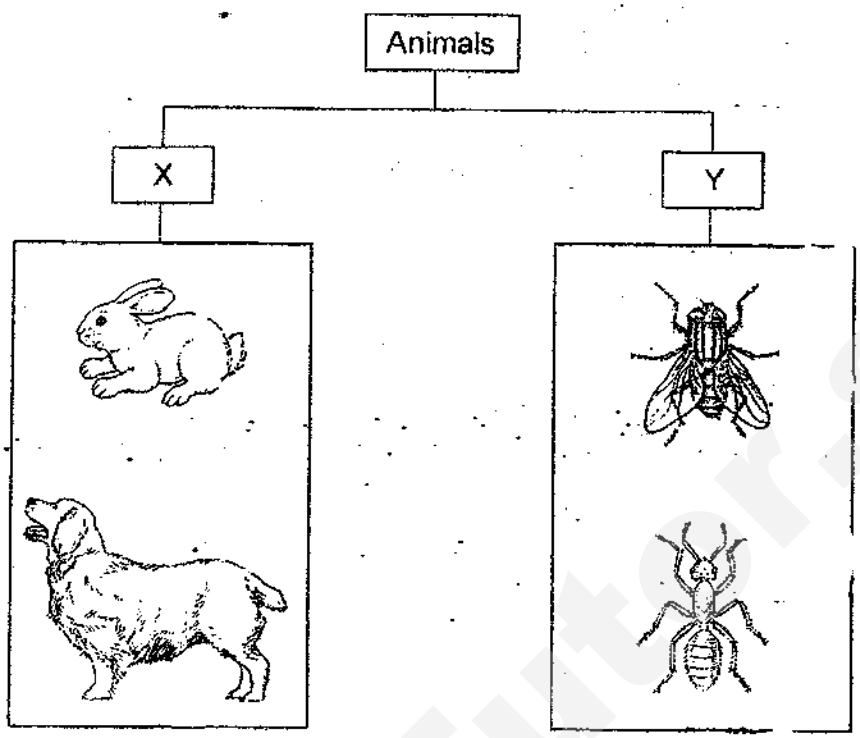
11 Ray caught two animals that can fly. One of them was an insect. Which of the following characteristics can help him identify the insect?

P Two eyes
Q Two wings
R Three body parts
S Three pairs of legs

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

Need a home tutor? Visit smiletutor.sg

12 Study the classification chart below.



Which of the following sets of headings best represents X and Y?

	X	Y
(1)	has feelers	does not have feelers
(2)	has six legs	does not have six legs
(3)	does not have three body parts	has three body parts
(4)	does not have wings	has wings

13 Which one of the following statements about fungi is correct?

(1) They bear fruits.

(2) They have flowers.

(3) They reproduce from seeds

(4) They cannot make their own food.

Need a home tutor? Visit smiletutor.sg

14 Which of the following statements about microorganisms are correct?

(A) Bacteria cannot reproduce.
(B) All microorganisms are harmful.
(C) Yeast can be used to make bread.
(D) Microorganisms cannot be seen with the naked eye.

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

15 Which of the following statements about bacteria are correct?

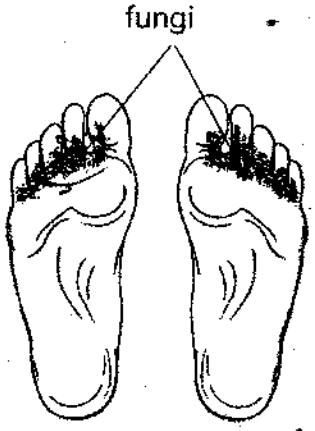
A Bacteria can only be found in water.
B Bacteria have different size and shape.
C Bacteria only need air and food to grow.
D Bacteria can only be seen with a microscope.

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

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

16 Jun Jie has a medical condition in which fungi grow on his feet.



What can he do to reduce the growth of the fungi on his feet?

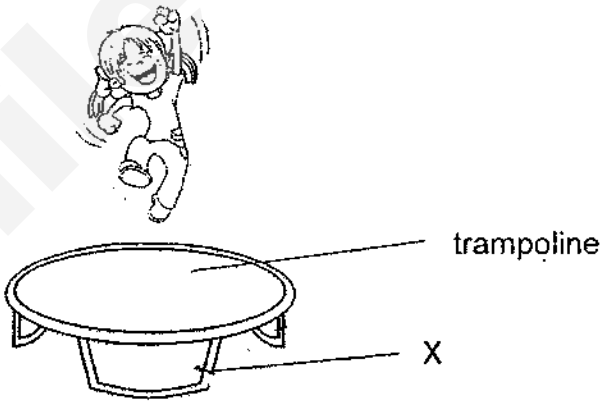
(1) Scratch his feet to remove the fungi.

(2) Rub both his feet together to get rid of the fungi.

(3) Walk from place to place so that the fungi can drop off.

(4) Dry his feet thoroughly with a clean cloth when it gets wet.

17 Sally likes to jump and bounce on her trampoline.



Which of the following is the most suitable material and property for making part X?

	Material	Property
(1)	metal	It is strong.
(2)	fabric	It is strong.
(3)	rubber	It is flexible.
(4)	plastic	It is flexible.

Need a home tutor? Visit smiletutor.sg

18 Kelvin recorded the characteristics of three different materials, P, Q and R, in the table below. A tick (✓) shows that the material has that characteristic.

Materials	Sinks in water	Breaks easily	Flexible
P	✓	✓	
Q	✓		✓
R	✓		

Which of the following represents materials P, Q and R?

	Material P	Material Q	Material R
(1)	metal	ceramic	rubber
(2)	metal	rubber	ceramic
(3)	ceramic	metal	rubber
(4)	ceramic	rubber	metal

19 Matthew was choosing a material for the soles of his running shoes.

He listed a few properties below.

S Flexibility

T Waterproof

U Transparency

V Ability to float in water

Which of the properties are important for him to consider when choosing a material for the soles of his shoes?

(1) S and T only

(2) S and V only

(3) T and U only

(4) U and V only

Need a home tutor? Visit smiletutor.sg

20 Zhen Yuan placed four similar cubes, W, X, Y and Z, made of four different materials, into four different containers. Each container had 150 ml of water at first. After two minutes, he took the cubes out and measured the amount of water left in the container. He recorded the results as shown in the table below.

	Amount of water (ml)	
Cubes	Before	After
W	150	100
X	150	150
Y	150	80
Z	150	115

What property was Zhen Yuan testing for?

(1) strength

(2) waterproof

(3) transparency

(4) ability to float in water

End of Booklet A

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

CATHOLIC HIGH SCHOOL

SEMESTRAL ASSESSMENT ONE (2018)

PRIMARY THREE

SCIENCE

BOOKLET B

Name: _____ ( )

Class: Primary 3 - _____

Date: 11 May 2018

Booklet A	40
Booklet B	20
Total	60

7 questions

20 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.
Write your answers in this booklet.

This booklet consists of 7 printed pages, excluding the cover page.

SmileTutor.sg

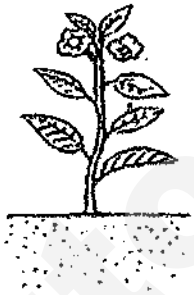
Need a home tutor? Visit smiletutor.sg

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 The picture below shows plants A and B.

plant A



plant B

Based on the pictures above,

(a) State one similarity between plants A and B. [1]
(Do not compare shape, size and colour.)

_____

_____

(b) State one difference between plants A and B. [1]
(Do not compare shape and size.)

_____

_____

(Go on to the next page)

SCORE	/ 2

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

22 The table below shows the characteristics of four plants, C, D, E and F. A tick (✓) shows that the plant has that characteristic.

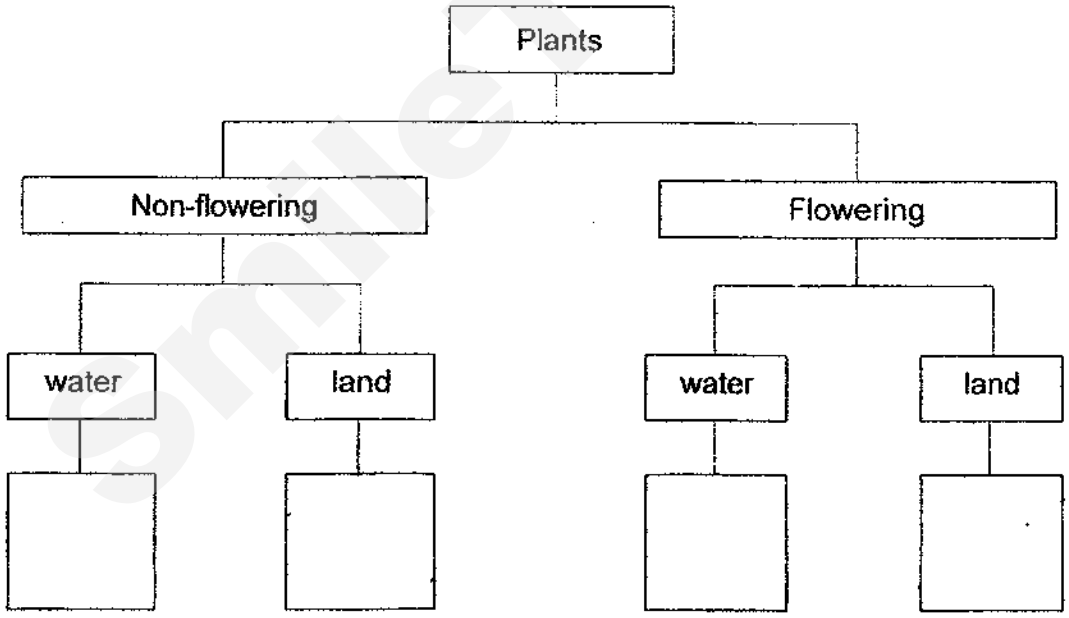
Characteristics	Plants			
	C	D	E	F
Has flowers	✓			✓
Grows in water		✓		✓

(a) Based on the information given in the table above, write down two characteristics of plant C. [1]

(i)_____

(ii)_____

(b) Based on the table above, classify the plants, C, D, E and F, in the classification chart below. [2]

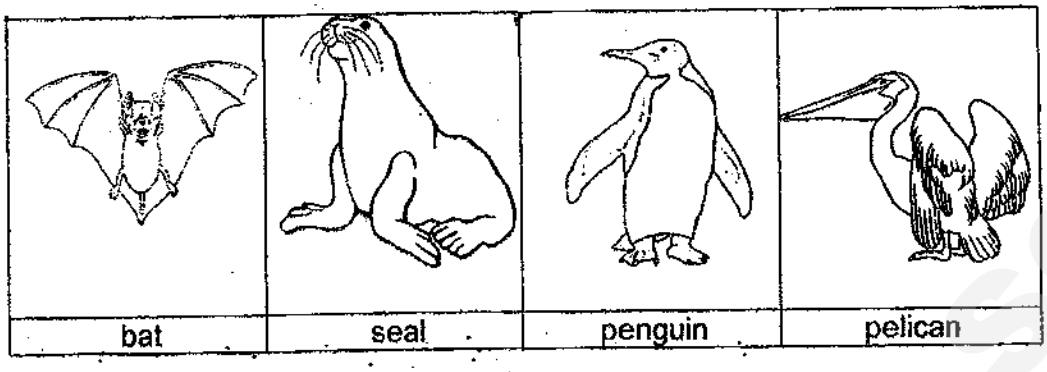


(Go on to the next page)

SCORE 3

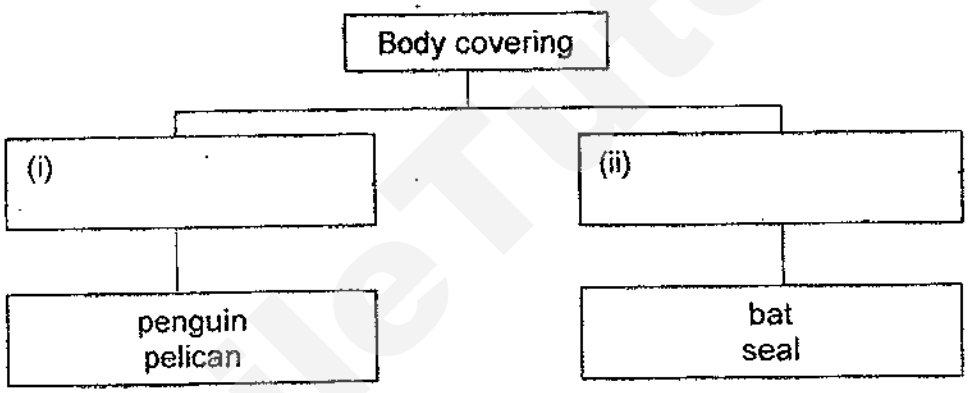
Need a home tutor? Visit smiletutor.sg

23 Fathima classified the following animals into two ways based on their characteristics.



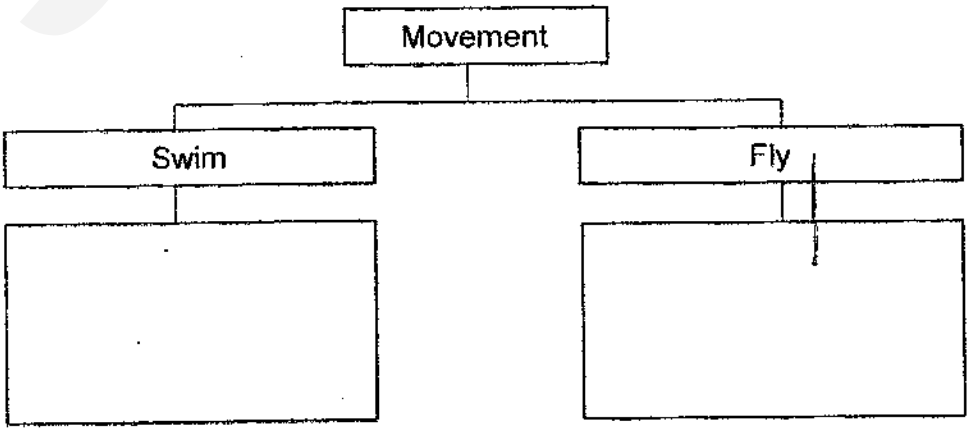
1st way

(a) She classified them according to their body covering. 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 move. Write the four animals, bat, seal, penguin and pelican, in the correct boxes below. [2]



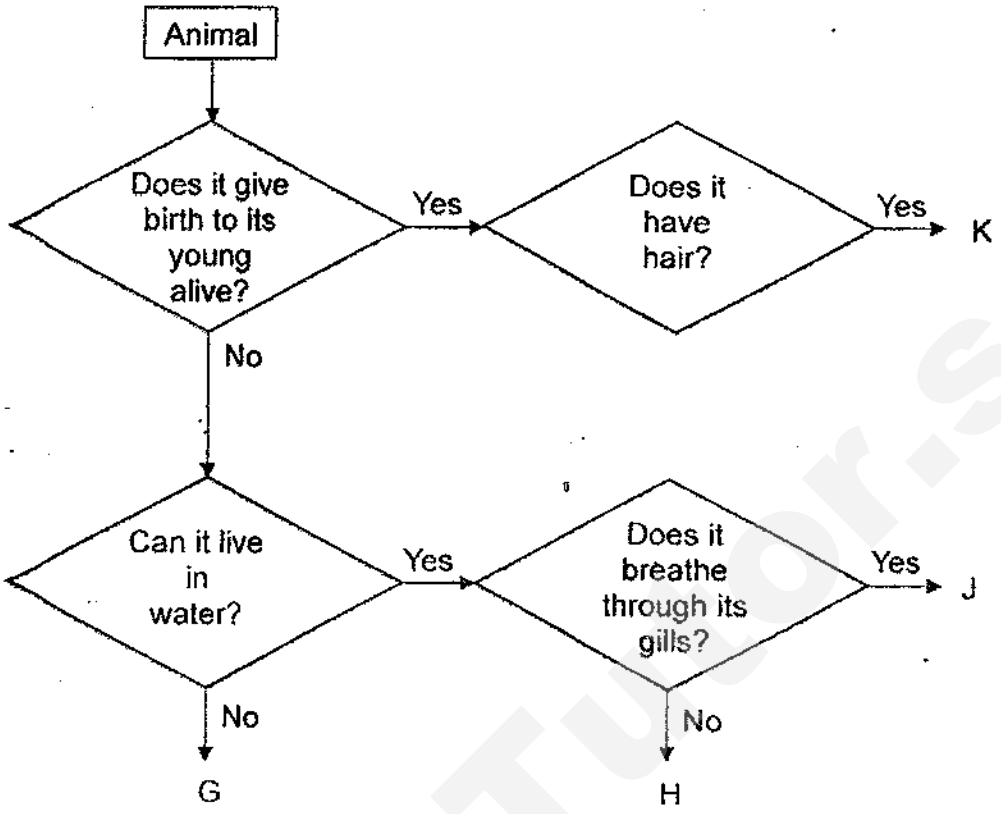
(Go on to the next page)

SCORE	/ 3

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

24 Study the flow chart below.



(a) Which animal group does Animal J belong to? [1]

_____

_____

(b) Based on the flow chart above, can K be a bird? Give a reason for your answer. [1]

_____

_____

(c) Based on the flow chart above, write the letters, G, H, J or K, that represents an adult giraffe and an adult frog, in the spaces provided below. [1]

adult giraffe : _____

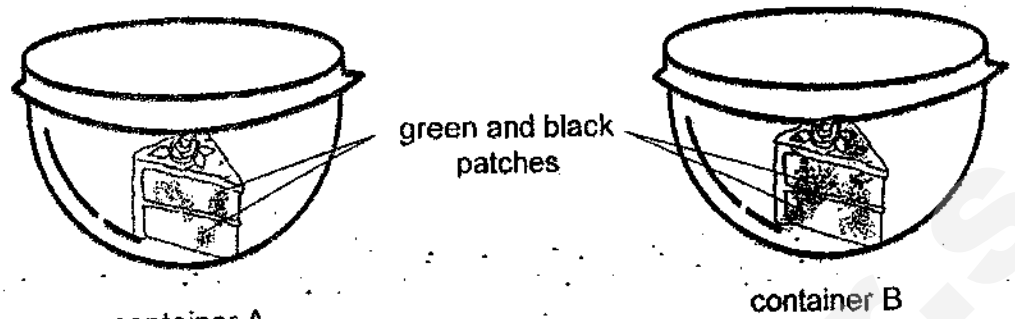
adult frog : _____

(Go on to the next page)

SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

25 Gary had two similar slices of cakes. He placed one slice of cake into container A. He then sprayed water on the other slice of cake and placed it in container B. He then covered both air-tight containers with a lid and left them on the dining table for one week.



After one week, Gary observed that there were more green and black patches on the slice of cake in container B.

(a) What were the green and black patches found on the slice of cakes in both containers? [1]

_____

(b) Which group of living things does the green and black patches belong to? [1]

_____

(c) Based on the experiment above, what was the condition required for the green and black patches to grow? [1]

_____

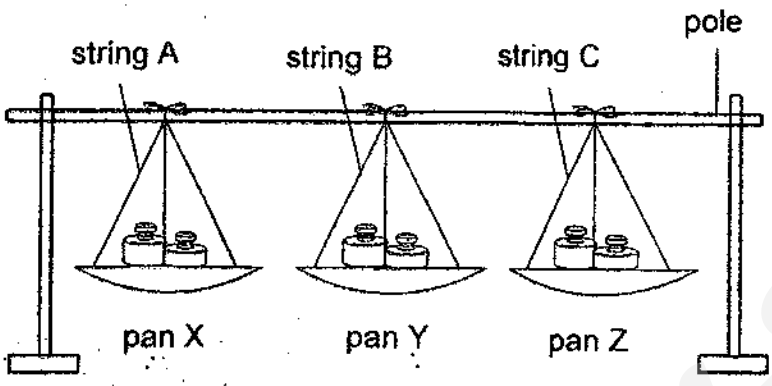
_____

(Go on to the next page)

SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

26 Meili set up an experiment using three different strings, A, B and C, as shown below. The strings were all of the same thickness and length. They were tied to a pole.



When Meili placed two weights on each pan, string B snapped but string A and C did not snap. Then she added another weight on pans X and Z. She observed that string C snapped.

(a) What property of the string was Meili trying to find out? [1]

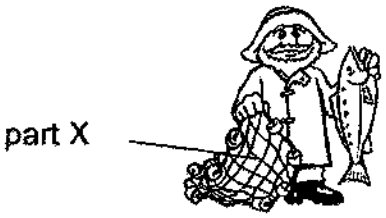
_____

(b) Arrange the three strings, A, B and C, beginning with the string which is able to hold the most number of weights to the string that is able to hold the least number of weights. [1]

_____ _____ _____

holds the most _____ holds the least

A fisherman uses fishing nets to catch fish in the sea. Meili wanted to use one of the strings to make part X of a fishing net.



(c) Which string, A, B or C, should she use to make the net? Give a reason for your answer. [1]

_____

_____

(Go on to the next page)

SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

27 Candy conducted an experiment using materials X, Y and Z. She recorded her results in the table below.

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

Candy wanted to go for a camping trip. She decided to pitch a tent for shelter.

(a) Based on the table above, which one of the materials, X, Y or Z, is most suitable to make parts A and B of the tent? [1]

(i) Part A : _____

(ii) Part B : _____

(b) Suggest a reason why Part B cannot be transparent. [1]

_____

_____

(c) Based on the table above, state one difference between materials X and Z. [1]

_____

_____

SCORE	3

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

YEAR : 2018
LEVEL : PRIMARY 3
SCHOOL : CATHOLIC HIGH SCHOOL
SUBJECT : SCIENCE
TERM : SA1

SECTION A

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

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

YEAR : 2018
LEVEL : PRIMARY 3
SCHOOL : CATHOLIC HIGH SCHOOL
SUBJECT : SCIENCE
TERM : SA1

BOOKLET B

Q21a) Both plants A and B have leaves.

Q21b) Plant A lives in water but Plant B lives on land.

Q22ai) It has flowers.

Q22aii) It does not grow in water.

Q22b) Non-flowering, water: D

Non-flowering, land: E

Flowering, water: F

Flowering, land: C

Q23ai) Have feathers

Q23aii) Have hair

Q23b) Swim: Penguin, Seal

Fly: Pelican, Bat

Q24a) Fish

Q24b) No. It gives birth to its young alive and has hair.

Q24c) Adult giraffe: K

Adult frog: H

Q25a) The green and black patches are mould.

Q25b) Fungi

Q25c) The condition reqired for it to grow is the presence of moisture.

Need a home tutor? Visit smiletutor.sg

Q26a) She was trying to find the property of the string strength.

Q26b) A, C, B

Q26c) String A. It is able to hold the most number of weights.

Q27ai) Part A: Z

Q27aii) Part B: Y

Q27b) It is opaque because it does not allow light to pass through.

Q27c) Material Y is not waterproof but material Z is waterproof.

SmileTutor.sg

END

Need a home tutor? Visit smiletutor.sg

Name: _____( )

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL

Primary 3
Semestral Assessment 1
SCIENCE

BOOKLET A

10 May 2018

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.

This booklet consists of 12 printed pages.

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Section A (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 provided.**

1. Study the table below.

Group R	Group S
fork spoon knife	pencil ruler crayon

Based on the table above, how were the objects grouped?

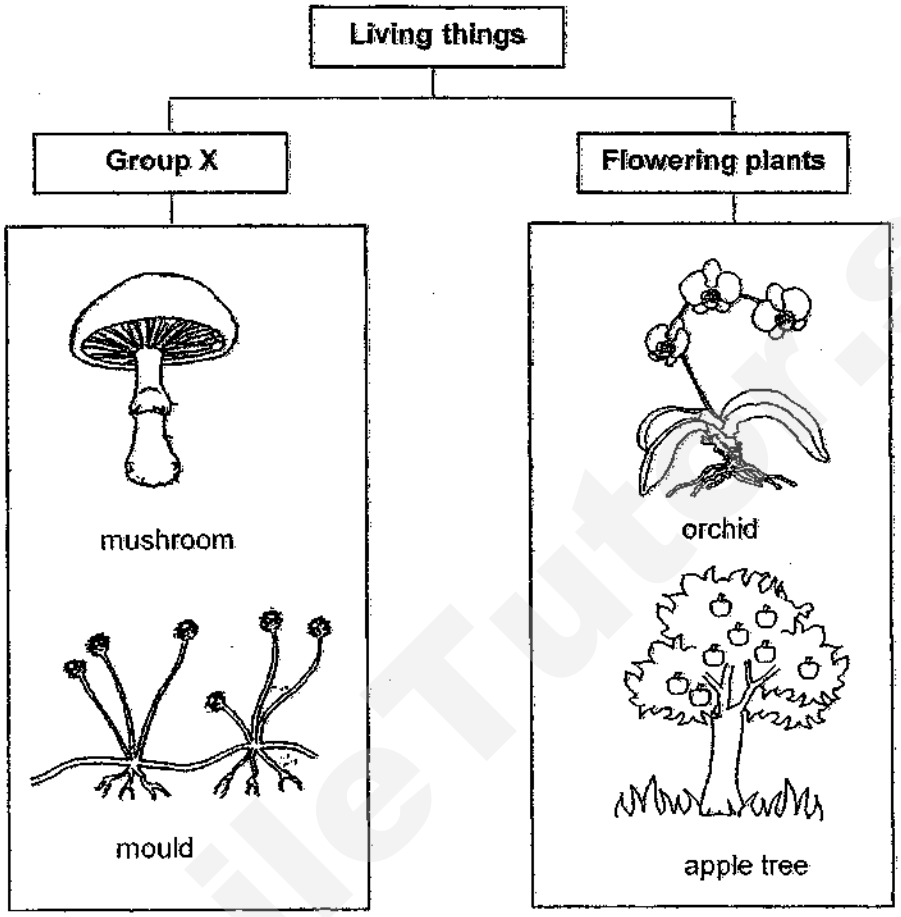
(1) By their size
(2) By their shape
(3) By how they are used
(4) By the material they are made of

2. Which one of the following statements is true about micro-organisms?

(1) All micro-organisms are harmful to humans.
(2) Most micro-organisms are non-living things.
(3) All micro-organisms live in bodies of animals only.
(4) Micro-organisms can only be seen under a microscope.

Need a home tutor? Visit smiletutor.sg

3. Study the classification chart below.

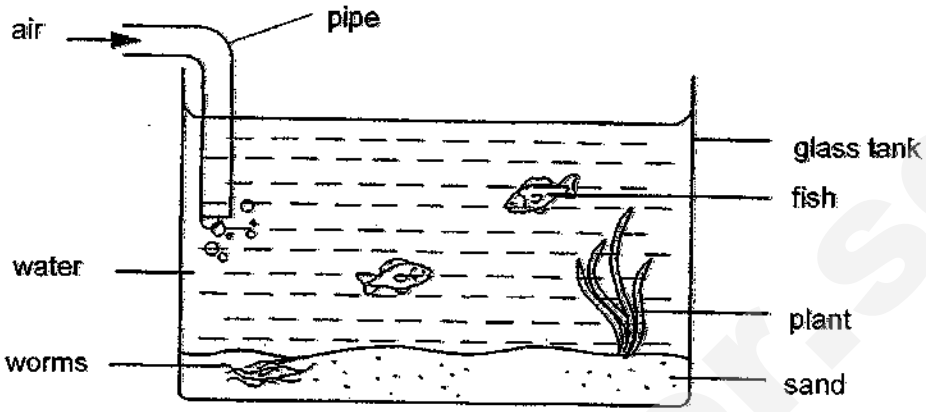


Based on the classification chart above, which one of the following headings best represents group X?

(1) Fungi
(2) Bacteria
(3) Micro-organisms
(4) Non-flowering plants

Need a home tutor? Visit smiletutor.sg

4. The diagram below shows a fish tank.



Shila counted the number of fish in the tank each month. She then recorded her results in the table below.

Month	Number of fish
January	2
February	2
March	14
April	14
May	30

Based on the table above, what can she conclude from her results?

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

Need a home tutor? Visit smiletutor.sg

5. Sindy has two identical plants A and B. The conditions provided to the plants are shown in the table below.

Plant	Type of soil	Amount of water (cm^3)	Amount of fertiliser (cm^3)	Location of pot
A	sandy	100	5	in the garden
B	sandy	0	5	in the garden

The diagram below shows Sindy's observation after one week.

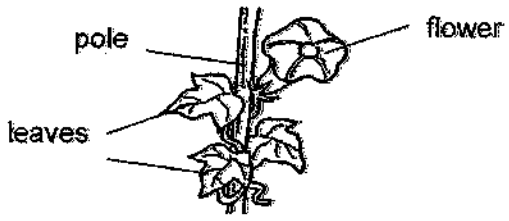
plant A plant B

Based on Sindy's observation, she can conclude that _____.

(1) plants need air to survive
(2) plants need fertiliser to survive
(3) plants need water to grow well
(4) plants need sunlight to grow well

Need a home tutor? Visit smiletutor.sg

6. The diagram below shows plant P.



plant P

Based on the diagram above, which of the following statements are true about plant P?

A It has a weak stem.
B It cannot make its own food.
C It can produce fruits.

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

7. The diagram below shows two organisms.

bird's nest fern

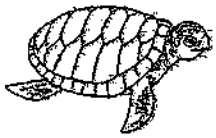
mushroom

Which one of the following statements is true for both organisms?

(1) They bear flowers.
(2) They do not need air to survive.
(3) They reproduce through spores.
(4) They do not make their own food.

Need a home tutor? Visit smiletutor.sg

8. Sarah observed three animals as shown below.

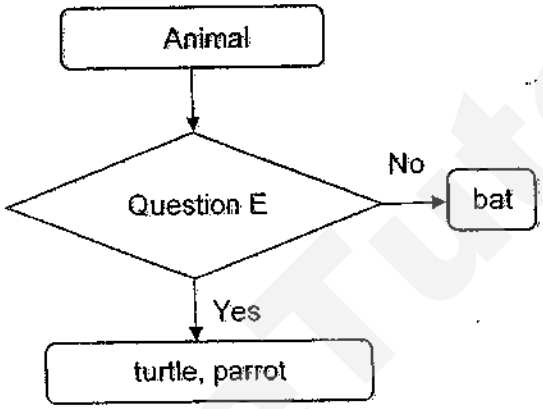


turtle

bat

parrot

She classified them in the flow chart shown below.



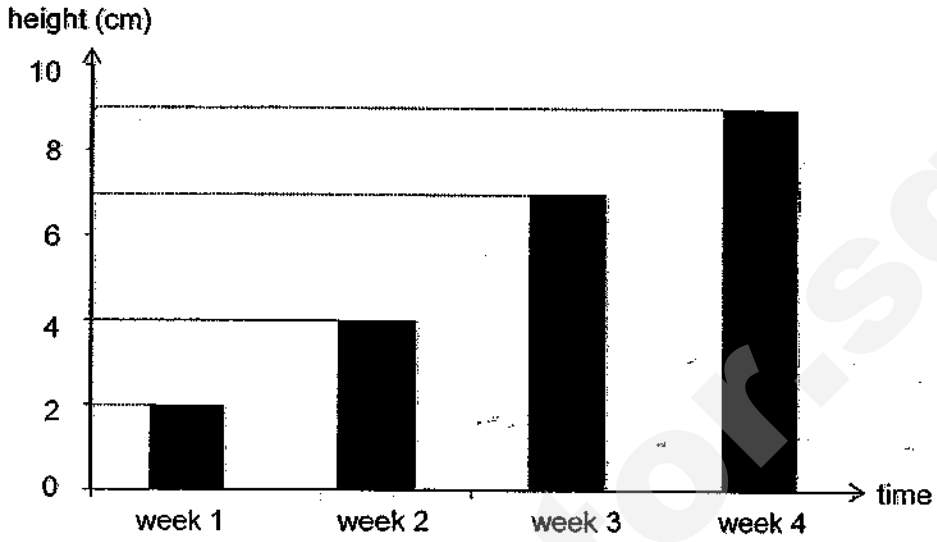
Which one of the following best represents question E in the flow chart?

(1) Does it fly?
(2) Does it lay eggs?
(3) Does it have wings?
(4) Does it feed its young with milk?

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

9. Yvonne planted a seed and recorded its growth in the graph below.



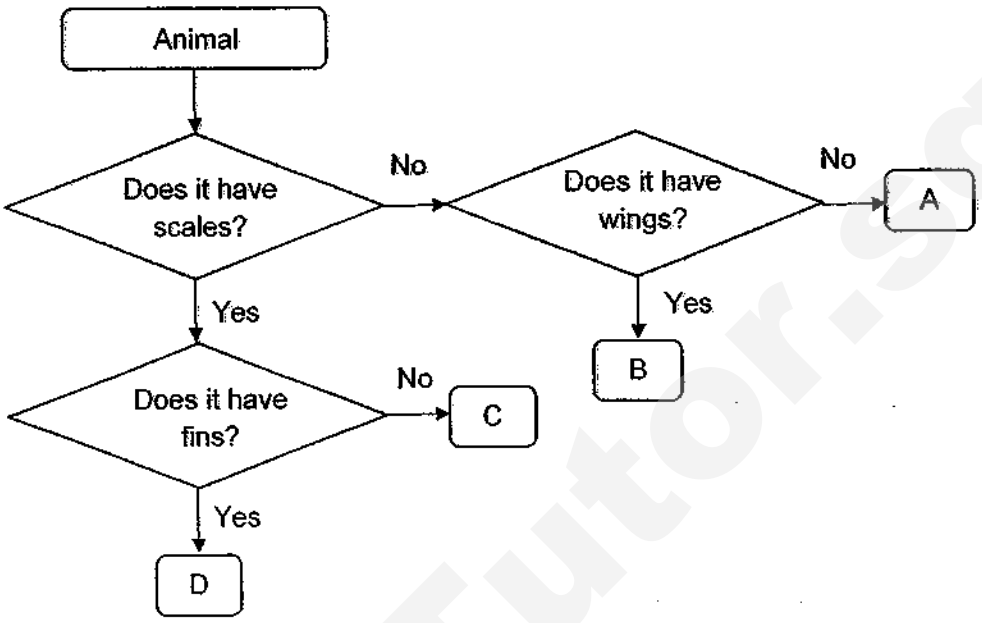
Based on the graph, which of the following statements are true?

A The plant grew 2 cm in the first week.
B The plant stopped growing after week 3.
C The plant grew the same height every week.
D The plant grew faster in week 3 than week 4.

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

Need a home tutor? Visit smiletutor.sg

10. Study the flow chart below.



Based on the flow chart above, which of the following best represents animals A, B, C and D?

	A	B	C	D
(1)	elephant	duck	salamander	angelfish
(2)	turtle	snake	tilapia	dog
(3)	chicken	angelfish	lion	salamander
(4)	giraffe	eagle	snake	goldfish

Need a home tutor? Visit smiletutor.sg

11. Anna observed four organisms A, B, C and D at the zoo. She recorded her observations in the table below. A tick (✓) shows that the organism has the characteristics.

Characteristics	Organism			
	A	B	C	D
Has 6 legs		✓		
Has hair				✓
Lays eggs	✓	✓	✓	
Has gills			✓	
Produces milk for the young				✓

Which one of the above organisms best represents a dolphin?

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

12. Henry found animal B in a garden. He recorded his observations of animal B in the box below.

It has wings.
It has two legs.
It has a beak.

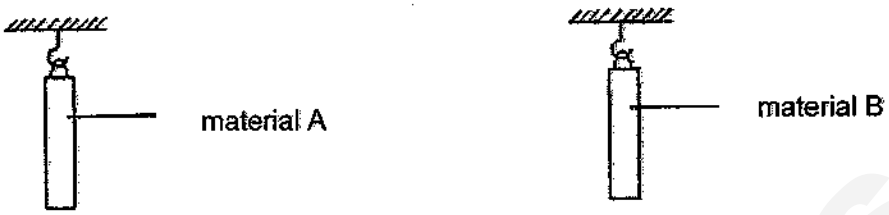
Based on Henry's observations, which one of the following best represents animal B?

(1) Bee
(2) Pelican
(3) Mosquito
(4) Grasshopper

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

13. A strip of material A and B, were each hung on a hook as shown below.



Two similar boxes were then hung onto the strips. The results are shown in the diagram below.

What can be concluded from the above experiment?

(1) Material A is stronger than material B.
(2) Material B is stronger than material A.
(3) Material A is more flexible than material B.
(4) Material B is more flexible than material A.

Need a home tutor? Visit smiletutor.sg

14. Four objects are classified into two groups X and Y, as shown below.

Group X	Group Y
styrofoam board	iron nail
ice-cream stick	metal key

Based on the table above, the objects are classified according to _____.

(1) the colour of the objects
(2) their ability to float or sink
(3) their ability to absorb water
(4) the amount of light that can pass through them

15. The table below shows the characteristics of three objects W, X and Y. A tick (✓) shows that the object has the characteristics.

Characteristics	Objects		
	W	X	Y
Bends easily		✓	✓
Do not allow light to pass through	✓	✓	✓
Absorbs water			✓

Based on the table above, which one of the following best represents objects W, X and Y?

	W	X	Y
(1)	cotton towel	mirror	rubber band
(2)	rubber band	mirror	cotton towel
(3)	mirror	rubber band	cotton towel
(4)	rubber band	cotton towel	mirror

End of Section A

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Name: _____( )

Class: Primary 3_____

CHIJ ST NICHOLAS GIRLS' SCHOOL

SIMPLE IN VIRTUE

STEADFAST IN DUTY

Primary 3

Semestral Assessment 1

SCIENCE

BOOKLET B

10 May 2018

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.

This paper consists of 8 printed pages.

Booklet A	30
Booklet B	20
Total	50

_____

Parent's Signature/Date

SmileTutor.sg

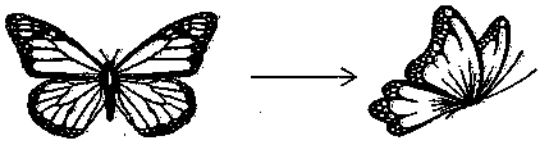
Need a home tutor? Visit smiletutor.sg

Section B (20 marks)

For questions 16 to 22, write your answers in this booklet.

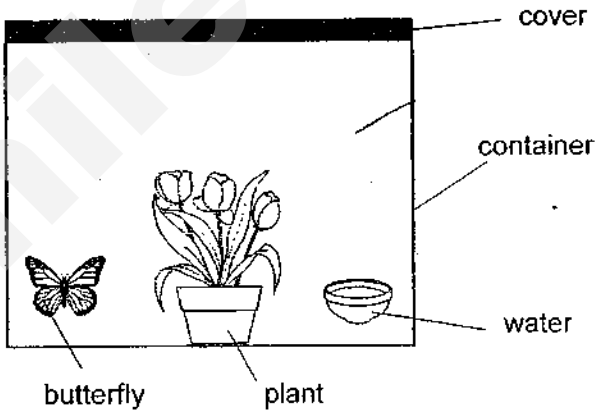
The number of marks available is shown in the brackets at the end of each question or part question.

16. Ali found a butterfly in the school garden. He noticed that the butterfly flew away when he tried to touch it.



(a) State one characteristic of living things that is shown by the butterfly. [1]

Ali caught the butterfly and placed it in the set-up below. His classmate told him that the butterfly will not be able to survive.



(b) What change should Ali make to his set-up to ensure that the butterfly survives? Give a reason to support your answer. [1]

Need a home tutor? Visit smiletutor.sg

17. Hannah placed four similar slices of bread A, B, C and D on her kitchen table. She added different amounts of water to the bread and recorded her findings in the table below.

Bread	**A**	**B**	**C**	**D**
Amount of water (ml)	0	5	7	10
Number of days before the bread turned mouldy	10	6	?	4

(a) Based on the table, how many days would it take for mould to appear on bread C? [1]

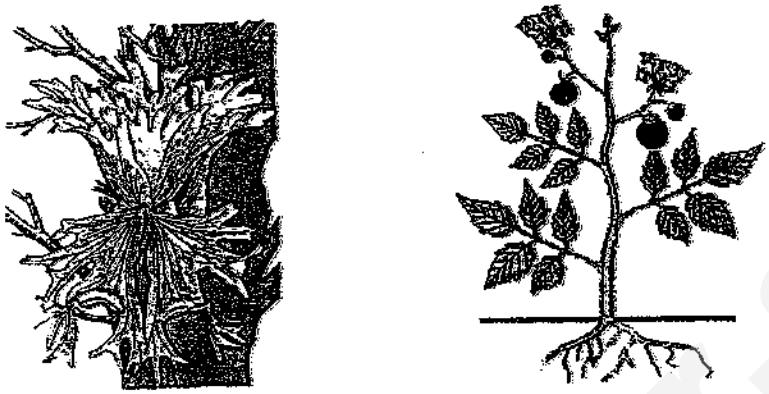
(b) Although no water was added to bread A, Hannah observed that it still turned mouldy after 10 days. Give a reason for this observation. [1]

(c) State what Hannah can do to reduce or slow down the growth of bread mould. [1]

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

18. The diagram below shows a staghorn fern and a tomato plant.



staghorn fern　　tomato plant

(a) Which plant group does the staghorn fern belong to? [1]

_____

(b) State two differences between the staghorn fern and the tomato plant in their reproduction method and their plant parts.

Difference in reproduction method:

_____

_____

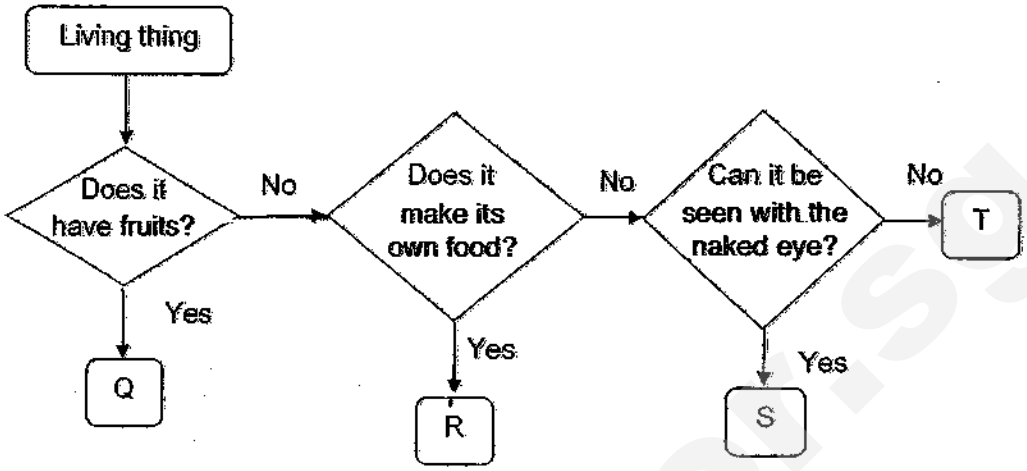
Difference in plant parts:

_____

_____

Need a home tutor? Visit smiletutor.sg

19. Study the flow chart below.



(a) Based on the flow chart above, state one similarity between living things R and S. [1]

_____

(b) Based on the flow chart above, match the living things below with the correct letters Q, R, S and T, in the blanks provided. [2]

Ladder fern: _____

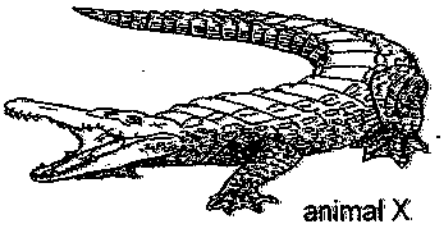
Bracket fungi: _____

Rose plant: _____

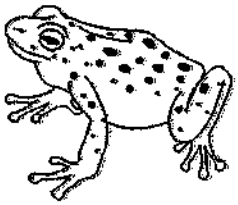
Bacteria: _____

Need a home tutor? Visit smiletutor.sg

20. John went to the zoo and saw animal X and Y, as shown below. He saw them moving on land and then they went into the water.



animal X



animal Y

(a) John thinks that animal X is an amphibian.
Do you agree with John? Explain why. [2]

_____

_____

(b) State one similarity between animal X and Y based on their method of reproduction. [1]

_____

_____

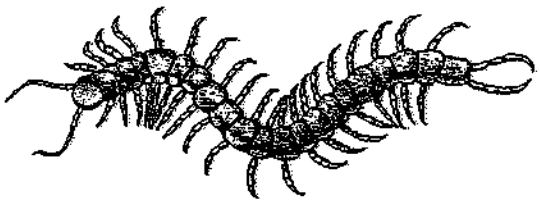
(c) Name one animal that belongs to the same animal group as animal Y. [1]

_____

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

21. The diagram below shows organism G.



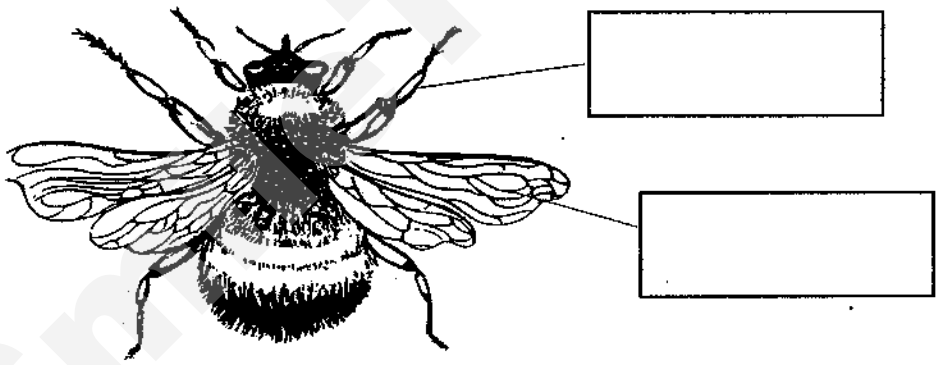
organism G

(a) Is organism G an insect? Explain your answer. [1]

_____

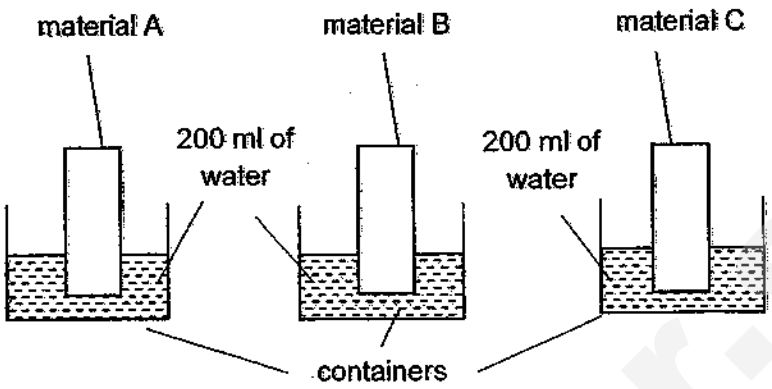
_____

(b) The diagram below shows an organism. Label the parts of the organism by writing in the boxes provided. [1]

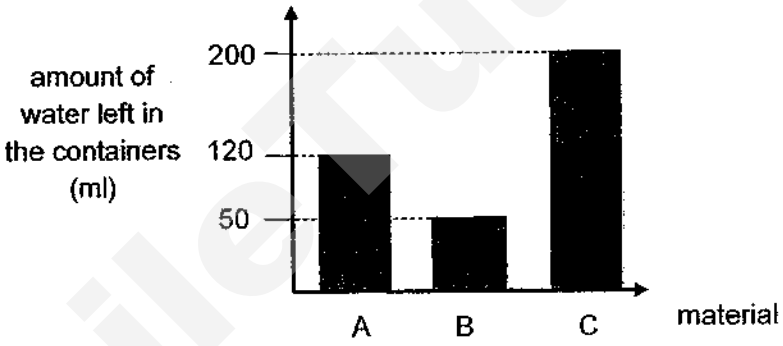


Need a home tutor? Visit smiletutor.sg

22. Felicia wanted to find out which material A, B or C absorbed the most water. She placed them into three similar containers as shown below.



She removed material A, B and C after ten minutes. She measured the amount of water **left** in the containers and recorded her observations in the graph below.



(a) Based on the graph above, which material A, B or C is the most absorbent? [1]

_____

(b) Based on the graph above, which material A, B or C is most suitable for making a beach ball? Give a reason to support your answer. [2]

_____

_____

End of paper

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

YEAR	:	**2018**
LEVEL	:	**PRIMARY 3**
SCHOOL	:	**CHIJ ST NICHOLAS GIRLS'**
SUBJECT	:	**SCIENCE**
TERM	:	**SA1**

Booklet A

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

Booklet B

Q16 (a) Living things respond to changes around them.

(b) He should make holes in the cover so that the butterfly can have air.

Q17 (a) 5 days

(b) There was moisture in the air.

(c) She can put the bread into the refrigerator to reduce warmth.

Q18 (a) Non-flowering plants.

(b) Difference in reproduction method:

Staghorn fern reproduces by spores while the tomato plant reproduces by seeds.

Difference in plant parts:

Tomato plant has fruits and flowers while the staghorn fern does not have fruits and flowers.

Need a home tutor? Visit smiletutor.sg

Q19 (a) **Both living things R and S do not have fruits.**

(b) **Ladder fern:** **R**

Bracket fungi: **S**

Rose plant: **Q**

Bacteria: **T**

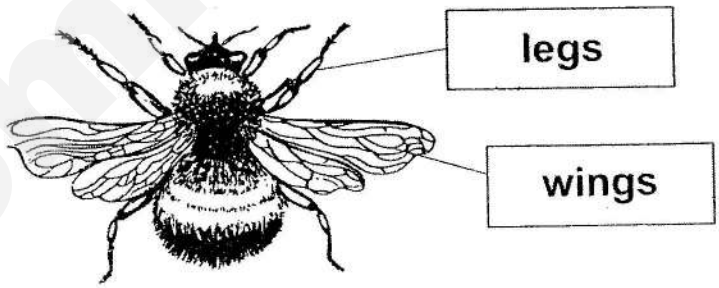
Q20 (a) **No, animal X has dry skin with scales while the amphibian has moist skin / Animal X breathe through lungs underwater while the amphibian breathes through moist skin under water.**

(b) **Both animals X and Y lay eggs.**

(c) **Salamander**

Q21 (a) **No. An insect has 6 legs and 3 body parts while organism G has more than 6 legs and more than 3 body parts.**

(b)



Q22 (a) **Material B**

(b) **C. C did not absorb any water as it is waterproof.**

End

Need a home tutor? Visit smiletutor.sg

MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 1

SCIENCE

10 MAY 2018

BOOKLET A

NAME: _____ ( )

CLASS: Primary 3 ( )

15 questions

30 marks

Total Time for Booklets A & B: 1 hour

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

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

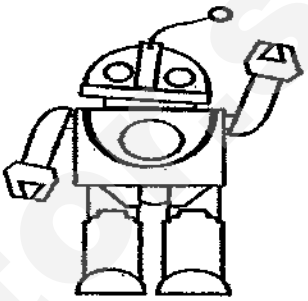
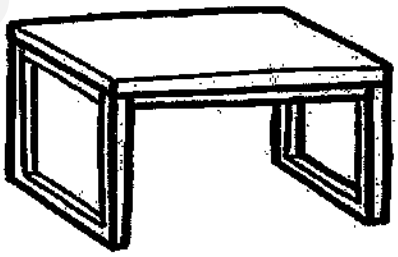
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

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). (30 marks)

---

1 Study the classification table.

Group A	Group B
Plant	 Robot
Ant	 Table

Which one of the following is true about the things in groups A and B?

	Group A	Group B
(1)	Cannot grow	Can grow
(2)	Needs air	Does not need air
(3)	Does not need food	Needs food
(4)	Does not respond to change	Responds to change

Need a home tutor? Visit smiletutor.sg

2 Study the following statements.

A A millipede coils itself after being touched.

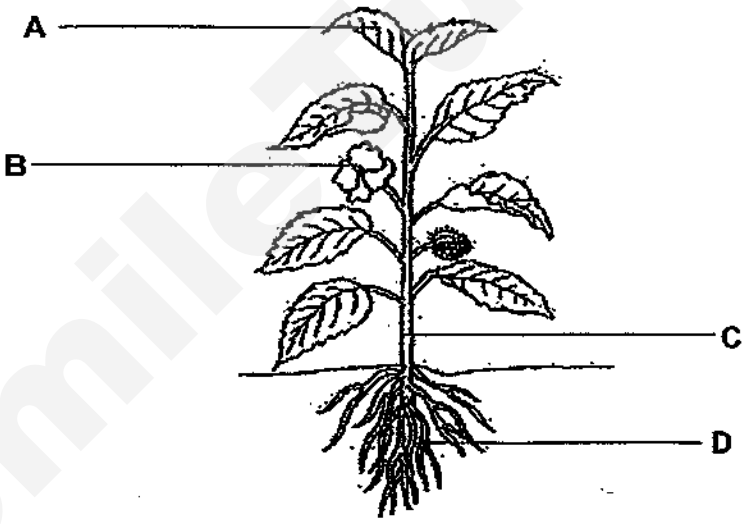
B A baby cries after hearing the loud thunder.

C A butterfly flies away when a cat moves towards it.

These statements show that living things _____.

(1) grow
(2) respond
(3) reproduce
(4) need air, food and water to survive

3 Study the diagram of the plant below.



Which part of the plant makes food?

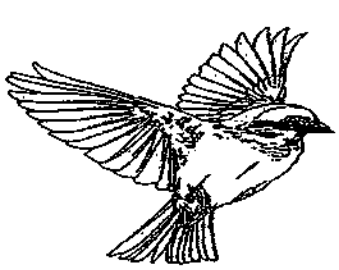
(1) A
(2) B
(3) C
(4) D

(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

4 The pictures below show some animals.



Animal A

Animal B

Animal C

The animals are similar because they all have _____.

(1) a tail
(2) wings
(3) a beak
(4) two legs

5 Sally made some statements about yeast and bacteria.

A Both are fungi.
B Both can reproduce.
C Both respond to change.

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

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

6 The table below shows the characteristics of two groups of animals, X and Y.
A tick (✓) indicates that the animals have the stated characteristic.

Characteristics	Group X	Group Y
Have moist skin		✓
Have scales	✓	
Live on land and in water		✓
Lay eggs	✓	✓

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

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

7 Which of the following statement(s) about fish is/are true?

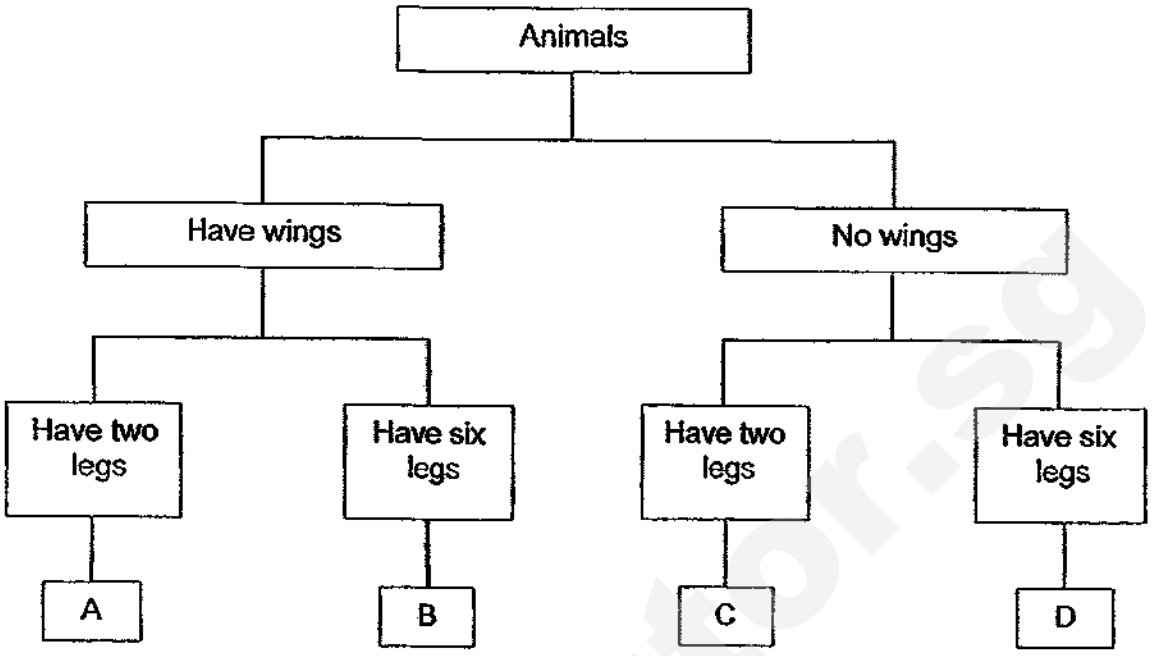
A They lay eggs.
B They breathe through their lungs.
C They have scales as their outer covering.

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

8 Study the classification chart below.



The picture below shows animal P.

Animal P

Which letter, A, B, C or D, represents Animal P?

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

9 The table below shows the characteristics of living things A, B, C and D.
A tick (✓) indicates that the living thing has the stated characteristic.

Characteristics	A	B	C	D
Bears flowers	✓			✓
Grows on land		✓	✓	✓
Reproduces from spores		✓	✓	
Makes its own food	✓		✓	✓

Which of the following is/are most likely non-flowering plant(s)?

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

10 The pictures below show toadstools and bracket fungi.

Toadstool

Bracket fungus

How are the toadstool and bracket fungus similar?

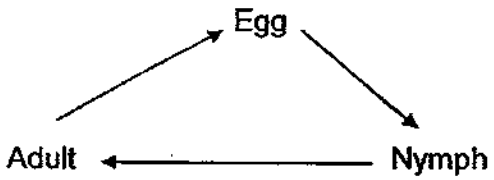
A They reproduce by spores.
B They are non-flowering plants.
C They can make their own food.
D They need air, food and water to survive.

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

11 The diagram below shows the life cycle of Animal W.

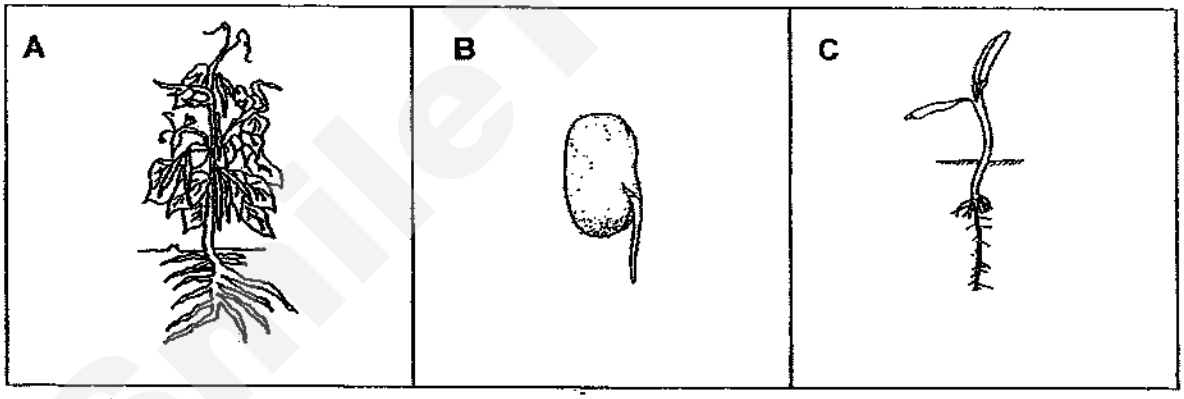


Life cycle of Animal W

Which of the following could Animal W be?

(1) Frog
(2) Butterfly
(3) Chicken
(4) Cockroach

12 The diagram below shows the different stages of the life cycle of a plant.



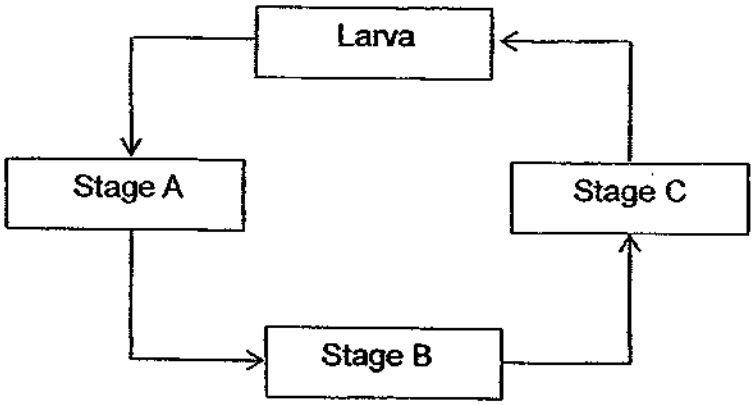
Which of the following shows the correct sequence in the life cycle of a plant?

(1) A → C → B
(2) B → A → C
(3) C → A → B
(4) C → B → A

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

13 The diagram below shows the life cycle of an insect.



Which is/are the stage(s) that the insect do(es) not eat?

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

14 Ben placed five animal P in a tank. He ensured that the animals had enough air, food and water in the tank.

Ben counted the number of animal P in the tank over 4 months. The table below shows his observations.

Month	Number of animal P
1	5
2	7
3	10
4	15

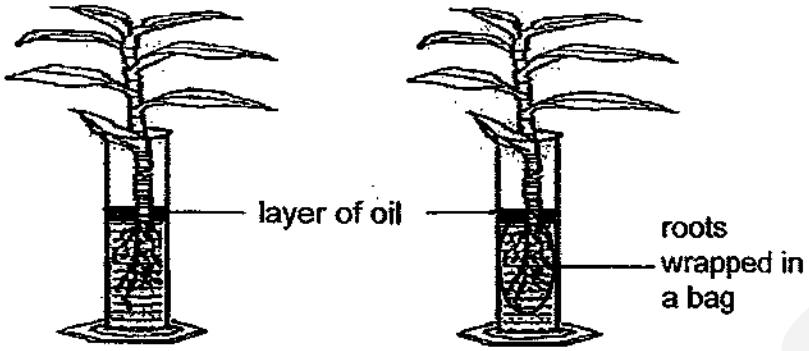
Which of the following statements about living things caused the observations made by Ben?

(1) Living things grow.
(2) Living things reproduce.
(3) Living things respond to changes around them.
(4) Living things need air, food and water to survive.

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

15 John prepared the set-ups as shown below and left them in the garden for one week.



Set-up A **Set-up B**

He measured the volume of the water at the start and end of the experiment.

The table below shows his results.

	Set-up A	Set-up B
Volume of water at the **start** of the experiment	500 ml	500 ml
Volume of water at the **end** of the experiment	430 ml	500 ml

Based on his results, which of the following statements is correct?

(1) The roots take in water.
(2) The stem takes in water.
(3) The stem transports water.
(4) The roots hold the plant firmly to the ground.

End of Booklet A

Go on to Booklet B

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 1

SCIENCE

10 MAY 2018

BOOKLET B

NAME: _____ ( )

CLASS: Primary 3 ( )

6 questions

20 marks

Total Time for Booklets A & B: 1 hour

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

BOOKLET A:	**/ 30**
BOOKLET B:	**/ 20**
TOTAL:	**/ 50**

PARENT'S SIGNATURE: _____

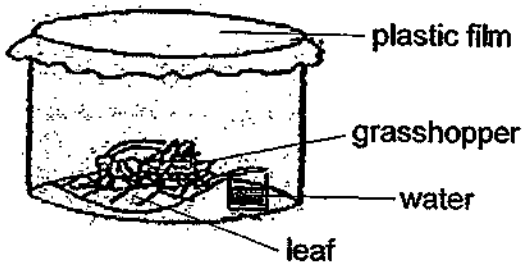
Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

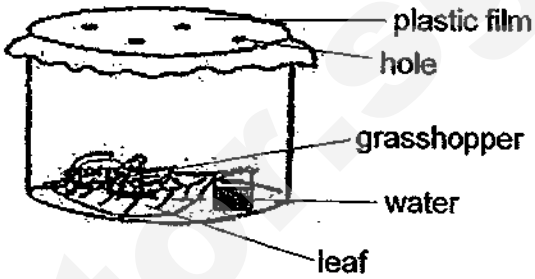
For questions 16 to 21, write your answers in this booklet. The number of marks available is shown in brackets [ ] at the end of each question or part question. (20 marks)

---

16 Joshua placed two grasshoppers in two separate containers, A and B, as shown in the diagrams below. The two containers are sealed with a plastic film. The plastic film on container B has holes but the one on container A does not have holes.



Container A



Container B

(a) In which container, A or B, would the grasshopper survive longer? [1]

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

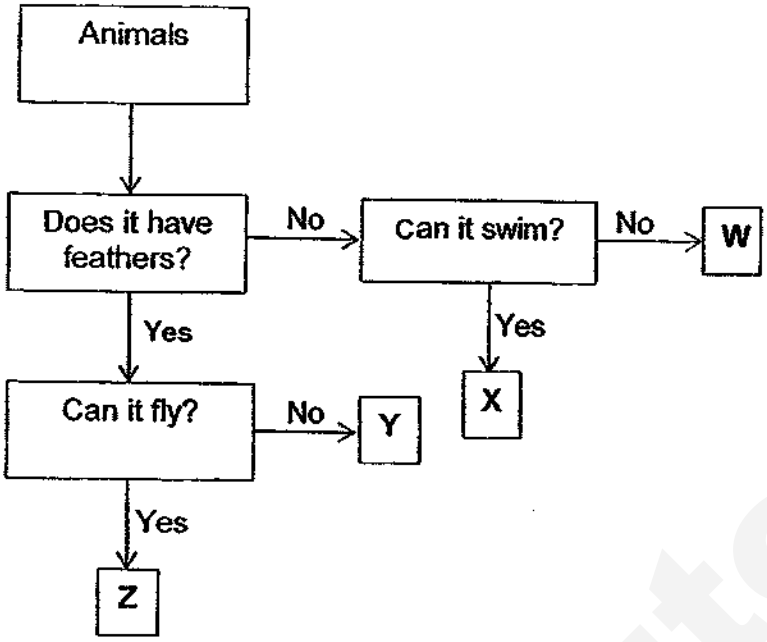
(c) What characteristic of living things is shown in this experiment? [1]

	3

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

17 Study the flowchart below.



(a) Describe animal X. [2]

(b) State one similarity between animals Y and Z. [1]

(c) State one difference between animals W and Y. [1]

	4

(Go on to the next page)

SmileTutor.sg

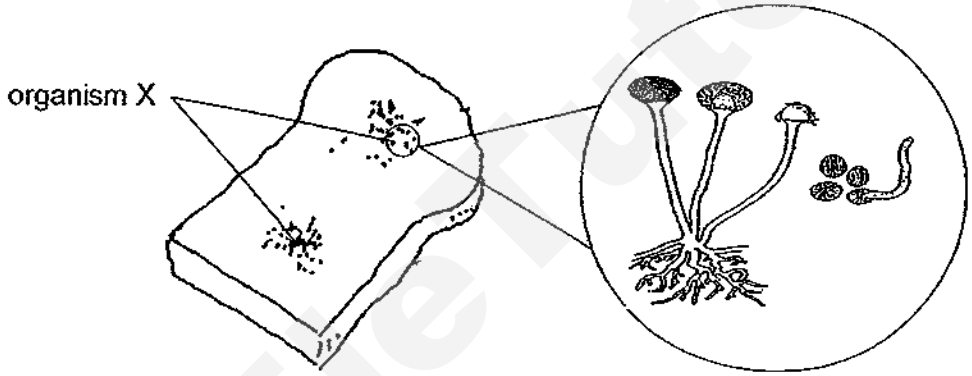
Need a home tutor? Visit smiletutor.sg

18 Study the following statements in the table shown below.

(a) Put a tick (✓) in the appropriate column to indicate if the statement is True or False. [2]

	Statements	True	False
(i)	All bacteria are harmful to humans.		
(ii)	All fungi can be seen by the naked eye.		
(iii)	Bacteria respond to changes around them.		
(iv)	Fungi reproduce by spores.		

(b) Ethan left a piece of bread on the table. After a week, he observed that organism X grew on the bread.



Magnified view

(i) What is organism X? [1]

_____

(ii) Based on Ethan's experiment, where did organism X get its food? [1]

_____

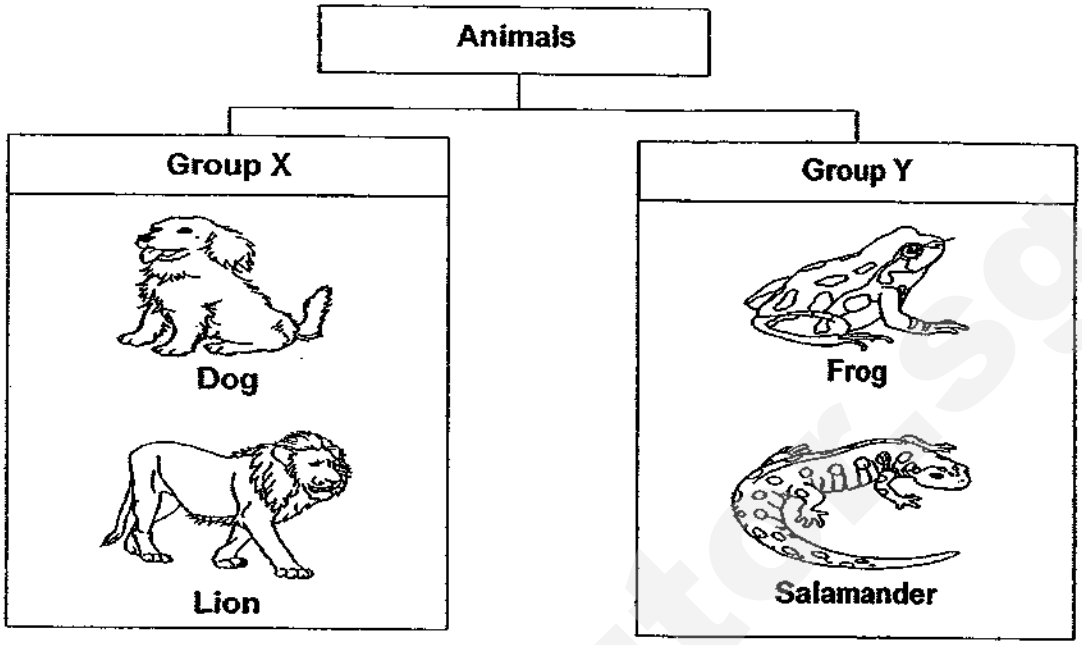
_____

	4

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

19 Study the classification chart below.



(a) State the correct animal groups that X and Y represent. [1]

Group X: _____

Group Y: _____

(b) State the difference in the outer-covering of the animals in groups X and Y. [1]

_____

_____

(c) State the difference in the method of reproduction of the animals in groups X and Y. [1]

_____

_____

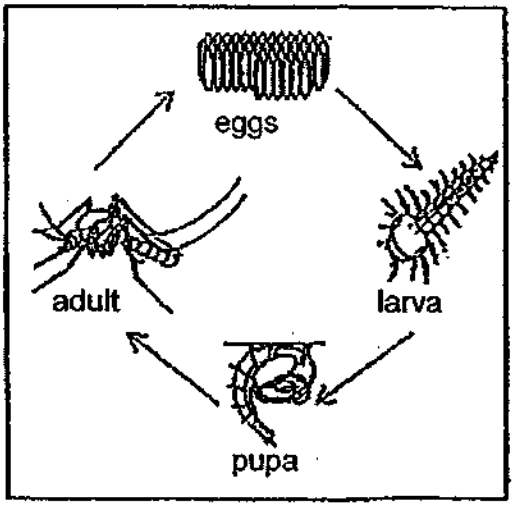
	3

(Go on to the next page)

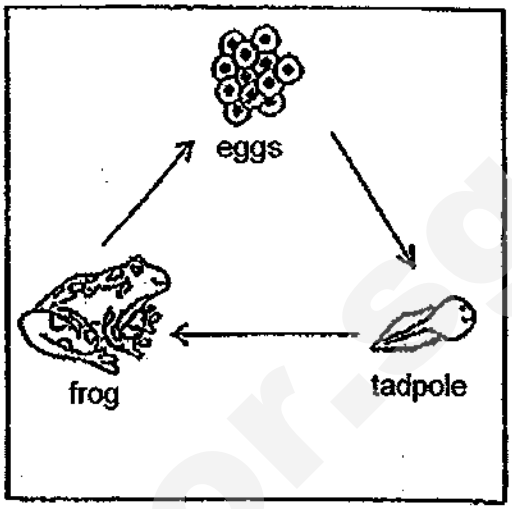
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

20 The diagrams below show the life cycles of a mosquito and a frog.



Life cycle of mosquito



Life cycle of frog

(a) State one similarity between the two life cycles. [1]

_____

_____

(b) State one difference between the two life cycles. [1]

_____

_____

(c) Which other animal has a similar life cycle as the mosquito? [1]
Put a tick (✓) to indicate your answer.

Butterfly	
Cockroach	
Grasshopper	

	3

(Go on to the next page)

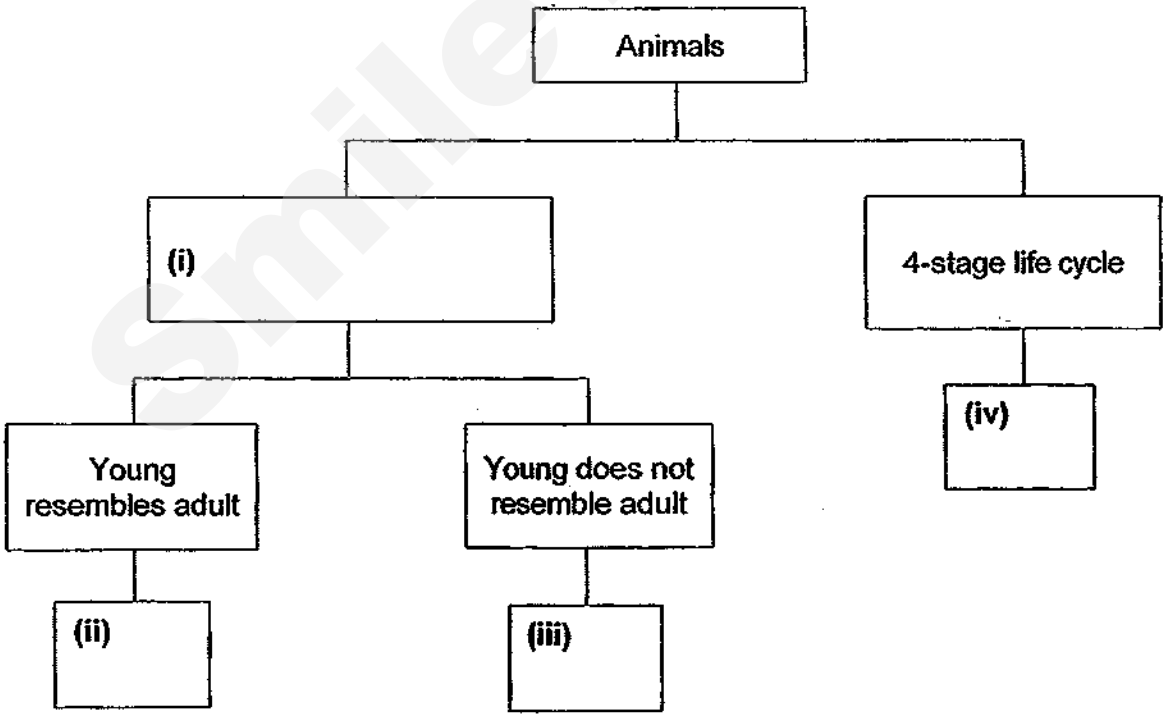
Need a home tutor? Visit smiletutor.sg

21 The table below shows the characteristics of three animals, A, B and C.
A tick (✓) indicates that the animal has the stated characteristic.

Animal	Has a three-stage life cycle	Young resembles its adult	Has six legs
A	✓	✓	✓
B			✓
C	✓		

(a) Describe animal B. [1]

(b) Based on the information above, write down the sub-heading and classify animals A, B and C in the classification chart below. [2]



End of Booklet B

	3

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : MARIS STELLA

SUBJECT : SCIENCE

TERM : SA1

ORDER CALL :

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

Q16) a) Container B

b) Container A does not have enough air as it does not have holes but Container B has holes so it has enough air.

c) Living things need air to survive.

Q17) a) Animal X does not have feathers and it can swim.

b) Both animals have feathers.

c) Y has feathers but W has no feathers.

Q18) a) (i) False

(ii) False

(iii) True

(iv) True

SmileTutor.sg

Need a home tutpr? Visit smiletutor.sg

b) i) mould

ii) Organism X got food from the bread.

Q19) a) Group X : mammals

Group Y : amphibians

b) Group X has hair but Group Y has moist skin.

c) Group X give birth to their young alive but Group Y lay eggs.

Q20) a) Both life cycles have an egg stage

b) The life cycle of the frog has three stages but the mosquito's life cycle has four stage.

c) Butterfly

Q21) a) B has six legs, does not have a three stage life cycle and its young does not resembles its adult.

b) i) 3-stage life cycle

ii) A

iii) C

iv) B

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

METHODIST GIRLS' SCHOOL

Founded in 1887

MID-YEAR EXAMINATION 2018
PRIMARY 3
SCIENCE

BOOKLET A

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.

Name: _____ ( )

Class: Primary 3._____

Date : 8 May 2018

This booklet consists of 15 printed pages including this page.

Smile Tutor.sg

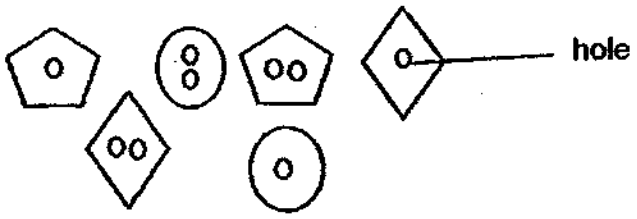
Need a home tutor? Visit smiletutor.sg

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 on the Optical Answer Sheet (OAS).

[40 marks]

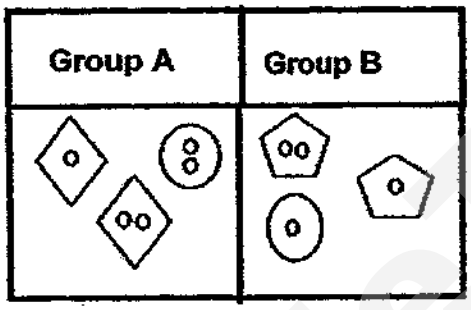
---

1 A group of pupils are classifying some buttons as shown below.

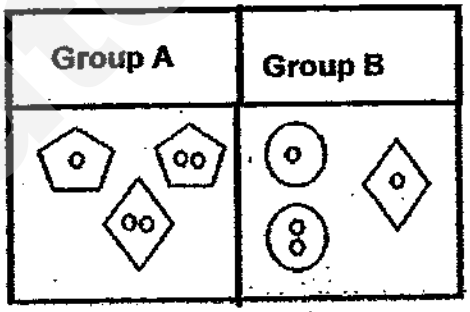


Which one of the following classification chart shows a possible way of classifying the buttons into two groups, A and B?

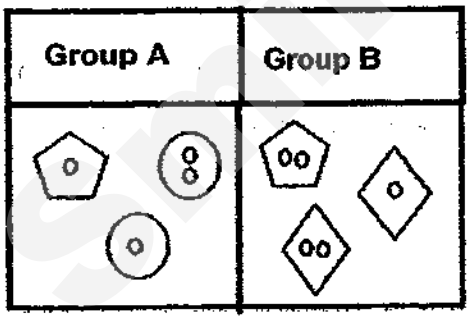
(1)



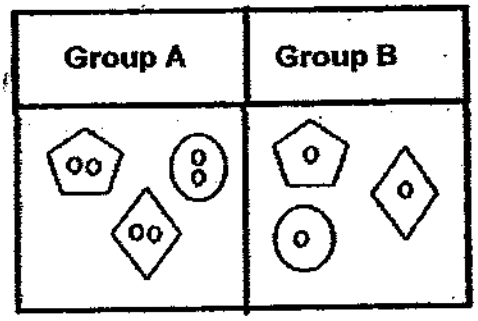
(2)



(3)



(4)

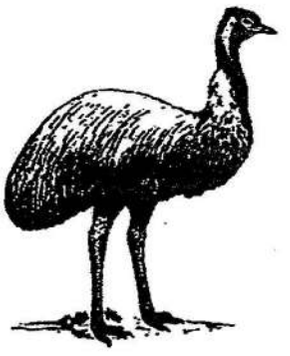


(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

2 The picture below shows an emu.



The emu is a bird because it _____.

(1) can fly
(2) lays eggs
(3) has feathers
(4) has two legs

3 The table below shows the characteristics of Organisms A, B and C.
A tick (√) indicates the presence of the characteristic.

Characteristics	Organism A	Organism B	Organism C
Respond to changes around them	√	√	√
Can reproduce	√	√	√
Can move from place to place		√	
Can produce its own food	√		

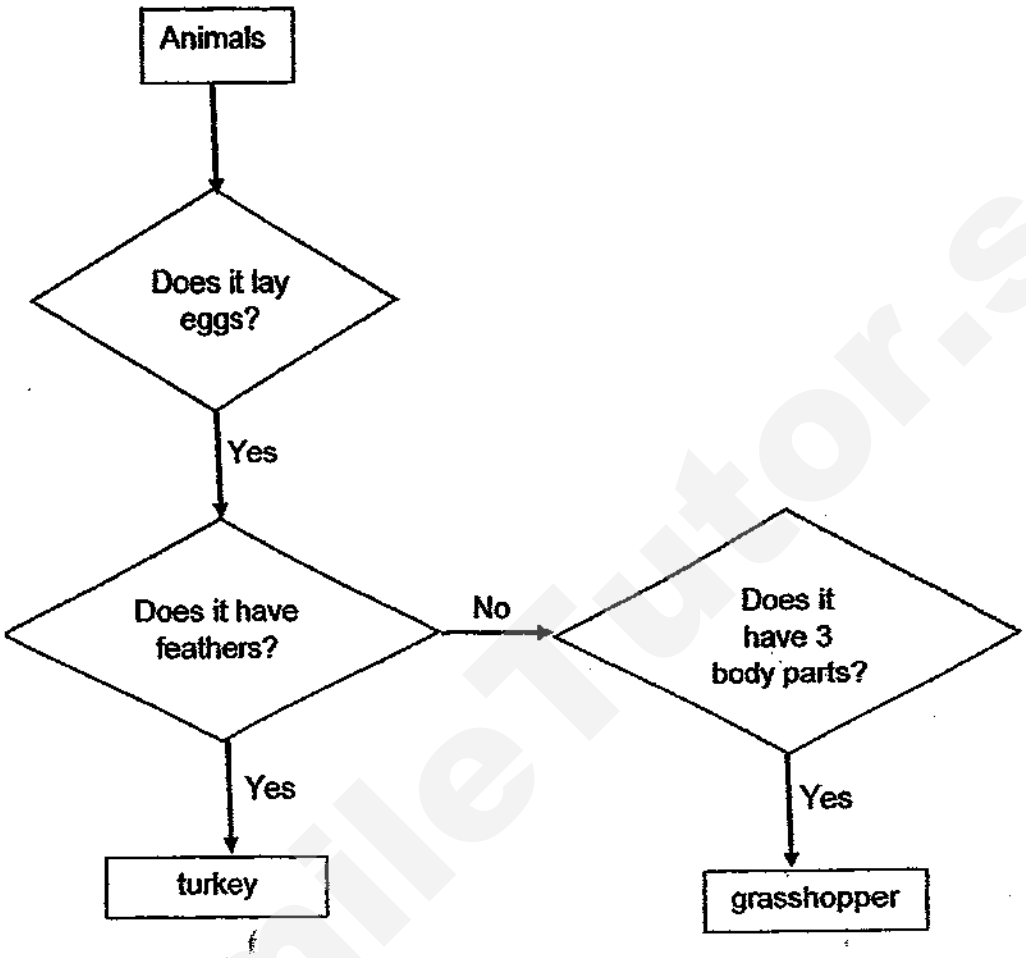
Which of the following correctly show the group of living things that Organisms A, B and C belong to?

	Organism A	Organism B	Organism C
(1)	Plants	Fungi	Animals
(2)	Plants	Animals	Fungi
(3)	Fungi	Animals	Plants
(4)	Animals	Plants	Fungi

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

4 Study the flowchart below carefully.



What is the similarity between the two animals?

(1) They lay eggs.
(2) They live on land.
(3) They have feathers.
(4) They have three body parts.

(Go on to the next page)

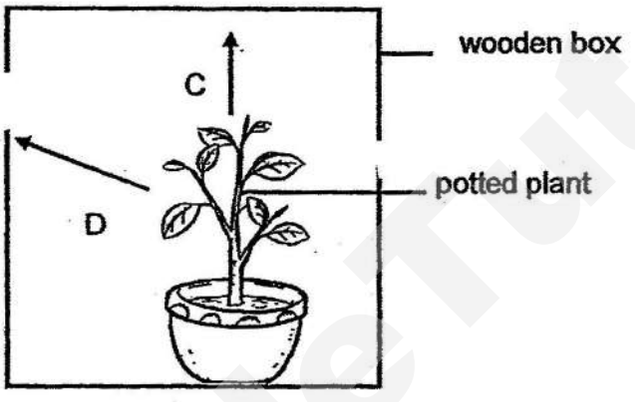
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

5 The table below shows how the four groups of animals breathe. Which one of the following is wrongly matched?

	Group	Breathe through
(1)	fish	gills
(2)	whales	gills
(3)	reptiles	lungs
(4)	amphibians	moist skin

6 Mr Yip placed a potted plant into a wooden box with a hole cut on one side as shown in the diagram below. The box was placed in a sunny spot and watered daily. The arrows, C and D, show the possible direction of the plant growth over time.



After some time, the plant would grow in direction _____.

(1) D because air can enter the box
(2) C because the plant will grow upwards
(3) C because the plant will respond to sunlight
(4) D because the plant will grow towards sunlight

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

7 Four children, Ahmad, Lily, Siva and Boon played with a remote controlled car as shown below.

car

remote control

Based on their observations, they made the following statements.

Ahmad	The car is a living thing because it responds to changes.
Lily	The car is a non-living thing because it needs battery to move.
Siva	The car is a living thing because it is able to move from place to place.
Boon	The car is a non-living thing because it does not need air, food and water to survive.

Whose statement(s) is/are correct?

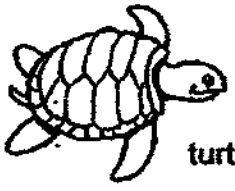
(1) Siva only
(2) Ahmad only
(3) Lily and Siva only
(4) Lily and Boon only

8 The pictures below show some animals.

snake

salamander

alligator



turtle

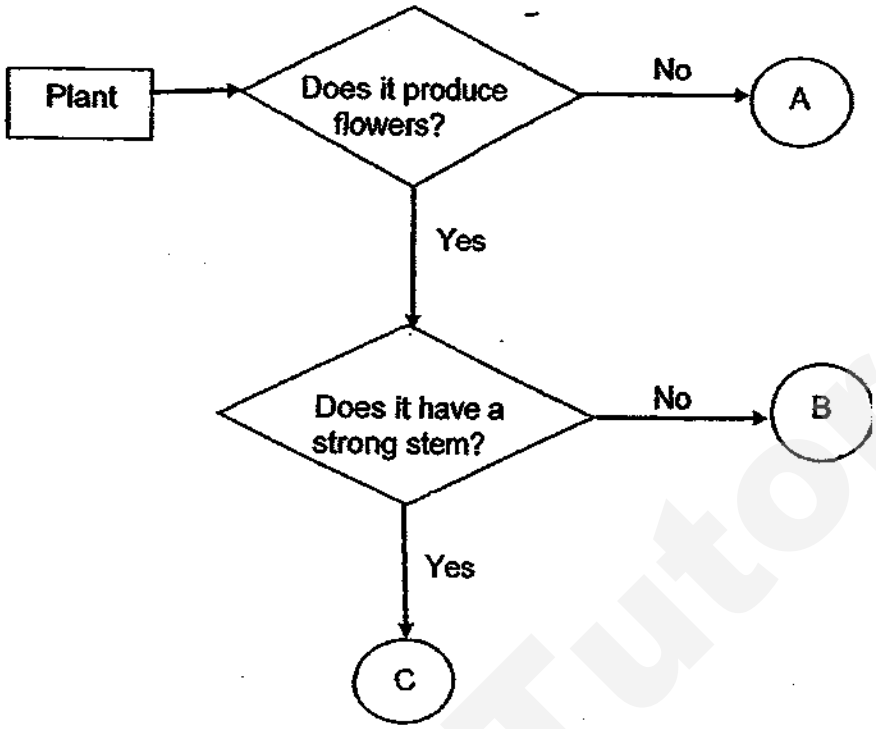
Which one of the animals does not belong to the same animal group as the rest?

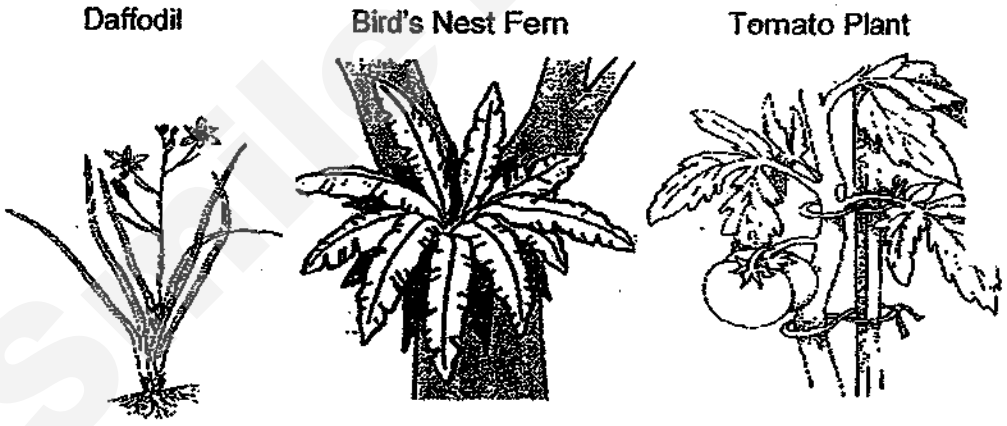
(1) turtle
(2) snake
(3) alligator
(4) salamander

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

9 Study the flowchart as shown below.





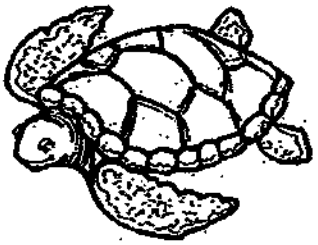
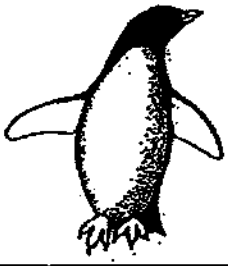
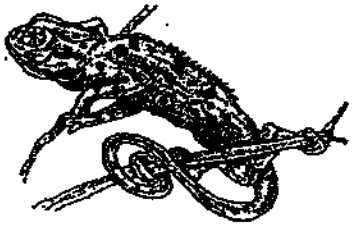
Which of the plants above best represent plants A, B and C?

	Daffodil	Bird's Nest Fern	Tomato Plant
(1)	C	B	A
(2)	B	A	C
(3)	A	C	B
(4)	C	A	B

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

10 Study the classification table below carefully.

Group A	Group B
	
	

Which of the following correctly shows the characteristics of the animals in group A or B?

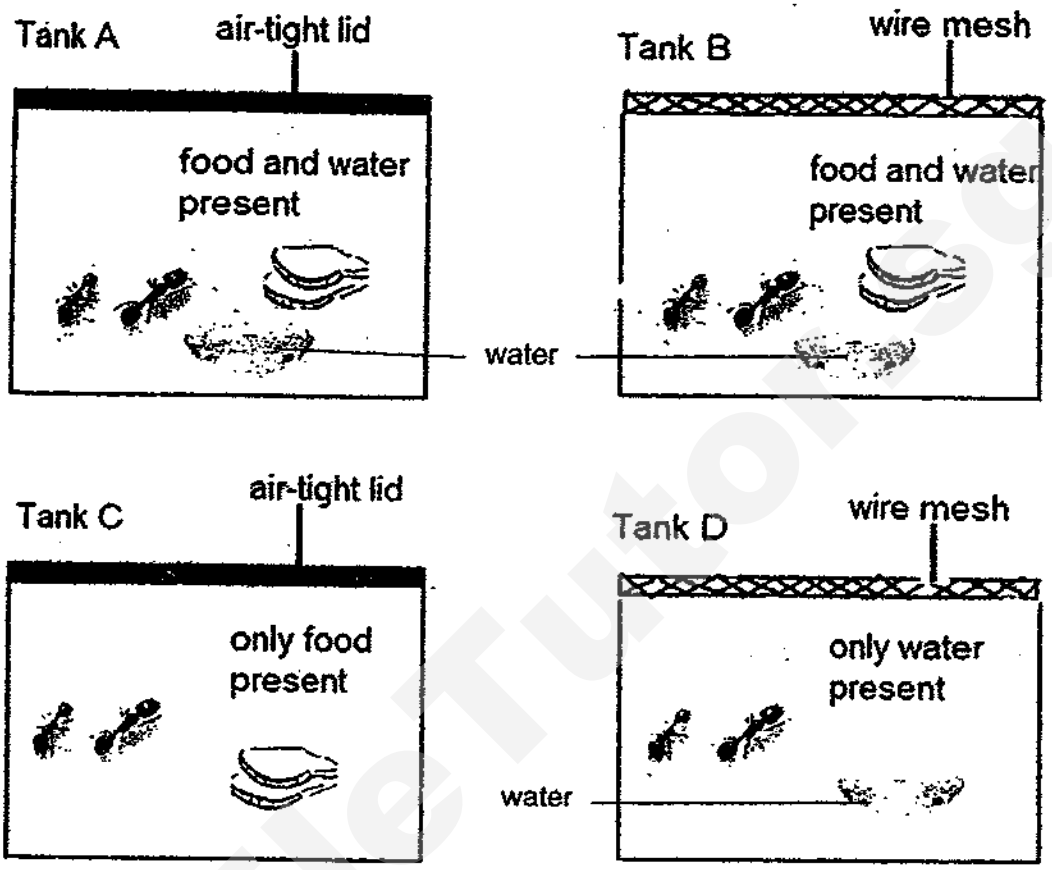
	Group	Have scales	Have feathers	Gives birth to young
(1)	A	Yes	No	Yes
(2)	B	No	Yes	Yes
(3)	A		No	Yes
(4)	B	No	Yes	No

(Go on to the next page)

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

11 Bee Eng put ants of similar size into four glass tanks A, B, C and D as shown in the diagram below.



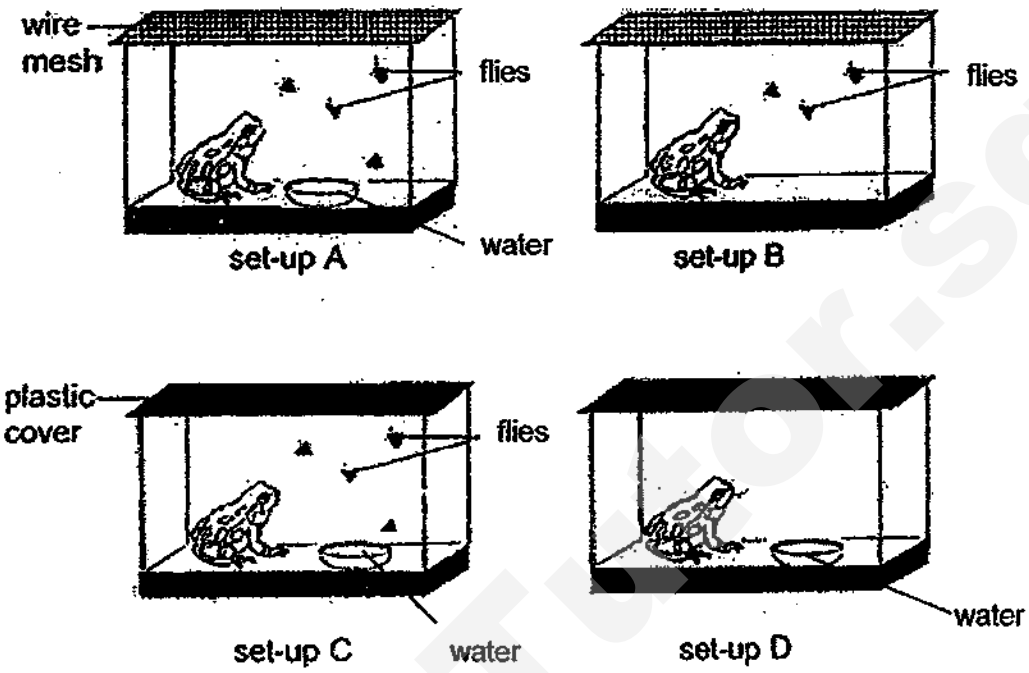
In which glass tank would the ants most likely survive for the longest period of time?

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

12 Kumar wanted to find out if living things need air to survive. He prepared four set-ups as shown below.



Which two set-ups should he use to make sure that his experiment is fair?

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

13 The diagram below shows four organisms, A, B, C and D.

A

Papaya tree

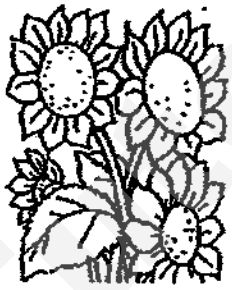
B

Ladder Fern

C

Toadstool

D



Sunflower plant

Which of the organisms reproduce from seeds?

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

14 Zainal found a puffball as shown below while hiking.

puffball

He wrote the following statements based on his observations.

A It grew on a rotting log.
B It was white and round like a ball.
C When it was pressed, some spores were released.

Which of the above characteristic(s) confirmed that the puffball is a fungi?

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

15 Four pupils made the following statements to compare the similarity between the yeast and the bacteria.

Tim	Yeast and bacteria are fungi.
Muthu	Yeast and bacteria are microscopic organisms.
Joe	Yeast and bacteria need water and air to grow.
Fatimah	Yeast and bacteria belong to the same animal group.

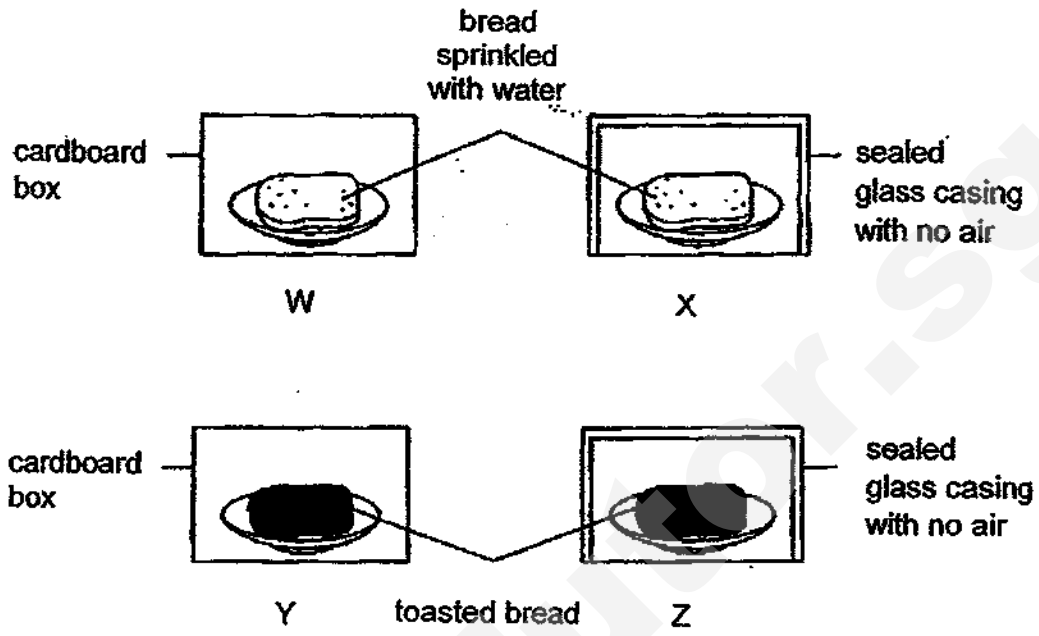
Whose statement(s) is/are correct?

(1) Muthu and Joe only
(2) Tim and Fatimah only
(3) Muthu, Tim and Joe only.
(4) Muthu, Tim and Fatimah only.

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

16 Betty wanted to find out if moisture is needed for fungi to grow. Set-ups W, X and Y were left in the kitchen while set-up Z was left in the refrigerator.



Which two of the following set-ups should she use?

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

17 Aisha prepares four types of cheese A, B, C and D under different conditions as shown below. After a week, mould was found on all the cheese.

Cheese	Location	Sprinkled with water
A	cupboard	Yes
B	refrigerator	Yes
C	cupboard	No
D	refrigerator	No

Which of the following correctly shows how the cheese is arranged from the least to the most amount of mould found on them?

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

18 The pictures below show four items found in Sally's house.
[Pictures are not drawn to scale].

bamboo chopsticks

wooden chair

books

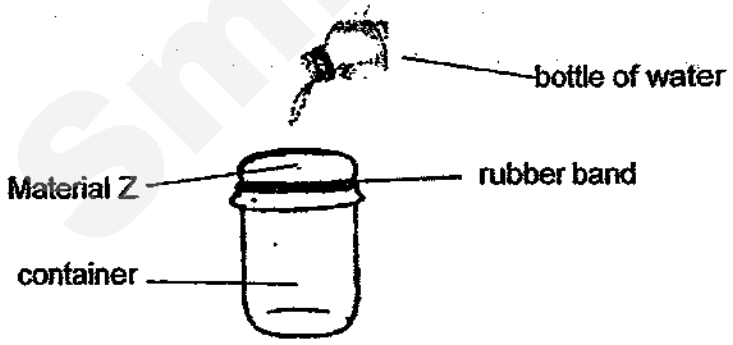
wooden door

What do these items have in common?

A They come from plants.
B They need air to survive.
C They are non-living things.
D They respond to changes around them.

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

19 Nurul wanted to find out if a sheet made of material Z allows water to pass through it. She put the sheet over a container and secured it tightly with a rubber band. She then poured some water from a bottle onto the sheet as shown in the diagram below.



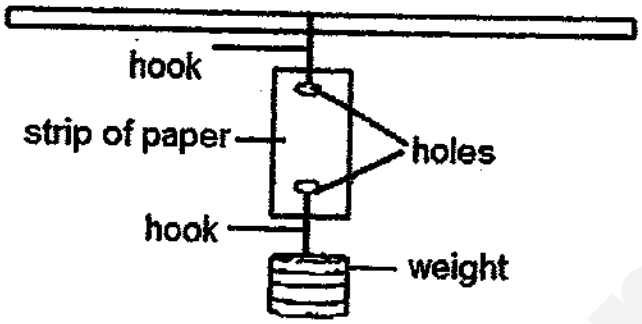
Nurul found that some water was collected in the container after some time.
What material could Z be?

(1) fabric
(2) metal
(3) rubber
(4) ceramic

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

20 Sammy wanted to find out the strength of four different types of paper, W, X, Y and Z of the same size. He hung each piece of paper, one at a time, using the following set-up as shown below.



Sammy added one weight at a time to the hook until the paper started to tear and recorded his results as shown in the graph below.

Based on the information above, which of the following statement(s) is/are correct?

A Y is stronger than Z.
B Z is the strongest paper.
C W is stronger than X and Y
D X is stronger than W and Y

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

End of Booklet A

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

METHODIST GIRLS' SCHOOL

Founded in 1887

MID-YEAR EXAMINATION 2018
PRIMARY 3
SCIENCE

BOOKLET B

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.

Name: _____ ( )

Class: Primary 3. _____

Date : 8 May 2018

Booklet A	40
Booklet B	20
Total	60
Parent's Signature	

This booklet consists of 10 printed pages including this page.

Smile Tutor.sg

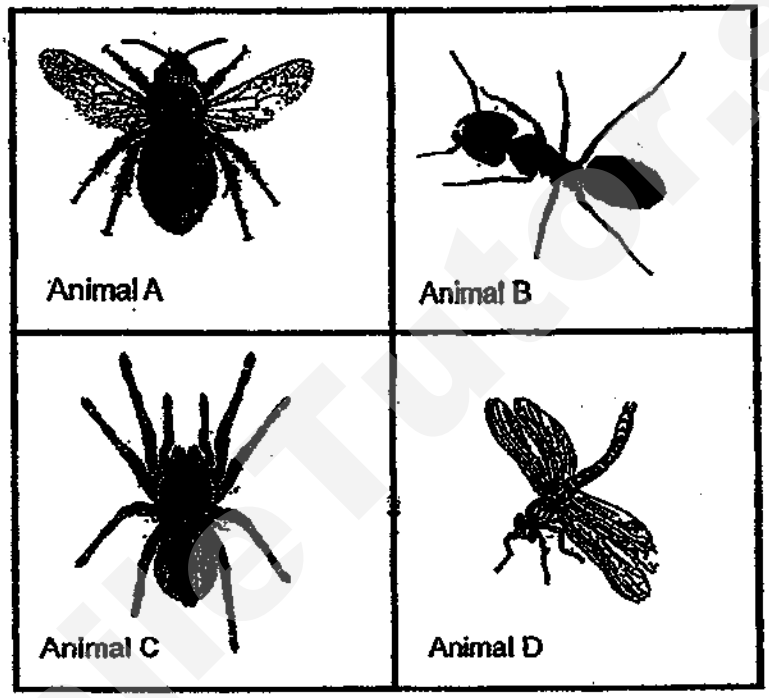
Need a home tutor? Visit smiletutor.sg

For questions 21 to 28, write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part question.

[20 marks]

---

21 During an outdoor science lesson, Rani was asked to draw four insects she saw in the garden. The diagram below shows what Rani drew.



Her classmates said that one of her drawings was not an insect.

(a) Which animal, A, B, C or D is not an insect? Suggest two reasons for your answer. [1]

_____

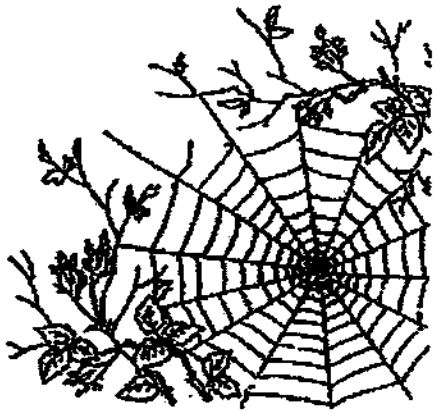
_____

1

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

Rani then noticed a spider web moving on a tree as it was blown by the wind.



(b) Is the spider web a living or non-living thing? Give one reason to explain your answer.

[1]

_____

_____

1

(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

22 The table below shows the characteristics of four plants, A, B, C and D. A tick (√) shows the characteristic that describes the plant.

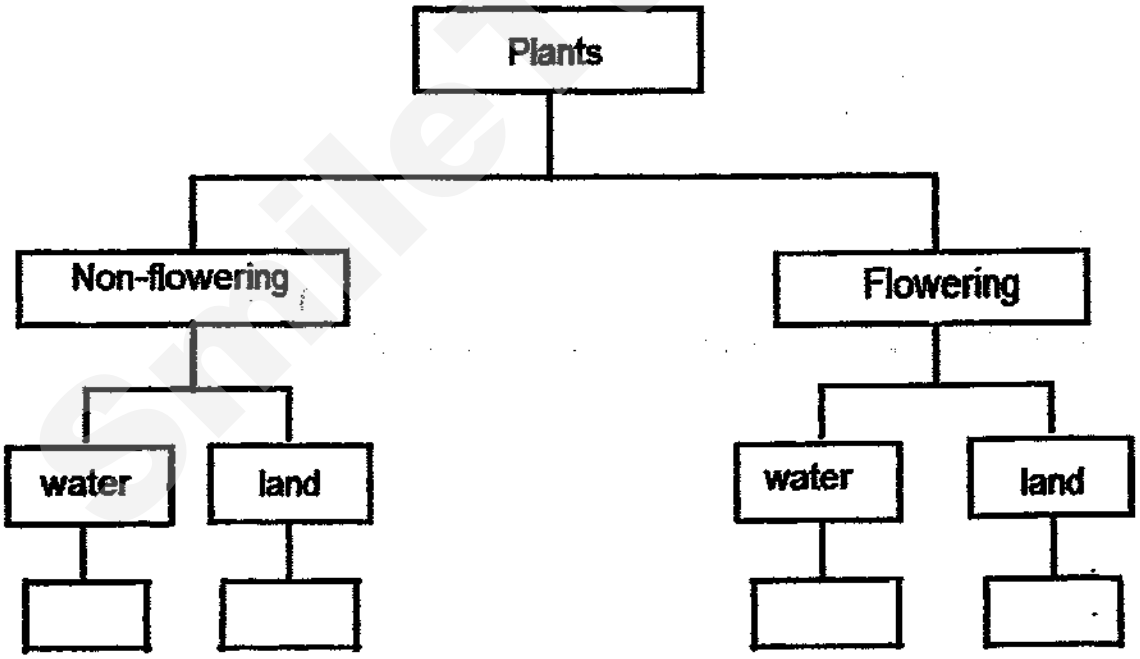
Characteristics	Plants			
	A	B	C	D
Has flowers	√			√
Grows in water		√		√

(a) What are the two characteristics of Plant B? [1]

_____

_____

(b) Using the information from the table above, classify the plants A, B, C and D in the classification chart below. [2]

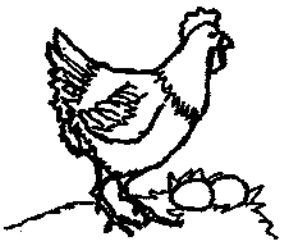


3

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

23 Which characteristic of living things is shown by each observation as shown below. [2]

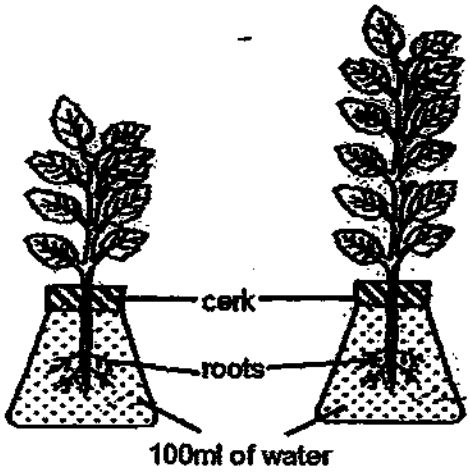
Observation	Characteristic
(a) A caterpillar changes into a butterfly.	Living things _____ _____.
(b) The girl running away from the dog.	Living things _____ _____.
(c) A bird flying to its nest on a tree.	Living things _____ _____
(d) A hen lays eggs. 	Living things _____ _____

2

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

24 A group of pupils wanted to find out if the size of a plant affects the amount of water it takes up. They carried out an experiment using two plants.



(a) Tick (√) the variable(s) that they must keep the same and the variable(s) that must be changed. An example is shown on the table. [2]

Variable	To be kept the same	To be changed
Location where the pots are placed	√	
Amount of water		
Type of plant		
Size of plant		
Duration of experiment		

(b) What do the pupils need to measure to conclude their experiment? [1]

_____

_____

_____

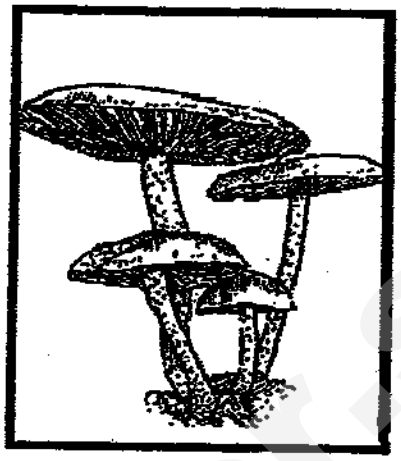
3/3

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

25 Annie was given two picture cards as shown below.

Fern



Mushroom

(a) She classified the fern and mushroom in the same group of living things because they both reproduce by spores. Is Annie correct? Give two reasons for your answer. [2]

_____

_____

_____

(b) In the diagram below, label "X" to show the part of the mushroom where spores are found. [1]

3

Need a home tutor? Visit smiletutor.sg

26 The pictures below show the mould growing on the banana and the Bird's Nest fern.
(Pictures are not drawn to scale)

mould growing on a banana

Bird's Nest fern

(a) Why was there mould growing on the banana? Explain your answer. [2]

(b) How do the mould and the Bird's Nest fern differ in the way they obtain nutrition for their growth? [1]

3

(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

27 Nancy set up an experiment to compare the property of three materials as shown below. Diagram 1 shows a strip of material on the support at the start.
Diagram 2 shows the material bending by a distance when a weight was hung in the middle of the material.

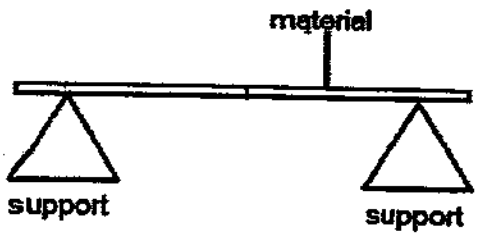


Diagram 1

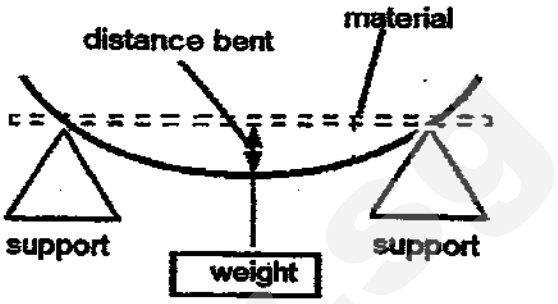


Diagram 2

Nancy tested three strips of materials, P, Q and R. She measured the distance bent for each rod when the same weight was hung on the strip of material and recorded the results as shown in the table below.

Material	Distance bent (cm)
P	4
Q	8
R	2

(a) Which property of materials was Nancy trying to compare? [1]

_____

Nancy wanted to use one of the materials to make a belt as shown below.

(b) Based on the table of results, which material, P, Q or R, is most suitable for making the belt? Explain your answer. [1]

_____

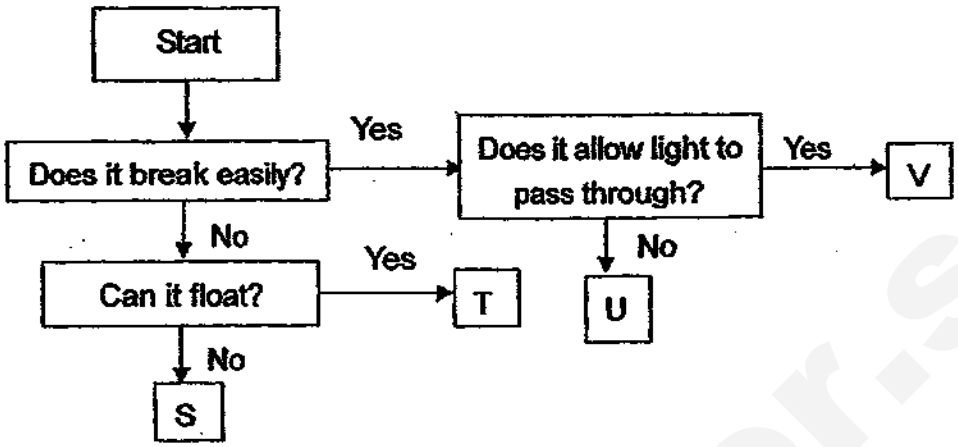
_____

2

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

28 Study the flowchart below carefully. U, V, S and T are different types of materials.



(a) What could be a suitable material represented by S? [1]

_____

(b) Which material is most suitable for making the lens of a magnifying glass? Give a reason for your answer. [1]

_____

_____

2

End of Booklet B

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : MGS

SUBJECT : SCIENCE

TERM : SA1

ORDER CALL :

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

Q21) a) C. Insects have 6 legs, 3 body parts and a pair of feelers but Animal C has a pair of feelers but not 3 body parts and 6 legs.

b) Non-living thing. Non living things need air, food and water to survive. The web does not need air, food and water to survive.

Q22) a) It does not have flowers and grows in water.

b) water – B land – C water – D land – A

Q23) a) Living things grow.

b) Living things respond to changes.

c) Living things move from places to places on its own.

d) Living things reproduce.

Need a home tutor? Visit smiletutor.sg

Q24) a) Amount of water – To be kept the same

Type of plant – To be kept the same

Size of plant – To be changed

Duration of experiment – To be kept the same.

b) How much water is left.

Q25) a) A fern is a plant and makes its own food while the mushroom feeds on other living things which may be dead or alive where their growing on for food. A fern is a non-flowering plant while mushroom is a fungi.

Q26) a) Spores in the air landed on the banana and grew when there was air, warmth food and water. Mould reproduce by spores.

b) Bird's Nest Fern make its own food while the mould feeds on the banana where it is growing on for food.

Q27) a) Flexibility.

b) Q. Q is the most flexible and can be bent easily compared to P and R. A belt needs to be flexible so that we can wear it around our waist and keep it easily.

Q28) a) Metal

b) V. It allows light to pass through and the person using it can see through it.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

SEMESTRAL ASSESSMENT 1
2018

BOOKLET A

Date : 8 May 2018
Duration : 1 h 20 min

Name : _____ ( )

Class: Primary 3 ( )

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

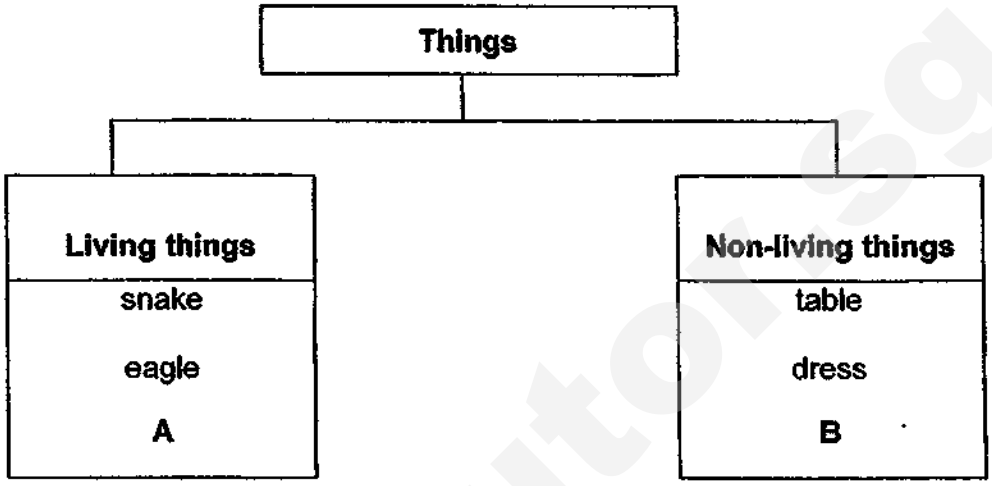
Booklet A consists of 15 printed pages including this cover page.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

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. Study the diagram below.



Which one of the following best represents A and B?

	A	B
(1)	rock	chair
(2)	plant	horse
(3)	cat	bottle
(4)	fish	bacteria

Need a home tutor? Visit smiletutor.sg

2. Jane found some animal X. She placed them in an open tank and fed them with the same amount of food and water daily. She observed the changes that took place and recorded her observations below.

Number of Days	Number of animal X
1	2
5	2
10	4
15	8

Jane then made the following statements about living things.

A Living things die.
B Living things reproduce.
C Living things need air, food and water to survive.

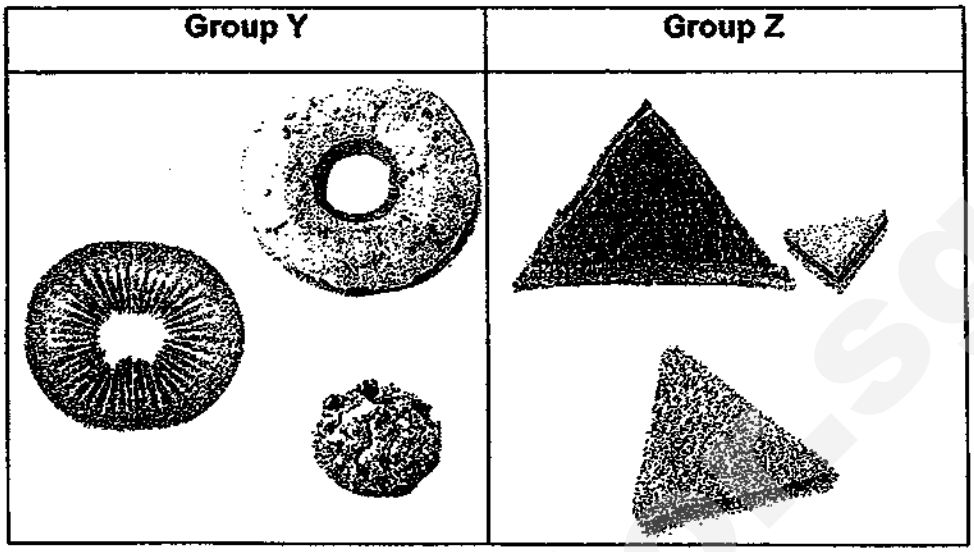
Which of the following characteristic(s) of living things can be seen in her observations of animal X?

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

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

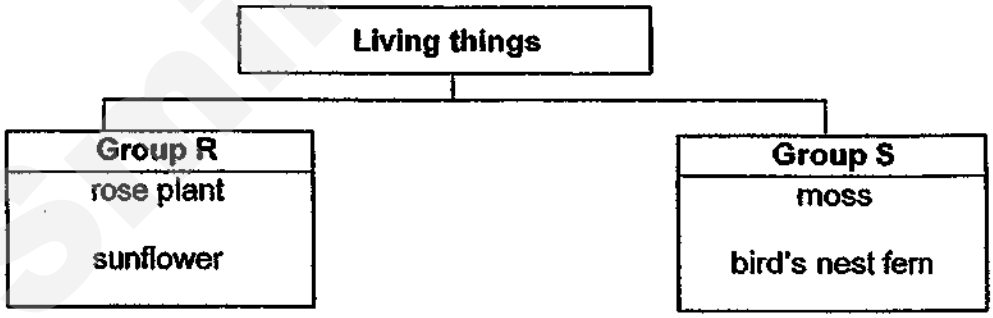
3. Study the group of objects in the picture below.



In what way had the objects been classified?

(1) size
(2) shape
(3) material
(4) thickness

4. Study the diagram below.



Which one of the following correctly represents Group R and Group S?

	Group R	Group S
(1)	Have leaves	Do not have leaves
(2)	Reproduce by seeds	Reproduce by spores
(3)	Do not have fruits	Have fruits
(4)	Make food on its own	Cannot make food on its own

Need a home tutor? Visit smiletutor.sg

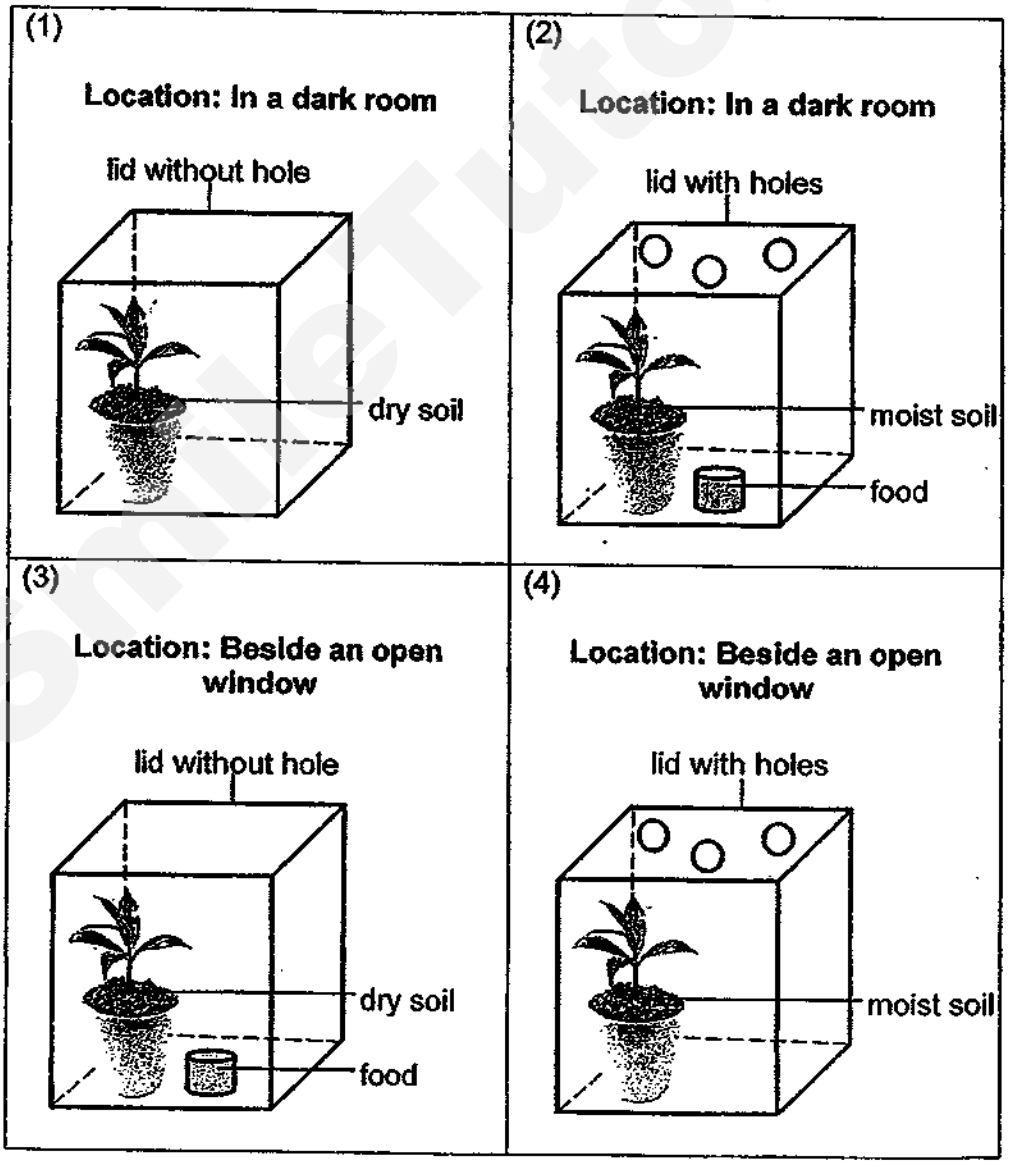
5. Elizabeth made the following statements.

A All plants produce fruits.
B Plants grow on land only.
C Leaves are all oval in shape.
D Some stems of plants are found underground.

Which of the statements above are **incorrect**?

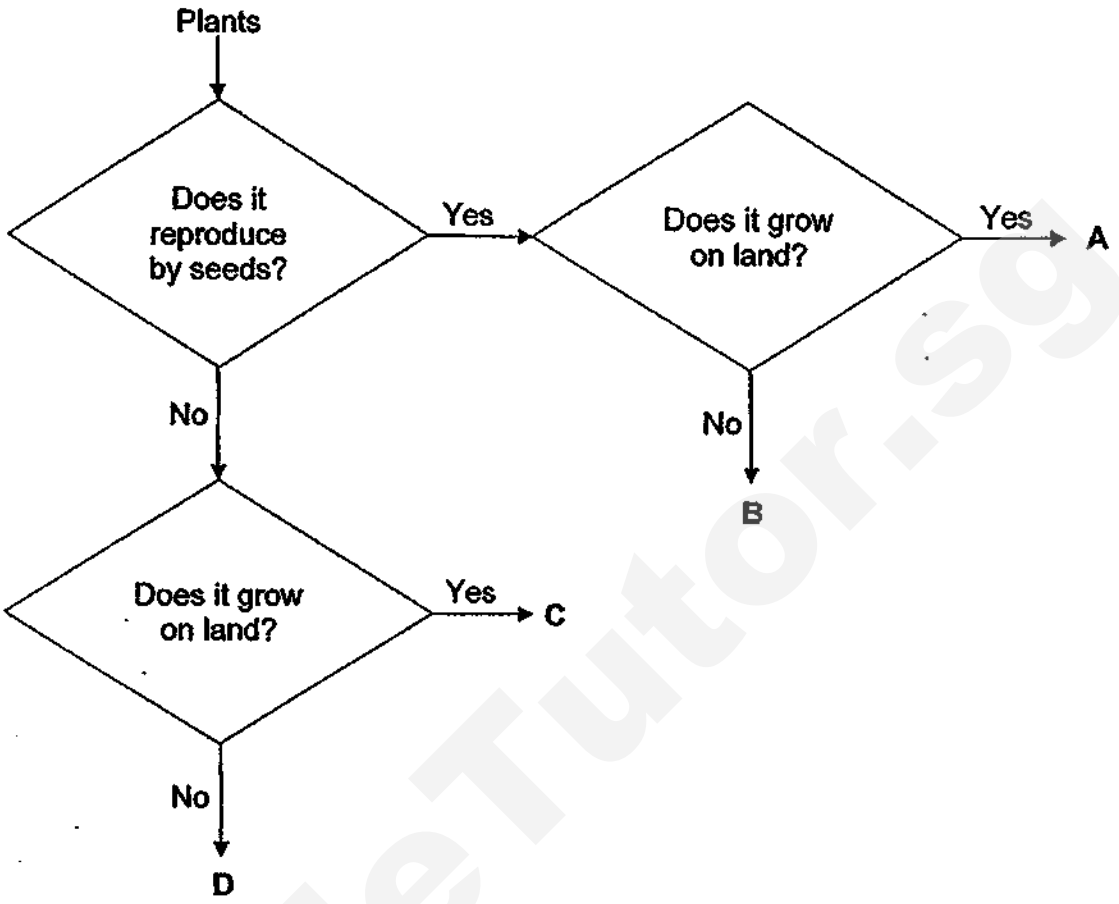
(1) A and B only
(2) C and D only
(3) A, B and C only
(4) A, B, C and D

6. John placed 4 identical plants in 4 boxes that allow most light to pass through. He placed the plants in different conditions. Which one of the following plants would survive for the longest period of time?



Need a home tutor? Visit smiletutor.sg

7. Study the flowchart below.



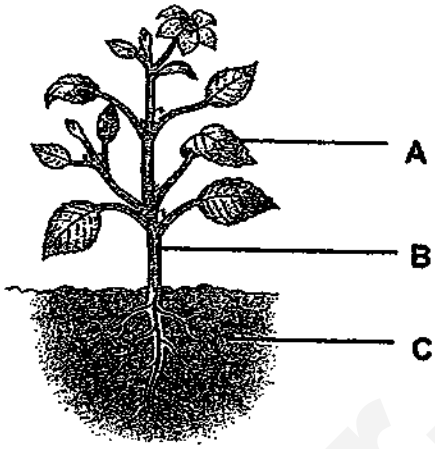
Plant M

Based on the flowchart, which letter A, B, C or D would most likely represent Plant M?

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

Need a home tutor? Visit smiletutor.sg

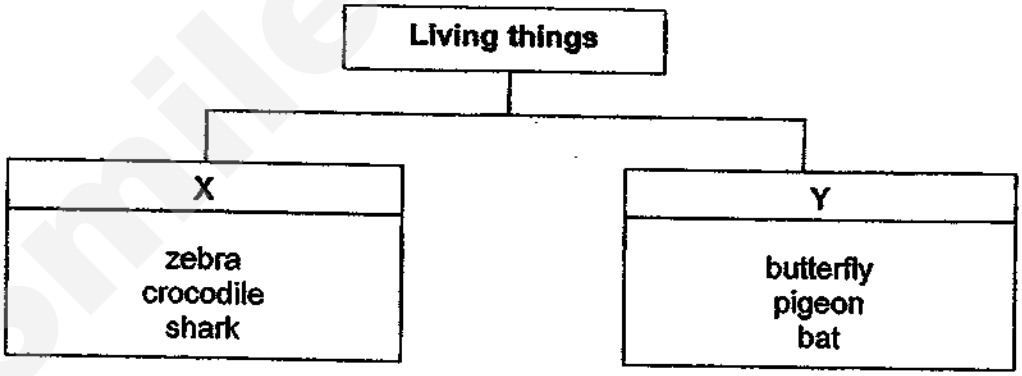
8. Study the diagram below.



Which one of the following correctly shows the labelled parts of a plant?

	A	B	C
(1)	stems	roots	flowers
(2)	flowers	leaves	stems
(3)	roots	flowers	leaves
(4)	leaves	stems	roots

9. Study the classification below.



Based on the classification diagram above, which one of the following headings best represents headings X and Y?

	X	Y
(1)	give birth to young	lay eggs
(2)	live in water	live on land
(3)	have scales	have hard outer covering
(4)	cannot fly	can fly

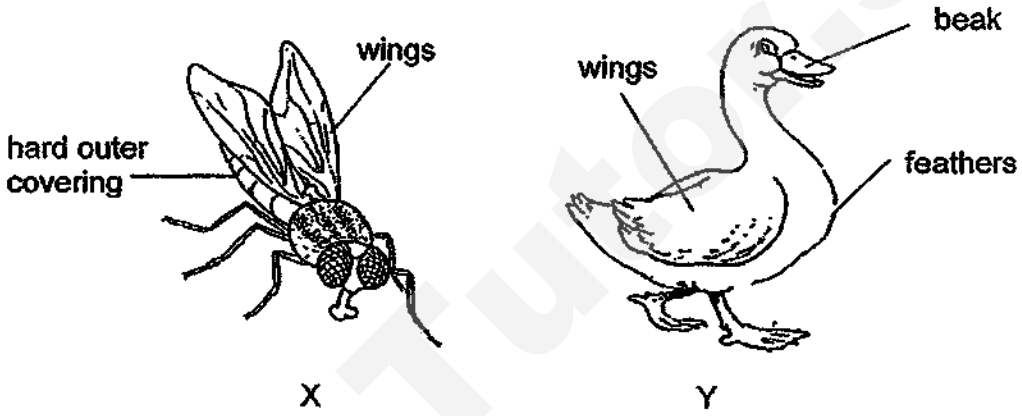
Need a home tutor? Visit smiletutor.sg

10. John found an unknown animal with its young near a pond. He observed that animal's characteristics and grouped them as a mammal.

Which one of the following characteristics could he have observed to group the animal as

(1) It has feathers.
(2) It is able to crawl and swim.
(3) It provides its young with milk.
(4) It moves on both land and in water.

11. Study the pictures below.



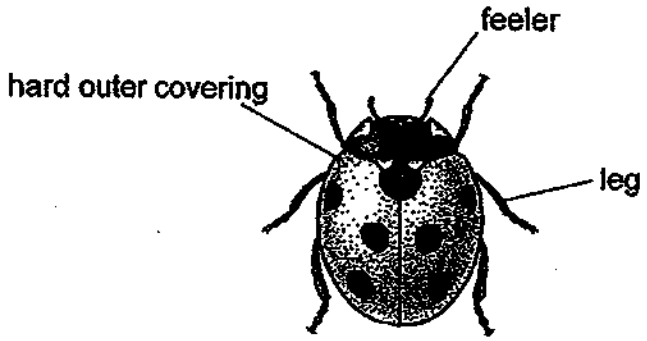
Based only on the pictures of the animals above, which of the following statement(s) is/are correct?

A Both have wings.
B Both have same outer covering.
C Both have same number of legs.

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

Need a home tutor? Visit smiletutor.sg

12. Study the picture of a beetle below.



The following statements were made about the insect.

A It is an insect because it has feelers.
B It is an insect because it has 3 pairs of legs.
C It is an insect because it has a hard outer covering.
D It is an insect because it is colourful and has many patterns.

Which of the statements above help to identify the beetle as an insect?

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

13. Ali was asked to compare an insect and a fish. He made the following statements.
Which one of the following states the difference between insects and fish?

	insect	fish
(1)	can swim	cannot swim
(2)	live in water	live on land
(3)	have hard outer covering	have scales
(4)	gives birth to young	lays eggs

Need a home tutor? Visit smiletutor.sg

The following table is used for questions 14 and 15.

characteristics	animal X	animal Y
It lays eggs	✓	
It has gills	✓	
It has scales	✓	
It lives in water	✓	✓

14. Hui Ling made the following statements about animals X and Y.

A Both breathe using gills.
B Both reproduce by the same way.
C Both have the same outer covering.

Which of the statement(s) above is/are **false**?

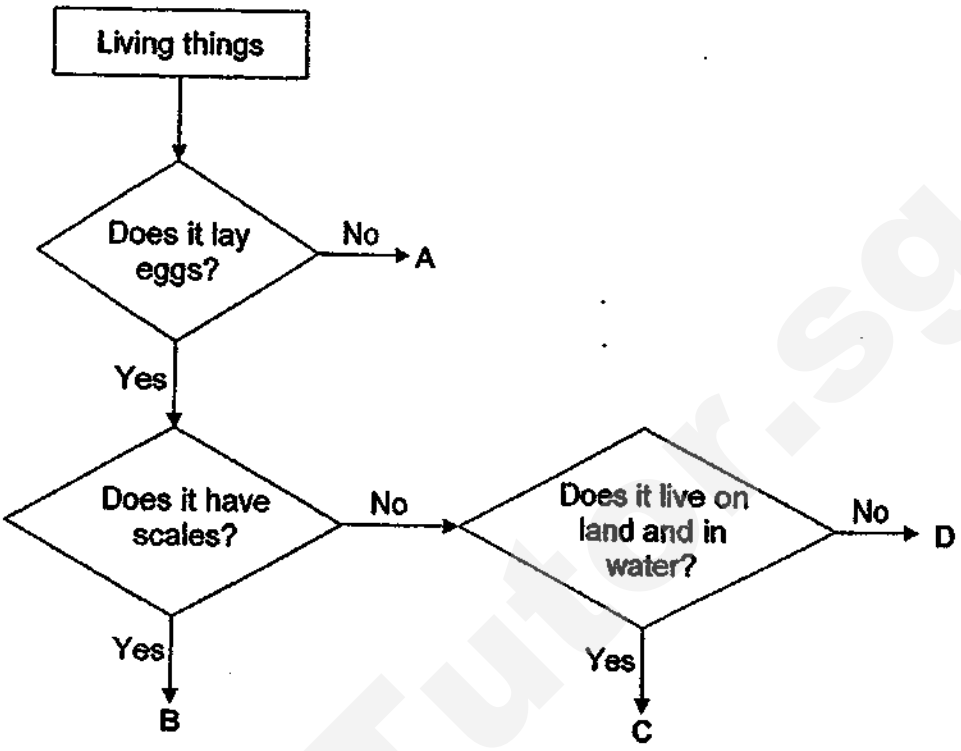
(1) B only
(2) A and C only
(3) B and C only
(4) A, B, and C

15. Which one of the following correctly represents the animal groups for X and Y?

	animal X	animal Y
(1)	fish	reptile
(2)	insect	reptile
(3)	fish	mammal
(4)	insect	mammal

Need a home tutor? Visit smiletutor.sg

16. Study the flowchart below.



Which one of the following animals represent animals A, B, C and D correctly?

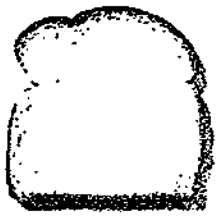
	A	B	C	D
(1)	cat	goldfish	frog	parrot
(2)	parrot	goldfish	cat	lizard
(3)	cat	lizard	parrot	frog
(4)	lizard	cat	frog	goldfish

17. Which one of the following statements is **correct**?

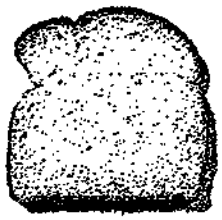
(1) All fungi are harmful.
(2) All bacteria are useful.
(3) Bacteria are microorganisms.
(4) Fungi can only feed on dead organisms.

Need a home tutor? Visit smiletutor.sg

18. Sammy conducted an experiment. She placed two identical slices of bread on the table as shown in the diagram below.



moist bread

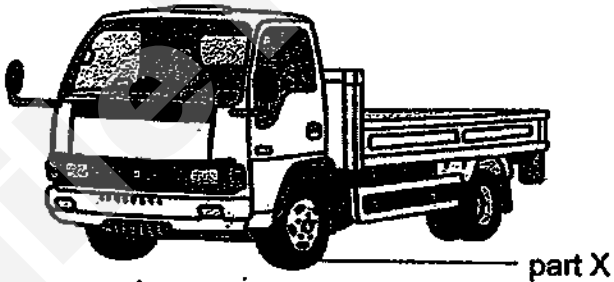


dry bread

After 3 days, Sammy observed that black dots were growing on the moist bread. What was Sammy trying to find out?

(1) To find out if fungi reproduce by spores.
(2) To find out if fungi need moisture to grow.
(3) To find out if fungi can make their own food.
(4) To find out if fungi can feed on dead or living things.

19. Fabian wanted to select the most suitable material to build part X of the lorry. He conducted a few tests on materials A, B, C and D and recorded the results in the table below.



lorry

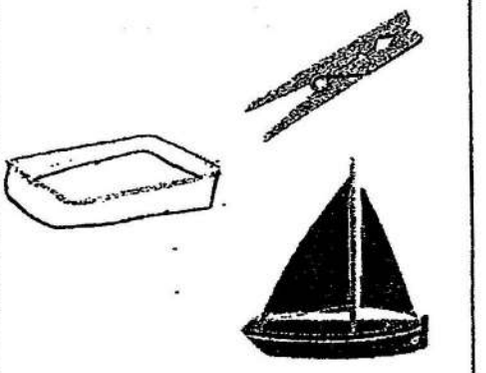
Material	Strong	Flexible	Waterproof	Allow most light to pass through
A	✓			
B	✓		✓	
C			✓	✓
D	✓	✓	✓	

Which one of the following material is the most suitable to make part X?

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

Need a home tutor? Visit smiletutor.sg

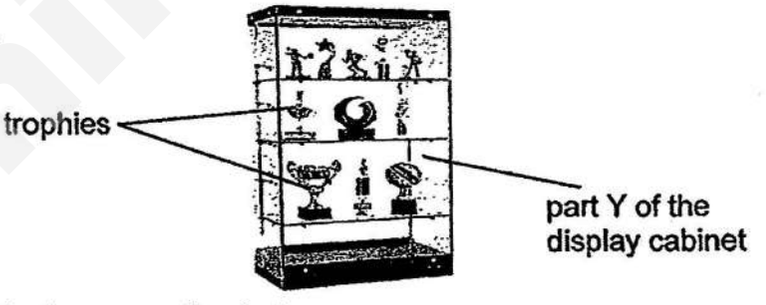
20. Study the two groups of items below carefully.

Group A	Group B
	

Which of the following are suitable headings for the above items in Groups A and B?

	Group A	Group B
(1)	Float on water	Sink in water
(2)	Waterproof	Not waterproof
(3)	Can break easily when bent	Cannot break easily when bent
(4)	Allow light to pass through	Do not allow light to pass through

21. Rosnah wanted to use a material to make part Y of a display cabinet to store her trophies.



She listed a few properties below:

A Flexibility
B Transparency
C Waterproof
D Floats on water

Which of the above properties are important when choosing a material to make part Y of the display cabinet?

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

Need a home tutor? Visit smiletutor.sg

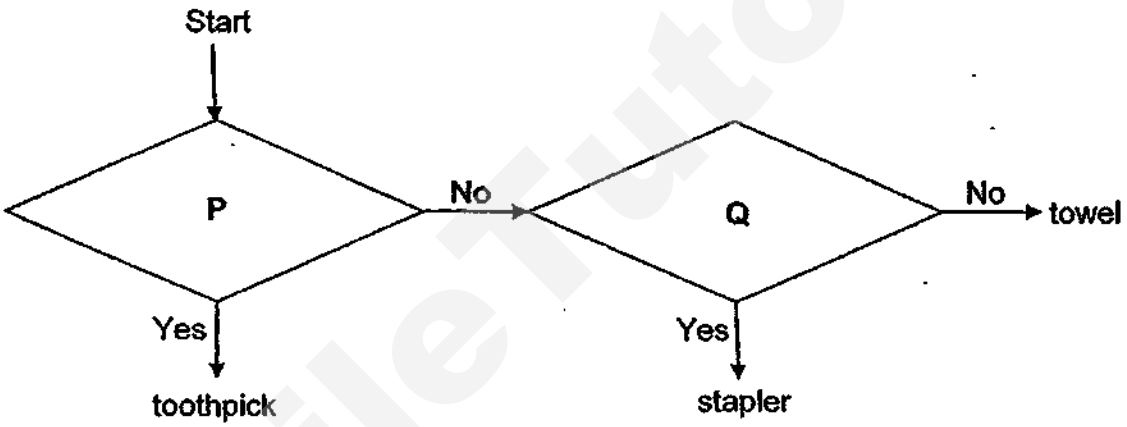
22. Caleb was given an unknown object. He recorded the following observations after conducting some tests.

- It does not absorb water.
- It breaks easily when dropped.
- It does not allow light to pass through.

Which one of the following is the most likely object to be made from the same material?

(1) dress
(2) metal spoon
(3) plasticine
(4) ceramic bowl

23. Study the flow chart below.



Which one of the following represents the missing questions, P and Q, in the flow chart?

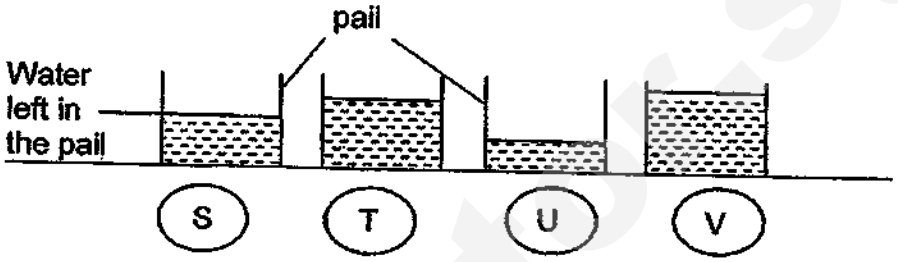
	P	Q
(1)	Is it waterproof?	Does it allow light to pass through?
(2)	Is it strong?	Does it float on water?
(3)	Does it float on water?	Is it waterproof?
(4)	Does it allow light to pass through?	Is it strong?

Need a home tutor? Visit smiletutor.sg

24. Kavitha had 4 pieces of materials, S, T, U and V.

They are of similar size, thickness and mass. She placed each material into four different pails, each with the same amount of water for 10 minutes. After 10 minutes, she removed the 4 materials.

The diagram below shows the water level left in the pails.



Which one of the following materials will be the most suitable to make a bath towel?

(1) S
(2) T
(3) U
(4) V

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

SEMESTRAL ASSESSMENT 1
2018

BOOKLET B

Date : 8 May 2018

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 17 May 2018.
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.

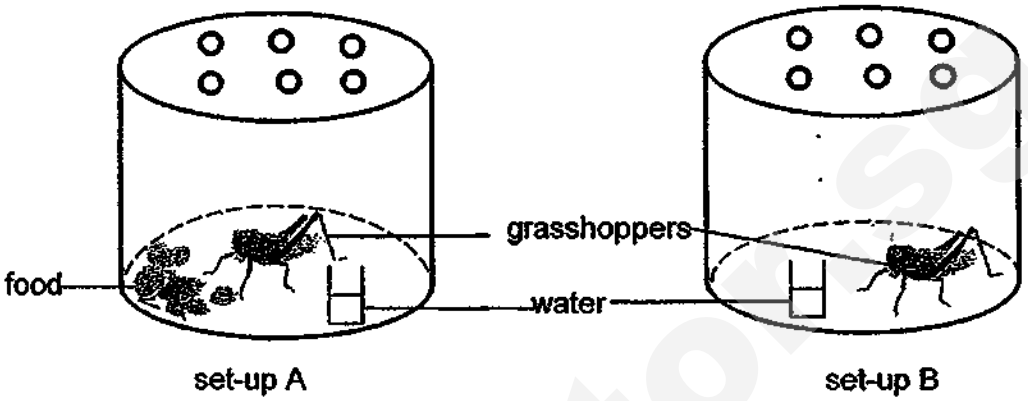
Booklet B consists of 11 printed pages including this cover page.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Section B (32 marks)
Write your answers to questions 25 to 34 in the spaces provided.

25. May Ling set up an experiment. She placed two identical grasshoppers in set-ups A and B, as shown in the diagram below.



(a) After 1 week, the grasshopper in Set up B died. Based on the results, what can May Ling conclude about living things? [1]

(b) May Ling left the set-up without making any changes to the experiment. After 4 months, what will happen to the grasshopper in Set-up A? Explain your answer. [2]

Need a home tutor? Visit smiletutor.sg

26. The table below shows information on four living things, W, X, Y and Z, based on four different characteristics.

	Living things			
Characteristics	**W**	**X**	**Y**	**Z**
Grow in water			✓	
Flowering plant	✓		✓	
Make its own food	✓	✓	✓	
Reproduce by spores		✓		✓

(a) From the information given above, match the livings things to the correct letter. Each letter can be used once only. [2]

Living things	Letter
fern	
mushroom	
water lily	
mango plant	

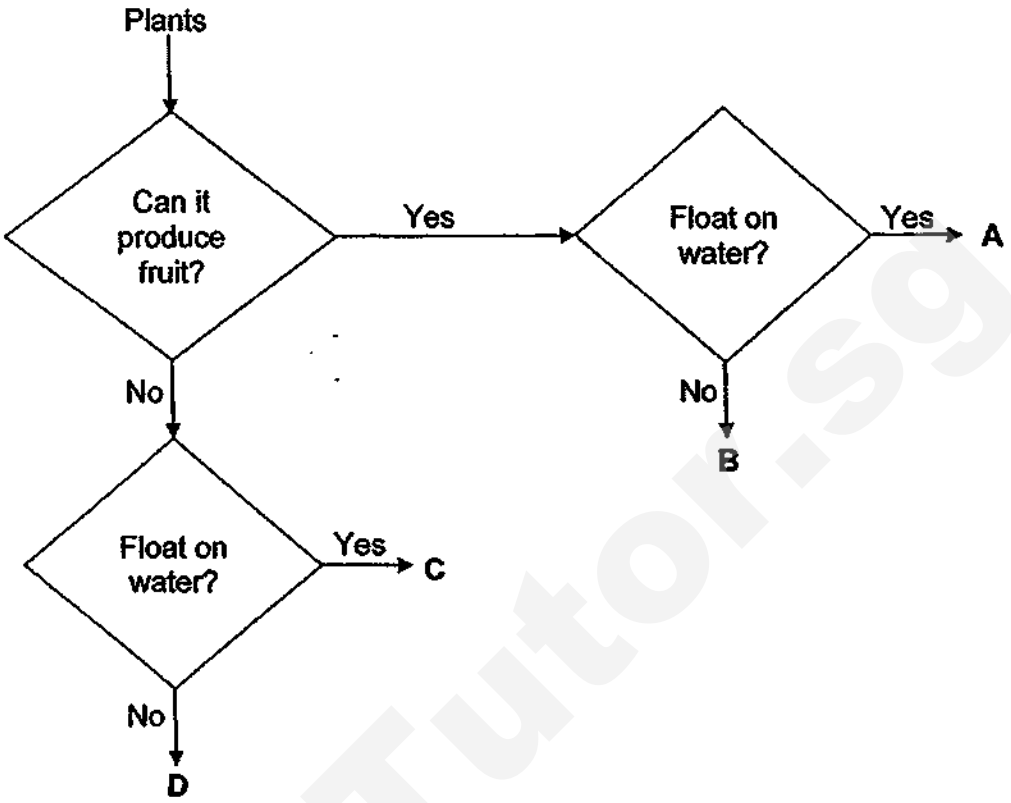
(b) Based on the table, state one difference between living things W and Y. [1]

_____

_____

Need a home tutor? Visit smiletutor.sg

27. The flowchart below is used to classify 4 plants, A, B, C, D



(a) Based on the chart, state a similarity between plant A and plant C. [1]

_____

(b) Based on the chart, state a difference between plant B and plant D. [1]

_____

_____

(c) Kelly's mother said that Plant X reproduce by spores. Kelly said that Plant X can be classified together with plant B. Is the statement correct? Explain why. [2]

_____

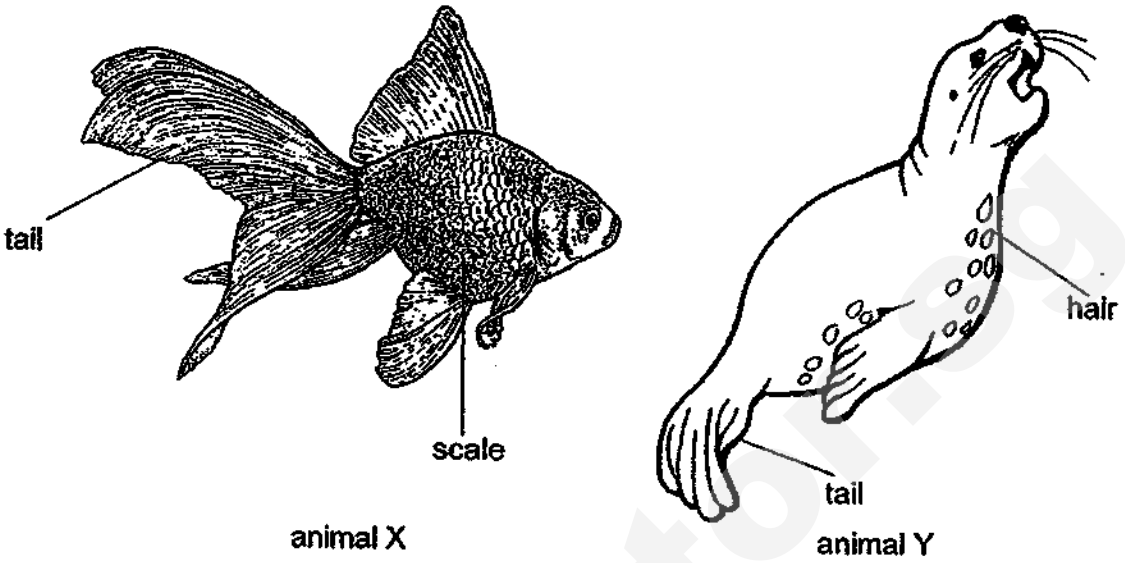
_____

_____

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

28. Study the animals below.



animal X

animal Y

(a) Based only on the diagram above, state one similarity between the two animals. (Do not compare shape, size and colour) [1]

_____

_____

(b) Based only on the diagram above, state one difference in the characteristics between the two animals. (Do not compare shape, size and colour) [1]

_____

_____

Ali wanted to group a dolphin in the same animal group as animal X because it lives in water, just like animal X.

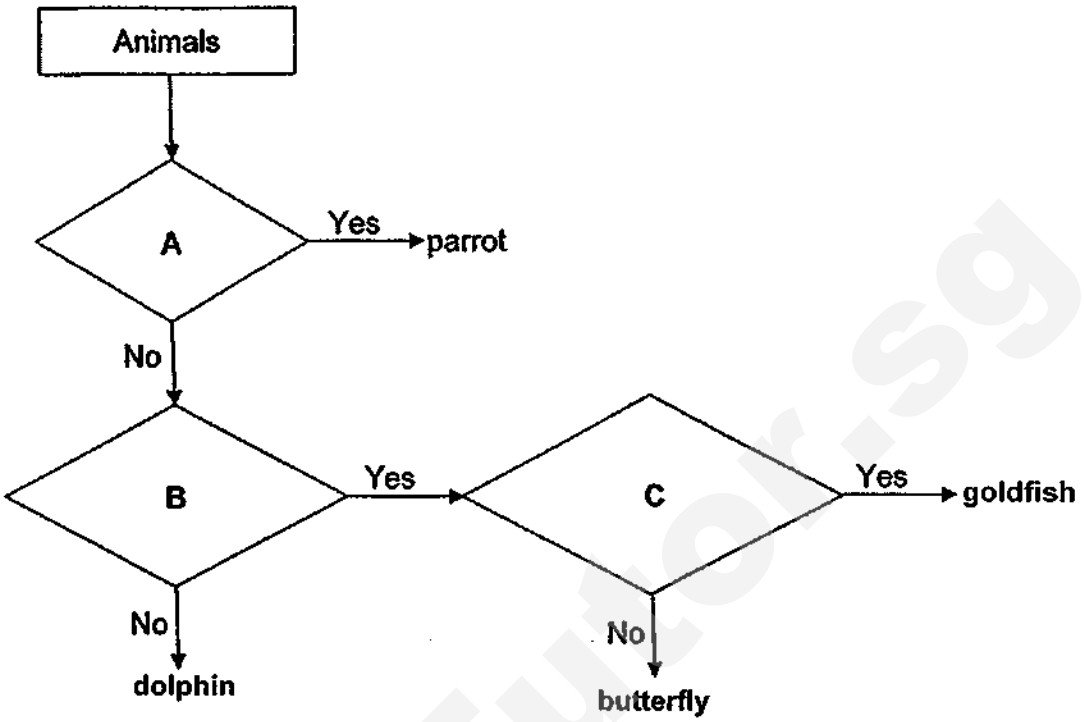
(c) Explain, using the characteristics of a dolphin and animal X, why he is wrong. [1]

_____

_____

Need a home tutor? Visit smiletutor.sg

29. Study the flowchart below



(a) Match the questions in the box below to the correct letters **A, B and C** in the flowchart above. [2]

Questions	A, B or C
Does it have scales?	
Does it have two legs?	
Does it lay eggs?	

(b) State one function of the outer covering of a parrot. [1]

Need a home tutor? Visit smiletutor.sg

30. Study the table below.

X	Y
bat	goldfish
elephant	duck
giraffe	crocodile

(a) Based on the characteristics of the animals, state a suitable heading for groups X and Y. [1]

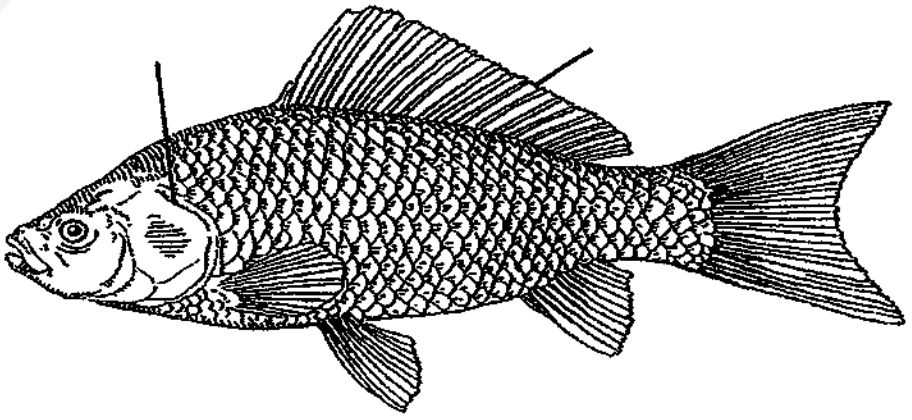
X: _____

Y: _____

(b) (i) Based on the characteristics of the animals, regroup **goldfish, crocodile and duck** into 2 groups.
(ii) Ensure the headings for each group is clearly stated.

[2]

(c) The drawing below is a goldfish. Label the fin and gill cover of the fish. [1]



SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

31. Chloe kept 4 identical slices of bread at different locations. She observed them over a period of 1 week and recorded her observations in the table below.

Conditions at the different locations	Day 0	Day 1	Day 4	Day 7
cool and wet			✓	✓
cool and dry				
warm and wet		✓	✓	✓
warm and dry				✓

Key:
✓: Mould observed

(a) Based on Chloe's result, which two conditions are the **least** suitable for mould to grow? [1]

_____

_____

(b) Which group of living things do moulds belong to? [1]

_____

(c) Chloe kept 2 identical oranges at two different locations, A and B. A tick (✓) shows the conditions of the locations.

Condition	Warm	Wet	Bright	Dark
Location A	✓	✓	✓	
Location B	✓	✓		✓

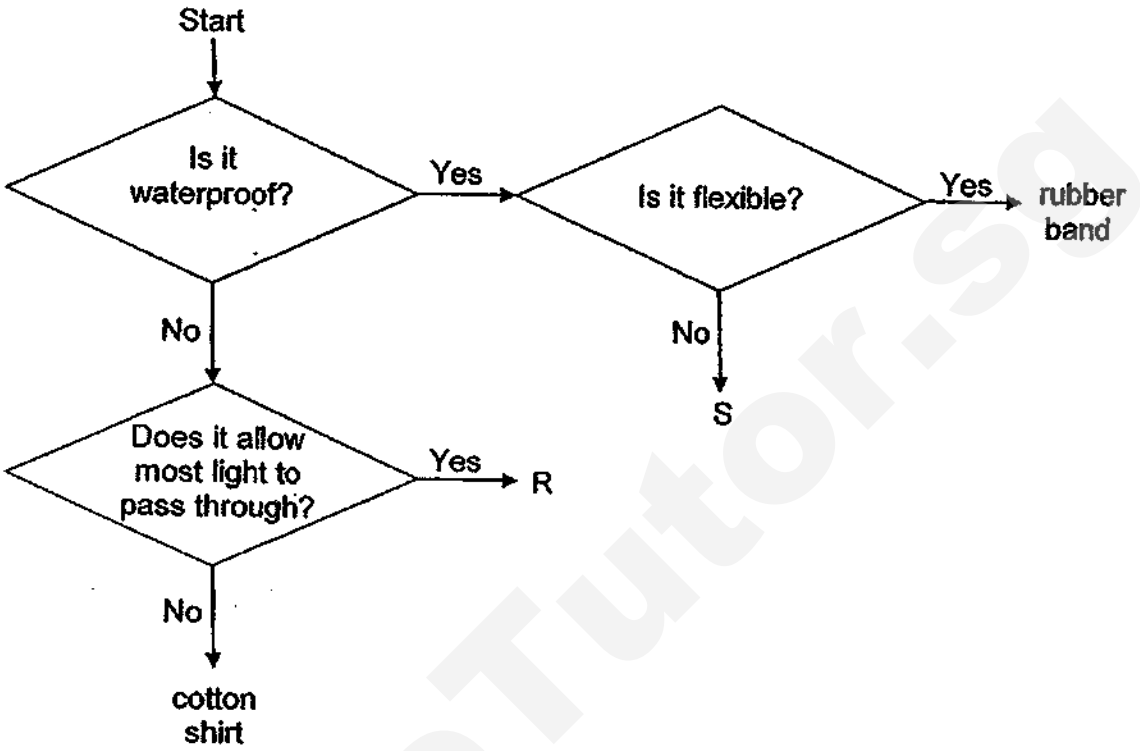
After 3 days, she observed mould growth on the oranges that were kept in Locations A and B. Based on her experiment, what can Chloe conclude about the presence of light in mould growth? [1]

_____

_____

Need a home tutor? Visit smiletutor.sg

32. The flow chart below shows the classification of some materials based on their properties.

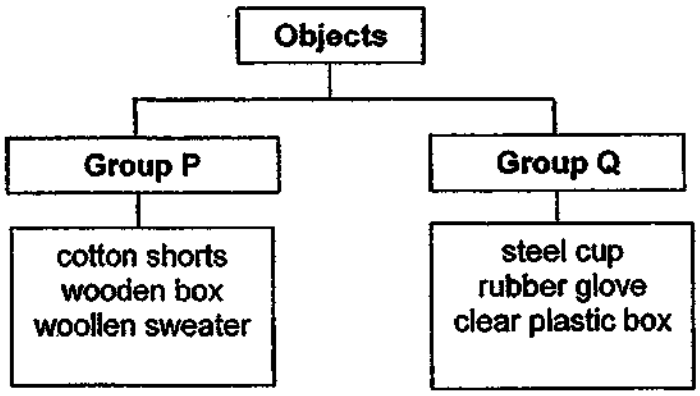


(a) Based on the above flow chart, state **all** the properties of Material S. [1]

(b) Minyi stated that glass window is made of Material R.
Is Minyi correct? Explain your answer. [1]

Need a home tutor? Visit smiletutor.sg

33. Six objects had been classified in the chart as shown below.



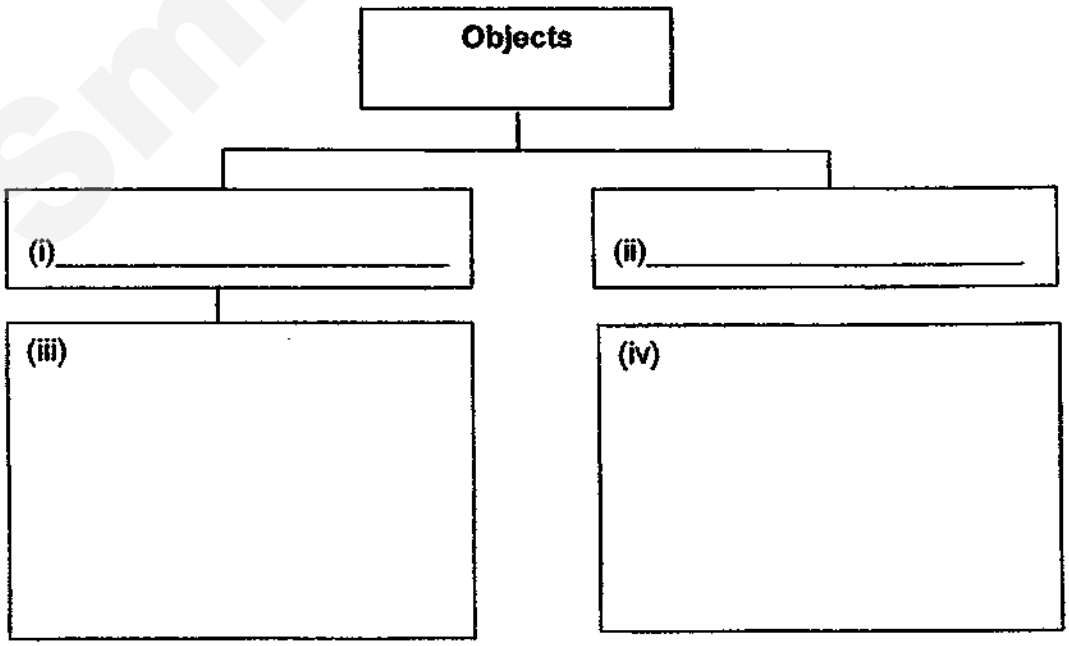
(a) Based on the properties of the materials, state a suitable heading that could represent Groups P and Q. [1]

Group P: _____

Group Q: _____

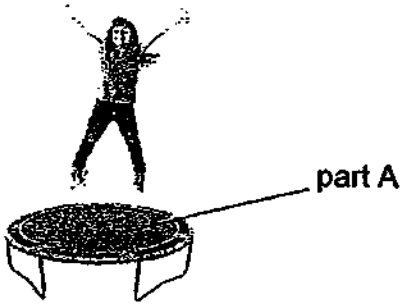
(b) Based on the properties of the materials, reclassify the following objects given into two groups below.
Give a suitable heading for each group. [2]

wooden box, woollen sweater, cotton shorts, rubber gloves



Need a home tutor? Visit smiletutor.sg

34. A trampoline is made of a material that allows children to bounce on it. Megan wanted to find out which one of the three materials, E, F or G, is suitable to make part A of a trampoline as shown below. The materials are of the same thickness, size and weight. She placed loads of 1kg on each material until the material tore.



She recorded the results in the table below.

Material	E	F	G
Maximum number of loads to tear the material	70	50	12

(a) Name 2 properties of a material that are important to make part A. [2]

Property 1: _____

Property 2: _____

(b) Based on the results in the above table, which material, E, F or G, is the most suitable to make part A? Explain your choice. [2]

(i) Material: _____

(ii) Reason: _____

_____

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Name : _____ Class : _____

Analysis of selected open-ended questions 2018 P3 Science SA1

1	3	6	4	11	1	16	1	21	2
2	3	7	1	12	4	17	3	22	4
3	2	8	4	13	3	18	2	23	3
4	2	9	4	14	4	19	4	24	3
5	3	10	3	15	3	20	1		

25. *Key concept : Pupils need to select the correct characteristics of living things based on the experiment.*

25a. Answer : Living things **need food** to survive.
Note : The difference in both setups is that the grasshopper in setup B had no food. The aim of the experiment will be to find out if food will affect the survival of the grasshopper. As air and water is not lacking in both setups, there should not be any mention of air and water. Pupils are to apply their concept to the experiment.

26b. *Key concept : Pupils to be able to gather information from given table.*
Answer : Plant Y grows in water but plant W **does not grow in water.**
Note : Use the wordings given in the table. Write "does not grow in water" instead of "grow on land".

27. *Key concept : Pupils to be able to gather information from flowchart.*
Note : Use the wordings given in the flowchart.

27c. Answer : No, plant X reproduces from spores so it is a non-flowering plant that will not produce fruit but plant B produces fruit so it is a flowering plant that reproduce from seeds.
Note : This is a comparison question. Pupils need to compare the following.
Reproduce by spores(X) vs reproduce by seeds(B)
Non-flowering(X) vs flowering(B)
Do not produce fruits(X) vs produce fruits(B)

28c. Answer : Dolphin has hair but animal X has scales.
Or : Dolphin gives birth to young alive but animal X lay eggs.
Or : Dolphin breathes through lungs but animal X breathes through gills.
Incomplete answer : Dolphin has hair but animal X does not have hair.
Note : must compare the same characteristics for full mark to be awarded.

29c. Answer : Feathers keep the birds warm.
Or : Feathers help the birds to fly.
Or : Feathers protect the birds from injury.
Incomplete answer : Feathers protect the birds.
Unacceptable answer: Feathers make the birds lighter so they can fly. Feathers do not reduce the mass of the birds.

30. *Key Concept :*
- *Reclassification means using a different characteristic to group the organisms listed. There must be examples in each grouping*
- *Habitat is not characteristic of animals.*

30a. X : gives birth to young alive
Y : lay eggs

30b.

Outer-covering of scales	Outer-covering of feathers
goldfish crocodile	duck

Note : Characteristics for Heading in 30b must be different from 30a. Same characteristics must be compared.

31. *Key concept :*
- *Fungi needs warmth and moisture to grow well.*
- *Light is not required for fungi to grow.*

31a. Answer : **Cool and dry** (base on observations given in the table, no fungi was observed for a week in the cool and dry conditions).

31c. Answer : Light does not affect the growth of mould. (mould was observed in both locations)

32b. Answer : No, glass is waterproof but material R is not waterproof.
Note : This is a comparison question. Properties of both material must be given.

33a. Answer : Group P : not waterproof vs Group Q : waterproof
Or : able to absorb water vs not able to absorb water
Note : compare the same characteristics.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

33b *Key Concept :*

- *Reclassification means using a different characteristic to group the organisms listed. There must be examples in each grouping*

Flexible	Not flexible/ stiff
Woollen sweater Cotton shorts Rubber gloves	Wooden box

Or : grouped based on buoyancy
Unacceptable grouping : based on strength

Note : Natural and man-made, once alive and never alive are already not in the syllabus as it is not possible to make a clear classification based on these headings. In addition, these are not properties of materials which the pupils are to use to group the objects.

34a. Answer : Strong, flexible, waterproof

34b. Answer:

(i) Material : **E** *(choice)*

(ii) Reason : E can hold **the most** ***(superlative)*** **number of loads before tearing** *(data)* so it is the **strongest** *(superlative, explanation)* material.

Note : When question is asked in "superlative", in this case ...the **most** suitable material..., pupils have to answer using superlative terms. When data (graph, table) is given in the question stem, it has to be used to explain the answer. Expected answer will have 3 parts, choice, data and explanation.

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT (1) 2018

Section A	/36
Section B	/24
Your score out of 60 marks	
Parent's signature	

Name : _____ Index No. ____ Class: P3 __

8 May 2018 **SCIENCE** Attn: 1h 15 min

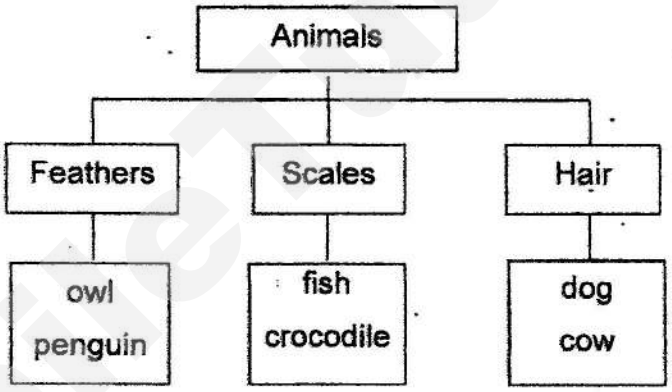
SECTION A (18 x 2 marks)

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. Lily grouped some animals as shown in the diagram below.



Which one of the following correctly describes how the animals are grouped?

(1) Movement

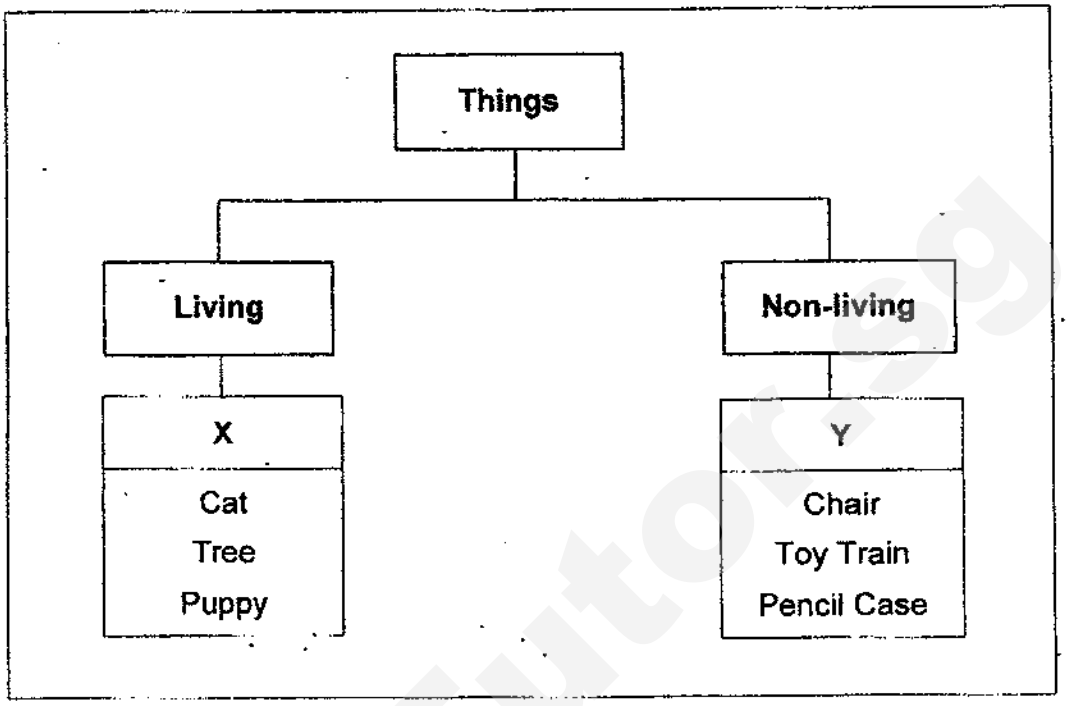
(2) Number of legs

(3) Body coverings

(4) Method of reproduction

Need a home tutor? Visit smiletutor.sg

2. In the diagram below, Tom classified some things into group X and Y.



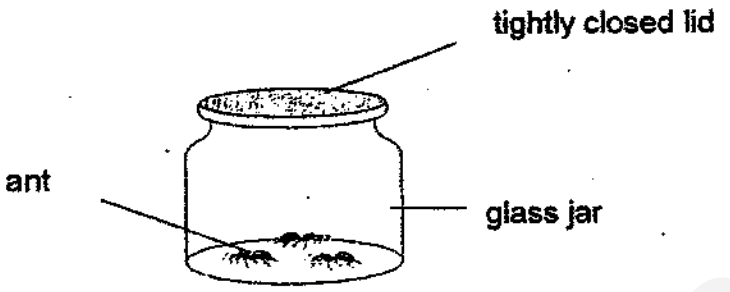
Which one of the following did Tom classify correctly?

	Group X	Group Y
(1)	fried chicken	elephant
(2)	crocodile	worm
(3)	paper boat	rubber snake
(4)	elephant	fishball

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

3. Ali kept some ants in a glass jar as shown in the diagram below.



What must Ali do to ensure that the ants will survive?

A Make holes on the lid.
B Give the ants some food.
C Give the ants some water.

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

4. Which one of the following statements show the characteristics of living things?

A A ball rolled down the stairs.
B The water bubbled when boiled.
C A dog barked when it spotted a stranger.
D Alice could not fit into her dress which she had bought a year ago.

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

SmileTutor.sg
Need a home tutor? Visit smiletutor.sg

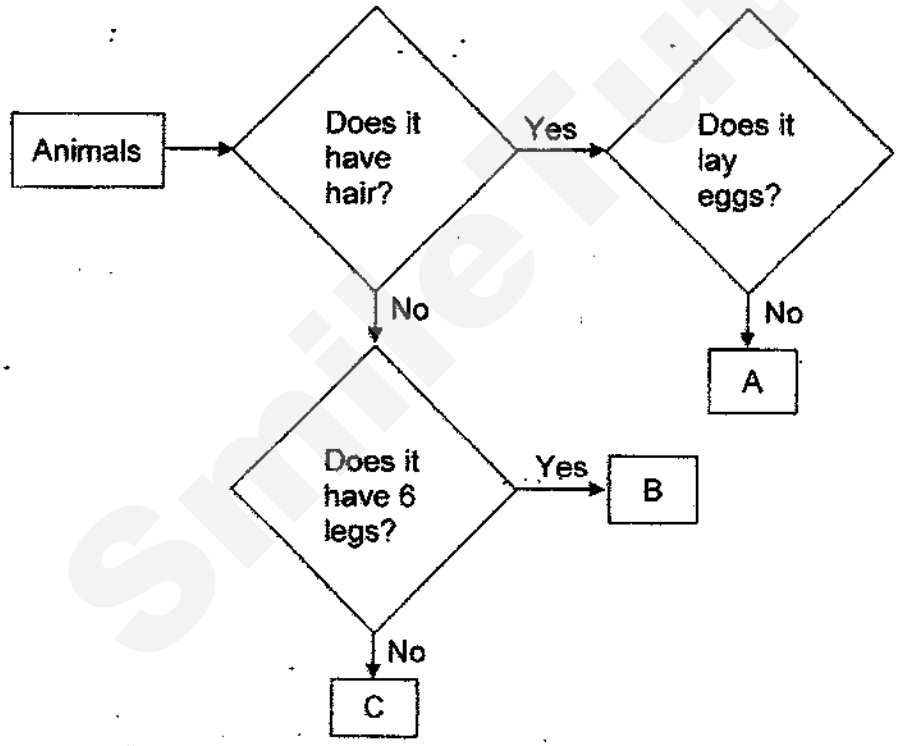
5. Three boys made the following statements about an animal.

Alan: It has moist skin.
Bala: It reproduces by laying eggs.
Calvin: It can live both on land and in water.

Which group does the animal belong to?

(1) Birds
(2) Insects
(3) Mammals
(4) Amphibians

6. Study the flowchart below.



What animal group correctly represents A, B and C?

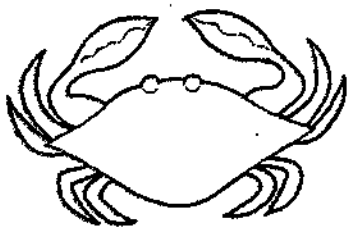
	A	B	C
(1)	fish	amphibian	bird
(2)	mammal	insect	fish
(3)	insect	mammal	fish
(4)	amphibian	fish	bird

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

7. Based on your observations of the following animals, which one of the following is an insect?

(1)



(2)

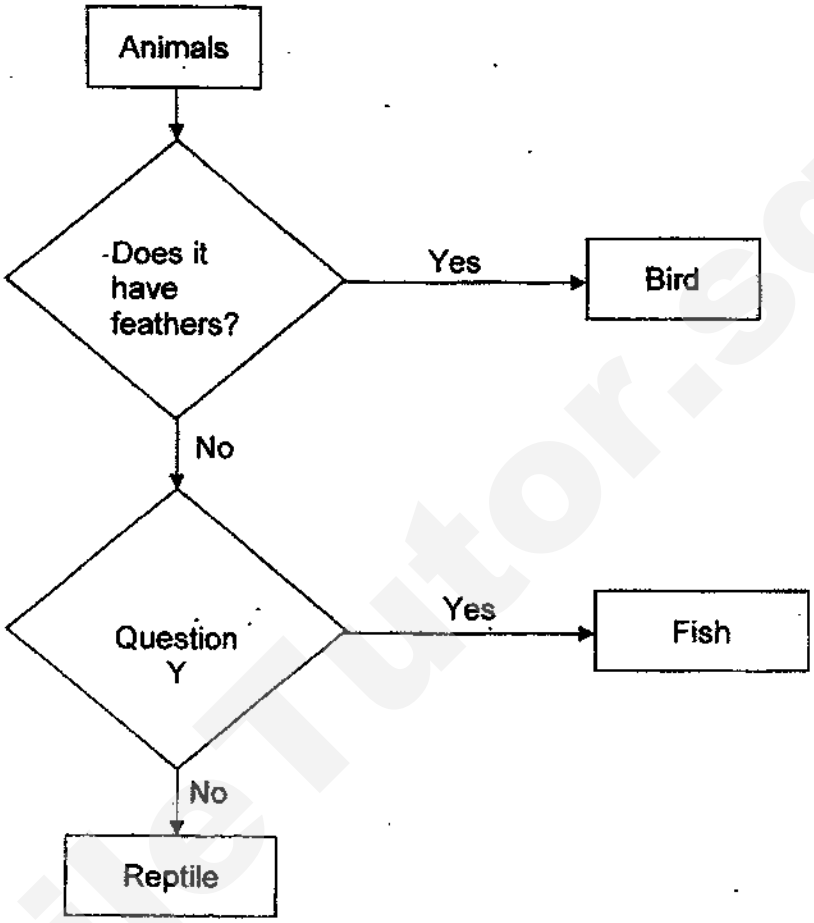
(3)

(4)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

8. Study the chart below.



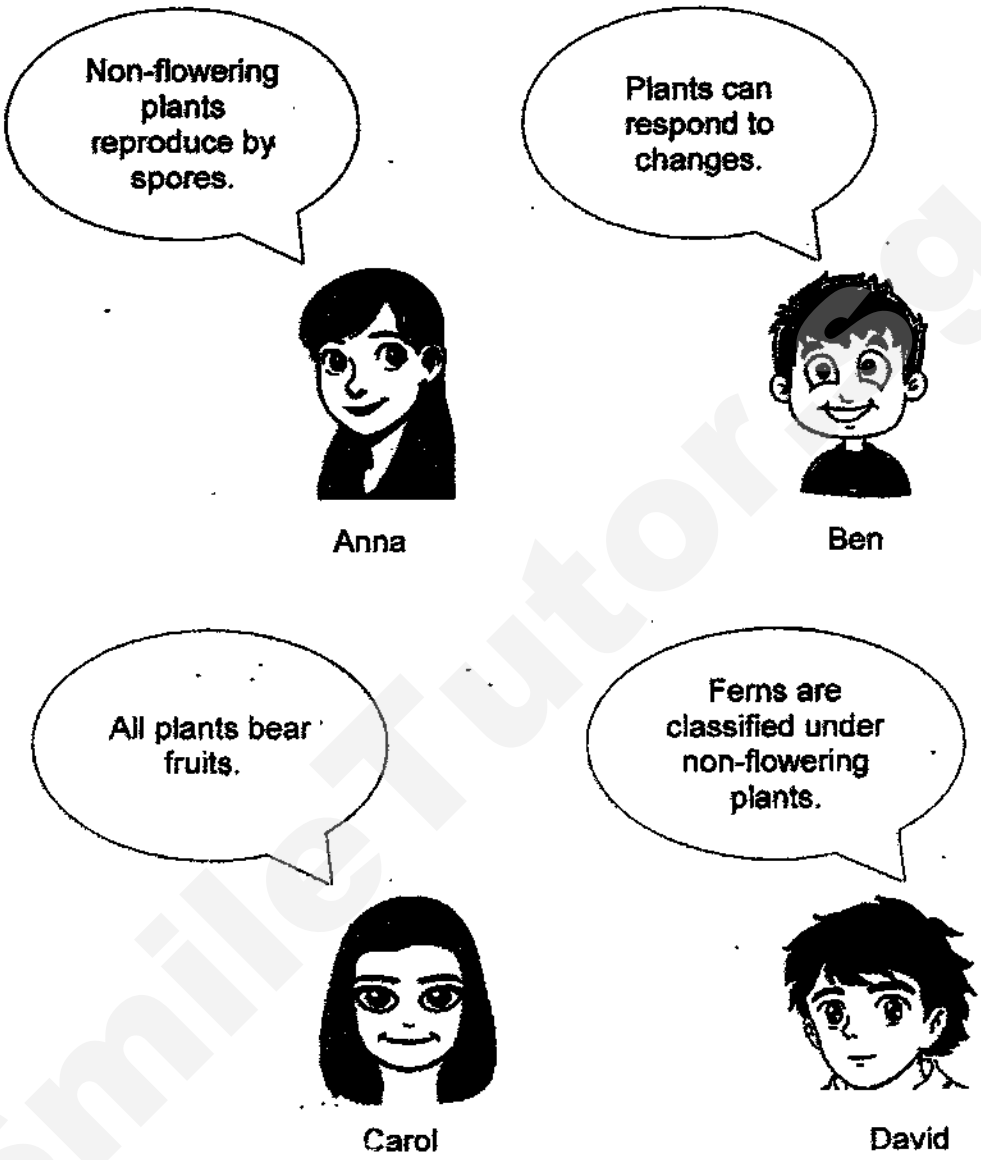
What can Question Y be?

(1) Does it have hair?
(2) Does it have gills?
(3) Does it have 6 legs?
(4) Does it have scales?

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

9. Four children made the following statements about plants.

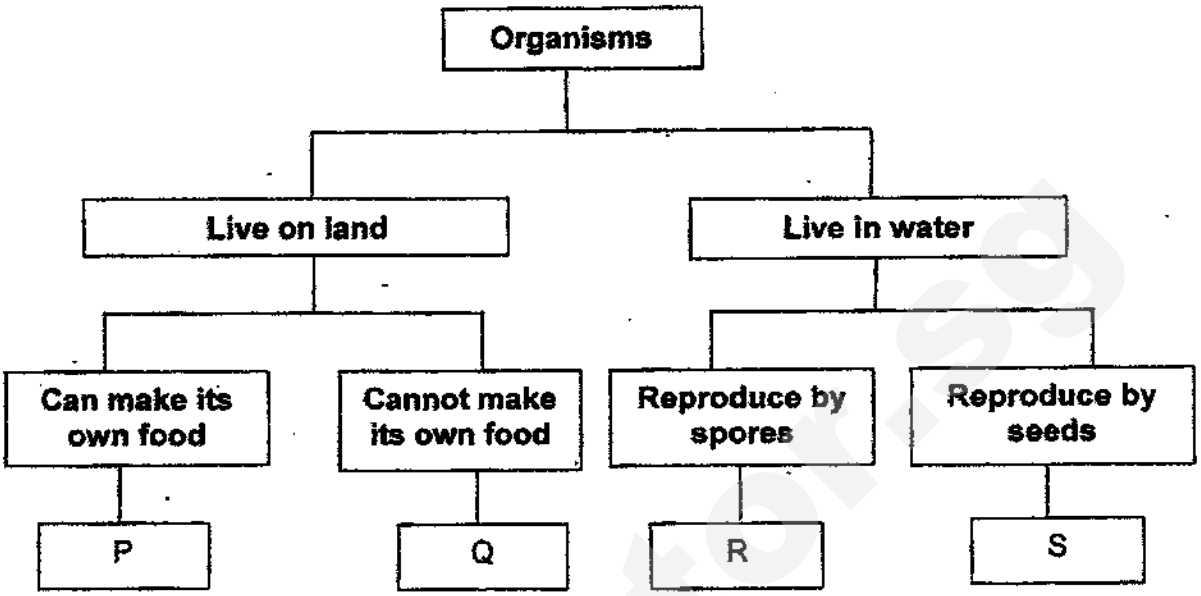


Which of the children made the correct statement(s) about plants?

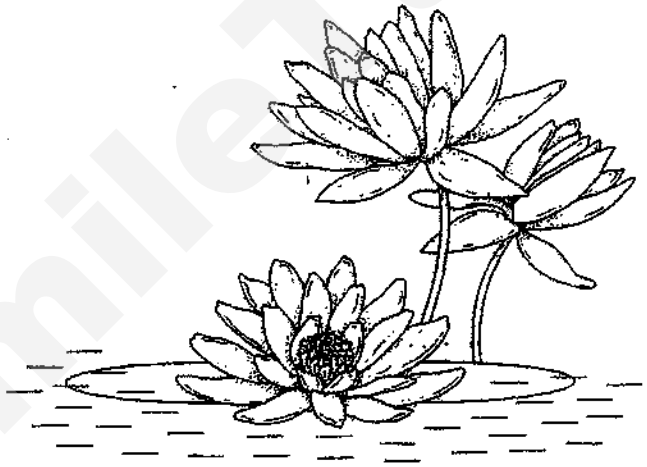
(1) Carol only
(2) Ben and David only
(3) Anna, Ben and Carol only
(4) Anna, Ben and David only

Need a home tutor? Visit smiletutor.sg

10. The classification chart below shows how some organisms are grouped.



Peter wants to classify Plant X as shown below.



Plant X

Which of the following correctly represents plant X?

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

Need a home tutor? Visit smiletutor.sg

11. Abby recorded the characteristics of 4 organisms, P, Q, R and S, found in the school garden. A tick (✓) shows the presence of the characteristic.

Characteristics	Organisms			
	P	Q	R	S
Does it have spores?	✓	✓		
Does it have leaves?		✓	✓	
Does it have fruits?			✓	
Can it be seen with the naked eyes?	✓	✓	✓	

Which of the following best represents a non-flowering plant?

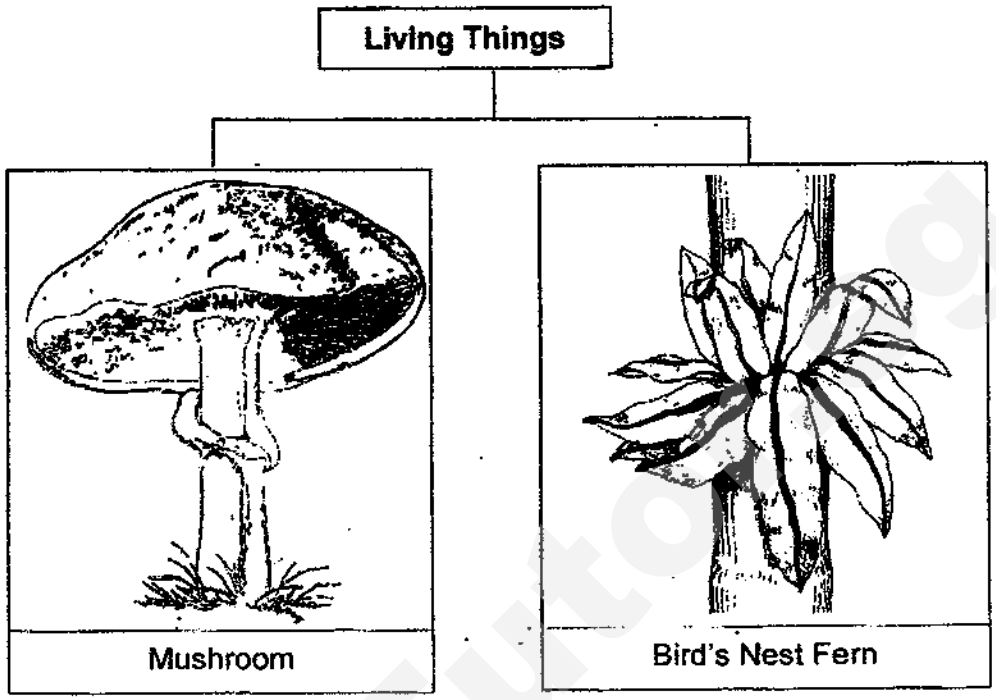
(1) P
(2) Q
(3) R
(4) S

12. Which one of the following statements is true about bacteria?

(1) Some bacteria are useful.
(2) Bacteria are non-living things.
(3) Bacteria reproduce by spores.
(4) Bacteria cannot be grouped under micro-organisms.

Need a home tutor? Visit smiletutor.sg

13. Study the classification chart below.



Which of the following correctly describes the difference(s) between a mushroom and a bird's nest fern?

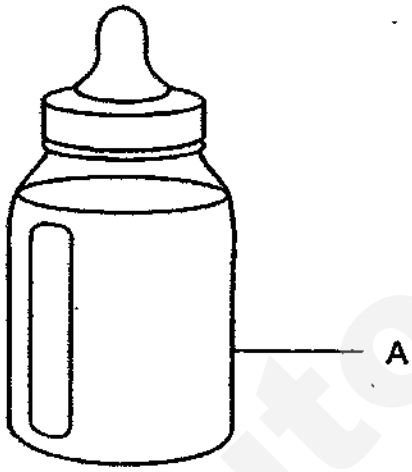
	Mushroom	Bird's Nest Fern
A	cannot reproduce	can reproduce
B	non-flowering plant	flowering plant
C	reproduce by spores	reproduce by seeds
D	cannot make its own food	can make its own food

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

Need a home tutor? Visit smiletutor.sg

14. Mrs Lim needed to buy a milk bottle for her three-year-old son. Part A of the bottle is made up of a material with the following properties:

- It cannot break easily.
- Able to see how much milk was left.



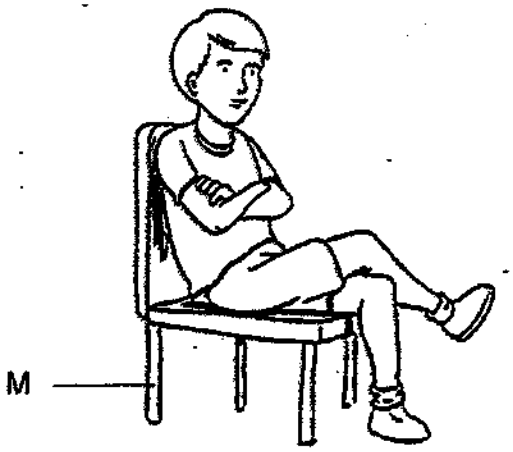
Which material is most suitable to make part A of the milk bottle?

(1) glass
(2) metal
(3) plastic
(4) rubber

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

15. The picture below shows a boy sitting on a chair.



While choosing a material to make M, which of the following properties must be considered to support the mass of the boy?

(1) strength
(2) flexibility
(3) waterproof
(4) degree of transparency

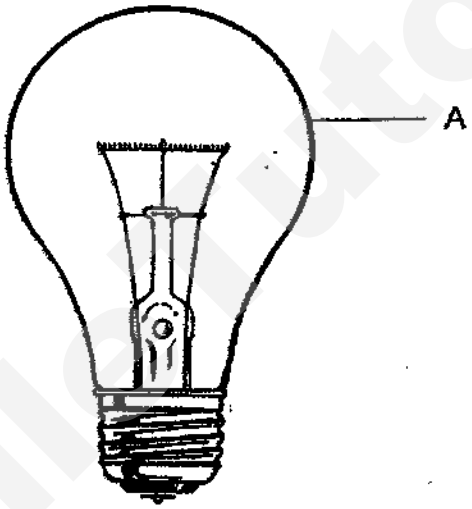
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

16. Susan listed the properties of four materials, P, Q, R and S, as shown in the table below. A tick (✓) shows the presence of the property.

Property	Materials			
	P	Q	R	S
Is it light?	✓			✓
Is it flexible?	✓	✓	✓	
Is it waterproof?	✓	✓		✓
Is it transparent?			✓	✓

The diagram below shows a light bulb.

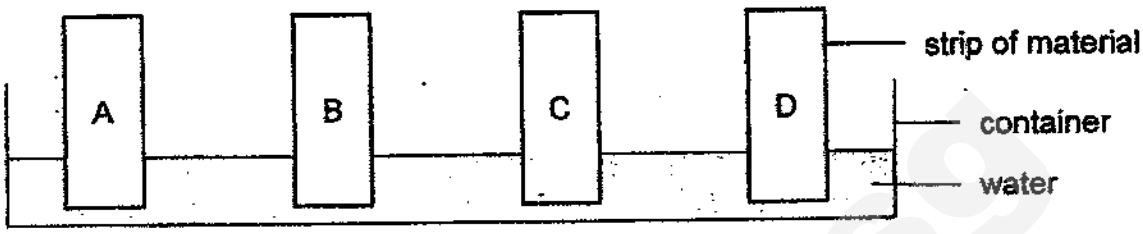


Which material is most suitable to make part A of the light bulb?

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

Need a home tutor? Visit smiletutor.sg

17. Mary conducted an experiment to find out the amount of water absorbed by four similar strips of materials A, B, C and D, of the same size and thickness. She placed the four strips in a container of water for half an hour.



The table below shows the results.

Material	Mass at first (g)	Mass after half an hour (g)
A	2	4
B	2	5
C	2	2
D	2	3

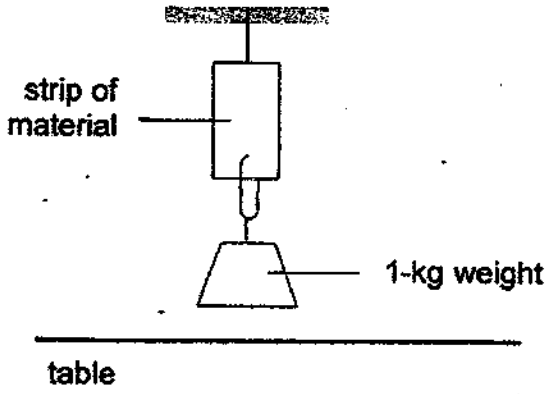
Mary wanted to choose a suitable material for making a pair of gloves to keep her hands dry while washing the dishes.

Based on the results above, which material is most suitable to make the gloves?

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

SmileTutor.sg
Need a home tutor? Visit smiletutor.sg

18. Eliza conducted an experiment as shown below.



She added 1-kg weights to different strips of materials, K, L, M and N. She counted the number of 1-kg weights that can be added to each strip before it started to tear.

She recorded the results as shown in the table below.

Material	Number of 1-kg weights added before the strip started to tear
K	6
L	3
M	4
N	10

Which of the following statements is correct?

(1) Material N is the weakest.
(2) Material L is the strongest.
(3) Material K is stronger than Material L.
(4) Material M is weaker than Material L.

Need a home tutor? Visit smiletutor.sg

Name; _____ ( )

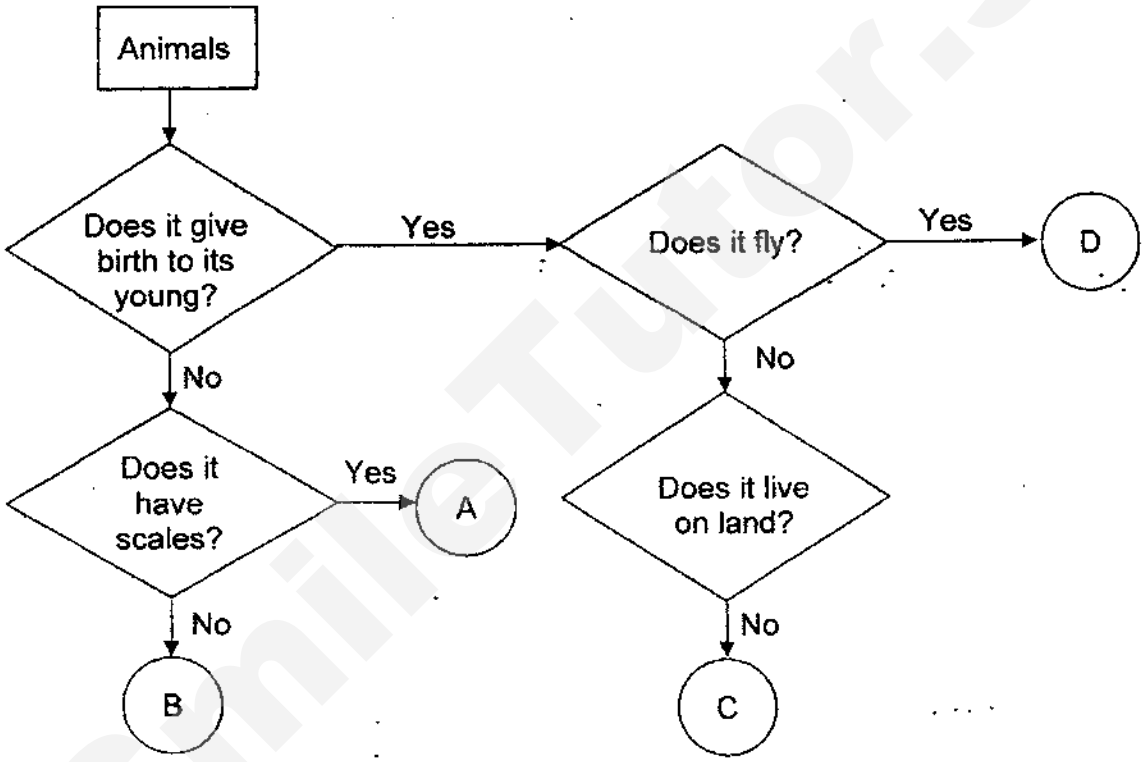
Class: P 3 ( )

24

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. The flow chart below shows how four animals, A, B, C and D, are being grouped.



(a) Name the two characteristics of animal D. [1]

i) _____

ii) _____

(b) State one common characteristic between animals A and B. [1]

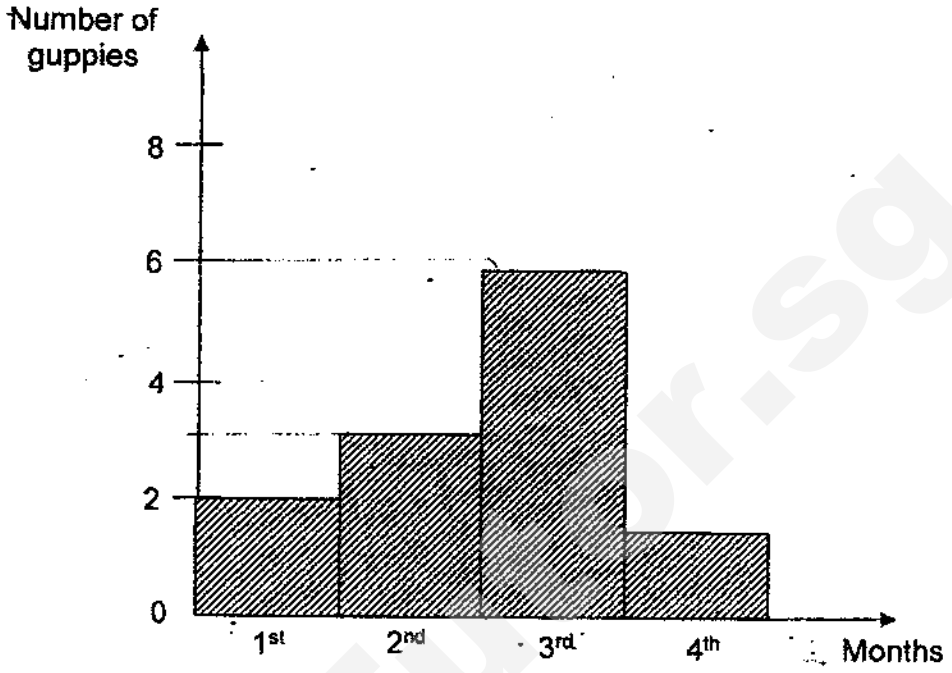
_____

_____

Score 2

Need a home tutor? Visit smiletutor.sg

20. The graph below shows the changes in the number of guppies in a fish tank over four months. The guppies were provided with sufficient air, food and water.



(a) What does the change in number of guppies in the first three months tell us about the characteristic of a living thing? [1]

_____

(b) The owner did not add or remove any guppies. State a possible reason for the decrease in the number of guppies in the fourth month. [1]

_____

_____

Score 2

Need a home tutor? Visit smiletutor.sg

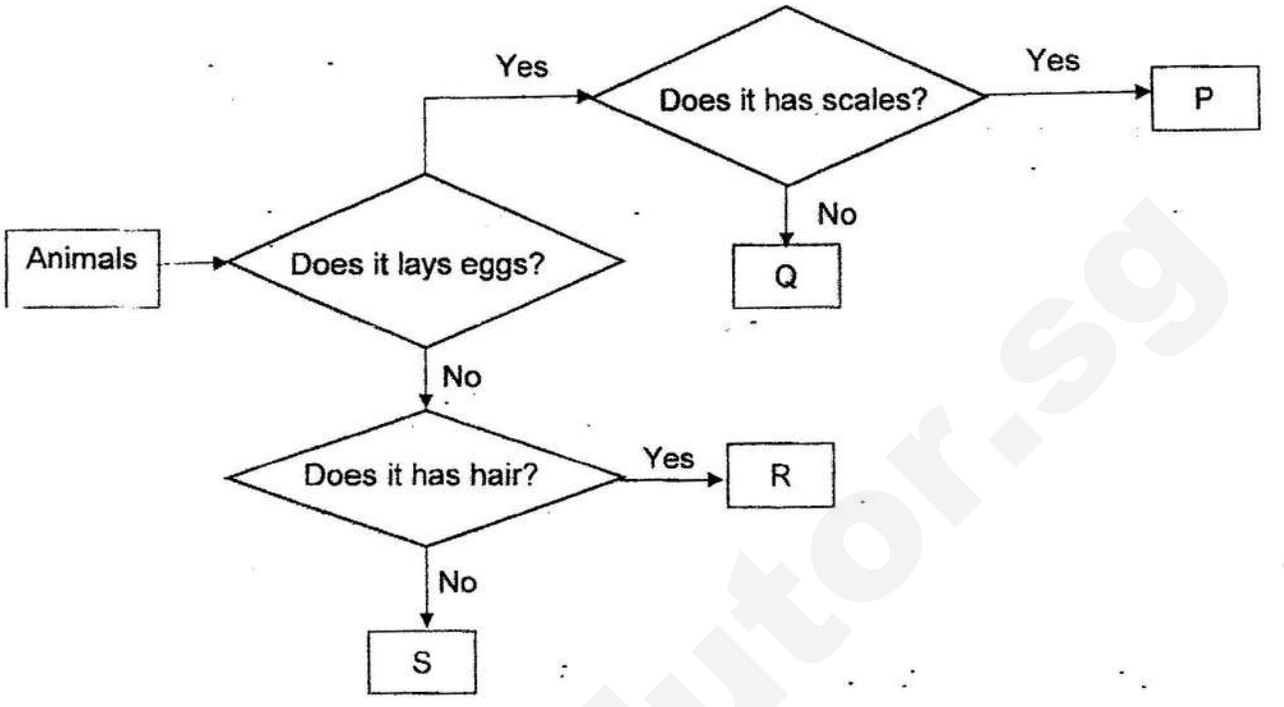
21. Write 'T' for True and 'F' for False for each of the following statements in the boxes provided. [2]

	Statements	True / False
(a)	All birds have an outer body covering of feathers.	
(b)	All insects have three body parts and a pair of wings.	
(c)	Most mammals give birth to their young alive.	
(d)	Most amphibians reproduce by laying eggs in water.	

Score	/ 2

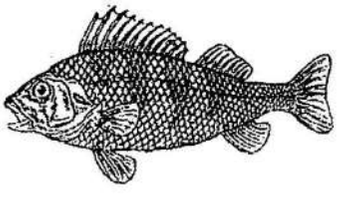
Need a home tutor? Visit smiletutor.sg

22. Study the flow chart below.



Based on the flow chart above, identify the animal that can be represented by P, Q, R or S. Write the letters, P, Q, R or S in the blanks below. [2]

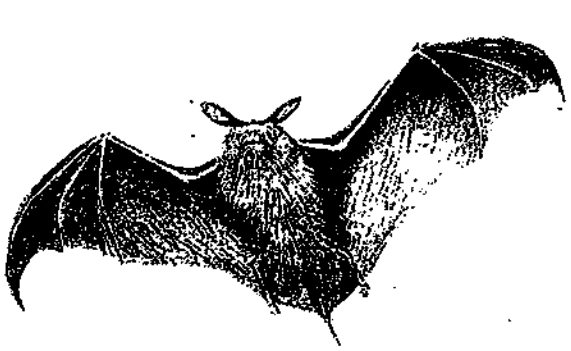
(a) _____

(b)  _____

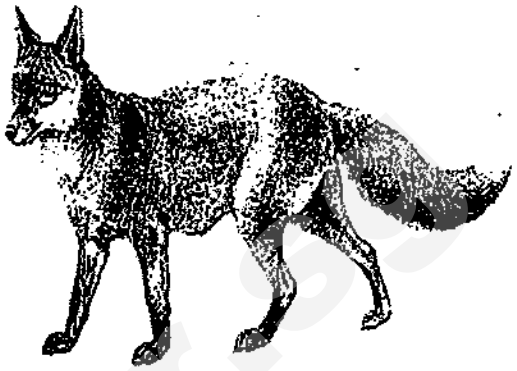
Score / 2

Need a home tutor? Visit smiletutor.sg

23. Study the animals below.



Animal A



Animal B

Based on your observation of the two animals above, state one similarity and one difference in the physical characteristic between them.

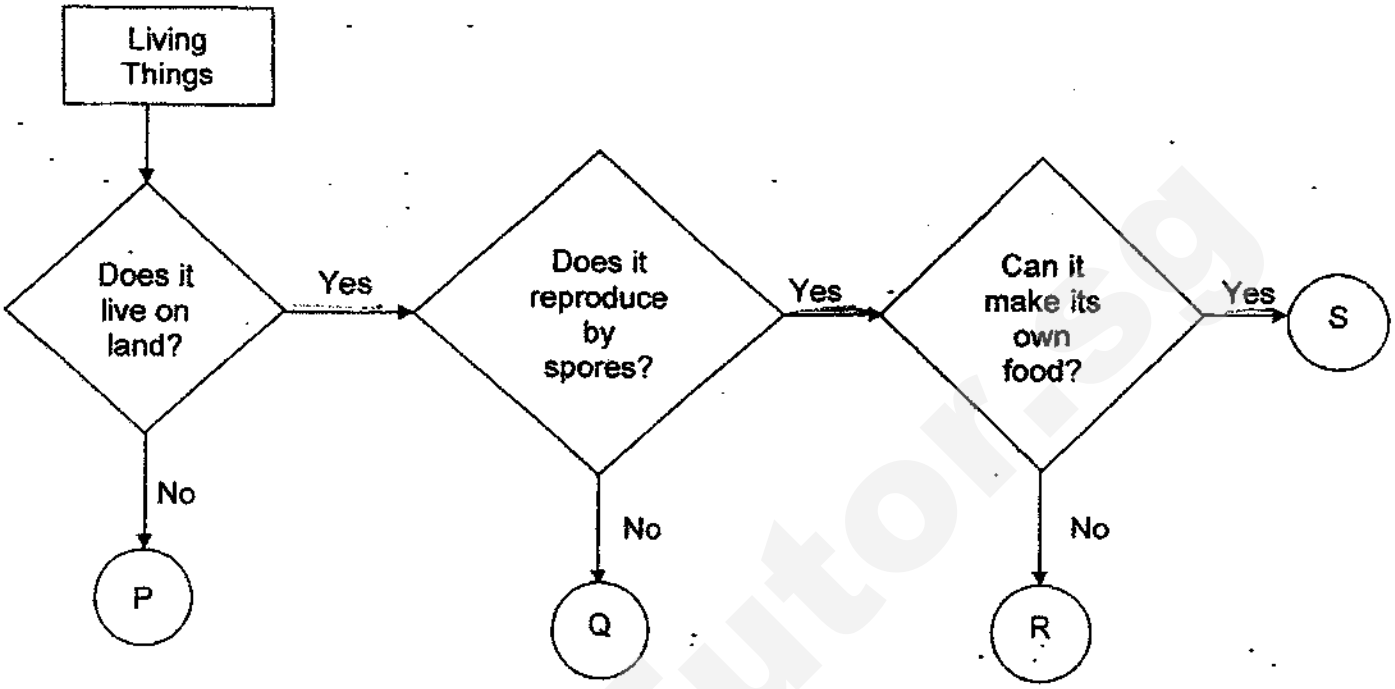
(Do not compare size, colour and movement.) [2]

Similarity	
Difference	

Score 2

Need a home tutor? Visit smiletutor.sg

24. The flow chart below shows how four living things, P, Q, R and S, are being grouped.



Based on the information above, state two characteristics of R. [2]

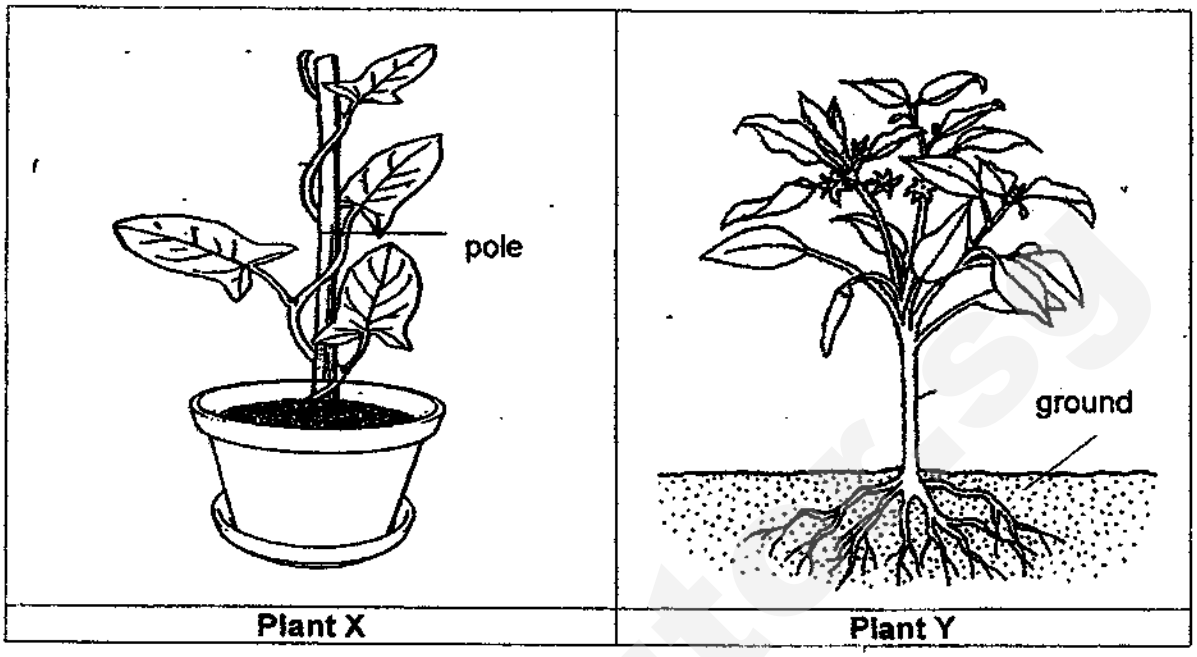
Characteristic 1	
Characteristic 2	

Score	/ 2

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

25. Study Plants X and Y as shown below.



Based on your observations on the plants, state one observable similarity and one difference in the physical characteristics between Plants X and Y.

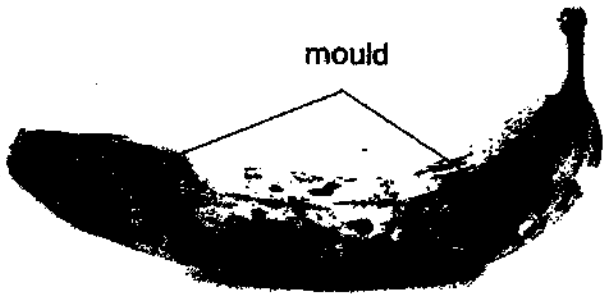
[Do not compare size and shape.] [2]

Similarity	_____ _____ _____
Difference	_____ _____ _____

Score	/ 2

Need a home tutor? Visit smiletutor.sg

26. Mdm Tan left a banana in the kitchen for two weeks. She observed black patches on the banana as shown below. She threw the banana as it had turned mouldy.



Read the following statements about the characteristics of the moulds found on the banana.

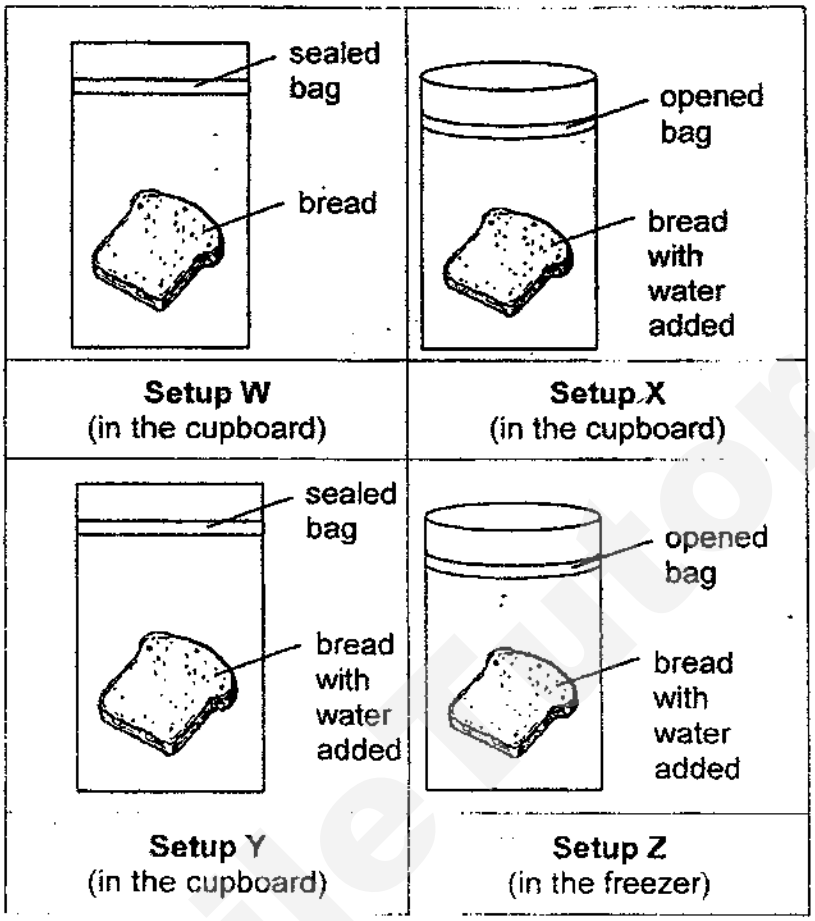
Put a tick (√) against each statement in the boxes below to show if it is true or false about the moulds on the banana. [2]

	Statements	True	False
(a)	They feed on the banana.		
(b)	They reproduce by seeds.		
(c)	They make its own food.		
(d)	They are fungi.		

Score	-	2

Need a home tutor? Visit smiletutor.sg

27. Paul conducted an experiment to find out the conditions needed for bread mould to grow. He placed four similar slices of bread in four identical bags under different conditions as shown below.



Based on the information above, answer parts (a) and (b).

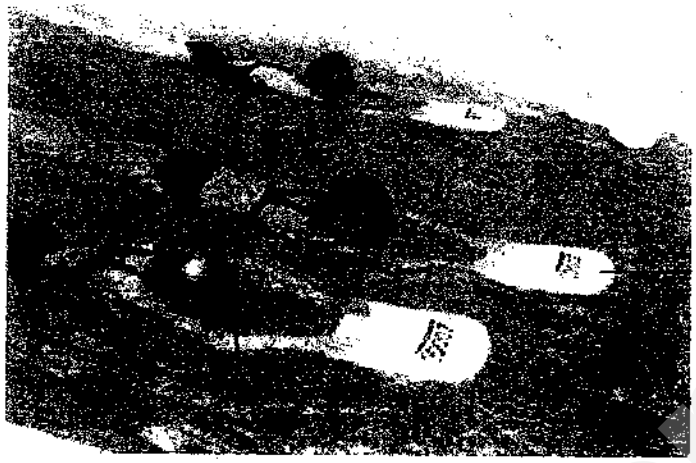
(a) To find out if water is needed for bread mould to grow, he should use set-up _____ and set-up _____ [1]

(b) To find out if warmth is needed for bread mould to, he should use set-up _____ and set-up _____ [1]

Score ___/2

Need a home tutor? Visit smiletutor.sg

28. A swimming board is used to help children while they are learning how to swim as shown below.



State two properties of the material that are taken into consideration when it is chosen to make into a swimming board. [2]

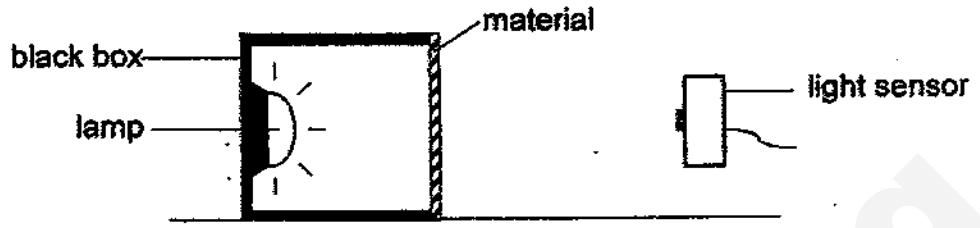
Property 1: _____

Property 2: _____

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

29. Olivia carried out an experiment to test the degree of transparency of three materials, K, L and M, as shown below.

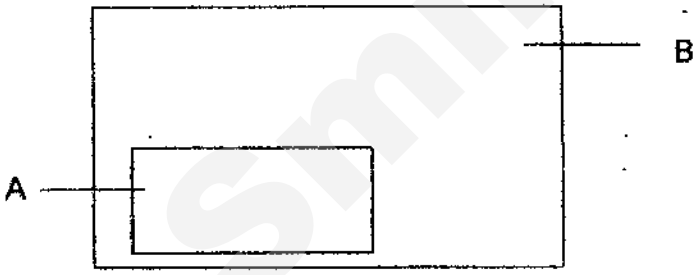


She used a light sensor to measure the amount of light that passed through each material and recorded her results as shown in the table below.

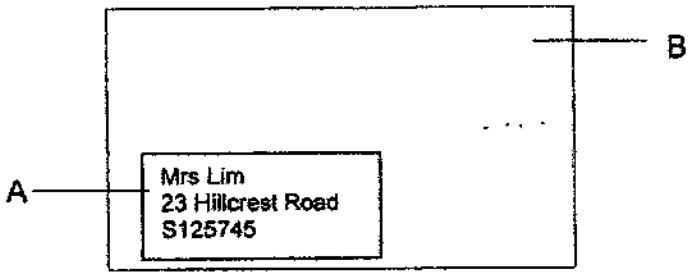
Materials	Amount of light that passes through each material (units)
K	300
L	0
M	250

Olivia wanted to select suitable materials to make an envelope as shown below. The use of each parts, A and B, is provided below:

A: To be able to see the address of the receiver
B: To not allow anyone to see the content of the letter



Before a letter is inserted



After a letter is inserted

Continued on next page

Need a home tutor? Visit smiletutor.sg

Continued from the previous page

Which of material, K,L or M, is most suitable to make Part A and B of the envelope? Give a reason for your answer. [2]

(a) Part A:

_____

Reason:

_____

_____

(b) Part B:

_____

Reason:

_____

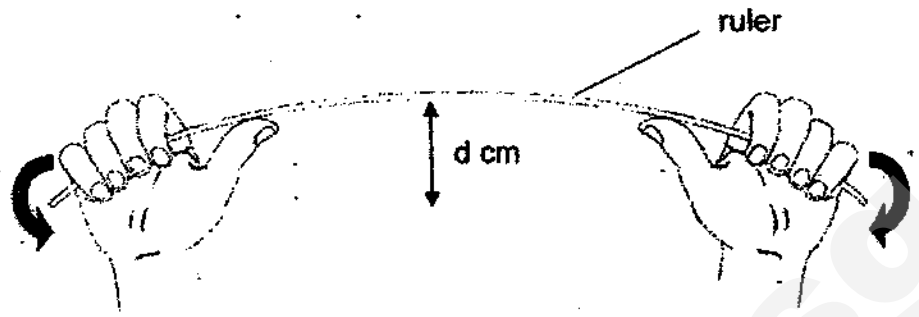
_____

Score 2

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

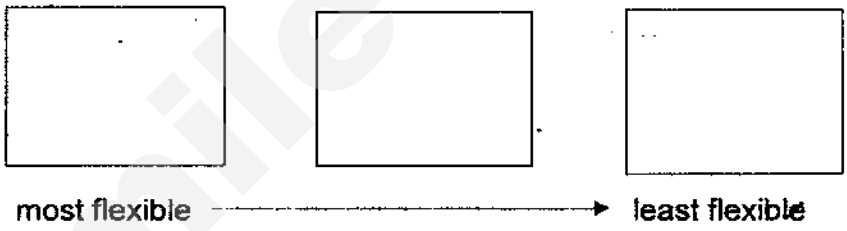
30. Cindy had three strips of materials, X, Y and Z. She measured the maximum distance, d cm, each strip could bend.



She recorded the results as shown in the table below.

Material	Distance d (cm)
X	20
Y	1
Z	5

(a) Based on the observations, rank the materials, X, Y and Z, starting from the material that is the most flexible. [1]



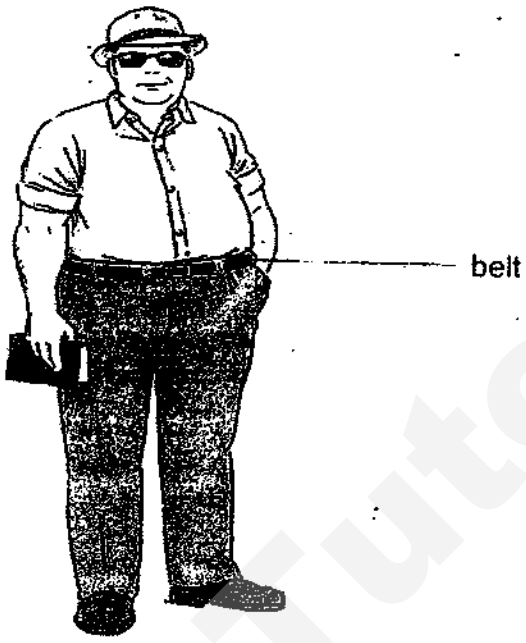
Score / 1

Continued on next page

Need a home tutor? Visit smiletutor.sg

Continued from previous page

(b) Mr Tan wears a belt around his waist to support the loose trousers as shown in the diagram below.



Which material, X, Y or Z, is most suitable to be used to make a belt? Give a reason for your answer. [1]

_____

_____

End of Paper

Setters: Mdm J. Yeo and Ms Thivya

Score / 1

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

YEAR : 2018
LEVEL : PRIMARY 3
SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL
SUBJECT : SCIENCE
TERM : SA 1

SECTION A

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

SECTION B

Q19a) i: It gives birth to its young.
ii: It has wings

b). Animals A and B do not give birth to its young.

Q20a) It tells us that livings things reproduce.

Q20b) A possible reason may be because some guppies died.

Q21) a:T b: F c: T d: T

Q22) a: R
b: P

Q23) Similarity: Both have hair.
Difference: Animal A can wings but Animal B does not.

Need a home tutor? Visit smiletutor.sg

Q24) Any 2 of the 3: It lives on land
It reproduces by spores
It cannot make its own food

Q25) Similarity: Both have leaves/ Both are land plants/ Both have stem
Difference: Plant X has a weak stem but plant Y has a strong stem

Q26) a: True
b: False
c: False
d: True

Q27a) set-up W and set-up Y

Q27b) set-up Z and set-up X

Q28) Property 1: Waterproof
Property 2: Ability to float

Q29a) Part A: Material K
Reason: K allows the most light to pass through and Part A needs as much light as possible to pass through.

Q29b) Part B: Material L.
Reason: L does not allow any light to pass through and Part B does not need any light to pass through.

Q30a) X, Z , Y

Q30b) Material X. It is the most flexible and can bend the most.

END

Need a home tutor? Visit smiletutor.sg

Rosyth School
Semestral Examination 1 2018
SCIENCE
Primary 3

Name: _____ Total Marks: ____/34

Class: Pr 3 _____ Register No. _____ Duration: 1 h 30 min

Date: 9 May 2018 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 17 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.
5. For questions 18 to 26, give your answers in the spaces given in Booklet B.

* This booklet consists of 10 printed pages (including cover page).

This paper is not to be reproduced in part or whole without the permission of the Principal.

Need a home tutor? Visit smiletutor.sg

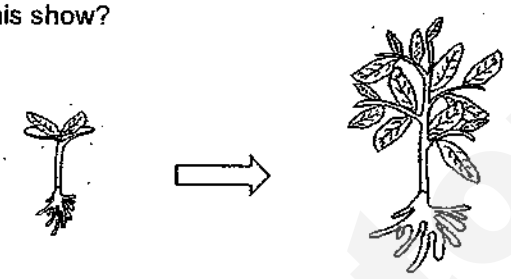
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Booklet A (34 marks)

For each question from 1 to 17, 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).

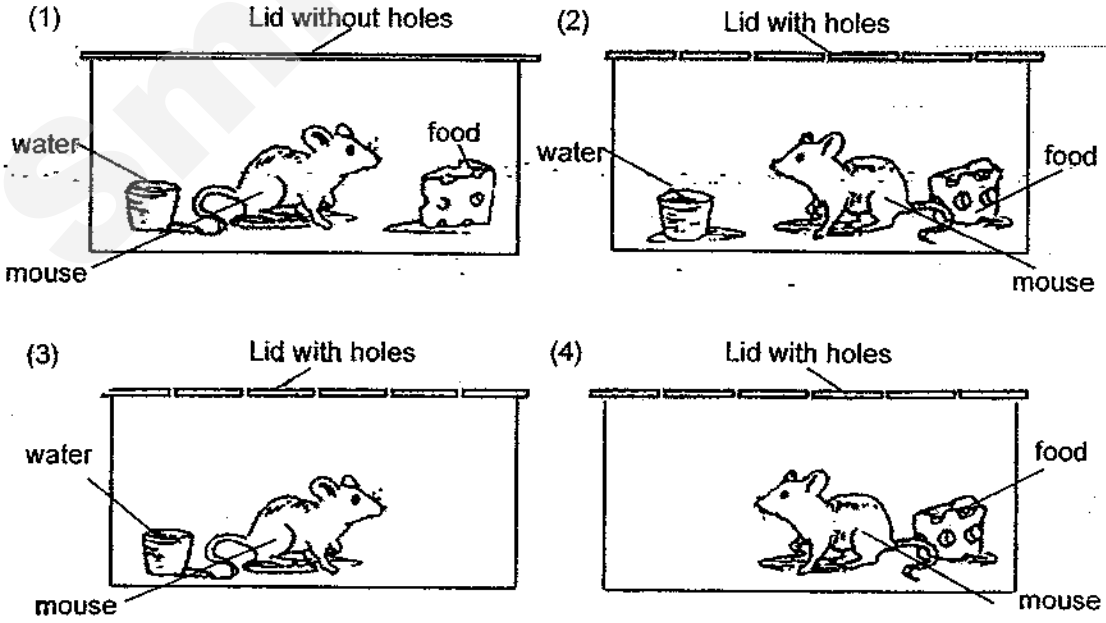
1. Alice observed a plant over three weeks as shown below. What characteristic of living things does this show?



Week 1 Week 3

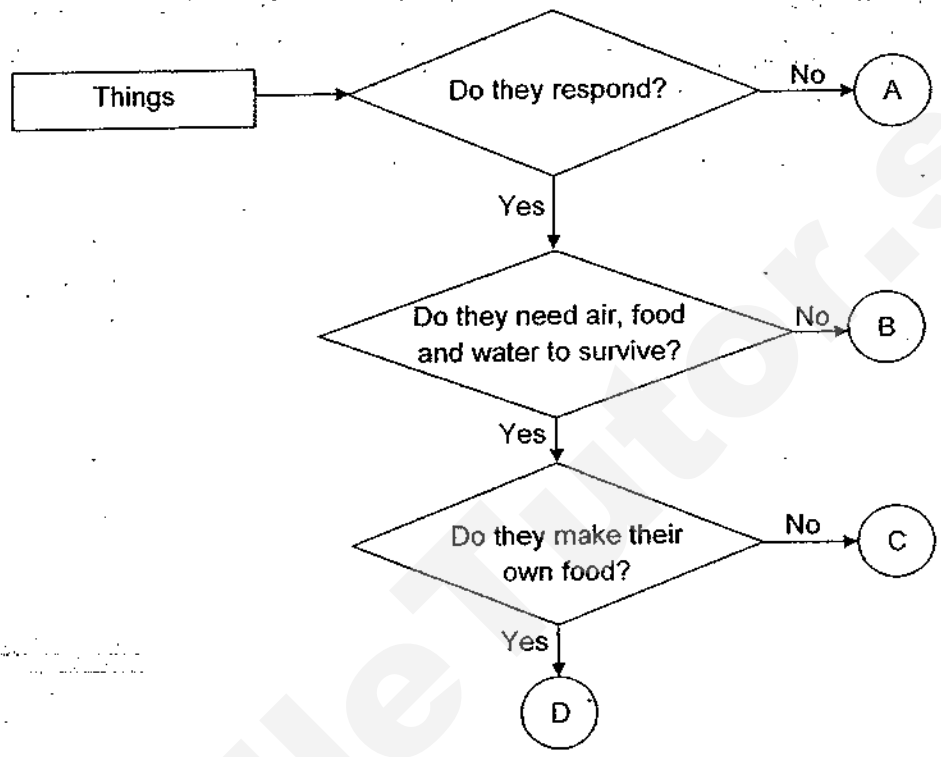
(1) Living things grow.
(2) Living things respond.
(3) Living things reproduce.
(4) Living things need air, food and water to survive.

2. Bala observed the mice in four similar containers as shown below.
In which container would the mice most likely survive for the longest time?



Need a home tutor? Visit smiletutor.sg

3. Study the flow chart below.



Which of the letters (A, B, C, D) represent living things?

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

4. Danny caught an animal and observed its characteristics. He described its characteristics as follows:

It lives on land. It has hair on its body. It gives birth to the young alive.

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

(1) Birds
(2) Insects
(3) Reptiles
(4) Mammals

Need a home tutor? Visit smiletutor.sg

5. Jojo saw an animal in a glass tank filled with water. She wanted to find out if the animal is a fish.

Which of the following actions (A, B and C) would definitely help Jojo decide if the animal is a fish?

A: Observe if the animal has eyes.
B: Observe if the animal swims with its fins.
C: Find out if the animal has gills to breathe.

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

6. Study the table below carefully. A tick (✓) shows that the animal has the characteristic.

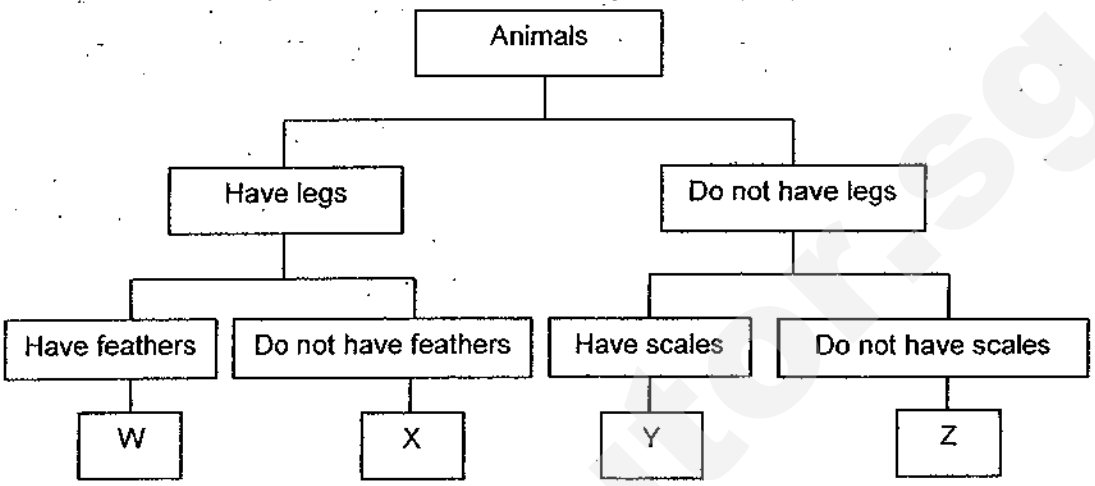
Animals	Has scales on its body	Has feathers on its body	Lives in water
W	✓		✓
X		✓	
Y	✓		
Z			✓

Which one of the following statements is definitely correct?

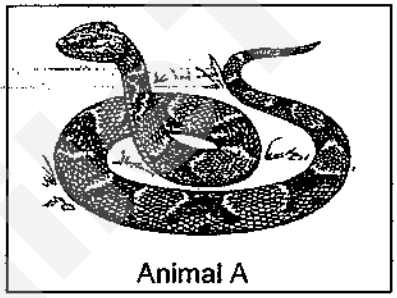
(1) Animal W is a mammal.
(2) Animal X is a bird.
(3) Animal Y is an amphibian.
(4) Animal Z is a fish.

Need a home tutor? Visit smiletutor.sg

7. Study the classification chart below.



Which group in the classification chart above does Animal A belong to?


Animal A

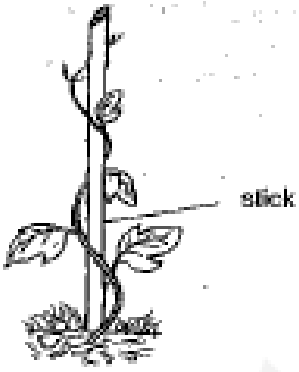
(1) W
(2) X
(3) Y
(4) Z

8. Which of the following part is not found in all plants?

(1) Root
(2) Stem
(3) Leaf
(4) Flower

Need a home tutor? Visit smiletutor.sg

9. Jane went to a garden and saw a plant as shown below.

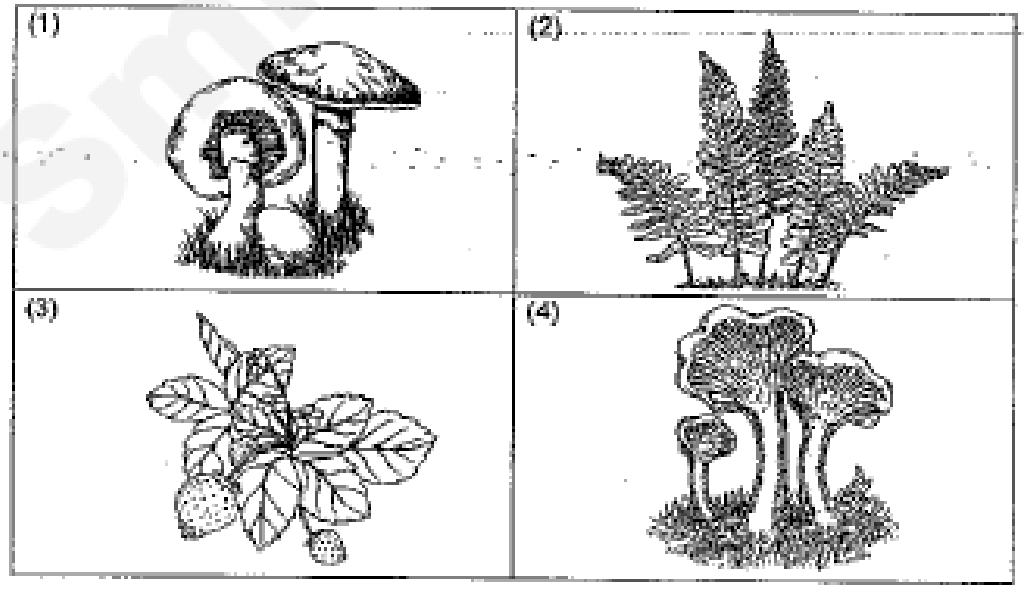


She made the following observations.

Which one of the following can be observed?

(1) The plant has leaves.
(2) The plant has deep roots.
(3) The plant has a strong stem.
(4) The plant is a flowering plant.

10. Which living thing shown below produces seeds?



SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

11. Which of the following statement is true about the bracket fungi and the bird's nest fern?

bracket fungi

bird's nest fern

(1) Both are plants.
(2) Both have leaves.
(3) Both reproduce by spores.
(4) Both can make their own food.

12. Which of the following statements is true about bacteria?

(1) All bacteria are harmful.
(2) All bacteria reproduce by spores.
(3) All bacteria can make their own food.
(4) All bacteria can only be seen under a microscope.

Need a home tutor? Visit smiletutor.sg

13. Kumar carried out an experiment on four similar pieces of wood. He added different amount of water to each piece of wood. He recorded his observation in a table as shown below.

Wood	Amount of water added (ml)	Number of days the wood took to become mouldy
A	0	25
B	100	20
C	200	15
D	300	10

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

(1) Mould grew first on Wood A.
(2) Mould grew on all the wood by day 20.
(3) Mould did not grow when no water was added.
(4) Mould grew the fastest when the most amount of water was added.

14. Gopal described the properties of a material as shown below.

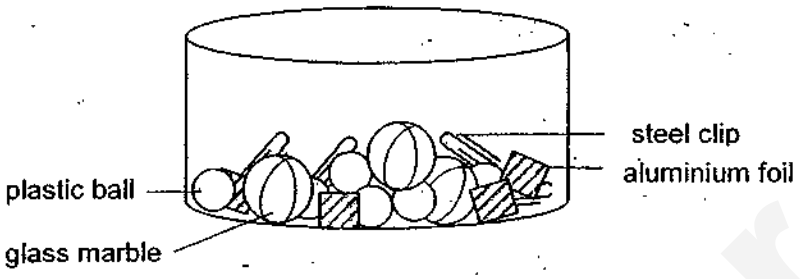
It is stiff.
It is strong.
It floats on water.
It does not allow light to pass through.

Which one of the following is most likely to be the material he has described?

(1) Fabric
(2) Rubber
(3) Glass
(4) Wood

Need a home tutor? Visit smiletutor.sg

15. Susan held a strong magnet over a container of plastic balls, steel clips, pieces of aluminium foil and glass marbles.



Which of the following objects would be attracted to the magnet?

(1) steel clips
(2) plastic balls
(3) aluminium foil
(4) glass marbles

16. Four materials (A, B, C and D) have different properties as shown in the table below.

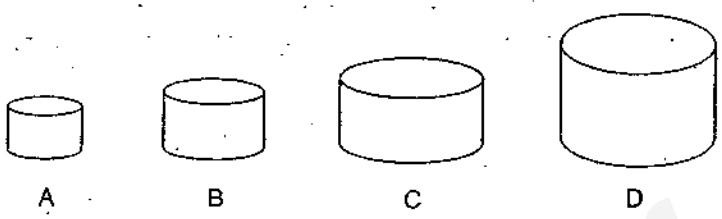
Material	Light	Flexible	Absorbent
A	✓	✓	
B			✓
C	✓		
D		✓	✓

Which material (A, B, C or D) is the best choice to make a bath towel?

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

Need a home tutor? Visit smiletutor.sg

17. Astro had four magnets (A, B, C and D) of different sizes. He brought each magnet near to a box of pins.



He observed the number of pins that were attracted by each magnet and recorded his observations in the table below.

	Magnet A	Magnet B	Magnet C	Magnet D
Number of pins attracted	15	7	3	10

Based on the results, which of the following is a correct statement?

(1) Magnet A is the strongest.
(2) Magnet B is stronger than Magnet D.
(3) The biggest magnet is the strongest magnet.
(4) The biggest magnet attracts the most number of pins.

End of Booklet A

Need a home tutor? Visit smiletutor.sg

Rosyth School
Semestral Examination 1 2018
SCIENCE
Primary 3

Name: _____

Class: Pr 3 _____ Register No._____ Duration: 1 h 30 min

Date: 9 May 2018 Parent's Signature: _____

BOOKLET B

Instructions to Pupils:

1. For questions 18 to 26, give your answers in the spaces given in this Booklet B.

	Maximum	Marks Obtained
Booklet A	34 marks	
Booklet B	26 marks	
Total	60 marks	

*This booklet consists of 11 printed pages (including cover page).

This paper is not to be reproduced in part or whole without the permission of the Principal.

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

Booklet B (26 marks)

For questions 18 to 26, write your answers in this booklet.

18. Berry kept some hamsters in a cage. She fed them daily with food and water. She recorded the number of hamsters at the end of each month in a table as shown below. She did not add or take out any hamsters from the cage.

Month	Number of hamsters
January	2
March	7
May	12

(a) Based on the table above, what do you observe about the number of hamsters between January to May? [1]

_____

_____

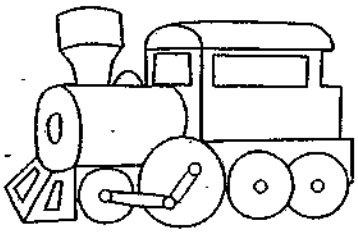
(b) What is the characteristic of living things observed in (a)? [1]

_____

_____

Need a home tutor? Visit smiletutor.sg

19. Mary has a toy train and a cat.



toy train

cat

(a) Complete the table below by writing 'toy train' and 'cat' in the correct boxes. [2]

Things / Characteristics	(i)_____	(ii)_____
Can it move?	Yes	Yes
Can it grow?	Yes	No
Does it respond?	Yes	No

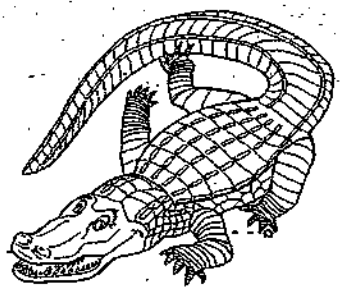
(b) Mary said that the toy train is a living thing as it can move. Do you agree with her? Explain your answer. [1]

_____

_____

Need a home tutor? Visit smiletutor.sg

20. Study the two animals shown below.



animal A

animal B

(a) Based on the pictures above, state one similarity between animal A and animal B. (Do not compare their size and shape.) [1]

_____

_____

(b) Based on the pictures above, state two differences between animal A and animal B. (Do not compare their size and shape.) [2]

(i) Difference 1 : _____

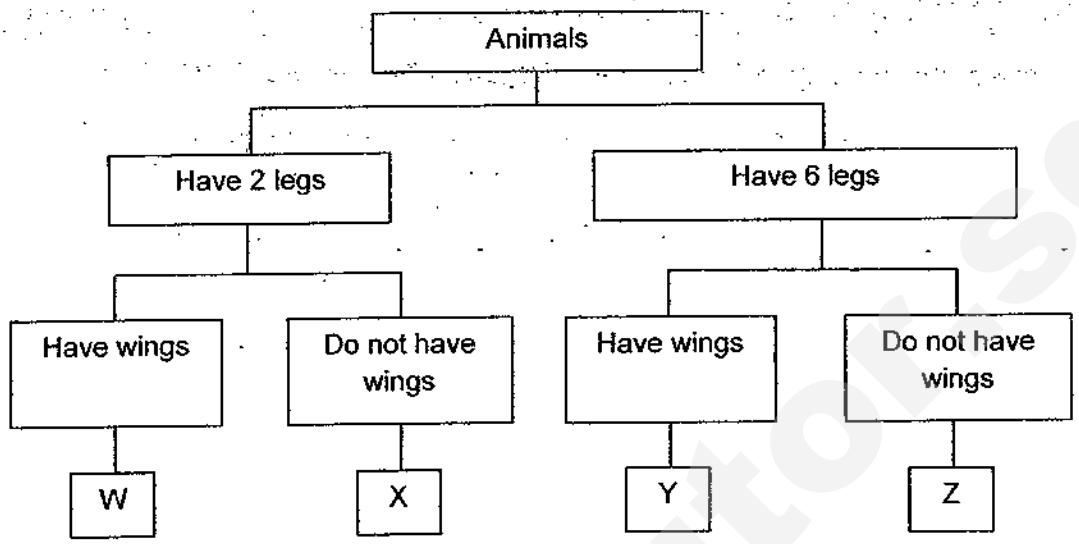
_____

(ii) Difference 2 : _____

_____

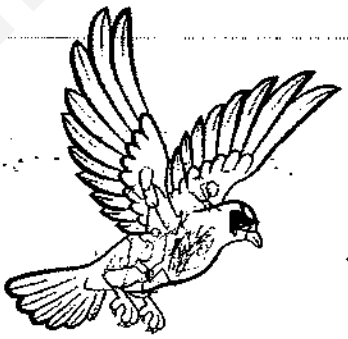
Need a home tutor? Visit smiletutor.sg

21. Study the classification chart as shown below.



(a) State the animal group that animal Y and animal Z belong to. [1]

(b) Dan saw an animal as shown below.

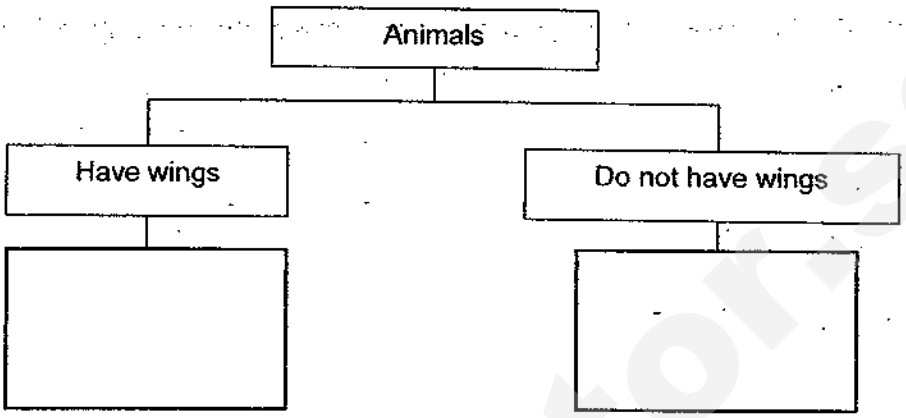


In which group (W, X, Y or Z) should Dan put the animal in the classification chart above? [1]

Question 21 continues on page 6

Need a home tutor? Visit smiletutor.sg

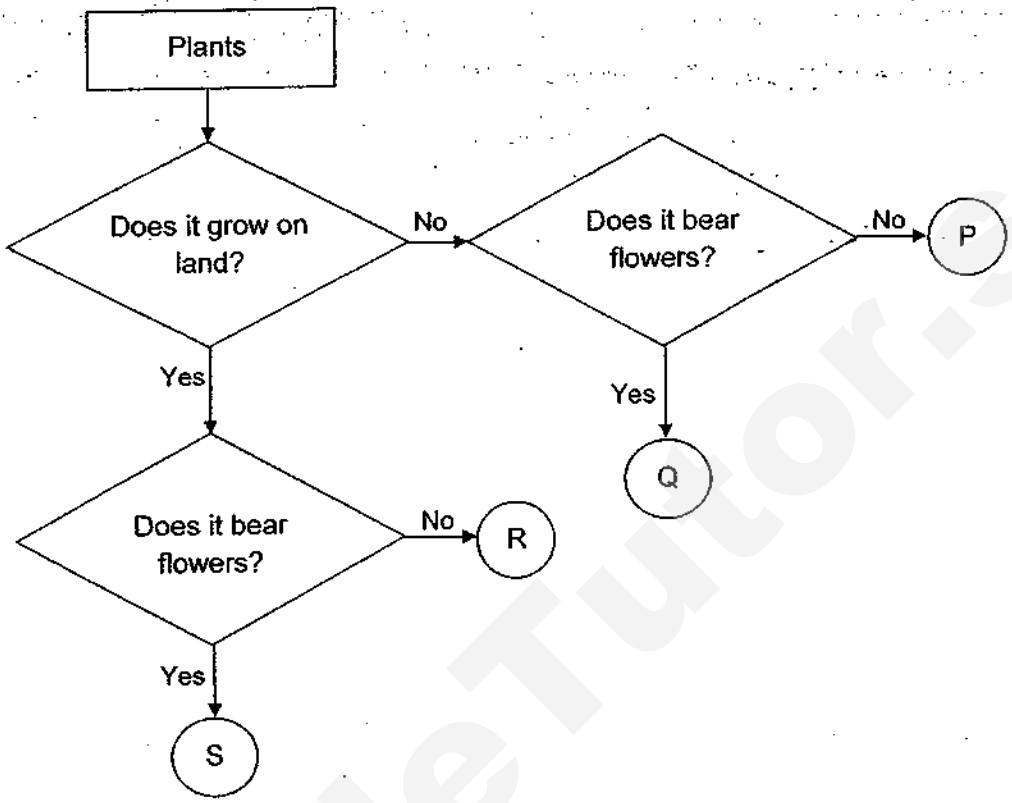
(c) Dan wanted to classify the animals in the chart as shown below. Complete the chart by writing W, X, Y and Z in the boxes below. [2]



SmileTutorsg

Need a home tutor? Visit smiletutor.sg

22. Study the flow chart below carefully.



(a) Based on the flow chart above, state a similarity between plant S and plant Q. [1]

_____

_____

(b) Based on the flow chart above, state a difference between plant R and plant P. [1]

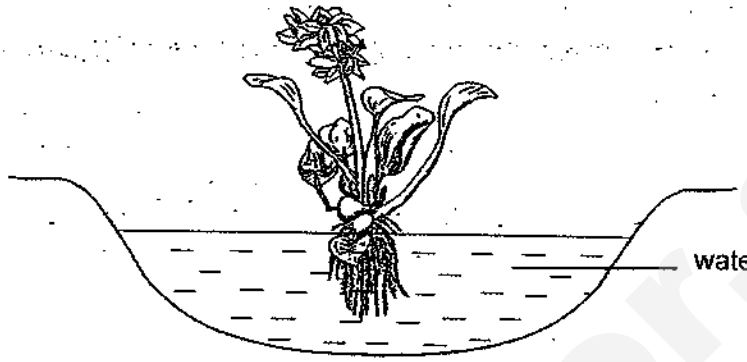
_____

_____

Question 22 continues on page 8

Need a home tutor? Visit smiletutor.sg

(c) Meimei saw a plant as shown below.

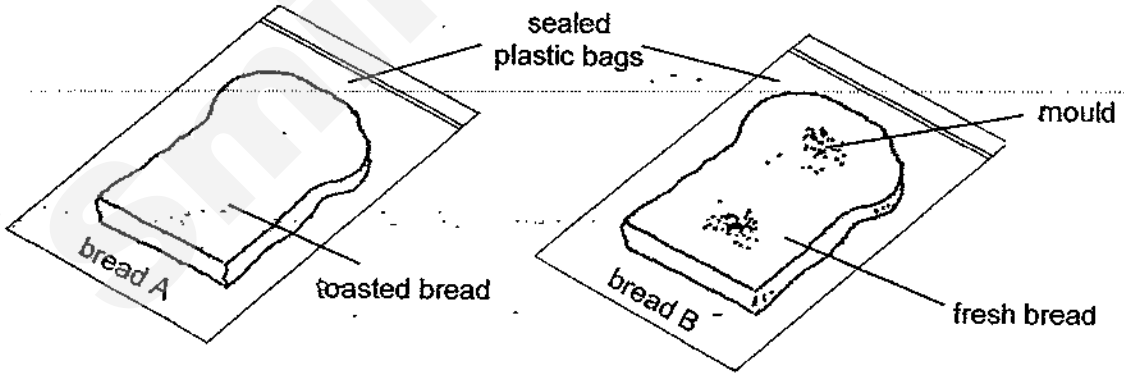


She said that it could be in the same group as plant S. Do you agree with her? Explain why. [1]

_____

_____

23. Jenny placed a piece of toasted bread in a sealed plastic bag and labelled it bread A. She also placed a piece of fresh bread in another sealed plastic bag and labelled it bread B. After one week, she observed some mould growing on bread B.



(a) Which group of living things does bread mould belong to? [1]

_____

(b) Explain why mould grew on bread B but not bread A. [1]

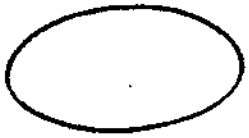
_____

_____

Need a home tutor? Visit smiletutor.sg

24. The table below shows some objects, the materials they are made from and why each material was chosen based on its property. [2]

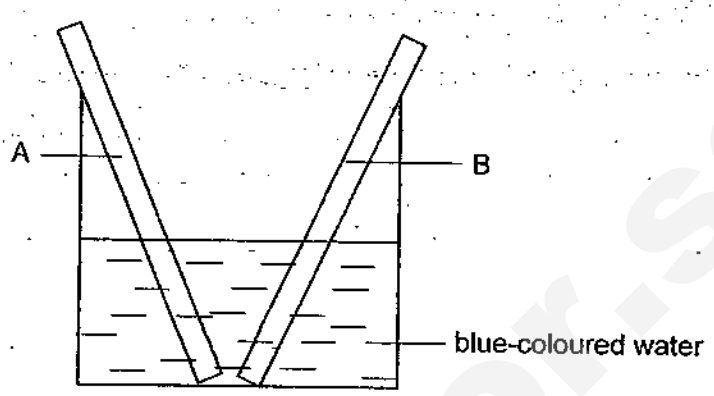
Complete the table below.

Object	Material	Property
 rubber band	rubber	(a) _____ _____
lens of spectacles	(b) _____	It is transparent.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

25. Jane put two white strips of different materials, A and B, into a beaker of blue-coloured water. She left the set-up as it was for two hours.



When she returned, she observed that A remained white in colour but B had turned blue in colour.

(a) Based on Jane's observation, what can she conclude about the property of the two materials? [2]

(i) Material A : _____

_____

(ii) Material B : _____

_____

(b) Which material, A or B, is better for making an umbrella? Explain your choice. [1]

_____

_____

Need a home tutor? Visit smiletutor.sg

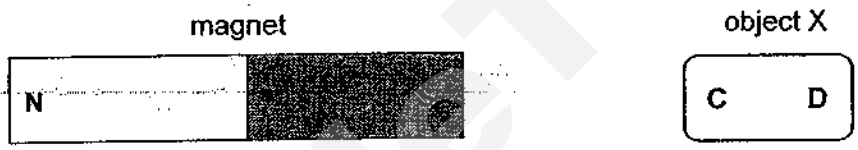
26. John placed a magnet and object Z close to each other.

The south pole of the magnet was brought near side A of object Z and they repelled.

(a) Study the following statements and put a tick (✓) in the correct box. [2]

	Statements	True	False
(i)	Object Z is a magnet.		
(ii)	The north pole of the magnet will attract side B.		

John replaced object Z with object X. Both sides C and D of object X are attracted to the south pole of the magnet.



(b) John says that object X is a magnet. Do you agree with John? [1]
Explain your answer.

_____

_____

(c) What material is object X made of? [1]

_____

- End of paper -

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

YEAR : 2018
LEVEL : PRIMARY 3
SCHOOL : ROSYTH SCHOOL
SUBJECT : SCIENCE
TERM : SA 1

BOOKLET A

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

BOOKLET B

Q18a) The number of hamsters increases.

Q18b) Living things reproduce.

Q19a) i: cat
ii: toy train

Q19b) No. Living things can grow, but the toy train does not grow. It also does not require air, food and water, nor reproduce.

Q20a) A and B have 4 legs.

Q20b) Difference 1: A has a tail but B does not have a tail.
Difference 2: A has a textured covering but B does not.

Q21a) Insects

Q21b) W

Need a home tutor? Visit smiletutor.sg

Q21c) Have wings: W, Y
Do not have wings: X, Z

Q22a) Both S and Q bear flowers.

Q22b) R grows on land but P does not.

Q22c) No. The plant above grows in water but S grows on land.

Q23a) Fungi

Q23b) There is moisture in bread B but not in bread A.

Q24) a: flexible
b: plastic

Q25a) Material A: A is waterproof as it did not absorb any water.
Material B: B is not waterproof as it absorbed the water.

Q25b) A. It is suitable to make an umbrella as it is waterproof and will keep the person dry when used to shield from rain.

Q26a) i: True
ii: False

Q26b) No. A magnet has two poles which means either C or D should repel the South pole of the magnet but both sides of object X were attracted.

Q26c) Steel

END

Need a home tutor? Visit smiletutor.sg

SINGAPORE CHINESE GIRLS' SCHOOL (PRIMARY)

FIRST SEMESTRAL ASSESSMENT 2018

NAME: _____ ( ) DATE: 4 May 2018

CLASS: PRIMARY 3 SY / C / G / SE / P

Parent's Signature:

_____

SCIENCE

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.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Part I (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.**

1. Rachelle saw a squirrel in the garden. The squirrel ran away immediately when she went near it. Which characteristic of living things did the squirrel show?

(1) Living things grow.
(2) Living things reproduce.
(3) Living things respond to changes around them.
(4) Living things need air, water and food to survive.

2. Which of the following is not a characteristic for all insects?

(1) It has wings.
(2) It has 6 legs.
(3) It has feelers.
(4) It has 3 body segments.

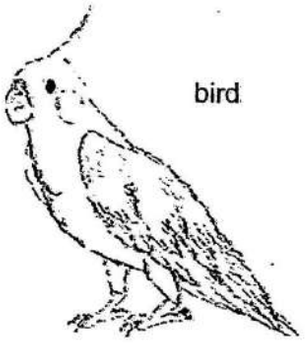
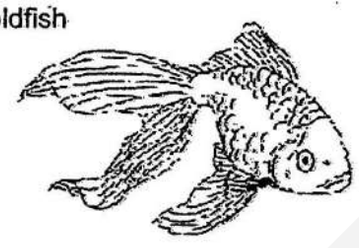
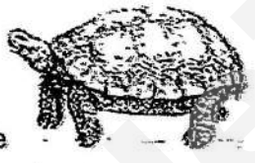
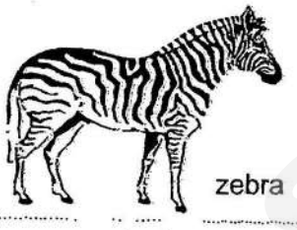
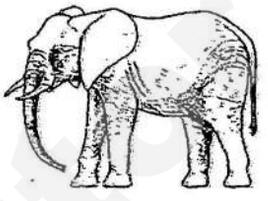
3. Meredith is trying to group reptiles and birds.

Which of the following will best enable her to put the animals in the right group?

(1) Check if the animal can swim
(2) Check if the animal lays eggs
(3) Check if the animal has feathers
(4) Check if the animal has a backbone

Need a home tutor? Visit smiletutor.sg

4. Study the animals as shown below.

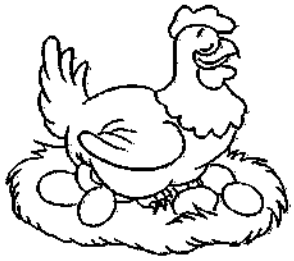
Group X	Group Y
 bird goldfish   tortoise	 zebra  elephant lion

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

	Group X	Group Y
(1)	Cold blooded	Warm blooded
(2)	Lives in water only	Lives on land only
(3)	Reptiles	Mammals
(4)	Lay eggs	Give birth to young alive

Need a home tutor? Visit smiletutor.sg

5. During a visit to a farm, Sarah observed a chicken laying eggs.



Which of the following shows a similar activity to the chicken laying eggs?

(1) A kitten becoming an adult cat.
(2) A turtle feeding on small shrimp.
(3) A horse giving birth to its young alive.
(4) A mimosa plant folding its leaves when it is touched.

6. Study the pictures below.

Plant S

Plant T

From what you can see only, how are the two plants similar?

A : Both bear fruit.
B : Both have leaves.
C : Both produce flowers.

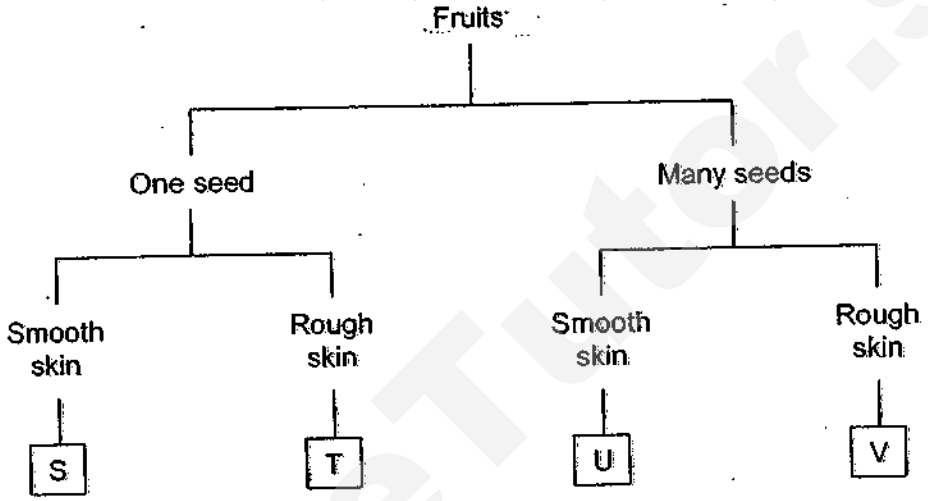
(1) A only
(2) B only.
(3) A and C
(4) A, B and C

Need a home tutor? Visit smiletutor.sg

7. Which of the following is correct in describing a flowering plant?

(1) It reproduces by seeds.
(2) It reproduces by spores.
(3) It does not produce fruits.
(4) It cannot make its own food.

8. The classification chart below shows how fruits can be grouped into 4 groups, S, T, U and V.



Study fruit B as shown below.

Fruit B

In which group, S, T, U or V, should fruit B be placed in?

(1) S
(2) T
(3) U
(4) V

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

9. Which statement about fungi and bacteria is correct?

(1) Both fungi and bacteria can make their own food.
(2) Both fungi and bacteria cannot grow in bright places.
(3) Both fungi and bacteria come in different shapes and sizes.
(4) Fungi is useful to humans but bacteria is harmful to humans.

10. The following table shows characteristics of living things P and Q.

	P	Q
Feed on living and dead things	Yes	Yes
Can be seen without a microscope	Yes	No

Which of the following could living things P and Q be?

	P	Q
(1)	bracket fungus	fern
(2)	bacteria	mushroom
(3)	fern	bracket fungus
(4)	mushroom	bacteria

11. Look at the materials listed in the table below.

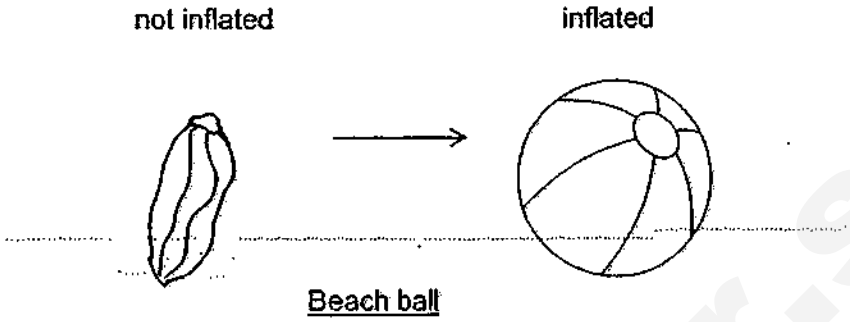
G	H
Cotton shirt	Steel spoon
Rubber gloves	Gold ring
Paper worksheet	Ceramic cup

How are the materials classified?

	G	H
(1)	Heavy	Light
(2)	Flexible	Not flexible
(3)	Breakable	Not breakable
(4)	Transparent	Not transparent

Need a home tutor? Visit smiletutor.sg

12. Joanne needs to choose a material to make a beach ball which can be inflated. Which of the following properties should she consider when choosing a material?

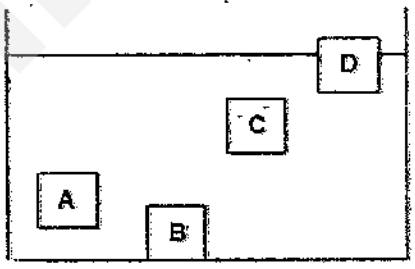


Beach ball

A: is flexible
B: is waterproof
C: is transparent

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

13. Jessica conducted an experiment using 4 blocks of different materials, A, B, C and D. She placed the blocks in a tank of water and observed that positions of the blocks in the water as shown below.

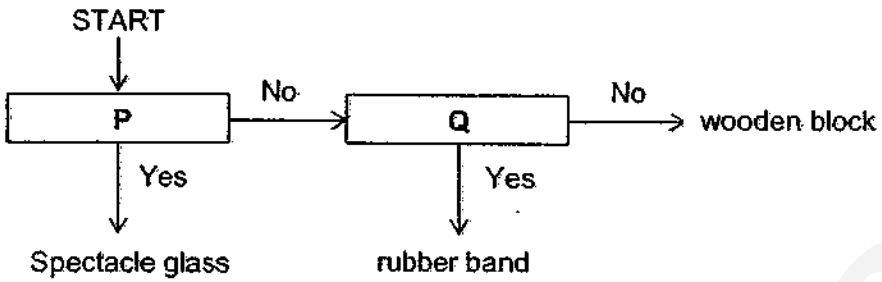


Which material, A, B, C or D is most suitable for making a swimming float?

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

Need a home tutor? Visit smiletutor.sg

14. Study the flow chart below.



Which of the following represents P and Q in the flow chart?

	P	Q
(1)	Is it waterproof?	Does it absorb water?
(2)	Is it transparent?	Is it flexible?
(3)	Is it strong?	Does it float on water?
(4)	Is it transparent?	Does it absorb water?

15. The table below shows the characteristics of three plants, G, H and K.

Characteristics	Plants		
	G	H	K
Does it have flowers?	Yes	No	Yes
Does it have large leaves?	No	No	Yes
Does it reproduce by spores?	No	Yes	No

Based on the above table, which of the following statements are true?

(1) Both Plant G and Plant H are flowering plants.
(2) Plant K can produce fruits.
(3) Plant H is a mushroom.
(4) Plant H does not have leaves.

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SINGAPORE CHINESE GIRLS' SCHOOL (PRIMARY)

FIRST SEMESTRAL ASSESSMENT 2018

NAME: _____ ( ) DATE: 4 May 2018

CLASS: PRIMARY 3 SY / C / G / SE / P

Parent's Signature:

SCIENCE

BOOKLET B

	Total Actual Marks	Total Possible Marks
Booklet A		**30**
Booklet B		**20**
Total		**50**

7 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.

Need a home tutor? Visit smiletutor.sg

BLANK PAGE

(Go on to the next page)

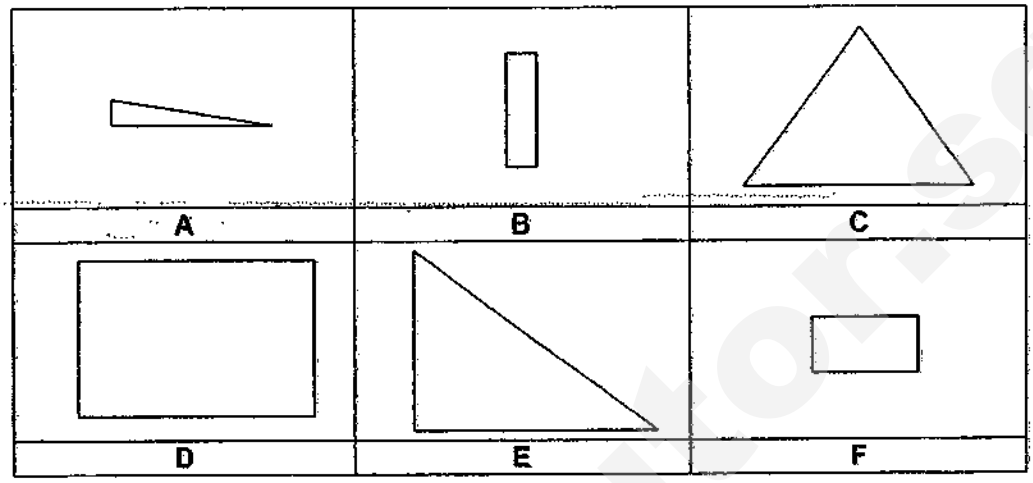
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Part II (20 marks)

Answer all the following questions.

16. The diagram below shows 6 figures, A, B, C, D, E and F.



a) Claire classified the 6 figures into two groups, X and Y, as shown in the classification table below.

Group X	Group Y
A	C
B	D
F	E

How did Claire classify these items? (2m)

The figures in Group X are _____.

The figures in Group Y are _____.

b) State another way in which she can classify the 6 figures.
Write down the new headings for the groups. (2m)

Group 1 : _____

Group 2 : _____

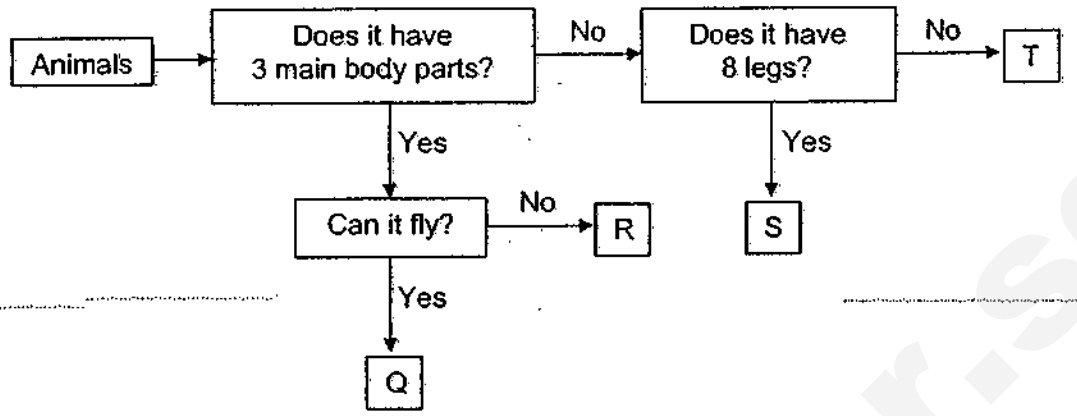
(Go on to the next page)

4

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

17. Study the flowchart below.



Answer the following questions based on the flowchart above.

a) State a common characteristic of Animal S and Animal T. (1M)

b) State one difference between Animal Q and Animal R. (1M)

c) Circle the animal grouping both "R" and "Q" belong to below: (1M)

Mammal **Insect** **Bird** **Reptile**

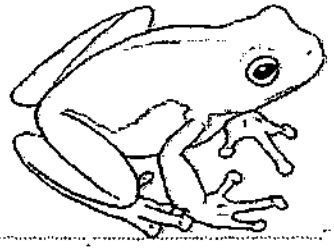
(Go on to the next page)

3

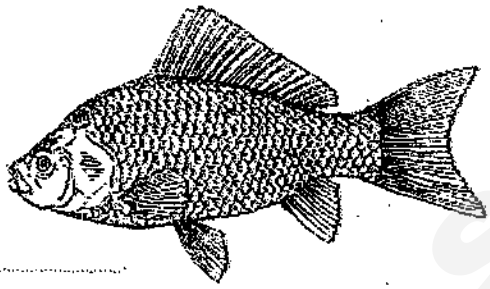
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

18. Study the two animals shown below.



Amphibian



Fish

a) How do both amphibian and fish reproduce? (1M)

_____

b) How are amphibians and fish different in their body coverings? (1M)

_____

_____

c) How do fish breathe underwater? (1M)

_____

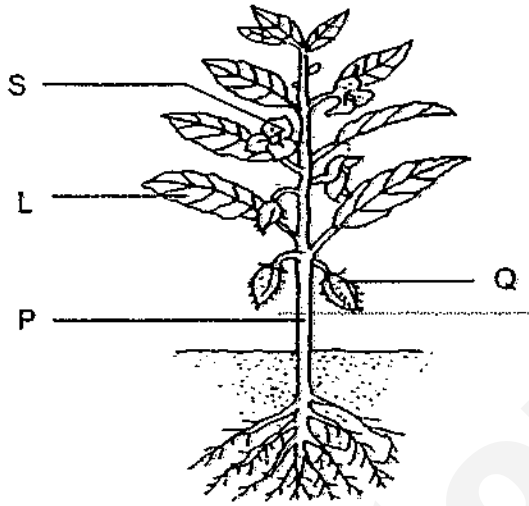
SmileTutor.sg

(Go on to the next page)

3

Need a home tutor? Visit smiletutor.sg

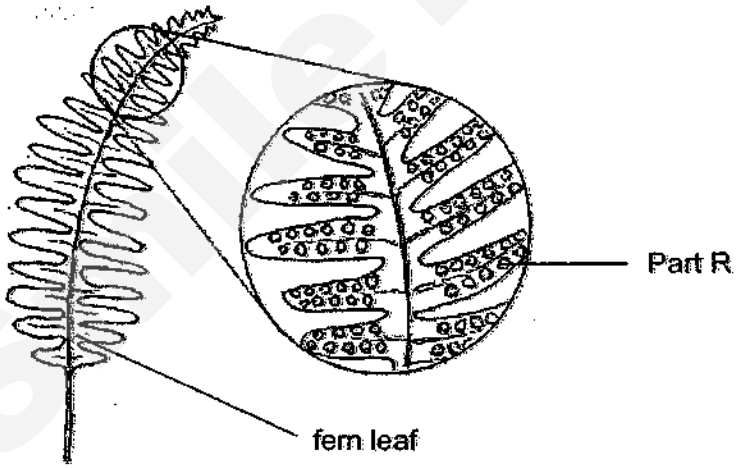
19a) Study the picture below.



What is Part P? (1M)

_____

b) The picture below shows a magnified view of what can be found on the underside of a leaf of a fern.



i) In what way are a seed and part R similar in function? (1M)

_____

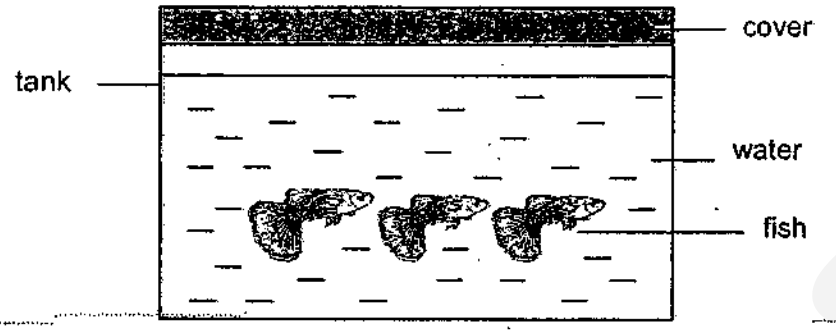
ii) Circle 2 living things below that also produce Part R. (1M)

Mushroom **Banana plant** **Mould** **Water Lily**

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

20. Jenny kept 3 fish in a tank.



She placed the tank in the classroom and fed the fish daily.

She recorded her observation in the table below.

Day	Number of fish
0	3
3	1
6	0

a) What characteristic of living things is shown by the fish at the end of day 6? (1M)

_____

b) What is a possible reason for the number of fish at the end of day 6?

They did not have enough _____. (1M)

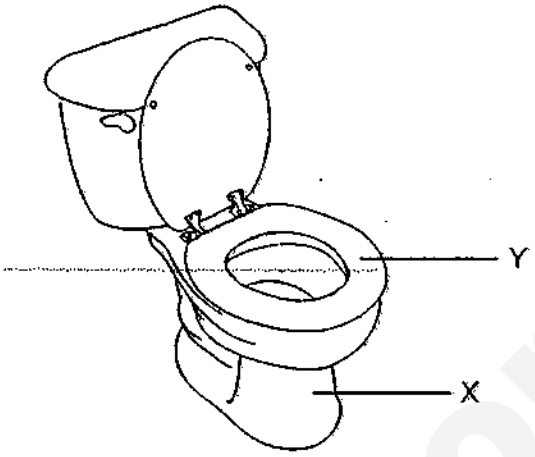
(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

21. The diagram below shows a toilet bowl.

2



a) Which property of glass makes it not a suitable material for making Part Y of the toilet bowl? (1M)

_____

_____

b) Material X is chosen to make Part X.
Tick (✓) 2 of the most important reasons that makes Material X suitable and safe for making Part X. (2M)

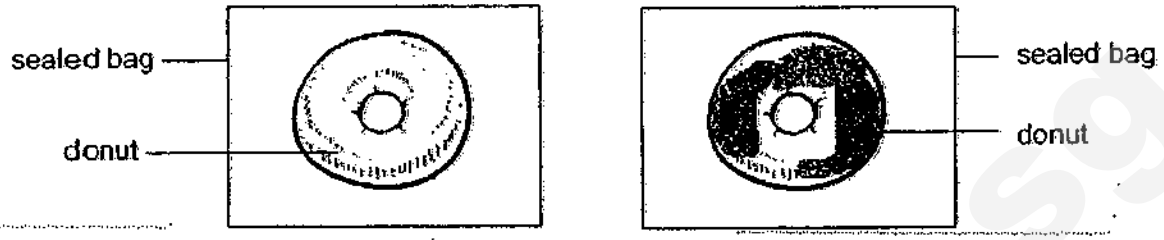
Reasons	Tick (✓)
Can withstand heavy weight	
Cannot float on water	
Is waterproof	
Does not allow light to pass through	

(Go on to the next page)

3

Need a home tutor? Visit smiletutor.sg

22. Caroline left a donut in a sealed bag and forgot about it.
A week later, she found some black spots growing on the donut as shown in the picture below.



Before 1 week later

a) What are the black spots growing on the donut? (1M)

_____

b) Caroline continued to leave the donut in the bag for another week to observe what would happen to the number of black spots.

The number of black spots is likely to _____.
(increase/decrease/remain the same)

(1M)

End of paper

(Go on to the next page)

2

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

YEAR : 2018
LEVEL : PRIMARY 3
SCHOOL : SINGAPORE CHINESE GIRLS' SCHOOL
SUBJECT : SCIENCE
TERM : SA1

Booklet A

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

Booklet B

Q16A) small shapes

big shapes

Q16B) Group 1: triangle

Group 2: rectangle

Q17A) Animal S and T do not have 3 main body parts.

Q17B) Animal Q can fly but Animal R cannot fly.

Q17C) Insect

Q18A) Both amphibian and fish reproduce by laying eggs.

Q18B) Amphibians body covering has moist skin but a fish has scales.

Q18C) Fish breathes through gills underwater.

Q19A) Part P is a stem.

Q19BI) All plants reproduce by Part P or a seed.

Q19BII) Mushroom and Mould

Q20A) Living things can die.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Q20B) air

Q21A) It is not strong.

Q21B) Can withstand heavy weight and is waterproof

Q22A) Mould

Q22B) increase

END

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

2018 PRIMARY 3 SEMESTRAL ASSESSMENT 1

Name : _____ ( ) Date: 10 May 2018

Class : Primary 3 ( ) Time: 8.00 a.m. - 9.00 a.m.

Parent's Signature: _____ Duration: 1 hour

SCIENCE
BOOKLET A

INSTRUCTIONS TO CANDIDATES

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

Need a home tutor? Visit smiletutor.sg

Section A (14 × 2 marks)

For each question, 1 to 14, four options are given. One of them is the correct answer.

Make your choice (1, 2, 3 or 4) and shade your answers on the Optical Answer Sheet.

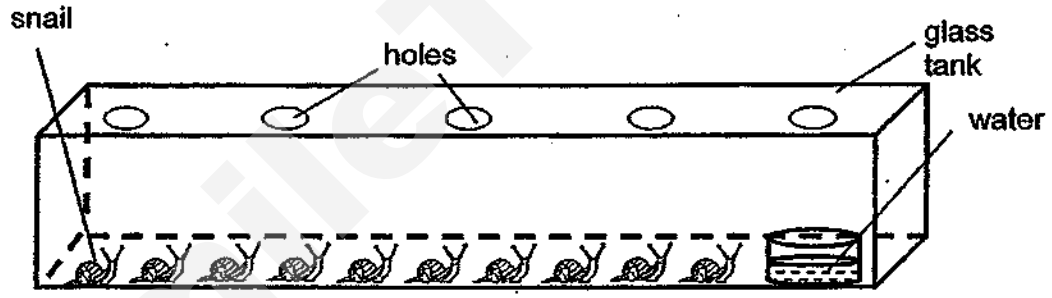
(28 marks)

---

1 Which of the following pairs of things is grouped correctly?

	Living things	Non-living things
(1)	apple	bird
(2)	seed	fish
(3)	bird	water
(4)	water	cat

2. Bala did an experiment by placing 10 snails in a glass tank as shown below. He made sure that there was water in the tank at all times.



He recorded the number of snails that were alive in the tank at the end of each week.

Number of snails still alive	Week 1	Week 2	Week 3	Week 4	Week 5
	10	9	7	5	3

Why did the number of snails decrease?

(1) There was no air.

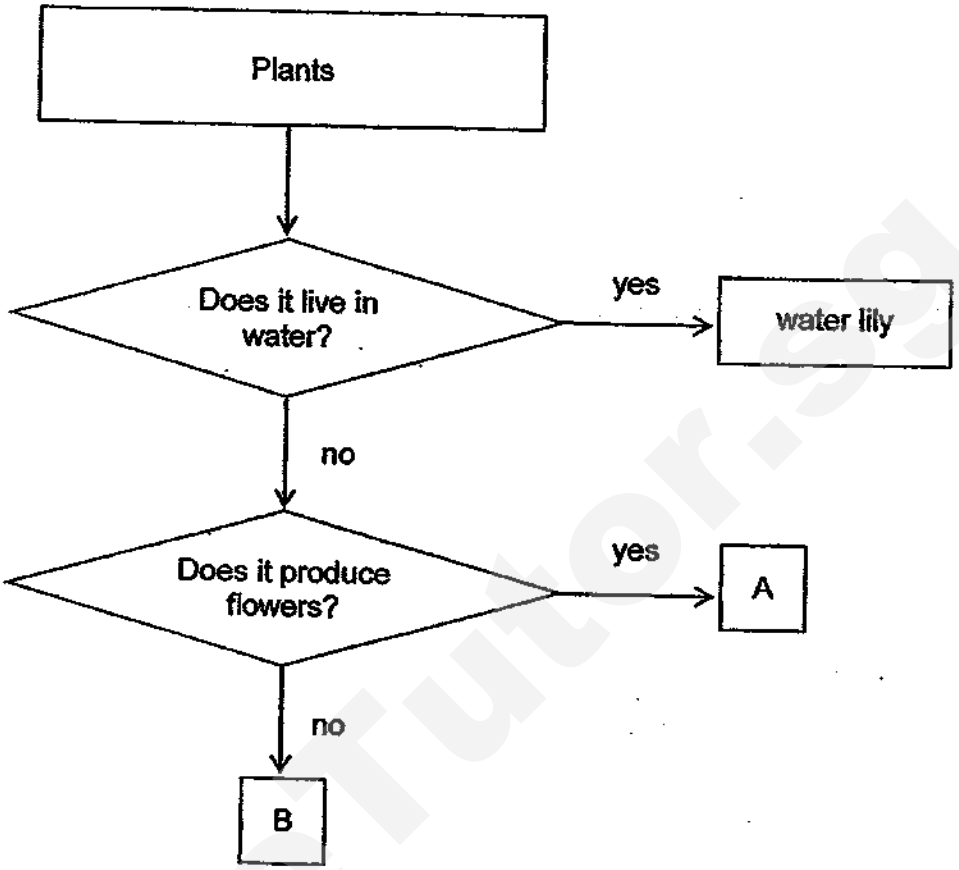
(2) There was no food.

(3) There was not enough water.

(4) The snails were not reproducing.

Need a home tutor? Visit smiletutor.sg

3. Study the flowchart below.

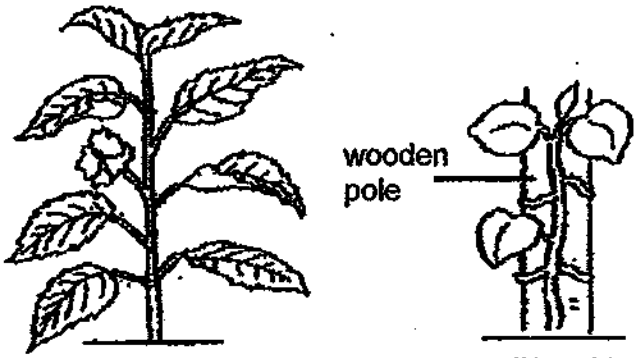


Which of the following best represent A and B?

	A	B
(1)	hibiscus	rose
(2)	bird's nest fern	moss
(3)	rose	bird's nest fern
(4)	moss	hibiscus

Need a home tutor? Visit smiletutor.sg

4. Study the plants below.



Plant X Plant Y

Based on the diagram, how are Plant X and Plant Y different?

	Plant X	Plant Y
(1)	has no flowers	has flowers
(2)	has no leaves	has leaves
(3)	has no fruits	has fruits
(4)	has strong stem	has weak stem

5. The table below shows some characteristics of animals, A, B, C and D.
A tick (✓) shows that the animal has the characteristic.

Animal	Has moist skin	Has scales	Has gills	Has hair
A	✓			
B		✓	✓	
C		✓		
D				✓

Which animal is likely to be a fish?

(1) A

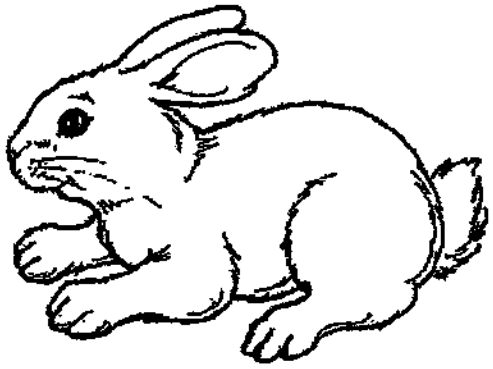
(2) B

(3) C

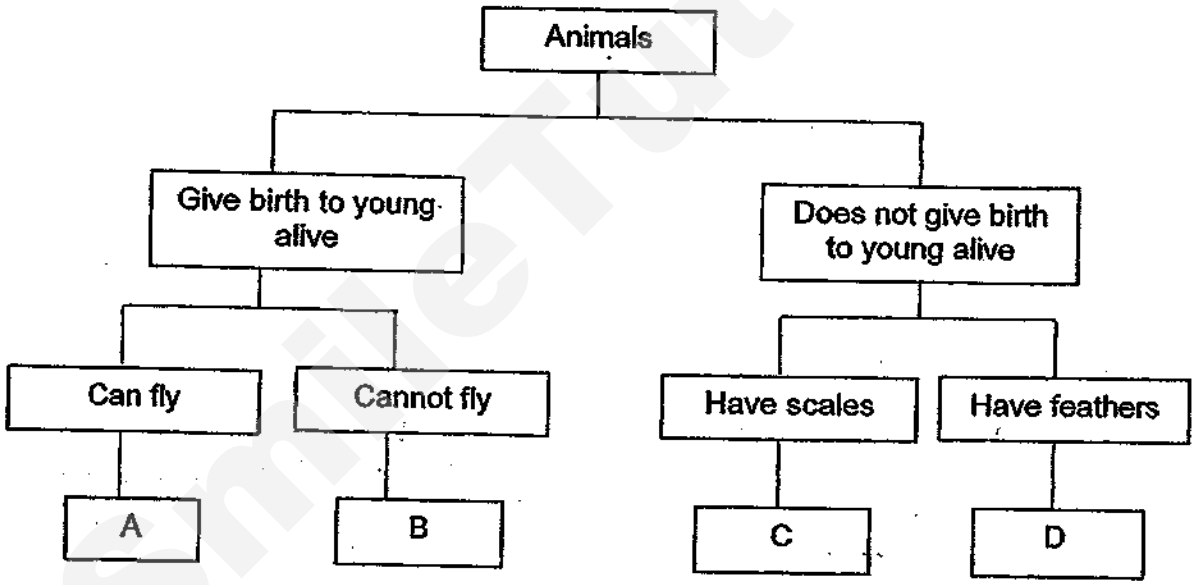
(4) D

Need a home tutor? Visit smiletutor.sg

6. The diagram below shows a rabbit.



The chart below shows how some animals can be classified.

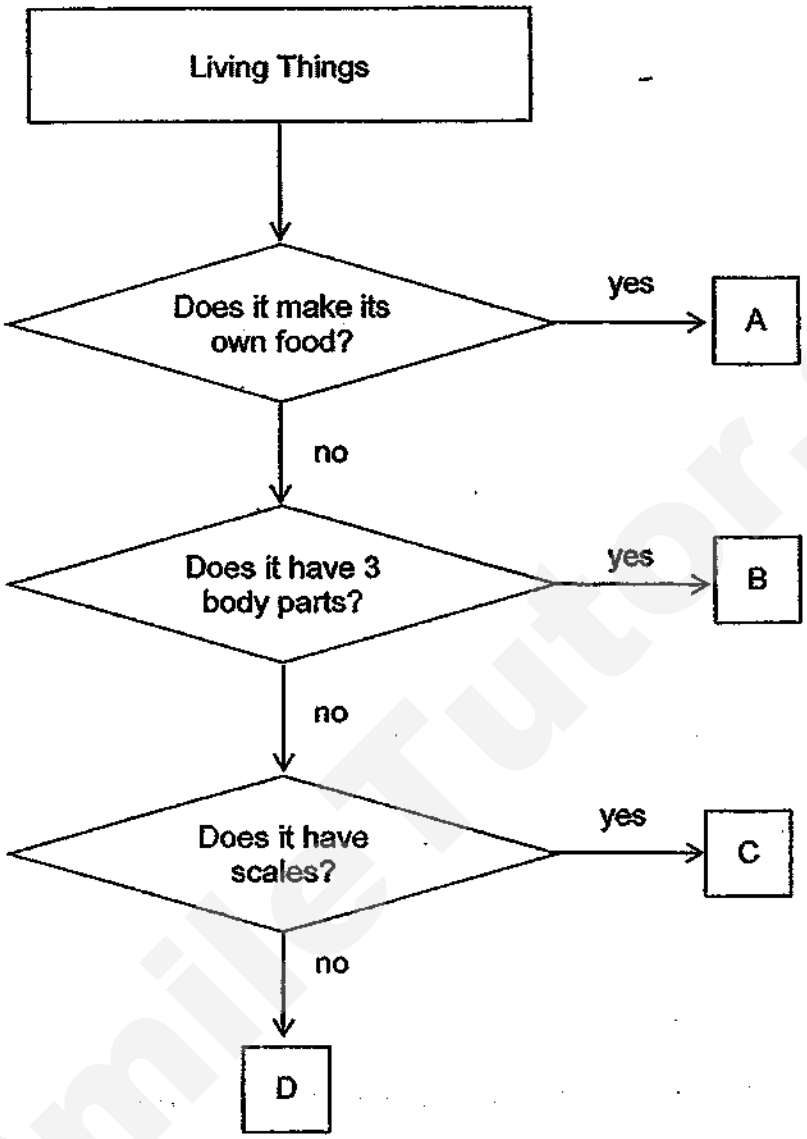


Based on the above classification chart, which of the following letters represents a rabbit?

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

Need a home tutor? Visit smiletutor.sg

7. Study the flowchart below.

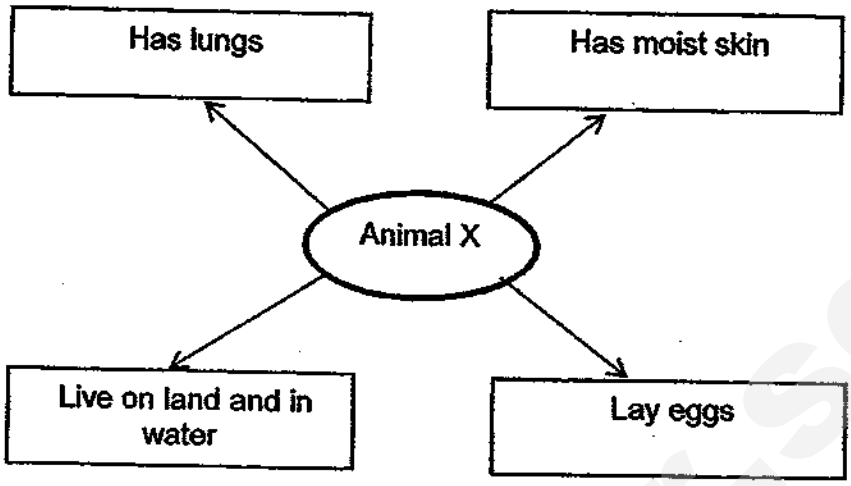


Which of the following best represent A, B, C and D?

	A	B	C	D
(1)	plant	insect	reptile	mammal
(2)	insect	reptile	mammal	plant
(3)	plant	insect	mammal	reptile
(4)	insect	mammal	plant	reptile

Need a home tutor? Visit smiletutor.sg

8. Study the diagram below which shows some characteristics of Animal X.



Which group does Animal X belong to?

(1) Fish

(2) Bird

(3) Mammal

(4) Amphibian

9. Study the living things below.

plant

mushroom

What is the difference between the plant and the mushroom?

(1) The plant is a living thing but the mushroom is not a living thing.

(2) The plant can be seen with the naked eye but the mushroom cannot.

(3) The plant reproduces by spores but the mushroom reproduces by seeds.

(4) The plant makes its own food but the mushroom does not make its own food.

Need a home tutor? Visit smiletutor.sg

10. Four bowls of equal amount of rice A, B, C and D are placed in different conditions as shown below.

Bowl	**A**	**B**	**C**	**D**
Rice	Cooked	Cooked	Uncooked	Cooked
Drops of water placed on it	2	4	2	4
Location of bowl	In refrigerator	On the table	On the table	In refrigerator

Which bowl of rice has the most bacteria after one day?

(1) A

(2) B

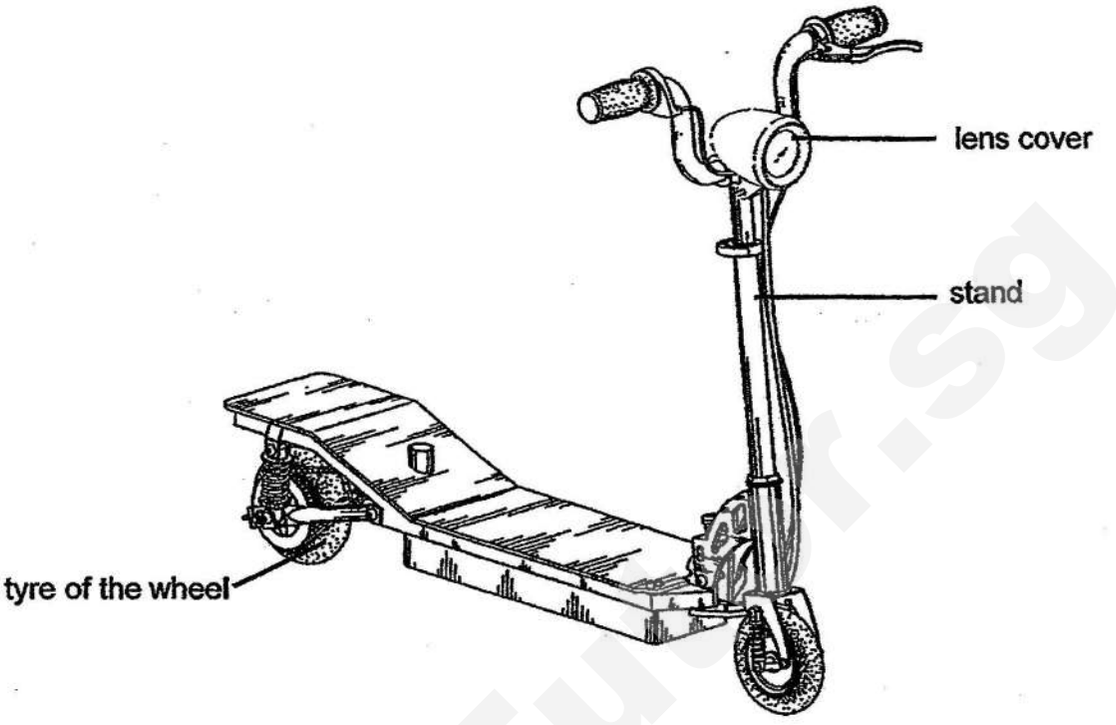
(3) C

(4) D

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

11. An electronic scooter is shown below.



John needs to select suitable materials to make different parts of the scooter.

- The lens cover must allow light to pass through.
- The stand must be strong.
- The tyre of the wheel must be flexible.

What materials should the above parts (lens cover, stand and tyre of the wheel) of the scooter be made of?

	lens cover	stand	tyre of the wheel
(1)	rubber	metal	plastic
(2)	plastic	rubber	metal
(3)	metal	rubber	plastic
(4)	plastic	metal	rubber

Need a home tutor? Visit smiletutor.sg

12. The table below provides information on the properties of materials A, B, C and D.
A tick (✓) shows that the material has the property.

	A	B	C	D
Allow some light to pass through	✓		✓	
Waterproof		✓		
Strong	✓	✓		✓

Which material would be most suitable to make a water bottle?

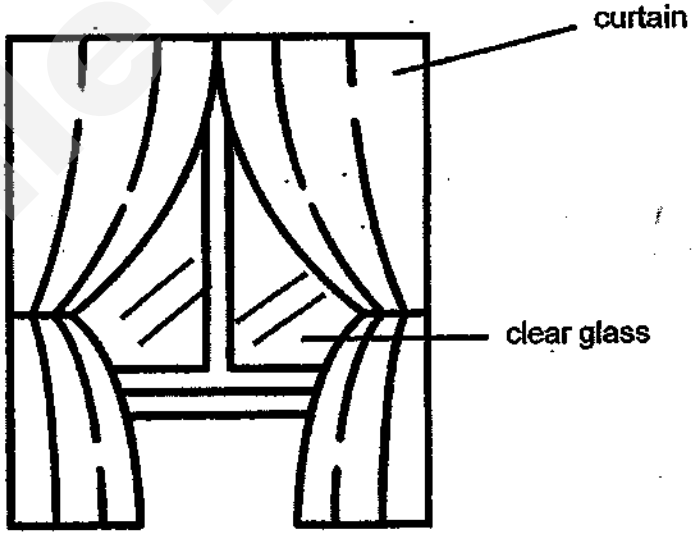
(1) A

(2) B

(3) C

(4) D

13. Bala wants to sleep in a dark room. He wants to put up curtains at his clear glass window as shown below.



Which material would be most suitable to make the curtains?

(1) iron sheet

(2) black cloth

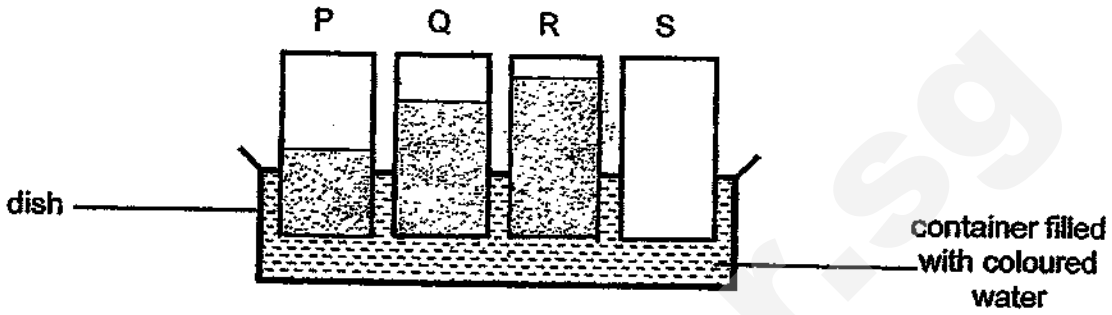
(3) newspaper

(4) clear plastic

Need a home tutor? Visit smiletutor.sg

14. Laura wanted to find out which material, P, Q, R or S, should be used to make a raincoat. She cut a strip from each material and placed one end of each strip into a container filled with some coloured water.

The diagram below shows the result at the end of the experiment after half an hour.



Which of the materials, P, Q, R or S, can be used to make a raincoat?

(1) P

(2) Q

(3) R

(4) S

– End of Booklet A –

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

TAO NAN SCHOOL 道南学校

SINCERITY & PERSEVERANCE

2018 PRIMARY 3 SEMESTRAL ASSESSMENT 1

Name : _____ ( )

Class : Primary 3 ( )

Parent's Signature : _____

Date: 10 May 2018

Time: 8.00 a.m. – 9.00 a.m.

Duration: 1 hour

SCIENCE

BOOKLET B

INSTRUCTIONS TO CANDIDATES

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

Booklet A	28
Booklet B	22
Total	50

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Section B (22 marks)
For the questions, 15 to 24, write your answers in the spaces provided.

15. Ahmad placed 250 g of food and 250 ml of water in 3 similar cages, X, Y and Z. She recorded the amount of food and water left at the end of the week in the table below.

Cage	Amount of food left (g)	Amount of water left (ml)
X	250	250
Y	70	50
Z	40	20

(a) Based on the results, which cage(s) contain(s) mice? Why? [1]

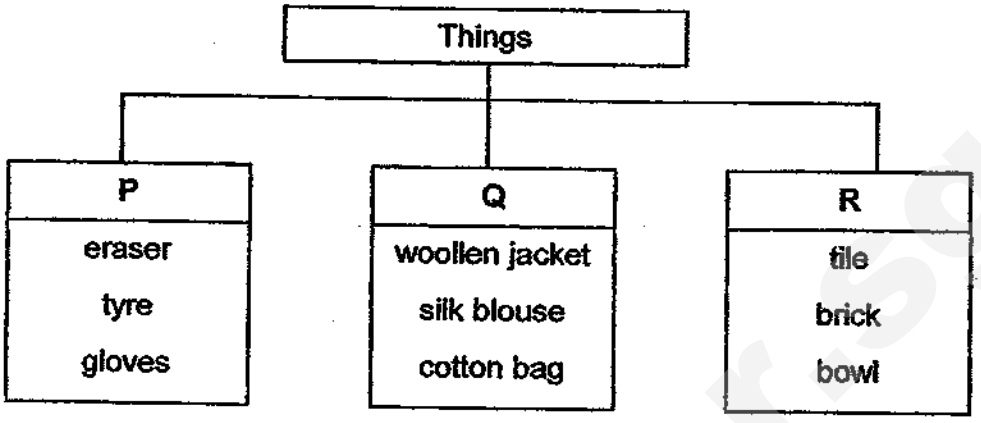
(b) What does this experiment tell you about the characteristics of living things? [1]

2

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

16. Study the classification chart below.



(a) How are the things stated above grouped? [1]

They are grouped according to _____

_____

(b) Which group, P, Q or R ,should a shirt be placed in? Why? [1]

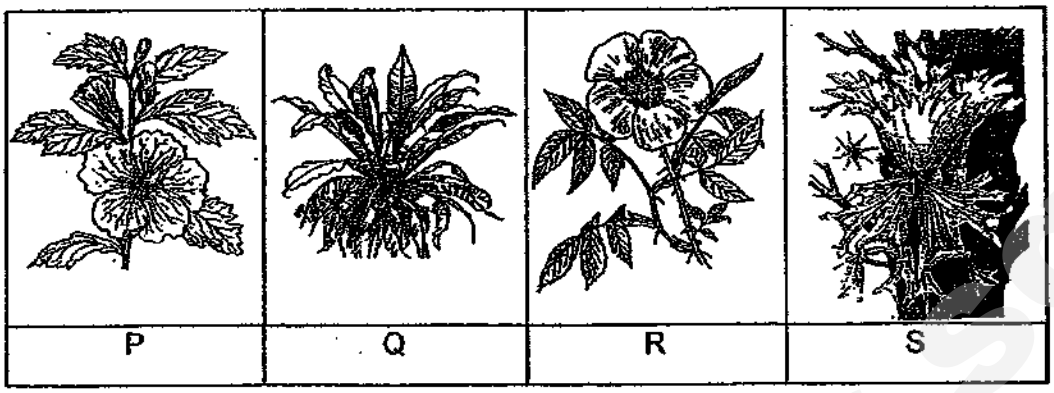
_____

_____

/2

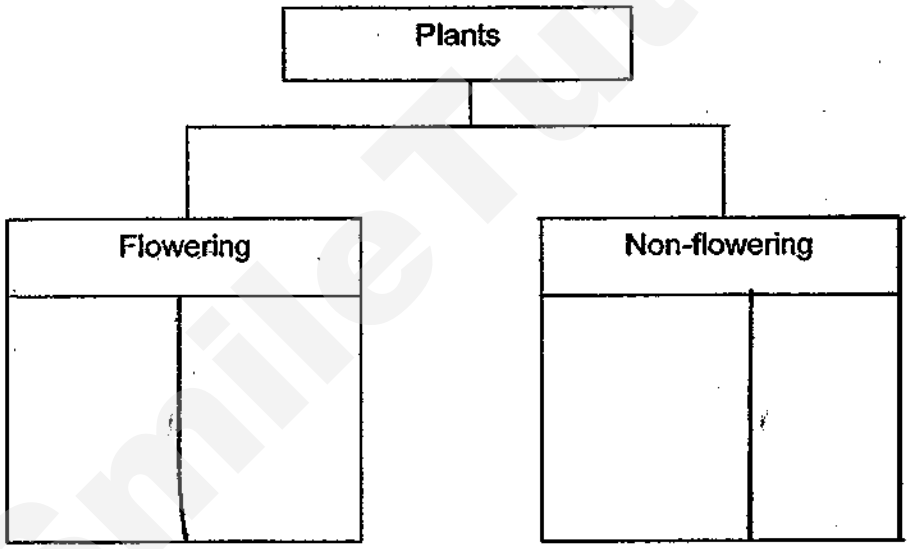
Need a home tutor? Visit smiletutor.sg

17. Study the plants P, Q, R and S shown below.



Classify the plants by writing the letters, P, Q, R and S, under the correct heading in the chart below.

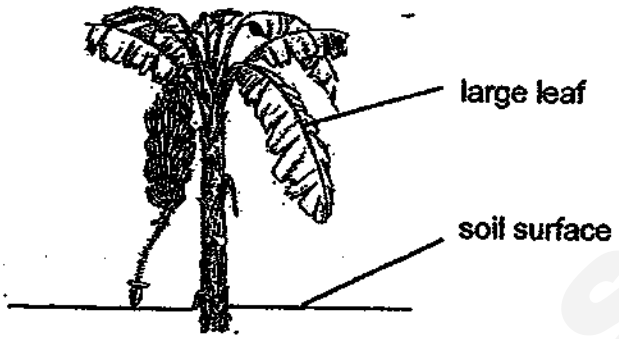
[2]



2

Need a home tutor? Visit smiletutor.sg

18. The diagram below shows Plant X.



Plant X

(a) How can you tell that Plant X is a flowering plant even though there are no flowers on it? [1]

_____

_____

(b)

Plant Y

Based on the diagrams of Plant X and Plant Y, give a difference between the two plants. [1]

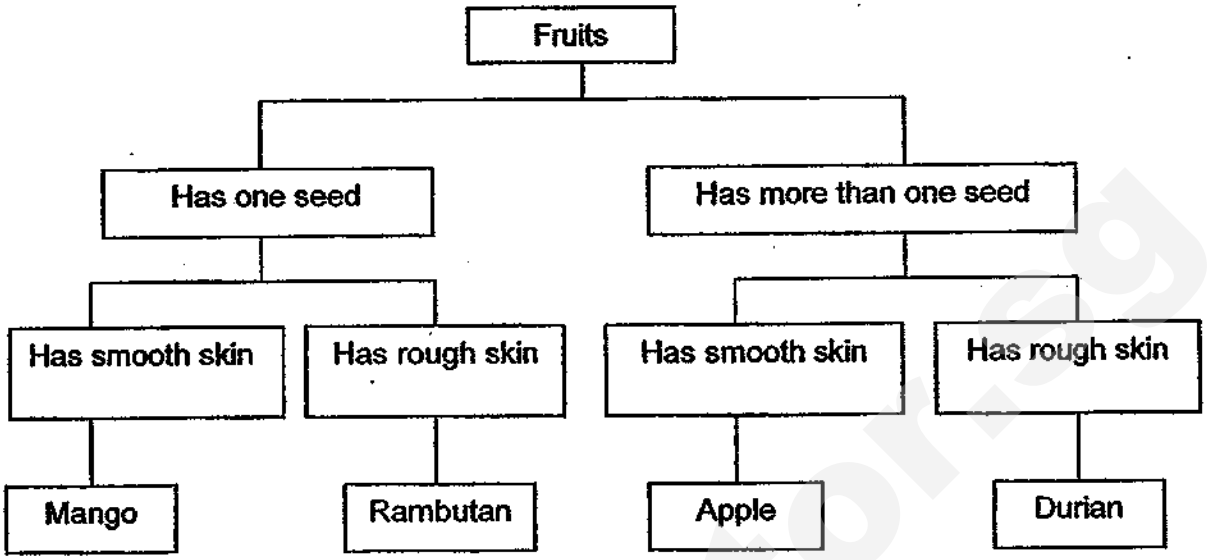
_____

_____

/2

Need a home tutor? Visit smiletutor.sg

19. Study the classification table below.



(a) Based on the classification table, describe the characteristics of durian. [1]

_____

_____

(b) Based on the classification table, state one similarity between the mango and rambutan. [1]

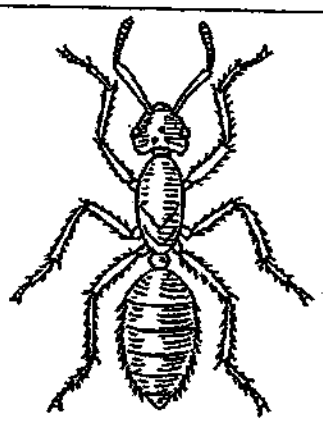
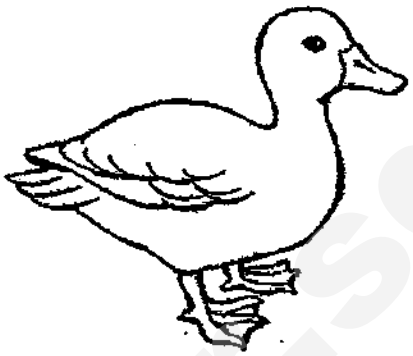
_____

_____

/2

Need a home tutor? Visit smiletutor.sg

20. Study the two animals shown below.

	
Animal A	Animal B

(a) Based only on the diagrams above, give two reasons why Animal A is an insect but Animal B is not. [2]

Reason 1:

_____

_____

Reason 2:

_____

_____

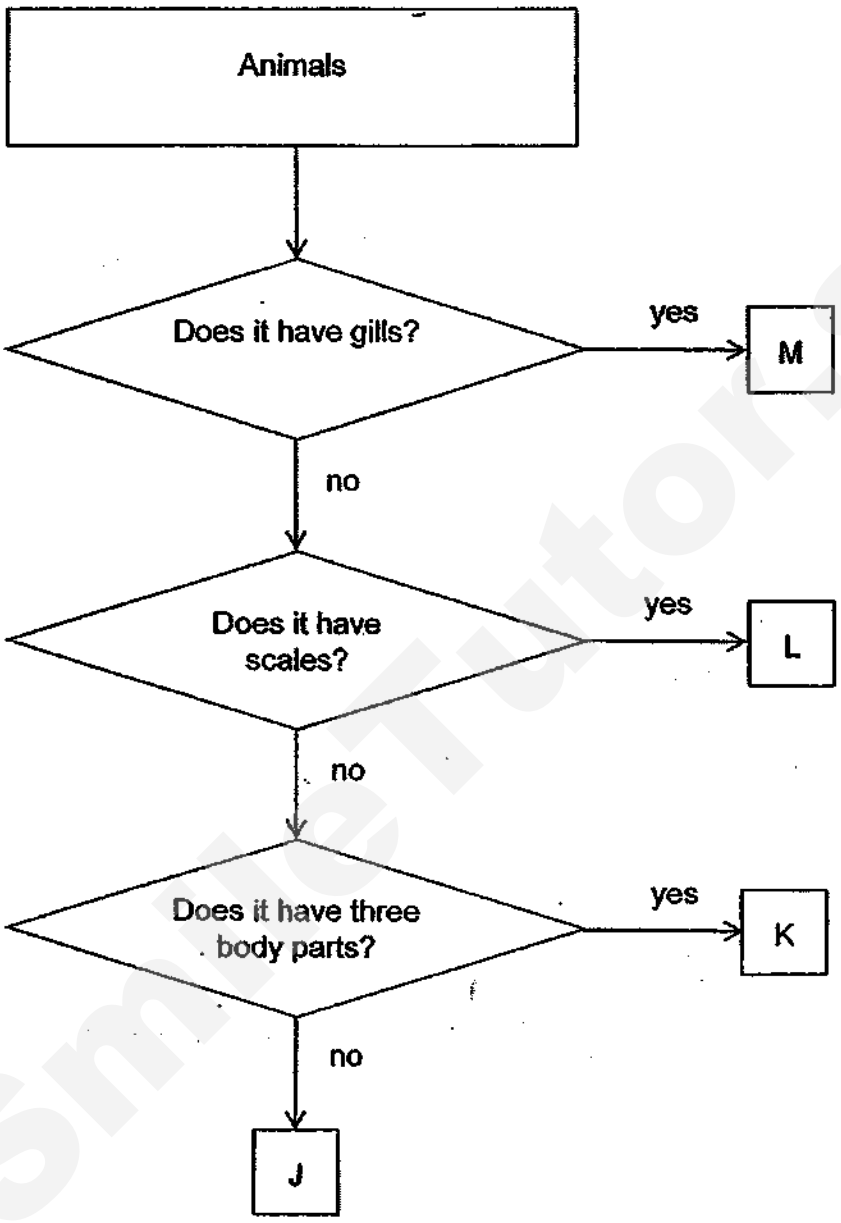
(b) Which animal group has a different method of reproduction from that of Animal A and Animal B? [1]

_____

3

Need a home tutor? Visit smiletutor.sg

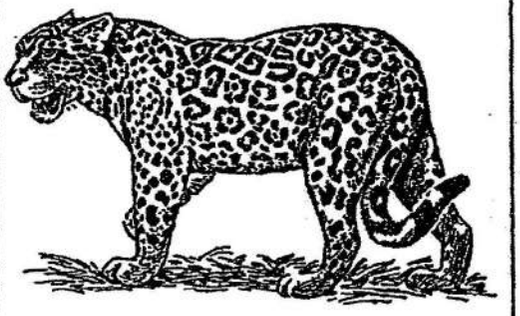
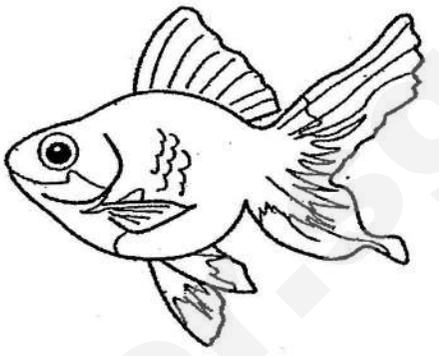
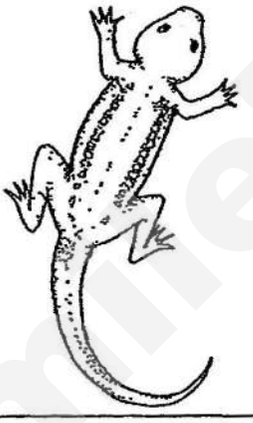
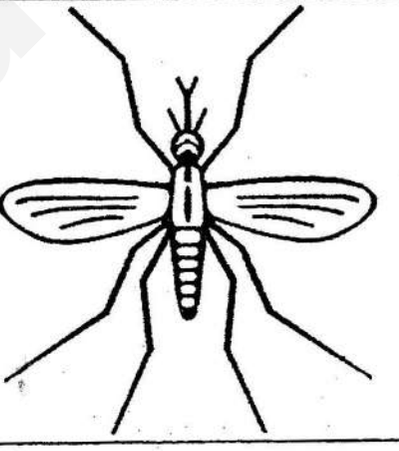
21. Study the flowchart below.



SmileTutorsg

Need a home tutor? Visit smiletutor.sg

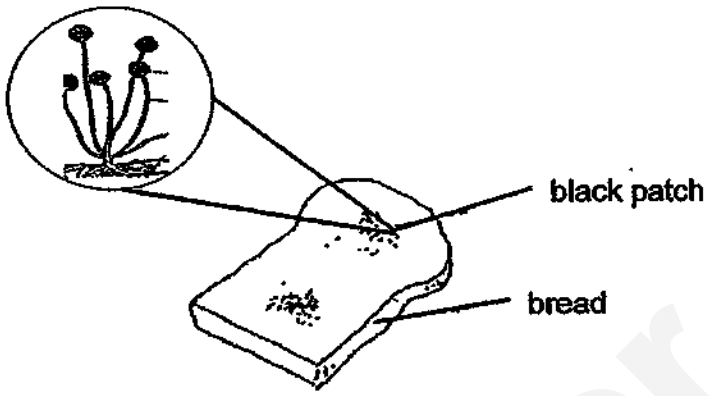
Using the information given in the flowchart, write down J, K, L or M to correctly represent the animals shown below. [2]

	
(a) Animal _____	(b) Animal _____
	
(c) Animal _____	(d) Animal _____

2

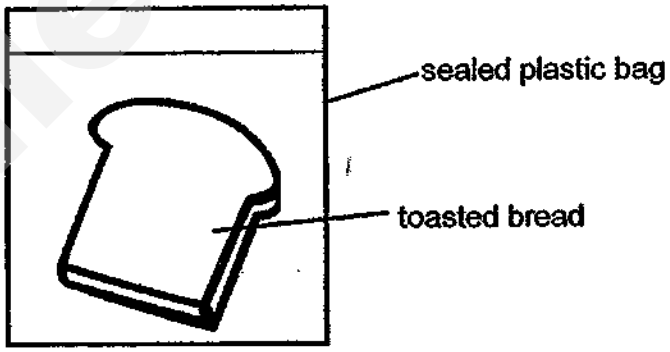
Need a home tutor? Visit smiletutor.sg

22. Liam left a piece of white bread on his table. He observed black patches on it on the fifth day.



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

Liam toasted a new piece of white bread and left it on the table in a sealed bag as shown below.



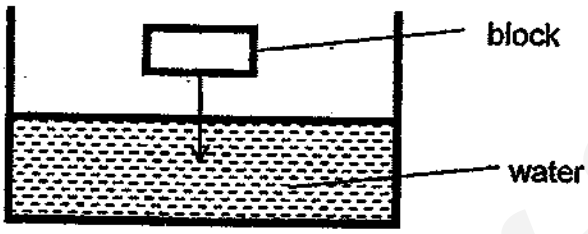
(b) Will the black patches appear on the toasted bread on the fifth day too? [1]
Why?

2

Need a home tutor? Visit smiletutor.sg

23. Li Ying did an experiment with 2 blocks, C and D, made of different materials. The blocks are of the same size, shape and thickness.

She dropped each block into the water as shown below.

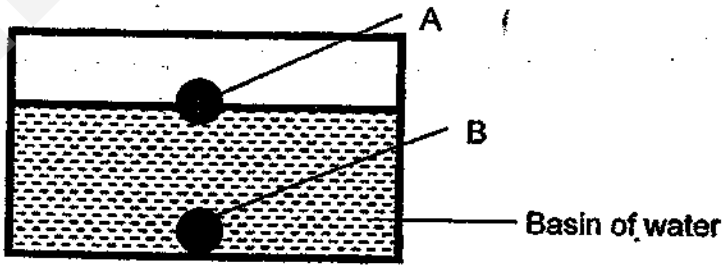


She recorded her observations in the table below.

Block	Observation	Material
C	Sinks immediately	
D	Floats on water surface	

(a) Write "ceramic" or "styrofoam" in the correct boxes for the material that block C and D are made of in the table above. [1]

(b) She has 2 balls, A and B, one made of glass and another made of styrofoam. She dropped both balls into a basin of water and she observed the results shown below. [1]



Which ball, A or B, is made of styrofoam and why?

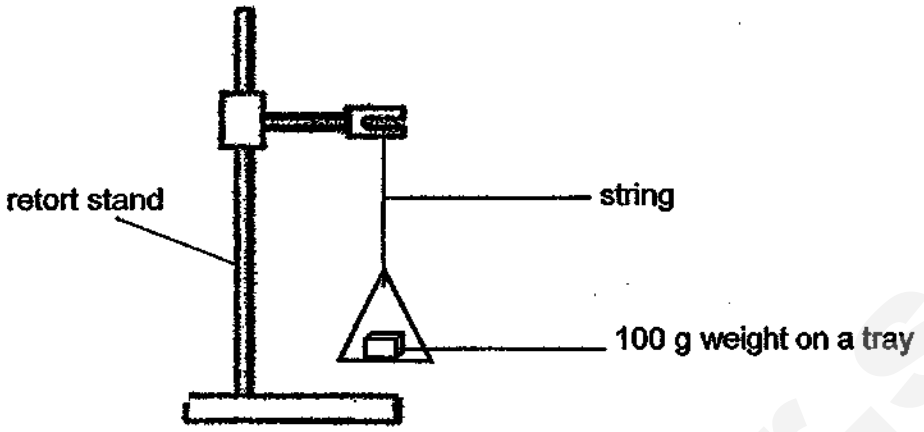
_____

_____

2

Need a home tutor? Visit smiletutor.sg

24. Jack set up an experiment as shown below.



He increased the number of weights on the string until it broke.

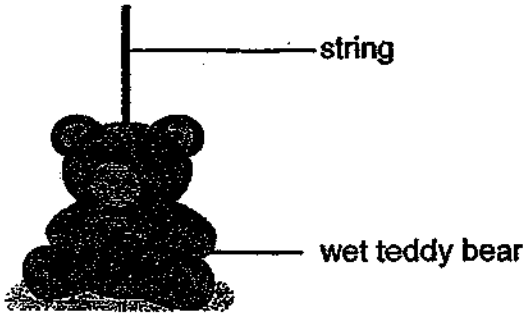
(a) What property of the string was Jack trying to find out? [1]

_____

Jack decided to test strings of different materials that are of similar length and thickness. His results were shown in the table below.

	A	B	C	D
Number of 100 g weights added before the string broke	2	4	7	9

(b) From the table above, which string (s), A, B, C or/and D, would be able to hang a 650 g wet teddy bear to dry after it had been washed as shown below? Explain why. [1]



_____

_____

2

Need a home tutor? Visit smiletutor.sg

(c) Jack wants to use string D to hang a 1500 g pot of plant. He used 5 strings of String D instead of one string. Explain why he did so. [1]

_____

_____

1

– End of Paper –

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : TAO NAN

SUBJECT : SCIENCE

TERM : SA1

ORDER CALL :

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

Q15) a) Cages Y and Z. The amount of food and water decreased.

b) Living things need food and water to stay alive.

Q16) a) They are grouped according to matirils.

b) Group Q. The shirt is made of fabric and the things in group Q are made of fabric.

Q17) Flowering – P , R

Non-flowering – Q , S

Q18) a) I can tell Plant X is a flowering plant even though there are no flowers because flower reproduce to a fruit so I can tell that Plant X is a flowering plant.

b) Plant Y live in water but Plant X does not. Plant X live on land.

Q19) a) Durian has rough skin, more than one seed and it is a fruit.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

b) The similarity between the Mango and a Rambutan is that they only have one seed.

Q20) a) Reason 1 : Because it has three body parts while Animal B has 1 body part.

Reason 2 : Because it has six legs but Animal B has 2 legs.

b) Mammals has a different method of reproduction. They reproduce by giving birth to their young alive.

Q21) a) Animal J

b) Animal M

c) Animal L

d) Animal K

Q22) a) mould

b) No. There is no water in the bread for the mould to grow.

Q23) a) Block C – ceramic

Block D – Styrofoam

b) A. It floats on water.

Q24) a) Where there it is strong or not.

b) String C and D. Both are able to hold 650 g weight.

c) It is to increase the strength of string.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT 2 (2018)

PRIMARY 3

SCIENCE

BOOKLET A

Wednesday **31 October 2018** **1 hr 45 min**

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

INSTRUCTIONS TO PUPILS

1 Do not turn over the pages until you are told to do so.

2 Follow all instructions carefully.

3 There are 28 questions in this booklet.

4 Answer ALL questions.

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

This question paper consists of 17 printed pages (inclusive of cover page).

SmileTutor.sg

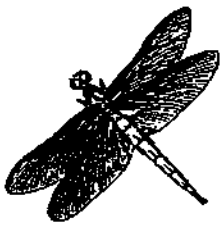
Need a home tutor? Visit smiletutor.sg

For each question from 1 to 28, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade your answer on the Optical Answer Sheet.

(56 marks)

---

1. The animals shown are similar because both of them _____.

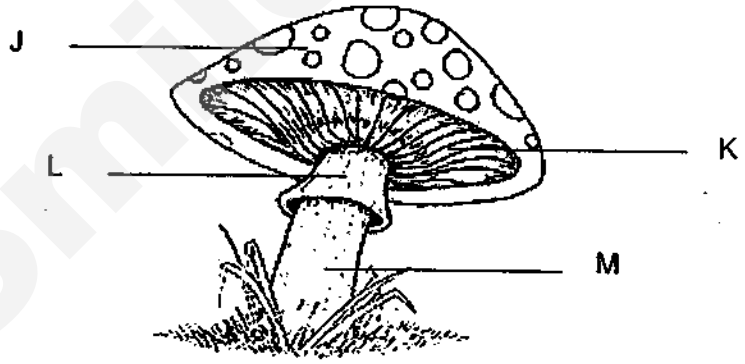


Dragonfly

Ostrich

(1) can fly
(2) have wings
(3) have the same number of legs
(4) have the same type of body covering

2. The picture shows a mushroom.



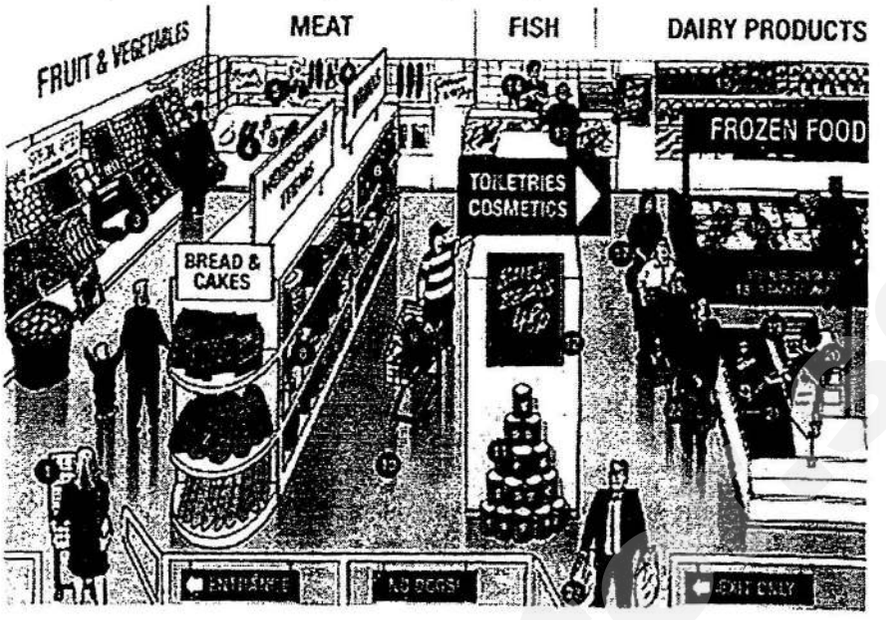
Which part of the mushroom, J, K, L or M, helps it to reproduce?

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

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

3. Items in a supermarket are organized by categories as shown.



Which one of the following best explains this arrangement?

(1) It looks attractive.
(2) It ensures customers' safety.
(3) It helps customers to find items easily.
(4) It helps to save space for the supermarket.

4. Which one of the following **does not** show a living thing responding to changes in its surroundings?

(1) A hamster dies due to old age.
(2) A mouse runs when it sees a cat.
(3) A snail enters its shell when touched.
(4) A baby cries when it hears the thunder.

5. Study the classification table.

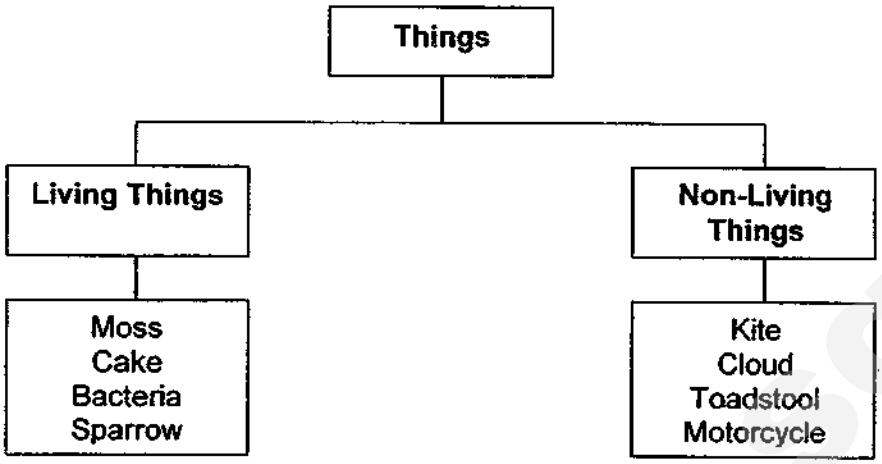
Group K	Group L	Group M
Eraser	T-shirt	Spectacle Lens
Tyres	Shoelaces	Window pane

Which of the following objects belong to Group L?

(1) Socks
(2) Marble
(3) Balloon
(4) Water bottle

Need a home tutor? Visit smiletutor.sg

6. Study the classification chart carefully.



Which of the following things are classified **wrongly**?

	Living Things	Non-living Things
(1)	Moss	Kite
(2)	Bacteria	Cloud
(3)	Sparrow	Motorcycle
(4)	Cake	Toadstool

7. Study the table of four living things A, B, C and D. A tick (✓) indicates that the characteristic is present.

Living things	Reproduce by spores	Comes in different shapes and sizes	Can only be seen under a microscope	Makes its own food
A	✓	✓		
B	✓	✓		✓
C		✓	✓	
D			✓	✓

Which of the following living things best describes a bacteria?

(1) A

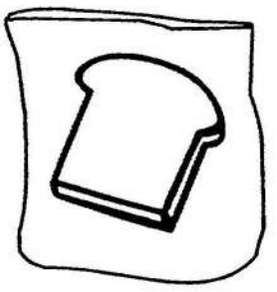
(2) B

(3) C

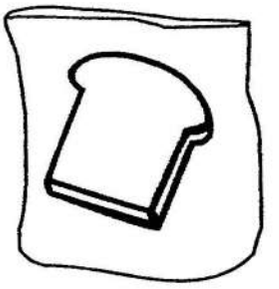
(4) D

Need a home tutor? Visit smiletutor.sg

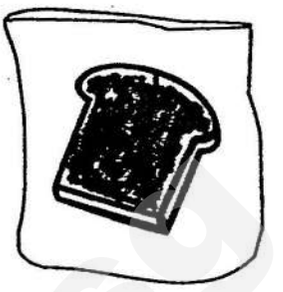
8. Lara conducted an experiment to find out the conditions in which bread mould would grow best. She used three identical slices of bread and did something to two of them. She then placed them in identical sealed bags for a week as shown.



A: bread with no water added



B: bread with water added



C: toasted bread

Arrange the set-ups in order, beginning with the one with the slice of bread that would have the least mould growing on it.

(1) C, B, A
(2) B, C, A
(3) C, A, B
(4) B, A, C

9. Tom wrote the following riddle.

"I cannot move from place to place.
I produce spores for reproduction and cannot make my own food.
I help to break down dead organism into simpler substances.
What organism can I possibly be?"

The riddle best describes _____.

A bacteria
B mushroom
C bread mould
D Bird's Nest Fern

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

Need a home tutor? Visit smiletutor.sg

10. Raj observed four objects, A, B, C and D, and recorded their characteristics in the table. A tick (✓) in the box indicates that the object has the characteristic.

Object	Able to respond to changes	Able to move from place to place	Able to grow	Able to make food
A	✓	✓		
B	✓	✓	✓	
C	✓			
D	✓	✓	✓	✓

Which object(s) is/are non-living thing(s)?

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

11. The table shows some characteristics of four different groups of fruits, P, Q, R and S. A tick (✓) in the box indicates that the fruits in that group have the characteristic.

Characteristic	P	Q	R	S
Have smooth skin	✓			✓
Have many seeds		✓		✓

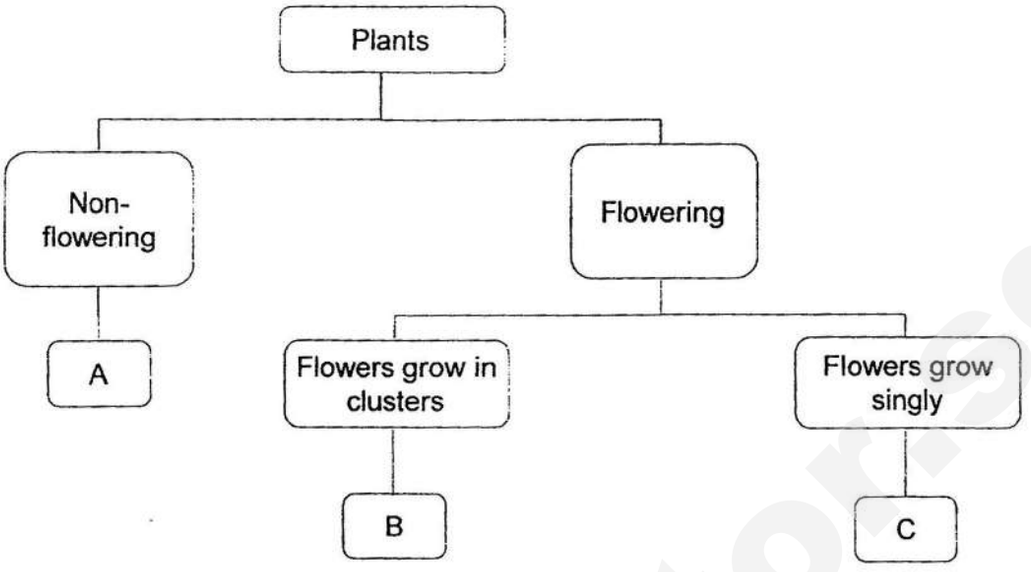
Faizal was given fruit X.

Based on the information above, which group of fruits, P, Q, R or S, does fruit X best belong to?

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

Need a home tutor? Visit smiletutor.sg

Study the classification chart and answer Questions 12 and 13.



12. Which of the following statements about Plant A is **incorrect**?

(1) It does not bear fruits.
(2) It does not make its own food.
(3) It could be the Bird's Nest Fern.
(4) It needs air, food and water to survive.

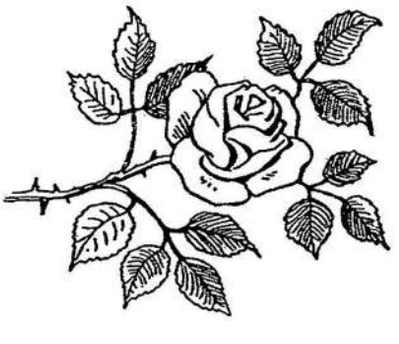
13. Which of the following is most likely to be Plant B?

(1)

(2)

(3)

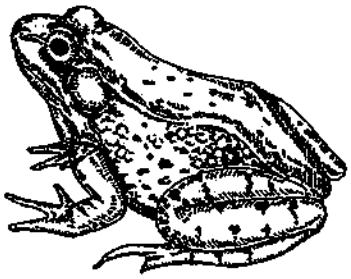
(4)



SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

14. Study Animal T carefully.

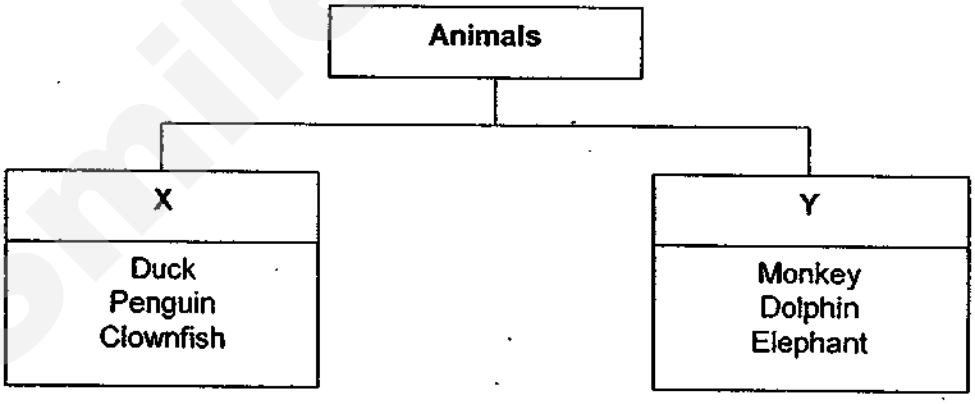


Animal T

Which of the following questions will best help confirm if Animal T is an amphibian?

(1) How many legs does it have?
(2) Can it live on land and in water?
(3) Does it breathe through its lungs?
(4) Does it reproduce by giving birth to its young?

15. Some animals are classified into two groups as shown.



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

	X	Y
(1)	Birds	Mammals
(2)	Have feathers	Animal-eaters
(3)	Animals that lay eggs	Animals that give birth to live young
(4)	Animals that live in the water	Animals that live on land

Need a home tutor? Visit smiletutor.sg

16. The table shows the characteristics of four animals, A, B, C and D. A tick (✓) in the box indicates that the animal has the characteristic.

Animal	Has scales	Gives birth	Breathes through gills
A	✓		✓
B		✓	
C	✓	✓	✓
D	✓		

Which animal is most likely to be a crocodile as shown?

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

17. Peter carried out an experiment on 4 similar plants, W, X, Y and Z. For each plant, he removed some plant part(s). The table shows the plant part(s) being removed.

Plant	Part(s) being removed
W	All the roots
X	All the flowers
Y	All the roots and leaves
Z	All the fruits and leaves

Which of the following plants, W, X, Y or Z, will most likely survive the longest?

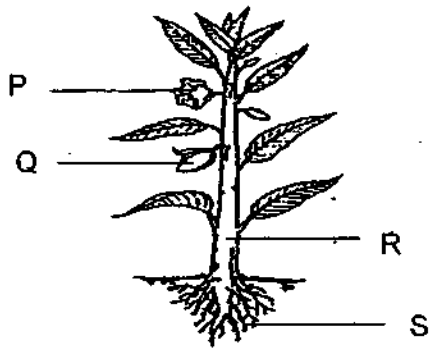
(1) W
(2) X
(3) Y
(4) Z

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

18. Ahmad and Devi commented on one part of the plant.

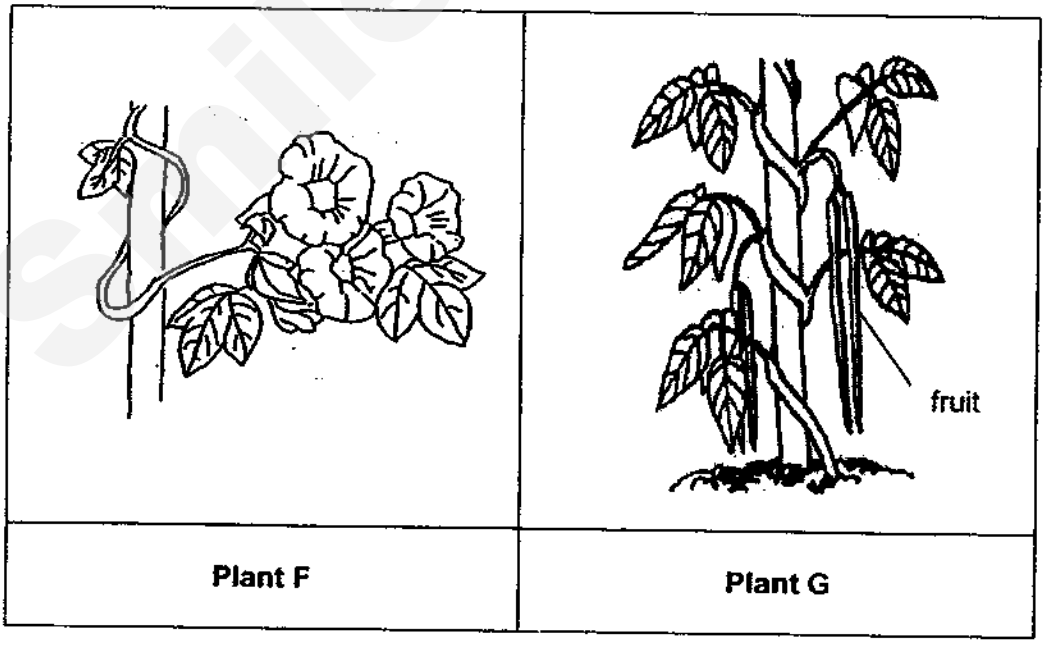
Ahmad : It supports the plant.
Devi : It holds the leaves up so that the plant can get enough sunlight.



Which part, P, Q, R or S, are they referring to?

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

19. Observe Plants F and G.



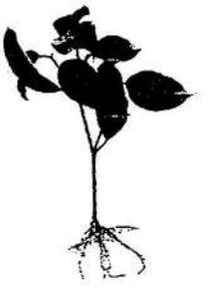
Which of the following statement is true?

(1) Plant G reproduce by spores.
(2) Only Plant F is a flowering plant.
(3) Both Plants F and G have weak stems.
(4) Plant F has no roots but Plant G has roots.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

20. Study the pictures of the two plants.

	
Plant G	Plant H

Four students made comments about the plants. Which of the following comments are true?

Aminah: Only the roots of Plant H hold the plant firmly to the ground.

Bala: Plant G will be uprooted more easily during a storm.

Caden: Plant H can make more food than Plant G.

David: The roots of Plant H absorb more water and minerals from the soil than the roots of Plant G.

(1) Bala and David

(2) Aminah and Caden

(3) Bala, Caden and David

(4) All of the above

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

21. Which two main body systems work together to enable the boy to move and dance?

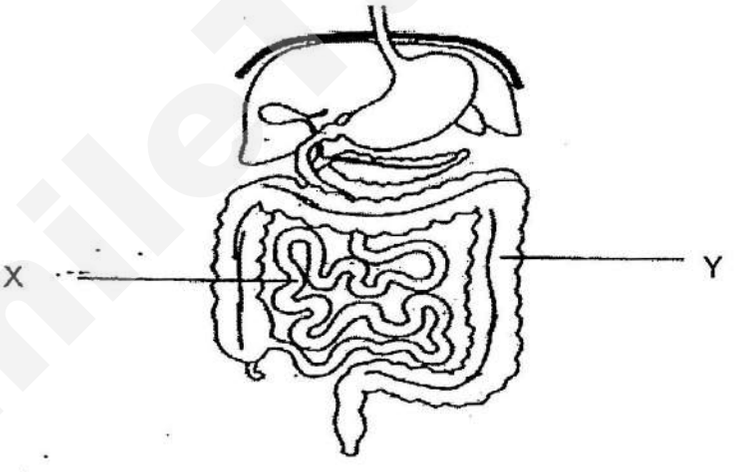
(1) Skeletal and Muscular System

(2) Circulatory and Skeletal System

(3) Digestive and Muscular System

(4) Respiratory and Circulatory System

22. The diagram shows parts of the digestive system.



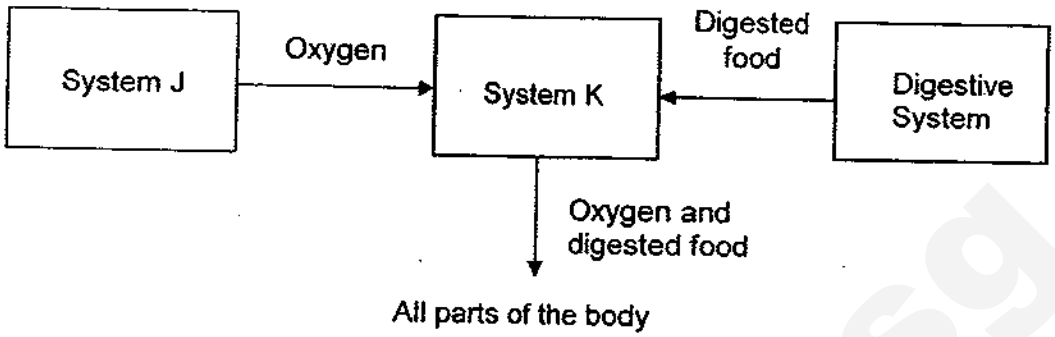
Which one of the following correctly matches what happens at parts X and Y?

	X	Y
(1)	Digestive juices are added to the partially digested food.	Waste is removed.
(2)	Food is further digested.	Digestion is completed.
(3)	Digested food is passed to the large intestine for further digestion.	Undigested food is pushed down into the anus.
(4)	Digestion is completed.	Water is absorbed from the undigested food.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

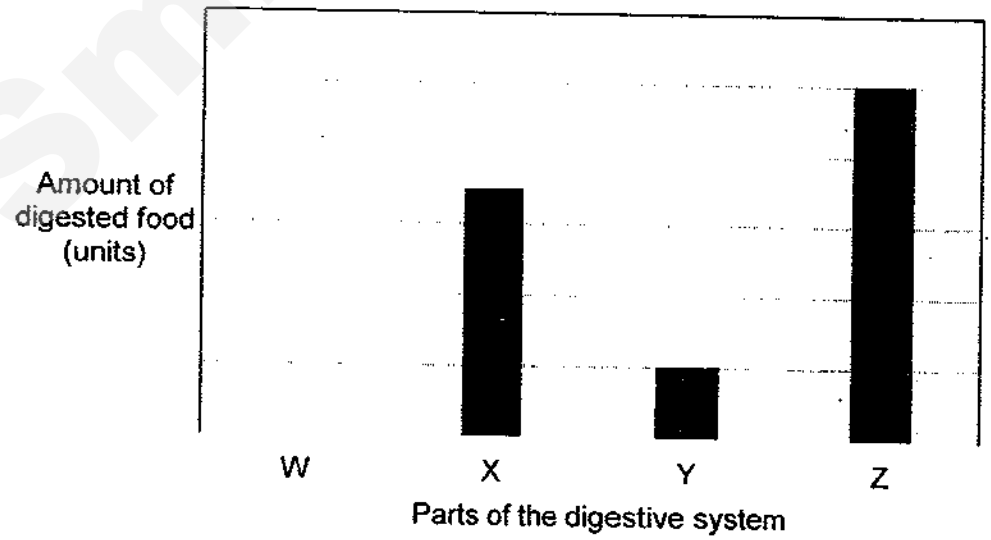
23. The flow chart shows how some substances are transported in the human body.



What are Systems J and K?

	System J	System K
(1)	Digestive	Skeletal
(2)	Digestive	Circulatory
(3)	Respiratory	Circulatory
(4)	Respiratory	Skeletal

24. Brian ate a sandwich during recess. The bar graph shows the amount of digested food found in different parts of his digestive system, the mouth, stomach, small intestine and large intestine. The different parts are not arranged in order.



Which part represents the stomach?

(1) W

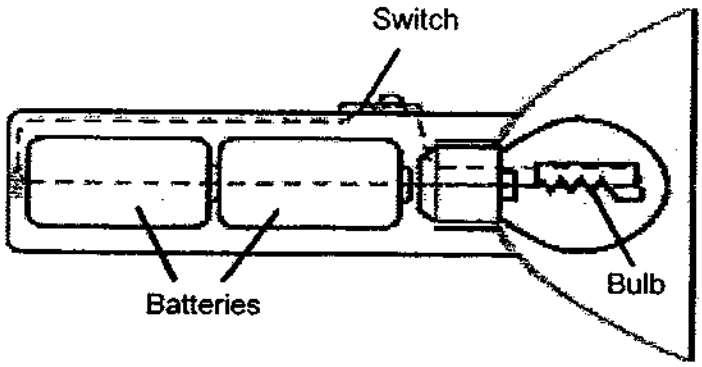
(2) X

(3) Y

(4) Z

Need a home tutor? Visit smiletutor.sg

25. Jack observed a torch and its parts.



When he turned on the switch, the bulb lighted up. He then removed one part of a torch each time and observed if the bulb lights up.

Part removed	Did the bulb light up?
Bulb	No
Switch	No
Batteries	No

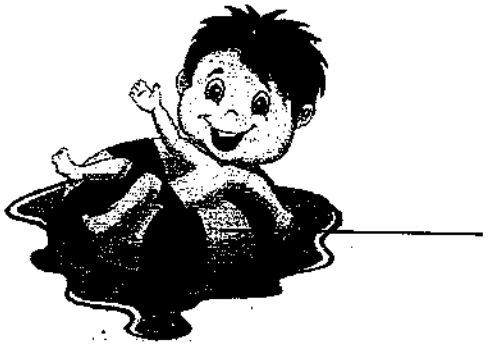
Which of the following do(es) Jack's observations confirm?

A. Each part of a torch has its own function.
B. A torch can be made of one or many parts.
C. Different parts of a torch must work together for the bulb to light up.

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

Smile Tutor.sg

26. The float shown is made of plastic and is designed to help a swimmer stay afloat in water while swimming.



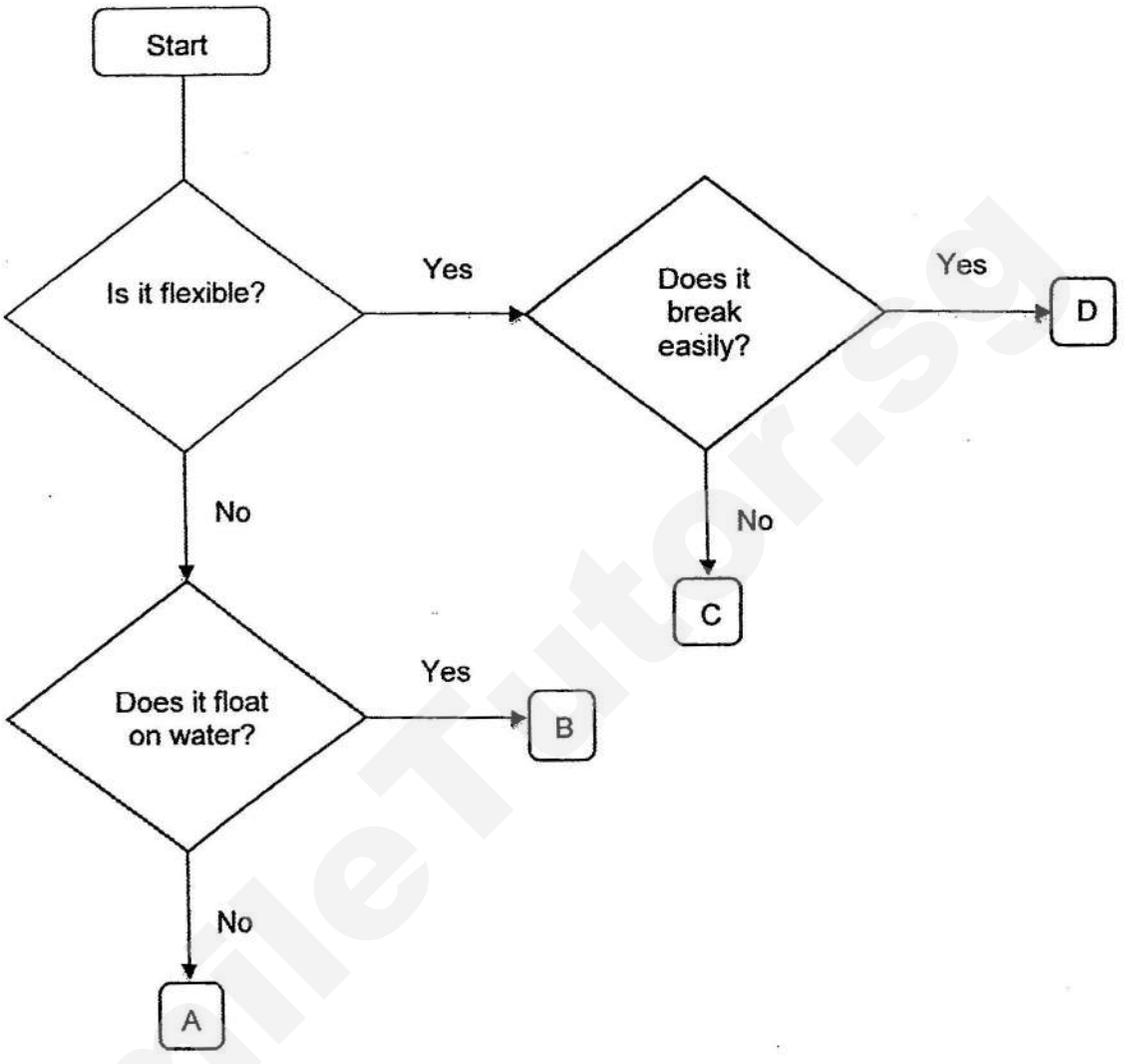
Which of the following properties of plastic make it suitable for making the float?

A It is stiff.
B It is waterproof.
C It is able to float on water.
D It allows light to pass through.

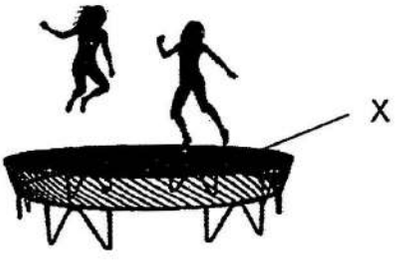
(1) B only
(2) B and C only
(3) A, B and D only
(4) A, C and D only

SmileTutor.sg

27. Study the flowchart of Materials A, B, C and D.



A trampoline is usually used to exercise by jumping up and down on it. Which material would be the most suitable to make Part X of the trampoline below?

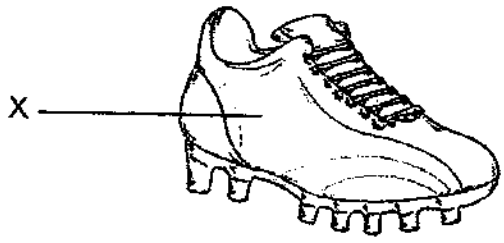


(1) A
(2) B
(3) C
(4) D

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

28. The diagram shows a pair of football boots.



Which of the following properties of material X must be taken into consideration when making the football boots?

A Flexibility
B Waterproof
C Ability to float on water
D Allows all light to pass through

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

End of Booklet A

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT 2 (2018)

PRIMARY 3

SCIENCE

BOOKLET B

Wednesday **31 October 2018** **1 hr 45 min**

Name: _____ ( ) Class: 3.( )

INSTRUCTIONS TO PUPILS

1 Do not turn over the pages until you are told to do so.

2 Follow all instructions carefully.

3 There are 13 questions in this booklet.

4 Answer ALL questions.

5 The marks are given in the brackets [ ] at the end of each question or part question.

Booklet	Possible Marks	Marks Obtained
A	56	
B	44	
Total	100	

This question paper consists of 17 printed pages (inclusive of cover page).

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

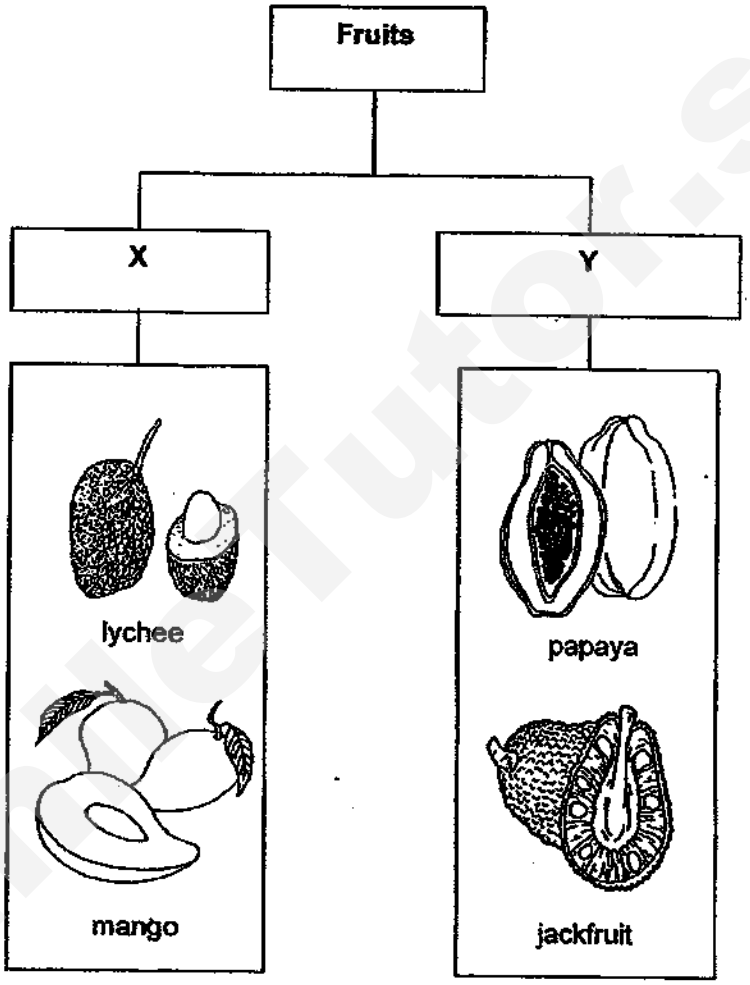
For questions 29 to 41, write your answers in this booklet.

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

(44 marks)

---

29. Study the classification table carefully.



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

i. X: _____

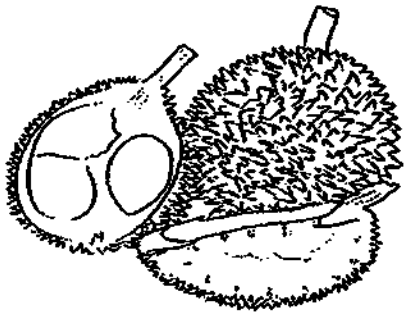
ii. Y: _____

(Go on to the next page)

SCORE	/ 1

Need a home tutor? Visit smiletutor.sg

Study Fruit Z carefully.



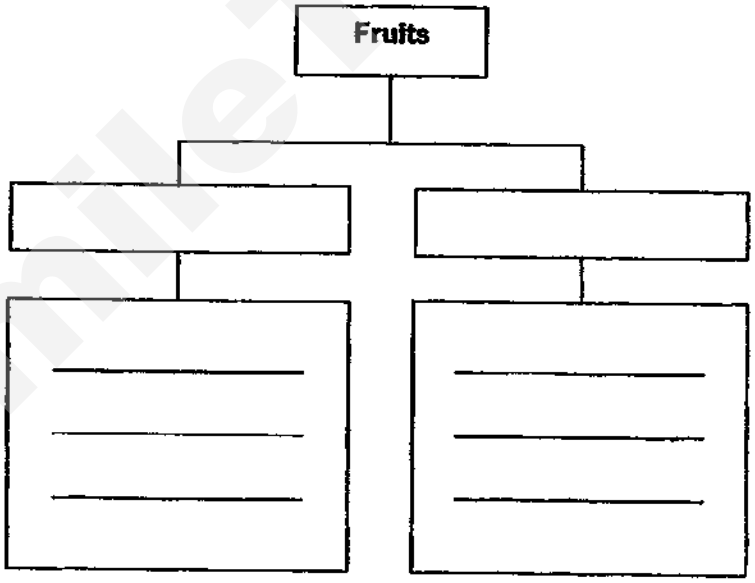
Fruit Z

(b) Give a reason why Fruit Z **cannot** be classified under Group X. [1]

_____

_____

(c) Classify all the fruits in part (a) together with Fruit Z in another way with new sub-headings in the table below. Do not compare shape, size or colour. [1]

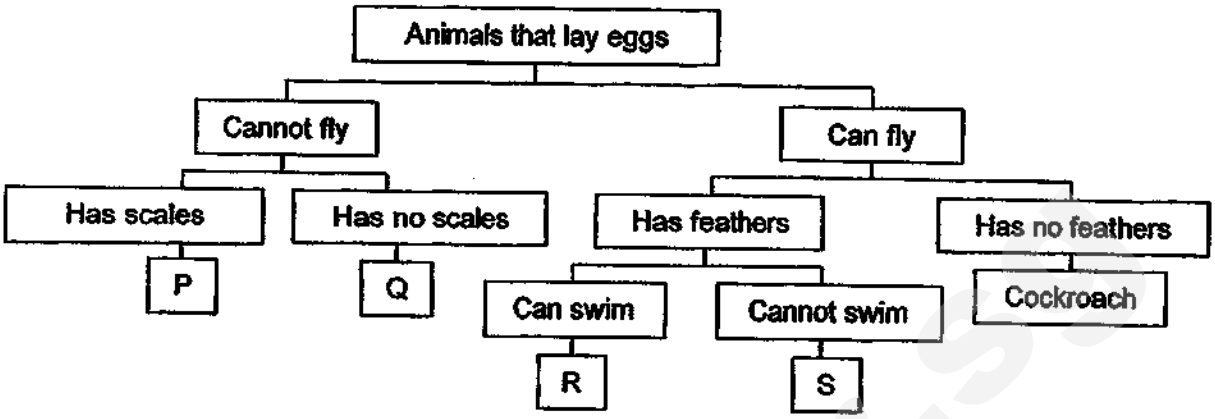


(Go on to the next page)

SCORE	2

Need a home tutor? Visit smiletutor.sg

30. Study the classification table carefully.



(a) Based on the information given in the chart, state all the characteristics of a cockroach. [1]

_____

(b) Give an example of Animal P. [1]

_____

(c) Observe the swan carefully.

Swan

[1]

Which letter P, Q, R or S best represents a swan?

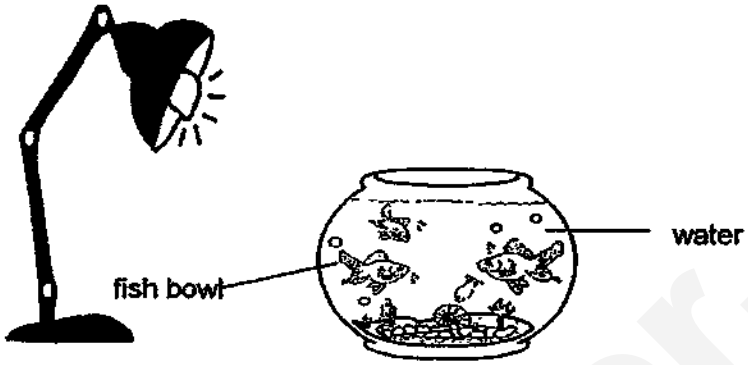
_____

(Go on to the next page)

SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

31. Ivan bought some fishes and placed them in a fish bowl as shown. He fed them daily with some fish food. However he noticed that the fishes kept swimming near the surface of the water.



(a) Explain why the fishes were swimming near the surface of the water. [1]

_____

(b) What could Ivan do to prevent the fishes from swimming near the surface of the water? [1]

_____

(c) After two weeks, Ivan noticed that there were six fishes in his fish bowl although he did not add any more fishes to the bowl. Which characteristic of living things does this show? [1]

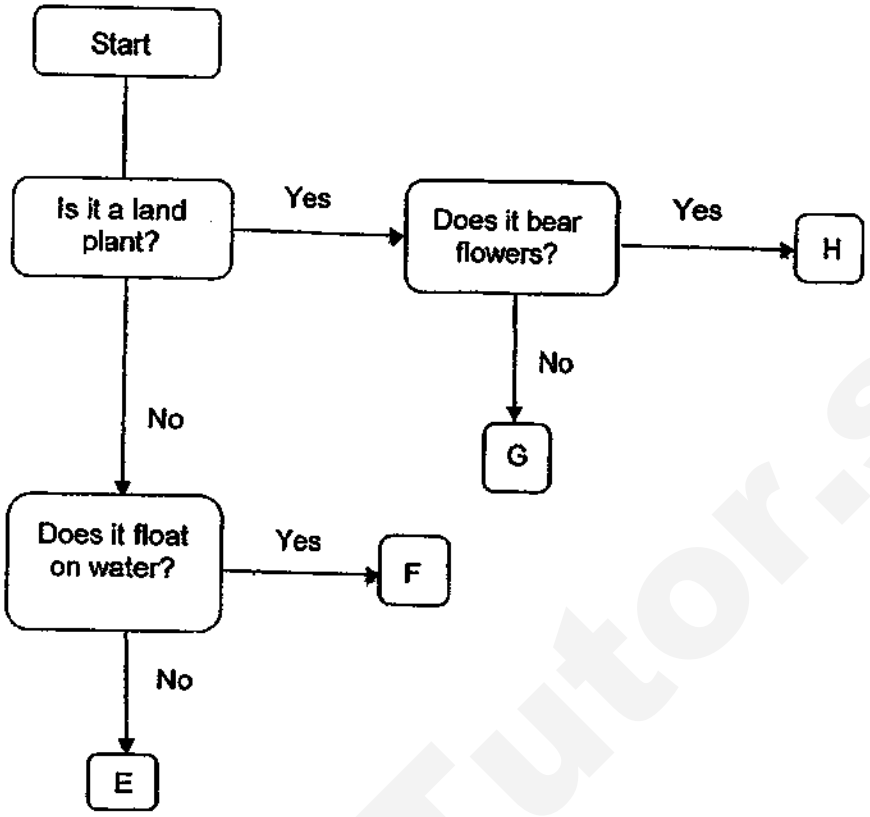
_____

(Go on to the next page)

SCORE	
	3

Need a home tutor? Visit smiletutor.sg

32. Study the flowchart of Plants E, F, G and H.



(a) State a similarity between Plants G and H. [1]

_____

(b) State a difference between Plants E and F. [1]

_____

_____

(c) Which plant, E, F, G or H, most likely reproduces by spores? [1]

_____

(d) Give an example of Plant H. [1]

_____

(Go on to the next page)

SCORE	/ 4

Need a home tutor? Visit smiletutor.sg

33. The table shows how animals have been classified into four groups, A, B, C and D, based on some characteristics.

Animals			
A	**B**	**C**	**D**
swordtail	toad	turtle	moth
clownfish	salamander	lizard	bee

(a) List two characteristics that are unique only to animals in group D. [1]

Study the animals shown below.

beetle shark snake frog

(b) Classify the animals into the four groups, A, B, C and D, by writing their names in the table above. [1]

(c) Compare a similarity and a difference of the characteristics of animals in groups B and C. [2]

Similarity: _____

_____

Difference: _____

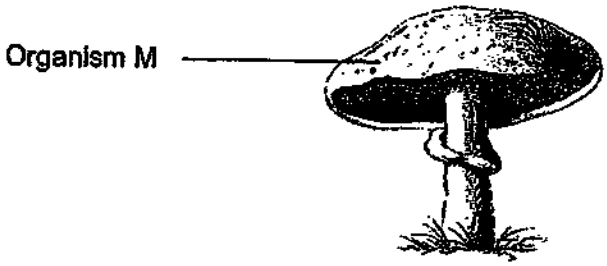
_____

(Go on to the next page)

SCORE	/ 4

Need a home tutor? Visit smiletutor.sg

34. Ali saw Organism M in the field and took a picture of it.



(a) Which group of living things does Organism M above belong to? [1]

Study the pictures carefully.

(b) How do the fern and mould reproduce? [1]

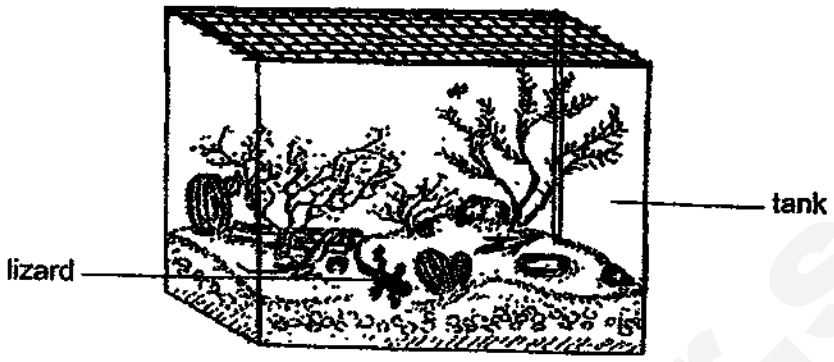
(c) State a difference in the way the fern and the mould obtain food. [1]

(Go on to the next page)

SCORE	
	3

Need a home tutor? Visit smiletutor.sg

35. Tanks were used to be made of glass. However, in recent years they are also made of plastic. The tank shown is used for keeping live plants and animals.



(a) Give two properties of plastic that make them more suitable for making tanks. [2]

_____

_____

(b) What is the advantage of having tanks that are transparent? [1]

_____

_____

(c) Besides preventing the lizard from escaping the tank, why is mesh wire used as a cover for the tank? [1]

_____

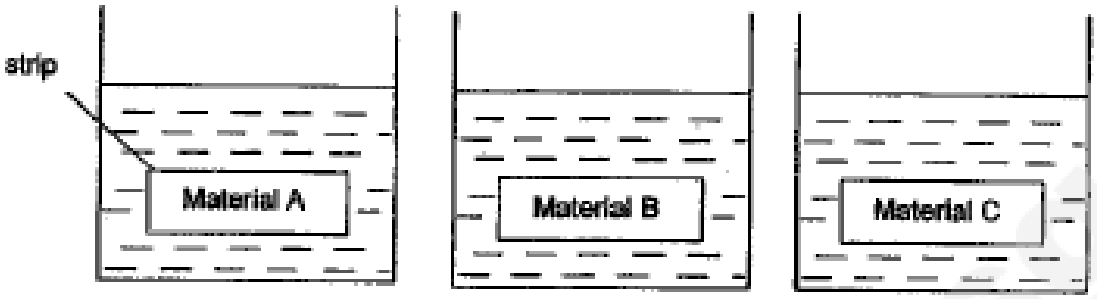
_____

(Go on to the next page)

SCORE	/ 4

Need a home tutor? Visit smiletutor.sg

36. Jane placed three identical sized strips made of different materials, A, B and C, into each beaker of water as shown.



After 10 minutes, she removed the strips and measured the volume of water left in each beaker.

Material	A	B	C
Volume of water at the start (ml)	100	100	100
Volume of water after 10 minutes (ml)	76	54	98

(a) Rank materials A, B and C, according to how waterproof they are, **beginning with the most waterproof.** [1]

[ ] → [ ] → [ ]

most waterproof — least waterproof

(b) Which material, A, B or C, is most suitable to make a towel? Explain your answer. [1]

_____

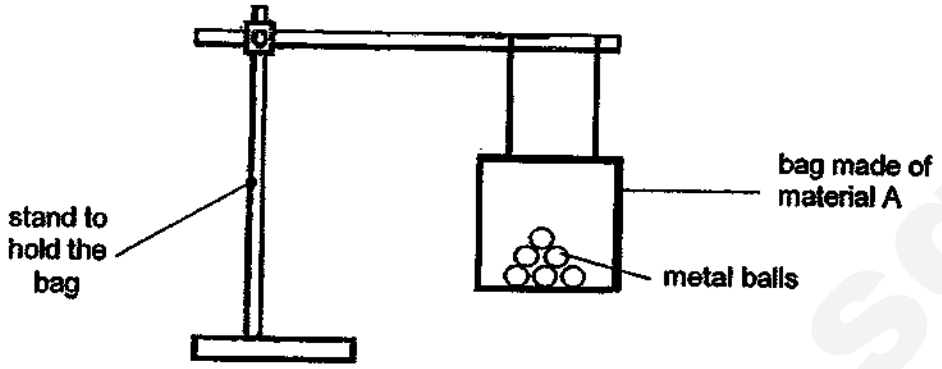
_____

(Go on to the next page)

SCORE	/ 2

Need a home tutor? Visit smiletutor.sg

Jane sets up another experiment as shown with material A. She kept placing metal balls into the bag until the bag broke.



She then repeated the experiment using bags made of materials B and C.

(c) Based on this experiment, which property of materials is she testing? [1]

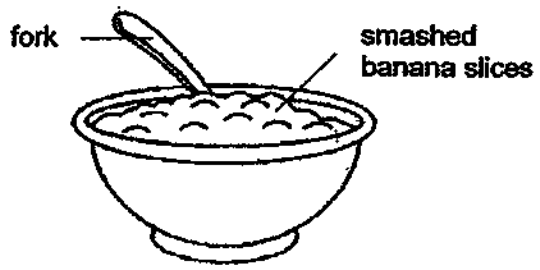
_____

(Go on to the next page)

SCORE	/ 1

Need a home tutor? Visit smiletutor.sg

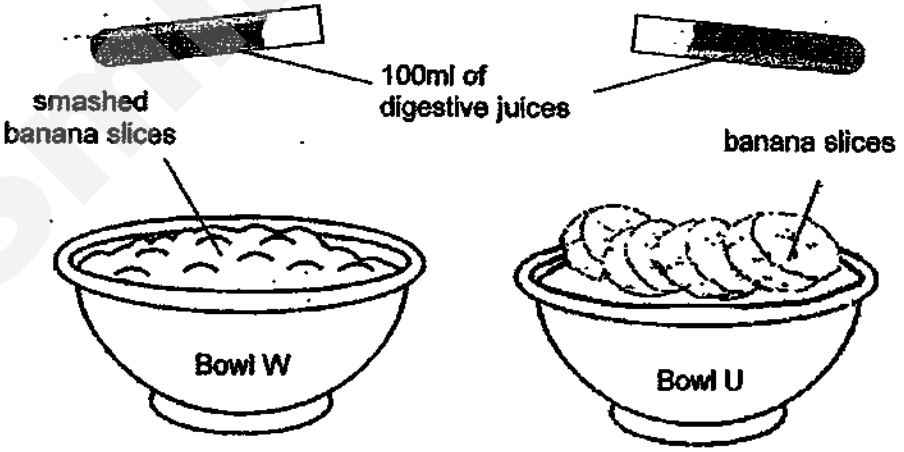
37. Mrs Ng used a fork to smash four slices of banana of the same size for her baby to eat as shown.



(a) Which part of the mouth has a similar function to the fork? Explain your answer. [1]

(b) State all the parts of the digestive system where digestive juice are produced. [1]

Mrs Ng decided to conduct an experiment. She added 100ml of digestive juices into Bowls W and U as shown.



(c) Which bowl of bananas, W or U, would digest faster after an hour? Explain your answer. [1]

(Go on to the next page)

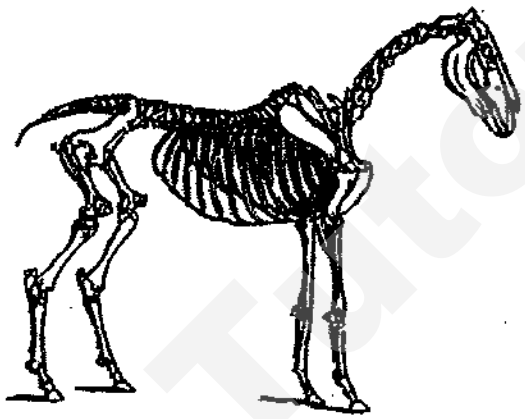
SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

(d) What happens to the completely digested food in the small intestine? [1]

_____

38. The picture shows an animal body system that is similar to a human body system.



(a) Which body system does the picture show? [1]

_____

(b) State two functions of the body system mentioned in (a). [2]

_____

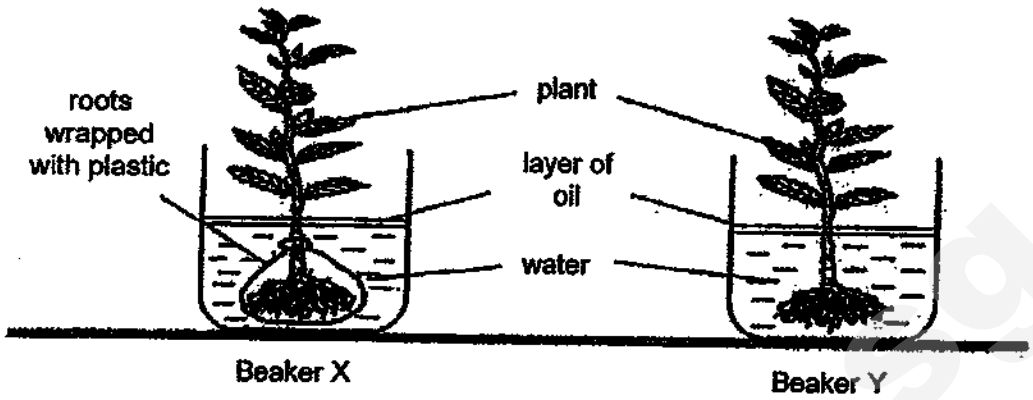
_____

(Go on to the next page)

SCORE	/ 4

Need a home tutor? Visit smiletutor.sg

39. Sarah used two identical plants to set up the experiment shown.



She left both beakers near a window for three days. After three days, she recorded the amount of water left in both beakers.

(a) Predict (what would happen) the water level for each beaker after three days. Explain your answer. [2]

Beaker	Water Level	Explanation
X:		
Y:		

(b) State two variables that Sarah has to keep constant to ensure that the above experiment is a fair test. [1]

(c) Sarah wanted to change her experiment and investigate whether plants need sunlight to make food. What change(s) should she make to the set-up above? [1]

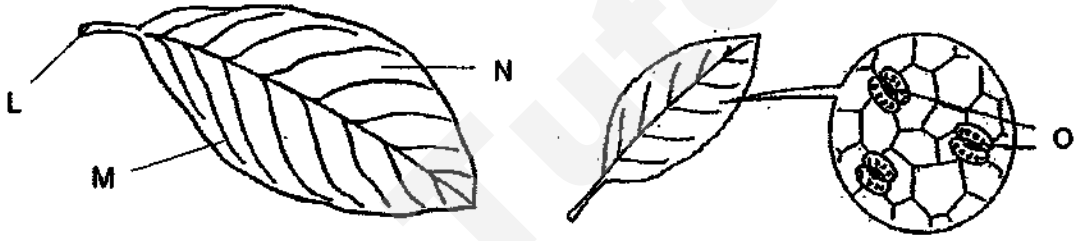
(Go on to the next page)

SCORE	/ 4

Need a home tutor? Visit smiletutor.sg

40. Mr Tan had a potted plant in his garden as shown.

He plucked out one of the leaves and observed it.



Topside of leaf

Underside of leaf

(a) Name parts L, M, N and O. [2]

L: _____

M: _____

N: _____

O: _____

(b) He decided to paint the underside of all the leaves of the plant with black paint and observe what happens after a week. He continued to water the plant daily.

After a week, Mr Tan observed that his plant had died. Explain clearly why it died. [1]

_____

_____

(Go on to the next page)

SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

41. John left 4 similar potted plants, P, Q, R and S, in the sun for different number of hours each day. He watered them daily. Then, he recorded the height of the plants after 2 weeks in a table.

Plants	P	Q	R	S
Number of hours each plant is in the sun each day (hours)	1	3	5	7
Height of plant after 2 weeks (centimetres)	6	10	?	16

(a) What was the aim of John's experiment? [1]

_____

_____

(b) Predict the height of plant R after two weeks. [1]

Height of plant R: _____ cm

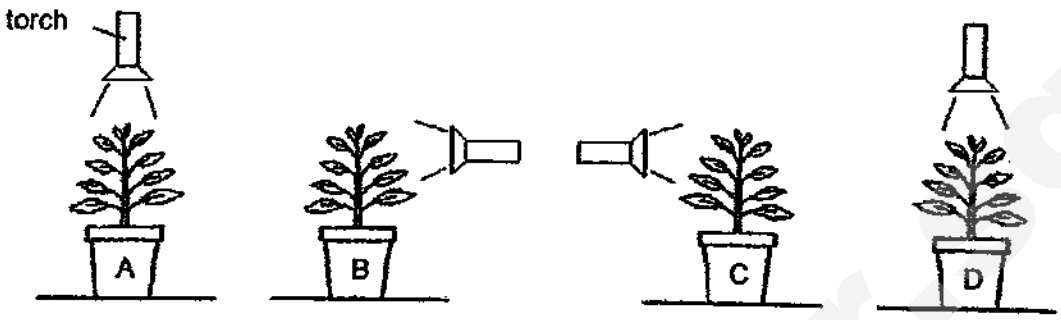
SmileTutor.sg

(Go on to the next page)

SCORE	/ 2

Need a home tutor? Visit smiletutor.sg

John decided to carry out another experiment with plants, A, B, C and D. This time, he placed all the plants in a dark room and shone a torchlight from different directions for each plant as shown.



He then recorded the heights of plants, A, B, C and D, after two weeks in another table below.

Plants	A	B	C	D
Number of hours he shone the torch on the plant each day (hours)	1	3	5	7
Height of plant after 2 weeks (centimetres)	7	7	13	13

(c) John concluded that plants C and D have the same height although the number of hours they were placed under the lit torchlight is different. His mother told him that it was not a fair test.

State one change he should make to the set-ups to make it a fair test [1]

_____

_____

End of Paper

SCORE	/ 1

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : ACS

SUBJECT : SCIENCE

TERM : SA2

ORDER CALL :

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	2	3	1	1	4	3	3	2	2
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
2	2	3	2	3	4	2	3	3	3
Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28		
1	4	3	2	2	2	3	1		

Q29) a) i) X : one seed

ii) Y : many seeds

b) Fruit Z has many seeds but the fruits in group X has only one seed.

c) Smooth skin – mango , papaya

Rough skin - lychee , jackfruit

Q30) a) It can fly and it can lay eggs.

b) Snake

c) R

Q31) a) They did not have enough air.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

b) He should put a air stone into the tank.

c) Living things reproduce.

Q32) a) Both of them are land plants.

b) Plant F floats on water but plant E does not float on water.

c) Plant G

d) mango tree

Q33) a) Both of them have a hard outer covering. Both of them have 3 body parts.

b) A:	B:	C:	D:
shark	frog	snake	beetle

c) Similarity : Both of them reproduce by laying eggs.

Difference : The animals in group C has scales on but the animals in group B does not have scales.

Q34) a) Fungi

b) They reproduce by spores.

c) The fern makes its own food but the mould feeds on other living things that are dead or alive.

Q35) a) They do not break easily and are light.

b) You can see the living thing inside it.

c) The mesh wire allows air to enter the tank for the lizard and plants to use.

Q36) a) C – A – B

b) Material B. It absorbed the most amount of water.

c) Strength

Q37) a) Teeth. It helps to grind up food into smaller pieces.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

b) mouth , stomach , small intestine

c) Bowl W. The banana pieces are smaller in bowl W than that in Bowl U.

d) The digested food passes through the intestinal walls into the blood stream.

Q38) a) Skeletal system

b) It shapes the body and supports our body

Q39) a) X : stay the same , because its root are wrapped with plastic, so it could not absorb water.

Y : It got lesser , because no plastic was tied around its roots. Therefore, it could absorb water.

b) Type of plant and amount of water

c) She should put the plant in beaker X in a dark box, remove the plastic bag and put the plant in Beaker Y in the garden.

Q40) a) L : leaf stalk

M : leaf vein

N : leaf blade

O : tiny openings

b) Since there was black point on the underside of the leaf, the plant could not make food.

Q41) a) He wanted to find out how the number of hours each plant was placed in the sun affects the height of the plant.

b) 13 cm

c) He should adjust the torchlight until they are all facing the plant at the same direction.

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

CATHOLIC HIGH SCHOOL

SEMESTRAL ASSESSMENT TWO (2018)

PRIMARY THREE

SCIENCE

BOOKLET A

Name: _____ ( )

Class: Primary 3 - _____

Date: 31 October 2018

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 14 printed pages, excluding the cover page.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

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 Which one of the following is a characteristic of all living things?

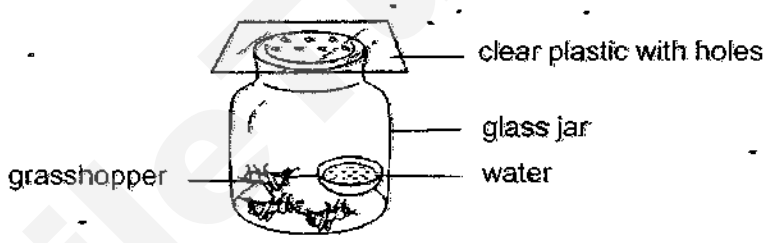
(1) They feed on plants.

(2) They need sunlight to grow.

(3) They can grow from young to adult.

(4) They reproduce by giving birth to young.

2 May put three grasshoppers and a dish of water in a glass jar. She used a sheet of clear plastic with some tiny holes to cover the jar as shown below. After a week, all the grasshoppers died.



What could May have done so that the grasshoppers would stay alive?

(1) Put some grass into the jar.

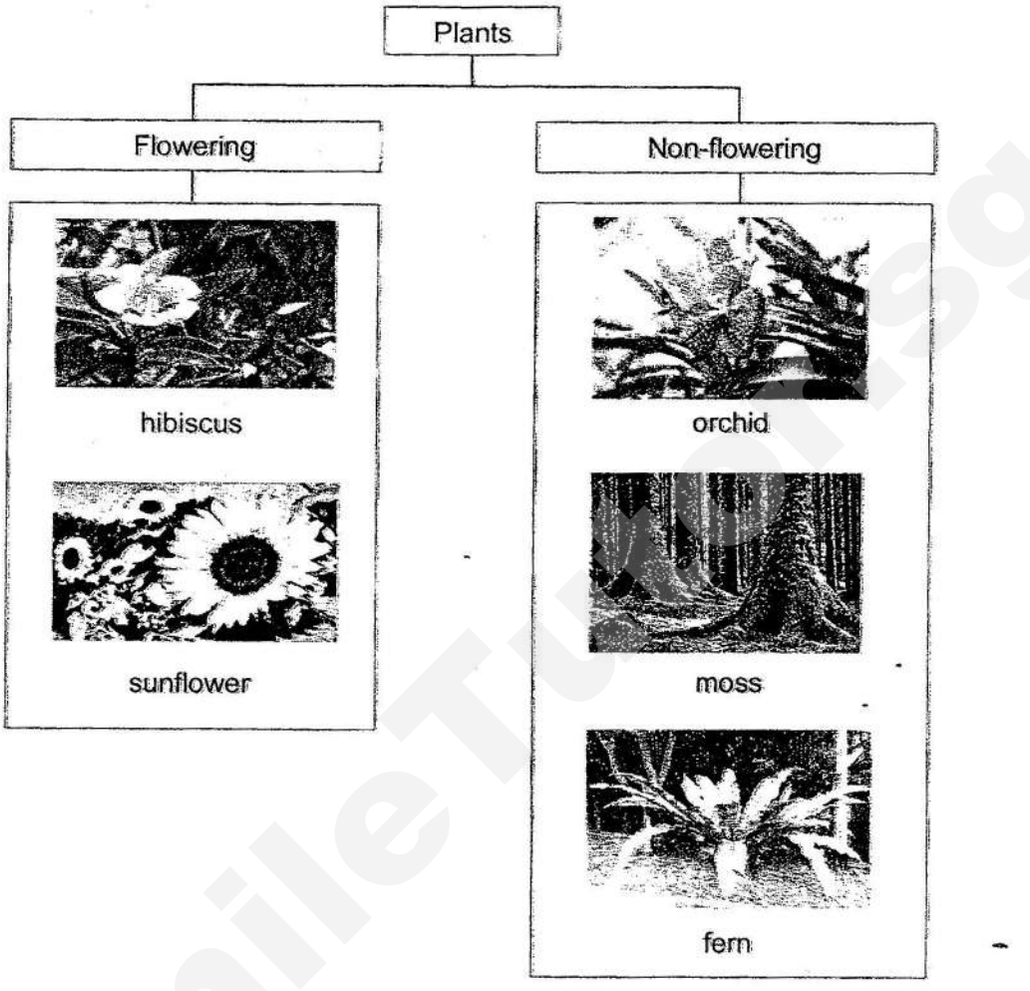
(2) Take out two grasshoppers.

(3) Place the jar in an open field.

(4) Put some moist soil into the jar.

Need a home tutor? Visit smiletutor.sg

3 James classified some plants as shown below.

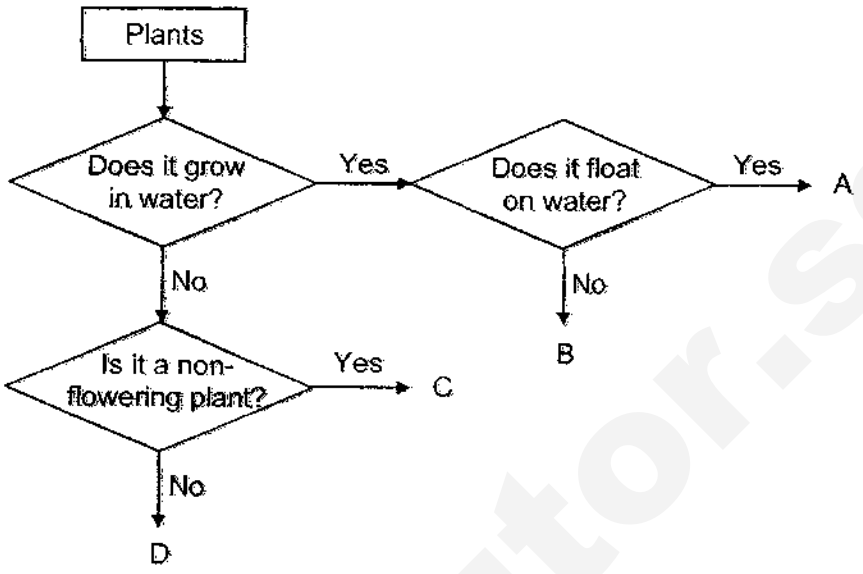


Which plant is not classified correctly?

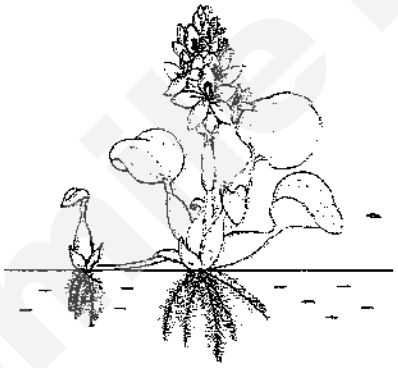
(1) fern
(2) orchid
(3) hibiscus
(4) sunflower

Need a home tutor? Visit smiletutor.sg

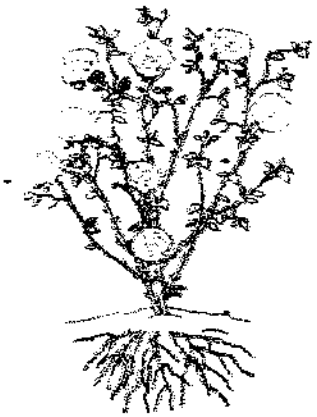
4 Study the chart below.



Which letters, A, B, C or D, represent the water hyacinth and the rose plant?



water hyacinth

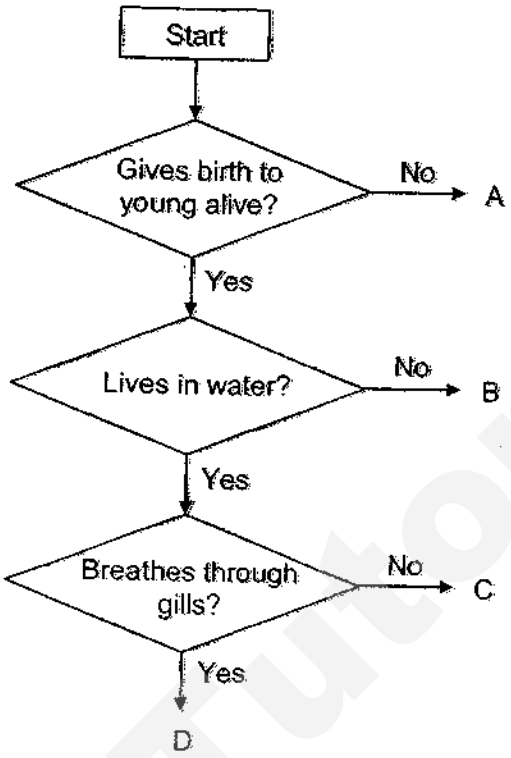


rose plant

	water hyacinth	rose plant
(1)	A	C
(2)	A	D
(3)	B	C
(4)	B	D

Need a home tutor? Visit smiletutor.sg

5 Study the chart below.

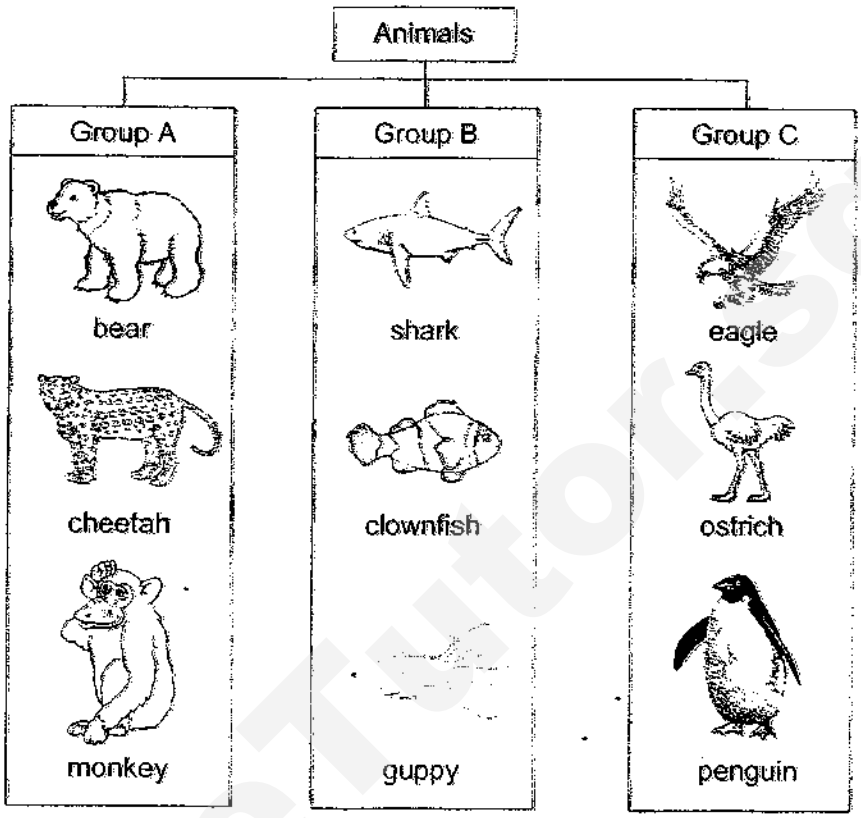


Animal Z is a sea mammal. Which letter, A, B, C or D, best represents animal Z?

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

Smile Tutor.sg
Need a home tutor? Visit smiletutor.sg

6 Study the chart below.



How are the above animals grouped?

(1) The way they move

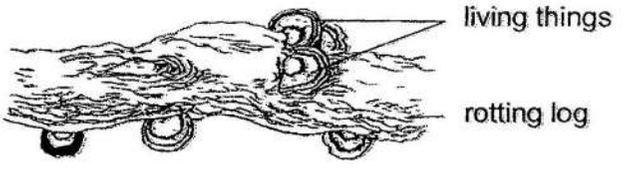
(2) The place they live in

(3) The type of food they eat

(4) The type of outer covering they have

Need a home tutor? Visit smiletutor.sg

7 Four pupils found some living things growing on a rotting log.



They made the following statements about the living things.

Name of pupil	Statements
Anton	They are plants.
Bala	They do not need sunlight.
Chee Ming	They are able to make their own food.
Dalimah	They reproduce by spores.

Who are correct?

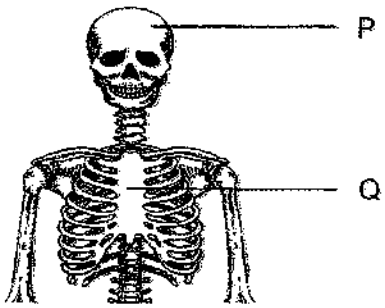
(1) Bala and Dalimah only
(2) Anton and Dalimah only
(3) Bala and Chee Ming only
(4) Anton and Chee Ming only

8 Which one of the following statements about bacteria is not correct?

(1) Bacteria are microorganisms.
(2) Bacteria do not need air or water to grow.
(3) Bacteria feed on living things, dead or alive.
(4) Bacteria can be useful and harmful to living things.

Need a home tutor? Visit smiletutor.sg

9 The diagram below shows the human skeletal system.



Which one of the following statements is correct about P and Q?

(1) They allow us to stand upright.

(2) They protect the organs in our body.

(3) They work on their own to enable movement.

(4) They work together with the muscles to enable movement.

10 Danny went jogging one morning. He started breathing faster and his heart beat faster.

Which systems in his body were responsible for the changes that he experienced?

(1) skeletal and muscular systems

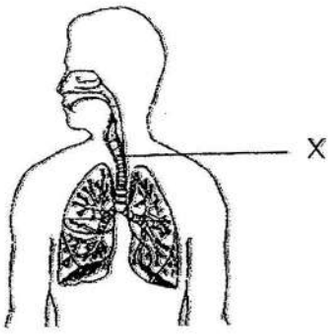
(2) circulatory and skeletal systems

(3) respiratory and muscular systems

(4) circulatory and respiratory systems

Need a home tutor? Visit smiletutor.sg

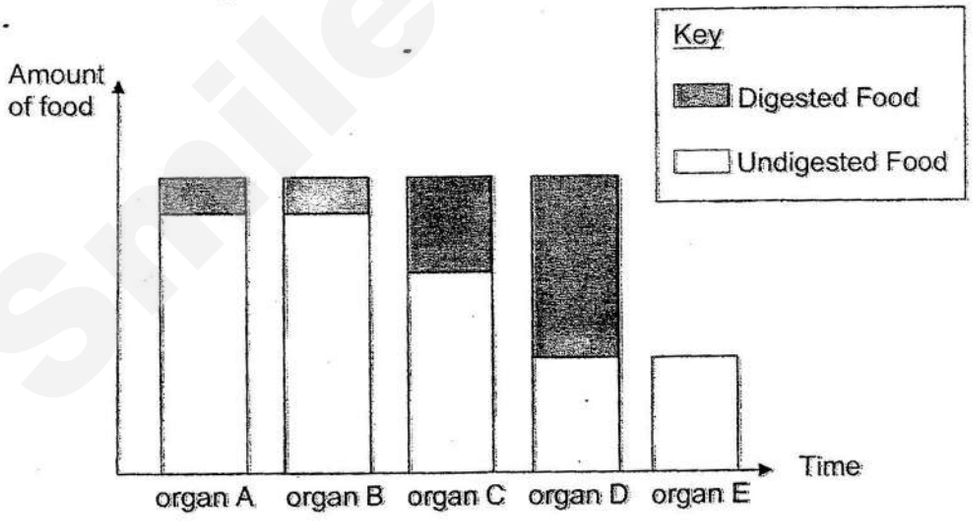
11 The diagram below shows a human body system.



What is the part labelled X?

(1) lung
(2) gullet
(3) windpipe
(4) small intestine

12 The bar graph below shows the amount of digested and undigested food in five organs, A, B, C, D and E, of the digestive system over four hours.



Which one of the following is most likely represented by organ E?

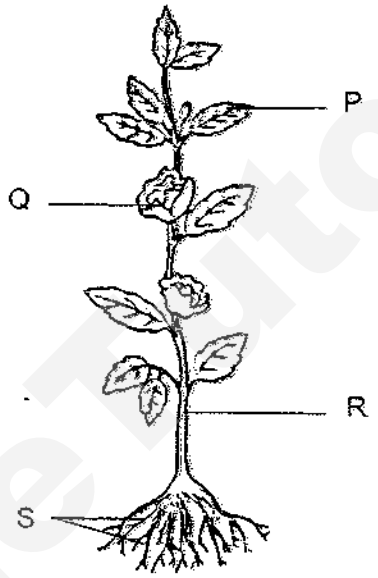
(1) gullet
(2) mouth
(3) large intestine
(4) small intestine

SmileTutor.sg
Need a home tutor? Visit smiletutor.sg

13 Which one of the following helps to hold the plant upright?

(1) stem
(2) roots
(3) fruits
(4) leaves

14 Study the diagram below.



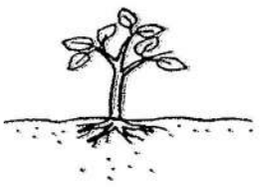
Which one of the following matches the parts correctly?

	P	Q	R	S
(1)	roots	stem	flower	leaf
(2)	flower	leaf	stem	roots
(3)	stem	flower	roots	leaf
(4)	leaf	flower	stem	roots

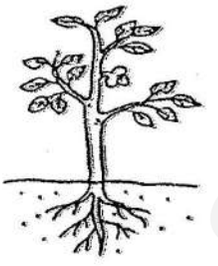
Smile Tutor.sg
Need a home tutor? Visit smiletutor.sg

15 During a heavy rain with severe thunderstorm, which plant is most likely to be uprooted first?

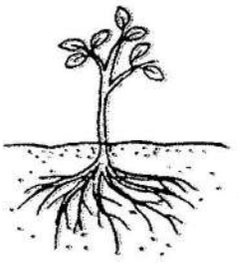
(1)



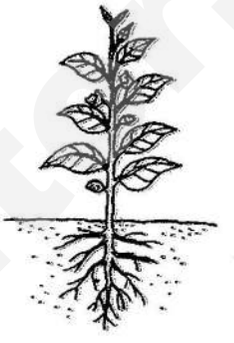
(2)



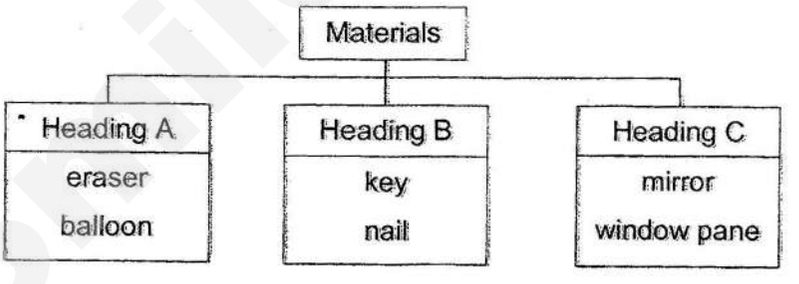
(3)



(4)



16 Study the chart below.

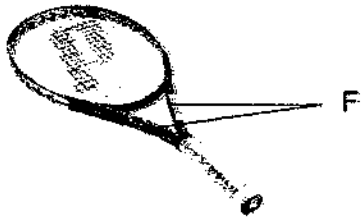


Which one of the following correctly shows what headings, A, B and C, can be?

	A	B	C
(1)	rubber	ceramic	glass
(2)	plastic	metal	fabric
(3)	rubber	metal	glass
(4)	plastic	ceramic	fabric

Need a home tutor? Visit smiletutor.sg

17 The diagram below shows a tennis racket.



Which material is most suitable for making part F of the tennis racket?

(1) glass
(2) metal
(3) rubber
(4) ceramic

18 The table below shows the properties of four materials, P, Q, R and S. A tick (√) indicates the presence of the characteristic.

Material / Property	P	Q	R	S
Flexible	√		√	
Breaks easily			√	
Waterproof	√	√		√
Can see through				√

Which material is most suitable for making a raincoat?

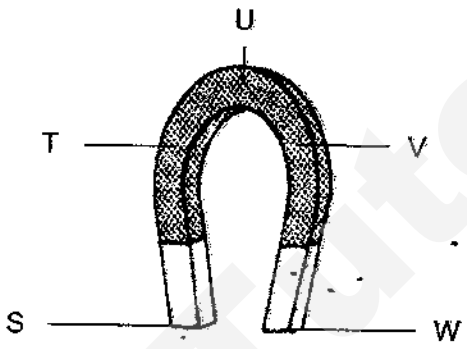
(1) P
(2) Q
(3) R
(4) S

Need a home tutor? Visit smiletutor.sg

19 In which direction will a freely suspended magnet point to when it comes to rest?

(1) South-East
(2) North-West
(3) South-West
(4) North-South

20 The diagram below shows a horseshoe magnet.



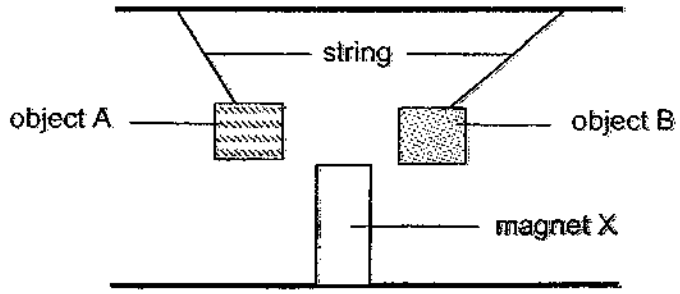
Which part(s) of the horseshoe magnet can attract the most number of paper clips?

(1) U only
(2) T and V only
(3) S and W only
(4) T, U and V only

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

21 Max set up an experiment and found that objects A and B were pulled towards magnet X as shown in the diagram below.



Which one of the following statements about objects A and B is correct?

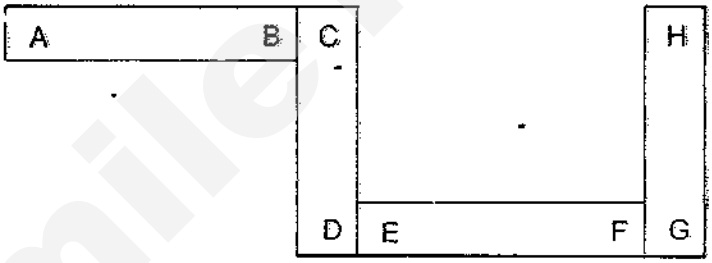
(1) Object A is a magnet but object B is non-magnetic.

(2) Object B is a magnet but object A is non-magnetic.

(3) Both objects A and B are made of magnetic materials.

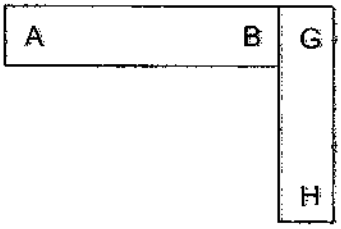
(4) Object A is made of aluminium and object B is made of copper.

22 Four bar magnets are arranged as shown below.

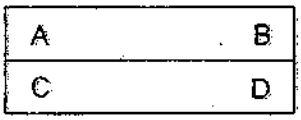


Which one of the following shows the correct arrangement when two of the bar magnets are put together?

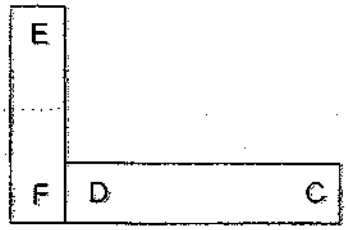
(1)



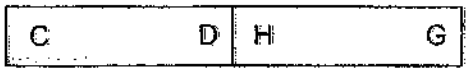
(2)



(3)

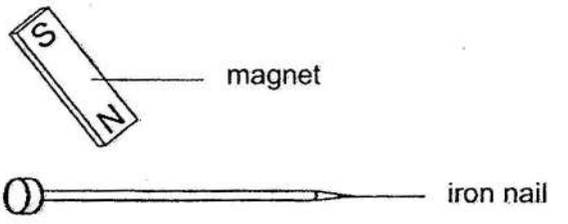


(4)



Need a home tutor? Visit smiletutor.sg

23 Peter wanted to magnetise an iron nail using the stroking method as shown below.



While stroking the iron nail, he should _____.

A stroke the nail with the same pole of the magnet

B stroke the nail with a magnet in different directions

C stroke the whole length of the nail at least 20 times

D stroke only part of the nail with a magnet in different directions

(1) B only

(2) A and C only

(3) B and D only

(4) A, C and D only

24 Four identical iron nails, W, X, Y and Z, were made into magnets using the stroking method. The table below shows the number of paper clips attracted.

Nails	W	X	Y	Z
Number of paper clips attracted	2	5	4	7

Which nail was stroked the most number of times?

(1) W

(2) X

(3) Y

(4) Z

End of Booklet A

Need a home tutor? Visit smiletutor.sg

CATHOLIC HIGH SCHOOL

SEMESTRAL ASSESSMENT TWO (2018)

PRIMARY THREE

SCIENCE

BOOKLET B

Name: _____ ( )

Class: Primary 3 - _____

Date: 31 October 2018

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 10 printed pages, excluding the cover page.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

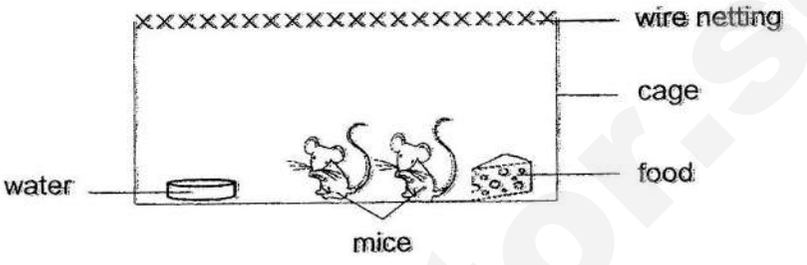
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

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 Ken observed a pair of mice in a cage for a month.



(a) Match Ken's observations to the characteristics of living things. [2]

Observations	Characteristics of living things
The mice fed on the food and water.	• Living things can grow.
The mice were bigger in size after two weeks.	• Living things need food and water.
The mice ran around the cage when Ken moved the cage.	• Living things can reproduce.
There were more mice in the cage after one month.	• Living things respond to changes around them.

Ken then replaced the wire netting with a piece of cardboard.

(b) What would Ken observe after a week? [1]

_____

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

_____

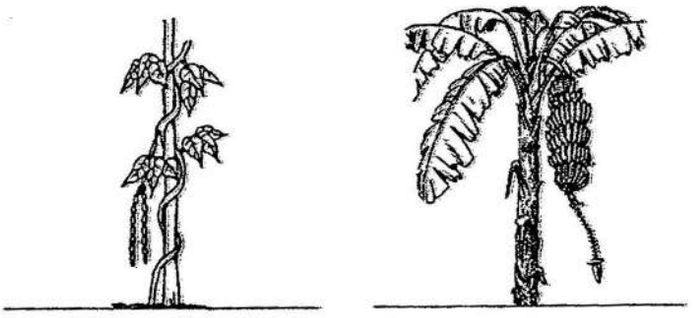
_____

(Go on to the next page)

SCORE	4

Need a home tutor? Visit smiletutor.sg

26 Study the two plants below.



plant X plant Y

(a) Based on the diagram above, state one similarity and one difference between plant X and plant Y.
(Do not compare size, shape and colour.)

(i) Similarity: [1]

_____

_____

(ii) Difference: [1]

_____

_____

(b) Based on the diagram above, are plant X and plant Y flowering plants? Give a reason for your answer. [1]

_____

_____

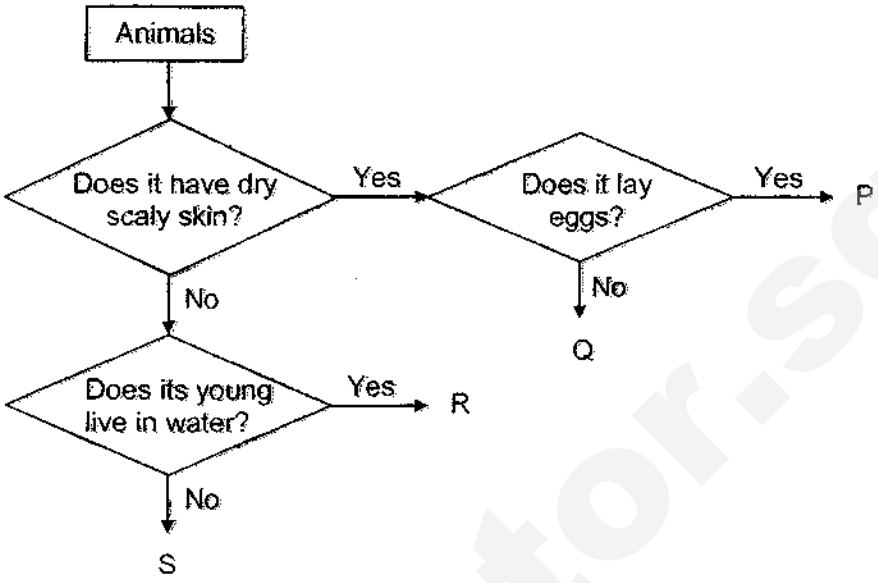
(Go on to the next page)

SCORE	/ 3

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

27 Study the chart below.



(a) Based on the chart above, state two characteristics of animal Q. [1]

_____

_____

(b) Based on the chart above, state one similarity between animals R and S. [1]

_____

_____

(c) Based on the chart above, which animal, P, Q, R or S, is most likely to be a snake? [1]

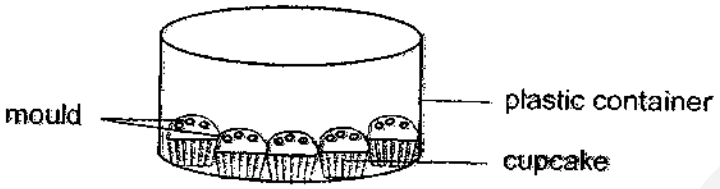
_____

(Go on to the next page)

SCORE	3

Need a home tutor? Visit smiletutor.sg

28 Mei Ling wanted to find out the temperature at which mould grows best on cupcakes. She placed five identical cupcakes each into four similar plastic containers, W, X, Y and Z. Each container was placed in a different room at a different temperature for one week.



She recorded her results in the table as shown below.

Plastic container	Temperature of the room the container was placed in (°C)	Number of cupcakes with mould growing on them
W	10	1
X	15	3
Y	25	4
Z	30	5

(a) Based on the results above, what change do you notice about the number of cupcakes with mould growing on them as the temperature of the room increased? [1]

_____

_____

(b) Based on the experiment above, name the condition that affected the growth of the mould. [1]

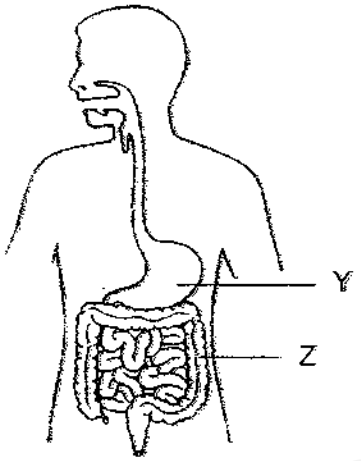
_____

(Go on to the next page)

SCORE 2

Need a home tutor? Visit smiletutor.sg

29 The diagram below shows the human digestive system.



(a) Name the labelled parts of the human digestive system. [1]

Part Y: _____

Part Z: _____

(b) What happens at part Z? [1]

_____

_____

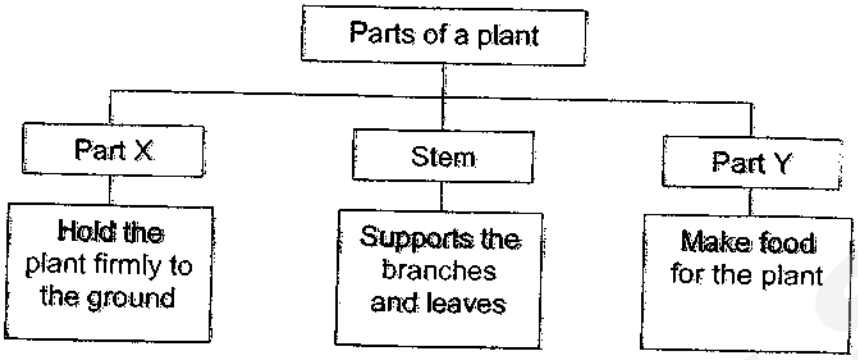
(Go on to the next page)

SCORE	2

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

30 Study the chart below. It shows the parts of a plant and their functions.



(a) Name parts X and Y. [2]

Part X: _____

Part Y: _____

(b) State another function of part X. [1]

_____

_____

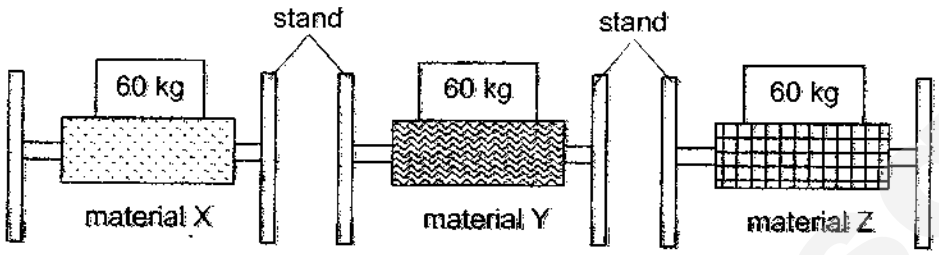
SmileTutor.sg

(Go on to the next page)

SCORE 3

Need a home tutor? Visit smiletutor.sg

31 Raja put a 60 kg weight onto three materials, X, Y and Z, as shown below. The materials were of the same thickness.



Raja then recorded his observations in a table as shown below.

Material	Observations
X	It bent.
Y	It broke.
Z	It remained the same.

(a) Put a tick (√) in the box(es) below to indicate the changed variable based on his experiment above. [1]

Variables	Changed
type of material	
size of material	
thickness of material	

(b) Arrange the materials, X, Y and Z, from the strongest to the weakest. [1]

_____ _____

strongest weakest

(c) Which material should Raja choose to make a chair? Explain your answer. [2]

_____

_____

(Go on to the next page)

SCORE 4

Need a home tutor? Visit smiletutor.sg

32 Ahmad arranged three ring magnets through a plastic rod as shown in diagram 1 below.

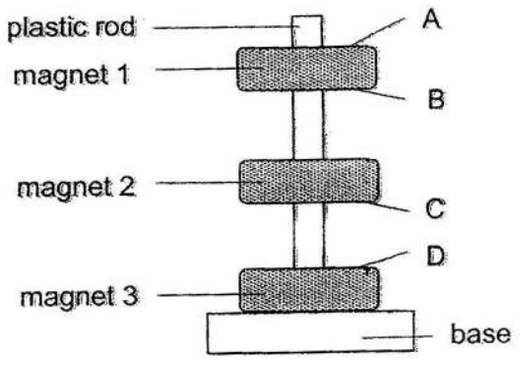


diagram 1

(a) Identify the poles of the ring magnets indicated by A, B, C and D. [2]

A: _____ C: _____

B: _____ D: _____

(b) State a property of the magnets shown in the diagram above. [1]

_____

Ahmad made a change to one of the magnets such that the three ring magnets come together as shown in diagram 2.

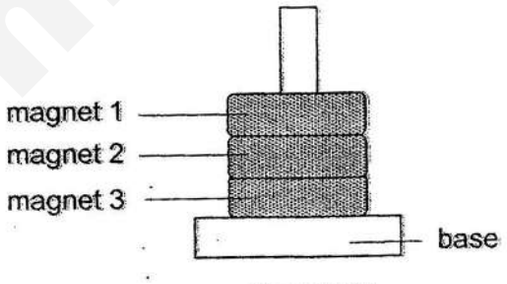


diagram 2

(c) What was the change that Ahmad had made? [1]

_____

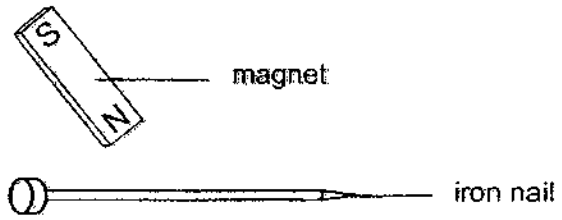
(Go on to the next page)

SCORE	/ 4

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

33 Ben wanted to magnetise an iron nail using the stroking method as shown in the diagram below.



The table below shows his results.

Number of times the iron nail is stroked	Number of paper clips attracted
10	1
20	2
30	3

(a) Put a tick (√) in the box(es) below to indicate the minimum number of times the iron nail is stroked to attract 4 paper clips. [1]

Number of times the iron nail is stroked	Tick (√)
25	
30	
40	

Ben changed the iron nail to a plastic ruler.

(b) How many paper clips could the plastic ruler attract after he stroked it 40 times with the magnet? [1]

_____

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

_____

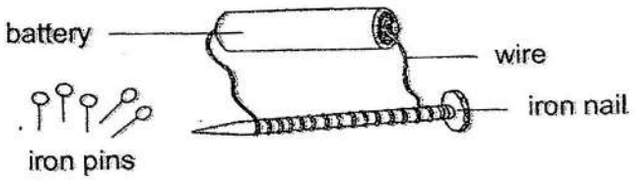
_____

(Go on to the next page)

SCORE	/ 3

Need a home tutor? Visit smiletutor.sg

34 Mabel set up the following experiment as shown below.



(a) What did Mabel observe when she placed some iron pins near the iron nail? [1]

_____

_____

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

_____

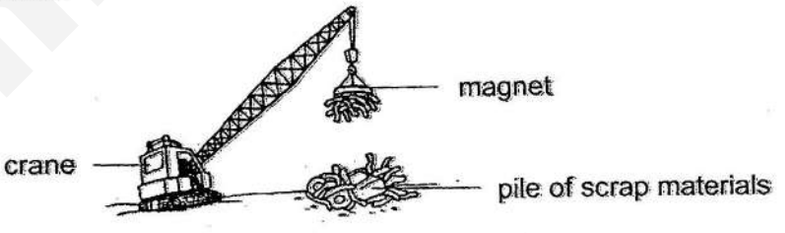
_____

(c) Suggest one way for Mabel to attract more iron pins to the iron nail. [1]

_____

_____

The crane below is found at a metal scrapyard. A magnet is attached to one end of the crane.



(d) Explain how the magnet helps to separate the magnetic materials from the pile of scrap materials. [1]

_____

_____

SCORE	/ 4

End of Booklet B

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

YEAR : 2018
LEVEL : PRIMARY 3
SCHOOL : CATHOLIC HIGH SCHOOL
SUBJECT : SCIENCE
TERM : SA2

BOOKLET A

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

BOOKLET B

Q25a)

The mice fed on the food and water. – Living things need food and water.

The mice were bigger in size after two weeks. – Living things can grow.

The mice ran around the cage when Ken moved the cage – Living things respond to changes around them.

There were more mice in the cage after one month – Living things can reproduce.

Q25b) All the mice in the cage would die.

Q25c) There was no continuous supply of air and living things need air to survive.

Q26ai) They both have a stem.

Q26aii) Plant X has a weak stem while Plant Y has a strong stem.

Q26b) Fruits come from flowers and flowers develop into fruits.

Q27a) Animal Q has dry scaly skin and it does not lay eggs.

Q27b) Both animal R and S do not have dry scaly skin.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Q27c) Animal P.

Q28a) As the temperature of the room increases, the number of cupcakes with mould growing on them increases.

Q28b) There was no warmth for the growth of the mould.

Q29a) Part Z: Stomach Part Y: Large Intestine

Q29b) Water is absorbed from undigested food.

Q30a) Part X: roots Part Y: leaf

Q30b) To absorb water and mineral salts from the soil.

Q31a) type of material

Q31b) Material Z, Material X, Material Y

Q31c) MaterialZ. It is the strongest materail as it can withstand a weight of 60kg.

Q32a) A: S/N B: N/S C: S/N D: S/N

Q32b) Like poles repel.

Q32c) Ahmad flipped magnet 2.

Q33a) 40

Q33b) 0 paper clips.

Q33c) The plastic ruler is a non-magnetic material. Only magnetic materials can be magnetised. Hence, the plastic ruler could not attract any paper cups.

Q34a) She will observe the iron nail will attract to the iron pins.
b) The iron nail has become an electromagnet.
c) Increase the number of batteries connected to the iron nails.
d) The magnetic materials would be attracted to the magnet

END

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Name: _____( )

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL

Primary 3
Semestral Assessment 2
SCIENCE

BOOKLET A

25 October 2018

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.

This booklet consists of 15 printed pages.

Smile Tutor.sg

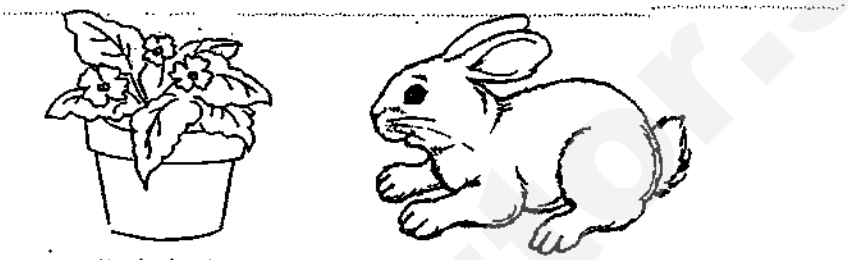
Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

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. The diagram below shows two living things.



potted plant rabbit

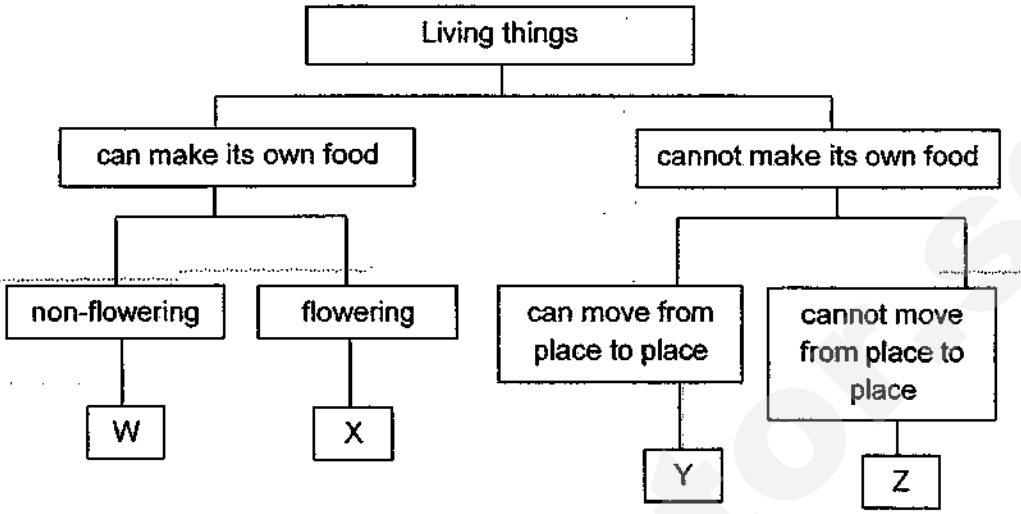
Which of the following statements about the two living things are true?

A Both can grow.
B Both can reproduce.
C Both can respond to changes.
D Both can make their own food.

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

Need a home tutor? Visit smiletutor.sg

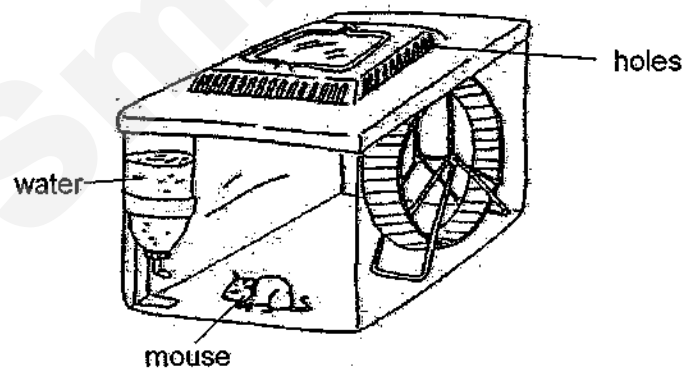
2. Study the classification chart below.



Based on the classification chart above, which letter W, X, Y or Z best represents bread mould?

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

3. Joe decided to keep his pet mouse in a cage shown below.

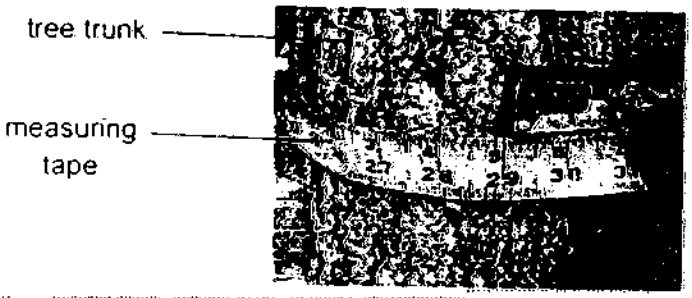


What should he do to help the mouse to stay alive?

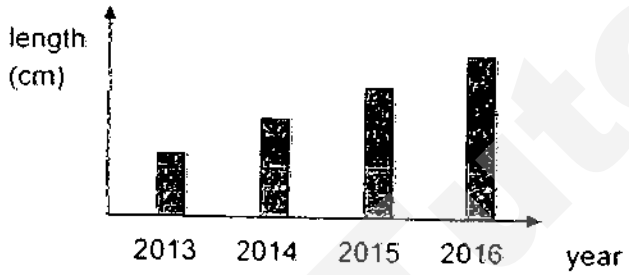
(1) Give the mouse some air.
(2) Put some food in the cage.
(3) Add more water in the cage.
(4) Place a few more mice in the cage.

Need a home tutor? Visit smiletutor.sg

4 Jack measured the size of a tree trunk in his garden shown below.



He recorded his results in the bar graph below.

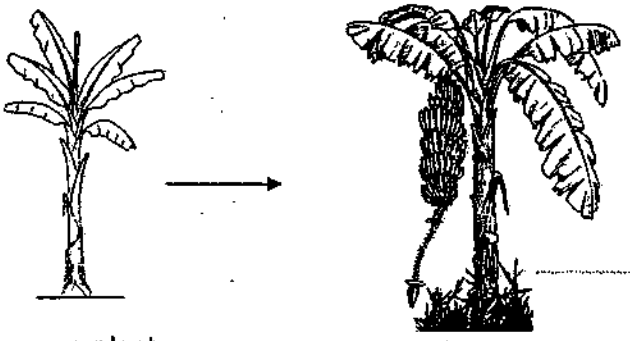


What can he conclude from his results?

(1) The tree has grown.
(2) The tree has reproduced.
(3) The tree has produced flowers.
(4) The tree has responded to changes.

Need a home tutor? Visit smiletutor.sg

5. Sue observed the changes of a plant in her garden over a few years.

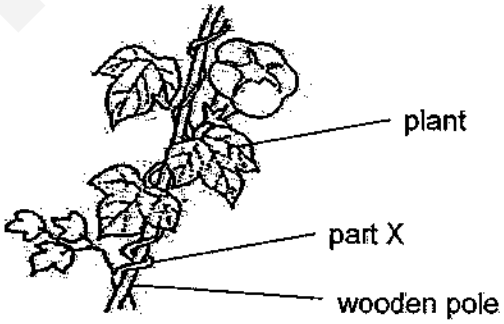


young plant adult plant

Based only on the diagram above, which one of the following statements is **not true**?

(1) It is a flowering plant.
(2) It can make its own food.
(3) It reproduces from spores.
(4) It produces fruits when it becomes an adult.

6. The diagram below shows a plant growing around a wooden pole.



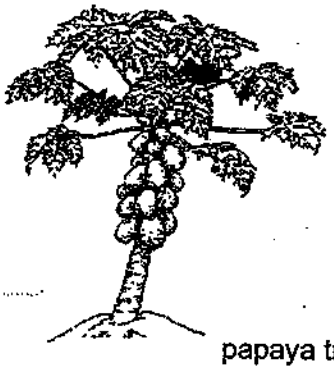
What is the function of part X?

(1) To support the stem
(2) To make food for the plant
(3) To absorb water and minerals
(4) To hold the leaves up so that they can get sunlight

Need a home tutor? Visit smiletutor.sg

7. Study the living things below.

fern



papaya tree

Three pupils Ali, Ben and Cindy made the following statements about the two living things shown above.

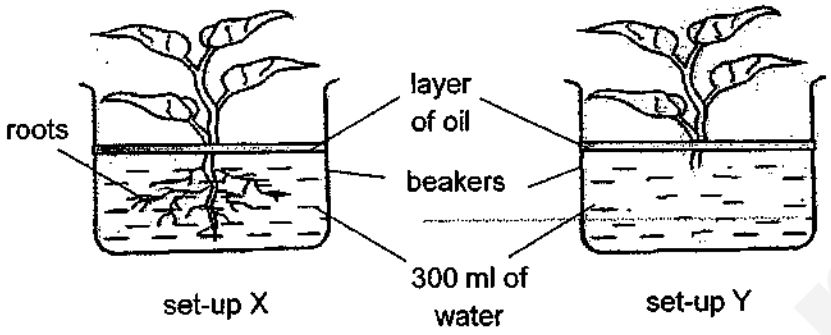
Ali:	They can make their own food.
Ben:	They have roots, stems and leaves.
Cindy:	They do not produce flowers.

Which of the pupils have made the correct statements?

(1) Ali and Ben only
(2) Ali and Cindy only
(3) Ben and Cindy only
(4) Ali, Ben and Cindy

Need a home tutor? Visit smiletutor.sg

8. Mary carried out an experiment using two similar plants shown below. The plant in set-up Y has its roots removed.



After two days, she recorded her observations in the table below.

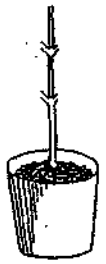
Set-up	Amount of water left in the beaker (ml)
X	250
Y	300

What does she want to find out from her experiment?

(1) To find out if roots take in water.
(2) To find out if leaves can make food.
(3) To find out if plants need water to survive.
(4) To find out if the stem is a weak stem or a strong stem.

Need a home tutor? Visit smiletutor.sg

9. Max conducted an experiment. He removed only the leaves of a plant shown below. He watered the plant daily.
After a week, he observed that the plant had wilted and died.

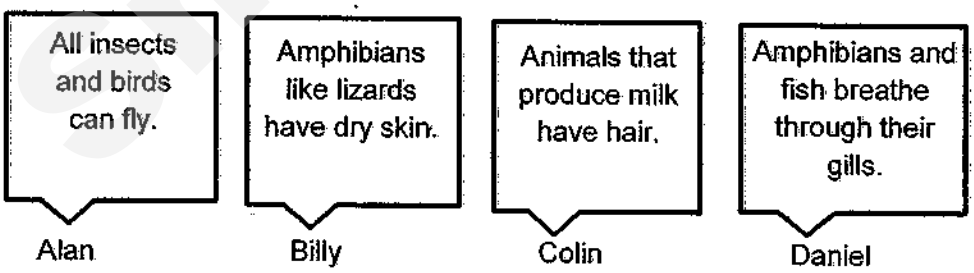


Which of the following statement(s) best explain(s) why the plant died?

A The stem did not have any support.
B The plant was not able to make food.
C The plant was not able to absorb water.

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

10. Four pupils Alan, Billy, Colin and Daniel made some statements about some animal groups.

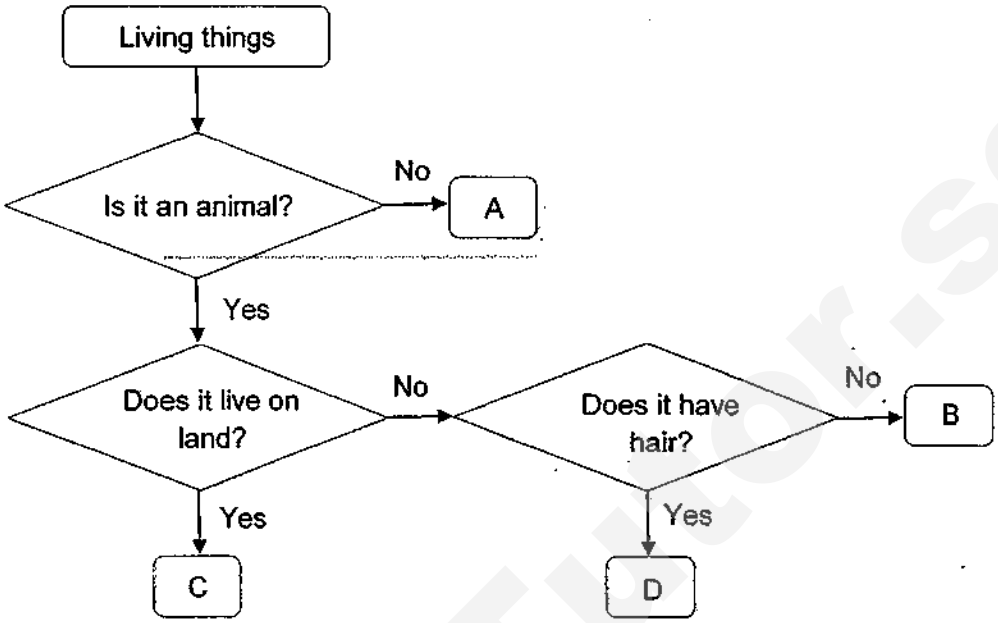


Which one of the following pupils has made a correct statement?

(1) Alan
(2) Billy
(3) Colin
(4) Daniel

Need a home tutor? Visit smiletutor.sg

11. Study the flow chart below.



Based on the flow chart above, which letter A, B, C or D best represents a seal?

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

12. The table below shows how some animals can be grouped.

X	Y
tilapia pelican beetles	orang-utan elephant bat

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

	X	Y
(1)	Can fly	Cannot fly
(2)	Lay eggs	Gives birth to the young
(3)	Live on land	Live in water
(4)	Have three body parts	Have two body parts

Need a home tutor? Visit smiletutor.sg

13. Sandy placed four similar slices of bread A, B, C and D into four similar boxes which were at different temperatures. She observed the growth of bread mould on the four slices of bread over a period of time.

She recorded her observations in the table below.

Bread	Amount of water added (ml)	Temperature in the box (^{0}C)	Number of the days for bread mould to appear on the bread
A	8 ml	5	12
B	8 ml	10	?
C	8 ml	20	7
D	8 ml	30	4

Based on the table above, how many days would it take for the bread mould to appear on bread B?

(1) 4
(2) 6
(3) 9
(4) 13

Need a home tutor? Visit smiletutor.sg

14. Jeremy recorded his observations of organism P in the box below.

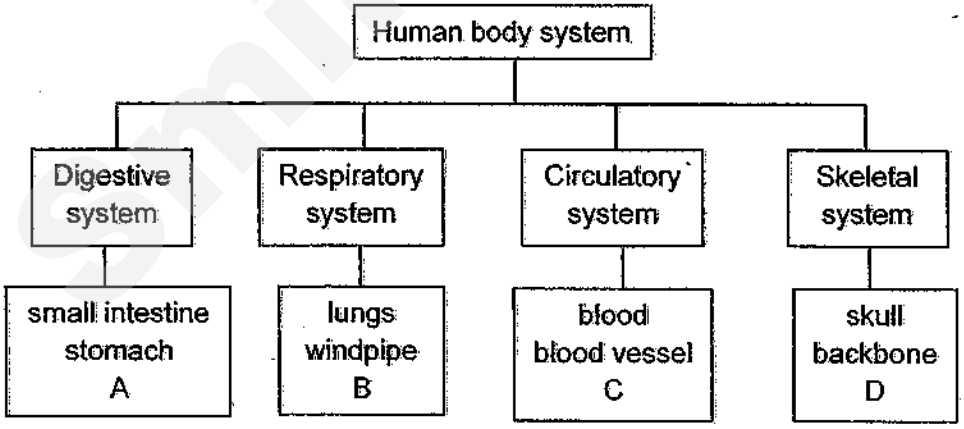
It cannot make its own food. It can be useful or harmful to humans. It can only be seen under a microscope.

Based on Jeremy's observations, which of the following best represents organism P?

A bacteria
B mushroom
C bracket fungi

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

15. Study the classification chart below carefully.



Which of the following is best represented by letters A, B, C and D?

	A	B	C	D
(1)	large intestine	gullet	ribcage	muscles
(2)	mouth	nose	heart	ribcage
(3)	gullet	mouth	muscles	large intestine
(4)	anus	mouth	nose	ribcage

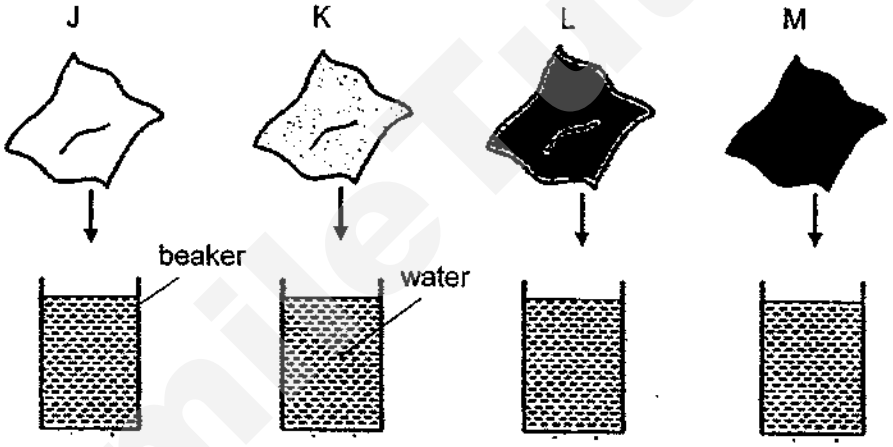
Need a home tutor? Visit smiletutor.sg

16. Which two systems work together to deliver oxygen to all parts of the body?

A Respiratory system
B Circulatory system
C Digestive system
D Skeletal system

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

17. Alvin placed four different materials J, K, L and M of the same size and thickness into four beakers containing equal amounts of water.



After ten minutes, the materials were taken out of the water and weighed. The results are recorded in the table below.

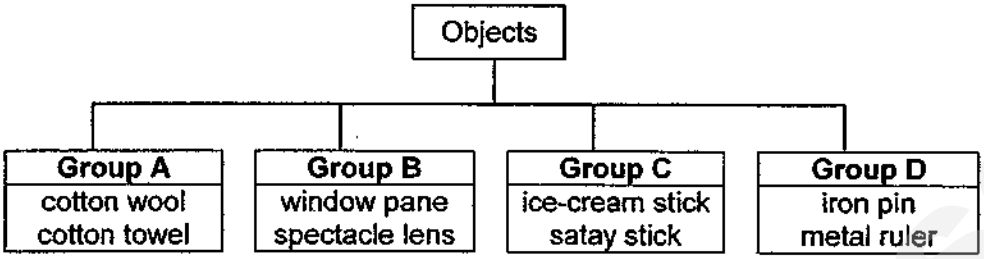
Material	Mass at the start (g)	Mass after 10 minutes (g)
J	10	16
K	10	30
L	10	20
M	10	35

Which material J, K, L or M is most suitable for making a bath towel?

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

Need a home tutor? Visit smiletutor.sg

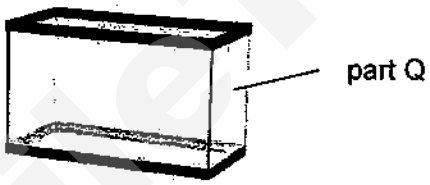
18. Study the classification chart below.



Based on the chart above, how were the objects grouped?

(1) By their size
(2) By their transparency
(3) By how they are used
(4) By the material they are made of

19. The diagram below shows a fish tank.



Which of the following properties should the material used for part Q of the fish tank have?

A Flexible
B Waterproof
C Transparent
D Able to float on water

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

Need a home tutor? Visit smiletutor.sg

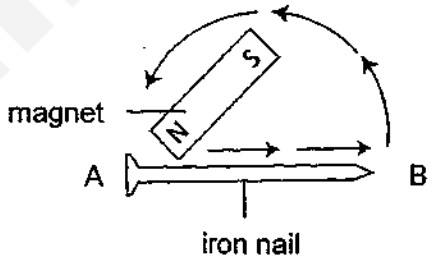
20. Wendy carried out an experiment using four bags A, B, C and D made of different materials. She put apples, one at a time, into each bag until it began to tear. She recorded her observations in the table below.

Bag	Number of apples in the bag before it began to tear
A	10
B	7
C	13
D	5

Based on the results in the table, what does she want to find out from her experiment?

(1) To find out which bag is waterproof.
(2) To find out which bag is the strongest.
(3) To find out which bag is the most flexible.
(4) To find out which bag allows light to pass through.

21. Kasper tried to magnetise an iron nail with a magnet using the stroke method in the direction shown below. After stroking the iron nail 15 times, the iron nail attracted three steel pins.

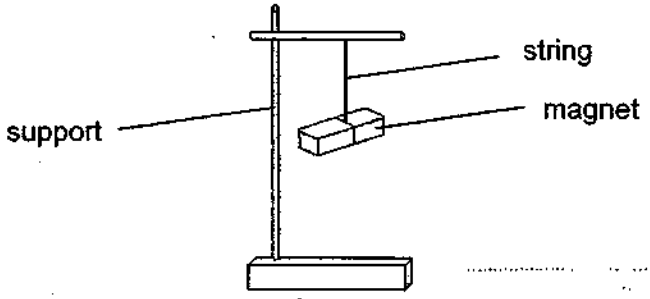


He repeated the experiment with another similar iron nail. What should he do if he wants to attract more than three steel pins?

(1) Stroke the iron nail using the same pole less than 15 times.
(2) Stroke the iron nail using the same pole more than 15 times.
(3) Stroke the iron nail using the same pole 15 times at a faster speed.
(4) Stroke the iron nail using both poles of the magnet for 15 times each.

Need a home tutor? Visit smiletutor.sg

22. The diagram below shows a freely suspended magnet.

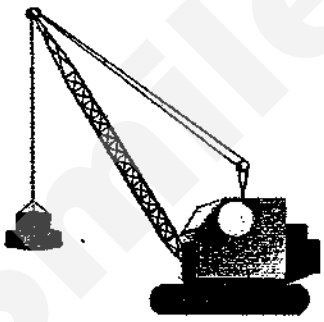


In which direction will a freely suspended magnet point?

(1) East-West direction
(2) South-East direction
(3) West-North direction
(4) North-South direction

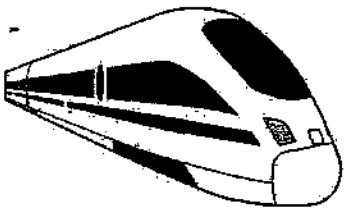
23. Study the pictures below. Which of the objects below is **not** a use of electromagnets?

(1)



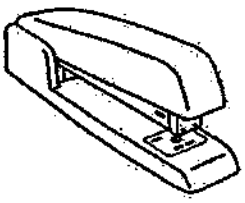
scrap iron crane

(2)



maglev train

(3)



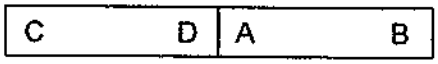
stapler

(4)

telephone

Need a home tutor? Visit smiletutor.sg

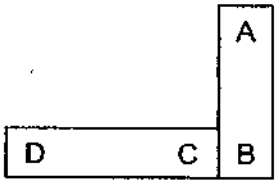
24. Two bar magnets AB and CD can be arranged as shown below.



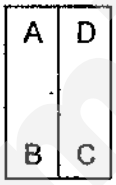
Which of the following arrangements of the magnets is **not** possible?

(1)

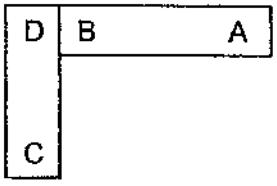
(2)



(3)



(4)



End of Section A

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

Name : _____( )

Class : Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL

Primary 3
Semestral Assessment 2

SCIENCE

BOOKLET B

25 October 2018

Booklet A	48
Booklet B	32
Total	80

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 10 printed pages.

_____

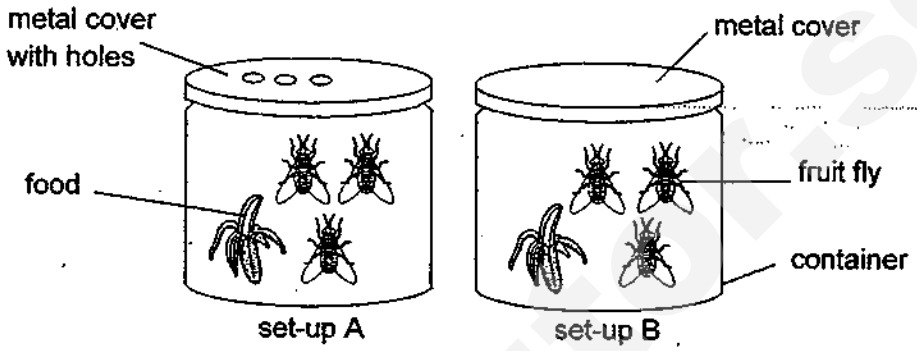
Parent's Signature/Date

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

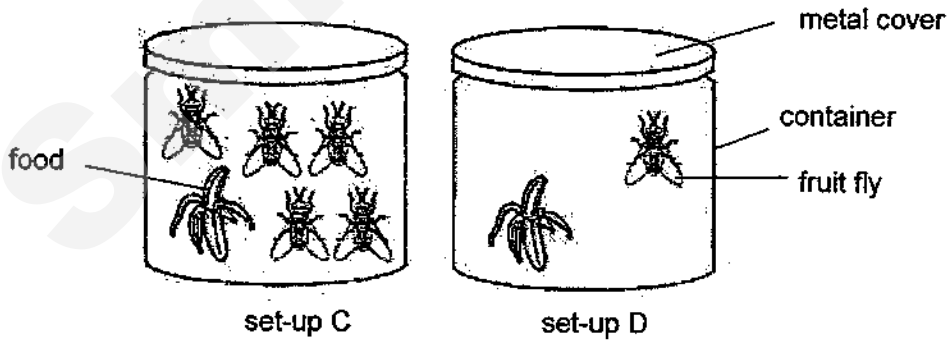
Section B (32 marks)
For questions 25 to 34, write your answers in this booklet. The number of marks available is shown in the brackets [ ] at the end of each question or part question.

25. Jane set up an experiment as shown below. She observed that the fruit flies in set-up B died after two days while the fruit flies in set-up A were still alive.



(a) What does Jane want to find out from this experiment? [1]

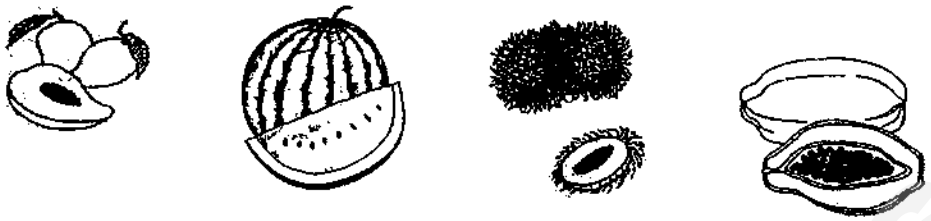
Jane conducted another experiment as shown below.



(b) In which set-up will the fruit fly/flies live longer? Explain your answer. [2]

Need a home tutor? Visit smiletutor.sg

26. Viknesh bought some fruits as shown below.



A B C D

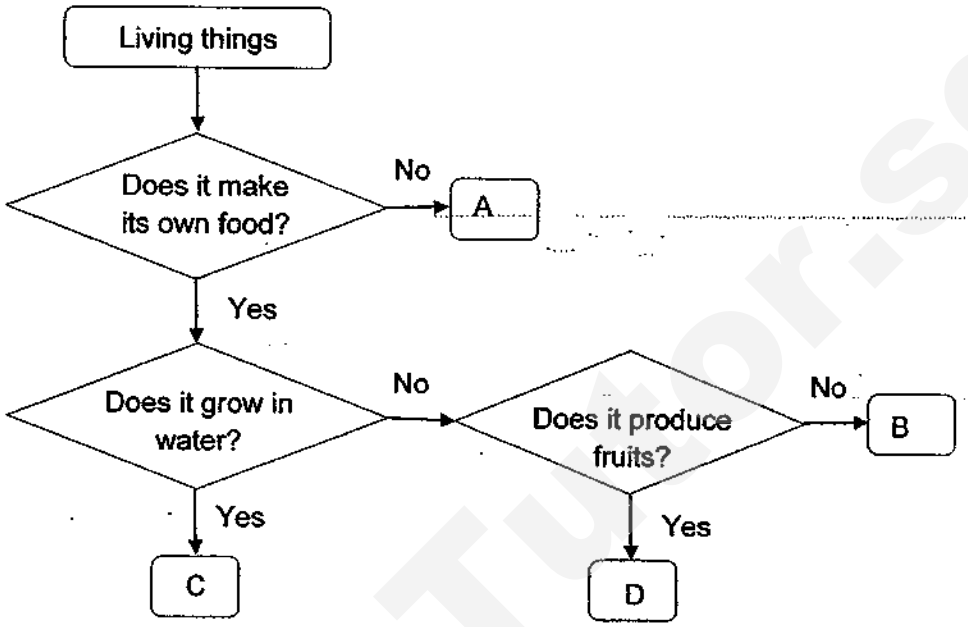
(a) Classify the fruits by writing the letters A, B, C and D in the table below. [1]

One seed	Many seeds

(b) Based on the diagram above, state a difference in the texture of the skin of fruit B and C. [1]

Need a home tutor? Visit smiletutor.sg

27. The flow chart below shows the classification of four organisms A, B, C and D.



(a) Based on the flow chart above, put a tick (✓) in the boxes below to show the characteristics that organisms C and D have. [2]

Organism	Produce fruits.	Makes food	Grow in water
C			
D			

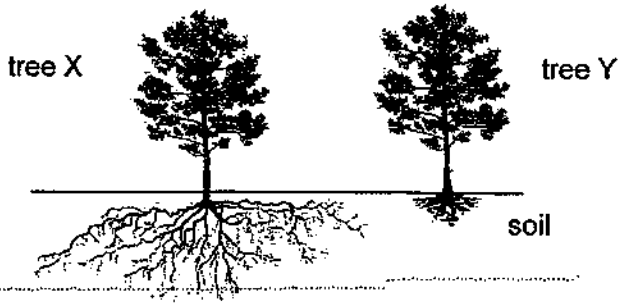
(b) Based on the flow chart above, state a difference between organism A and B. [1]

_____

_____

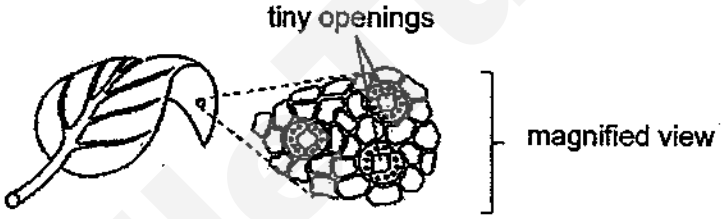
Need a home tutor? Visit smiletutor.sg

28. Study the roots of trees X and Y as shown below.



(a) During a storm, which tree X or Y will more likely be uprooted? Explain your answer. [2]

The diagram below shows some tiny openings on a leaf using a microscope.



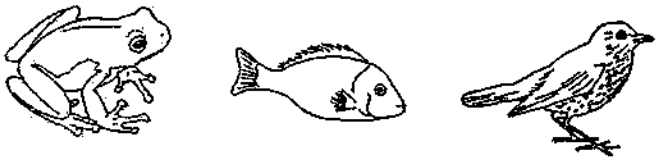
(b) State the function of the tiny openings. [1]

Look at the leaf shown below.

(c) The leaf is observed to have its leaflets spread out without overlapping. Explain how this arrangement of the leaflets help the plant to survive. [1]

Need a home tutor? Visit smiletutor.sg

29. Look at the animals R, S and T below.

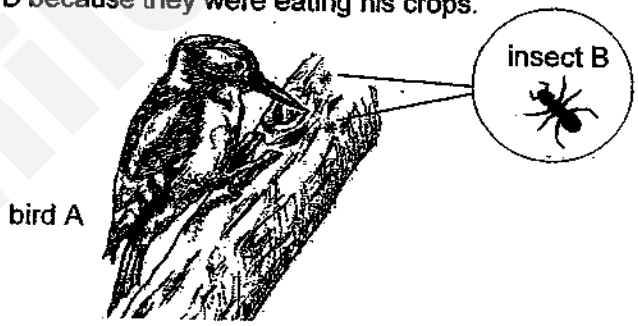


R S T

(a) State one difference in the breathing method of animals R and S in the water. [1]

(b) State one similarity in the reproduction method of animals R and T. [1]

The diagram below shows bird A. It feeds only on insect B. Farmer Suresh killed many insect B because they were eating his crops.

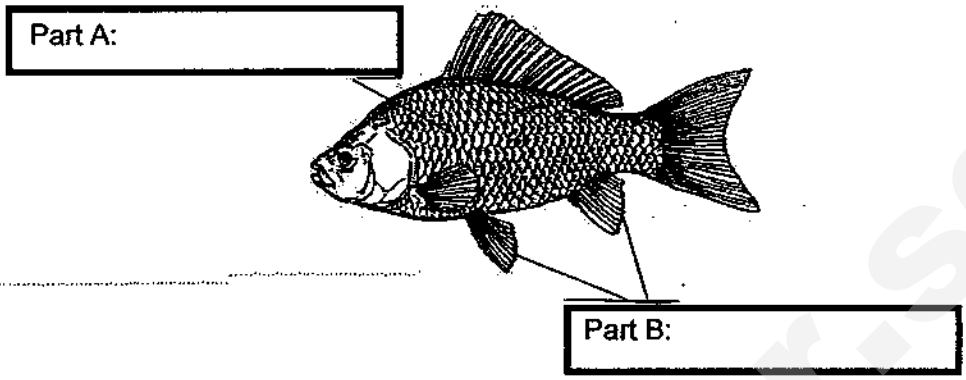


(c) After a few days, farmer Suresh observed that many bird A also died. Give a reason for his observation. [1]

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

30. The diagram below shows a fish.



(a) Label the parts of the fish by writing in the boxes provided above. [1]

(b) State the function of part B of the fish. [1]

_____

_____

The diagram below shows a dolphin.

(c) Which animal group does the dolphin belong to? Give a reason for your answer. [2]

_____

_____

Need a home tutor? Visit smiletutor.sg

31. The diagram below shows some fruits.

dried fruit

fresh fruit

(a) Explain why the dried fruit will not become mouldy as easily as the fresh fruit. [1]

_____

_____

(b) Gary bought some fish from the market. Suggest one possible action Gary can take to prevent the fish from turning bad quickly. Give an explanation for your answer. [2]

Action: _____

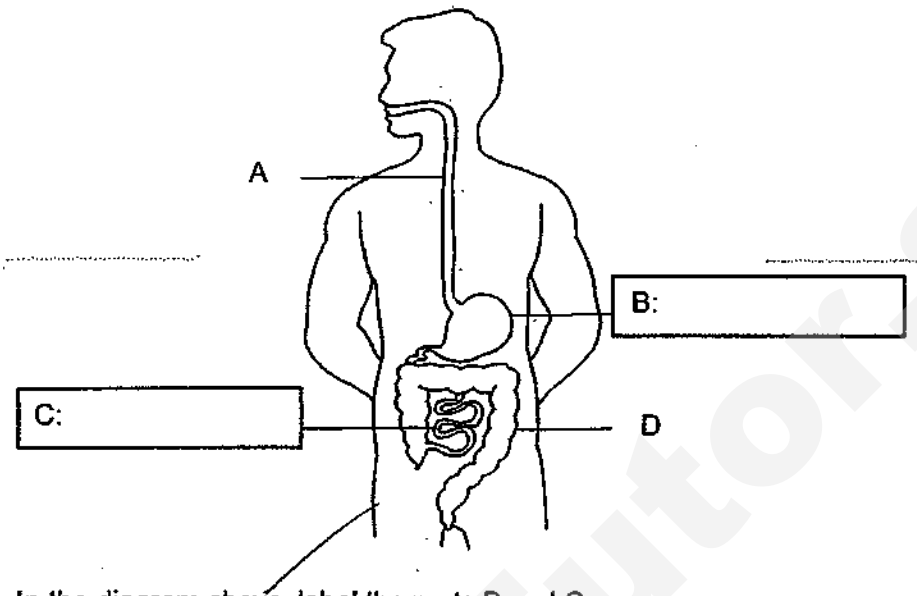
_____

Explanation: _____

_____

Need a home tutor? Visit smiletutor.sg

32. The diagram below shows the human digestive system.



(a) In the diagram above, label the parts B and C. [1]

(b) Put a tick (✓) in the table below to show whether digestion takes place at the parts A, B, C and/or D. [1]

Part	Digestion takes place (✓)
A	
B	
C	
D	

(c) State the difference in the substances absorbed by part C and part D. [1]

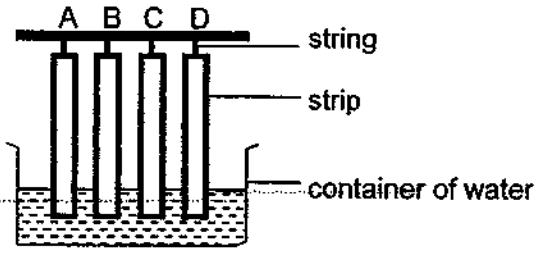
_____

_____

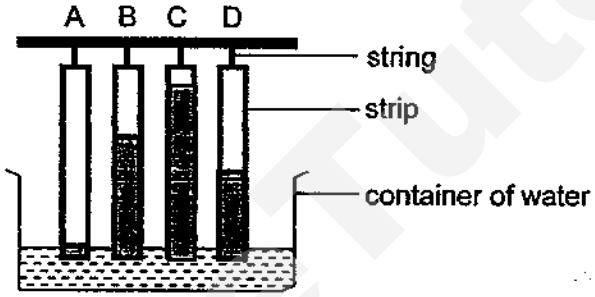
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

33. Jordan conducted an experiment to measure the amount of water absorbed by four different materials A, B, C and D. The four strips were of the same size and thickness. He dipped them into a container of water as shown below.



After ten minutes, he observed that the water had risen to different levels along the four strips of materials as shown below. The shaded part on the strips shows the absorption of water by the four strips of materials.

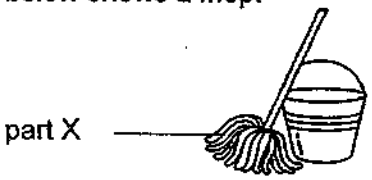


(a) Based on the results shown above, arrange the materials A, B, C and D according to the amount of water it can absorb. [1]

_____, _____, _____, _____

absorbs the least water — absorbs the most water

The diagram below shows a mop.



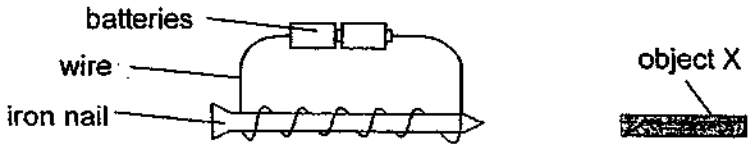
(b) Based on the results above, which material A, B, C or D is most suitable for making part X of the mop? Explain your answer. [2]

_____

_____

Need a home tutor? Visit smiletutor.sg

34. Shawn set up an electromagnet as shown below. When object X is brought near the iron nail, object X moved closer to the iron nail.



(a) Shawn concluded that object X is a magnet but his friend said that object X **may not** be a magnet. Give a reason why. [1]

(b) What can Shawn's friend do to show that object X is a magnet? [1]

Shawn carried out another experiment by changing the number of batteries attached to the electromagnet. He placed the electromagnet near some steel pins and recorded his observations in the table below.

Number of batteries	Number of steel pins attracted
2	4
3	6
4	8
5	10

(c) Based on the results above, tick (✓) to indicate if the statement(s) is/are true in the table below. [1]

	Statements	True
(i)	When the number of batteries increase, the number of steel pins attracted increase.	
(ii)	When the number of batteries increase, the number of steel pins attracted decrease.	
(iii)	When the number of batteries increase, the number of steel pins attracted remain the same.	

(d) Shawn replaced the steel pins with copper pins. He observed that no copper pins were attracted by the electromagnet. Give a reason for his observation. [1]

End of Booklet B

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

YEAR	:	2018
LEVEL	:	PRIMARY 3
SCHOOL	:	CHIJ ST NICHOLAS GIRLS'
SUBJECT	:	SCIENCE
TERM	:	SA2

Booklet A

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

Booklet B

Q25 (a) She wants to find out if living things need air to survive.

(b) The fruit fly in set-up D will live longer. There is more air in set-up D for the fruit fly hence less competition for air.

Q26 (a)

One seed	Many seeds
A , C	B , D

(b) Fruit B has a smooth skin while fruit C has hairy skin.

Q27 (a)

Organism	Produce fruits	Makes food	Grow in water
C		✓	✓
D	✓	✓	

(b) Organism A does not make its own food while organism B makes its own food.

Need a home tutor? Visit smiletutor.sg

Q28 (a) **Tree Y. The roots of tree Y are shorter so the roots cannot hold the tree firmly to the ground.**

(b) **The tiny openings allow the exchange of gases in its surroundings.**

(c) **The arrangement of the leaflets allows the plant to trap more sunlight to make food.**

Q29 (a) **Animal R breathes through moist skin while animal S breathes through gills.**

(b) **Both animals R and T reproduce by laying eggs.**

(c) **Bird A did not have enough food to eat as insect B was its food.**

Q30 (a) **Part A: <u>Scales</u>**

Part B: <u>Fins</u>

(b) **Part B allow the fish to move in water by pushing it to move.**

(c) **Mammals. When the dolphin is young, it has hair at the tip of its nose and when it gets older, they will slowly drop off.**

Q31 (a) **The dried fruit is dry and mould need water to survive.**

(b) **Action: <u>Put the fish in refrigerator.</u>**

Explanation: <u>To reduce warmth.</u>

Need a home tutor? Visit smiletutor.sg

Q32 (a) **B: Stomach**
C: Small intestine

(b)

Part	Digest takes place (✓)
A	
B	✓
C	✓
D	

(c) **Part C absorbs the digested food while part D absorbs water from the undigested food.**

Q33 (a) **A , D , B , C**

(b) **C. C absorbs the most water so it can clean up the spillage on the floor more efficiently.**

Q34 (a) **Object X could be a magnetic material.**

(b) **Turn object X around to see if the other pole repels the iron nail.**

(c) (i) **True**

(d) **Copper is a non-magnetic material so it will not be attracted by the electromagnet.**

End

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

HENRY PARK PRIMARY SCHOOL

SECOND SEMESTRAL ASSESSMENT 2018

PRIMARY 3

SCIENCE

BOOKLET A (40 MARKS)

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers on the Optical Answer Sheet (OAS) provided.

Name: _____ ( )

Class: Primary 3 ( )

Date: 26 October 2018

Total Time for Booklets A, B & C : 1 h 30 min

Booklet	Marks
A	/ 40
B + C	/ 40
Total (A+B+C)	/ 80

Parent's Signature: _____

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

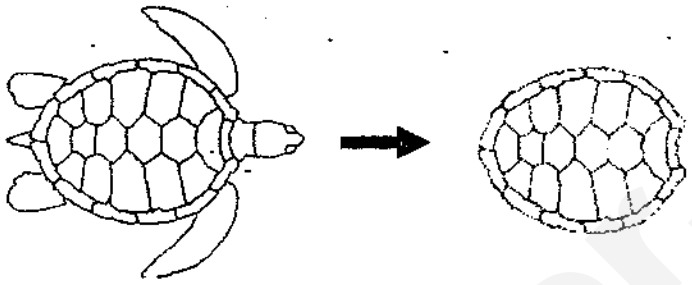
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Section A: (20 x 2 marks = 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. When John touched a turtle, it felt threatened and retreated into its shell, as shown in the diagram below.



Which one of the following characteristics of living things does the turtle show?

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

( )

2. Look at the classification table below.

Group 1	Group 2
shorts	knife
skirt	shirt
towel	fork
pants	scissors

Which one of the following is classified wrongly?

(1) fork
(2) shirt
(3) knife
(4) scissors

( )

Need a home tutor? Visit smiletutor.sg

3. Study the classification table shown below.

Group X	Group Y
rose plant	bird's nest
hibiscus	rabbit's foot

How have the plants been classified?

	Group X	Group Y
(1)	land plants	water plants
(2)	flowering	non-flowering
(3)	strong stem	weak stem
(4)	reproduce by spores	reproduce by seeds

( )

Need a home tutor? Visit smiletutor.sg

4. Look at the two groups of animals.

Which one of the following characteristics is used to group the animals?

(1) size of body
(2) types of food
(3) body covering
(4) where they live

( )

5. Three students made the following statements on fungi.

Xin Yan : Yeast is a type of fungi.
Yasman : Fungi reproduce from spores.
Zachary : Fungi make their own food.

Which of the following statements about fungi are correct?

(1) Zachary and Yasman only
(2) Xin Yan and Yasman only
(3) Xin Yan and Zachary only
(4) Yasman, Xin Yan and Zachary only

( )

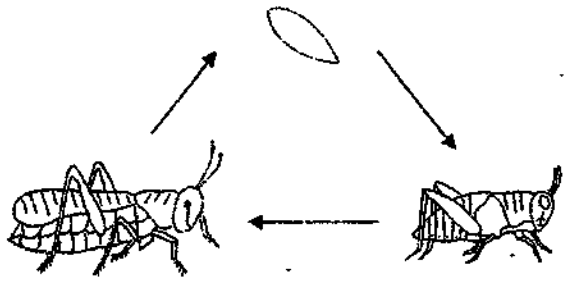
6. Which of the following organisms can only be seen through a microscope?

(1) Bacteria and yeast
(2) Moss and yeast
(3) Mould and ferns
(4) Mushroom and bacteria

( )

Need a home tutor? Visit smiletutor.sg

7. The diagram below shows the life cycle of animal X.



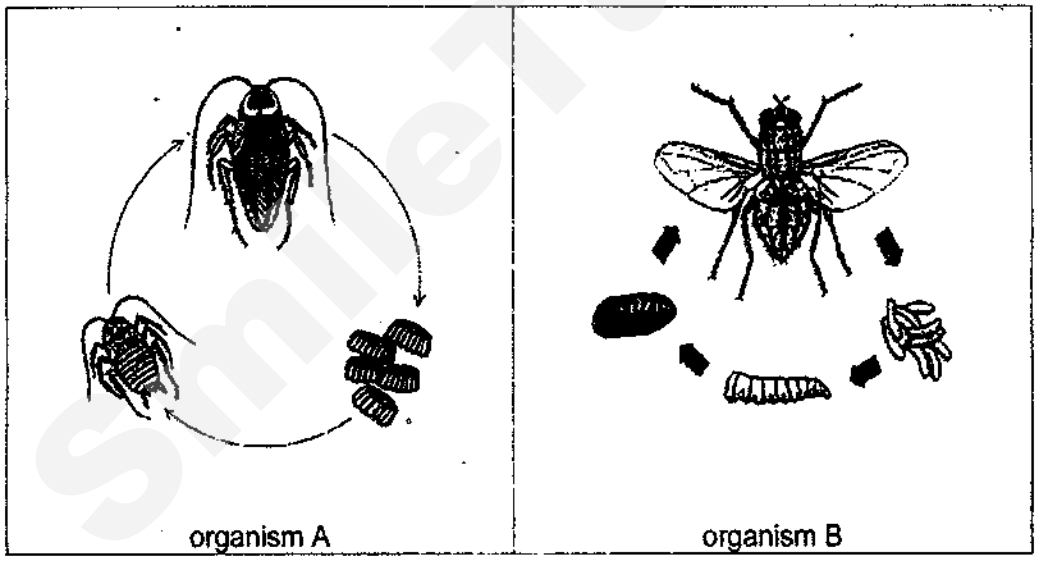
stage A

Which one of the following correctly describes animal X at stage A?

(1) Animal X does not eat at all.
(2) Animal X does not have wings.
(3) Animal X does not move around.
(4) Animal X does not respond to changes.

( )

8. The diagram below shows the life cycle of organism A and organism B.



organism A organism B

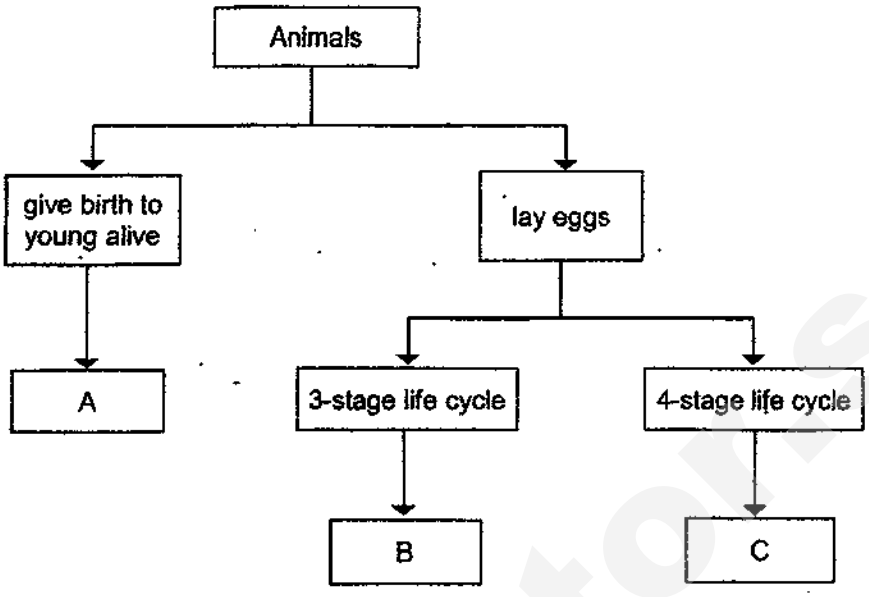
Which statement is **not** correct?

(1) Organism A has three stages in its life cycle.
(2) Organism B has four stages in its life cycle.
(3) The young of organism A resembles the adult.
(4) The young of organism B resembles the adult.

( )

Need a home tutor? Visit smiletutor.sg

9. Study the classification table below.



Which one of the following correctly identifies A, B and C?

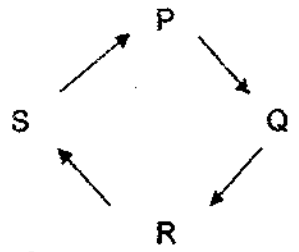
	A	B	C
(1)	frog	cockroach	beetle
(2)	cat	mosquito	frog
(3)	horse	chicken	beetle
(4)	chicken	frog	cockroach

( )

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

10. The diagram below shows the life cycle of a butterfly.



Jenny observed and recorded the number of leaves eaten by a butterfly at the different stages, P, Q, R and S, in the table below.

Stage	Number of leaves eaten in a day
P	0
Q	0
R	0
S	8

Which stage is most likely the adult stage?

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

( )

11. Michael has four objects K, L, M and N made of different materials. He measured the mass of each object before putting it in water. He recorded his observations in the table below.

Object	Material	Mass (g)	Floats in water
K	metal	6	×
L	plastic	6	✓
M	wood	15	✓
N	plastic	18	×

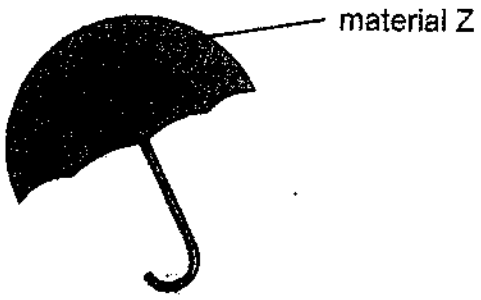
Based on the information given, which one of the following statements is correct?

(1) Object N has the biggest mass.
(2) All objects made of plastic float.
(3) All objects with a small mass float.
(4) Object K has a bigger mass than object L.

( )

Need a home tutor? Visit smiletutor.sg

12. An umbrella protects the user from the Sun and rain.



The table below shows some properties of materials.

	Properties
A	strong
B	waterproof
C	allows **most** light to pass through

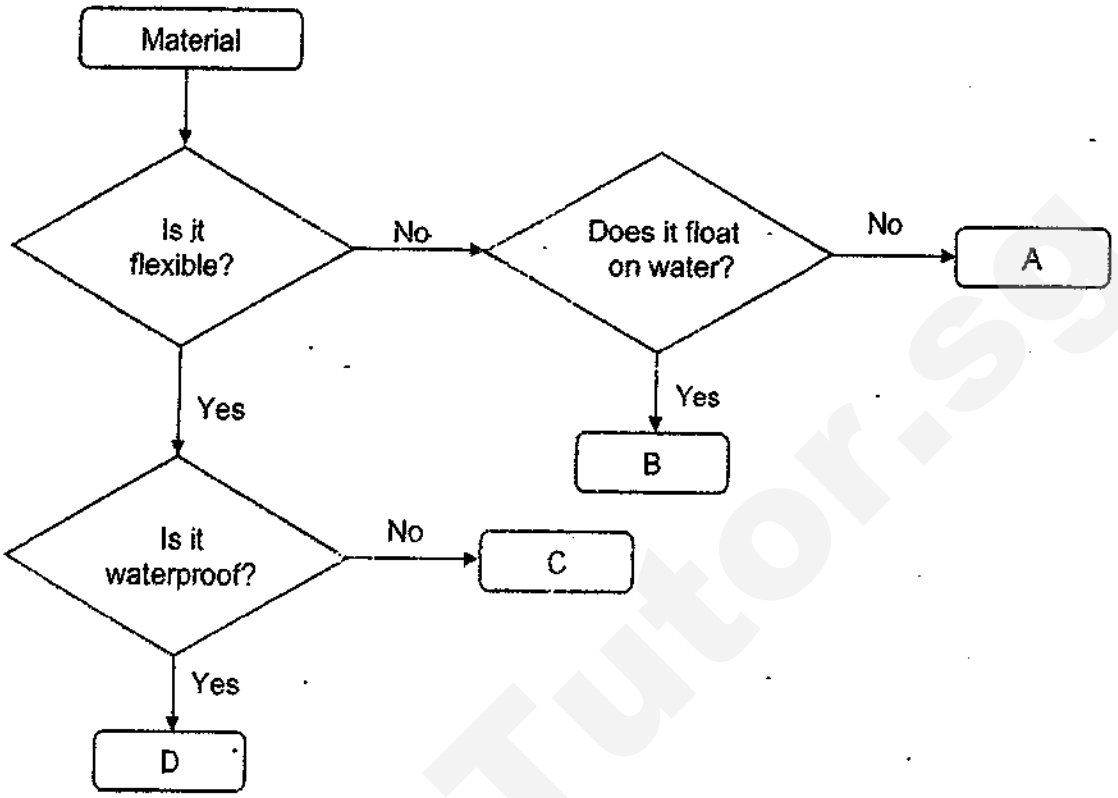
Which of the following properties should material Z have?

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

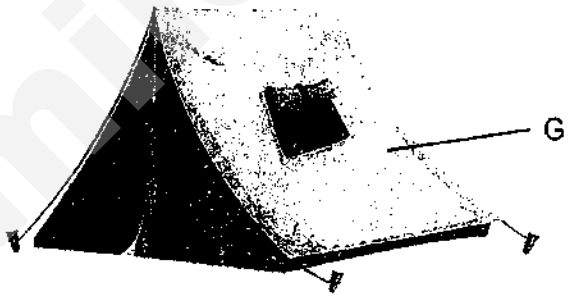
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

13. Study the flowchart below.



Based on the flowchart given, which material, A, B, C or D, is suitable for making part G of the camping tent shown below?



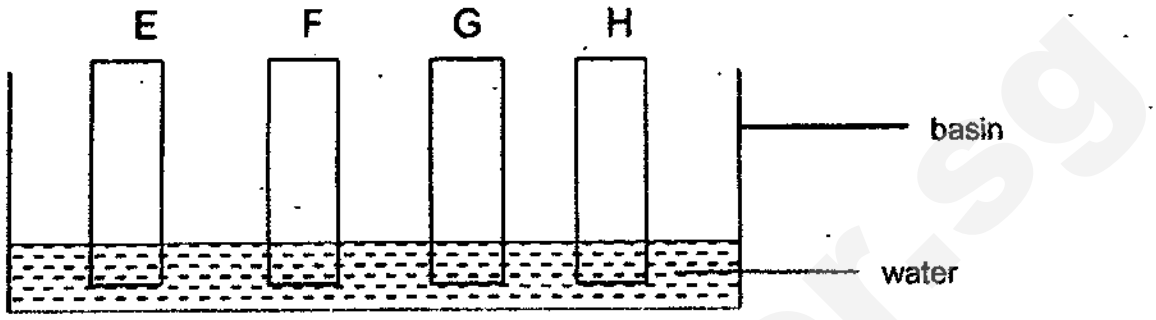
(1) A
(2) B
(3) C
(4) D

( )

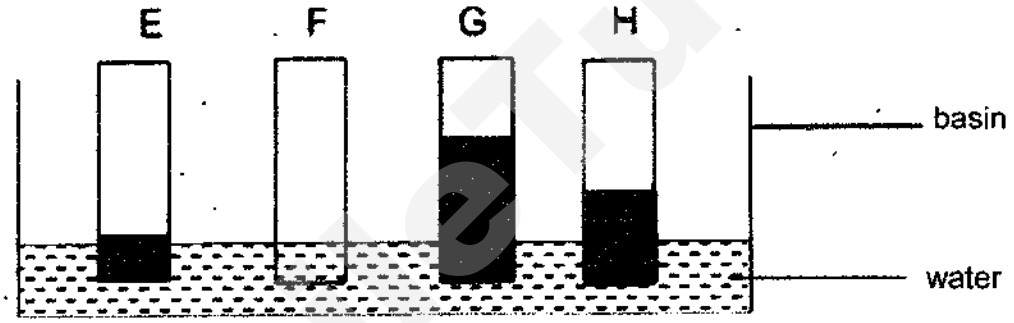
Need a home tutor? Visit smiletutor.sg

14. Ahmad set up an experiment to find out which material, E, F, G or H absorbed the most amount of water.

He placed four similar strips of materials E, F, G and H into a basin of water as shown below.



The diagram below shows the strips of materials after 30 minutes. The black patches represent the water absorbed by the materials.



Which material is **most** suitable to make a bath towel?

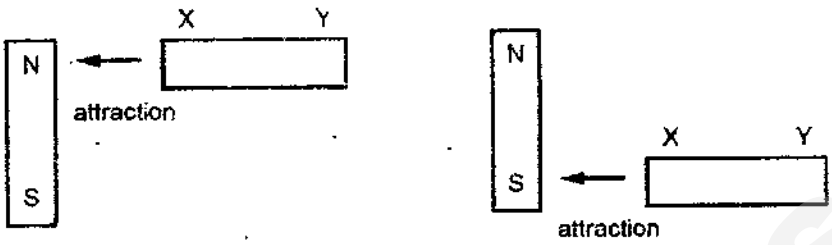
(1) E
(2) F
(3) G
(4) H

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

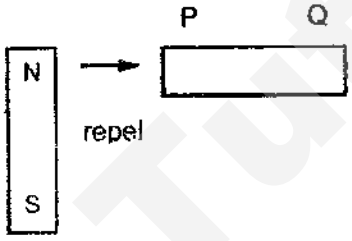
15. A metal rod XY is placed near a bar magnet.

End X is **attracted** when it is placed near to the North Pole (N) of the magnet, and also when it is placed near to the South Pole (S) as shown below.



Another metal rod PQ is also placed near the same bar magnet.

End P **repelled** when it is placed near to the North Pole (N) of the magnet as shown below.



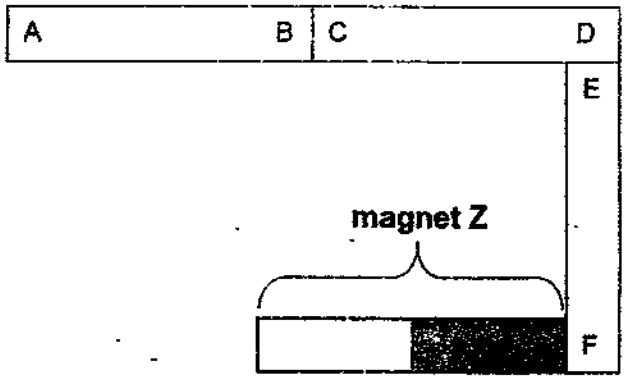
Which of the following will be observed when **end Y** and **end P** are placed near to the South Pole (S) of the bar magnet?

	end Y near South Pole (S)	**end P** near South Pole (S)
(1)	attract	attract
(2)	attract	repel
(3)	repel	attract
(4)	repel	repel

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

16. Three similar bar magnets with their poles labelled A, B, C, D, E and F are arranged with the bar magnet Z as shown in the diagram below.

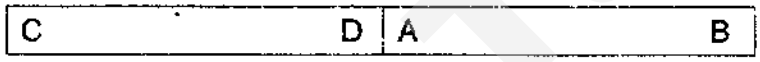


Which one of the following arrangements is possible?

(1)

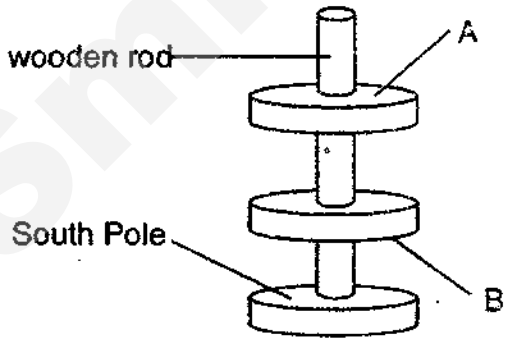
(2)

(3)

(4) 

( )

17. The diagram shows the positions of 3 ring magnets when they are put through a wooden rod.



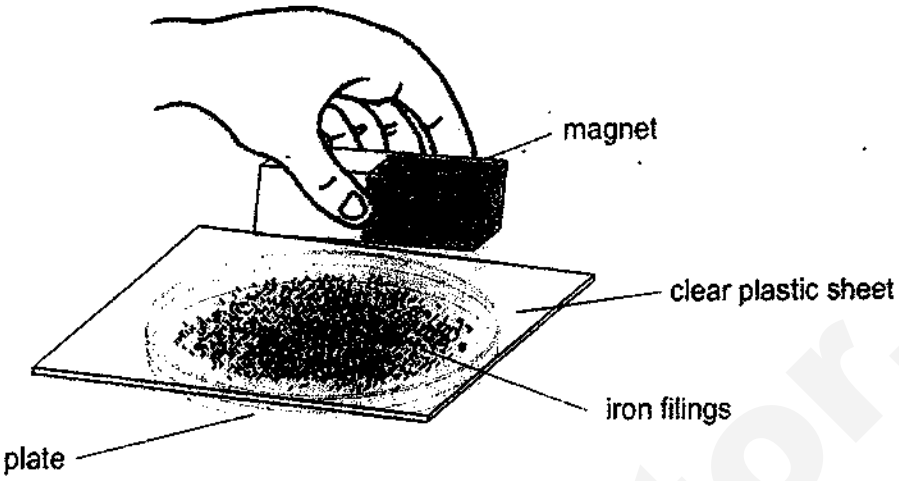
Which one of the following shows correctly the poles marked A and B?

	A	B
(1)	north	north
(2)	north	south
(3)	south	south
(4)	south	north

( )

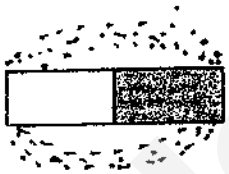
Need a home tutor? Visit smiletutor.sg

18. Susan poured some iron filings into a plate and placed a clear plastic sheet over the plate as shown below. She then placed a bar magnet on the clear plastic sheet and observed that the iron filings were attracted to the magnet.

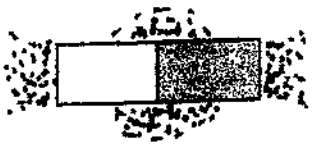


Which one of the following diagrams best shows what Susan would observe after some time?

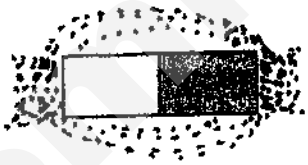
(1)



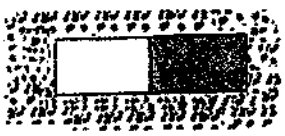
(2)



(3)



(4)



SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

19. James conducted an experiment with magnets, S, T and U.

He brought each magnet 3 cm away from a container of paper clips and recorded the number of paper clips attracted to each magnet in the table below.

He then heated each magnet over a candle flame for 10 minutes and repeated the experiment.

Magnet	Number of paper clips attracted	
	Before heating	**After heating**
S	7	0
T	13	0
U	5	0

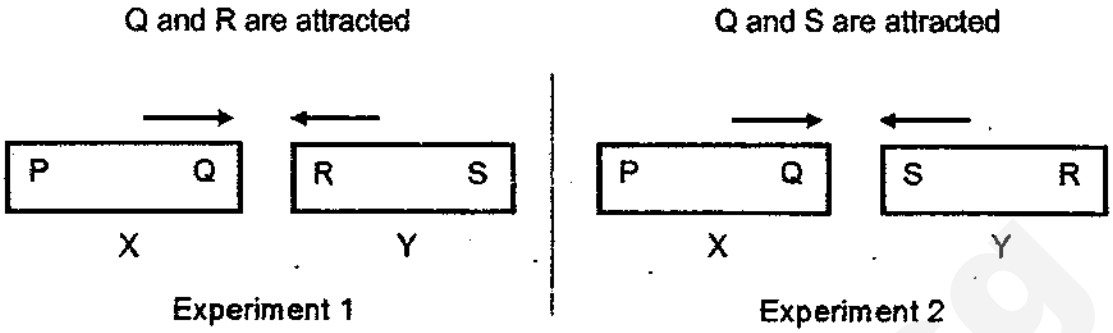
Based on the results shown in the table above, what could James conclude?

A Magnet S is the weakest magnet before heating.
B Magnet T is the strongest magnet before heating.
C Magnet U is the strongest magnet after heating.
D All magnets lost their magnetism after being heated.

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

Need a home tutor? Visit smiletutor.sg

20. Two objects, X and Y, are placed side by side as shown in the diagrams below.



Based on the diagrams above, which of the following statement(s) is/are correct?

A : One of the objects (X or Y) is a magnet.
B : Q and R are **definitely** unlike poles.
C : Both objects, X and Y, are made of magnetic materials.

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

( )

End of Section A

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

HENRY PARK PRIMARY SCHOOL

SECOND SEMESTRAL ASSESSMENT 2018

PRIMARY 3

SCIENCE

BOOKLET B and C (40 MARKS)

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.

Name: _____ ( )

Class: Primary 3 (

Date: 26 October 2018

Total Time for Booklets A, B & C : 1 h 30 min

Marks for Booklet B and C: _____

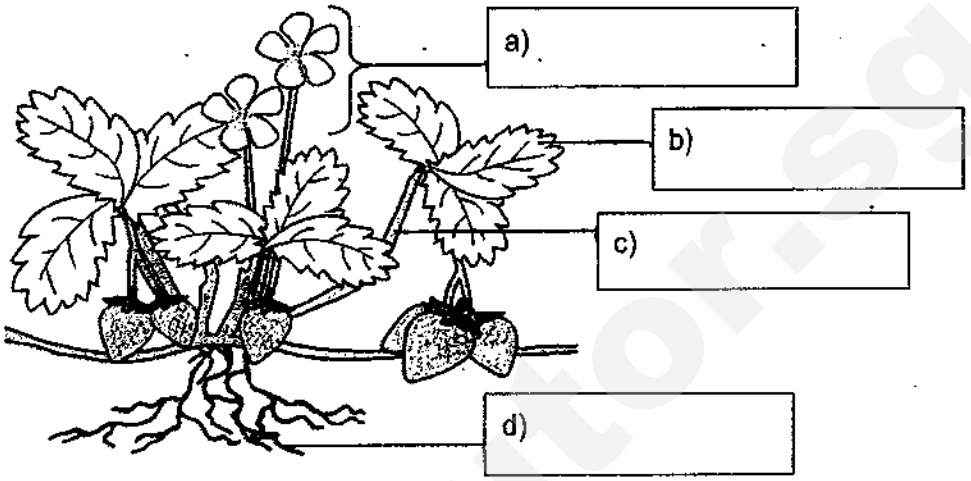
Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

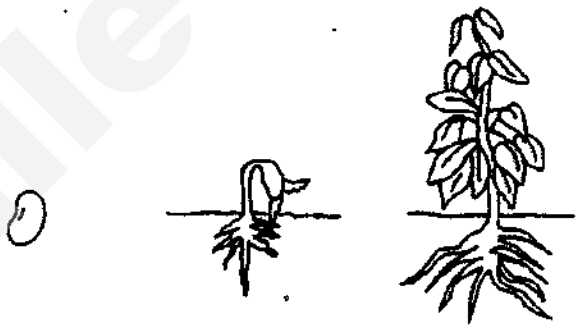
Section B : (8 x 2 marks = 16 marks)

Write your answers to questions 21 to 28 in the spaces given. Each question is 2 marks.

21. Identify and label correctly the parts of the plant shown in the diagram below. [2]



22. The diagram below shows the 3 stages in the life cycle of a bean plant.



Name the stages **A** and **B** in the life cycle of the bean plant. [2]

A : _____ B : _____

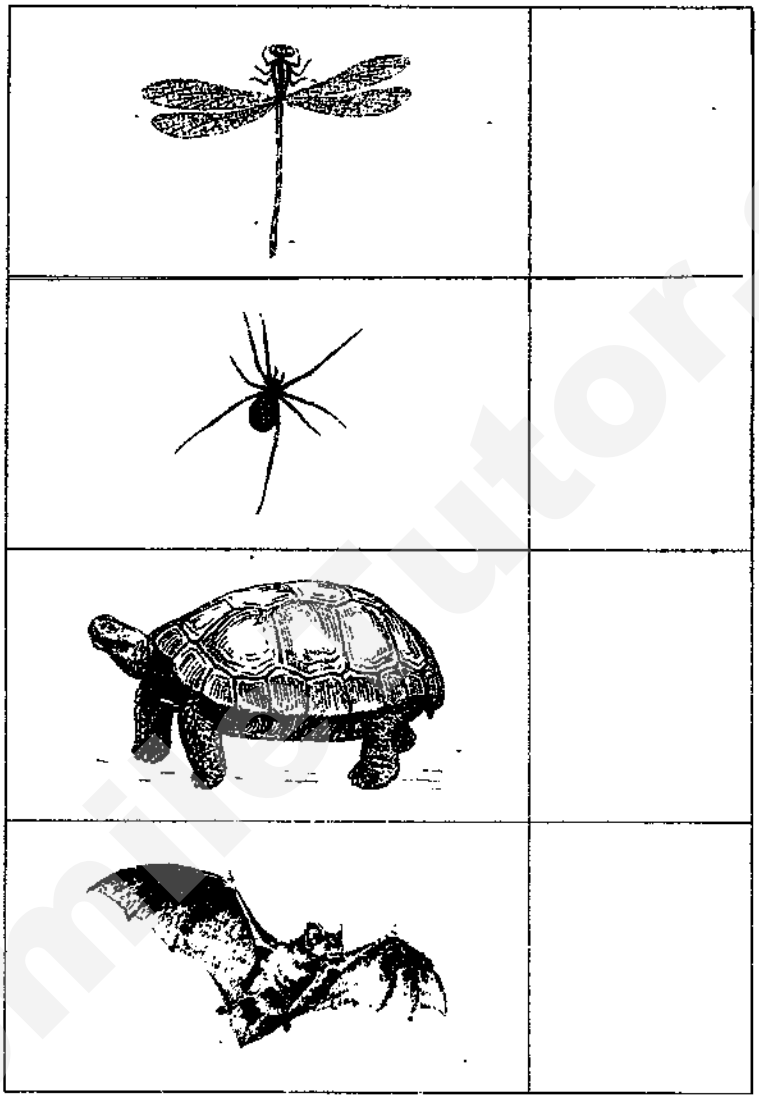
Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

23. A description of animal **A** is given below.

"I am a small animal. My body, which has a hard outer covering, is divided into three parts. I reproduce by laying eggs. What am I?"

a) Study the diagrams given below and put a tick (✓) in the box that represents animal **A**. [1]

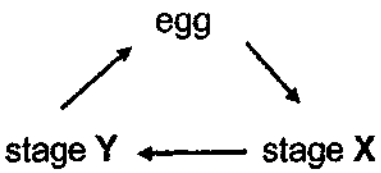


b) Put a tick (✓) beside the animal group that animal **A** belongs to. [1]

Animal group	Put a tick (✓) in the correct box
fish	
bird	
insect	
mammal	

Need a home tutor? Visit smiletutor.sg

24. The diagram below shows the life cycle of a frog.



Name stages **X** and **Y**. [2]

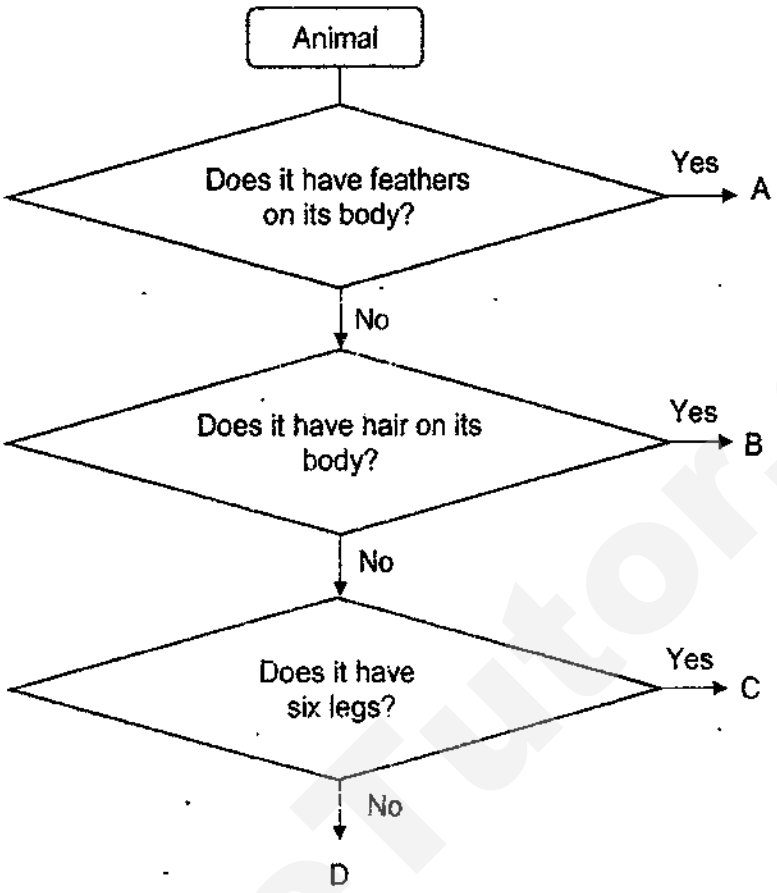
Stage **X** : _____

Stage **Y** : _____

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

25. Study the flowchart below carefully.



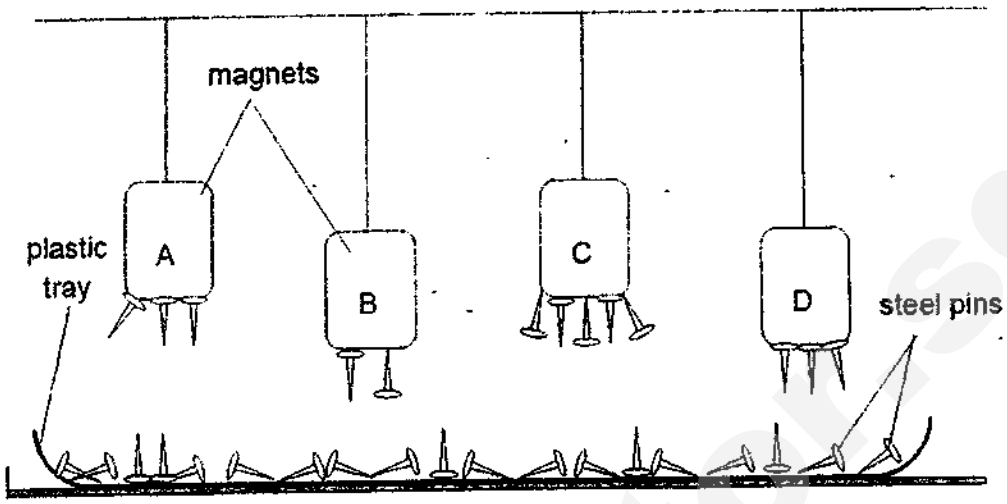
Using the information in the flowchart, group the animals by writing the A, B, C or D in the correct boxes below. [2]

Animal	Letters
Cockroach	
Chicken	
Giraffe	
Frog	

SmileTutor.sg

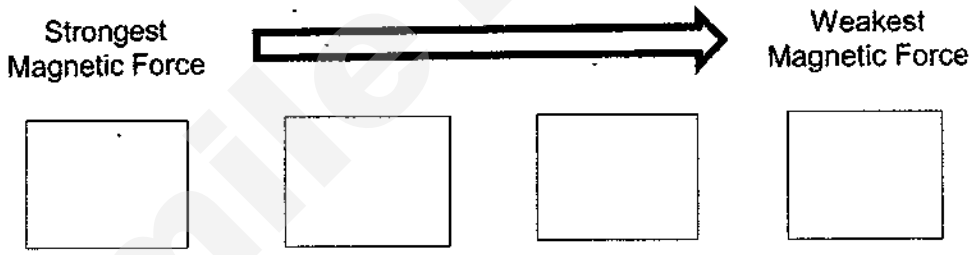
Need a home tutor? Visit smiletutor.sg

26. Magnets A, B, C and D are hanging from strings of two different lengths as shown in the diagram below. A plastic tray of steel pins is placed below the magnets. Each magnet attracts different number of steel pins.



Based on the diagram above, arrange the magnets according to their magnetic force, from the magnet with the strongest magnetic force to the magnet with the weakest magnetic force.

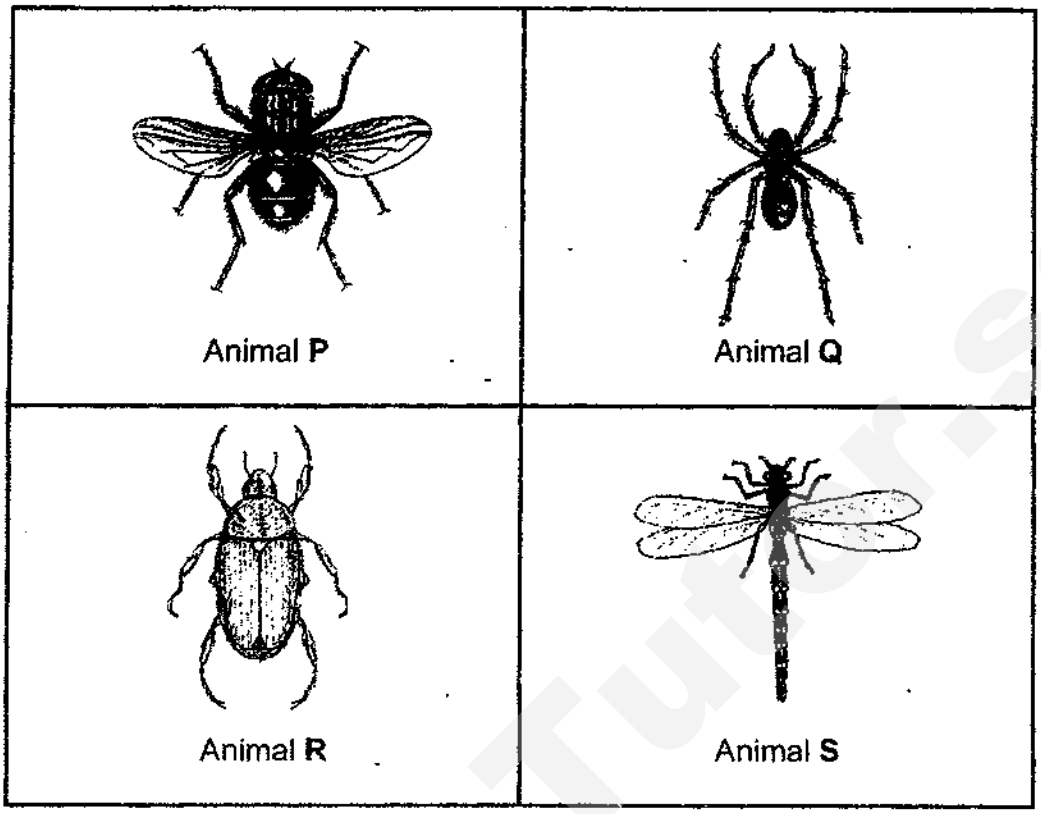
Write A, B, C and D in the correct boxes provided below. [2]



Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

27. Jane and Mary found four small animals (**P**, **Q**, **R** and **S**) as shown in diagram below.



The girls observed these animals and made a table about their observations.

Complete the table below by adding the letters (**P**, **Q**, **R** and **S**) of the four animals in the correct boxes. [2]

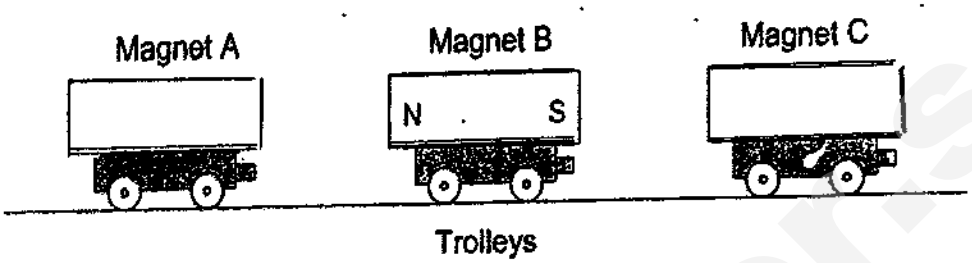
	Animal (Write P, Q, R or S)	**Number of wings**	**Number of legs**	**Number of feelers**
(a)		0	6	2
(b)		4	6	2
(c)		0	8	0
(d)		2	6	2

Need a home tutor? Visit smiletutor.sg

28. The diagram below shows three trolleys.

Paul put a bar magnet on each trolley. He pushed the trolleys together.

- Magnet B **attracted** magnet A.
- Magnet B **repelled** magnet C.



On the diagrams above, **write** the North and South poles of magnets **A** and **C** using the letters **N** and **S**. [2]

End of Section B

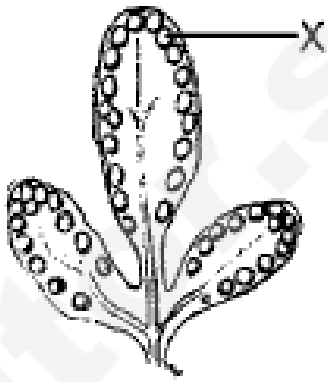
Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

Section C: (24 marks)

Write your answers to questions 29 to 35 in the spaces given. Each question carries 2 to 4 marks.

29. Tiffany found plant P in her garden. She observed the plant and recorded the following observations.

Observations of plant P	
• It is green in colour. • It has part X on the underside of its leaves which contains some brown powder. • It does not bear flowers.	

a) Name part X. _____ [1]

b) Can plant P produce fruit? Explain your answer. [2]

_____

_____

_____

Need a home tutor? Visit smiletutor.sg

30. Alex observed animals, D and E, over a period of time.

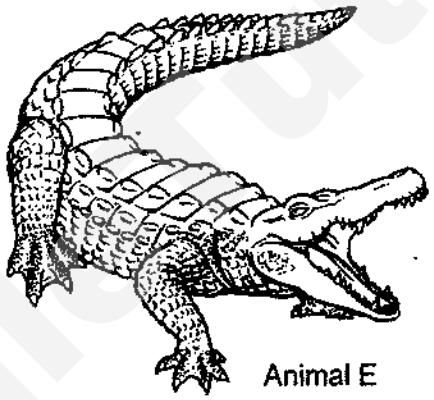
A young of animal D

Animal D has moist skin as outer covering. The adult lives on land and lays eggs on the surface of a pond.

A few weeks later, some of the eggs hatched and its young lived in the pond until they grow into adults.

a) Name the animal group that animal D belongs to. [1]

_____



Animal E

Animal E has scales and dry skin and lives on land. It lays eggs and its young were found near the water after they hatched from the eggs.

Alex concluded that animals D and E have many similar characteristics so they belong to the same animal group.

b) Do you agree with Alex's conclusion? Explain why. [2]

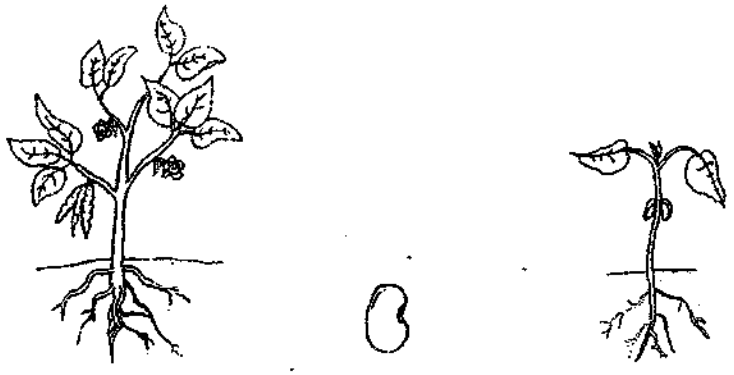
_____

_____

_____

Need a home tutor? Visit smiletutor.sg

31. The diagrams below show the stages in the life cycle of a plant. They are not arranged in order.



P Q R

Use the diagrams shown above to answer the following questions.

Observe the **parts** of the plant at stages **P** and **R**.

a) Based on your observation, state one **similarity** between the plant at stages **P** and **R**. [1]

_____

_____

b) Based on your observation, state one **difference** between the plant at stages **P** and **R**. [1]

_____

_____

Need a home tutor? Visit smiletutor.sg

32. The table below shows the properties of three materials E, F and G.

Material	Property			
	Waterproof	Flexible	Strong	Allow light to pass through
E	✓	✓		
F	✓		✓	✓
G		✓	✓	

a) Based on the information given in the table above, state two properties of material G. [2]

Property 1 : _____

Property 2 : _____

b) The diagram below shows a pair of reading glasses.

Which material, E, F or G, is **most** suitable for making part X?

Explain your answer. [2]

Material: _____

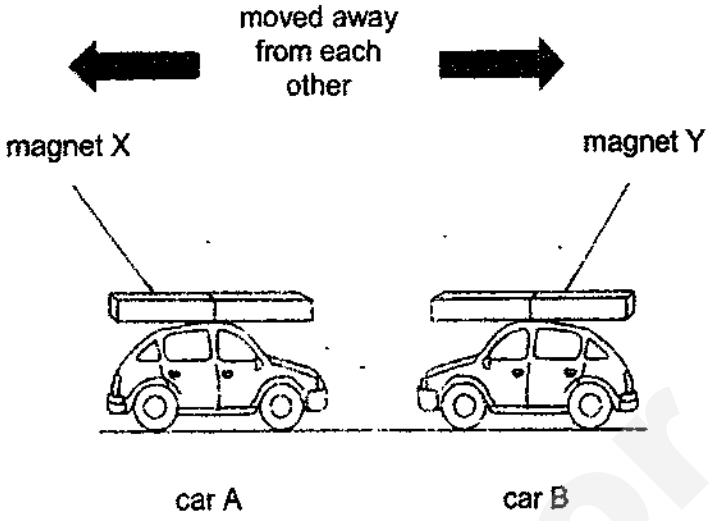
Explain: _____

_____

_____

Need a home tutor? Visit smiletutor.sg

33. Jett tied two similar magnets X and Y on two plastic toy cars, A and B.



a) When the two plastic toy cars with the magnets were brought close to each other, they moved away from each other as shown in the diagram above.

Explain why this happened. [2]

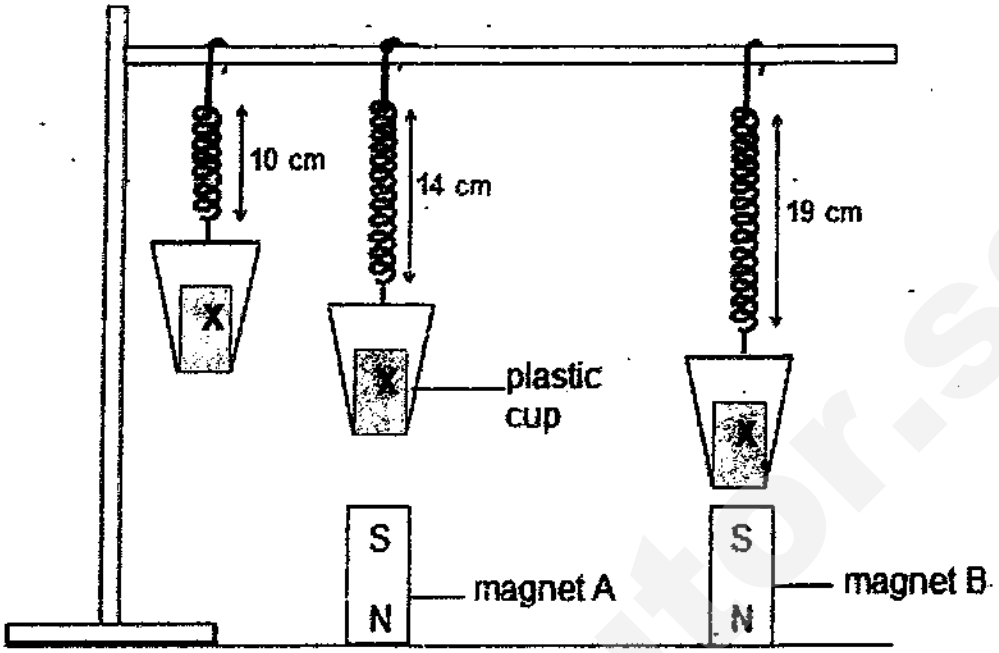
b) What can Jett do to **magnet X** to make the two toy cars move towards each other? [2]

Explain your answer.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

34. The diagram below shows three identical plastic cups with object X in each one of them. The cups are attached to three identical springs. Object X is made of iron.



When magnets A and B were placed below the plastic cups, it was observed that the springs stretched longer.

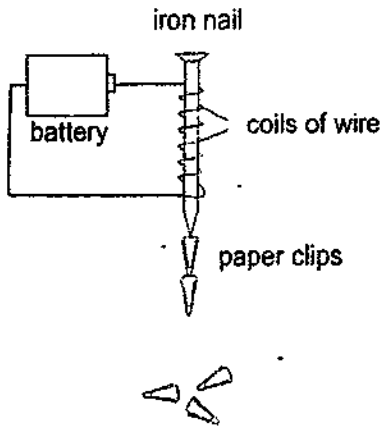
a) Explain why the springs stretched longer. [2]

b) i) Which magnet, A or B, is stronger? [1]

ii) Based on the diagrams shown above, explain your answer in (bi). [1]

Need a home tutor? Visit smiletutor.sg

35. Mary prepared an experiment as shown in the diagram below.



a) Explain why the iron nail was able to attract the paper clips. [1]

_____

b) Suggest **two** ways Mary can increase number of paper clips attracted by the iron nail above. [2]

i) _____

ii) _____

An iron nail was used in the above experiment.

c) Besides iron, **name** another suitable material the nail can be made of. [1]

_____

End of Section C

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

YEAR : 2018
LEVEL : PRIMARY 3
SCHOOL : HENRY PARK PRIMARY
SUBJECT : SCIENCE
TERM : SA2

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

21) (a) Flower

(b) Leaf

(c) Stem

(d) Roots

22) A : Seed

B : Young plant

23) (a)

✓

(b) Insect ✓

24) Stage X : Young
Stage Y : Adult

Need a home tutor? Visit smiletutor.sg

25)

Animal	Letters
Cockroach	C
Chicken	A
Giraffe	B
Frog	D

26)

C	A	D	B

27) (a) R

(b) S

(c) Q

(d) P

28)

Magnet A		Magnet B		Magnet C	
N	S	N	S	S	N

29) (a) Spores

(b) Plant P cannot produce fruit as it is a non-flowering plant.

30) (a) Amphibians

(b) I do not agree with Alex's conclusion as animal D can live in land and water while animal E can only live on land.

31) (a) The plant in both stages of the life cycle have leaves.

(b) The plant in stage P has flowers and fruits while the plant in stage R does not.

Need a home tutor? Visit smiletutor.sg

32) (a) **Property 1 : <u>It is flexible.</u>**

Property 2 : <u>It is strong.</u>

(b) **Material : <u>F</u>**

Explain : <u>Material F allows light to pass through as it allows the user to see clearly through the lens.</u>

33) (a) **The two like poles of magnet X and Y are facing each other that is why they repelled each other.**

(b) **Turn magnet X around so that the unlike poles will face each other and they would attract. The cars will then move towards each other.**

34) (a) **Object X is a magnetic material so the magnet would attract object X and the spring will stretch longer.**

(b) (i) **Magnet B**

(ii) **The spring stretched longer.**

35) (a) **The iron nail became an electromagnet.**

(b) (i) **She can increase the number of coils.**

(ii) **She can increase the number of batteries.**

(c) **Steel**

End

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

1 NOVEMBER 2018

BOOKLET A

NAME: _____ ( )

CLASS: Primary 3 ( )

24 questions

48 marks

Total Time for Booklets A & B: 1 h 30 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

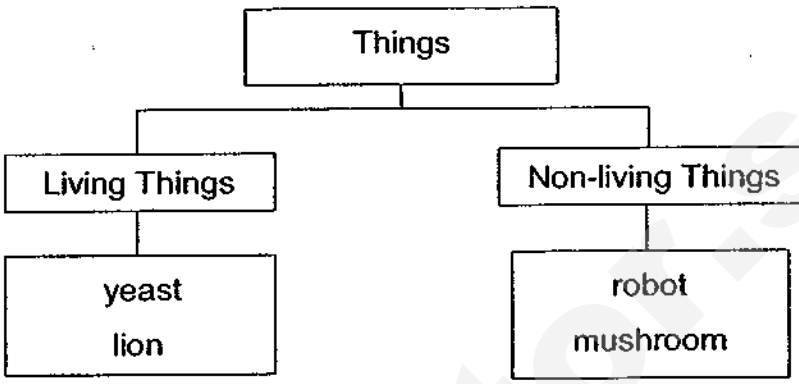
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

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). **(48 marks)**

---

1 Study the classification chart below.



Which one of the following has been classified **wrongly**?

(1) lion
(2) yeast
(3) robot
(4) mushroom

2 Which of the following is true for all insects?

(1) have wings
(2) have 6 legs
(3) 2 body parts
(4) have hair as their outer-covering

3 Which of the following statements is true about all bacteria?

(1) All bacteria are fungi.
(2) All bacteria are harmful.
(3) All bacteria cannot reproduce.
(4) All bacteria can respond to changes.

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

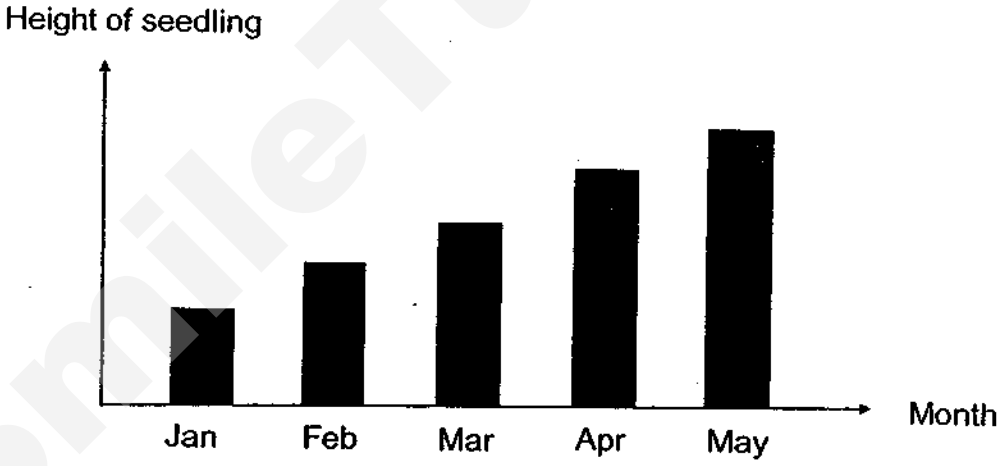
4 Organism X has the following characteristics.

- It has scales.
- It does not have legs.
- It breathes using its lungs.

Which group of animals does organism X belong to?

(1) fish
(2) reptile
(3) mammal
(4) amphibian

5 The bar graph below shows the height of a seedling over five months.



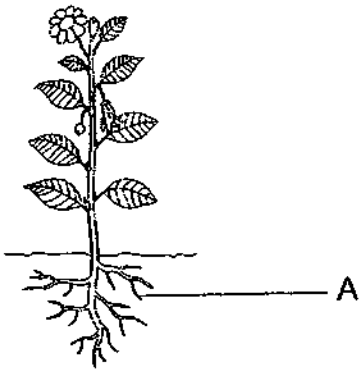
Which characteristic of living things does the graph show?

(1) Living things grow.
(2) Living things reproduce.
(3) Living things respond to changes.
(4) Living things need air, food and water to survive.

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

6 The diagram below shows a flowering plant.



What is the function of A?

(1) to hold the plant upright
(2) to make food for the plant
(3) to take in food for the plant
(4) to hold the plant firmly to the ground

7 Study the classification table below.

Group X	Group Y
parrot ostrich penguin	cat dog sheep

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

	Group X	Group Y
(1)	give birth to young alive	lay eggs
(2)	have feathers	have hair
(3)	live in water only	live on land only
(4)	can fly	cannot fly

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

8 The picture below shows a mushroom.

Which one of the following statements about the mushroom is true?

(1) It can reproduce.
(2) It produces flowers.
(3) It makes its own food.
(4) It does not respond to changes.

9 Which of the following statements about fungi are true?

A: Fungi reproduces from spores.
B: Fungi needs air, food and water to survive.
C: Fungi can only be seen under a microscope.

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

10 Which of the following body systems take air into our body?

(1) digestive system
(2) muscular system
(3) circulatory system
(4) respiratory system

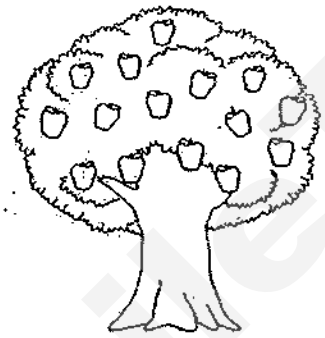
(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

11 Which of the following body systems matches its function?

	Systems	Functions
(1)	skeletal	breaks down food into simpler substances
(2)	digestive	helps different parts of the body move
(3)	circulatory	carries substances to all parts of the body
(4)	respiratory	supports the body

12 The diagrams below show two plants.



apple tree

bird's nest fern

How are the two plants similar?

A Both can produce flowers.

B Both reproduce by spores.

C Both can make their own food.

(1) A only

(2) C only

(3) B and C only

(4) A, B and C

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

13 Ron placed ten guppies in a tank and observed them for a few months. No guppies were added or removed from the tank after January. He recorded the number of guppies in the table below.

Month	Number of guppies
January	10
February	15
March	18

His results show that living things _____.

(1) grow
(2) move
(3) reproduce
(4) need water

14 The pictures below show the stages in the life cycle of a butterfly.

Stage A

Stage B

Stage C

Stage D

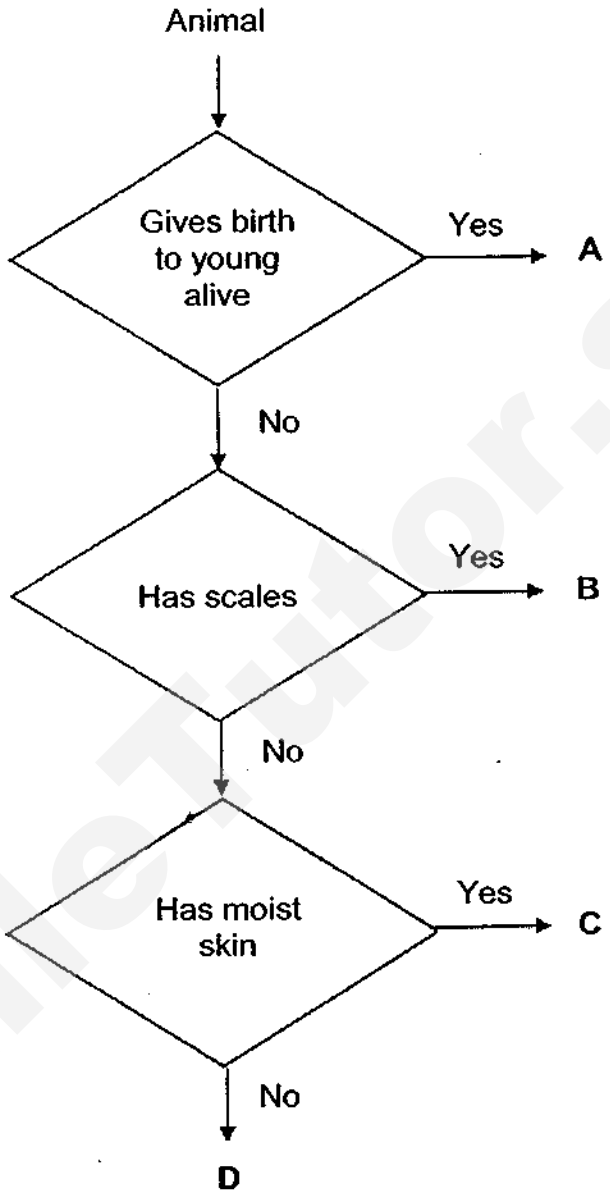
Which of the following shows the correct representation of the life cycle of a butterfly?

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

15 Study the flowchart below.



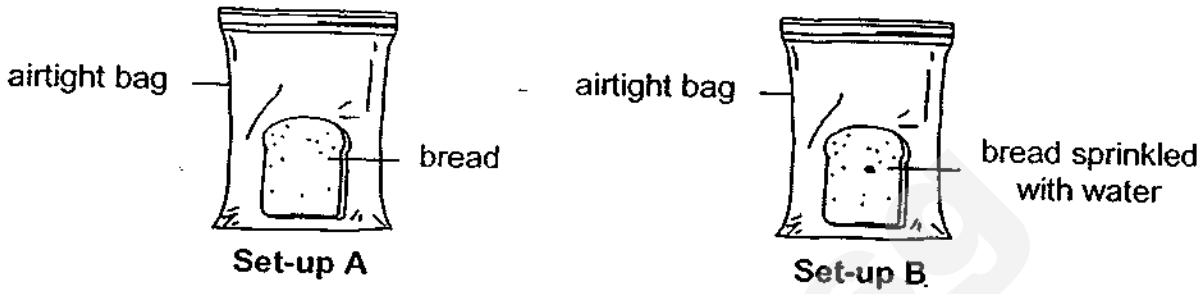
Which of the following best represents A, B, C and D?

	A	B	C	D
(1)	amphibian	mammal	insect	fish
(2)	bird	insect	mammal	amphibian
(3)	mammal	amphibian	insect	bird
(4)	mammal	fish	amphibian	insect

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

16 Sandy prepared two set-ups as shown below.



After 3 days, she observed mould growing on the bread in set-up B but there was no mould on the bread in set-up A.

What can she conclude based on her observation?

(1) Mould needs air to grow.
(2) Mould needs water to grow.
(3) Mould needs warmth to grow.
(4) Mould needs sunlight to grow.

17 The table below shows the characteristics of animals, P and Q.

	Animal P	**Animal Q**
Does it have a 4-stage life cycle?	No	No
Does the young resemble the adult?	No	Yes

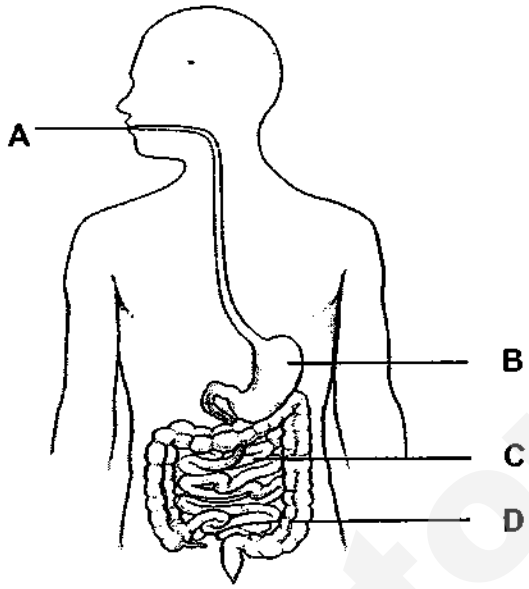
Which of the following could animals P and Q be?

	Animal P	**Animal Q**
(1)	Cockroach	Chicken
(2)	Frog	Cockroach
(3)	Chicken	Butterfly
(4)	Mosquito	Frog

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

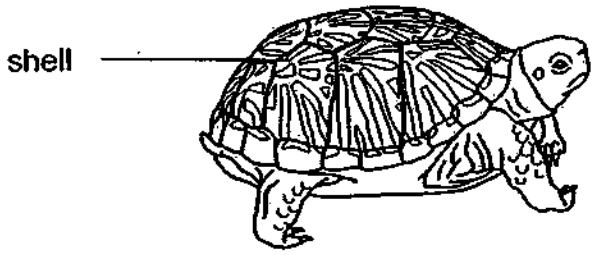
18 The picture below shows the human digestive system.



Which part of the digestive system is excess water absorbed into the bloodstream?

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

19 A tortoise has a shell.



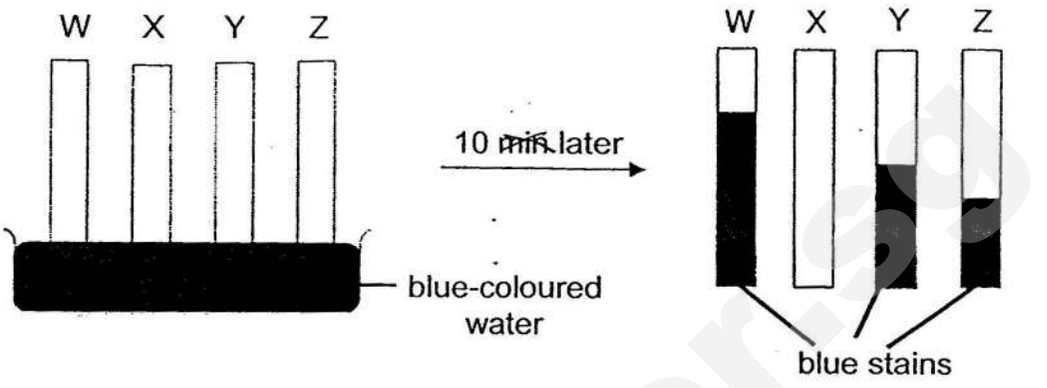
Which property allows the shell to protect the tortoise from being eaten by other animals?

(1) strength
(2) flexibility
(3) waterproof
(4) ability to float

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

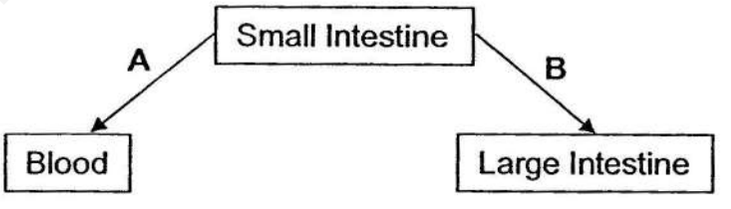
20 Paul dipped four different materials, W, X, Y and Z, into a container filled with blue-coloured water. After ten seconds, Paul removed the materials from the container and his results are as shown below.



Based on his results, which material is the most suitable for making a towel to dry wet surfaces?

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

21 Study the diagram below. A and B represent the substances that leave the small intestine to the different parts of the body.



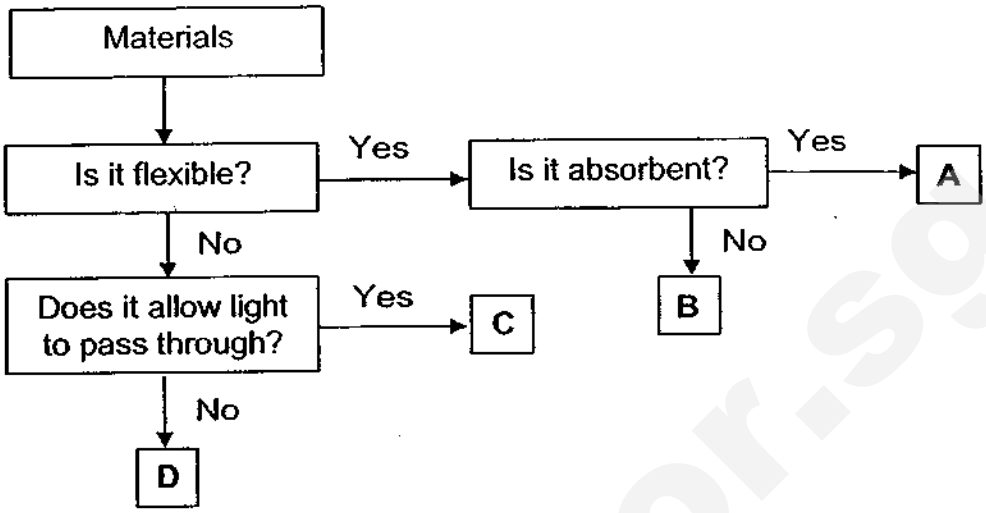
Which of the following correctly represents A and B?

	A	B
(1)	water	digested food
(2)	digested food	undigested food
(3)	undigested food	digested food
(4)	digested food	water

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

22 Study the flowchart below.



Which of the following represents materials A, B, C and D?

	A	B	C	D
(1)	Fabric	Rubber	Glass	Metal
(2)	Plastic	Wood	Glass	Wood
(3)	Fabric	Ceramic	Metal	Plastic
(4)	Wood	Plastic	Rubber	Fabric

23 The picture below shows a pair of spectacles.

Why is the lens of spectacles usually made of plastic?

(1) It can float.

(2) It is flexible.

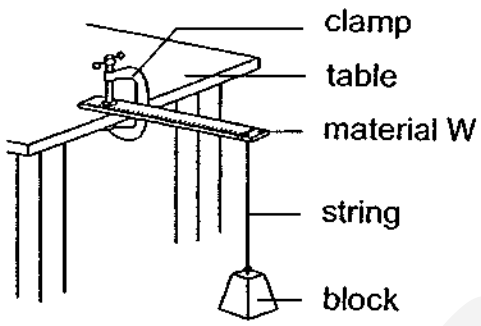
(3) It is absorbent.

(4) It allows light to pass through.

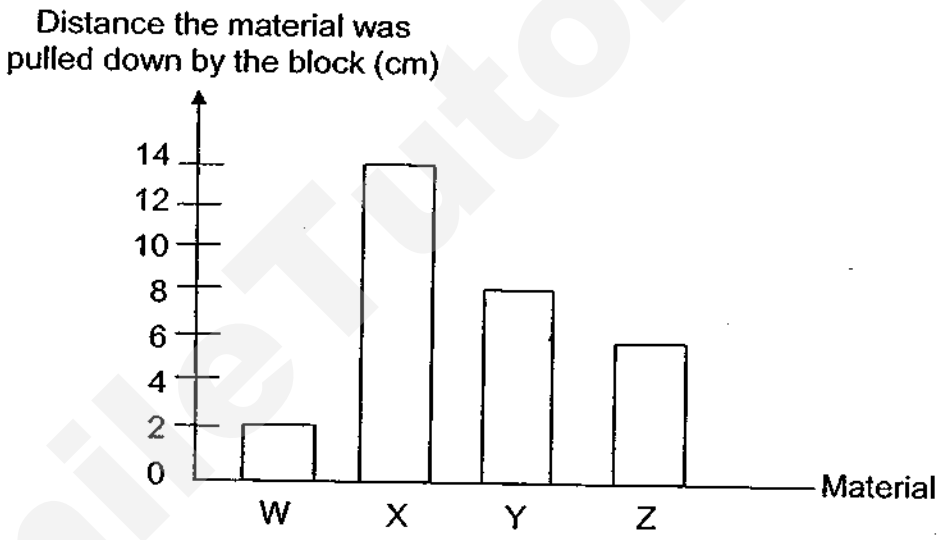
(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

24 Justin set up an experiment as shown below to test the flexibility of material W.



He measured the distance material W was pulled down by the block. He repeated the experiment with materials X, Y and Z. The bar graph below shows his results.



Which material is the most flexible?

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

- End of Booklet A -

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

1 NOVEMBER 2018

BOOKLET B

NAME: ( )

CLASS: Primary 3 ( )

10 questions

32 marks

Total Time for Booklets A & B: 1 h 30 min

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

BOOKLET A:	**/ 48**
BOOKLET B:	**/ 32**
TOTAL:	**/ 80**

PARENT'S SIGNATURE: _____

Smile Tutor.sg

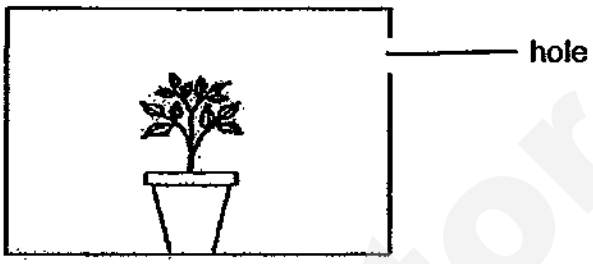
Need a home tutor? Visit smiletutor.sg

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 John placed a pot of plant in black box with a hole. The box was then placed in the garden.



The diagram below shows the changes observed after a week.

Based on the changes observed, state two characteristics of living things. [2]

Characteristic 1:

_____

_____

Characteristic 2:

_____

_____

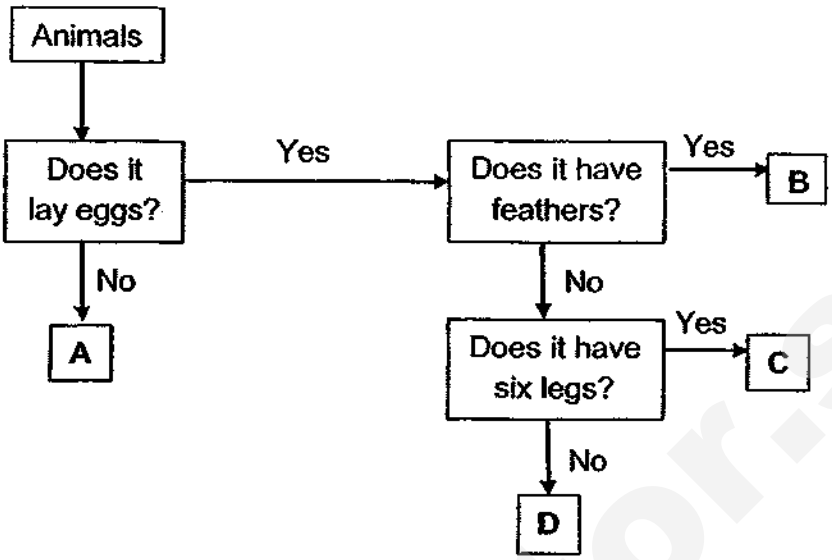
	2

(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

26 Study the flowchart below.



(a) Describe animal B. [1]

(b) State one difference between animals B and D. [1]

(c) Which animal group does animal A belong to? [1]

(d) State another characteristic of animal C that is not shown in the flowchart. [1]

4

(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

27 The table below shows the properties of 3 different materials, X, Y and Z.
A tick (✔) indicates that the property is present.

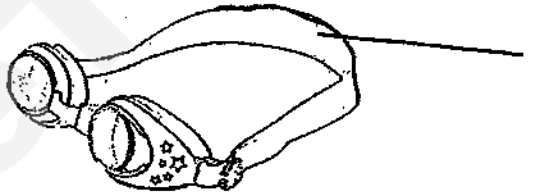
Properties of Materials	Materials		
	X	Y	Z
It is strong.	✔	✔	✔
It is flexible.	✔		
It allows light to pass through.			✔

(a) State two properties of material Y. [2]

_____

_____

(b) The picture below shows a pair of goggles.



(i) Which material, X, Y or Z, is the most suitable for making part A? [1]

_____

(ii) Which property is most important in making sure that the goggles can fit tightly on the head? [1]

Properties	Tick (✔) in the correct box
flexible	
able to float	
allows light to pass through	

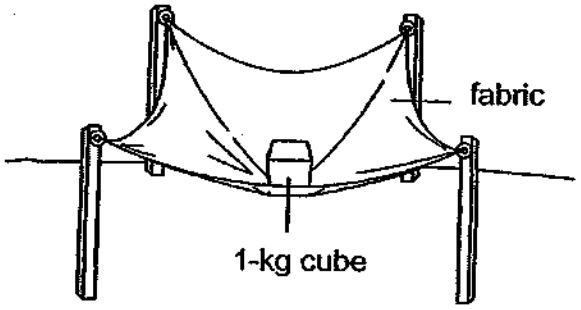
	4

(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

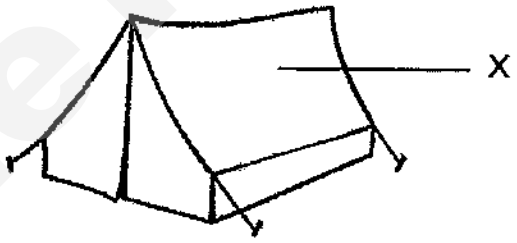
28 Sam carried out an experiment using 3 different pieces of fabric, A, B and C. He tied the corners of each piece of fabric to four poles as shown below and added 1-kg cubes one at a time, until the fabric tore. The table below shows his results.



Fabric	Number of 1-kg cubes added before fabric tore
A	15
B	10
C	50

(a) Which property of material is Sam testing? [1]

The picture below shows a tent that is used for camping. It has to withstand heavy rain and frequent folding and unfolding.



(b) Which fabric, A, B or C, is most suitable for making part X of the tent? Give a reason for your answer. [1]

(c) Other than the property tested, state another important property of the material chosen for it to be suitable for making part X of the tent. [1]

	3

(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

29 The table below shows the characteristics of three organisms, A, B and C.
A tick (✔) indicates that the characteristic is present.

Characteristic	Organisms		
	A	B	C
It bears flowers.	✔		
It lives on land.		✔	✔
It reproduces by spores.		✔	✔
It is able to make its own food.	✔	✔	

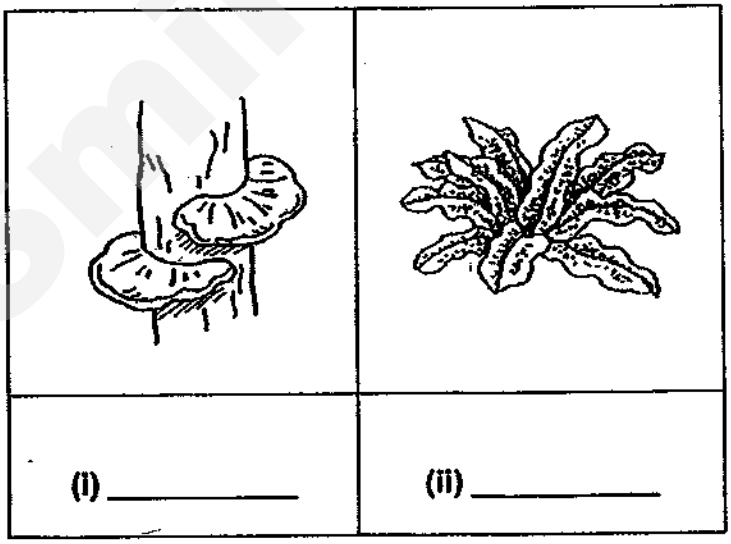
(a) Based on the table above, state one similarity between organisms A and B. [1]

_____

_____

(b) The pictures below shows two of the organisms.

Identify the organisms by filling in the blanks with the letters A, B or C. [2]



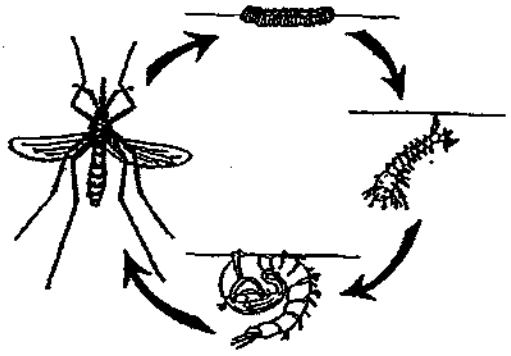
(i) _____ (ii) _____

	3

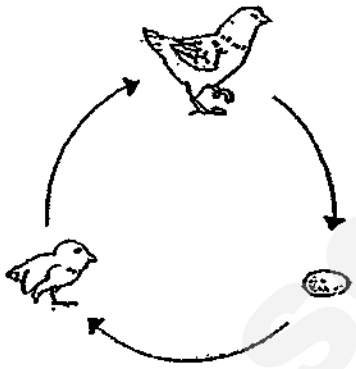
(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

30 Study the life cycles of animals P and Q below.



Life cycle of Animal P



Life cycle of Animal Q

(a) How do animals P and Q reproduce? [1]

_____

_____

(b) State two differences between the life cycles of animals P and Q. [2]

(i) _____

_____

(ii) _____

_____

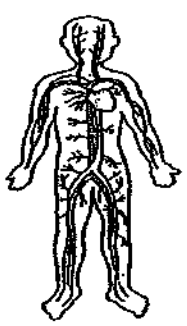
	3

(Go on to the next page)

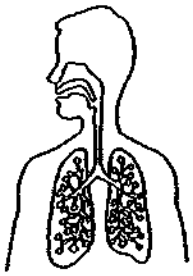
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

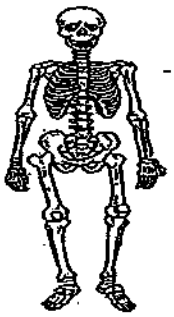
31 The diagrams below show four different human body systems.



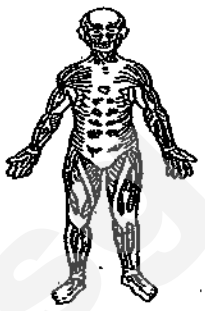
System W



System X



System Y



System Z

(a) Match systems W, X, Y and Z to the body systems in the table below. [2]

	Name of body systems	Systems
(i)	Respiratory system	
(ii)	Skeletal system	
(iii)	Muscular system	
(iv)	Circulatory system	

(b) State one function of system Y. [1]

_____

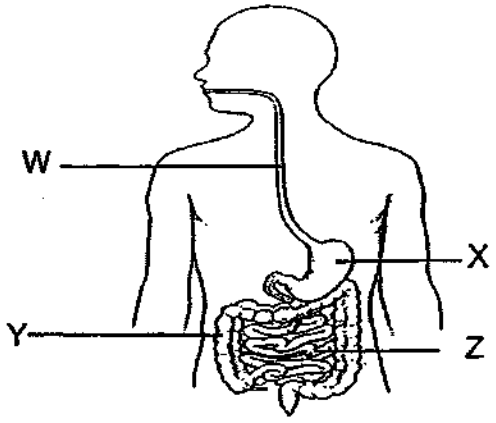
_____

	3

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

32 The diagram below shows a human digestive system.

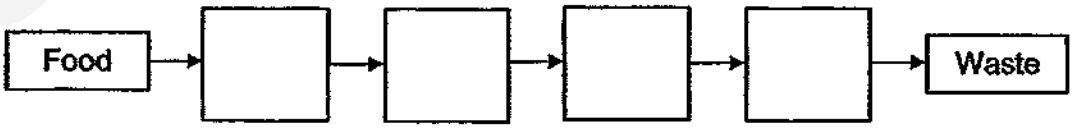


(a) Name parts X and Y. [2]

Part	Part of the digestive system
X	
Y	

(b) At which part of the digestive system, W, X, Y or Z, is digestion completed? [1]

(c) Fill in the boxes with letters, W, X, Y and Z, to show the parts of the digestive system food moves through after it enters the digestive system. [1]



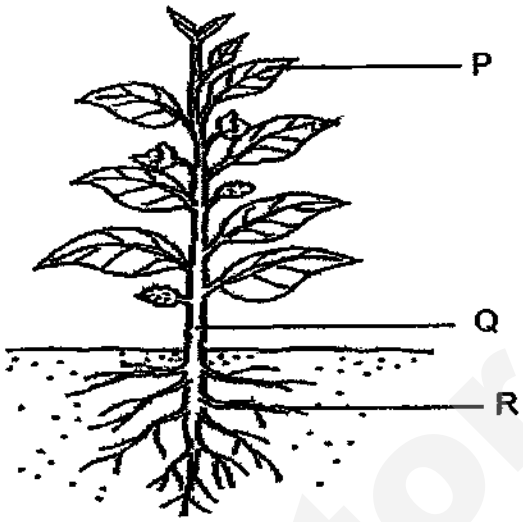
4

(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

33 Study the diagram of the plant below.



(a) Name parts Q and R of the plant. [2]

(i) Q: _____

(ii) R: _____

(b) State the function of part P. [1]

_____

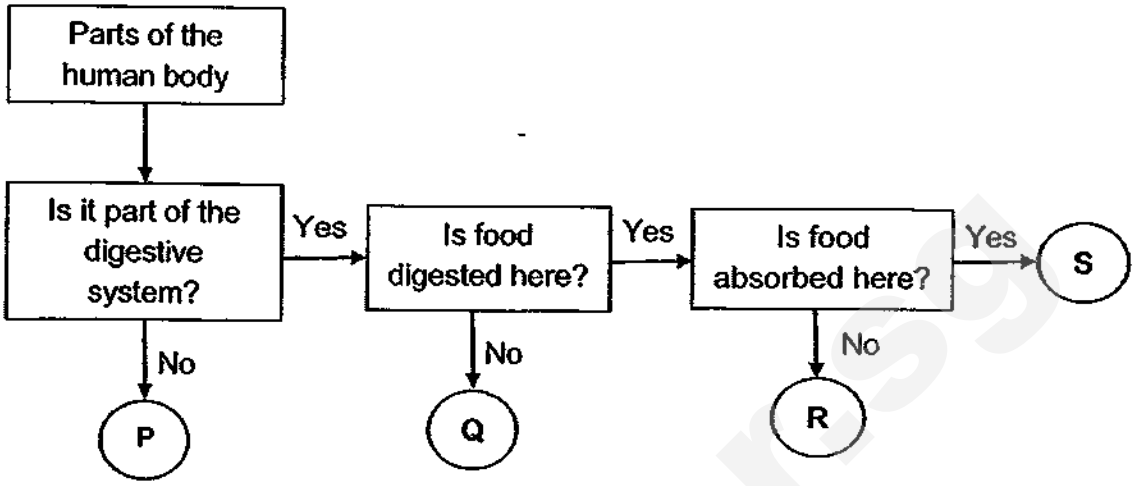
_____

3

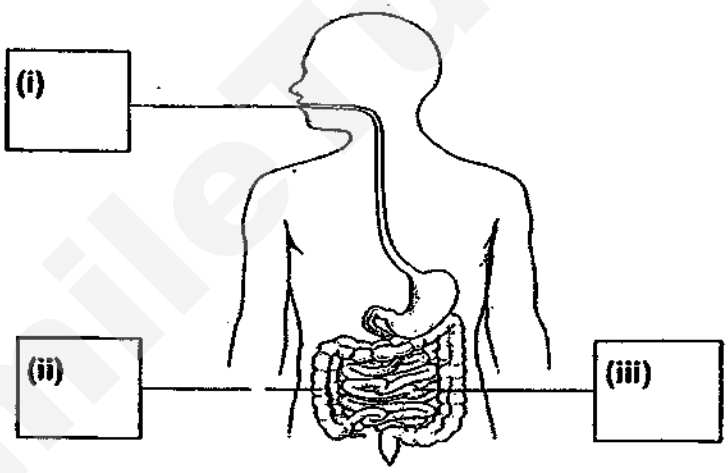
(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

34 Study the flowchart below.



Label the human digestive system with parts, P, Q, R or S. [3]



- End of Booklet B -

	3

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : MARIS STELLA

SUBJECT : SCIENCE

TERM : SA2

ORDER CALL :

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

Q25) Characteristic 1 : Living things respond to changes around them.

Characteristic 2 : Living things grow.

Q26) a) It lays egg and has feathers.

b) B has feathers but D does not have.

c) Mammals

d) It has three body parts.

Q27) a) It is strong and it is stiff.

b) i) X

ii) flexible

Smiletutor.sg

Need a home tutor? Visit smiletutor.sg

Q28) a) strength

b) C. It is the strongest.

c) Waterproof

Q29) a) Both are able to make its own food.

b) (i) C

(ii) B

Q30) a) They reproduce by laying eggs.

b) i) P has four stages but Q has three.

ii) Q's young looks like it's adult but P's does not.

Q31) a) (i) X

(ii) Y

(iii) Z

(iv) W

b) It keeps the body upright.

Q32) a) X : stomach

Y : large intestine

b) Z

c) W – X – Z – Y

Q33) a) i) Q : stem

ii) R : roots

b) It helps the plant make food.

Q34) (i) R

(ii) Q

(iii) S

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

METHODIST GIRLS' SCHOOL

Founded in 1887

END-OF-YEAR EXAMINATION 2018
PRIMARY 3
SCIENCE

BOOKLET A

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.

Name: _____ ( )

Class: Primary 3. _____

Date : 30 October 2018

This booklet consists of 18 printed pages including this page.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

For each question from 1 to 28 four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet (OAS).

[56 marks]

---

1 Study the pictures below.

Which characteristic of living things does it show?

(1) Living things die.
(2) Living things grow.
(3) Living things respond to changes around them.
(4) Living things need air, water and food to stay alive.

2 The table below shows the number of fishes in a fish tank over a period of four days.

Day	Number of fish
1	5
2	5
3	4
4	2

What are the likely reasons for decrease in the number of fishes at the end of four days?

A The fishes are not fed daily.
B There is no air pump in the tank.
C The fishes are swimming too slowly.
D A disease has spread among the fishes.

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

(Go on to the next page)

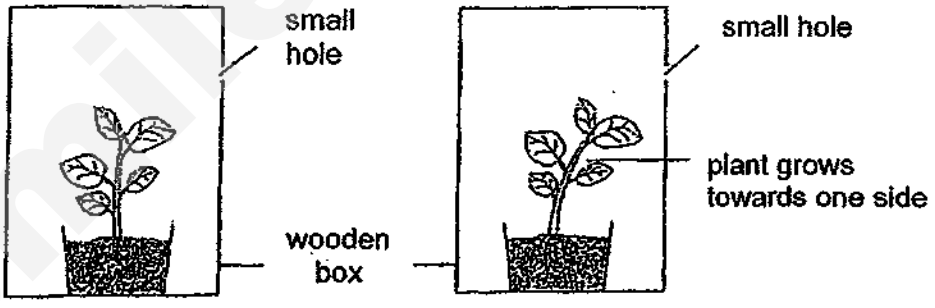
Need a home tutor? Visit smiletutor.sg

3 The picture below shows an apple.

Which one of the following statements correctly describes the apple?

	It is a fruit	It grows from a flowering plant	I needs sunlight to make food	It gets water from the roots
(1)	Yes	No	Yes	No
(2)	No	No	Yes	Yes
(3)	Yes	Yes	No	Yes
(4)	No	Yes	No	No

4 A potted plant was put inside a wooden box with a small hole. The wooden box was then placed in a garden.



In the beginning At the end of three days

Which one of the following statements explains the observation at the end of three days?

(1) It tried to get more water.
(2) It tried to take in more air.
(3) It was reaching out for fertilizer.
(4) It was reaching out for more sunlight.

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

5 Which of the following characteristic(s) is/are common to most fish, reptiles and birds?

A has fins
B has gills
C lays eggs
D body has scales

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

6 Four pupils made a few statements about the differences between a shark and a dolphin.

Quentin: A shark swims but a dolphin does not.

Chandra: A dolphin has gills but a shark has lungs.

Siew Lin: A shark has scales but a dolphin has hair on its body.

Siti Maya: A dolphin does not suckle its young but a shark does.

Whose statements

(1) Quentin and Siew Lin only
(2) Chandra and Siti Maya only
(3) Quentin, Chandra and Siti Maya only
(4) Chandra, Siew Lin and Siti Maya only

(Go on to the next page)

SmileTutor.sg

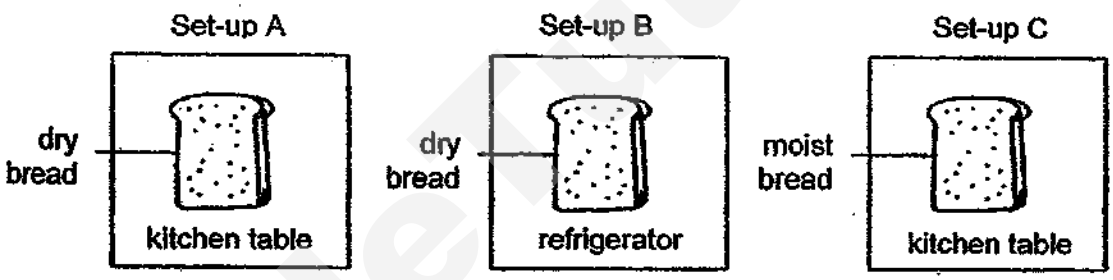
Need a home tutor? Visit smiletutor.sg

7 Which of the following are correct statements about bacteria?

A All bacteria are harmful to man.
B Bacteria are micro-organisms.
C Bacteria reproduce from spores.
D Bacteria exist in different shapes.

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

8 Gopal conducted an investigation by placing three similar pieces of bread in different set-ups, A, B and C as shown below.



After a few weeks, mould was found on the bread in the three set-ups.

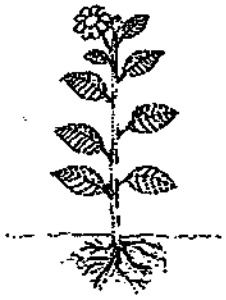
Which one of the following correctly shows the amount of mould found on the bread in each set-up?

	least <---------- amount of mould ----------> most		
(1)	A	B	C
(2)	B	A	C
(3)	B	C	A
(4)	C	B	A

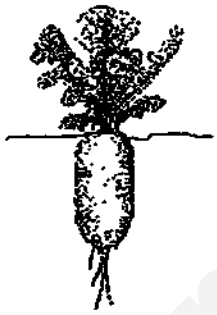
(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

9 Study Plant A and Plant B as shown below. [The pictures are not drawn to scale]



Plant A



Plant B

Which one of the following statements is correct?

(1) Plant B bears fruit but Plant A does not bear fruit.
(2) The roots of Plant B can store food but not Plant A.
(3) The leaves of Plant A can make food but not Plant B.
(4) Both plants have stems to hold the plant firmly to the soil.

10 Which one of the following is the correct path of water in the plant?

(1) roots → stem → leaves

(2) roots → leaves → stem

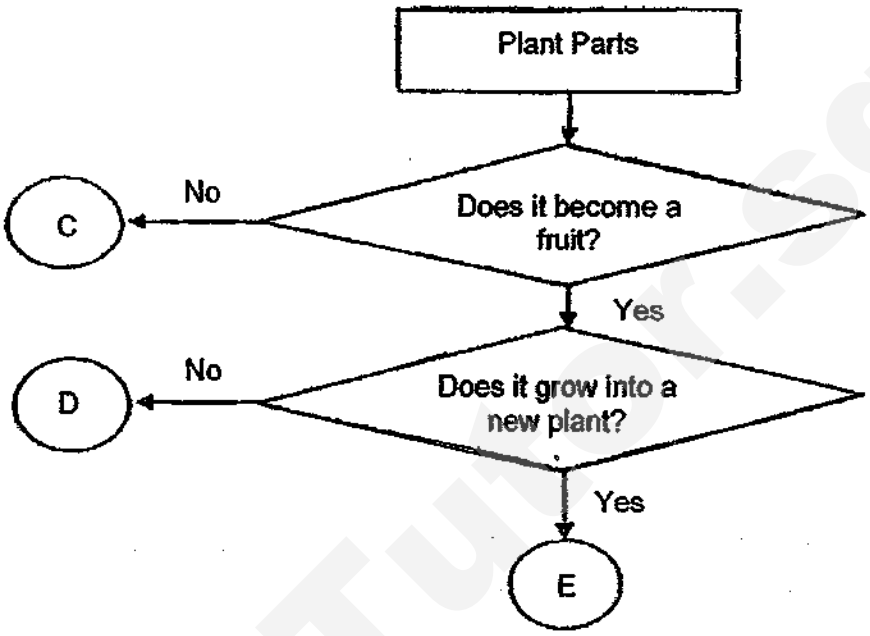
(3) leaves → stem → roots

(4) stem → leaves → roots

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

11 In the flow chart below, C, D and E represent three plant parts.



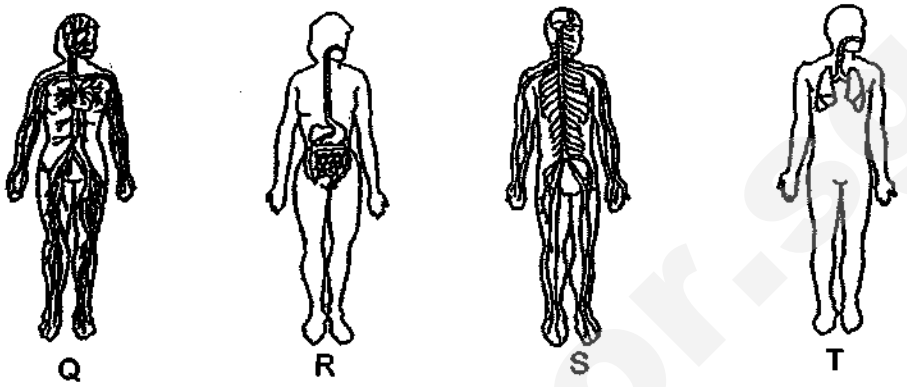
Which of the following best represent parts C, D and E?

	C	D	E
(1)	roots	leaf	fruit
(2)	stem	flower	seed
(3)	leaf	seed	flower
(4)	flower	stem	leaf

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

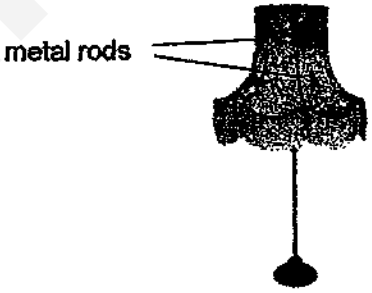
12 The diagrams below show the different organ systems, Q, R, S and T.



Which of the diagrams show the circulatory system and respiratory system?

(1) Q and R
(2) R and S
(3) S and T
(4) Q and T

13 The picture below shows a lampshade on a stand. The lamp shade has thin metal rods to support it and give the lampshade its shape.



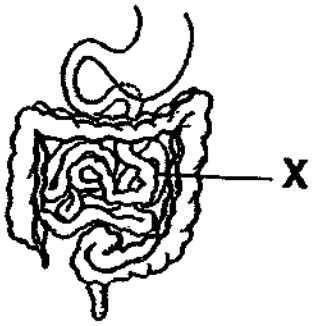
Which one of the following systems in our body provides similar function as the metal rods used in the lampshade?

(1) Skeletal system
(2) Muscular system
(3) Digestive system
(4) Respiratory system

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

14 Study the picture below.



Which of the following correctly identifies organ X and its funcion?

	X	Function
(1)	small intestine	It gets rid of excess water.
(2)	small intestine	It absorbs digested food into the bloodstream.
(3)	large intestine	It stores undigested food.
(4)	large intestine	It digests the food completely.

15 Mr and Mrs Samy wanted to build a house in their village. Their friends told them that they should use bricks for their house.

Why is brick a good material for building the house?

A Brick is strong.
B Brick is not flexible.
C Brick is not waterproof.
D Brick is made from clay.

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

16 **The table below shows a few items, the materials used for making them and the reasons for choosing these materials. Which reason is incorrect in explaining why the material was used to make the item?**

	Item	Material	Reason for choice of material
(1)	shoes	fabric	It is flexible.
(2)	plate	ceramic	It breaks easily.
(3)	spoon	metal	It does not bend easily.
(4)	raincoat	plastic	It is waterproof.

17 The table below shows the properties of materials, A, B and C.
A tick (√) shows that the material has the property.

Properties	Materials		
	A	B	C
It bends easily.		√	√
It is waterproof.	√	√	
It allows most light to pass through.	√		

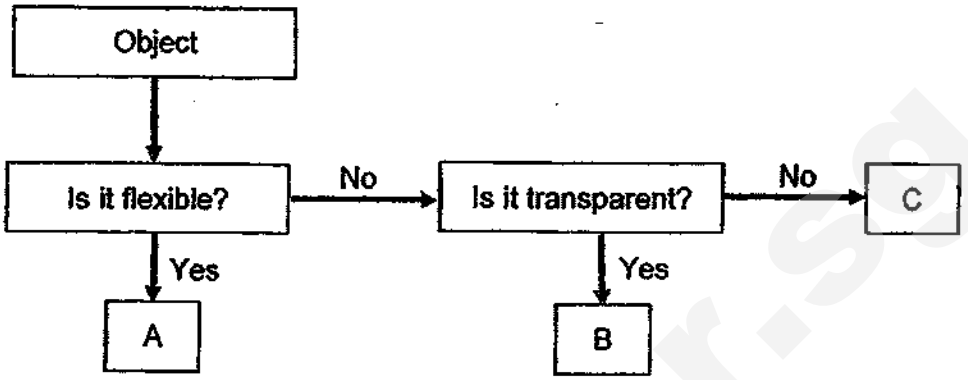
Which of the following best represent materials A, B and C?

	A	B	C
(1)	glass	rubber	fabric
(2)	glass	fabric	rubber
(3)	rubber	glass	fabric
(4)	rubber	fabric	glass

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

18 Study the flow chart below.



Which of the following correctly shows what objects, A, B and C could be?

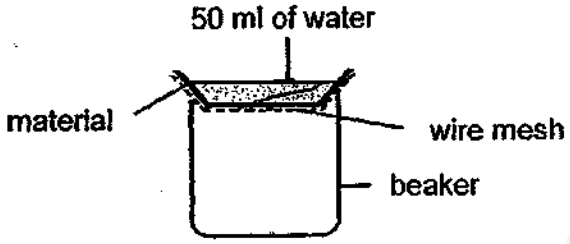
	A	B	C
(1)	coin	nail	socks
(2)	socks	spectacle lens	nail
(3)	nail	towel	fish tank
(4)	towel	fish tank	spectacle lens

(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

19 Alice had four different peices of materials, A, B, C and D of similar size and thickness. She set up her experiment using the apparatus as shown in the diagram below and poured 50 ml of water onto each of the material.



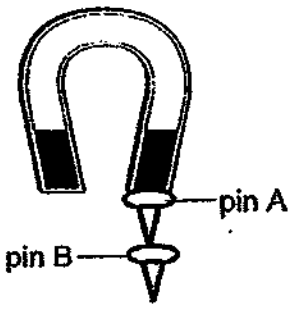
After five minutes, Alice recorded her findings in the table below.

Material	Amount of water in the beaker (ml)
A	0
B	5
C	15
D	40

Which material is most suitable to make a helmet?

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

20 A horseshoe-shaped magnet was held over some pins and the diagram below shows the interaction of pin A and pin B.



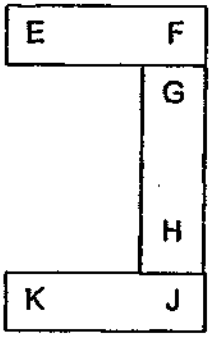
Why is pin B attracted to pin A as shown above?

(1) Pin A is made of aluminium.
(2) Pin A cannot be magnetized.
(3) Pin A is a temporary magnet.
(4) Pin A is a non-magnetic material.

(Go on to the next page)

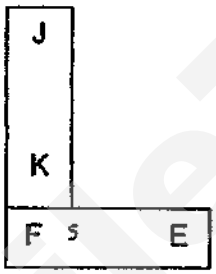
Need a home tutor? Visit smiletutor.sg

21 Three bar magnets with their poles marked A to F can be arranged as shown below.

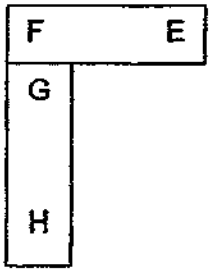


Two of the bar magnets were taken to form a new arrangement. Which one of the following diagrams shows the correct arrangement for two of the magnets?

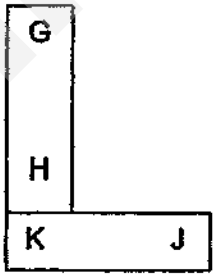
(1)



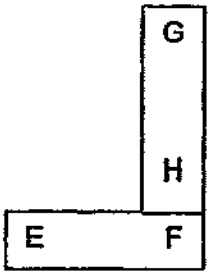
(2)



(3)



(4)

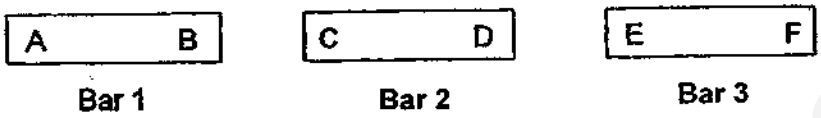


(Go on to the next page)

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

22 There are three iron bars, Bar 1, Bar 2 and Bar 3. The ends of the iron bars are labelled as shown below.



When the ends of the iron bars are brought close to each other, they interacted as recorded in the table below.

Ends of Iron Bar	Observations
A and C	Attract
B and E	Attract
B and F	Attract
C and F	Attract

Which is/are definitely magnet (s)?

(1) Bar 1 only
(2) Bars 1 and 2 only
(3) Bars 2 and 3 only
(4) Bars 1, 2 and 3

23 Magnets are very useful in our daily life. Which of the following objects make use of magnets to work?

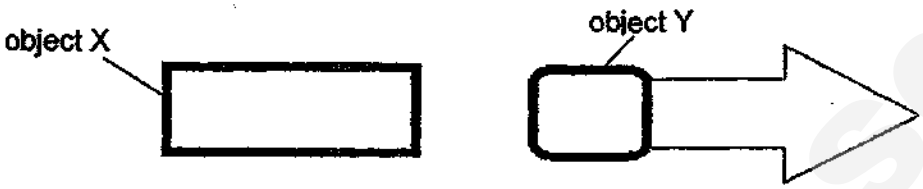
A Torch
B Compass
C Fishing rod
D Refrigerator

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

24 Ben and Jill played a game as shown in the diagram below. The aim of the game is to make use of object X to pick up object Y, which is attached to a paper arrow.



Start of game

End of game

Which of the following could represent objects X and Y?

	Object X	Object Y
A	magnet	aluminium block
B	steel block	magnet
C	magnet	iron block

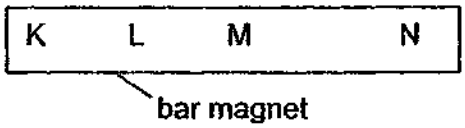
(1) A only
(2) C only
(3) B and C only
(4) A, B and C

(Go on to the next page)

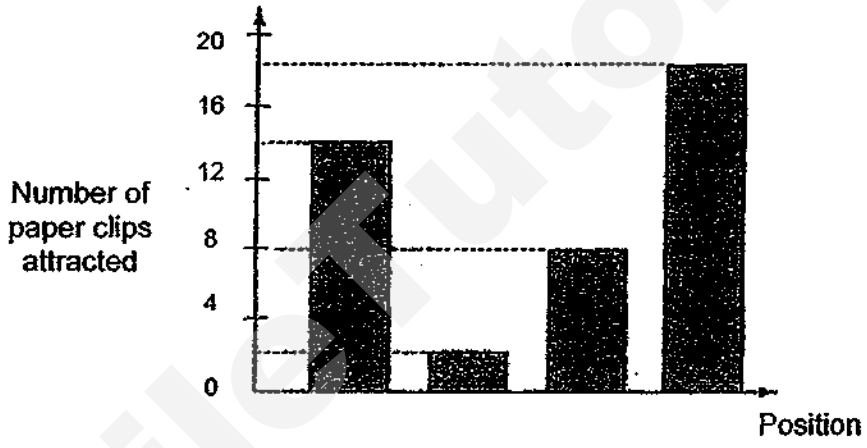
Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

25 Johari set up an experiment to test the strength of different parts of a bar magnet by putting some steel paper clips at positions K, L, M and N of the magnet respectively.



He then recorded the number of steel paper clips attracted to each position of the magnet in the graph below.



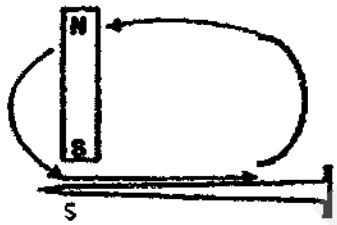
Which one of the following shows the correct number of paper clips attracted to positions K, L, M and N of the magnet?

	K	L	M	N
(1)	14	18	8	2
(2)	2	8	14	18
(3)	8	14	18	2
(4)	18	8	2	14

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

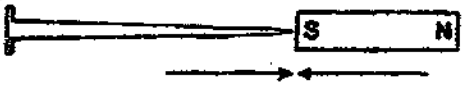
26 A steel nail is made into a magnet using the stroking method. The south pole of the magnet is used to stroke the tip of the nail in a regular motion each time as shown below.



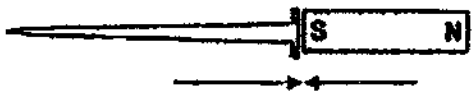
Which one of the following diagrams shows the interaction between the magnetized nail and a magnet that is brought near it?

(1)

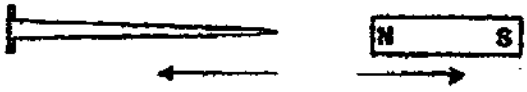
(2)



(3)



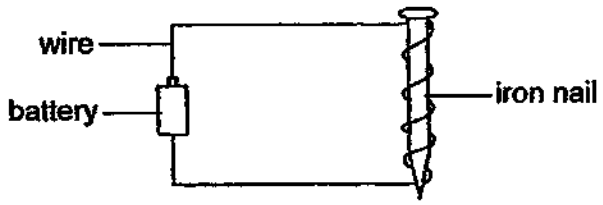
(4)



(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

27 Sally set up an electromagnet as shown below.

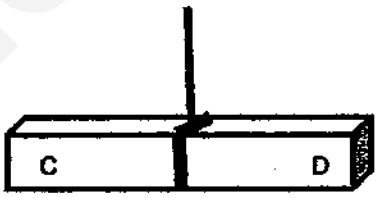


What could Sally do to increase the strength of the electromagnet?

A Use a longer nail.
B Use a longer wire.
C Use more batteries.
D Coil more wire around the nail.

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

28 Khalil suspended a bar magnet CD which came to a rest and pointed in a certain direction as shown in the diagram below.



bar magnet CD

Khalil held the N-pole of another magnet near to pole D and he noticed that both poles repel each other.

What would be pole C and pole D?

	C	D
(1)	S-pole	S-pole
(2)	N-pole	N-pole
(3)	S-pole	N-pole
(4)	N-pole	S-pole

End of Booklet A

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

METHODIST GIRLS' SCHOOL

Founded in 1887

END-OF-YEAR EXAMINATION 2018
PRIMARY 3
SCIENCE

BOOKLET B

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.

Name: _____( )

Class: Primary 3._____

Date : 30 October 2018

Booklet A	56
Booklet B	34
Total	90
Parent's Signature	

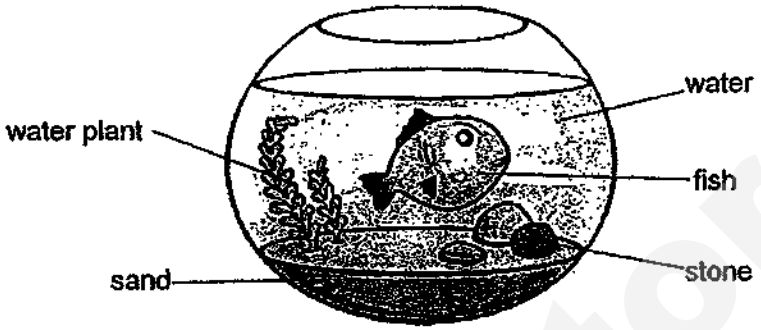
This booklet consists of 13 printed pages including this page.

Smile Tutor.sg

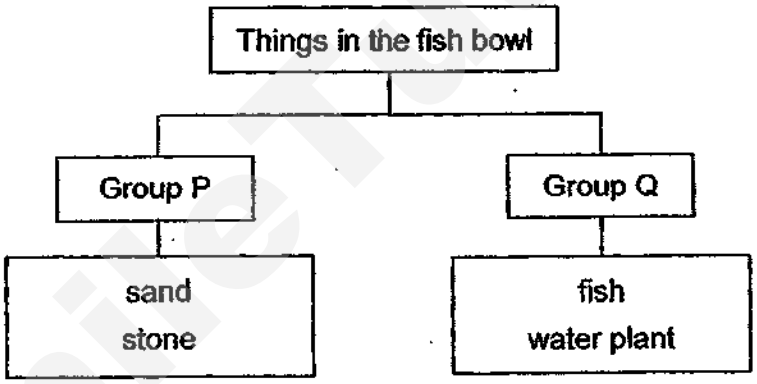
Need a home tutor? Visit smiletutor.sg

For questions 29 to 38, write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part question. [34 marks]

29 The picture below shows a fish bowl filled with different things.



The things in the fish bowl are grouped according to the classification chart below.



(a) What are suitable headings for Group P and Group Q? [1]

Group P: _____ Group Q: _____

(b) Which group, P or Q, should water be classified?
Give a reason for your answer. [1]

_____

_____

(c) After a few days, the fish was observed to be swimming very near to the water surface. Explain why. [1]

_____

3

Need a home tutor? Visit smiletutor.sg

30 The pictures below show Plant X and Plant Y.

Plant X

Plant Y

(a) State a difference between Plant X and Plant Y in terms of their parts. [1]
Do not compare size and shape.

_____

_____

(b) How do both plants, X and Y obtain nutrition? [1]

_____

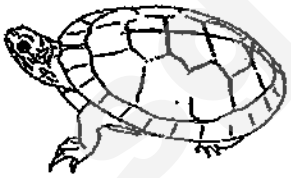
_____

2

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

31 Some animals are classified according to their animal groups in the table shown below. [The pictures are not drawn to scale.]

Group R	Group S	Group T
frog	ant	 turtle
salamander	grasshopper	crocodile

(a) Identify Group R and Group T. [1]

Group R: _____ Group T: _____

(b) How do all the animals above reproduce? [1]

_____

(c) What is the difference between the body covering of the animals in Group S and Group T? [1]

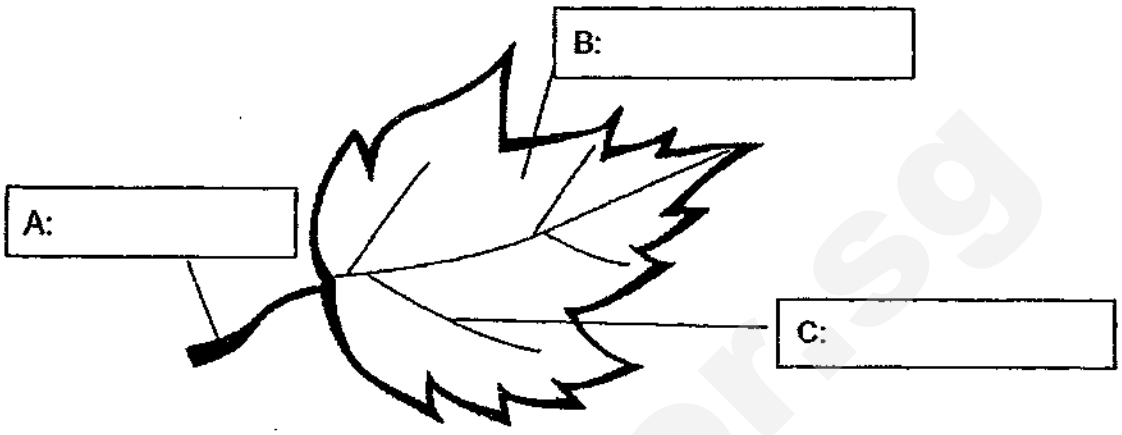
_____

_____

3

Smile Tutor.sg

32 The diagram below shows a leaf.



(a) Label the parts of the leaf, A, B and C in the boxes provided above. [1]

(b) Name two things that a plant needs to make food. [1]

_____

_____

(c) There are many tiny openings on the leaf. What is the function of these openings? [1]

_____

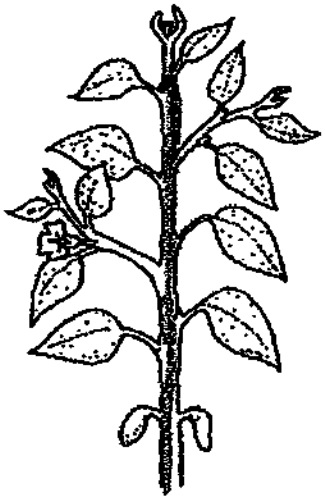
_____

3

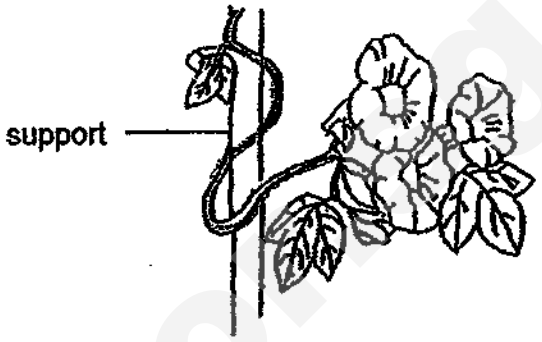
(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

33 The diagrams below show plants X and Y.



plant X



plant Y

(a) What is the difference between the stems of Plant X and Plant Y? [1]

_____

_____

(b) Why does plant Y climb upwards on a support? [1]

_____

_____

(c) Besides supporting the plant, what is another important function of the stem? [1]

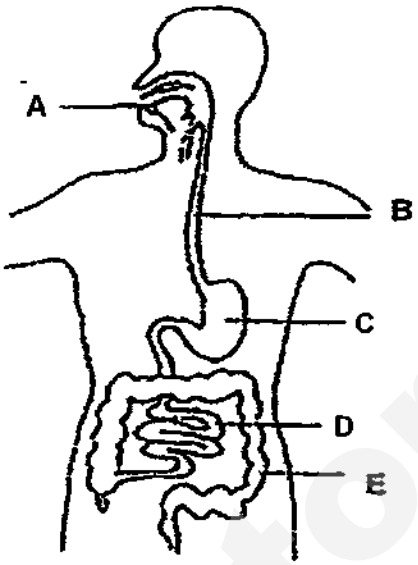
_____

_____

3

SmileTutor.sg

34 The diagram below shows the human digestive system.



(a) Which organs, A, B, C,D or E release digestive juices? [1]

(b) How does organ A help in digestion? [1]

(c) What happens to the food when it enters organ C? [1]

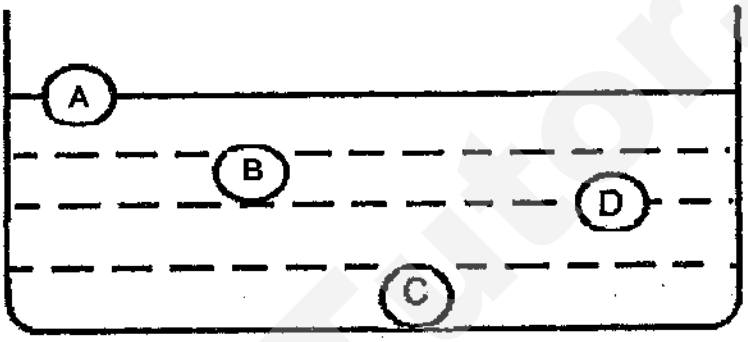
3

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

35 Jamal conducted an experiment on four different types of materials to be used for making an anchor for a toy boat. An anchor is an object that is dropped into the water to stop the boat from moving away. The diagram below shows an anchor.

He placed the materials into a container filled with water as shown below.



(a) State the property of the material that Jamal is testing in his experiment. [1]

_____

(b) Which of the following materials, A, B, C or D is most suitable for making the anchor? Explain why. [1]

_____

_____

(c) Is glass a suitable material for making an anchor? Give a reason for your answer. [1]

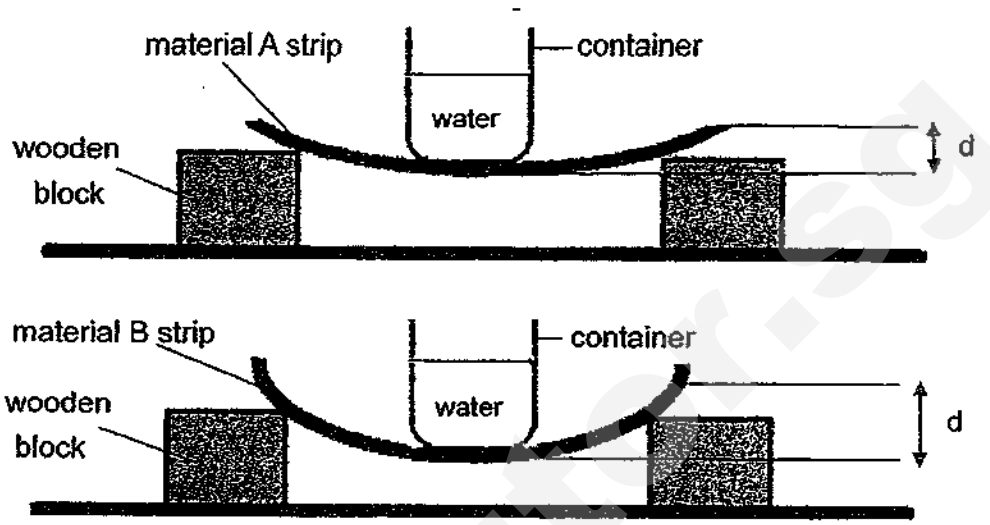
_____

_____

3

Need a home tutor? Visit smiletutor.sg

36 Alison set up an experiment as shown below to compare two different strips of **materials, A and B.** The materials are of the same thickness. She placed a plastic container with 100 ml of water on the strip as shown in the diagram below.



She measured the distance, **d**, which is the distance between the highest point and the lowest point of the strip.

The table below shows the results.

distance / cm	material A	material B
d	2	5

(a) Besides the same thickness, state another **variable that must be kept the same** for the strip in order for the experiment to be fair. [1]

(b) What could Alison conclude **about Strip A and B from this experiment?** [1]

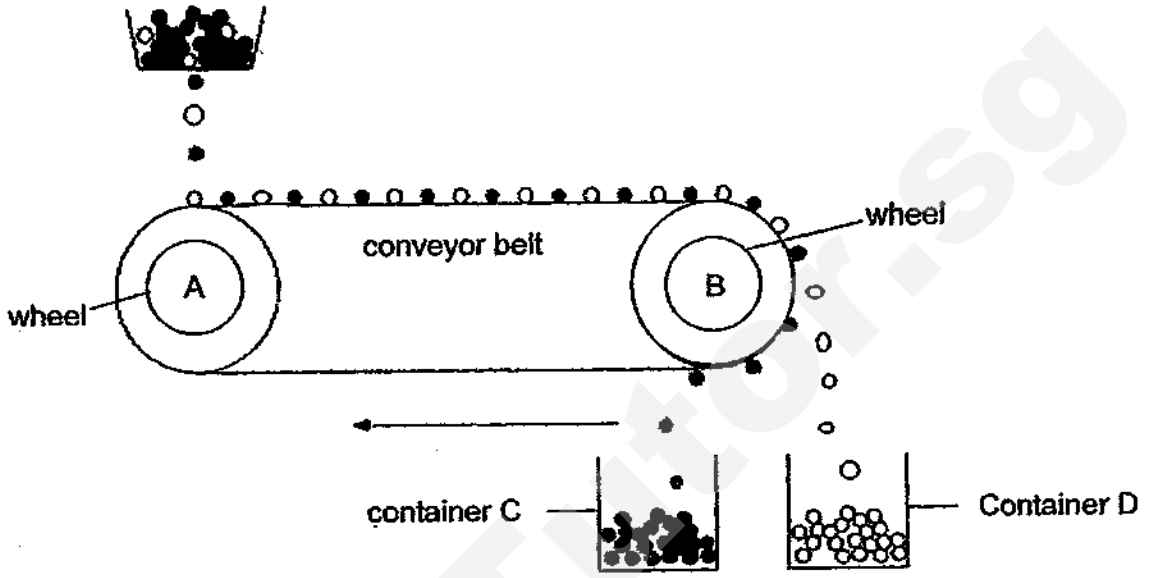
(c) Explain your answer in (b) based on Alison's results. [1]

3

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

37 A factory uses a machine below to separate magnetic metals from non-magnetic metals. Both magnetic and non-magnetic metals are carried on the moving conveyor belt which is turned by wheel A and wheel B as shown in the diagram below.



(a) In which wheel, A or B, is the magnet in the machine? [1]

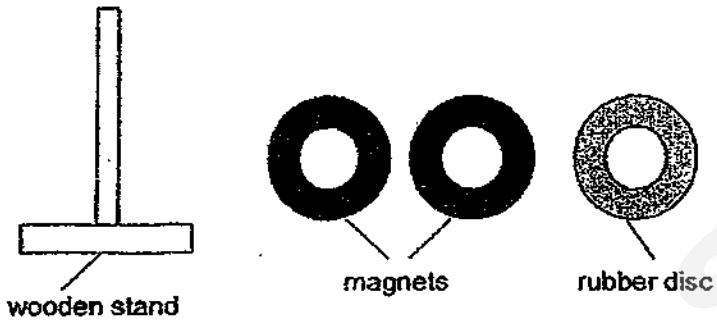
(b) Containers C and D collect the metals. Describe how magnetic metals are separated and collected. [2]

(c) In which container, C or D, would copper be collected? Explain your answer. [1]

4

Smile Tutor.sg

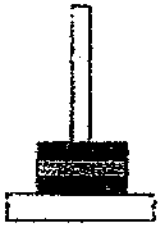
38 The diagram below shows three discs, each with a hole at its centre. Two of the discs are magnets and one is made of rubber. All three discs can be slotted through the wooden stand.



Sulin drew a picture of an arrangement of the above discs in her notebook as shown below.

(a) Explain why one magnet is floating above the other. [1]

Sulin wants a new disc arrangement as shown below.

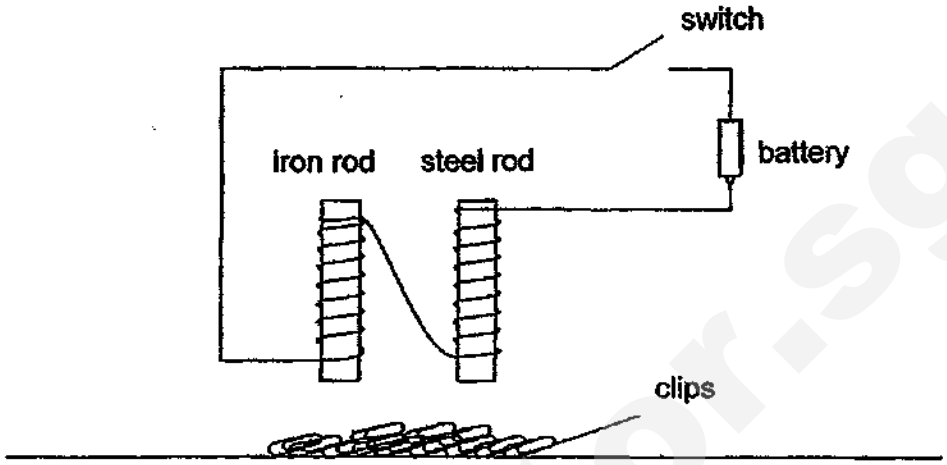


(b) Explain why the new arrangement is possible. [1]

2

Need a home tutor? Visit smiletutor.sg

39 The diagram below shows an iron rod and a steel rod with wires coiled around each of them. The ends of the wires were connected to an electrical circuit. Both rods were placed a short distance above some clips.



(a) What happened to the iron rod and steel rod when the switch is closed? [1]

The number of clips attracted by the iron rod and the steel rod are shown in the table below.

	First Try	Second Try	Third Try
Iron rod	12	14	13
Steel rod	7	6	8

(b) Why was the experiment repeated three times? [1]

(c) Based on the results, which rod has stronger magnetic strength? Explain why. [1]

3

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

(d) What would happen to the results if the battery was removed from the set-up? Explain your answer. [2]

_____

_____

_____

_____

2

End of paper

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : MGS

SUBJECT : SCIENCE

TERM : SA2

ORDER CALL :

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	4	3	4	1	3	1	2	2	1
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
2	4	1	2	2	2	1	2	1	3
Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28		
2	3	3	3	4	3	4	3		

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Methodist Girls' School (Primary)
2018 End-Of-Year Examination
Primary 3
Answers

Booklet B

Q.	
29a	P is Non-living Things Q is Living Things
29b	Water is classified under Group P Water cannot reproduce/grow/breathe/die OR Water does not need air and food to live. Water is a non-living thing.
29c	To get more air / oxygen
30a	X has no flowers while Y has flowers. OR X has no stems but Y does. X reproduce by spores and Y reproduce by seeds.
30b	Both plants can make their own food.
31a	R – Amphibians T – Reptiles
31b	They reproduce by laying eggs.
31c	Animals in group S have a hard outer covering but animals in group T have dry skin covered with scales. Animals in group S has a hard outer covering but animals in group T does not.
32a	A: leaf stalk B: leaf blade C: leaf vein
32b	Sunlight / water / air (Any 2 correct answers)
32c	The tiny openings help plants to take in and give out gases. OR They allow the exchange of gases.
33a	Plant X has strong stem but Plant Y has weak stem.
33b	To reach for more sunlight[½] for photosynhesis/to make food [½].
33c	The stem helps to carry food and water to all parts of the plant.

Smiletutor.sg

Need a home tutor? Visit smiletutor.sg

34a	Organs A, C and D.
34b	In organ A, the mouth, food is chewed [½] into smaller pieces and saliva makes the food soft [½] to swallow.
34c	In organ C, more digestive juice is added [½] to the food to turn it into soupy mix [½]. To break down the food further into simple substances [½].
35a	Ability to float or sink. / buoyancy of material
35b	Material C as it sank to the bottom of the water/sankcompletely(lowest/deepest/best)into the water .
35c	No. Glass is fragile/breaks easily.
36a	The length of the strip.
36b	Strip B is more flexible than Strip A.
36c	Strip B is able to bend more than Strip A (when the same amount of water was placed on the strip).
37a	Wheel B.
37b	Magnetic metals are attracted by B and collected by C. Non-magnetic metals are not attracted by B and fall into D.
37c	Container D [½]. Copper is not a magnetic metal [½], so it is not attracted by the magnetic wheel and falls off the belt into D.
38a	Like poles [½] of the 2 disc magnets are facing each other and they repel [½]
38b	Unlike poles [½] are facing each other ,so they attract [½].
39a	Both became magnetized / temporary magnets / electromagnets.
39b	To ensure reliability of results. / Consistency of results.
39c	Iron rod has greater magnetic strength as it can attract more clips.
39d	Both rods will not be able to attract any clips as they cannot become electromagnets if there is no battery to allow electricity to flow through.

SmileTutor.sg

NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2018
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 : 1 November 2018 **Parent's signature:** _____

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

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. Which of the following statements about living things are correct?

A They can reproduce.
B They are able to grow.
C They only need water to survive.
D They can move from place to place.

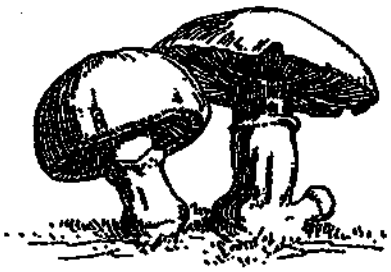
(1) A and B only
(2) C and D only
(3) A, B and C only
(4) A, B, C and D

2. The pictures below show some living and non-living things.

cloud

sand

leaves



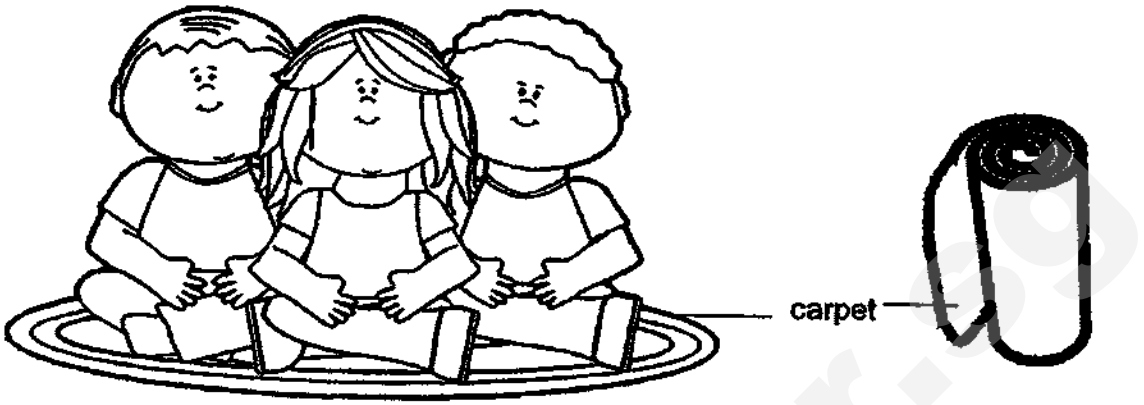
mushrooms

Which of the following thing(s) is/are alive?

(1) mushrooms only
(2) sand and leaves only
(3) leaves and mushrooms only
(4) cloud, leaves and mushrooms only

Need a home tutor? Visit smiletutor.sg

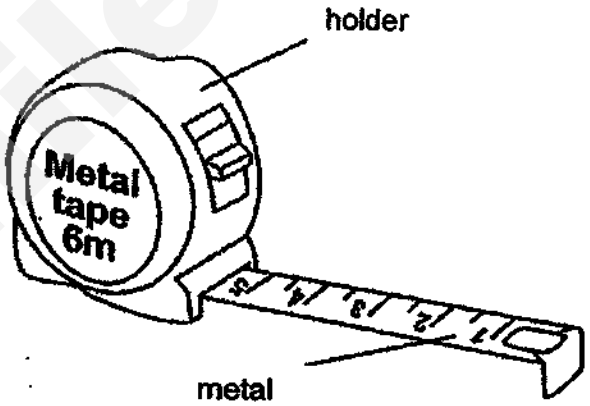
3. The students placed a carpet on the floor of the classroom and sat on it. After using it, they rolled it up and kept it in the cupboard.



The carpet is made of fabric because fabric _____.

(1) is flexible
(2) sinks in water
(3) absorbs water
(4) does not allow light to pass through it

4. Sam has a metal measuring tape as shown in the diagram below. He used it to find the length of a table for his new home.

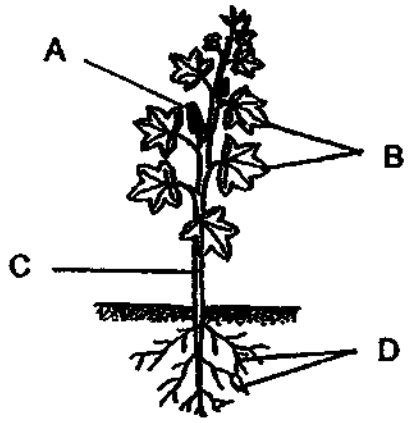


Which property of the metal measuring tape allows it to be rolled up inside the holder?

(1) The metal measuring tape is stiff.
(2) The metal measuring tape is weak.
(3) The metal measuring tape is strong.
(4) The metal measuring tape is flexible.

Need a home tutor? Visit smiletutor.sg

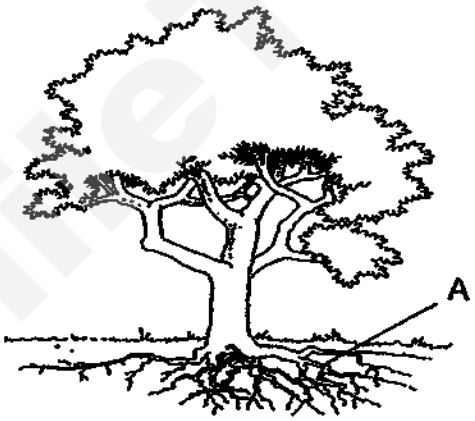
5. The picture below shows a flowering plant.



Which part, A, B, C or D, makes food for the plant?

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

6. The picture below shows a tree.



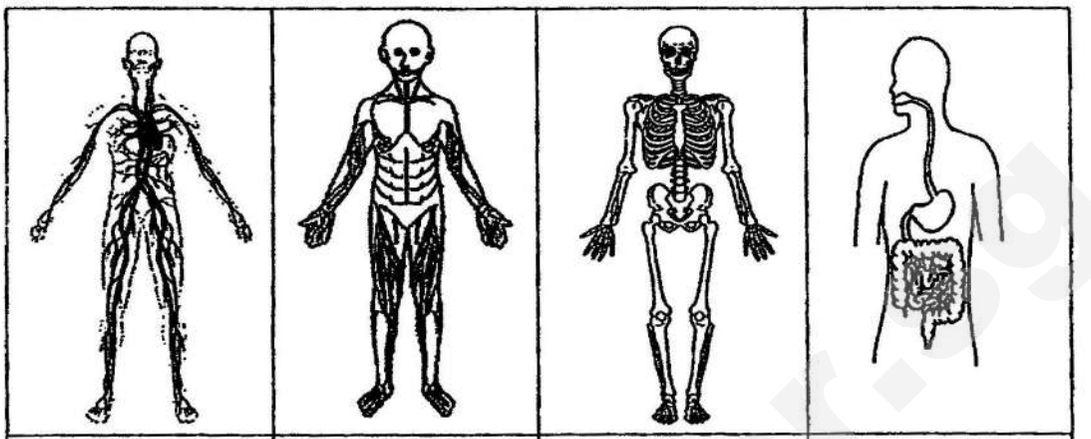
Which of the following statement(s) state(s) the function(s) of part A?

A Make food for the plant
B Hold the plant firmly to the ground
C Absorb water and mineral salts from the soil
D Carry food, water and mineral salts to all parts of the plant

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

Need a home tutor? Visit smiletutor.sg

7. The diagrams below show four body systems of a human.



Which system gives the body its shape and protects important organs?

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

8. Four pupils made the following statements about the human digestive system.

Uma	Digestion starts in the mouth.
Vilma	The small intestine stores undigested food.
Tommy	Digestion is completed in the large intestine.
Siew Leng	Water is absorbed into the body from the stomach.

Whose statement is correct?

(1) Uma
(2) Vilma
(3) Tommy
(4) Siew Leng

Need a home tutor? Visit smiletutor.sg

9. Digestion takes place in the _____.

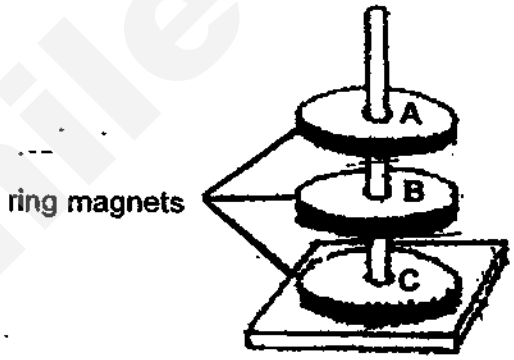
A mouth
B stomach
C small intestine
D large intestine

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

10. A freely suspended magnet will come to rest in the _____ direction.

(1) East-West
(2) North-East
(3) North-South
(4) South-West

11. Jeremy arranged three ring magnets, A, B and C, through a plastic rod as shown in the diagram below.

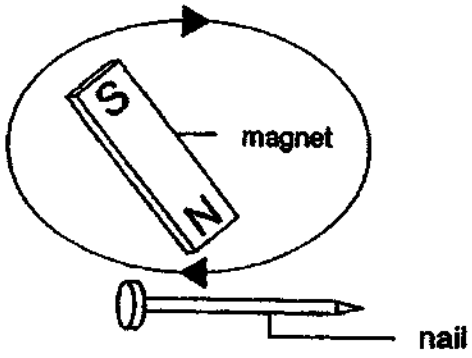


Which magnet(s) should Jeremy turn over so that all three mangets are attracted to one another?

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

Need a home tutor? Visit smiletutor.sg

12. Linda wanted to turn an iron nail into a magnet. She stroked the iron nail with a magnet as shown below.



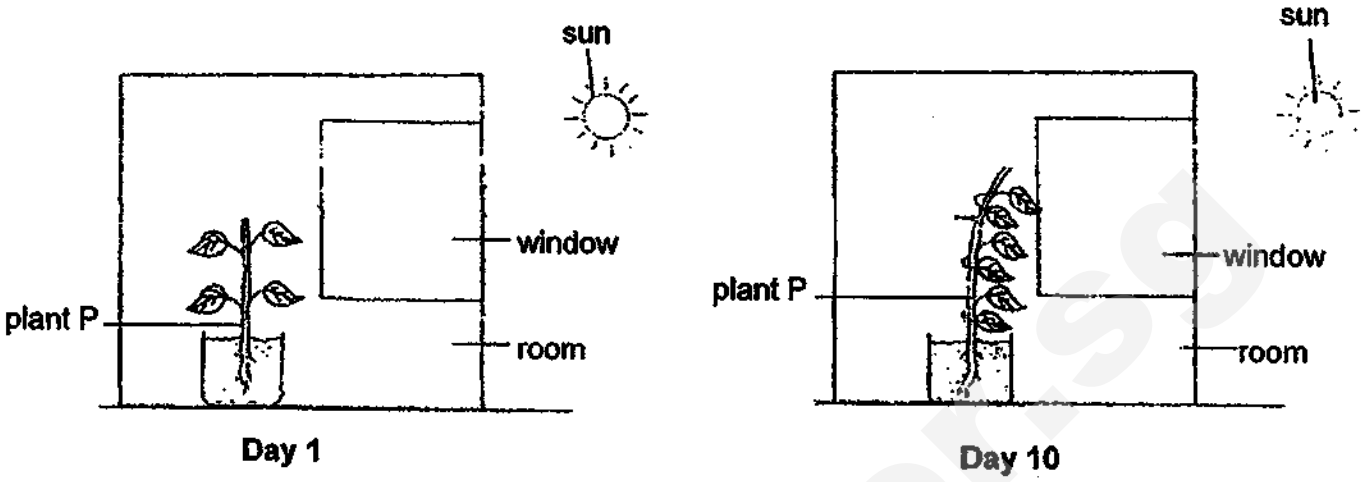
Which of the following must be done for the nail to be magnetised?

A Stroke the nail at least 10 times
B Stroke the entire length of the nail
C Stroke the nail in different directions
D Stroke the nail with the same pole of the magnet

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

Need a home tutor? Visit smiletutor.sg

13. The diagram below shows the conditions of plant P on Day 1 and Day 10.



Which of the following characteristics of living things are shown by plant P?

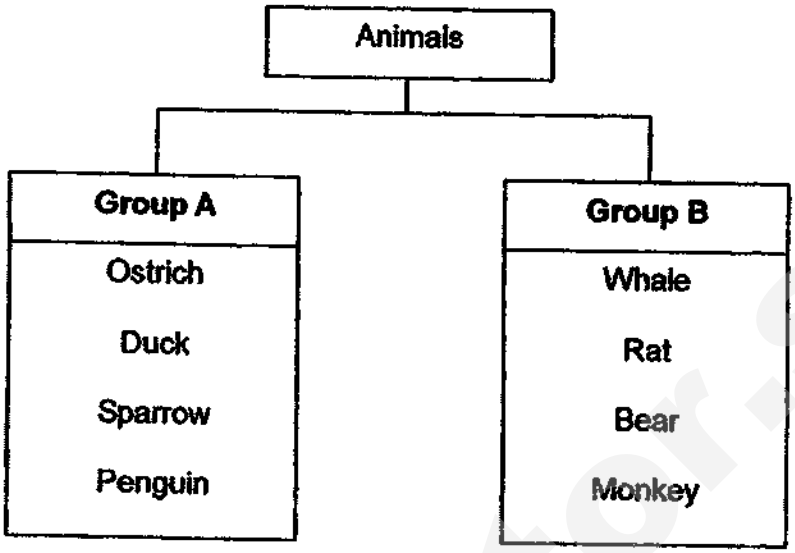
A Living things can grow.
B Living things can reproduce.
C Living things can move by themselves.
D Living things respond to changes in the surroundings.

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

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

14. Ben grouped some animals in the diagram shown below.

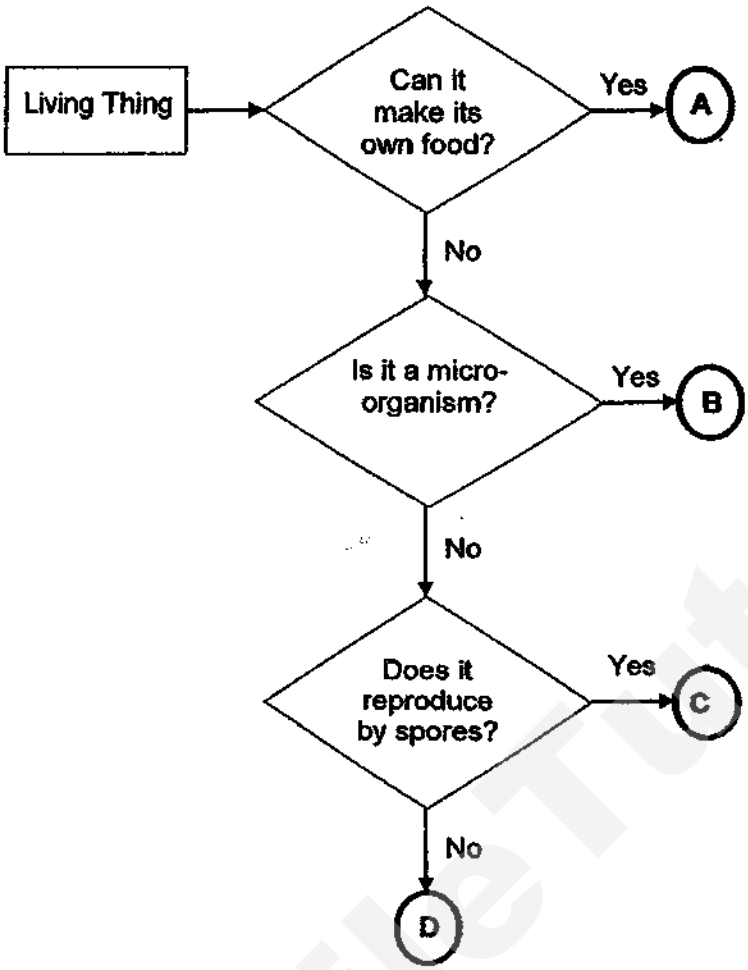


Which of the following are suitable headings for group A and group B?

	Group A	Group B
(1)	Birds	Fish
(2)	Birds	Mammals
(3)	Amphibians	Fish
(4)	Fish	Mammals

Need a home tutor? Visit smiletutor.sg

15. Study the flowchart below carefully.



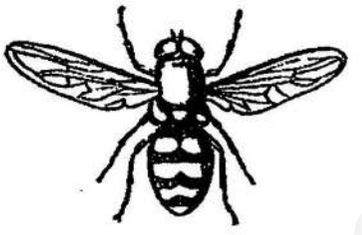
Which of the following could the living things A, B, C and D be?

	A	B	C	D
(1)	Rain tree	Toadstool	Yeast	Butterfly
(2)	Bird's Nest Fern	Bacteria	Toadstool	Butterfly
(3)	Toadstool	Yeast	Bird's Nest Fern	Bacteria
(4)	Yeast	Butterfly	Rain tree	Bacteria

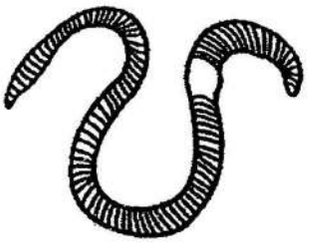
Need a home tutor? Visit smiletutor.sg

16. The diagrams below show four living things.

grass



fly



worm

frog

How are the living things similar?

(1) They live on land only.
(2) They feed on other living things.
(3) They cannot make their own food.
(4) They can be seen with the naked eye.

17. The picture below shows a pair of sports shoes.

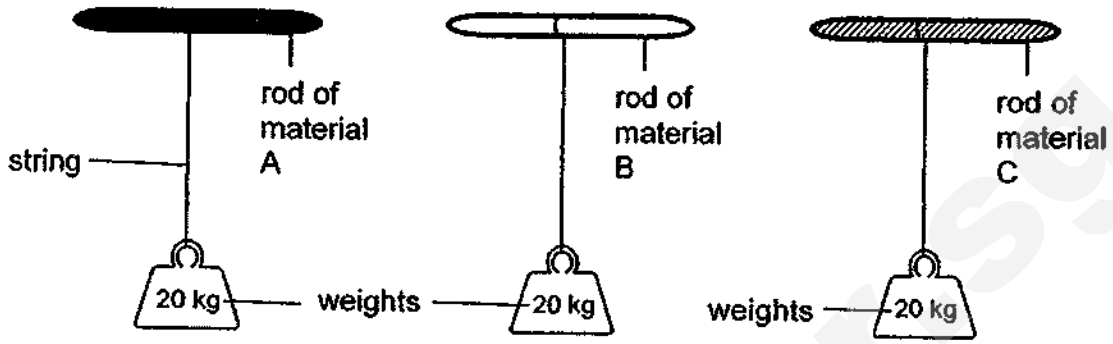
Rubber is suitable for making the soles of the shoes because _____.

A rubber is flexible.
B rubber is waterproof.
C rubber sinks in water.
D rubber does not allow light to pass through.

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

Need a home tutor? Visit smiletutor.sg

18. James wanted to test the flexibility of materials A, B and C and set up an experiment as shown below. He added weights of 20 kg to rods made of materials A, B and C.



Which variable(s) must he keep the same to ensure a fair test?

A Length of the rods
B Length of the strings
C Thickness of the rods.

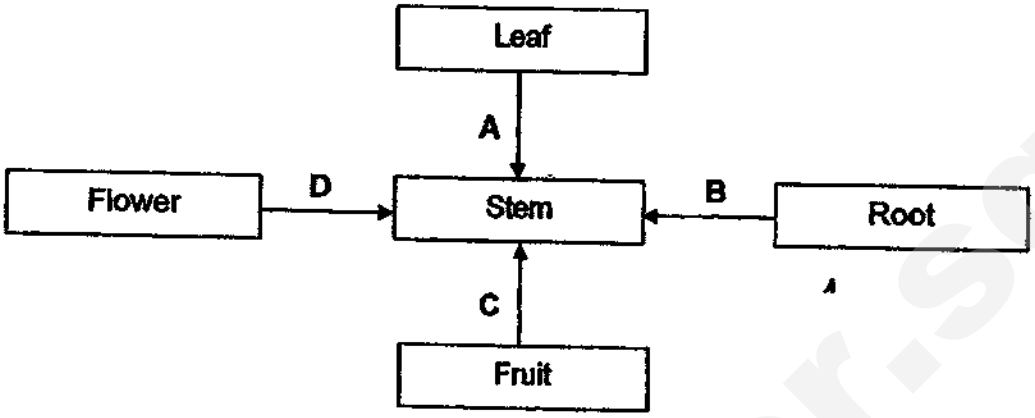
(1) A only
(2) C only
(3) A and B only
(4) A, B and C

19. Adeline was given four objects made of **different materials.** She put each object into a beaker of water for 15 minutes. She removed the objects and recorded the mass of the objects in the table below. Based on the table, which material is the best for making a towel to wipe spilled water?

	Object	Mass of object at the beginning (g)	Mass of object after removing it from the beaker of water (g)
(1)	A	100	125
(2)	B	100	100
(3)	C	100	120
(4)	D	100	105

Need a home tutor? Visit smiletutor.sg

20. Derick drew arrows (⟶) to show the movement of water in a plant.



Which arrow shows the correct movement of water?

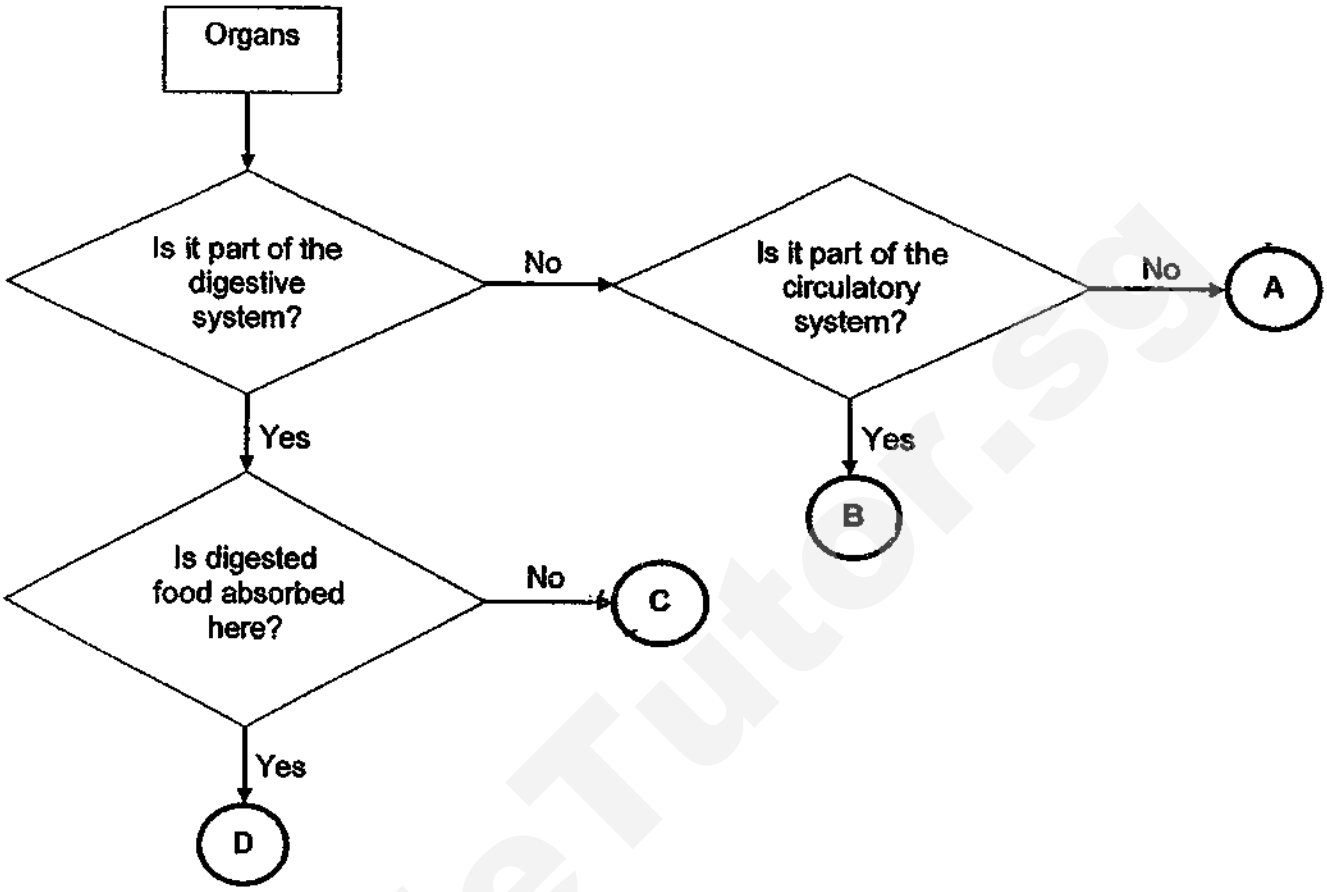
(1) A
(2) B
(3) C
(4) D

21. Which one the following systems is **wrongly** matched to its function?

	Human System	Function
(1)	Respiratory System	Helps the body to take in oxygen and remove carbon dioxide.
(2)	Digestive System	Protects important organs in the body.
(3)	Circulatory System	Carries oxygen, digested food and waste materials around the body.
(4)	Muscular System	Helps different parts of the body to move.

Need a home tutor? Visit smiletutor.sg

22. Study the flowchart below.

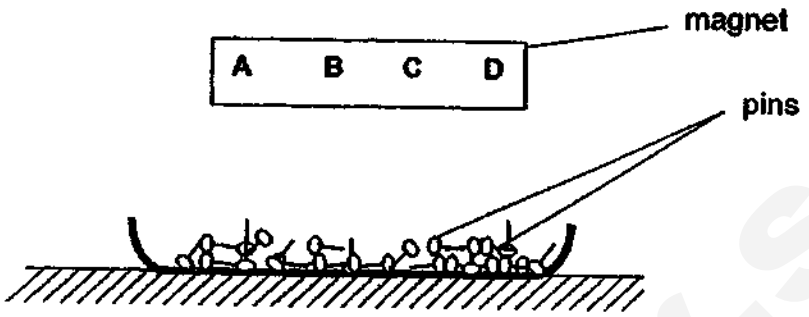


Which one of the following sets correctly identifies A, B, C and D?

	A	B	C	D
(1)	Gullet	Lungs	Large intestine	Heart
(2)	Lungs	Blood vessels	Large intestine	Small Intestine
(3)	Heart	Small Intestine	Stomach	Windpipe
(4)	Windpipe	Heart	Gullet	Large intestine

Need a home tutor? Visit smiletutor.sg

23. Terry placed a magnet into a bowl of pins. He took it out carefully and counted the number of pins attracted to parts A, B, C and D of the magnet.

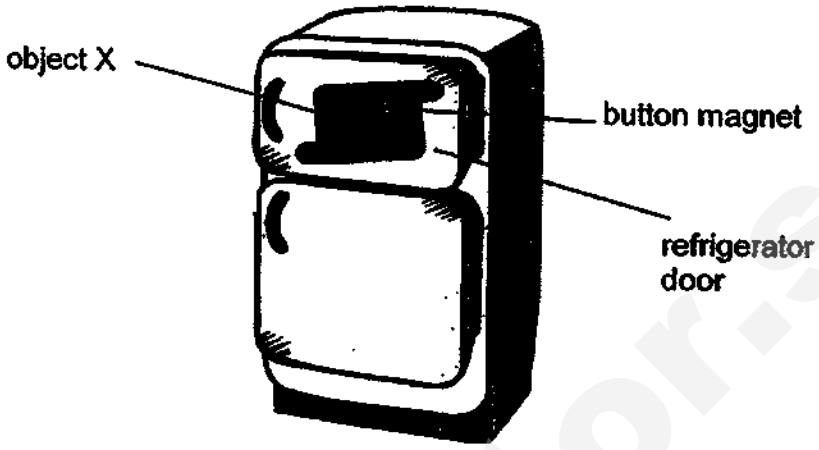


Which one of the following most likely shows the number of pins attracted to parts A, B, C and D of the magnet?

	Number of pins attracted			
	Part A	Part B	Part C	Part D
(1)	4	2	5	7
(2)	9	4	3	8
(3)	7	3	2	2
(4)	1	3	7	9

Need a home tutor? Visit smiletutor.sg

24. Magnetism can pass through non-magnetic materials. In the diagram below, a button magnet is able to hold object X onto the refrigerator door.



What properties of object X and the refrigerator door enable this to happen?

	Object X	Refrigerator door
(1)	magnetic	magnetic
(2)	magnetic	non-magnetic
(3)	non-magnetic	magnetic
(4)	non-magnetic	non-magnetic

Need a home tutor? Visit smiletutor.sg

NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2018
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

Name: _____( ) Class: P 3 _____

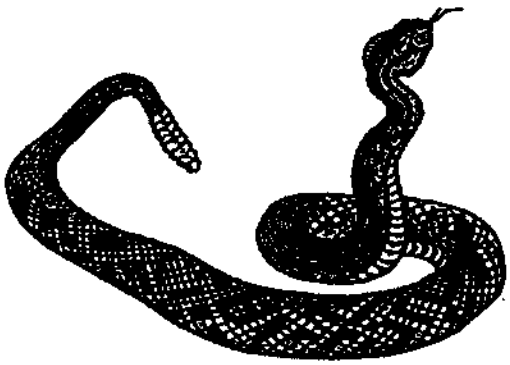
Date : 1 November 2018 Parent's Signature:_____

SmileTutor.sg

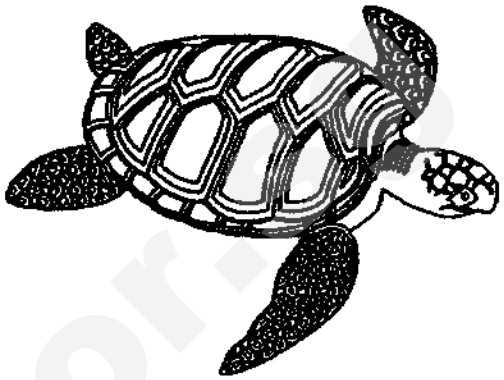
Need a home tutor? Visit smiletutor.sg

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 pictures below show two animals.



animal X



animal Y

(a) Based on what you can observe from the pictures, state one similarity between animal X and animal Y. (Do not compare their colours, shapes and sizes.) [1]

_____

_____

(b) Based on what you can observe from the pictures, state one difference between animal X and animal Y. (Do not compare their colours, shapes and sizes.) [1]

_____

_____

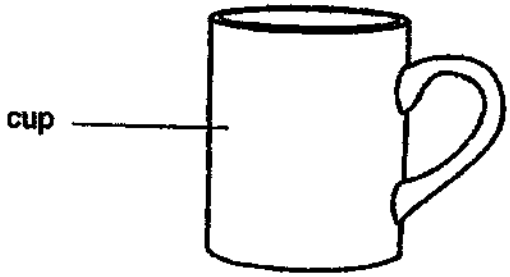
(c) Which group of animals do animal X and animal Y belong to? [1]

_____

Score	/ 3

Need a home tutor? Visit smiletutor.sg

26. A cup is normally made of ceramic or glass.



(a) State a similar property between ceramic and glass that makes it suitable for making a cup. [1]

_____

(b) Suggest another material that can be used to make a cup for young children. The material chosen must be reusable. [1]

_____

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

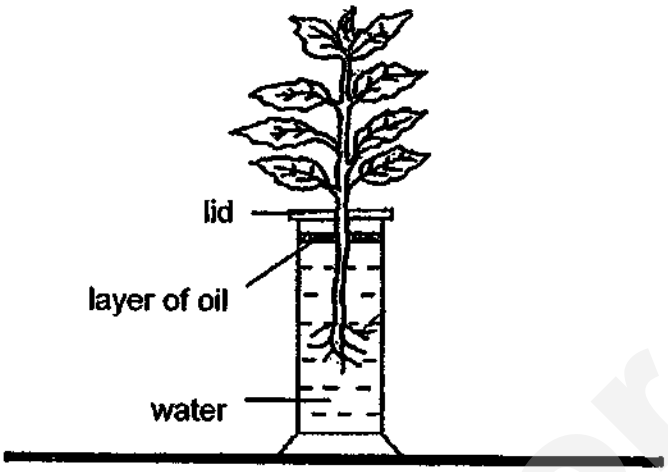
_____

_____

Score / 3

Need a home tutor? Visit smiletutor.sg

27. The set-up below shows a plant in a container of water. The set-up was left overnight in a room.



(a) What would happen to the amount of water in the container after one night? [1]

_____

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

_____

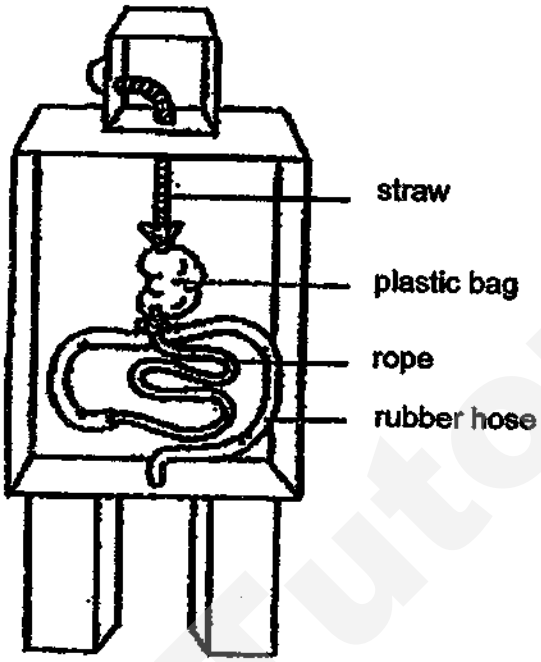
_____

_____

Score / 2

Need a home tutor? Visit smiletutor.sg

28. Zack made a model of a human body system using scrap materials as shown below.



(a) Which body system did he make? [1]

_____

(b) State one function of the body system mentioned in (a). [1]

_____

_____

(c) Name the organ that the plastic bag represent. [1]

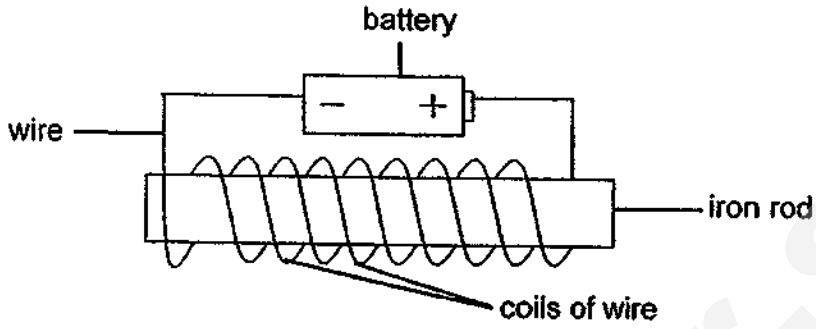
_____

Score	/ 3

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

29. Julius wanted to magnetise an iron rod. He used a wire and a battery as shown in the set-up below.



(a) Name the **above** method of **magnetising** the iron rod. [1]

_____

Julius placed some paper clips near the iron rod and recorded the number of paper clips that were attracted to it in the table below.

Number of coils of wire around the iron rod	Number of paper clips attracted to the iron rod
10	5
15	12
?	20
25	28

(b) How many coils of wire were required for 20 paper clips to be attracted? [1]

Number of coils of wire on the iron rod: _____

(c) Suggest **2 changes** that Julius can make to the set-up above so that the electromagnet will attract more paper **clips?** [2]

(i) _____

_____

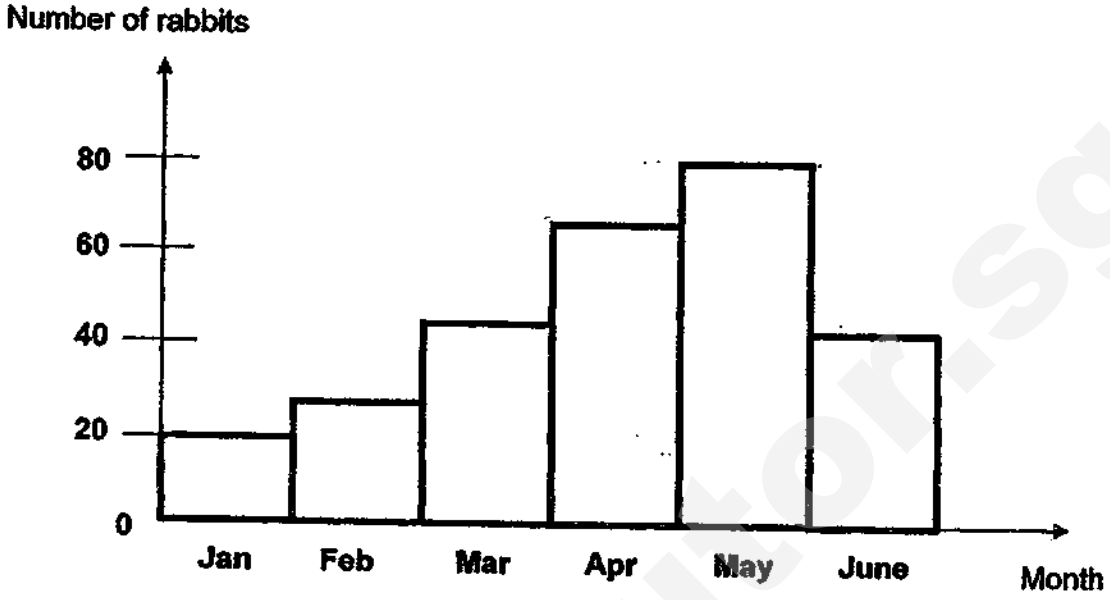
(ii) _____

_____

Score	/ 4

Need a home tutor? Visit smiletutor.sg

30. The graph below shows the number of rabbits in a field from January to June. No rabbits moved into or out of the field during this period.



(a) Based only on the graph above, state the characteristic of living things shown by the rabbits from January to May. [1]

(b) No other animals moved into the field in June. Explain what could have caused the number of rabbits to decrease in June. [2]

(c) Animal X came in July. It has 2 legs and lays eggs. What outer covering does animal X most likely have? [1]

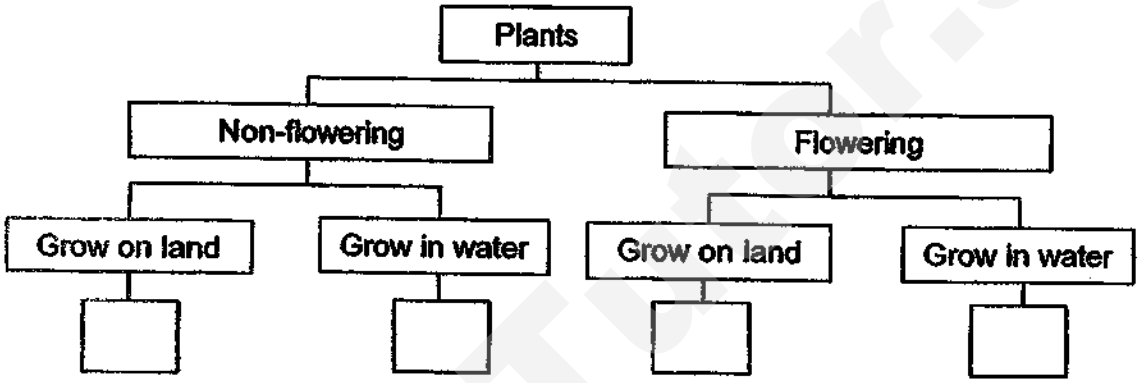
Score / 4

SmileTutor.sg
Need a home tutor? Visit smiletutor.sg

31. The table below shows the characteristics of four plants, A, B, C and D.

Characteristics	Plants			
	A	B	C	D
Can bear fruits	Yes	No	Yes	No
Grows on land	No	No	Yes	Yes

(a) From the information above, put Plant A, B, C and D in the classification table below. [2]



Kah Lee found two living things in the garden.

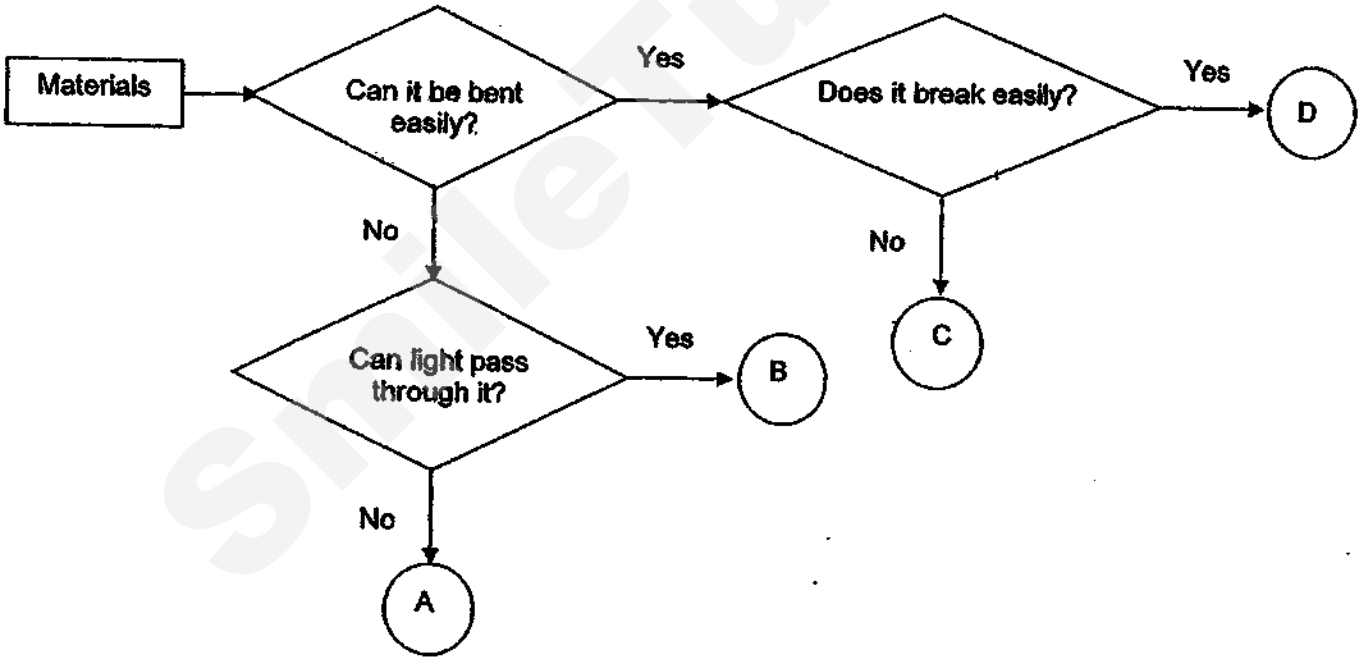
(b) She then classified both as non-flowering plants because both reproduce through spores. Is she correct? Explain your answer. [1]

Score 3

Need a home tutor? Visit smiletutor.sg

32. Mrs Tan wants to make a reusable ECO bag that she can use for shopping. She needs it to be folded after use. She also needs it to be light so that she can carry it everywhere she goes.

The following flowchart shows the properties of four different materials, A, B, C and D.



(a) Which material, A, B, C and D, is most suitable for making the ECO bag? [1]

_____

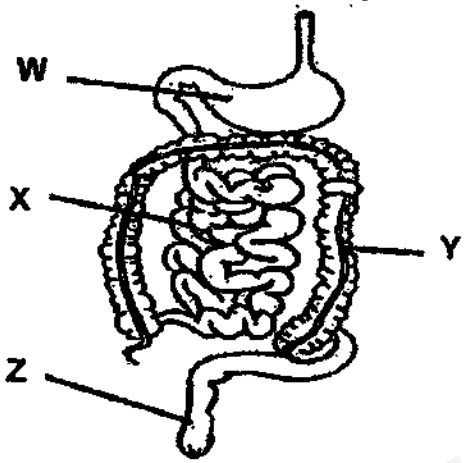
(b) Based on the flowchart, state two properties of material B. [2]

_____

Score 3

Need a home tutor? Visit smiletutor.sg

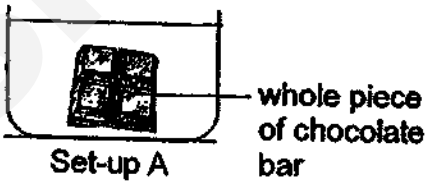
33. The diagram below shows the human digestive system.

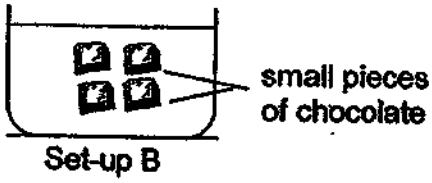


(a) Write the parts, W, X, Y or Z, that perform the following functions in the table below. [3]

Function	Part
(i) Water is absorbed from undigested food.	
(ii) The food is digested further and mixed with other digestive juices.	
(iii) Digestion of food is completed here and the digested food is absorbed into the blood.	

(b) Charlene conducted an experiment using the two set-ups below. Set-up A has a whole piece of chocolate bar in the beaker while Set-up B has a similar piece of chocolate broken into small pieces. Same amount of digestive juice was added to both set-ups.





Charlene saw that the small pieces of chocolate in Set-up B digested faster than the whole piece of chocolate bar in Set-up A. Explain why. [1]

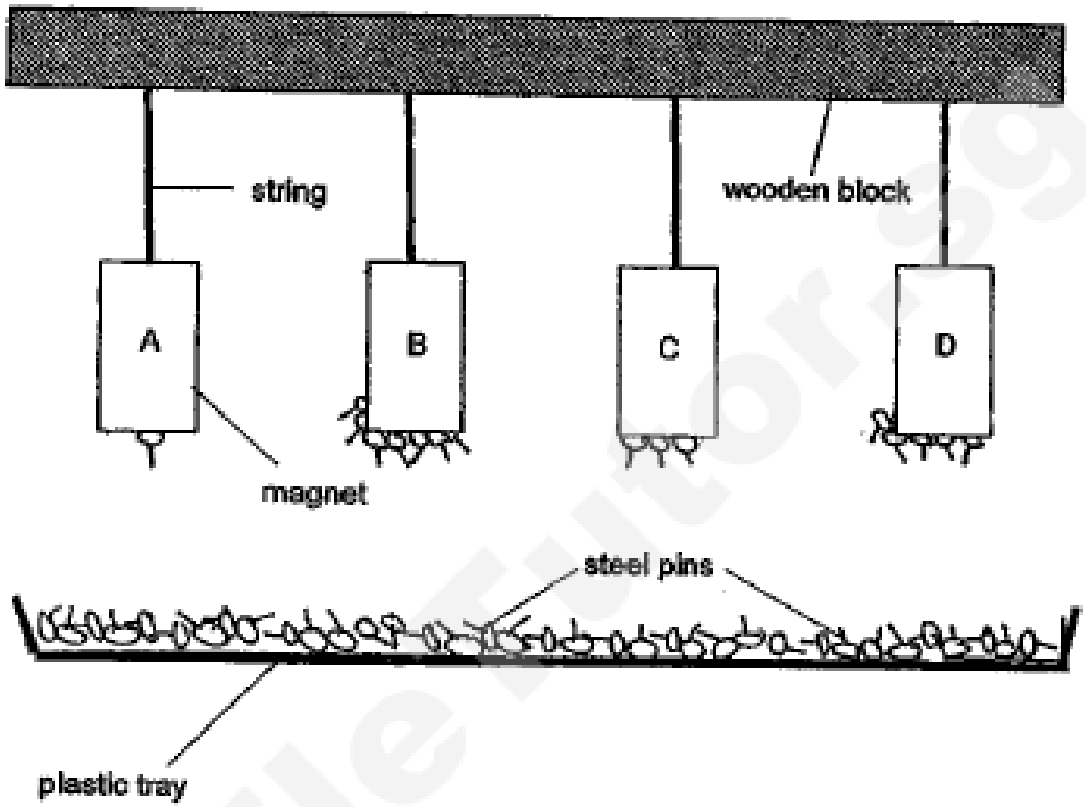
_____

_____

Score ___/4

Need a home tutor? Visit smiletutor.sg

34. Sarah wanted to compare the magnetic strength of four magnets, A, B, C and D. All the magnets were of the same size. She set up the experiment below and observed the number of steel pins that were attracted by each magnet.



The table below shows the number of steel pins attracted by the 4 magnets during the experiment.

Magnet	Number of steel pins attracted to the magnet
A	1
B	7
C	3
D	5

Need a home tutor? Visit smiletutor.sg

(a) Arrange the magnets, A, B, C and D, from the strongest to the weakest. [1]

_____, _____, _____, _____

strongest **weakest**

(b) Sarah replaced all the steel pins with aluminium pins and repeated the experiment. What would she observe? Explain why. [2]

_____

_____

_____

~ End of paper ~

Score	/ 3

Need a home tutor? Visit smiletutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : NAN HUA

SUBJECT : SCIENCE

TERM : SA2

ORDER CALL :

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

Q25) a) It has scales as its outer-covering

b) Animal Y has 4 legs but X does not.

c) Reptile

Q26) a) Both are waterproof

b) Plastic

c) Plastic does not break easily.

Q27) a) The amount of water will decrease.

b) The roots of the plant has absorbed the water.

Q28) a) Digestive system

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

b) It breaks down food into simple substances so that it can be absorbed by the body.

c) Stomach

Q29) a) Electrical Method

b) 18

c) i) Increase coils around the iron rod.

ii) Increase the number of batteries.

Q30) a) They can reproduce

b) Some rabbits have died because there was not enough food or water in the field.

c) Feather.

Q31) a) Non-flowering : Grow on land – D Grow in water – B

Flowering : Grow on land – C Grow in water – A

b) No. A mushroom is not a plant as it cannot make its own food.

Q32) a) C

b) B cannot be bend easily. B allows light to pass through.

Q33) a) i) Y

ii) W

iii) X

b) The small pieces of chocolate has a bigger surface area that is in contact with the digested juices so its get digested faster than the whole piece of chocolate bar.

Q34) a) B , D , C , A

b) She will observed that none of them will get attracted because aluminium is a non-magnetic material.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

SEMESTRAL ASSESSMENT 2
2018

BOOKLET A

Date : 29 October 2018
Duration : 1 h 20 min

Name : _____ ( )

Class: Primary 3 ( )

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

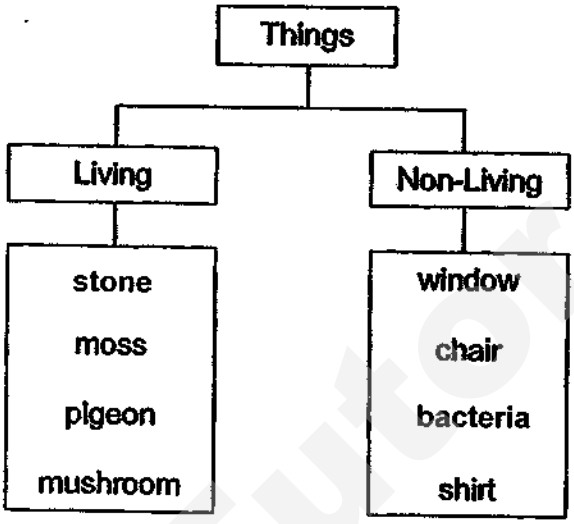
Booklet A consists of 14 printed pages including this cover page.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

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).
Indicate your answer and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet provided.

1. The table below shows a classification diagram.



Which of the following things had been wrongly classified?

(1) stone and bacteria
(2) pigeon and window
(3) moss and chair
(4) mushroom and shirt

2. Beng Huat observed the characteristics of 2 things, A and B. He then recorded his observation in the table below. A tick (✓) shows that the characteristic is present and a cross (×) shows that the characteristic is not present.

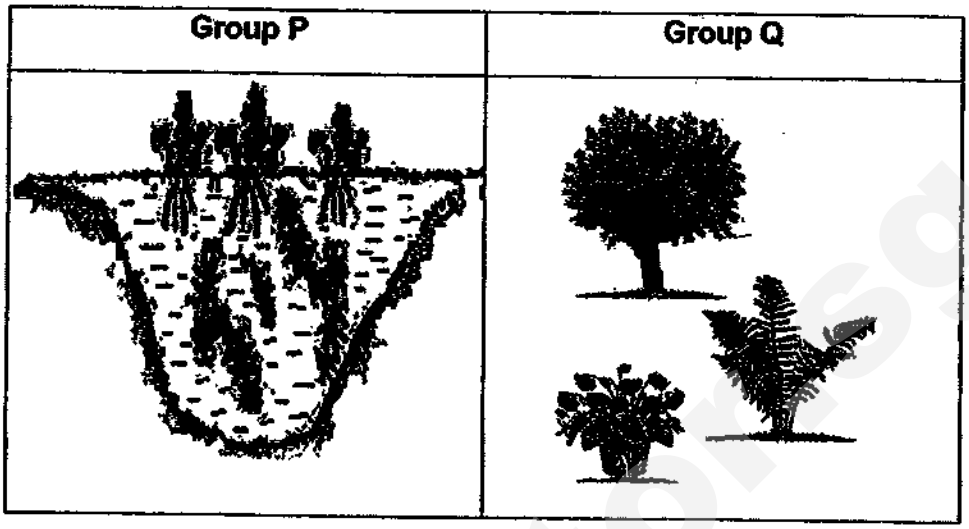
Characteristic	Things	
	A	B
It can reproduce.	×	✓
It can respond to changes in the surrounding.	×	✓
It can move freely from place to place.	×	×

Based on the information from the table, which one of the following best represents A and B?

	A	B
(1)	yeast	lamp
(2)	book	plant
(3)	pencil	cow
(4)	fish	eagle

Need a home tutor? Visit smiletutor.sg

3. Study the plants in the picture below.



Which one of the following correctly represents headings P and Q?

	P	Q
(1)	Big stems	Small stems
(2)	Grow in water	Grow on land
(3)	Cannot make food	Can make food
(4)	Reproduce by seeds	Reproduce by spores

4. Rashid found some plants growing at the school garden as shown below.

Moss

Banana Plant

Rashid then made some statements about the moss and banana plant.

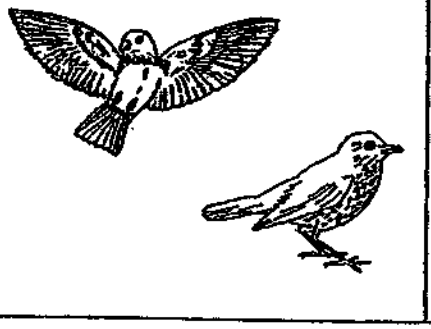
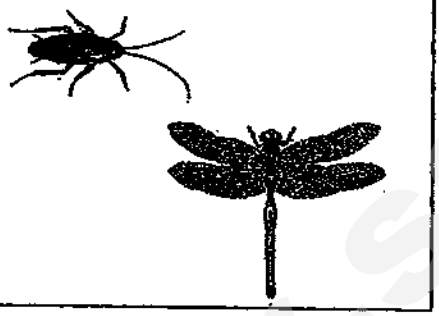
A Both can produce fruits.
B Both can make their own food.
C Both can move freely from place to place.

Which of his statement(s) above is/are correct?

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

Need a home tutor? Visit smiletutor.sg

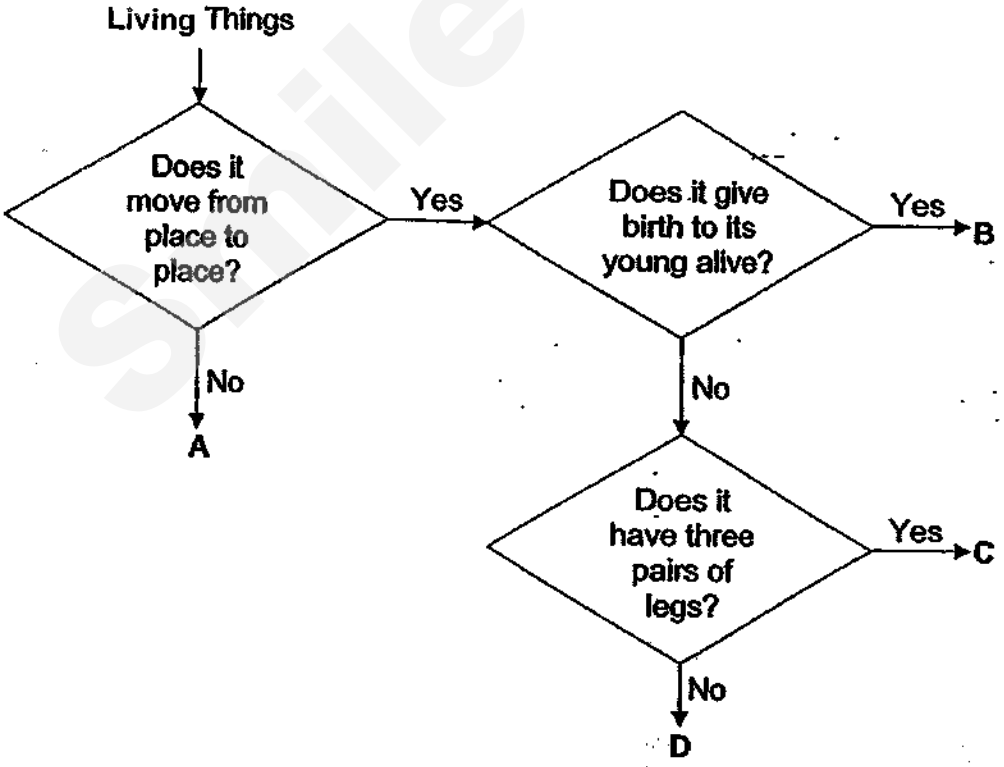
5. Study the two animal groups below.

A	B
	

Which one of the following correctly describes animal groups A or B?

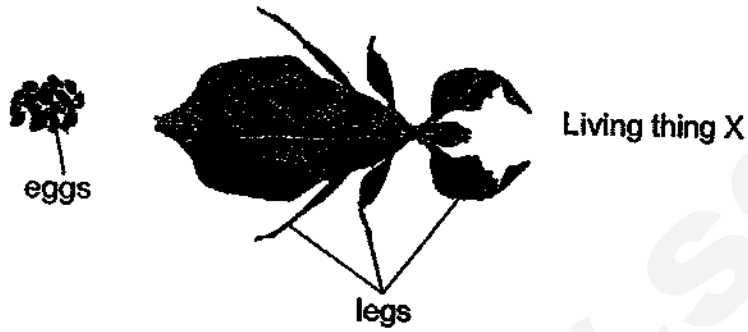
	Group	Has hard outer covering	Has 3 body parts	Give birth to its young alive
(1)	A	Yes	Yes	No
(2)	A	No	No	No
(3)	B	Yes	Yes	Yes
(4)	B	No	No	Yes

Study the following flowchart. Refer to it to answer question 6 and 7.



Need a home tutor? Visit smiletutor.sg

6. Justin spotted a living thing X in the park. It is moving on a tree, leaving behind a cluster of eggs, as shown in the picture below.



Which letter, A, B, C or D from the flowchart, would most likely represent living thing X?

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

7. Which one of the following could correctly represent the group of living things A, B, C and D?

	A	B	C	D
(1)	plant	mammal	insect	fish
(2)	mammal	insect	fish	plant
(3)	plant	insect	mammal	amphibian
(4)	insect	fish	reptile	mammal

8. Xuanling observed three living things, J, K and L, and recorded her observations in a table as shown below. A tick (✓) shows that the living thing has the characteristic.

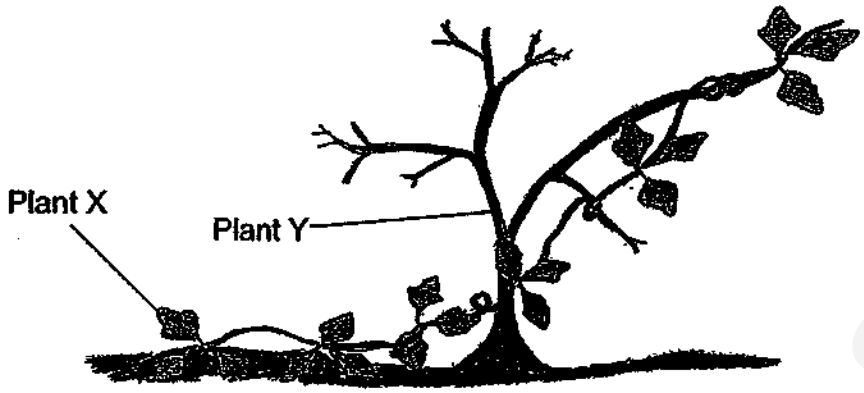
Characteristic	J	K	L
Able to make food	✓		
Reproduce by spores	✓		✓
Can only be seen with a microscope		✓	✓

Based on the information above, which one of the following correctly represents the living things J, K and L?

	J	K	L
(1)	fern	mould	yeast
(2)	bacteria	yeast	mould
(3)	fern	bacteria	mould
(4)	yeast	fern	yeast

Need a home tutor? Visit smiletutor.sg

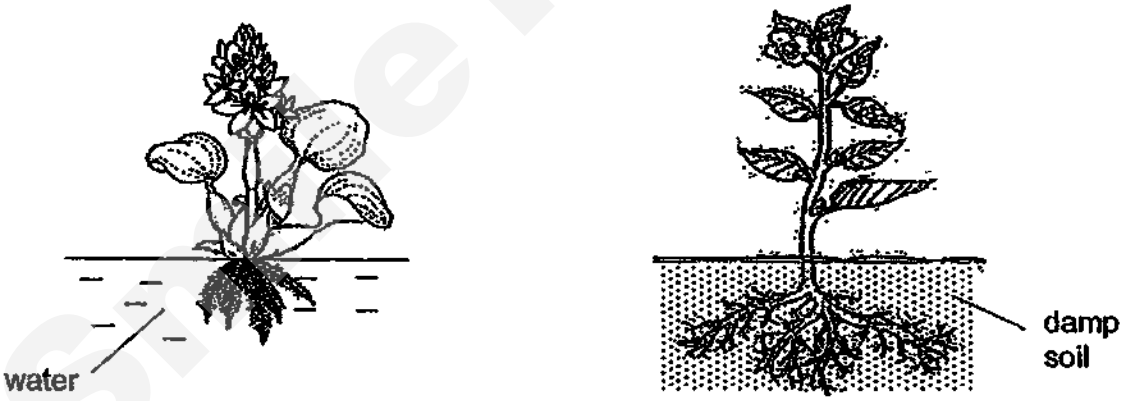
9. Study the picture below.



Which one of the following best explains why plant X climbed up plant Y?

(1) It needed to get more air.
(2) It needed to get more water.
(3) It needed to get food from plant Y.
(4) It needed to get more sunlight to make food.

10. Study the pictures below.



Plant S Plant T

Which one of the following statements explains the function of roots for both plant S and plant T?

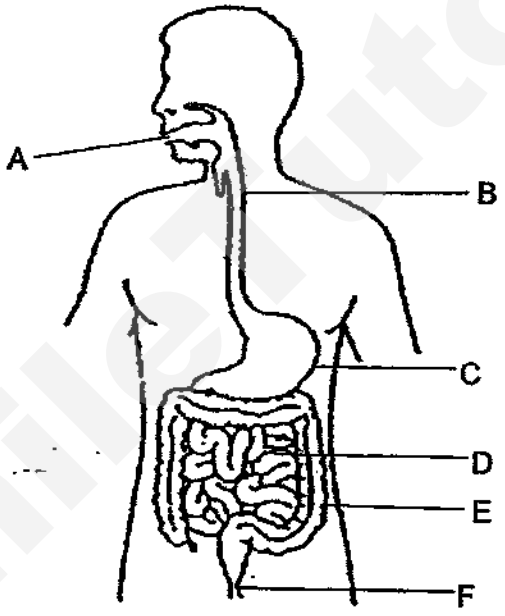
(1) The roots absorb water for the plants.
(2) The roots hold the plants firmly to the ground.
(3) The roots trap light for the plants to make food.
(4) The roots hold the leaves towards sunlight for them to make food.

Need a home tutor? Visit smiletutor.sg

11. Which one of the following correctly matches the human system to its function?

	System	Function
(1)	Circulatory system	Carries waste materials away from different parts of the body
(2)	Muscular system	Gives the body shape
(3)	Respiratory system	Helps different parts of the body to move
(4)	Skeletal system	Absorbs digested substances to be used by different parts of the body

12. The human digestive system is shown in the figure below.

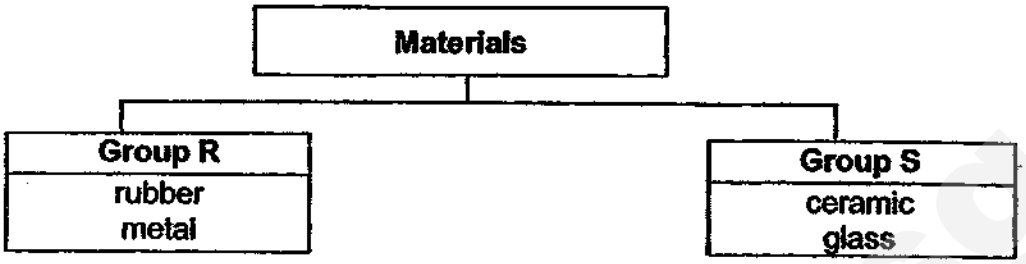


Which one of the following correctly identifies the part(s) where digestion of food takes place?

(1) A only
(2) A, B and C only
(3) A, C and D only
(4) All of the above

Need a home tutor? Visit smiletutor.sg

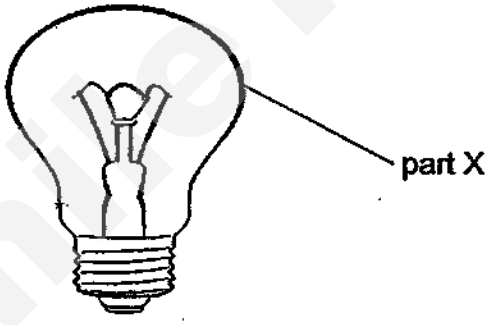
13. Study the classification diagram below. The objects had been grouped according to the properties of the materials that they are made of.



Which one of the following correctly represents group R and group S?

	Group R	Group S
(1)	stiff	flexible
(2)	float on water	sink in water
(3)	waterproof	not waterproof
(4)	strong	not strong

14. Study the picture below. Part X is the cover of the light bulb.

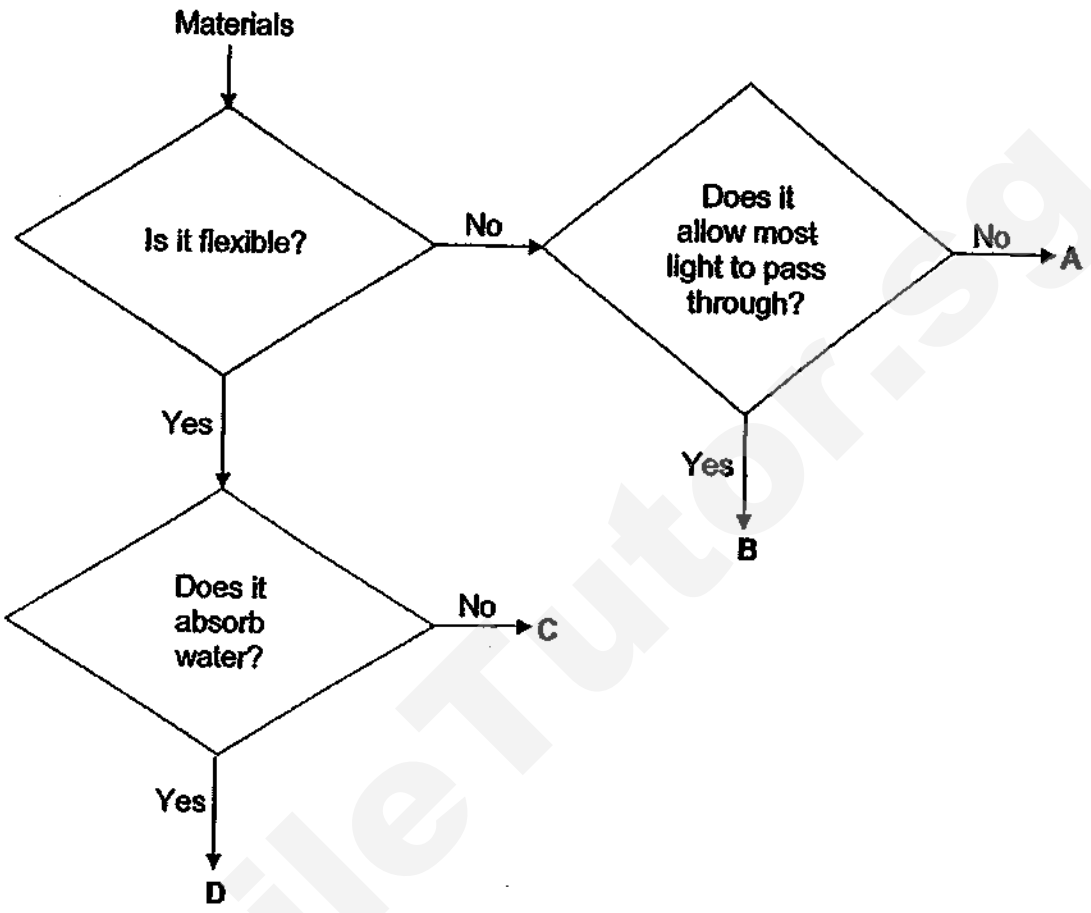


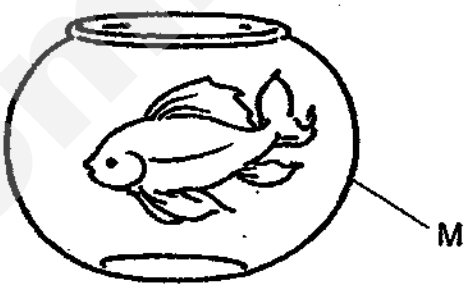
Which one of the following pairs of properties are important in order for part X to function properly?

	property 1	property 2
(1)	waterproof	does not allow light to pass through
(2)	not waterproof	allows most light to pass through
(3)	waterproof	allows most light to pass through
(4)	not waterproof	does not allow light to pass through

Need a home tutor? Visit smiletutor.sg

15. Study the flowchart below.



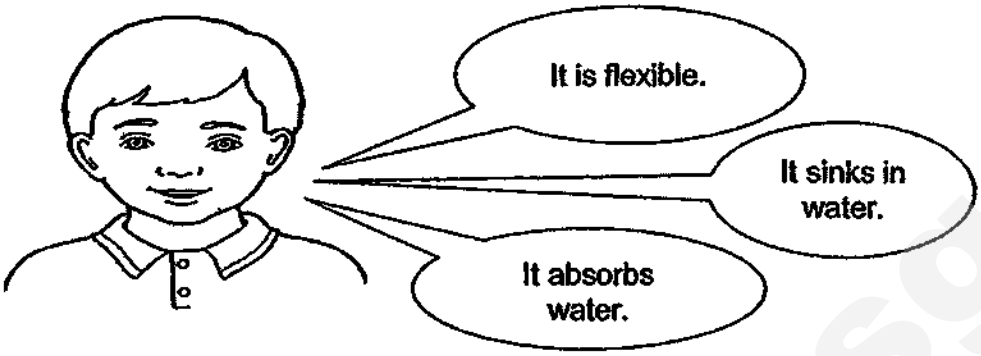


Based on the flowchart, which material A, B, C or D, could be used to make part M of the fish bowl above?

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

Need a home tutor? Visit smiletutor.sg

16. John made the following observations of a material.

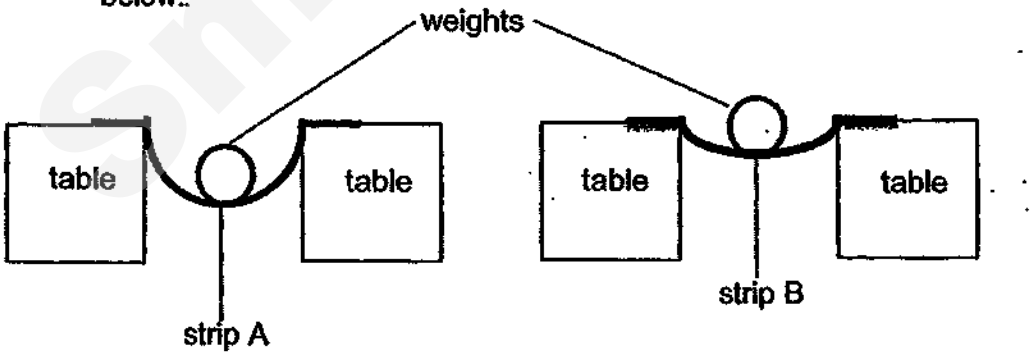


Which one of the following is most likely the material he had observed?

(1) wood
(2) metal
(3) cotton
(4) rubber

17. Adam conducted an experiment. He used two strips of materials, A and B, with the same thickness. He placed the strips across two tables which are of the same distance apart as shown below.

He placed the same weight, 5kg, on the two strips and drew the results below.



Based only on the results above, what can Adam conclude about strips A and B?

(1) Strip A is stronger than strip B
(2) Strip B is stronger than strip A
(3) Strip A is more flexible than strip B
(4) Strip B is more flexible than strip A

Need a home tutor? Visit smiletutor.sg

18. The table below shows a few objects made of different materials.

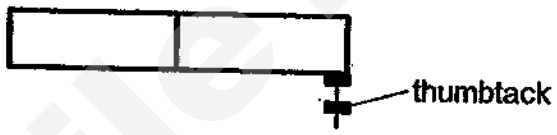
A	Iron bar
B	Steel ruler
C	Glass marble
D	Aluminium foil

Which of the objects above are made of magnetic materials?

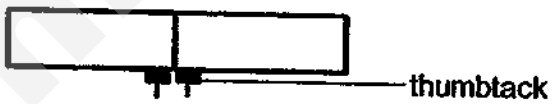
(1) A and B only
(2) A and C only
(3) C and D only
(4) A, B and D only

19. Mark placed a bar magnet in a tray filled with thumbtacks. He then took out the bar magnet from the tray.
Which one of the diagrams below shows the most likely positions of the thumbtacks on the magnet?

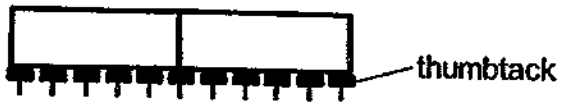
(1)



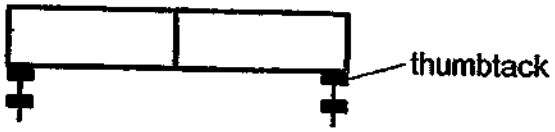
(2)



(3)

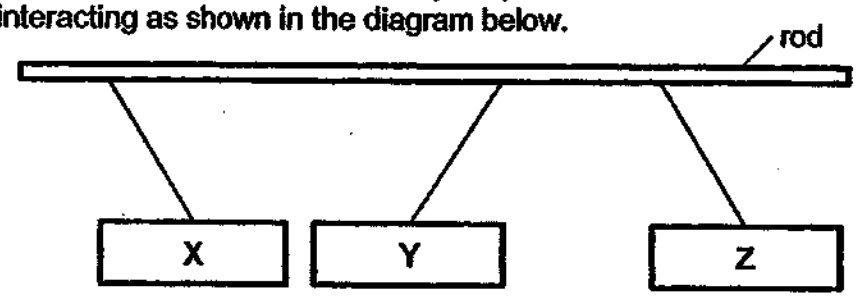


(4)



Need a home tutor? Visit smiletutor.sg

20. Three bars, X, Y and Z, are freely suspended from a rod and ended up interacting as shown in the diagram below.



Based on the result above, which one of the following statements and explanation is true?

(1) Only bar X is a magnet because it attracts bar Y.
(2) Only bar Y is a magnet because it attracts bar X.
(3) Bars Y and Z are magnets because they repel each other.
(4) Bars X and Y are magnets because they attract each other.

21. The table below shows a few objects.

A	compass
B	maglev train
C	stapler

Which of the object(s) above make use of magnets?

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

Need a home tutor? Visit smiletutor.sg

22. Michael created a temporary magnet using the stroke method correctly. He changed the number of strokes used to create the temporary magnet. The results are shown in the table below.

Number of strokes	Number of paper clips it could attract
20	3
30	6
40	8
50	13

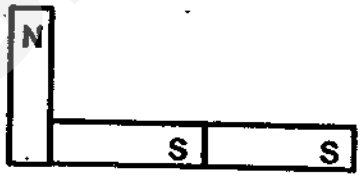
What can Michael conclude from the results in the table above?

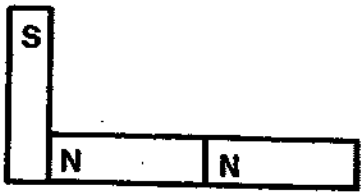
	Strokes	Strength of temporary magnet
(1)	Less	More
(2)	Less	No change
(3)	More	Less
(4)	More	More

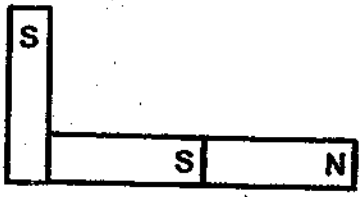
23. Beth arranged three bar magnets as shown below. The magnets did not repel each other.

Which one of the following diagrams shows the correct poles for the three magnets?

(1)

(2)


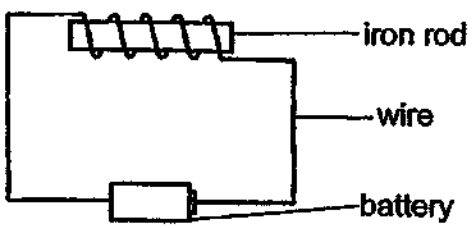
(3)


(4)


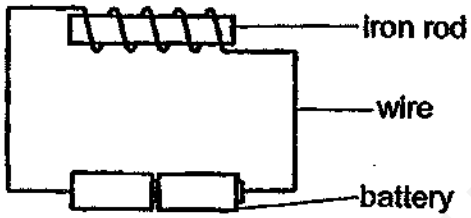
Need a home tutor? Visit smiletutor.sg

24. The set-ups below made use of identical batteries, iron rods and wires. Which iron rod would attract the most number of steel pins?

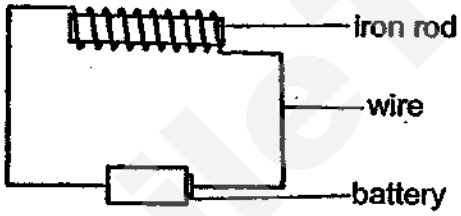
(1)



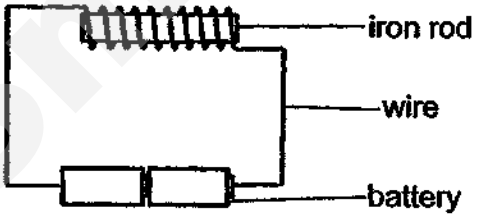
(2)



(3)



(4)



Need a home tutor? Visit smiletutor.sg

NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

SEMESTRAL ASSESSMENT 2
2018

BOOKLET B

Date : 29 October 2018

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 5 November 2018. 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.

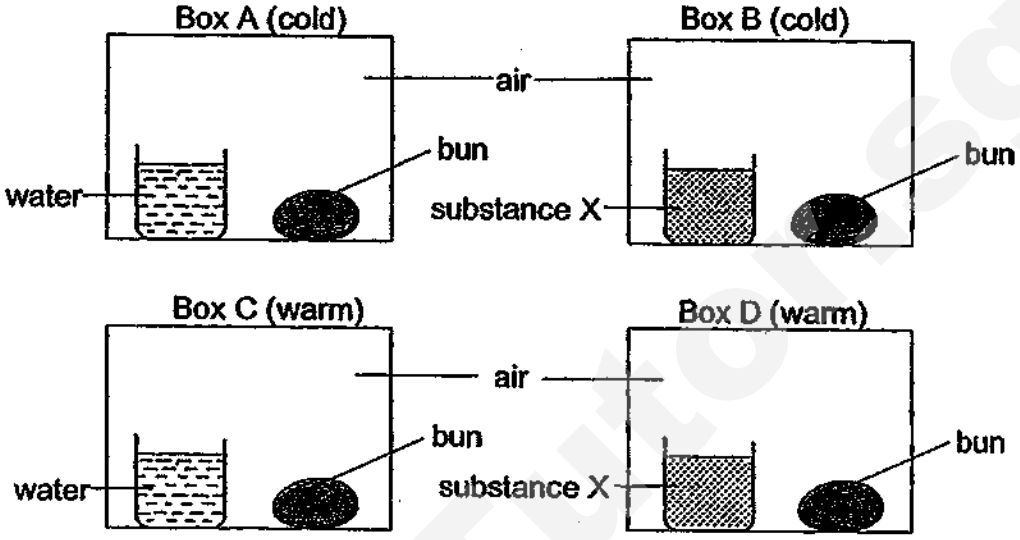
Booklet B consists of 12 printed pages including this cover page.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Section B (32 marks)
Write your answers to questions 25 to 34 in the spaces provided.

25. Wilson placed four buns in four identical sealed boxes. Boxes A and B were placed in a cold place and boxes C and D were placed in a warm place. He placed a beaker of water in Box A and Box C. Substance X was used to absorb the moisture in Box B and Box D.



(a) (i) In which box, A, B, C or D, would mould first appear on the bun? [1]

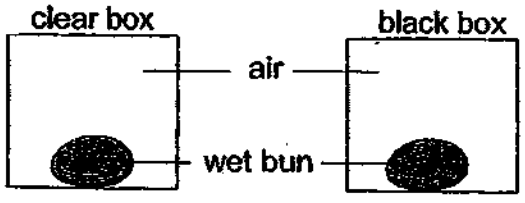
Box _____

(ii) Explain the reason for the answer in part (i). [1]

_____

_____

Wilson conducted another experiment by placing a wet bun in a clear box and a black box as shown below. He found there was mould growing on both buns after 2 weeks.



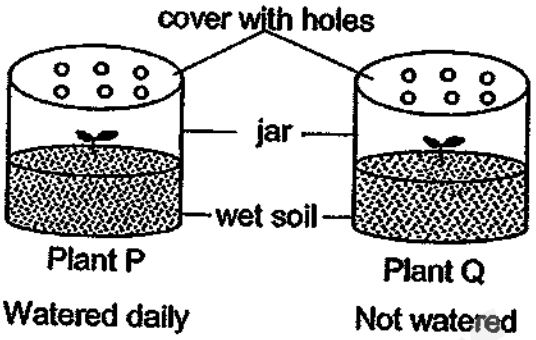
(b) What could he conclude from the experiment? [1]

_____

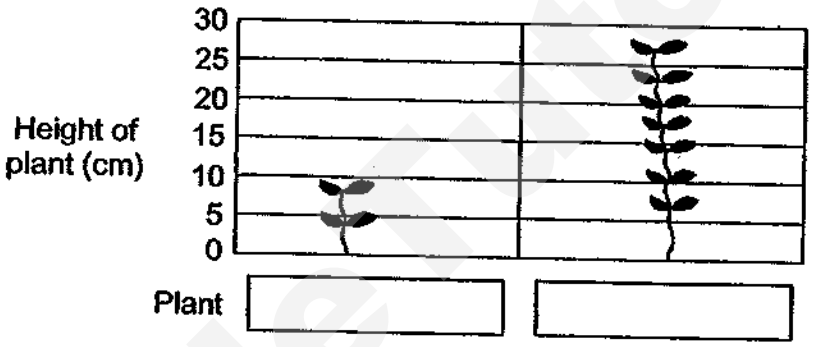
_____

Need a home tutor? Visit smiletutor.sg

26. Nadia prepared two identical jars of similar plants, P and Q. Each plant was about 5cm tall at the start of the experiment, as shown in the diagram below. Both set-ups were placed next to a window. Only one plant was watered daily.



She measured and recorded the height of the plants on the tenth day as shown in the graph below.



(a) (i) **Fill in the boxes** above with letters P and Q to correctly represent the height of the plants. [1]

(ii) Explain why Nadia placed the plants next to a window. [1]

_____

_____

After the tenth day, Nadia observed the leaves of Plants P and Q. On one of the plants, she found spores growing on the underside of the leaves. Nadia said that this plant has the same method of reproduction as a rose plant.

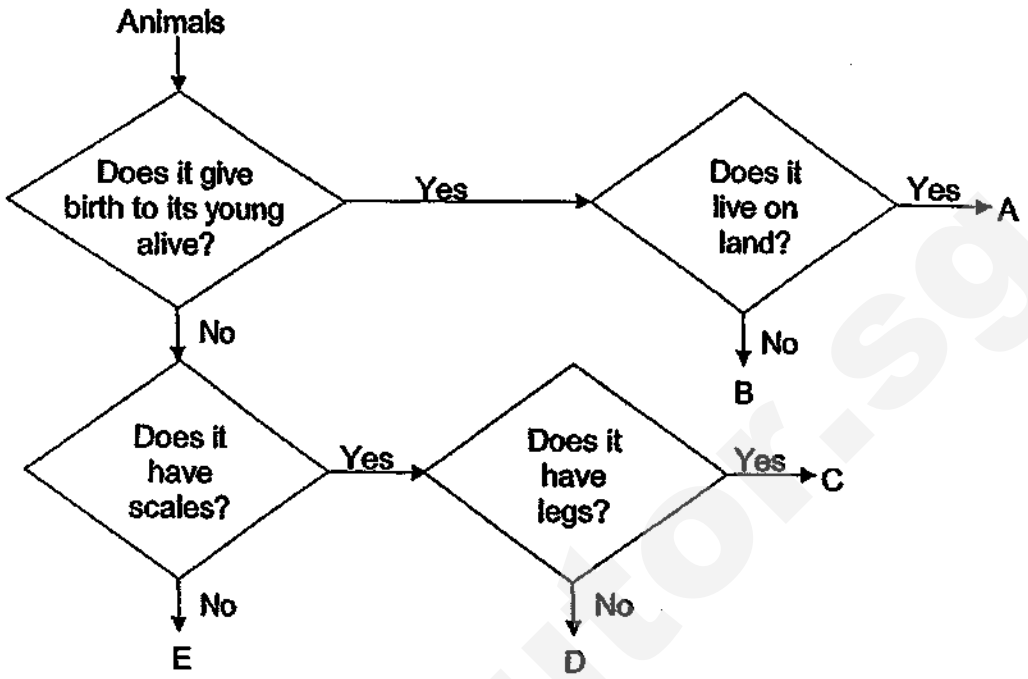
(b) Explain why Nadia was wrong. [2]

_____

_____

Need a home tutor? Visit smiletutor.sg

27. The flowchart below is used to classify 5 animals, A, B, C, D and E.



(a) Based only on the flowchart, state a difference between animals B and C. [1]

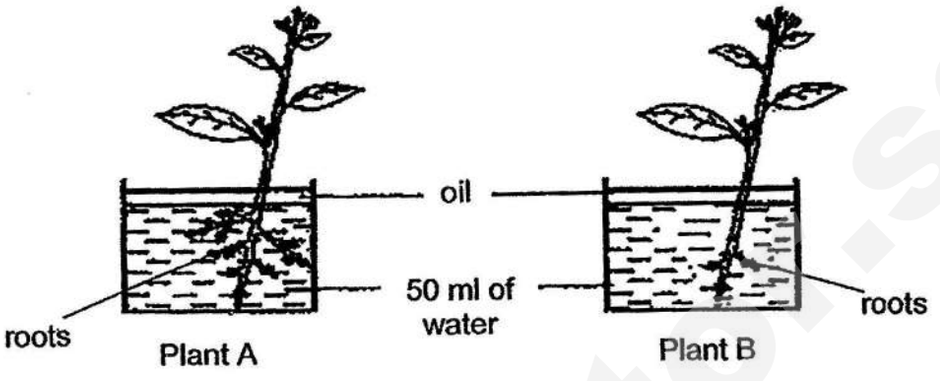
(b) Based on the flowchart, which of the following animals could correctly represent animals A, B, C, D and E? Write the letters A, B, C, D and E in the table below. (Each letter should be used **once** only). [2]

		Animal
i)	goldfish	
ii)	monkey	
iii)	frog	
iv)	dolphin	
v)	lizard	

(c) Jiang Wen said that crocodile is an example of animal E.
Explain why he is wrong. [1]

Need a home tutor? Visit smiletutor.sg

28. Alle conducted an experiment as shown below using 2 similar plants. Some of Plant B's roots had been removed. She then added oil to ensure that there was no water lost to the surroundings. She placed both plants next to a window where there was enough sunlight for the plants.



After 5 days, she recorded the amount of water left in each beaker.

Beaker	Amount of water left after 5 days
A	20 ml
B	45 ml

(a) Based on the results above, state the function of the roots. [1]

_____

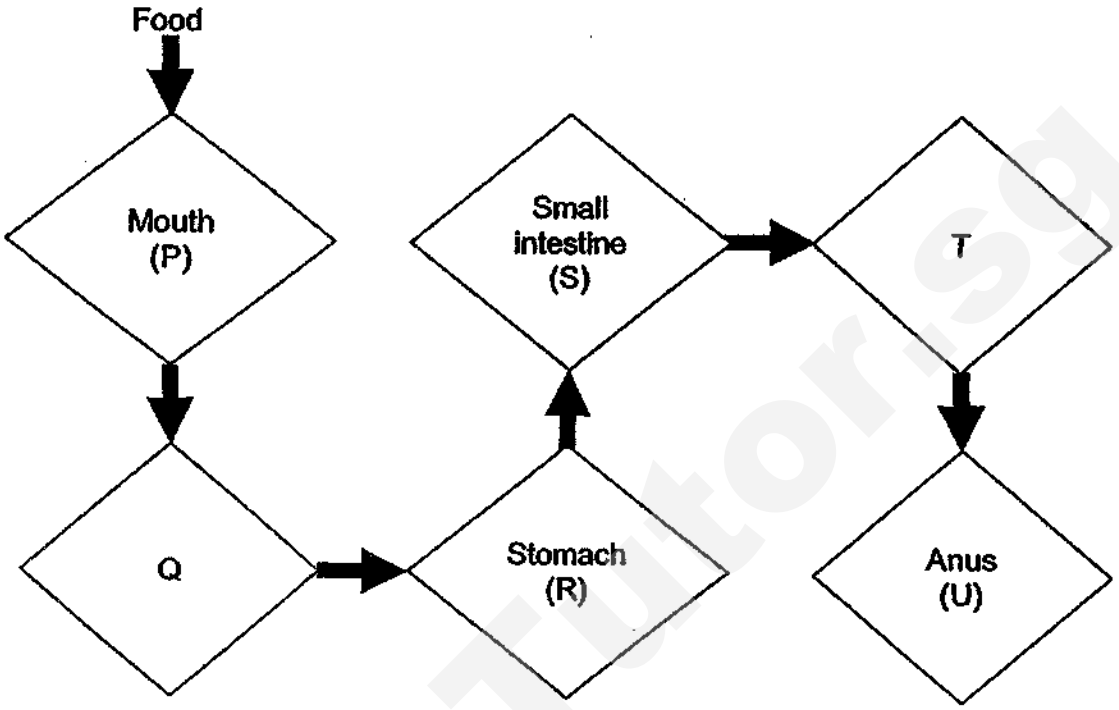
(b) After a few more days, plant B died but plant A did not die. Explain the observation. [2]

_____

_____

Need a home tutor? Visit smiletutor.sg

29. The flowchart below shows the pathway of digestion in the human body. The letters P, Q, R, S, T and U represent the different parts of the human digestive system.



(a) Identify parts Q and T. [2]

Q: _____

T: _____

(b) State all the parts (P, Q, R, S, T, U) where digestive juices can be found. [1]

_____

_____

(c) After digestion of food is completed, state another process that happens in the small intestine before undigested food is passed on to part T. [1]

_____

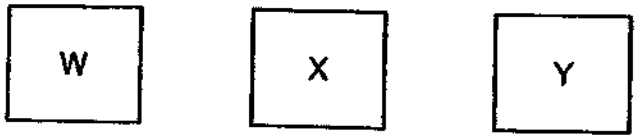
_____

Smile Tutor.sg

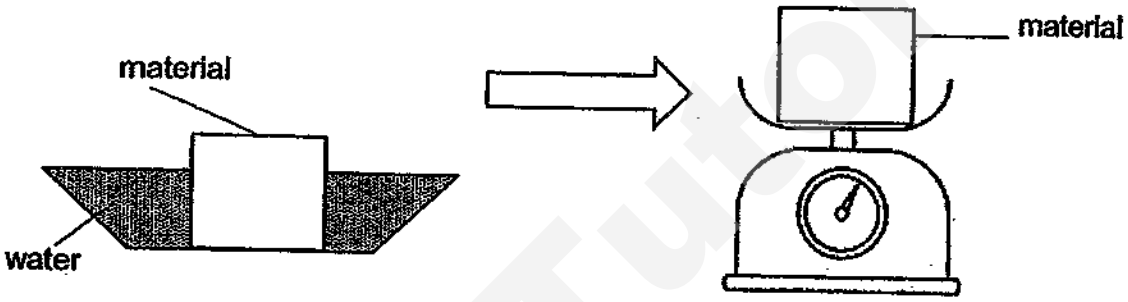
Need a home tutor? Visit smiletutor.sg

30. Jane conducted an experiment to find out which material absorbs water. She used three identical materials, W, X, and Y.

Each material is of the same size and thickness and weigh 100g.



She put each material, one at a time, into a bowl of water for five seconds. She then took the materials out of the bowl. She ensured that no water dripped from the materials and measured the new weight of each material.



bowl of water

weighing scale

The results are shown below.

material	Original weight (g)	New weight(g)
W	100	100
X	100	180
Y	100	250

She concluded that the greater the amount of water the material absorbed, the heavier the material.

(a) Based on the results above, which material is most suitable to make raincoats? Explain your answer. [1]

_____

_____

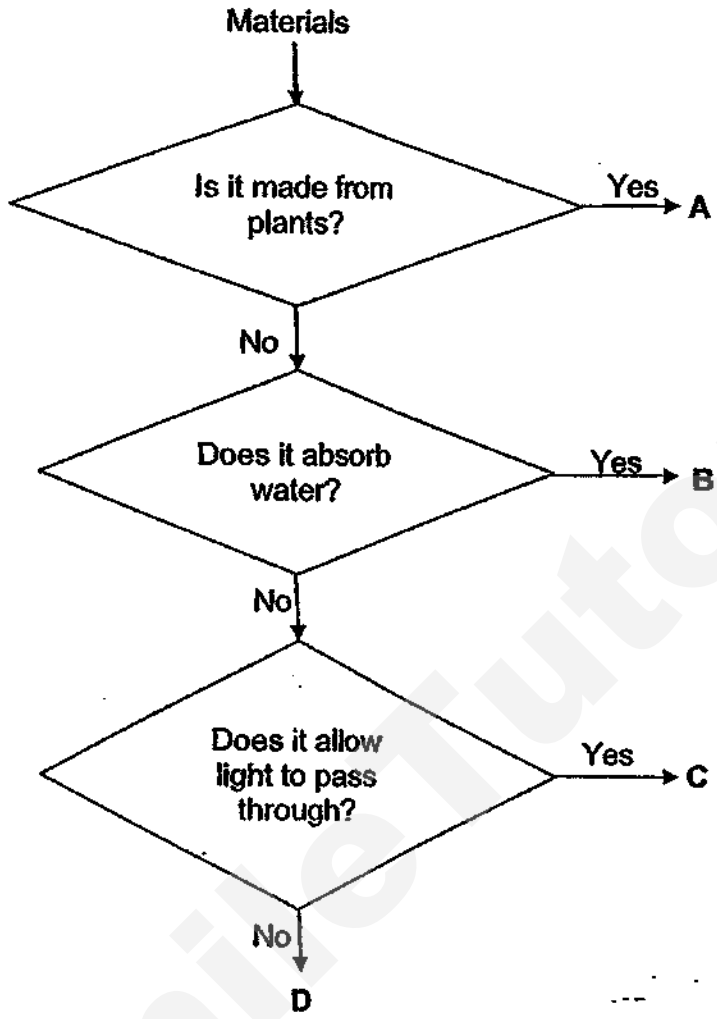
(b) Based on the results above, which material is most suitable to make a bath towel? Explain your answer. [1]

_____

_____

Need a home tutor? Visit smiletutor.sg

31. The flowchart below is used to classify 4 materials, A, B, C and D.



(a) Based on the flowchart above, state **two** similarities between materials C and D. [1]

(i) _____

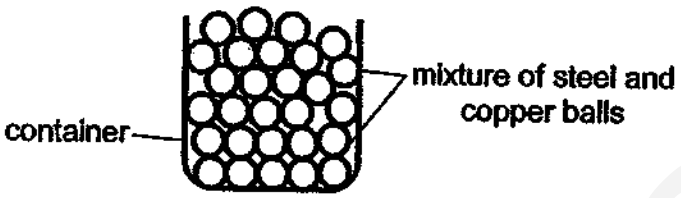
(ii) _____

(b) Based on the flowchart above, match the objects below with the correct material that they are most likely made of. Write A, B, C or D in the boxes provided. [2]

gold ring	wooden box	window glass	woollen jacket

Need a home tutor? Visit smiletutor.sg

32. John mixed a container of steel balls with a container of copper balls. The steel and copper balls were of the same size, shape and colour.

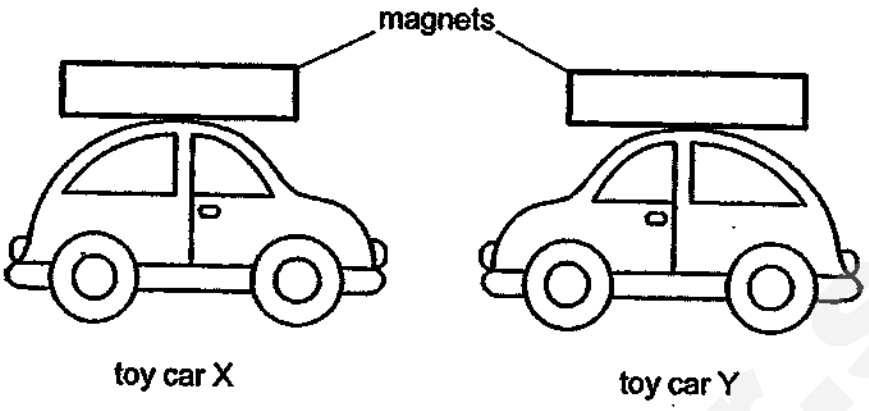


Using a bar magnet, describe what he should do to separate the steel balls from the copper balls. Explain your answer. [2]

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

33. Bala attached similar magnets to the top of 2 toy cars as shown in the diagram below.

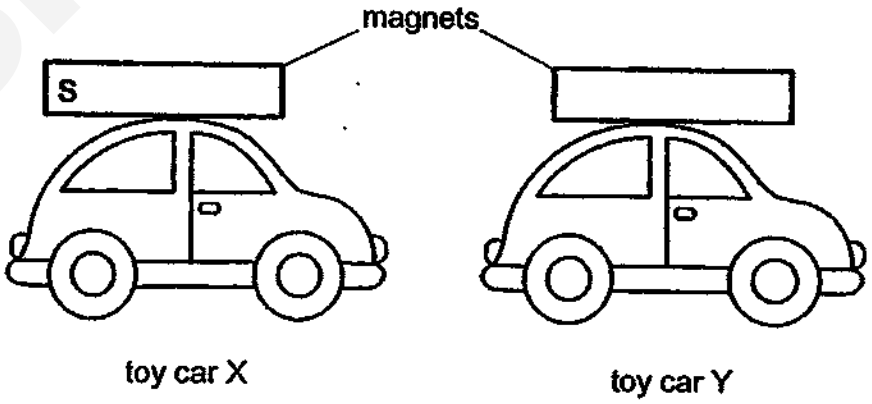


(a) When toy car X was brought close to toy car Y, toy car Y moved away. Explain why the above observation happened.

[2]

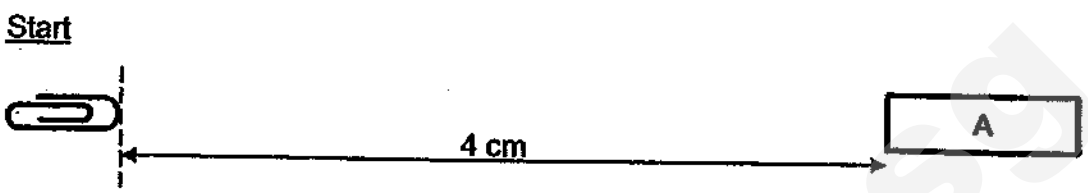
Bala turned toy car Y the other way round such that both toy cars are now facing the same direction.

(b) One of the poles of the magnet on toy car X is shown below. **Label the poles of the magnet on toy car Y below.** [1]

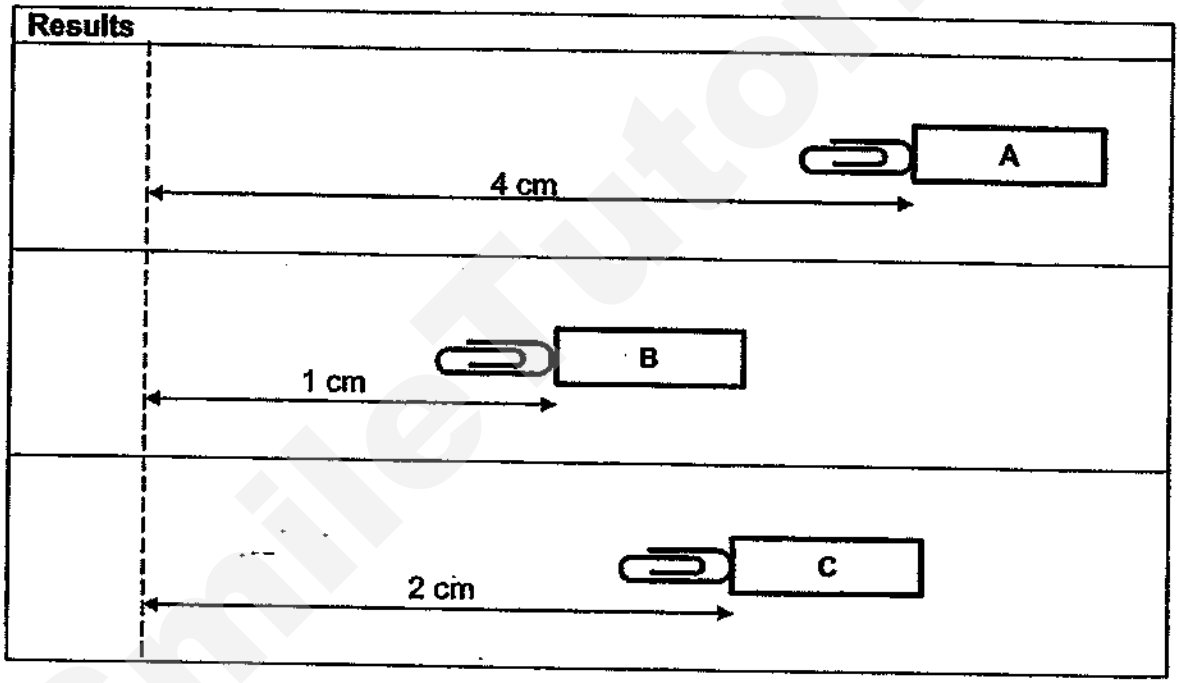


Need a home tutor? Visit smiletutor.sg

34. Mei Ling set up an experiment to find out the magnetic strength of 3 magnets, A, B and C. She placed the 3 magnets at the same distance away from a steel paper clip. Each magnet was then moved slowly towards the paper clip. She stopped moving the magnet when it attracted the paper clip.
The diagram below shows the start of the experiment.



The table below shows the results of the experiment.



(a) Arrange the magnets from the strongest to the weakest. Write the letters **A**, **B** and **C** in the table below. [1]

Strongest →		Weakest

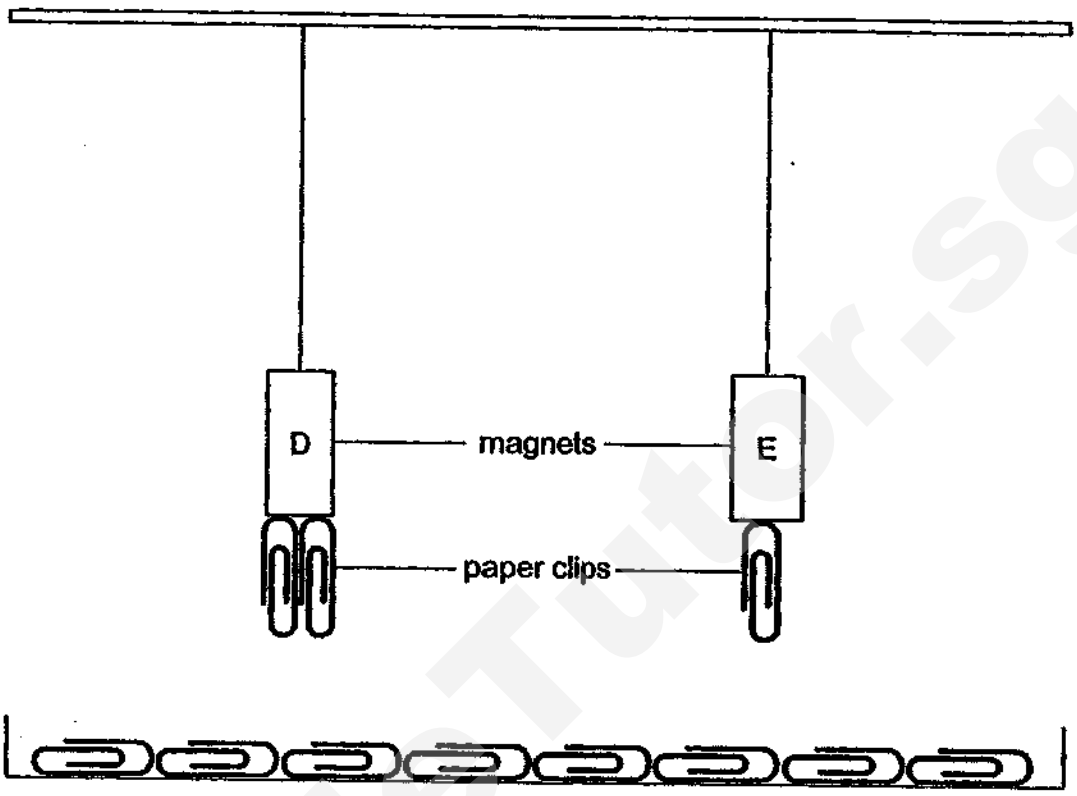
(b) Explain your answer for the strongest magnet stated in (a). [1]

_____

_____

Need a home tutor? Visit smiletutor.sg

She conducted another experiment with magnets D and E. She suspended both magnets at an equal distance above a tray of paper clips. Both magnets attracted paper clips as shown in the diagram below.



(c) Mei Ling said that since magnets D and E attracted paper clips from the same distance, they are equally strong. Explain why she is wrong.

[2]

Need a home tutor? Visit smiletutor.sg

Nanyang

P3 Science SA2 2018

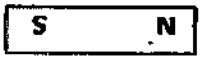
Booklet A

1	1	11	1	21	3
2	2	12	3	22	4
3	2	13	4	23	2
4	2	14	3	24	4
5	2	15	2		
6	3	16	3		
7	1	17	3		
8	3	18	1		
9	4	19	4		
10	1	20	3		

Booklet B

Q. No	Answer
25(ai)	Box C
(aii)	Box C is warm and has moisture/water and mould needs both to grow. Must mention the conditions in Box C.
(b)	Light is not needed for mould to grow.
26(ai)	Q, P
(aii)	Plants will be able to get sunlight to make food.
(bi)	A rose plant reproduces by seeds but the plant reproduces by spores. Must mention the comparison of the rose plant and the plant.
27a	Animal B gives birth to its young alive but Animal C does not give birth to its young alive/does not/unlike animal C/lay eggs. Must state the difference.
b(i) to (v)	D, A, E, B, C
(c)	Crocodile has scales as its body covering but Animal E does not have a body covering of scales. Must show comparison of both animals.
28(a)	Roots absorb/take in water for the plant.
(b)	Plant B has less roots than Plant A and did not have enough water to survive. Must mention the comparison of roots and why Plant B died.

Need a home tutor? Visit smiletutor.sg

29(a)	Q: Gullet T: Large Intestine
(b)	Digestive juice can be found in parts P, R and S.
(c)	Digested food is absorbed into the blood/bloodstream. Must mention the function of small intestine.
30(a)	W. It did not absorb water and it will keep the user dry. Must mention Material(M), Property(P) and Function (F)
(b)	Y. It absorbed the most amount of water/most absorbent. It will help dry the user after a bath. Must mention Material(M), Property(P) and Function (F)
31(ai) & (aii)	They are not made from plants and do not absorb water/ waterproof / not absorbent.
(b)	D,A,C,B
32	Use the magnet to attract the steel balls, as steel is a magnetic material but copper is a non-magnetic material. Must mention why the magnet can attract the steel balls and not the copper balls.
33 (a)	The like poles of the 2 magnets are facing each other, causing them to repel each other.
(b)	
34 (a)	
(b)	It was able to attract the paper clip from the furthest distance (compared to the rest). Must show comparison of distance.
(c)	She is wrong because magnet D was able to attract more paper clips than magnet E although they are placed at the same distance away. Therefore, magnet D is a stronger magnet than magnet E. Must show the comparison of number of paper clips attracted of both magnets.

Need a home tutor? Visit smiletutor.sg

RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT (2)

2018

Section A	48
Section B	32
Your score out of **80** marks	
Parent's signature	

Name : _____ **Index No:** ___ **Class: P 3** ___

25 October 2018 **SCIENCE** **Attn: 1 h 30 min**

SECTION A (24 x 2 marks)

For each question from 1 to 28, 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 statement(s) about birds is/are correct?

A All birds can fly.

B All birds have two legs.

C All birds give birth to their young alive.

D All birds have fur to keep themselves warm.

(1) B only

(2) C only

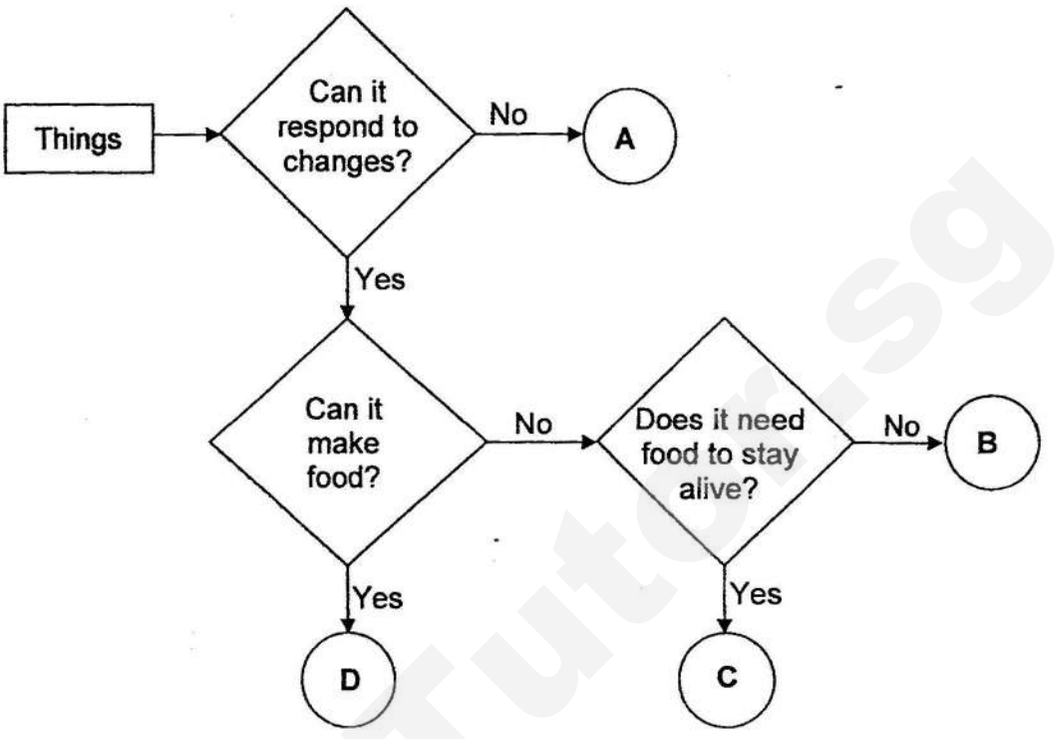
(3) B and D only

(4) A, C and D only

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

2. The flow chart below shows how some things are being classified.



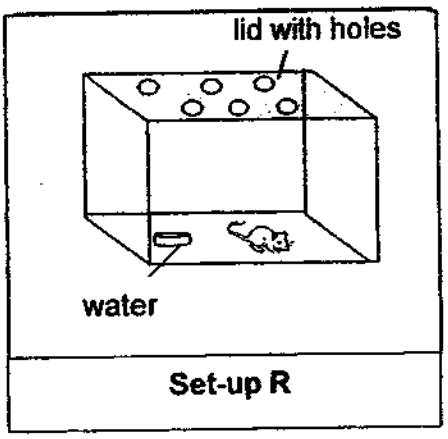
Based on the information above, which of the following best represent living and non-living things?

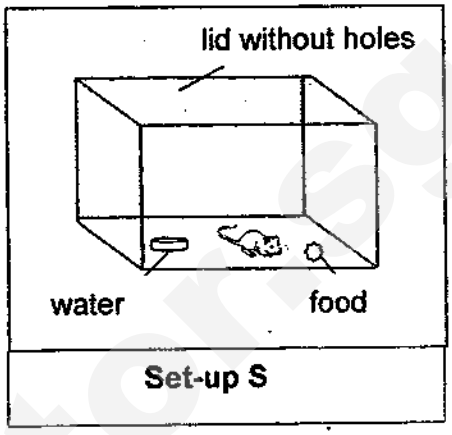
	Living Things	Non-living Things
(1)	B, C and D	A
(2)	C	A, B and D
(3)	C and D	A and B
(4)	A and C	B and D

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

3. Fiona wanted to conduct an experiment to find out if air is needed for the mouse to survive.



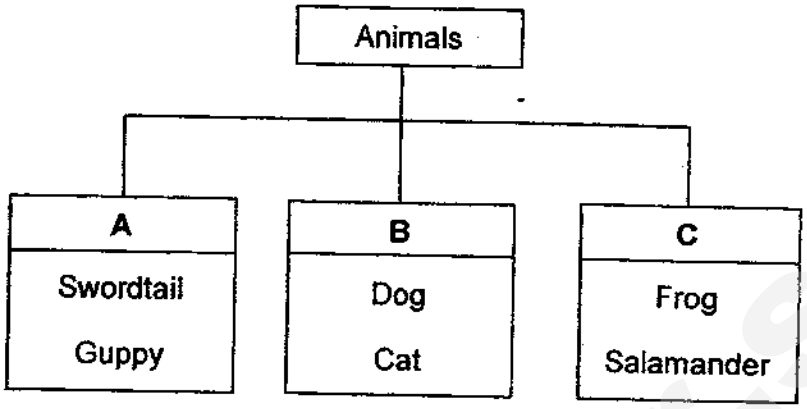


Based on the above set-ups, which of the following change(s) should be made to ensure a fair test?

	Set-up R	Set-up S
(1)	remove water	remove food
(2)	no change	make holes on the lid
(3)	add food	no change
(4)	remove water	no change

Need a home tutor? Visit smiletutor.sg

4. The animals below are grouped according to the way they breathe.



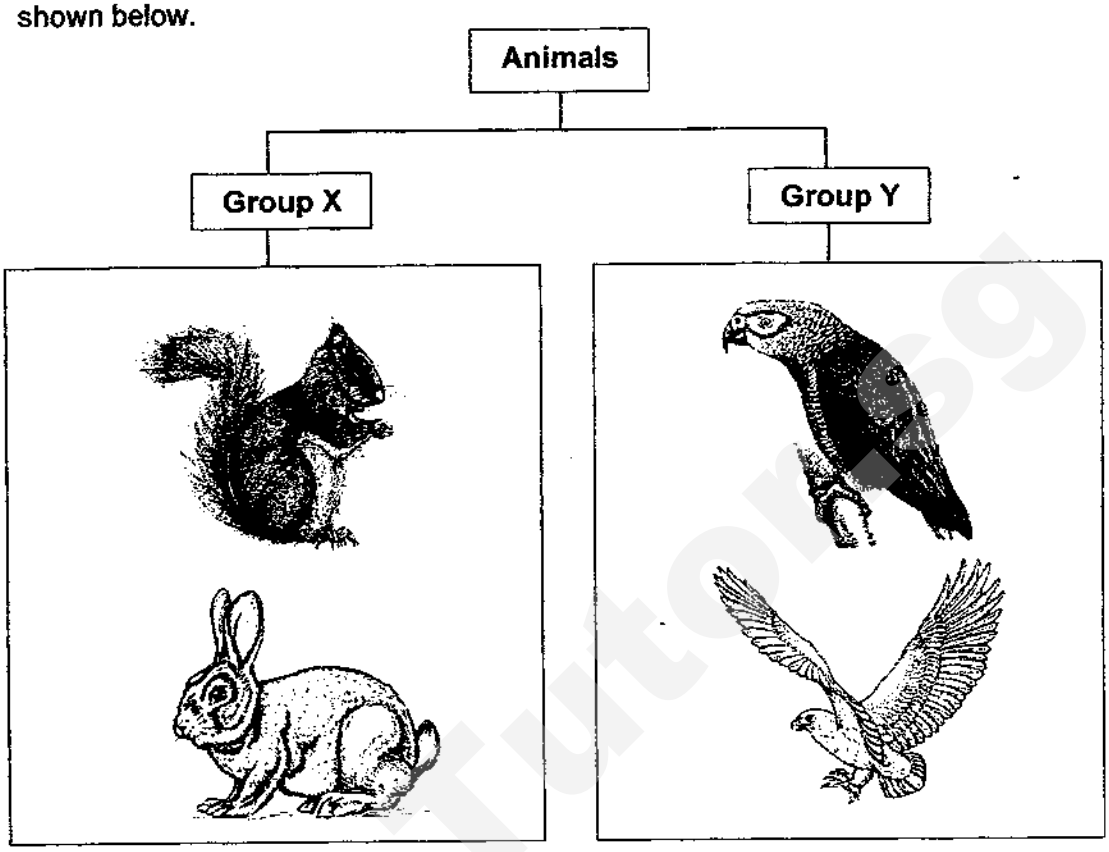
Which of the following is the correct sub-heading for **A**, **B** and **C** in the classification table?

	A	B	C
(1)	gills	moist skin	lungs
(2)	gills	lungs	moist skin
(3)	lungs	gills	moist skin
(4)	moist skin	lungs	gills

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

5. Leela grouped some animals based on their common physical characteristics as shown below.



Based on your observations, which of the following shows the possible sub-headings for group X and Y?

	Group X	Group Y
A	lays eggs	gives birth to young alive
B	has fur	has feathers
C	has no wings	has wings
D	has a tail	has no tail

(1) A and B only

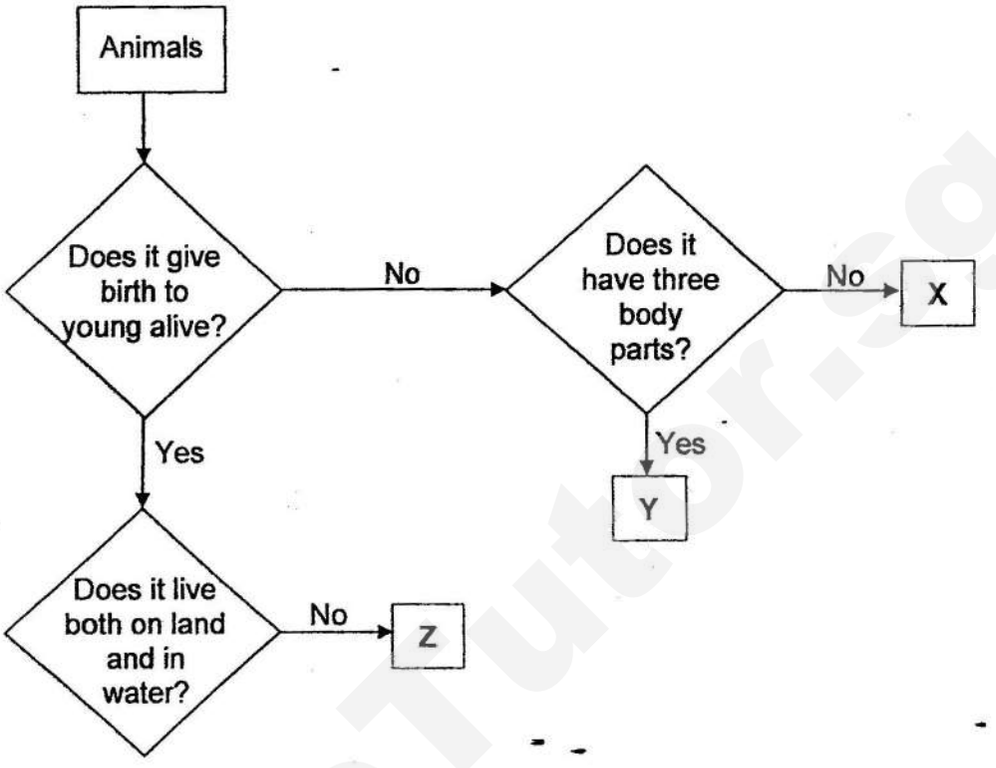
(2) B and C only

(3) A, B and C only

(4) A, B, C and D

Need a home tutor? Visit smiletutor.sg

6. Study the flow chart below carefully.

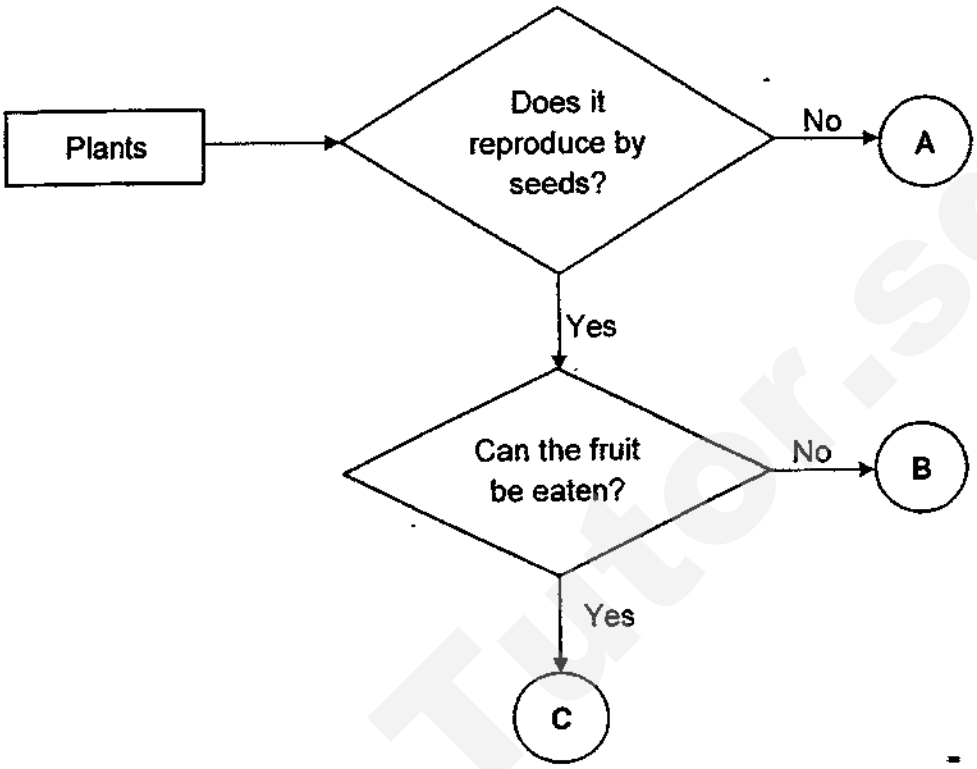


Which of the following groups of animals best represent **X**, **Y** and **Z**?

	X	Y	Z
(1)	bird	reptile	mammal
(2)	fish	insect	amphibian
(3)	insect	bird	reptile
(4)	amphibian	insect	mammal

Need a home tutor? Visit smiletutor.sg

7. Study the flow chart below.

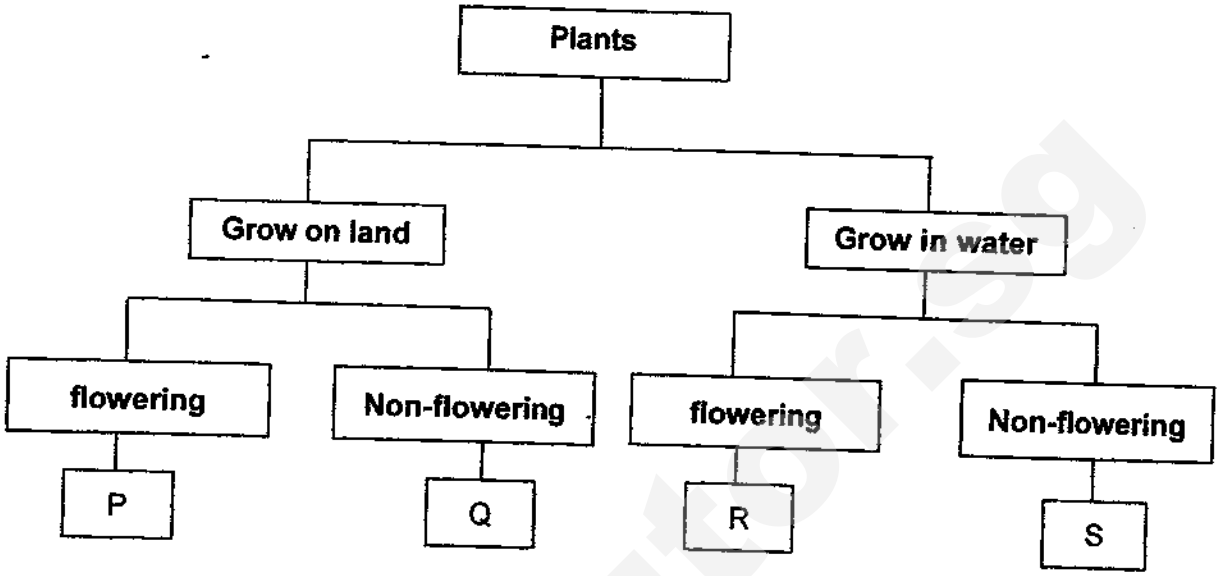


Based on the flow chart above, which plant(s) is/are flowering plant(s)?

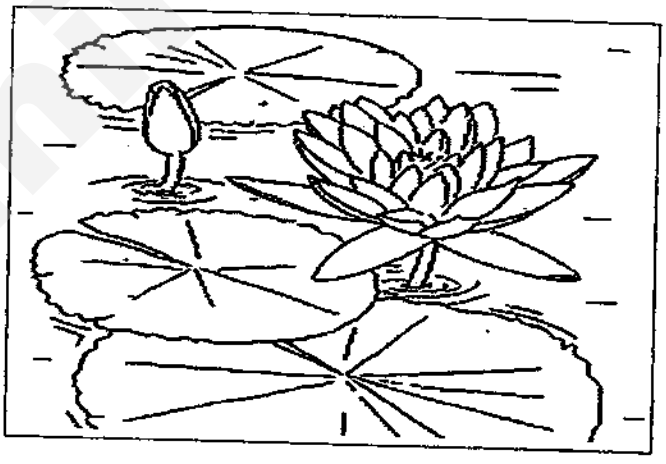
(1) B only
(2) C only
(3) A and C only
(4) B and C only

Need a home tutor? Visit smiletutor.sg

8. The classification chart below shows how plants are classified.



Observe the plant in the diagram below.



Continue on next page

Need a home tutor? Visit smiletutor.sg

Where do you classify the plant in the flow chart?

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

9. Which of the following statements about fungi are **correct**?

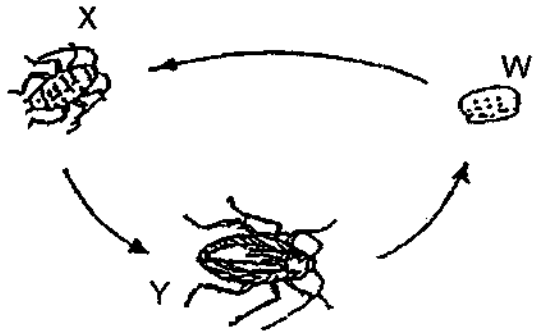
A It responds to changes.
B It is a non-flowering plant.
C It reproduces by spores.
D It feeds on other living things which may be dead or alive.

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

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

10. The diagram below shows the life cycle of a cockroach with the different stages labeled W, X and Y.



Which of the following statement(s) is/are correct?

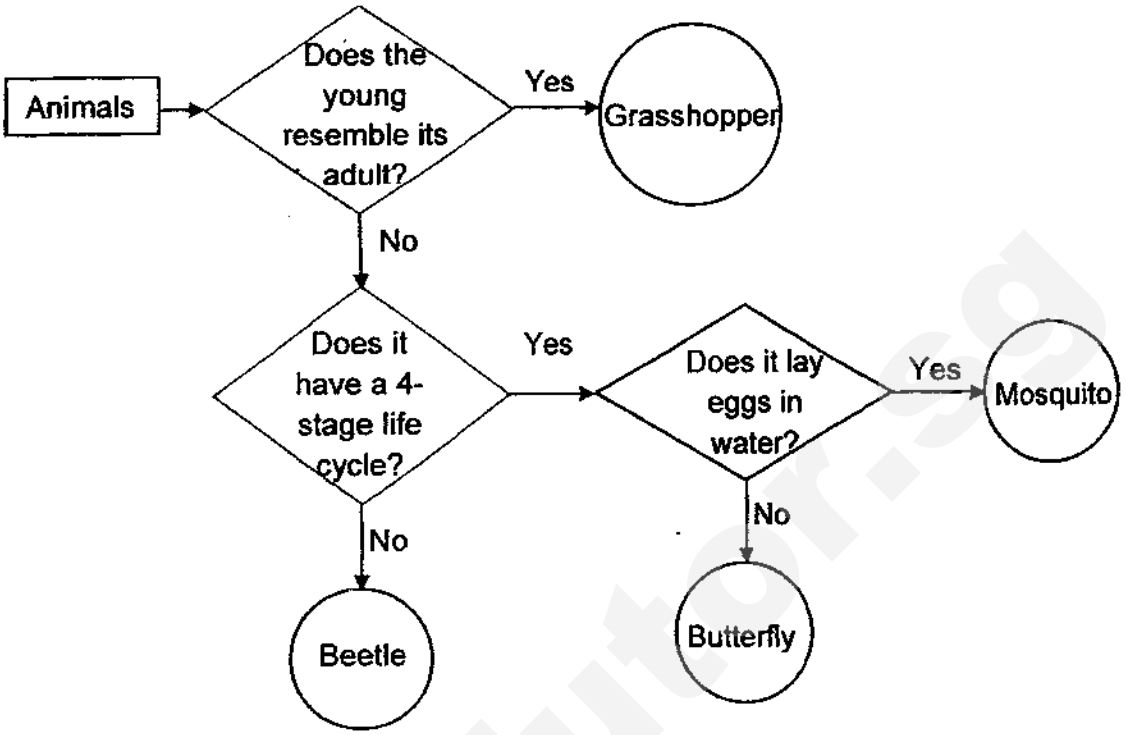
A It does not feed at stage Y.
B It reproduces by laying eggs.
C It has fully developed wings at stage X.

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

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

11. The classification chart below shows how four animals were classified.

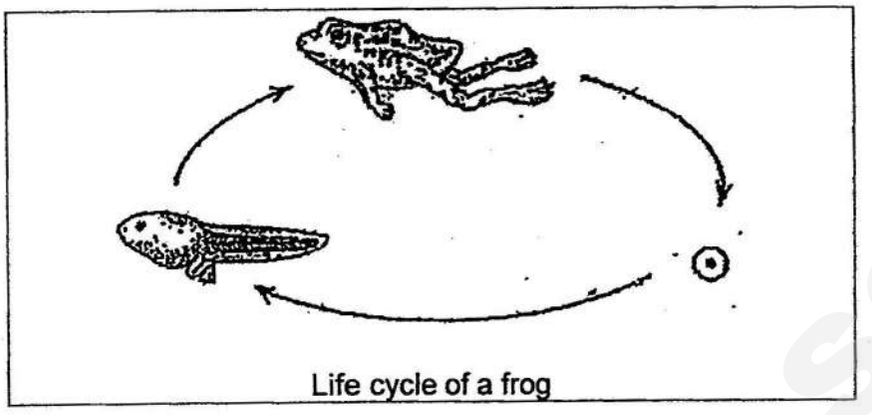


Which one of the animals above was classified **incorrectly**?

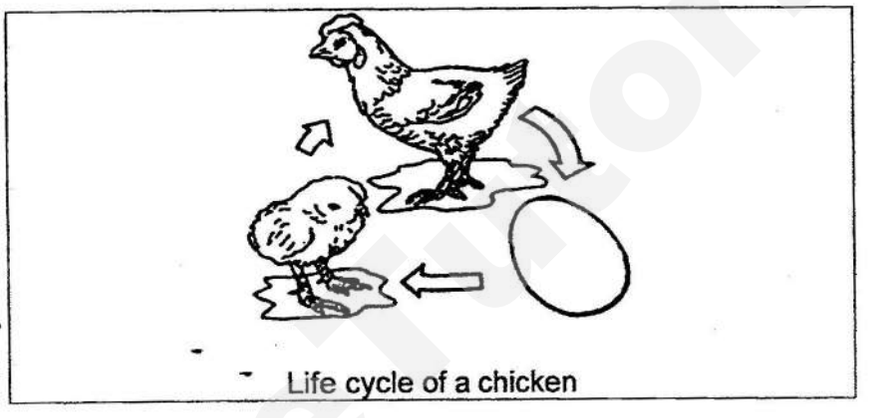
(1) Beetle
(2) Butterfly
(3) Mosquito
(4) Grasshopper

Need a home tutor? Visit smiletutor.sg

12. The diagram below shows the life cycle of a frog and a chicken.



Life cycle of a frog



Life cycle of a chicken

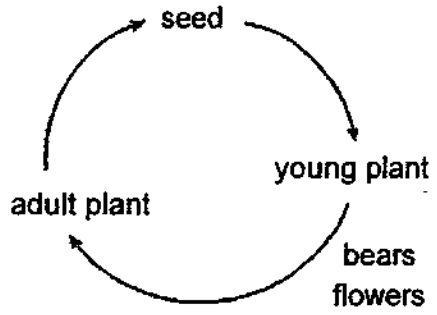
Based on the diagrams above, which one of the following is **correct** about the two life cycles?

	Similarity	Difference
(1)	Their youngs resemble the adults.	The young of the chicken lives on land but the young of the frog lives in water.
(2)	The youngs of both animals swim.	The adult of the chicken lays eggs but the frog gives birth to live young.
(3)	They both have a 3-stage life cycle.	The young of the chicken lives on land but the young of the frog lives in water.
(4)	They both reproduce by giving birth to young alive.	The young of the chicken resemble the adult but the young of the frog does not resemble the adult.

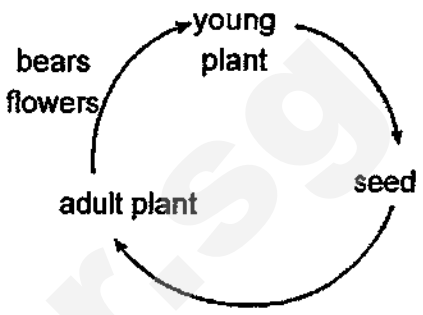
Need a home tutor? Visit smiletutor.sg

13. Which one of the following shows the stages in the life cycle of a plant **correctly**?

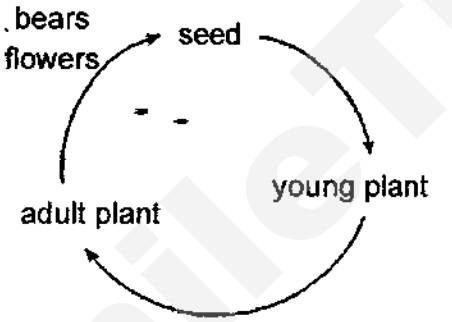
(1)



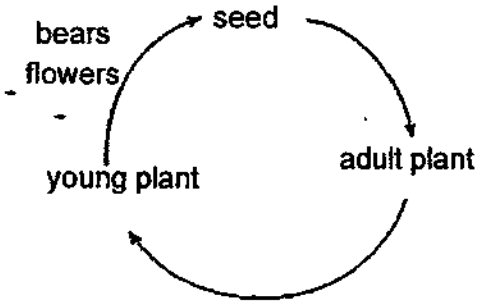
(2)



(3)



(4)



SmileTutor.sg

Need a home.tutor? Visit smiletutor.sg

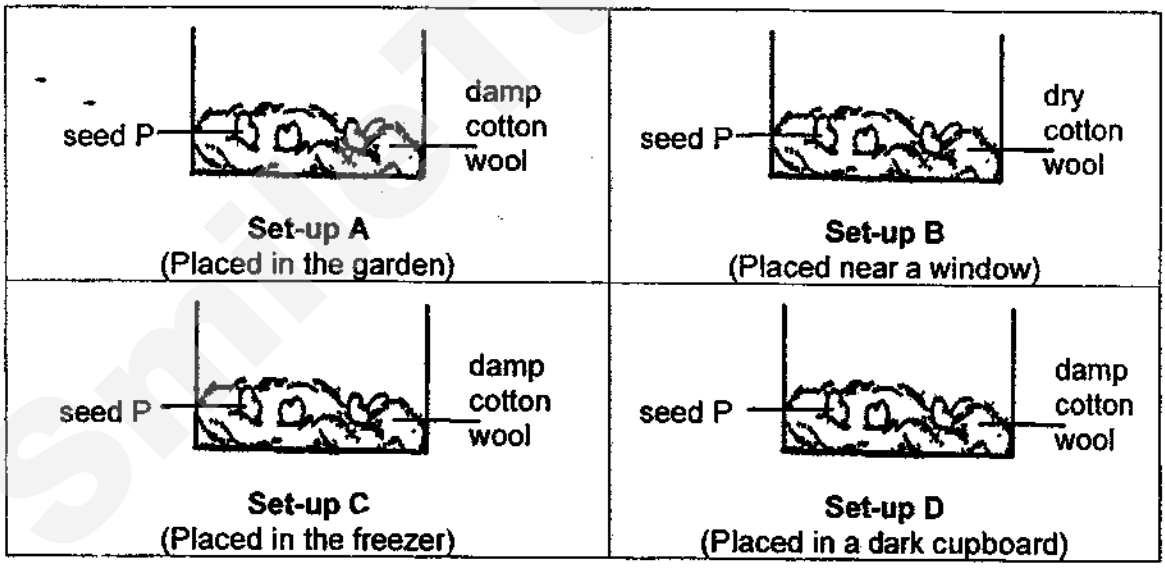
14. The table below shows how the height of the plant and the mass of the seed leaf of a seedling change over 14 days.

Day	1	3	5	7
Mass of seed leaf (g)	5	4	2	1
Height of seedling (cm)	0	2	5	8

Based on the table above, which one of the following shows the relationship between the mass of the seed leaf and the height of the seedling?

(1) The height of the seedling does not affect the mass of the seed leaf.
(2) The height of the seedling increases as the mass of the seed leaf increases.
(3) The mass of the seed leaf decreases as the height of the seedling increases.
(4) The mass of the seed leaf decreases as the height of the seedling decreases.

15. The table below shows four set-ups placed in different locations.



Which of the following set-up(s) will the seeds germinate?

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

Need a home tutor? Visit smiletutor.sg

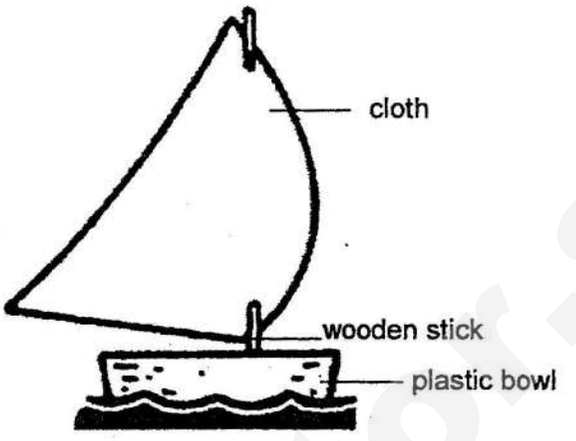
16. The picture below shows a pair of Mei Mei's shoes. Material used to make part X allows Mei Mei to walk safely in both dry and wet weathers.

A tick (√) shows the presence of the property.
What properties of material are most suitable to make part X of the shoes?

	Strong	Flexible	Waterproof
(1)	√	√	√
(2)		√	
(3)	√		√
(4)		√	√

SmileTutor.sg
Need a home tutor? Visit smiletutor.sg

17. Jim made a toy boat using a piece of cloth, a wooden stick and a plastic bowl as shown below. He placed the toy in a pond and the toy boat moved when the wind blew.



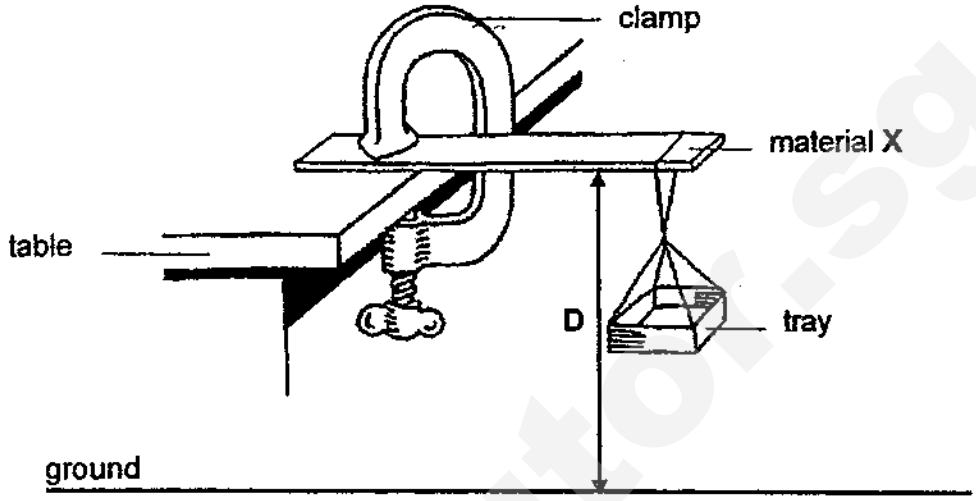
Toy boat

What properties of plastic bowl and wooden stick make them suitable for making the different parts of the toy boat above?

	Plastic bowl	**Wooden stick**
(1)	Strong	flexible
(2)	ability to float	stiff
(3)	Flexible	waterproof
(4)	Ability to sink	stiff

Need a home tutor? Visit smiletutor.sg

18. Mandy used the following set-up to find out which type of materials, **X**, **Y** or **Z**, was the most flexible. The materials were of the same thickness and length. She clamped one end of material **X** on a table, 100cm above the ground, and hung a tray on its other end as shown in the diagram below.



Mandy put a 50g weight on the tray then she measured the distance, D, as shown in the diagram above.She repeated the same experiment by replacing material **X** with **Y** and **Z** respectively.

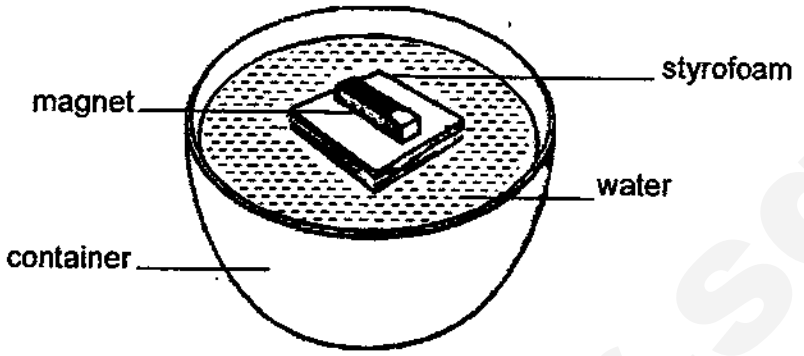
At the end of her experiment, Mandy concluded that **X** was the most flexible and **Z** was more flexible than **Y**.

Which one of the following most probably shows Mandy's results of her experiment?

	Distance (D) in cm		
	X	**Y**	**Z**
(1)	100	95	97
(2)	97	95	100
(3)	93	100	95
(4)	93	95	97

Need a home tutor? Visit smiletutor.sg

19. A magnet is attached to a piece of styrofoam and placed in a container of water to allow it to move freely as shown in the diagram below.



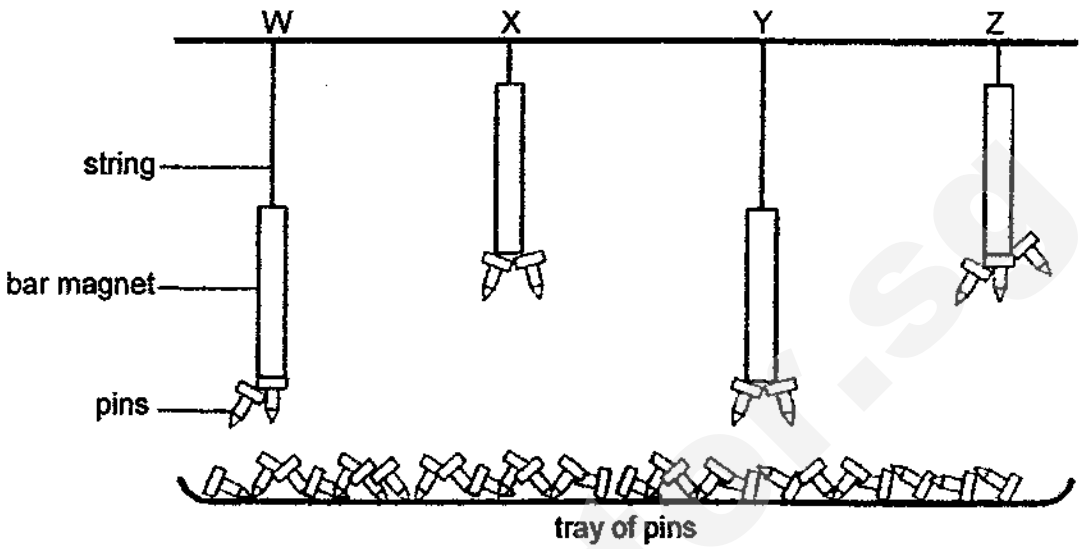
After some time, the magnet came to rest in the _____ position.

(1) East-West
(2) North-East
(3) South-West
(4) North-South

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

20. Four identical bar magnets, W, X, Y and Z, were hung from a bar using strings of different lengths as shown in the diagram below. A tray of pins was then placed under the magnets.



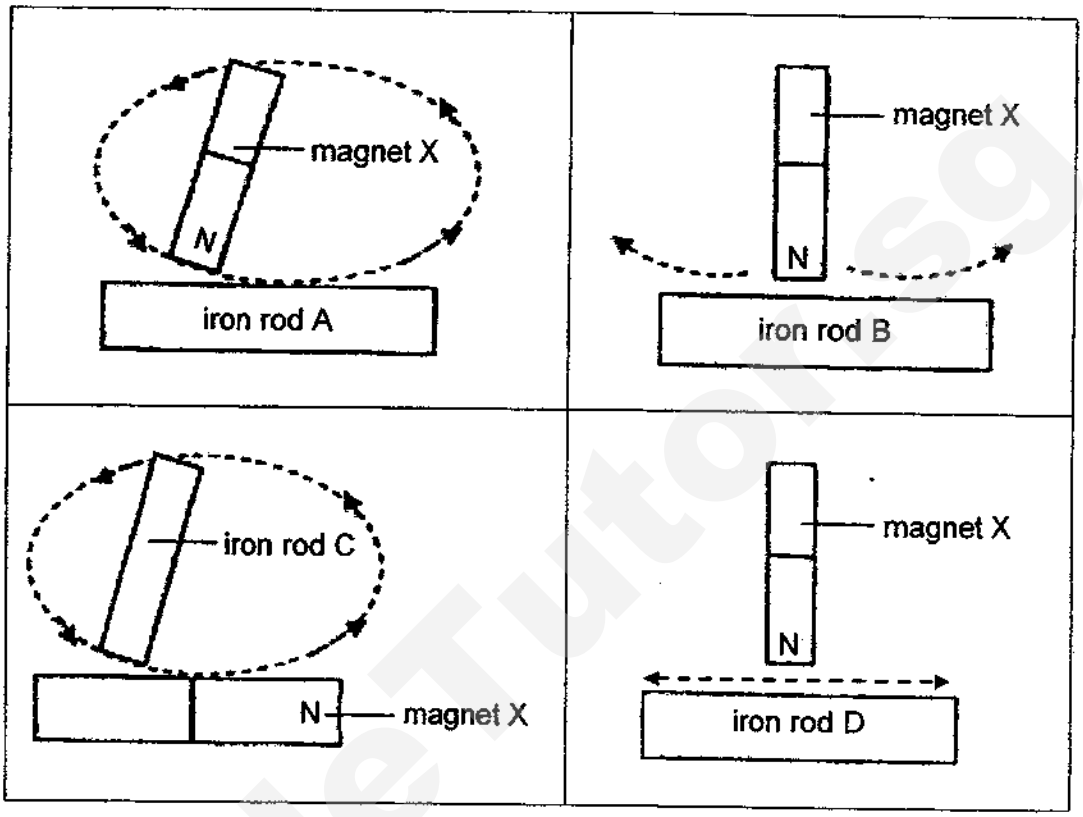
Which of the following statement(s) is/are true about the four bar magnets?

A Magnet Z has the greatest magnetic strength.
B Magnet W has the greatest magnetic strength.
C Magnets X and Y have the same magnetic strength.
D Magnet W has greater magnetic strength than magnet Y.

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

Need a home tutor? Visit smiletutor.sg

21. Anne tried to magnetise rods A, B, C and D using the stroking method as shown in the diagrams below.



Which one of the iron rods will be magnetised?

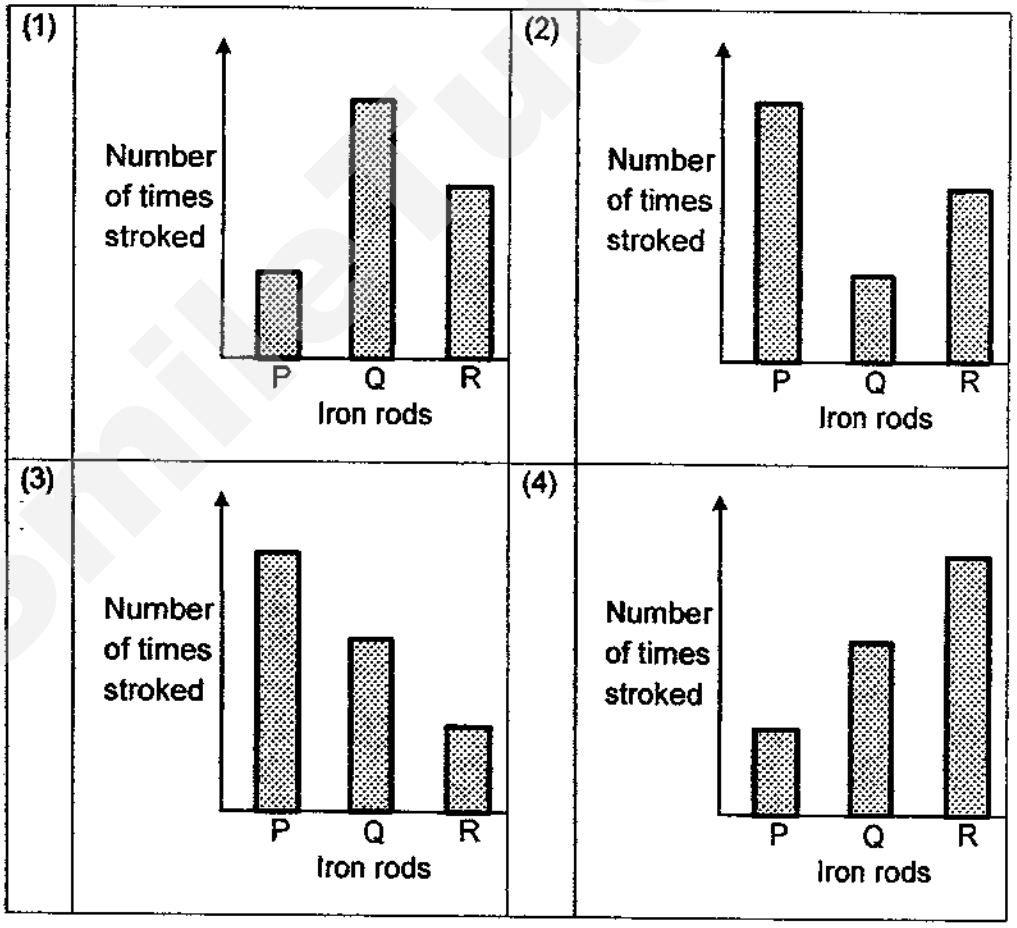
(1) A
(2) B
(3) C
(4) D

Need a home tutor? Visit smiletutor.sg

22. Amy made three magnets using the stroking method. She used the same bar magnet to stroke iron rods P, Q and R, for different number of times in the same direction. She then placed each iron rod into a tray of paperclips and counted the number of paperclips each rod attracted and recorded her observation in the table below.

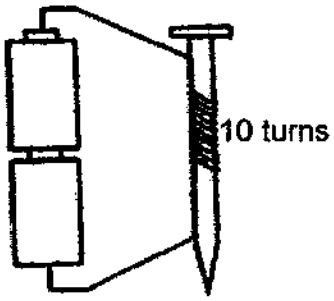
Iron rod	Number of paperclips attracted
P	5
Q	3
R	4

Which one of the following graphs correctly shows the number of times each iron rod was stroked with the bar magnet?



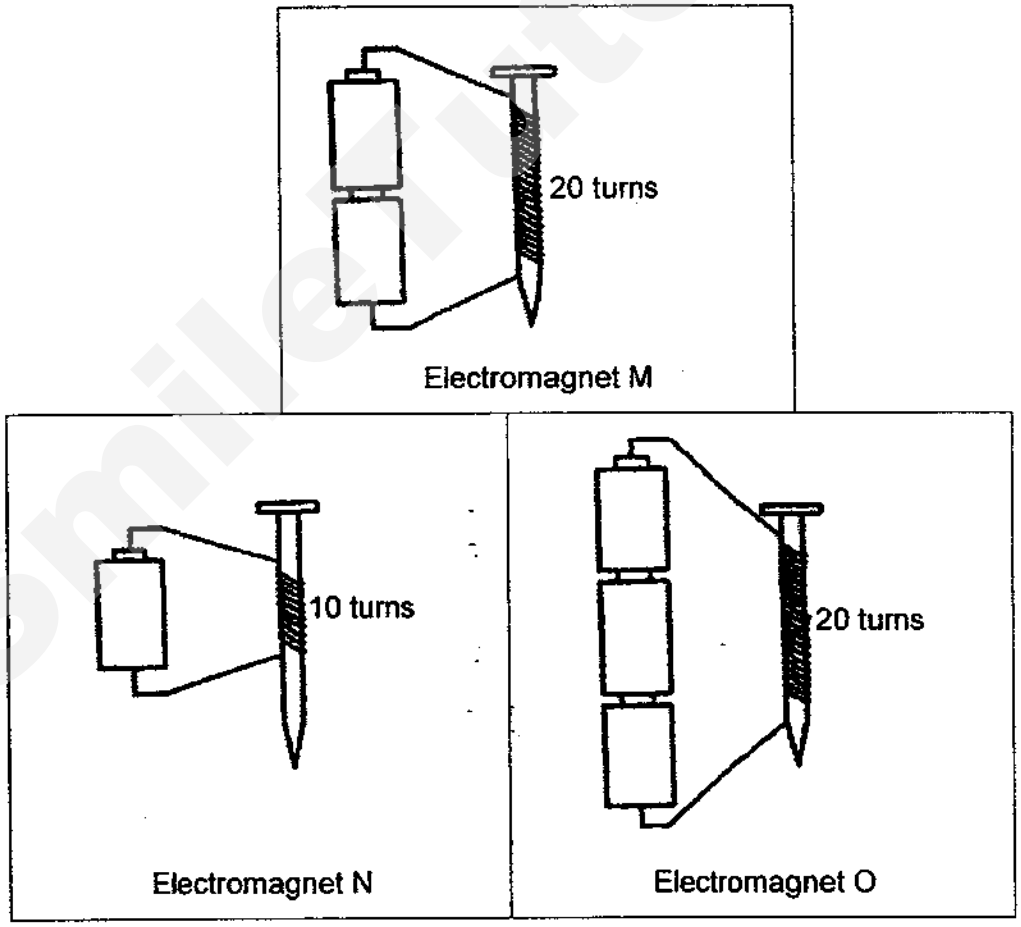
Need a home tutor? Visit smiletutor.sg

23. The diagram below shows electromagnet L.



Electromagnet L

Three electromagnets, M, N and O, were made as shown in the diagram below.



Continue on next page

Need a home tutor? Visit smiletutor.sg

Continued from previous page

Which of the following electromagnet(s) is/are stronger than electromagnet L?

(1) N only
(2) M and N only
(3) M and O only
(4) M, N and O

24. The diagram 1 below shows a magnetic floating globe. Diagram 2 shows the magnets in the magnetic floating globe with the N pole on one of the magnets and 2 unknown poles, **A** and **B**.

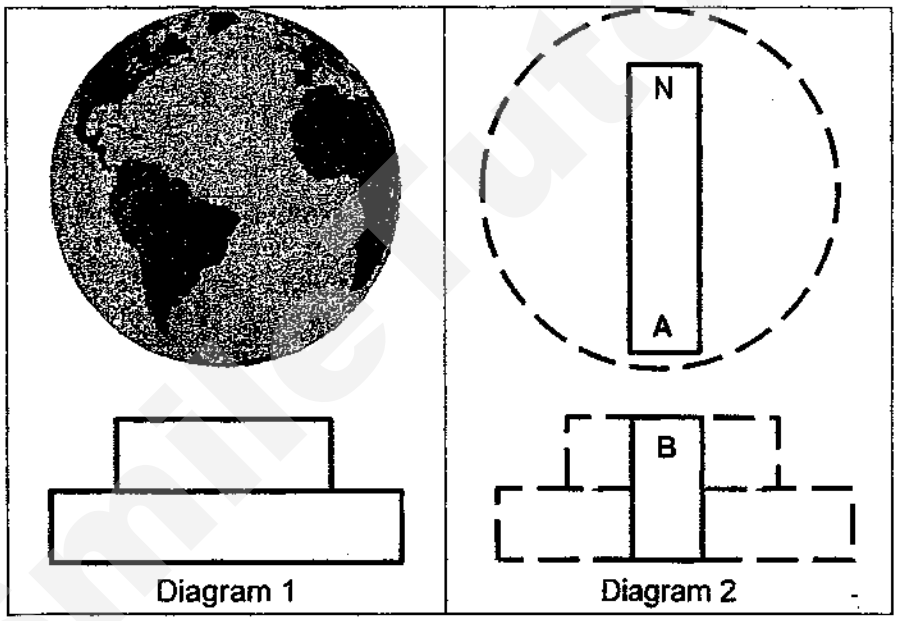


Diagram 1 Diagram 2

Which one of the following identifies poles A and B correctly?

	Pole A	Pole B
(1)	N Pole	S Pole
(2)	N Pole	N Pole
(3)	S Pole	N Pole
(4)	S Pole	S pole

Need a home tutor? Visit smiletutor.sg

Name: _____ ( )

Class: P 3 ( )

32

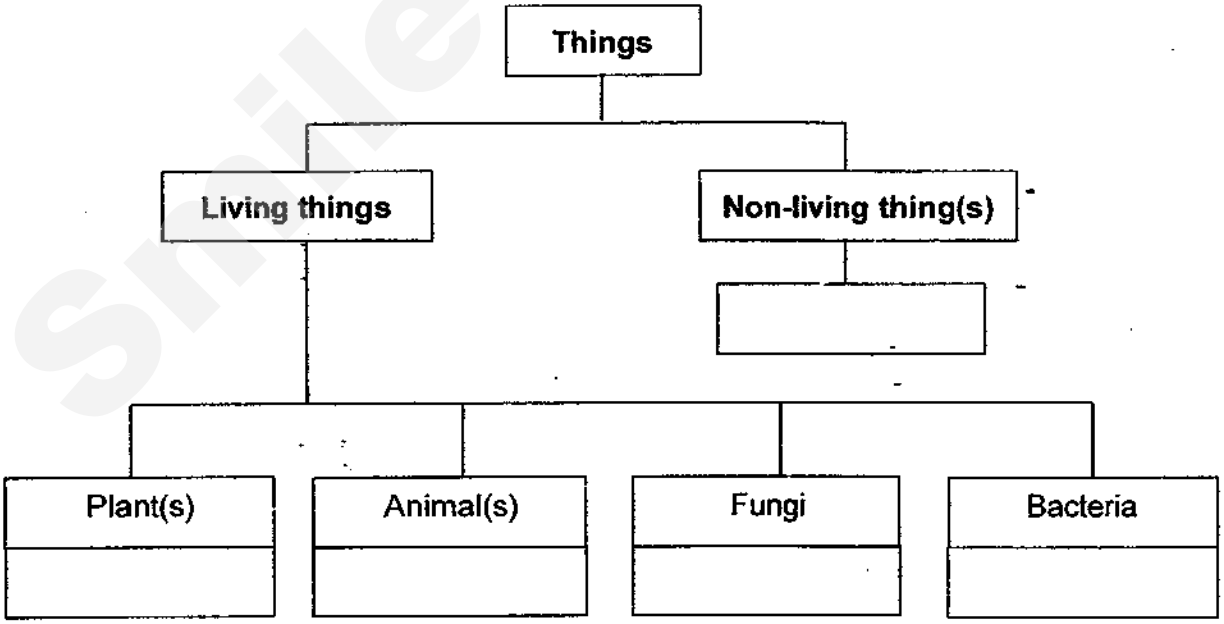
SECTION B (32 marks)

For questions 25 to 37, 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.

25. The pictures below show different types of things, A, B, C and D.

A	B	C	D

Based on the pictures above, complete the diagram below. Write letters A, B, C and D **ONCE** only in the appropriate box(es). You need **NOT** fill in all the boxes. [2]



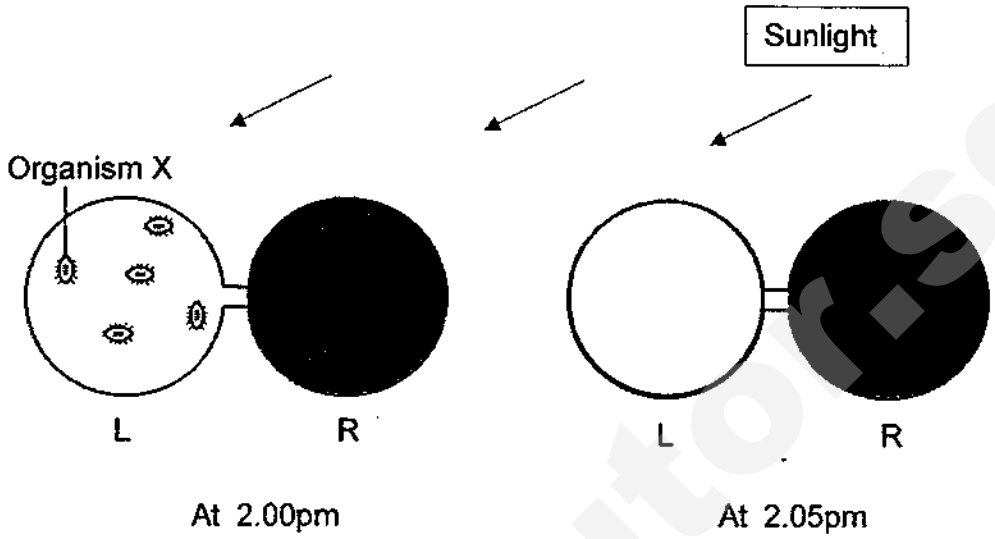
Score 2

Need a home tutor? Visit smiletutor.sg

26. Kelly prepared a set-up for an experiment. She divided the sealed glass container into two parts, L and R, as shown in the diagram below.

Part R of the glass tank was covered with a piece of thick black paper. She placed five live organisms X in part L of the glass container and fed them with moist oatmeal.

Then she placed the glass container near an open window on a bright and sunny day.



At 2.00pm At 2.05pm

5 minutes later, Kelly observed that the organisms X moved towards Part R of the glass tank.

Based on the information above, answer the following questions:

(a) Name the characteristic of living things shown in the observation made by Kelly. [1]

_____

_____

(b) A week later, Kelly found that all the organisms X were dead.
Explain clearly why. [1]

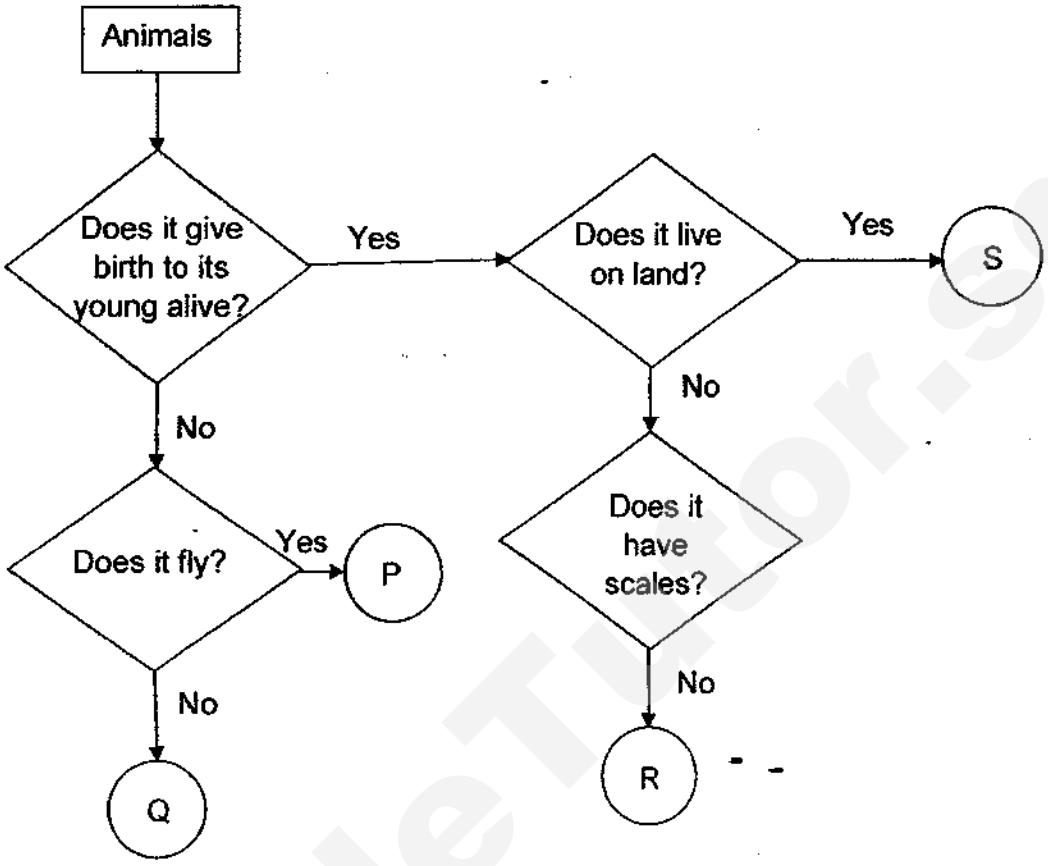
_____

_____

Score	/ 2

Need a home tutor? Visit smiletutor.sg

27. The flow chart below shows how 4 animals, P, Q, R and S, are being grouped.



Based on the information above, answer the questions below.

(a) Which animals, P, Q, R or S, best represent a dolphin?
Explain your answer. [1]

_____

_____

(b) Which animals, P, Q, R or S, best represent an ostrich?
Explain your answer. [1]

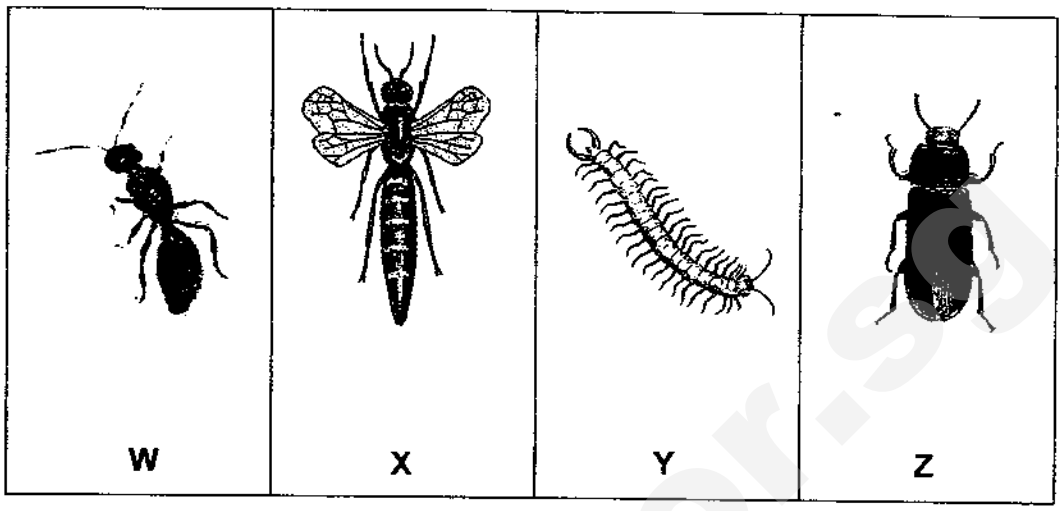
_____

_____

Score	/ 2

Need a home tutor? Visit smiletutor.sg

28. Sally classified the animals W, X, Y and Z together as a group as shown in the diagrams below.



Based on your observations of the physical characteristics of the animals, answer the following questions.

(a) Which one of the animals, W, X, Y or Z, cannot be grouped together? Give a reason for your answer. [1]

_____

_____

(b) Based on their physical characteristics, write down one similarity and one difference between animal X and Y. [2]
[Do **NOT** compare body shapes, sizes and colours.]

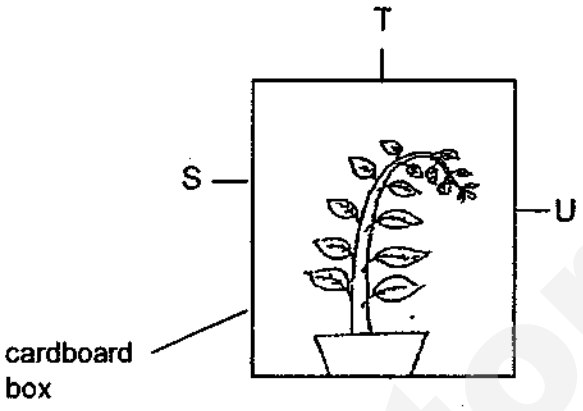
Similarity	_____ _____
Difference	_____ _____

Score	3

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

29. Tom placed a plant in a cardboard box which had a hole in it. After a week, he realised that the plant had grown sideways as shown in the diagram below.



(a) Based on how the growth of the plant, which part, S, T, or U, could the hole most likely be located? [1]

_____

(b) If the hole was covered up with a black cardboard, what would happen to the plant three weeks later? [1]

_____

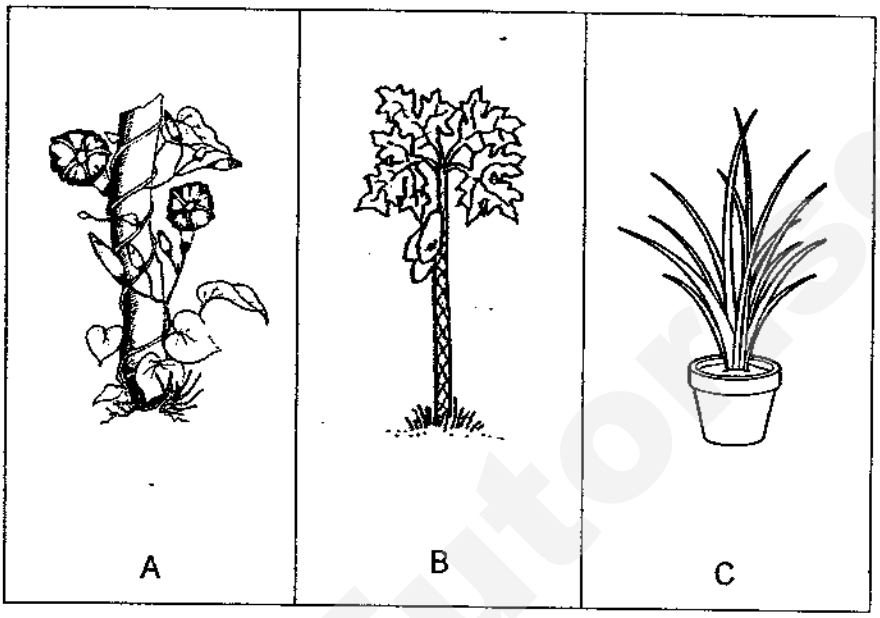
_____

Score	
	2

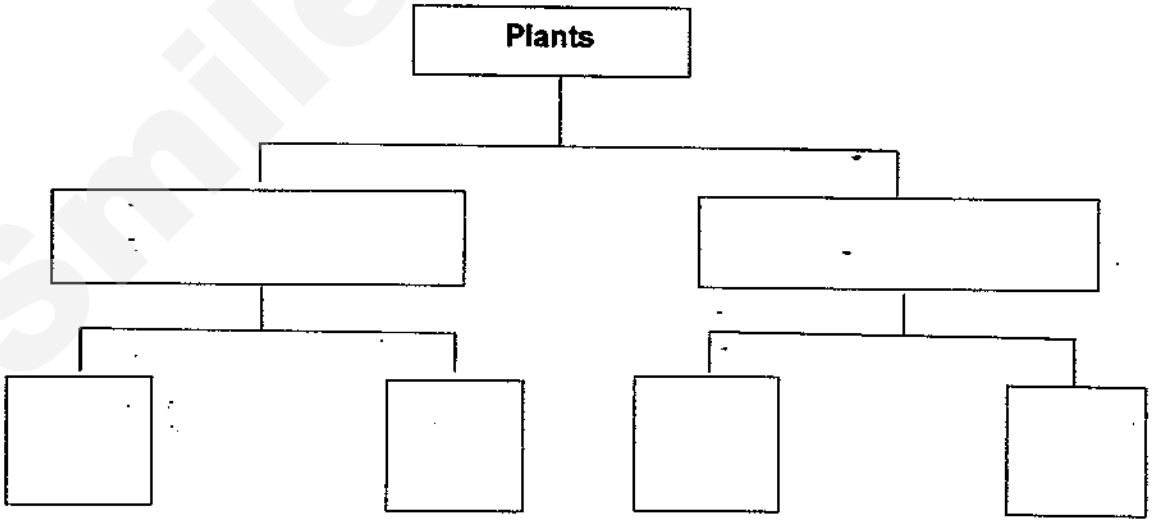
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

30. The diagram below shows three plants, A, B and C.



(a) Complete the classification chart below with the correct sub- headings and classify plants, A, B and C. [2]



Continue on next page

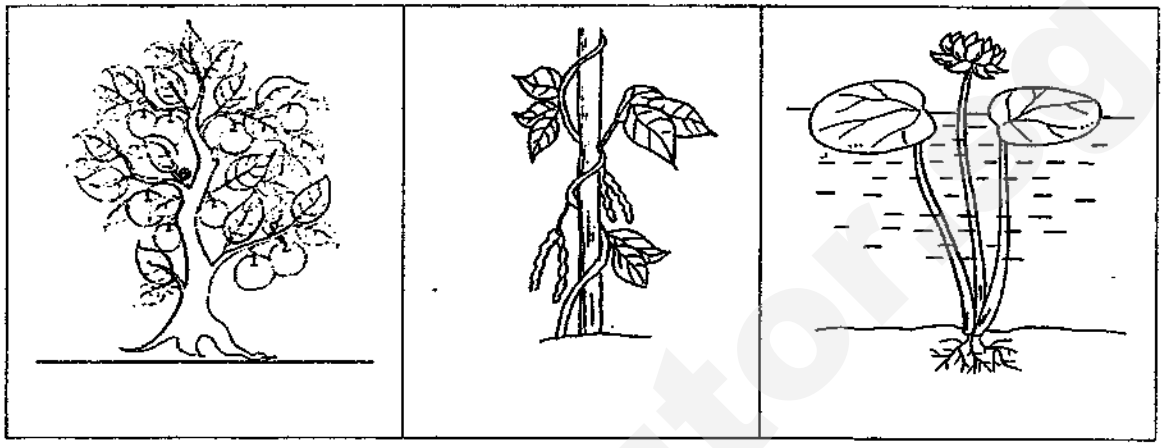
Score	2

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

Continue from previous page

(b) Observe plants in the diagram below.



Tick (√) the correct box(es) to show the similarities of the 3 plants shown above. [1]

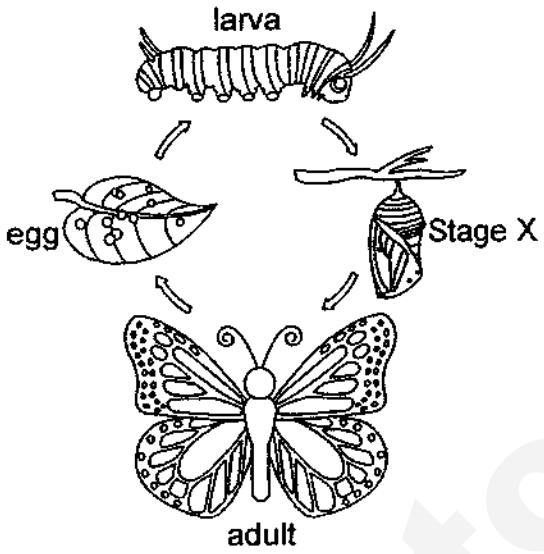
	They are land plants.
	They are flowering plants.
	They reproduce by seeds.

Score	/ 1

Smile Tutoring

Need a home tutor? Visit smiletutor.sg

31. The diagram below shows the life cycle of a butterfly.



(a) What is the name of stage X shown in the diagram above. [1]

_____

(b) At which stage of its life cycle would the butterfly be a pest to the gardeners? State a reason for your answer. [1]

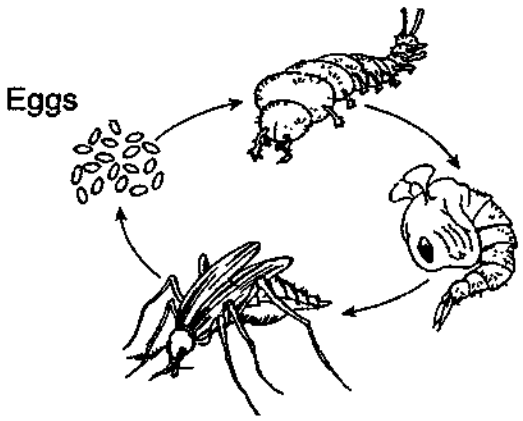
_____

_____

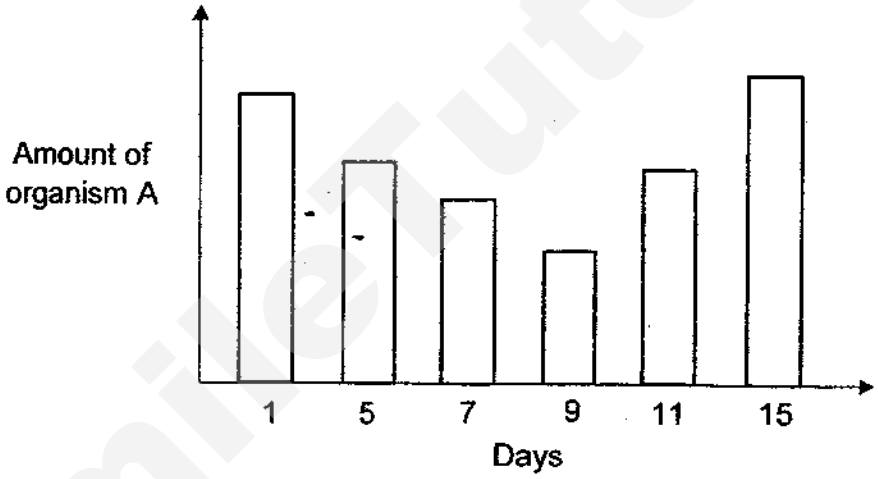
Score	/ 2

Need a home tutor? Visit smiletutor.sg

32. The diagram below shows the life cycle of a mosquito.



The young of a mosquito feeds on organism A found in the water. A container of water with some mosquito eggs was monitored for the amount of organism A in the water over a period of fifteen days. The graph below shows the amount of organism A found in the container of water.



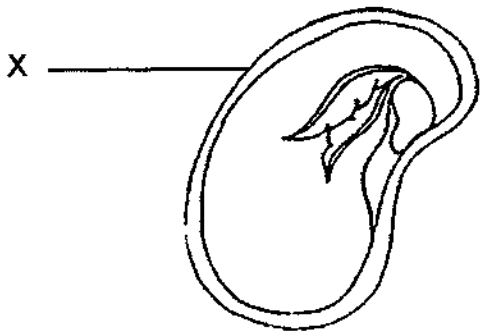
(a) The graph above shows that the amount of organism A decreased from day one to day nine. State a possible reason for this decrease? Explain your answer. [2]

(b) The graph shows that the amount of organism A increased after day nine. At what stage of its life cycle will the mosquito be in after nine days? State a reason for your answer. [1]

Score	3

Need a home tutor? Visit smiletutor.sg

33. The diagram below shows the cross section of a seed with one of its parts marked X.



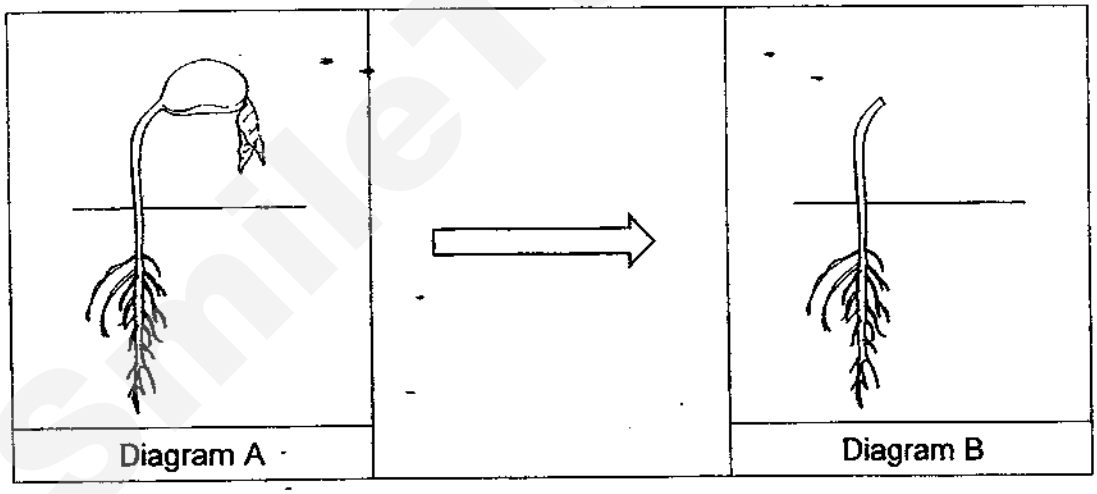
(a) Name the part of the seed marked X. [1]

_____

(b) State the function of part X.

_____

34. Diagram A below shows a seedling. Part of the seedling was cut as shown in diagram B below.



Based on your observation, state a reason why the seedling withered the following day. [2]

_____

_____

Score	/4

SmileTutor.sg

Need a home tutor?. Visit smiletutor.sg

35. Jean conducted an experiment on two materials G and H to find out which material absorbs more water. The steps that Jean carried out in her experiment are shown below.

(a) Arrange the steps in the correct order by writing **2, 3 and, 4** in the boxes provided below. (The first step is written below.) [1]

Step [1] : Cut materials G and H into strips of equal lengths and thickness.

Step [ ] : Observe materials G and H after 2 minutes.

Step [ ] : Put materials G and H into 2 similar trays.

Step [ ] : Pour equal amounts of water added with blue ink into each tray until the blue coloured water covers materials G and H.

SmileTutor.sg

Continue on next page

Score	/ 1

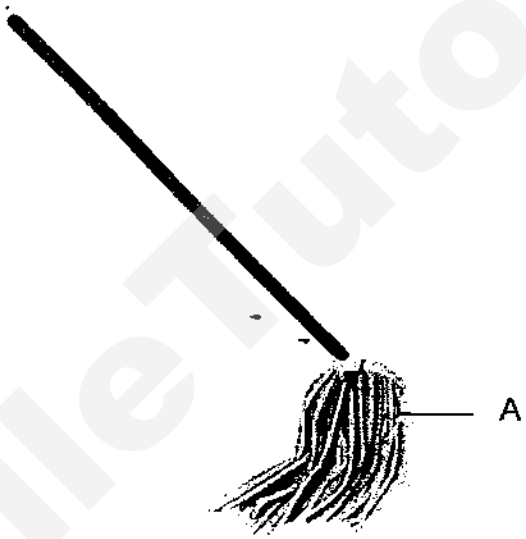
Need a home tutor? Visit smiletutor.sg

(b) Jean's observations are shown below.

Material G: It was dry. Only a few droplets of blue coloured water could be seen. Upon shaking, these droplets rolled off.

Material H: It was wet and completely blue.

The diagram below shows a mop.



Which material, G or H, do you think is more suitable to make into part A of the mop as shown in the above diagram? Give a reason for your answer. [1]

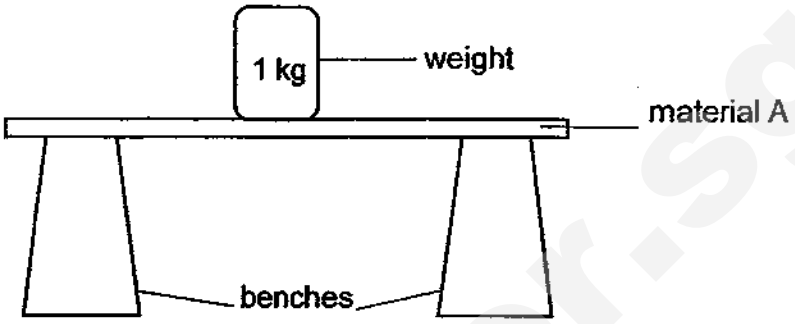
_____

_____

Score	1

Need a home tutor? Visit smiletutor.sg

36. Victor set up an experiment as shown below. He tested three different materials A, B and C. He tested material A by placing it on two benches and added 1kg-weights on it until it broke. He then repeated the same experiment for material B and C.



The table below shows the results of his experiment.

Material	Maximum number of 1kg- weights it could hold before the material broke
A	7
B	2
C	9

(a) What property of material does the experiment aim to find? [1]

_____

Continue on next page

Score	1

Need a home tutor? Visit smiletutor.sg

Continued from previous page

(b) Identify variable(s) that Victor must keep the same in order to conduct a fair test. Tick (√) the correct box(es). [1]

Variables	Tick (√)
Thickness of materials	
Distance between 2 benches	
Types of material	
Length of material	

(c) Which material(s) can Victor use to make into a bag to carry a 5-kg object? [1]

_____

Score	/ 2

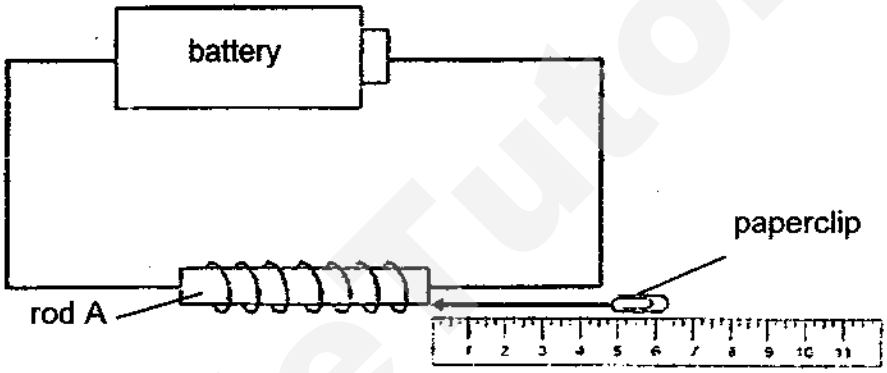
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

37. Jack made three electromagnets using rods A, B and C, of the same length. The table below shows the materials each rod is made of. He ensured that each electromagnet had only one battery.

Rod	Material of rod
A	Iron
B	Steel
C	Wood

He then placed the electromagnet at one end of a ruler and slowly pushed a paperclip towards the electromagnet from the other end of the ruler until the paperclip was attracted to the rod as shown in the diagram below.



The table below shows the result of Jack's experiment.

Rod	Distance at which the paperclip was attracted to the magnet (cm)
A	6
B	8
C	0

(a) Jack noticed that rod C did not attract the paperclip at all. Explain why there was no interaction between the electromagnet made of rod C and the paperclip. [2]

Continue on next page

Score 2

Need a home tutor? Visit smiletutor.sg

(b) Which one of the rods was the strongest electromagnet? State a reason for your answer. [1]

_____

_____

(c) Without adding or removing any part of the set-up, state one way to increase the strength of the electromagnet. [1]

_____

_____

SmileTutor.sg

End of Paper

Score	2

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER KEY

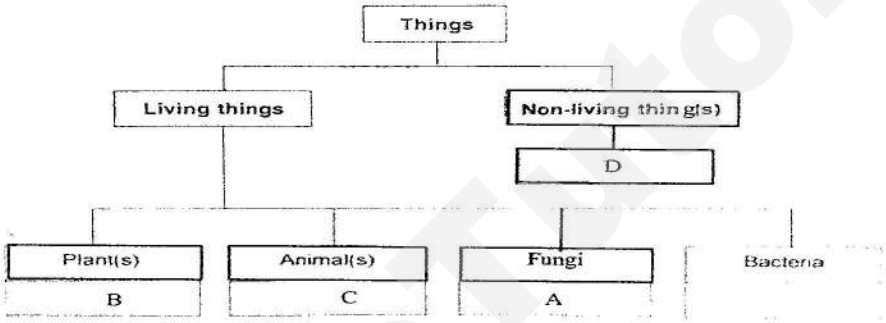
YEAR : 2018
LEVEL : PRIMARY 3
SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL
SUBJECT : SCIENCE
TERM : SA2

SECTION A

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

SECTION B

Q25



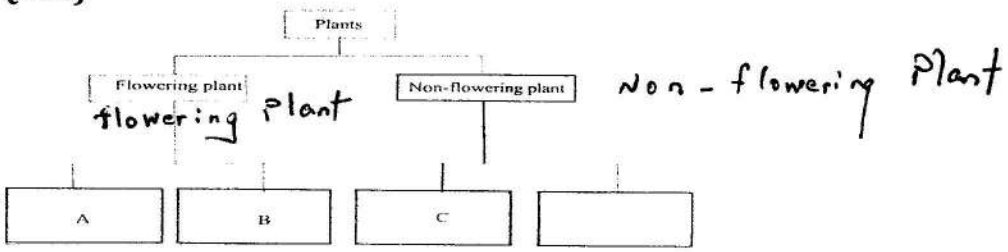
Q26a) Living things respond to changes around them.
b) All the organism X were dead as they did not have enough oxygen to survive.

Q27a) Animal R as it gives birth to its young alive , it does not live on land and it does not have scales.
b) Animal Q as it does not give birth to its young alive and it does not fly.

Q28)a) Animal Y , as it has more than six legs , unlike the other animals.
b) Similarity : Both has a pair of antenna
Difference : Animal X has a pair of wings but Animal Y does not.

Q29a) Part U.
b) The plant would wither and die due to the lack of air and sunlight for food.

Q30a)



Need a home tutor? Visit smiletutor.sg

b) ✓ They are flowering plants.
✓ They reproduce by seeds.

Q31a) The pupa stage
b) The larva stage , it would eat the leaves gardeners grow.

Q32a) The larva of the mosquito fed on organism A as all living things need food to survive.
b) Pupa , it does not feed on organism A.

Q33)a) The seed coat.
b) It helps protect the seed and the seed leaf inside it

Q34) The seedling withered the following day as it could not make food by itself without the seed leaf yet.

Q35)a)
Step 1 Cut the materials G and H into equal lengths and thickness
Step 4 Observe materials G and H after 2 minutes
Step 2 Put material G and H into 2 similar trays.
Step 3 Pour equal amounts of water added with blue ink into each tray until the blue coloured water covers material G and H.

b) Material H is most suitable. It is absorbent so that it can absorb water to clean the floor.

Q36)a) Strength
b) ✓ Thickness of materials
✓ Distance between 2 benches
✓ Length of material
c) Material A and C.

Q37a) The material of rod C is made of a non-magnetic material and only magnetic material can be made into electromagnet.
b) Rod B was the strongest electromagnet as it attracted the paperclip at the longest distance among the three rods.
c) Jack can increase the number of coils of wire around the rod to increase the strength of the electromagnet.

THE END

Need a home tutor? Visit smiletutor.sg

Rosyth School
Second Semestral Examination for 2018
SCIENCE
Primary 3

Total Marks: ____/ 46

Name: _____

Class: Pr 3 - _____ **Register No.** _____ **Duration: 1 h 30 min**

Date: 31 October 2018 **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 23 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.

*** This booklet consists of 13 printed pages (including cover page).**

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Part 1

For each question from 1 to 23, 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.** **(46 Marks)**

1. A snail hides itself in its shell when touched.

This shows that the snail is a living thing because it can _____.

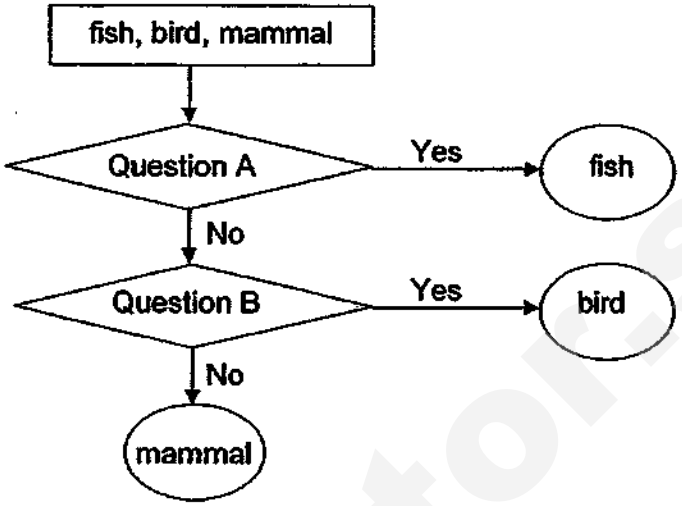
(1) breathe
(2) grow
(3) respond
(4) reproduce

2. Which one of the following statements is true for all insects?

(1) They live on land.
(2) They have wings.
(3) They feed on other animals.
(4) They have the same number of legs.

Need a home tutor? Visit smiletutor.sg

3. Study the chart below.



Which of the following are the missing questions A and B?

	Question A	Question B
(1)	Does it have gills?	Does it have hair?
(2)	Does it have a tail?	Does it have wings?
(3)	Does it have hair?	Does it have a beak?
(4)	Does it have fins?	Does it have feathers?

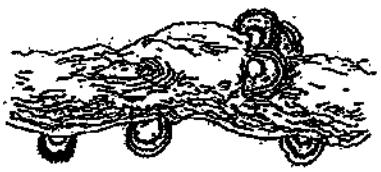
4. Which one of the following living things can bear flowers?

(1) fern

(2) banana plant

(3) mushroom

(4) bracket fungi



Need a home tutor? Visit smiletutor.sg

5. Ben compared two living things, P and Q.

Difference: P does not make its own food but Q makes its own food.
Similarity: Both P and Q reproduce from spores.

What could P and Q be?

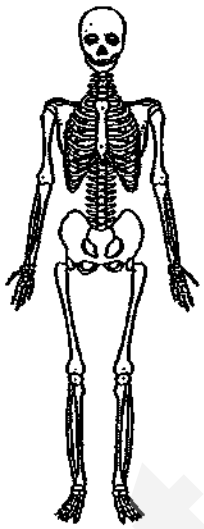
	P	Q
(1)	fern	mushroom
(2)	flowering plant	mushroom
(3)	fern	flowering plant
(4)	mushroom	fern

6. How is bacteria similar to fungi?

(1) Both are micro-organisms.
(2) Both reproduce by spores.
(3) Both are able to make food.
(4) Both need air, food and water.

Need a home tutor? Visit smiletutor.sg

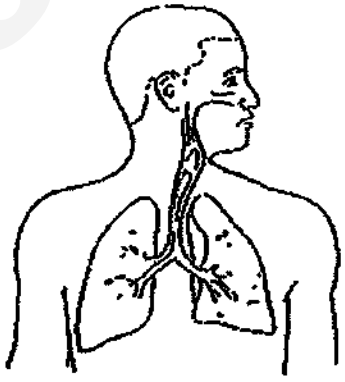
7. Study the diagram below.



The above diagram shows the _____ system.

(1) skeletal
(2) digestive
(3) muscular
(4) respiratory

8. The picture below shows an organ system in the human body.



Which of the following statements are true of the organ system?

A : The organ system is made up of different parts.
B : Without the organ system, oxygen cannot be absorbed into the body.
C : The organ system removes carbon dioxide from the body.

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

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

9. Study the description about an organ system in the human body as shown below.

- Produces digestive juices to break down food into simpler substances.
- Works together with another organ system A to push food down from one part to another.

Which of the following is organ system A?

(1) skeletal system
(2) muscular system
(3) respiratory system
(4) circulatory system

10. Organ systems, P and Q are found in the human body. One of the functions of each organ system is described in the table below.

Organ System P	Organ System Q
• Works with another body system to enable different parts of the body to move.	• Stores undigested food until it is removed.

Identify organ system P and organ system Q.

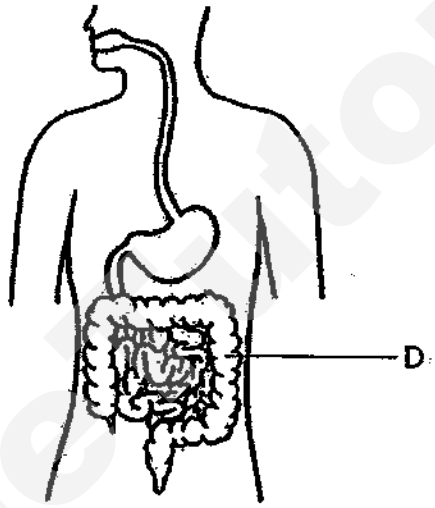
	Organ System P	Organ System Q
(1)	skeletal	digestive
(2)	circulatory	digestive
(3)	skeletal	circulatory
(4)	muscular	respiratory

Need a home tutor? Visit smiletutor.sg

11. Which one of the following shows correctly how the food travels through a human digestive system in a healthy person?

(1) anus → large intestine → small intestine → stomach → gullet → mouth
(2) stomach → gullet → mouth → anus → large intestine → small intestine
(3) mouth → gullet → stomach → large intestine → small intestine → anus
(4) mouth → gullet → stomach → small intestine → large intestine → anus

12. The diagram below shows a human digestive system.

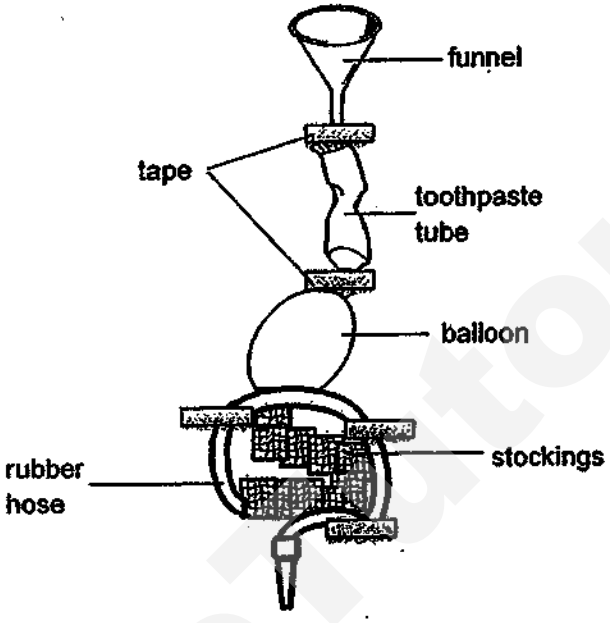


What would possibly happen when organ D is not functioning properly?

(1) More digestive juices are produced.
(2) Watery faeces will be passed out from the body.
(3) Food will be broken up into smaller pieces slowly.
(4) Undigested food will be removed from the stomach directly.

Need a home tutor? Visit smiletutor.sg

13. A model of the human digestive system was built as shown below. Each part of the model represents a part of the human digestive system.
Use the model below to answer questions 13 and 14.



Which one of the following part of the model correctly represents the part of the human digestive system?

	Part of the Model	Part of the Human Digestive System
(1)	balloon	stomach
(2)	funnel	small intestine
(3)	stocking	gullet
(4)	toothpaste tube	mouth

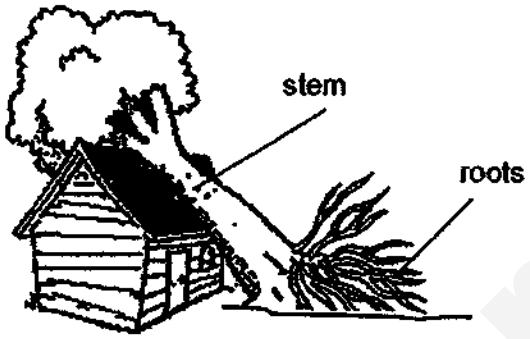
14. If the rubber hose is the large intestine, it cannot perform the function of a large intestine.

Which one of the following best explains why the rubber hose cannot perform the function of a large intestine?

(1) The rubber hose cannot absorb water.
(2) The rubber hose cannot absorb digested food.
(3) The rubber hose cannot produce digestive juices.
(4) The rubber hose cannot cut the food into smaller pieces.

Need a home tutor? Visit smiletutor.sg

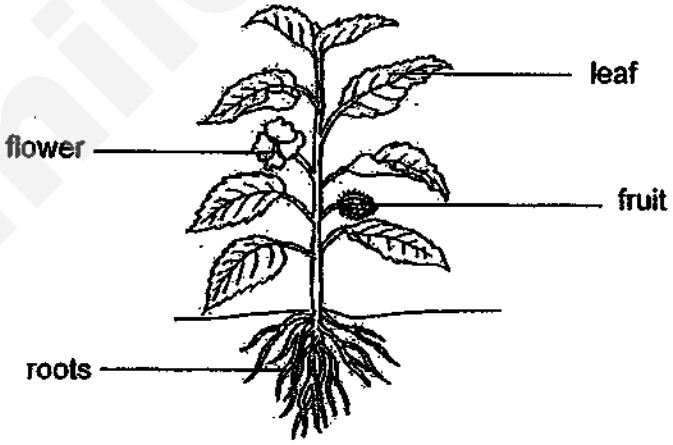
15. On a stormy day, a tree fell onto a house as shown below.



Which of the following best explains why the tree fell?

(1) The stem is not strong.
(2) The stem cannot support the tree.
(3) The roots are not able to absorb water.
(4) The roots are not able to hold it firmly to the ground.

16. Study the plant below.



Which part of the plant makes food?

(1) leaf
(2) fruit
(3) flower
(4) roots

Need a home tutor? Visit smiletutor.sg

17. There are three similar adult plants, A, B and C. They are placed under the sun and watered every day. One part of each plant is removed completely as shown in the table below.

Plant	Part of the Plant that is Removed Completely
A	roots
B	fruits
C	flowers

After one month, which of the following plant(s) will not die?

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

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

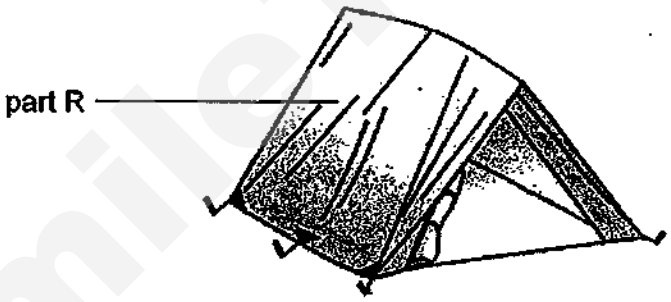
18. Study the table below.

X	Y
chopsticks	wood
vase	ceramic
knife	metal

Which one of the following are suitable headings in place of X and Y?

	X	Y
(1)	Objects	Materials
(2)	Objects	Uses
(3)	Materials	Properties
(4)	Materials	Uses

19. The camping tent shown below keeps out the rain and the sun. It can be folded easily when not in use.



Which of the following most correctly states the properties of part R?

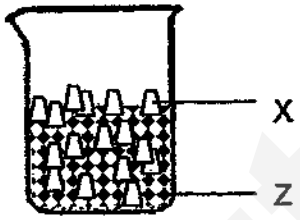
	Allows light to pass through	Waterproof	Flexible
(1)	Yes	Yes	Yes
(2)	Yes	No	No
(3)	No	Yes	Yes
(4)	No	No	No

Need a home tutor? Visit smiletutor.sg

20. Which one of the following can be attracted by a magnet?

(1) iron ball
(2) rubber ball
(3) plastic ball
(4) wooden ball

21. Rajan was given a beaker containing small pieces of two materials, X and Z, mixed together.



The properties of X and Z are given in the table below.

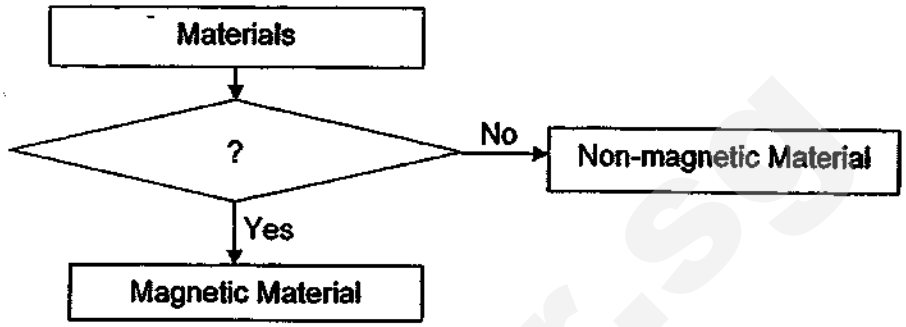
	Can it be attracted by a magnet?	Does it allow light to pass through?	Does it float on water?	Is it waterproof?
X	No	Yes	No	Yes
Z	Yes	No	No	Yes

Which property should Rajan use in order to separate the two materials in the shortest time?

(1) It is waterproof or absorbent.
(2) It is able to float or sink in water.
(3) It can or cannot be attracted by a magnet.
(4) It allows or does not allow light to pass through it.

Need a home tutor? Visit smiletutor.sg

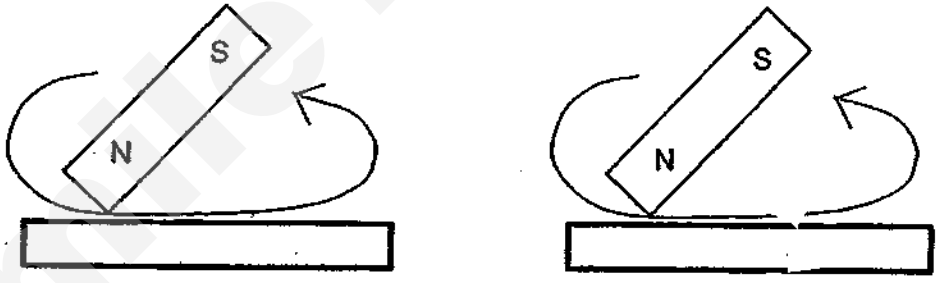
22. The diagram below shows a flow chart.



Which one of following is the missing question in the box?

(1) Is it a metal?
(2) Can it be made into a magnet?
(3) Can it be repelled by a magnet?
(4) Does it have a north and south pole?

23. Jill stroked two similar iron rods, A and B, with the same magnet as shown below.



Rod A Rod B

Both rods became magnets.
Rod A attracted fewer pins than rod B.

Which one of the following shows the possible number of strokes used for rod A and rod B respectively?

	Rod A	Rod B
(1)	30	30
(2)	15	30
(3)	15	15
(4)	30	15

End of Booklet A

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Rosyth School
Second Semestral Examination for 2018
SCIENCE
Primary 3

Name: _____ Total Marks: /80

Class: Pr 3 - _____ Register No. _____ Duration: 1 h 30 min

Date: 31 October 2018 Parent's Signature: _____

Booklet B

Instructions to Pupils:

1. For questions 24 to 34, write your answers in the spaces given in this booklet.

	Maximum	Marks Obtained
Booklet A	46 marks	
Booklet B	34 marks	
Total	80 marks	

* This booklet consists of 11 printed pages (including cover page).

SmileTutor.sg

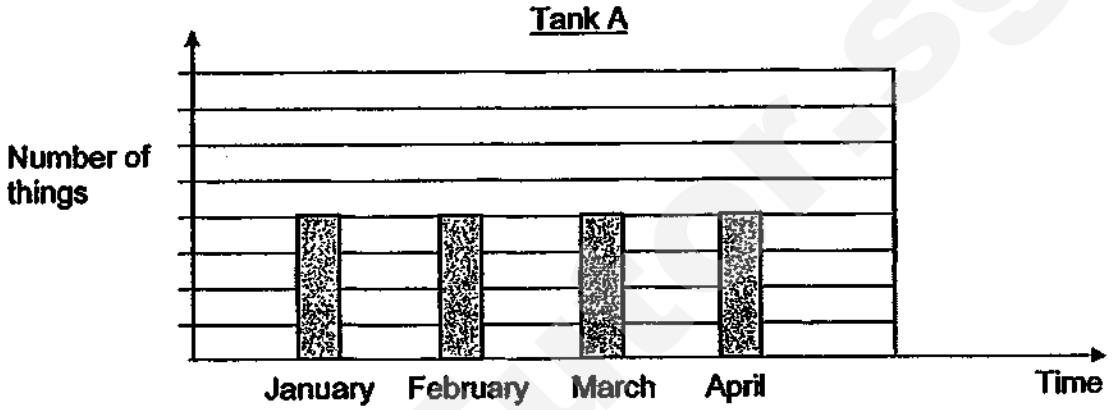
Need a home tutor? Visit smiletutor.sg

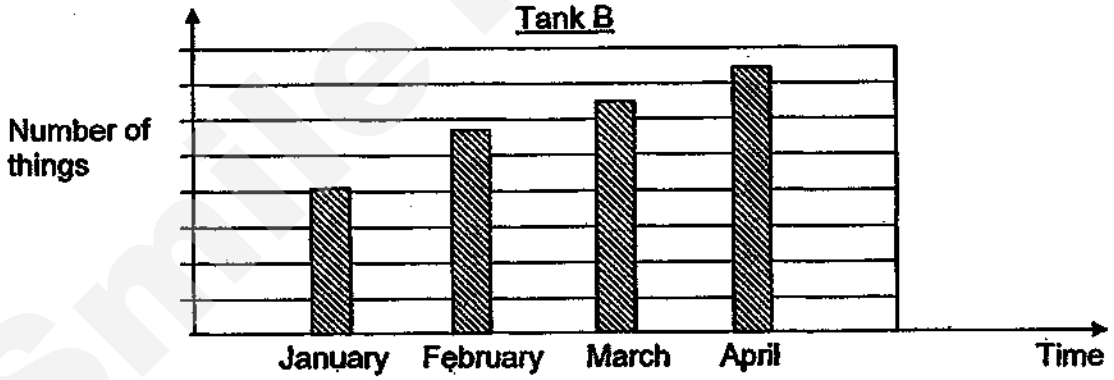
Part II

For questions 24 to 34, write your answers in the space provided. **(34 Marks)**

---

24. Ron conducted an experiment from January to April. He set up two tanks, A and B, with two different things. Both tanks were provided with air, water and food. Every month, Ron counted the number of things in both tanks and drew the bars as shown below.





(a) Based on the graph above, which tank possibly contained a living thing? Write A or B in the blank. [1]

Tank _____

(b) Explain how you arrive at your answer in (a). [1]

_____

_____

_____

Need a home tutor? Visit smiletutor.sg

25. A scientist discovered an animal Y in a jungle. He made an observation of the animal as listed below.

Feeds its young with milk

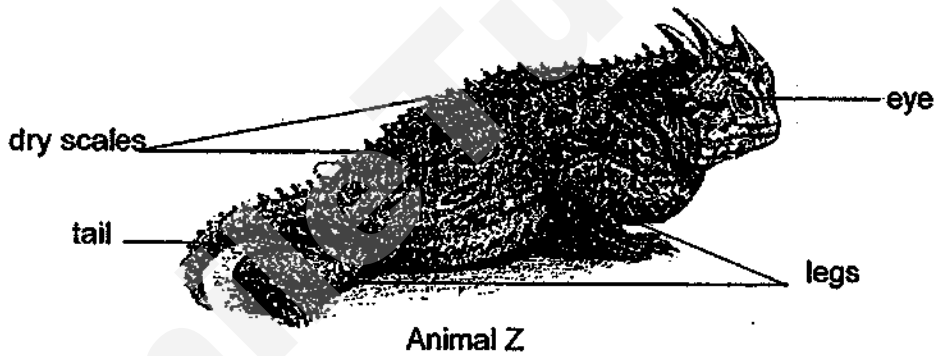
(a) Which group of animals does Y belong to? [1]

_____

(b) Write down another characteristic of animal Y which other groups of animals do not have. [1]

_____

The picture below shows another animal, Z, that the scientist saw in the forest.



Animal Z

(c) Which group of animals does Z belong to? Give your reason. [2]

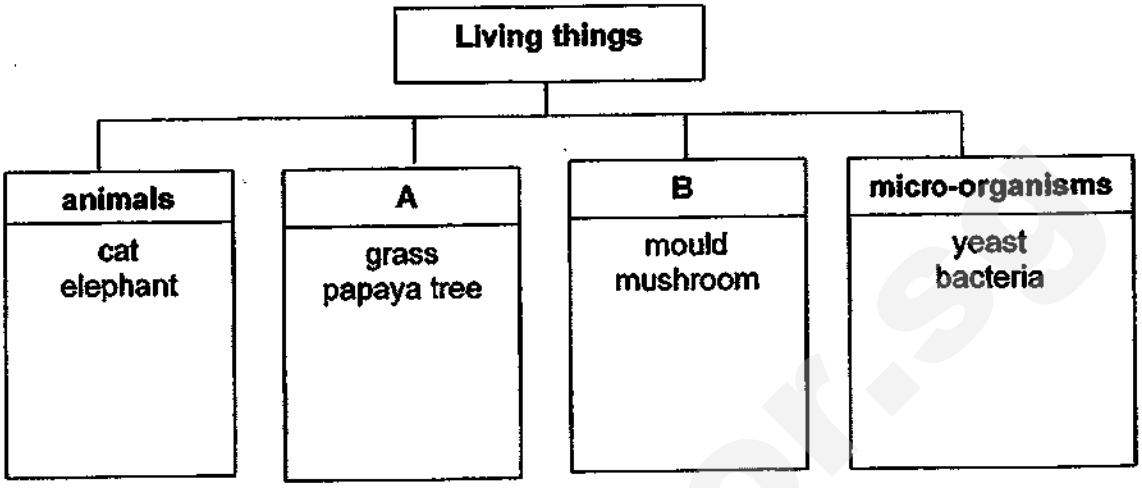
_____

_____

_____

Need a home tutor? Visit smiletutor.sg

26. Study the classification table below.



(a) Write down suitable headings for A and B. [1]

A: _____

B: _____

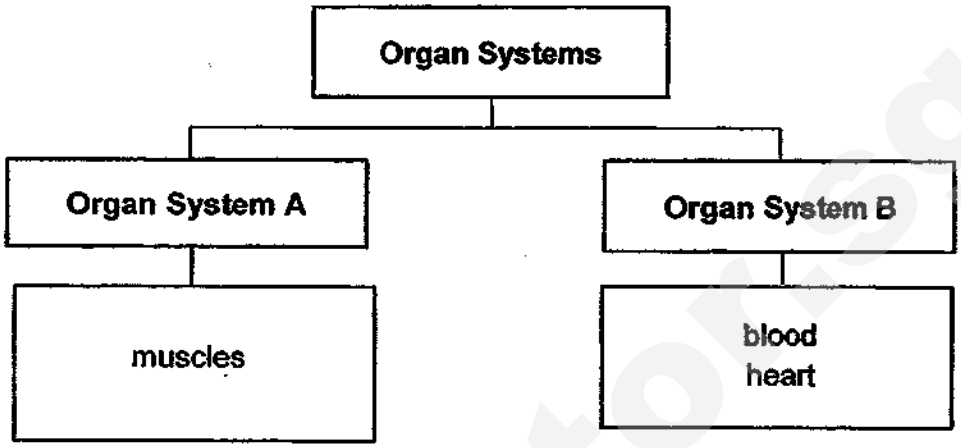
(b) Classify 'fern' using the classification table above. Write 'Fern' in the correct box. [1]

27. Match the correct human body system to its function. [2]

Function		Human Body System
Allows the exchange of gases to take place.	•	• circulatory system
Carries food, water and oxygen to various parts of the body.	•	• respiratory system
Supports the body and gives it shape.	•	• muscular system
Helps different parts of the body to move.	•	• skeletal system

Need a home tutor? Visit smiletutor.sg

28. Susan classified the parts of the organ systems as shown below.



(a) Provide a suitable heading for the following: [2]

Organ System A: _____

Organ System B: _____

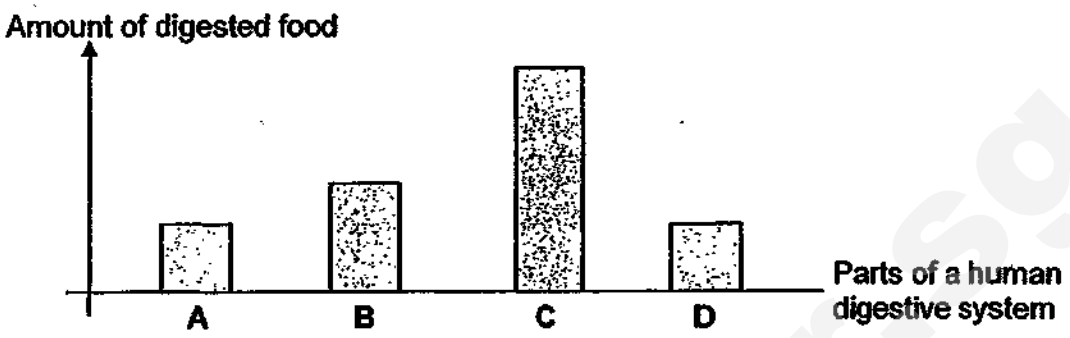
(b) In which organ system, A or B, should Susan place the "blood vessels"? [1]

Organ System [ ]

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

29. The graph below shows the amount of digested food in different parts, A, B, C and D of a human digestive system. The parts are not in the correct order.



(a) Using the results, identify parts C and D of a human digestive system by completing the table below.

Part A is the gullet. Part B is the stomach. They have already been done for you. [2]

Parts of a Human Digestive System	Part
gullet	*A*
mouth	
stomach	*B*
small intestine	

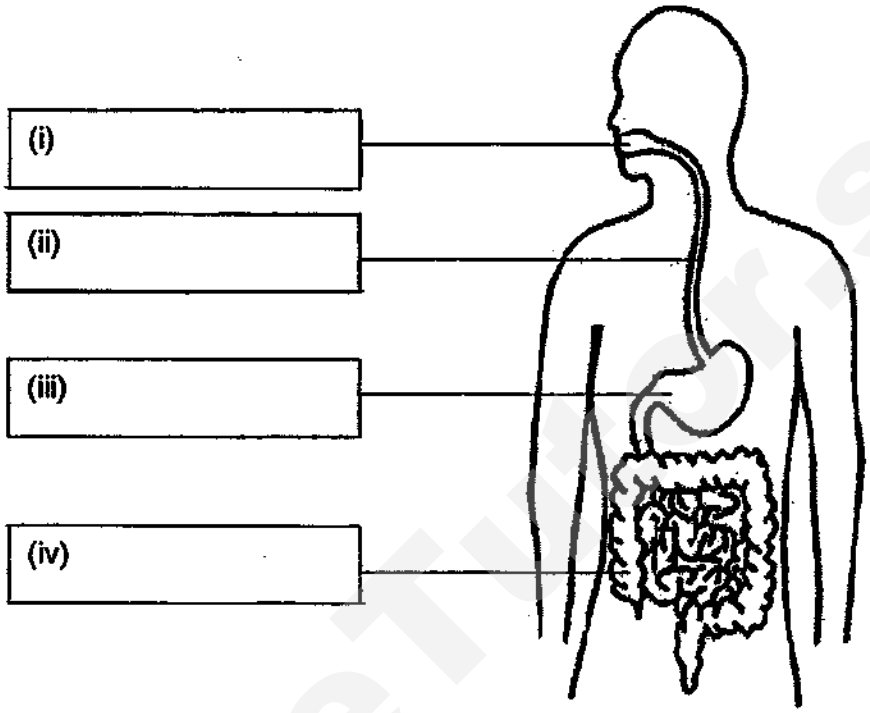
(b) Which organ system will transport the digested food from the small intestine to other parts of the body? [1]

_____

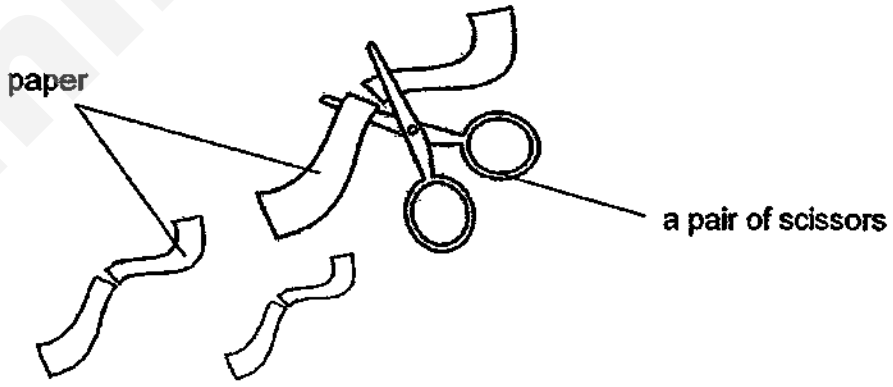
Need a home tutor? Visit smiletutor.sg

30. The diagram below shows some organs in the digestive system.

(a) Label the organs. [2]



The diagram below shows a pair of scissors used to cut paper.



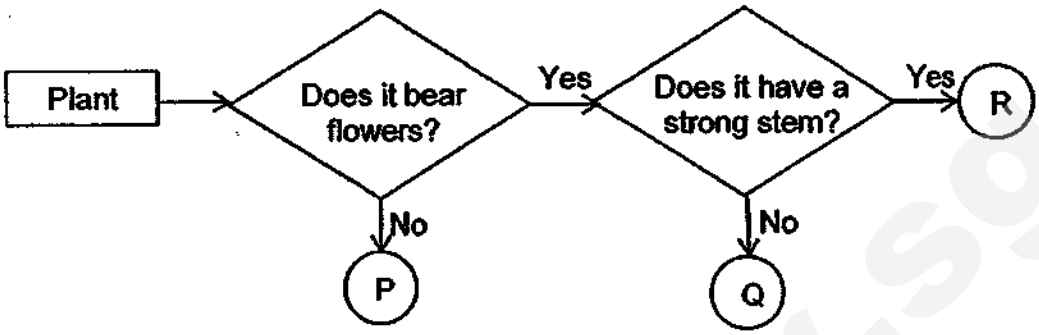
(b) Which organ in the digestive system has the similar function as a pair of scissors? Give a reason to your answer. [2]

_____

_____

Need a home tutor? Visit smiletutor.sg

31. Study the flowchart below.



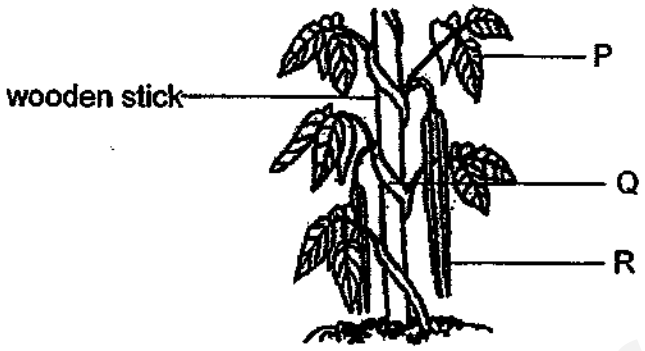
(a) State one characteristic of plant Q. [1]

(b) State one difference between plant P and plant Q. [1]

(c) State one similarity between plant Q and plant R. [1]

Need a home tutor? Visit smiletutor.sg

32. Arul observed a plant growing in his garden.



(a) Name parts P and Q shown in the plant above. [2]

Part P: _____

Part Q: _____

(b) How does the wooden stick help the plant? [1]

_____

_____

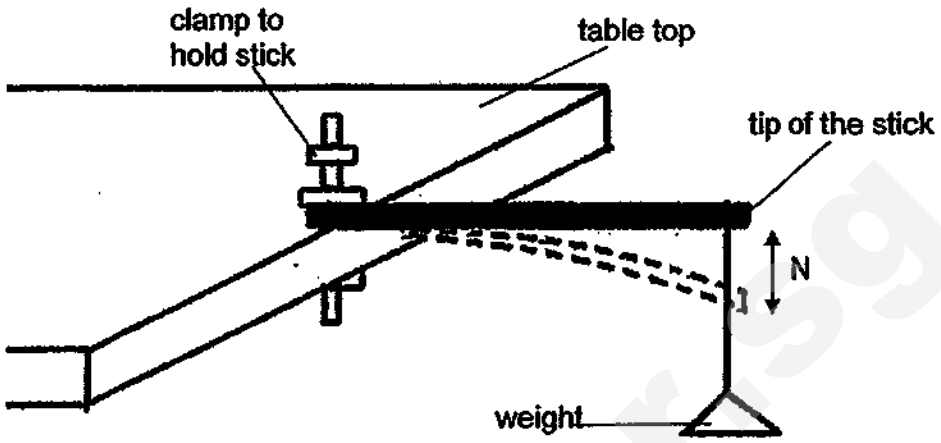
(c) Part R is the fruit of the plant. What is found inside R that helps it to reproduce?

[1]

_____

Need a home tutor? Visit smiletutor.sg

33. Baoli had the following set-up for her experiment.



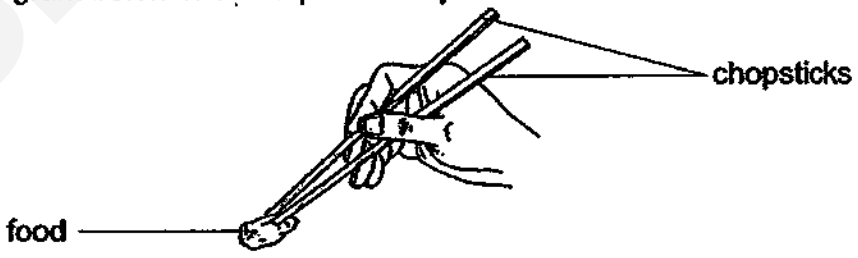
She measured N, the distance travelled by the tip of the stick when a weight is hung on it. She repeated the experiment with stick Y which is made of a different material.

(a) What property was Baoli testing? [1]

Baoli recorded her results as shown below.

	Stick X	Stick Y
N (Distance travelled by the tip of the stick when a weight is hung on it.)	5 cm	0 cm

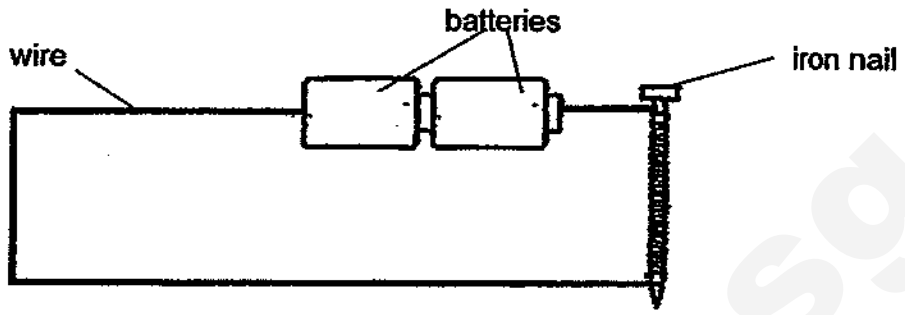
The diagram below shows a pair of chopsticks and its use.



(b) Which stick, X or Y, is more suitable for making a pair of chopsticks? Explain your answer. [2]

Need a home tutor? Visit smiletutor.sg

34. Sammy made an electromagnet as shown below.



(a) What could Sammy do to find out if the iron nail had become an electromagnet? [1]

_____

_____

(b) State 2 changes that Sammy could do to increase the strength of the electromagnet. [2]

(i) _____

_____

(ii) _____

_____

Sammy placed two magnets together as shown below.

(c) Fill in the blank below with the correct word.

Based on the above observation, Sammy inferred that A and B are

_____ poles. [1]

End of Paper

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : Rosyth

SUBJECT : SCIENCE

TERM : SA2

ORDER CALL :

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

Q24) a) Tank B

b) The number of living thing in tank B increases as living things reproduce.

Q25) a) mammal

b) They have hair as outer covering

c) Reptile because it has dry scales.

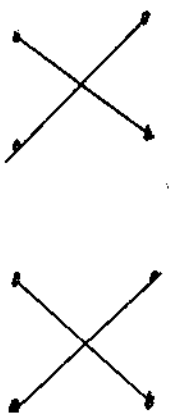
Q26) a) A : plants

B : fungi

b) box A

Need a home tutor? Visit smiletutor.sg

Q27)



Q28) a) Organ System A : muscular system.

Organ System B : circulatory system

b) Organ System B

Q29) a) mouth – D small intestine – C

b) circulatory system

Q30) a) i) mouth ii) gullet iii) stomach iv) small intestine

b) Mouth. Because it chew the food into smaller pieces just like the scissor.

Q31) a) Plant Q is a flowering plant.

b) Plant Q bear flowers but plant P does not bear flowers.

c) Both bear flowers.

Q32) a) Part P : leaves

Part Q : stem

b) It helps to support the plant from falling.

c) seeds

Q33) a) flexibility

b) Y. Less flexible while X when a weight was added chopsticks must be stiff when picking up food.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Q34) a) Put the iron nail near to some iron clips it should attract some of them.

b) i) Increase the number of batteries.

ii) Increase the number of coils around the iron nail

c) unlike poles.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

SINGAPORE CHINESE GIRLS' SCHOOL (PRIMARY)

SECOND SEMESTRAL ASSESSMENT 2018

NAME: _____ DATE: 24 OCTOBER 2018

Parent's Signature:

_____

SCIENCE

BOOKLET A

20 questions

40 marks

Total time for Booklets A & B: 1 h 25 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

Need a home tutor? Visit smiletutor.sg

Part I (40 marks)

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

1. Which one of the following statements is **not true** about living things?

   1) Living things reproduce.
   2) Living things do not die.
   3) Living things respond to changes around them.
   4) Living things need food, air and water to survive.

2. Study the table below.

Properties	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 X and Y be respectively?

	X	Y
1)	Hamster	Rose Plant
2)	Rabbit	Table
3)	Toy Car	Fish
4)	Sunflower Plant	Bird's Nest Fern

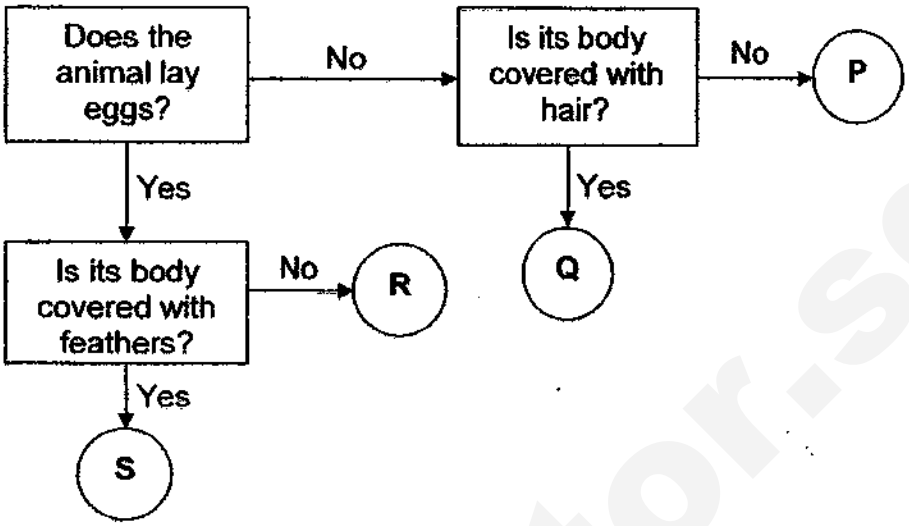
3. Which of the following pairs of animals have the same type of body covering?

   1) Sparrow and Crab
   2) Tiger and Turtle
   3) Squirrel and Snail
   4) Fish and Snake

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

4. Study the flowchart below.



Which animal is a lizard?

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

5. Mrs Lee added something to enable milk to turn into yoghurt. What could she have added?

1) mould
2) fern spores
3) mushrooms
4) bacteria

6. Daniel conducted an experiment using three similar pieces of bread. He placed them on separate clean plates and left them on the kitchen table.

Fresh bread

Moist bread

Toasted bread

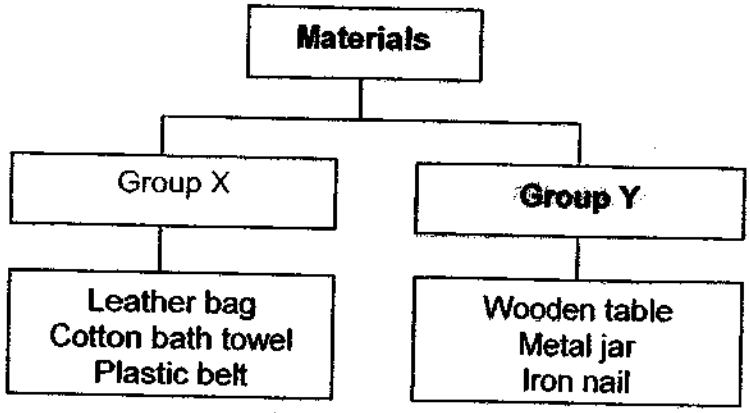
After 2 weeks, Daniel observed mould growing only on the fresh bread and moist bread. What is the most likely reason for his observation?

1) Mould cannot grow without water.
2) Mould cannot grow without light.
3) Mould can only grow with air.
4) Mould can only grow after being put in an oven.

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

7. The classification table below shows some materials that have been placed into Groups X and Y.



Which of the following headings best describe the objects classified above?

	Group X	**Group Y**
1)	Hard	Soft
2)	Flexible	Non-flexible
3)	Non-breakable	Breakable
4)	Made from natural materials	Made from man-made materials

8. Tom wants to investigate which material is most suitable to make a fish tank for a young child.

	Characteristics		
Material	**Waterproof**	**Transparent**	**Breaks easily**
W	Yes	No	Yes
X	No	Yes	Yes
Y	Yes	Yes	No
Z	No	No	Yes

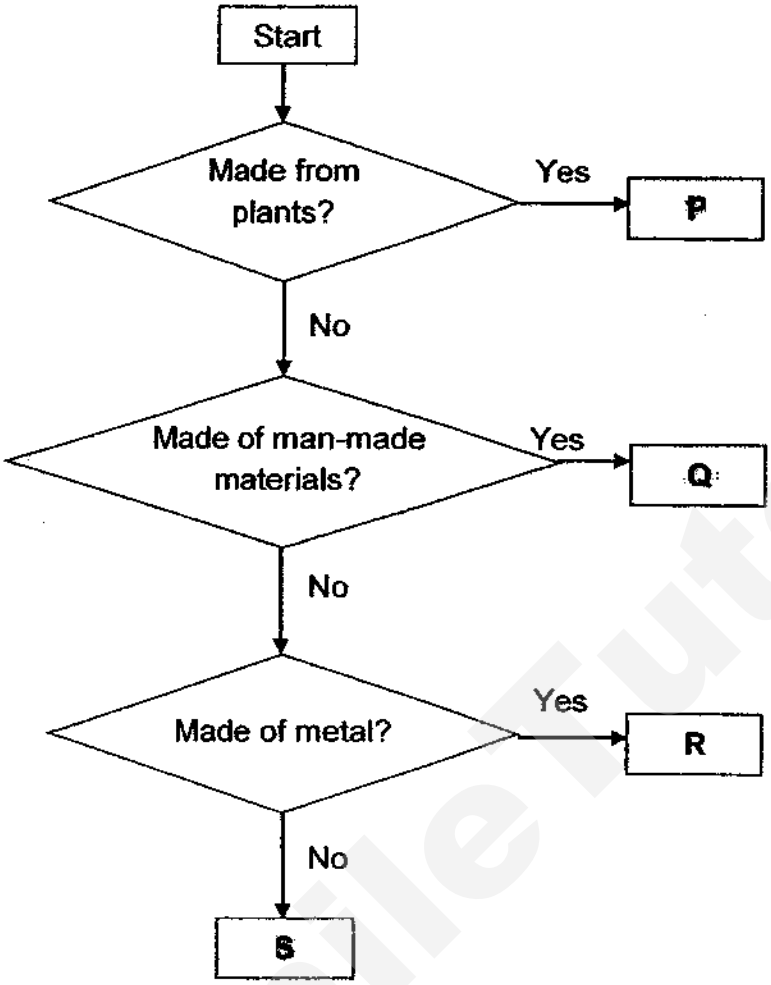
Which material is the **most suitable** material to make the fish tank?

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

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

9. Study the flowchart below.



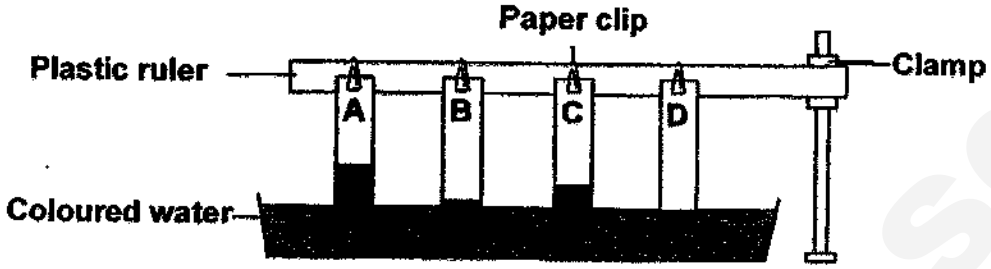
What objects are **P**, **Q**, **R** and **S** likely to be?

	P	Q	R	S
1)	paper	soil	needle	shirt
2)	key	plastic bag	leather	soil
3)	shirt	metal spoon	toothpick	nail
4)	toilet roll	plastic pail	nail	leather

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

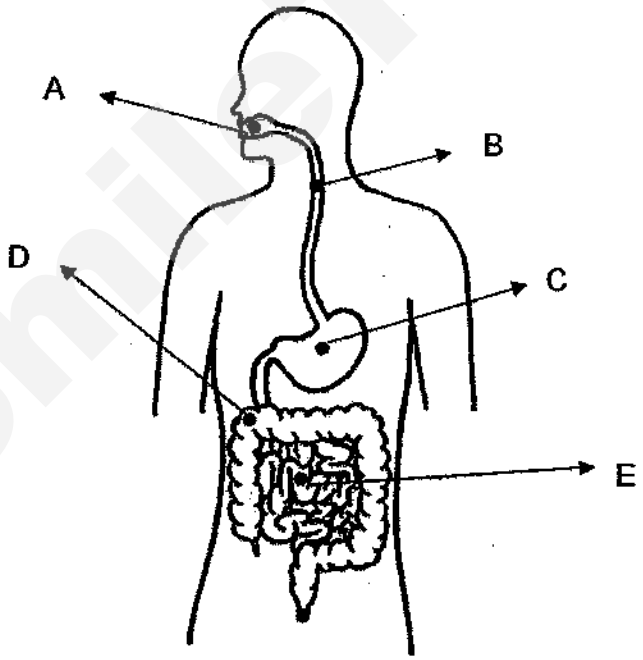
10. Sheila wanted to investigate which brand of bath towel can absorb the most water. She carried out an experiment to find out the amount of water absorbed by different materials. The results are shown in the diagram below.



Which brand of towel should she buy if she wants a brand of towel that can absorb the most amount of water?

1) Brand A
2) Brand B
3) Brand C
4) Brand D

11. In which part of the digestive system are digestive juices produced?



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

(Go on to the next page)

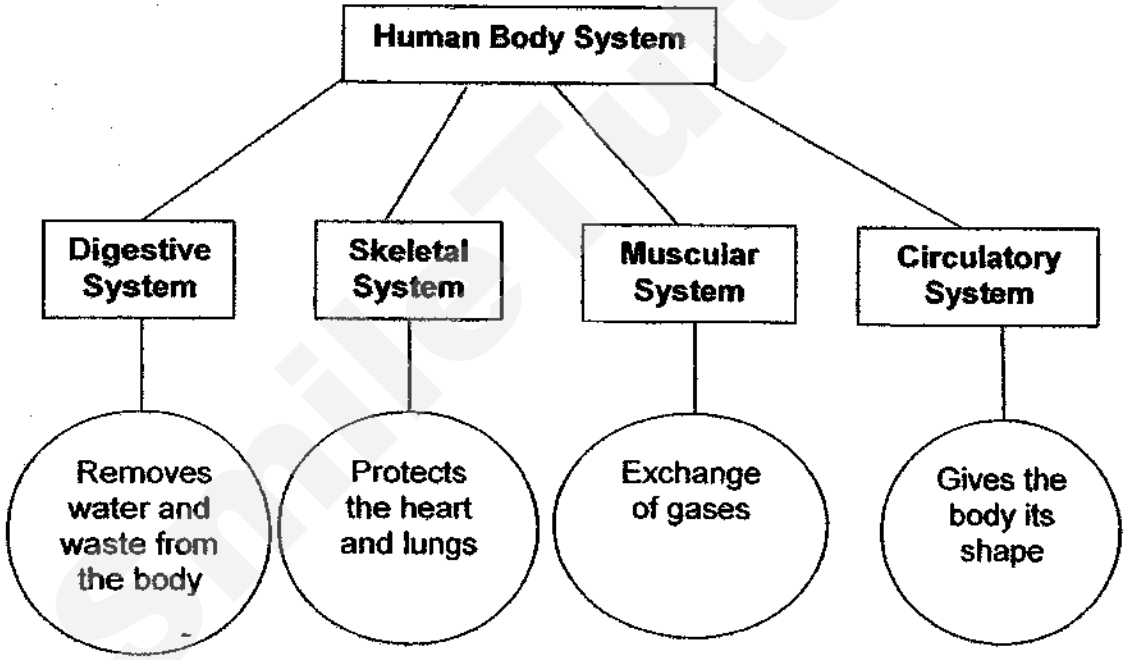
Need a home tutor? Visit smiletutor.sg

12. The diagram below shows parts of an organ system.

What are organs X and Y respectively?

1) mouth and lungs
2) mouth and heart
3) nose and lungs
4) nose and heart

13. Look at the chart below.



Which body system has been correctly matched to one of its functions?

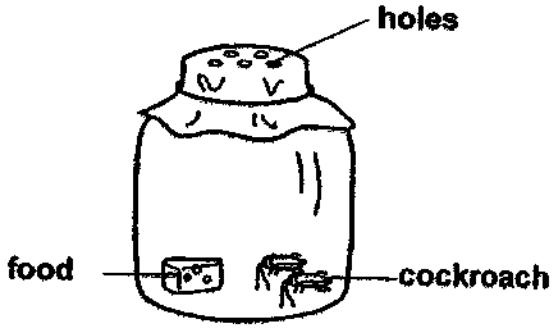
1) Digestive System and Skeletal System only
2) Digestive System and Circulatory System only
3) Skeletal System and Muscular System only
4) Digestive System, Muscular System and Circulatory System only

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

14. Alisha placed the four set-ups as shown below in a dark room.

1)



Set – up A

2)

Set – up B

3)

Set – up C

4)

Set – up D

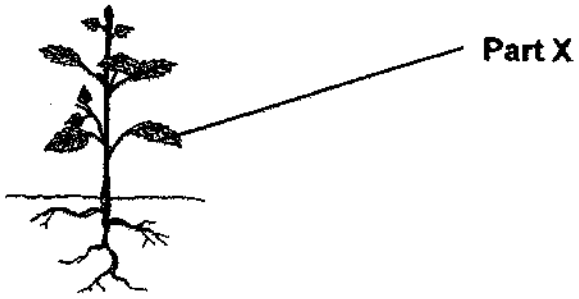
In which set-up, A , B , C or D will the cockroaches die in the shortest time?

1) Set-up A
2) Set-up B
3) Set-up C
4) Set-up D

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

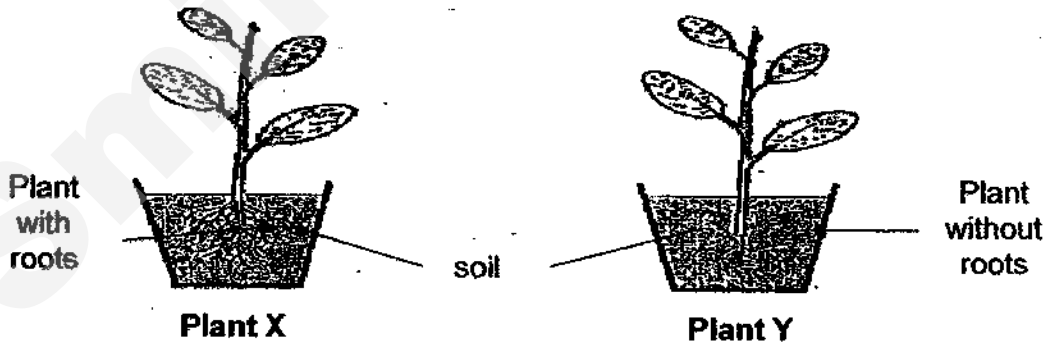
15. The diagram below shows a plant.



Based on the picture above, identify Part X and its function.

	Part X	Function
1)	Roots	Absorbs water
2)	Flower	Absorbs mineral salts
3)	Stem	Keeps the plant upright
4)	Leaf	Makes food

16. Alice has 2 similar pots of plants. For Plant Y, she removed all the roots from the plant and placed it back into the soil.



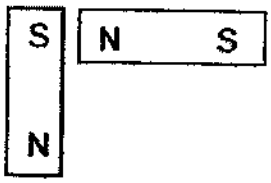
When a strong gust of wind blew at the 2 pots, she noticed that Plant Y fell out of its pot but Plant X did not.

Based on her observation only, what can she conclude about the function of roots?

1) The roots store food in the soil.X
2) The roots hold the plant firmly to the soil.
3) The roots absorb water and mineral salts from the soil.
4) The roots transport food and water to all parts of the plant.

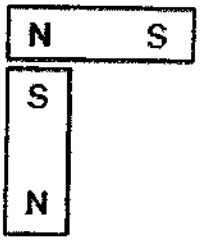
Need a home tutor? Visit smiletutor.sg

17. Sarah placed 2 magnets together to see if they would repel. Which of the following would the two magnets repel each other?

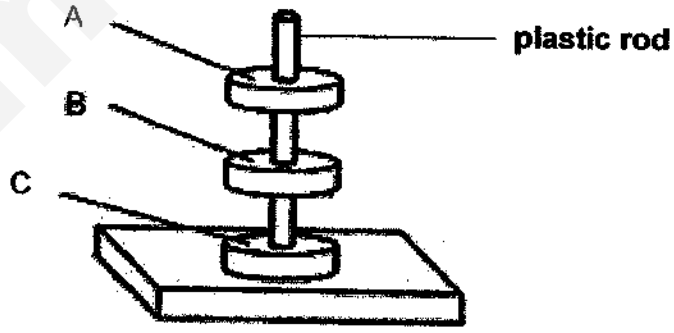
1) 

2)

3)

4) 

18. The diagram below shows three rings A, B and C when they are passed through a plastic rod.



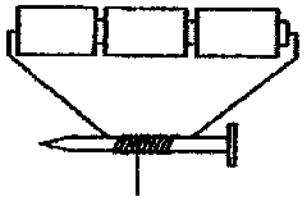
What can A, B and C be?

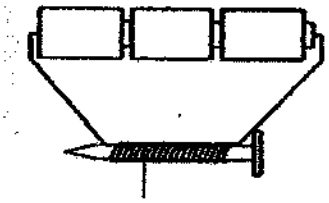
	A	B	C
1)	copper ring	plastic ring	ring magnet
2)	plastic ring	ring magnet	copper ring
3)	silver ring	ring magnet	ring magnet
4)	ring magnet	ring magnet	ring magnet

(Go on to the next page)

Need a home tutor? Visit smiletutor.sg

19. Johnny conducted an experiment to make nails A and B into electromagnets as shown below using similar batteries and wires.





He placed the iron nails near some steel clips and recorded the number of clips attracted.

Nail	Number of turns of wire	Number of steel clips attracted
A	10	5
B	20	0

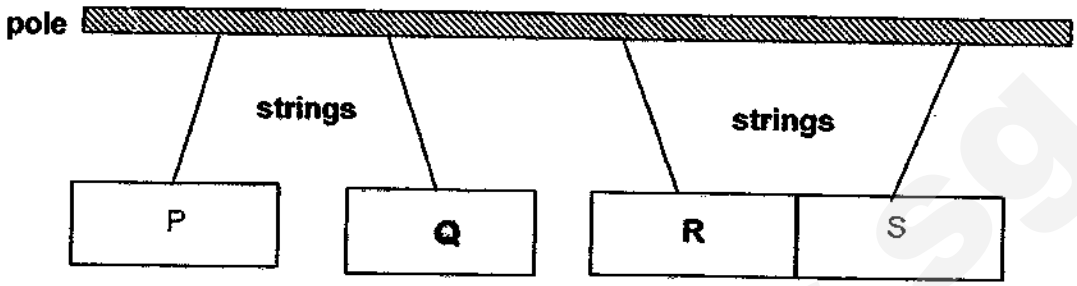
Johnny remembered reading from his Science notes that the greater the number of turns of wire, the stronger will be the nail. Thus, he expected nail B to be able to pick up more steel clips but instead it attracted none.

The likely reason for the result of his experiment would be _____.

1) nail A is made of steel and nail B is made of copper
2) nail A is made of copper and nail B is made of steel
3) nail A is made of steel but nail B is made of iron
4) both the nails are made of steel

Need a home tutor? Visit smiletutor.sg

20. Four metal bars, P, Q, R and S of the same size, were tied to a pole using strings as shown below.



Based on the table below, which of the following observations are correct about the metal bars?

Object	Made of non-magnetic material	Made of magnetic material	Is a magnet
P		√	√
Q		√	√
R	√		
S	√		

(1) P only

(2) R only

(3) R and S only

(4) P and Q only

End of Booklet A

Need a home tutor? Visit smiletutor.sg

SINGAPORE CHINESE GIRLS' SCHOOL (PRIMARY)

SECOND SEMESTRAL ASSESSMENT 2018

NAME: _____ DATE: 24 OCTOBER 2018

SCIENCE

BOOKLET B

	Total Actual Marks	Total Possible Marks
Booklet A		**40**
Booklet B		**30**
Total		**70**

12 questions

30 marks

Total time for Booklets A & B: 1 h 25 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

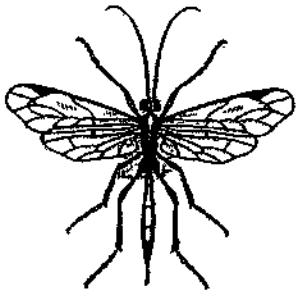
FOLLOW ALL INSTRUCTIONS CAREFULLY.

Need a home tutor? Visit smiletutor.sg

Part II (30 marks)

Answer all the following questions.

21. The pictures below show 2 animals.



A

B

a) Based on what you can see only, list 1 similarity and 1 difference between them. (Do not mention their colour, size and shape)
[2]

Similarity:

_____

_____

Difference:

_____

_____

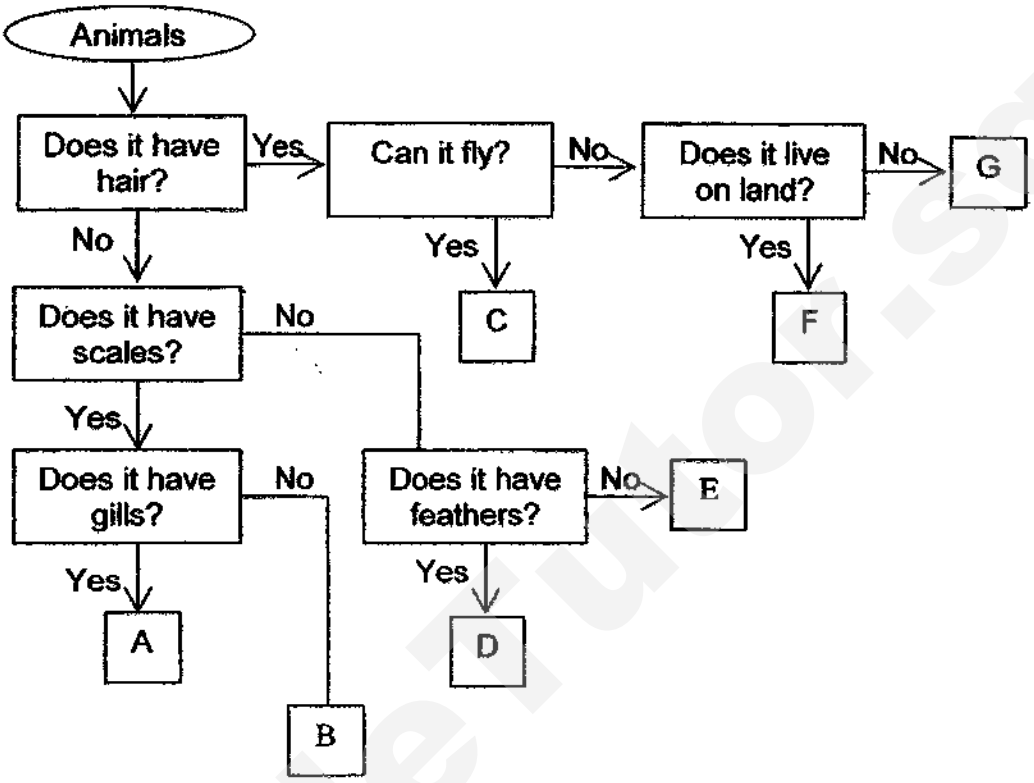
b) Which group of animals do both animals belong to? [1]

_____

3

Need a home tutor? Visit smiletutor.sg

22. Mary observed 7animals A, B, C, D, E, F and G and drew a flowchart to describe the animals as shown below.



a) From the flowchart, which animal(s) is/are mammals? [1]

_____

b) From the flowchart, which animal(s) is/are fish? [1]

_____

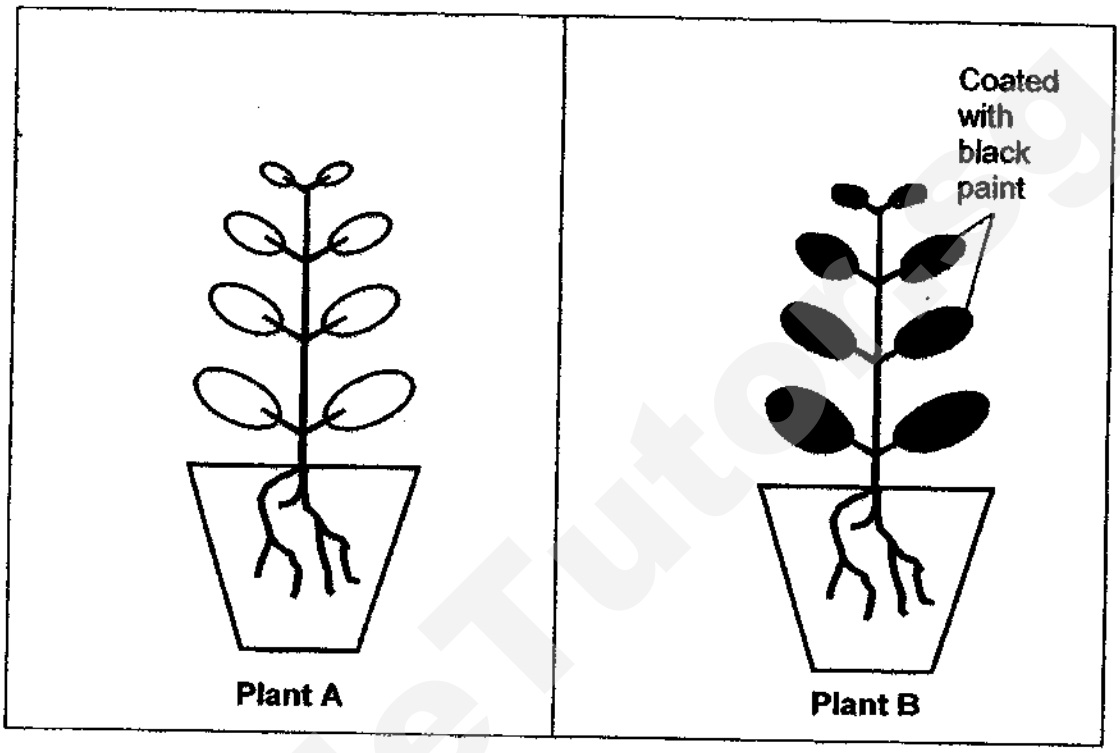
c) Suggest which of the animals (A, B, C, D, E, F or G) in the above classification diagram represents a crocodile. [1]

_____

3

Need a home tutor? Visit smiletutor.sg

23. Olivia set up an experiment with 2 potted plants as shown below. She covered the leaves of Plant B with black paint. Both plants were given the same amount of water daily.



a) What do you think will happen to both the plants after 1 week? [1]

	Statement	Put a tick (√) if the statement is true.
i)	Leaves on Plant A will grow bigger.	
ii)	Plant A will die but plant B will grow.	

b) Based on the diagrams above, what can Plant A do that Plant B cannot do? [1]

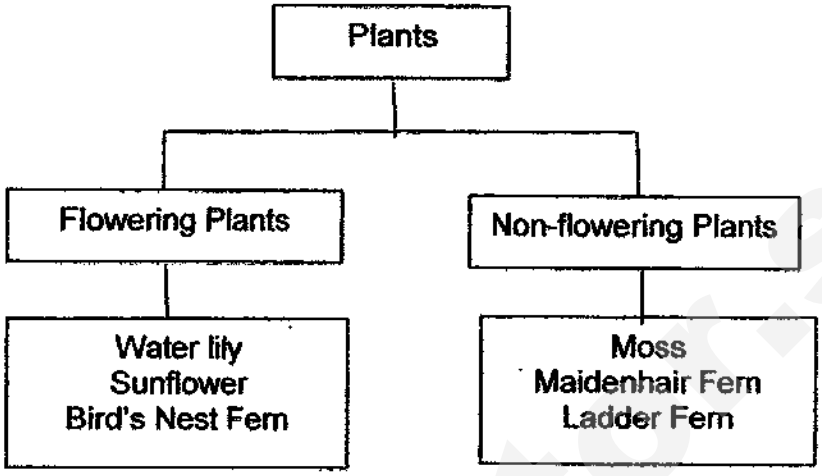
_____

_____

2

Need a home tutor? Visit smiletutor.sg

24. Shi Lee drew a classification chart as shown below.



a) Which one of the living things above has been classified **wrongly**? [1]

_____

b) Explain how the living thing you have stated in (a) reproduces. [1]

_____

2

Need a home tutor? Visit smiletutor.sg

25. Pamela had 4 identical pieces of leather that she cut out from an old sofa. She added 5 drops of water onto each piece of leather. Then, she left each piece of the leather under different conditions. Two weeks later, she noticed patches of black and green spots growing on the leather.

Conditions	Number of black and green patches on the leather
Bright and dry	1
Bright and moist	10
Shady and dry	2
Shady and moist	15

a) What are the black and green patches likely to be? [1]

_____

b) Based on the information above, put a tick (✓) in the correct column below to show whether each statement made by Pamela about the black and green patches is true or false. [2]

	Statements	True	False
(i)	They can grow on leather objects.		
(ii)	They only need air to grow well.		
(iii)	They grow very well in shady and moist conditions.		
(iv)	They do not grow well in dry conditions.		

3

Need a home tutor? Visit smiletutor.sg

26. The table below shows the properties of 4 different materials

Properties	A	B	C	D
Flexible	No	Yes	Yes	Yes
Strength	Strong	Weak	Strong	Strong
Transparent	Yes	No	Yes	No

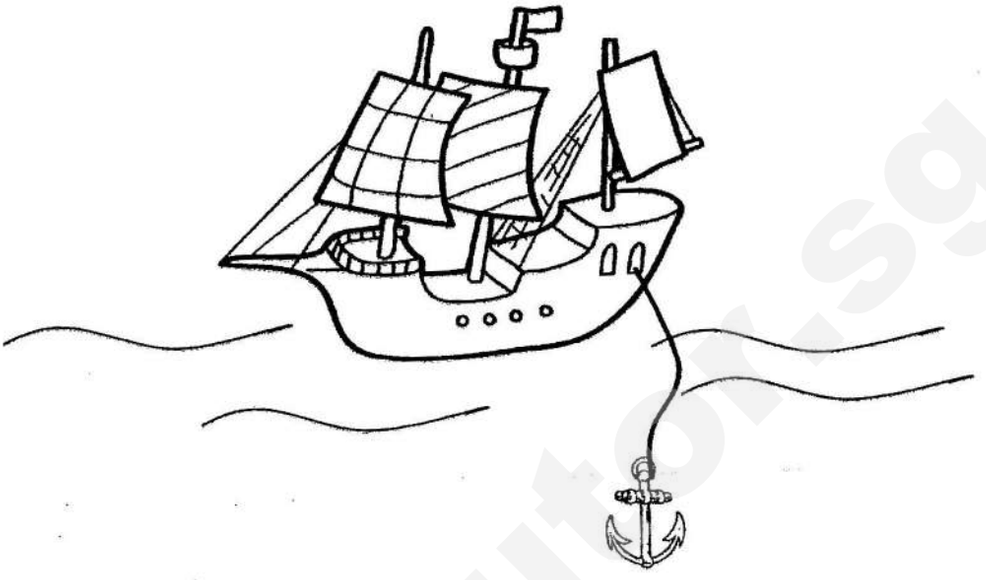
a) Based on the table, describe material D. [1]

b) Based on the table, state the difference(s) between materials B and C. [1]

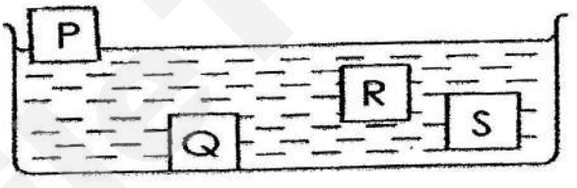
2

Need a home tutor? Visit smiletutor.sg

27. Katriel wants to build a simple boat. She conducted an experiment to find out which is the most suitable material she could use to build a boat and the anchor.



She sets up an experiment as shown below.



a) Based on the experiment shown above, which property of materials is being tested in this experiment? [1]

_____

b) Based on the experiment conducted, which material P, Q, R or S is most suitable to be used to build the boat? Explain your choice. [1]

_____

_____

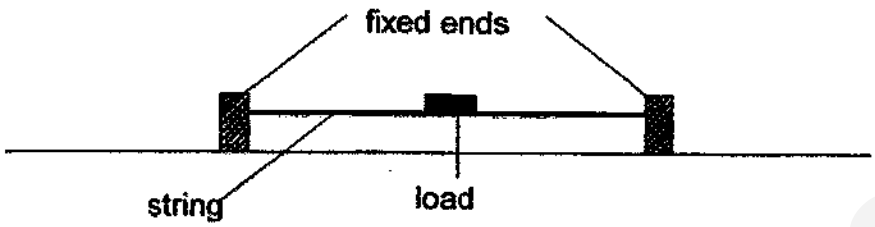
c) The anchor helps to prevent the boat from drifting off by gripping the sea bed in the sea. Which material P, Q, R or S is suitable to make the anchor? [1]

_____

/ 3

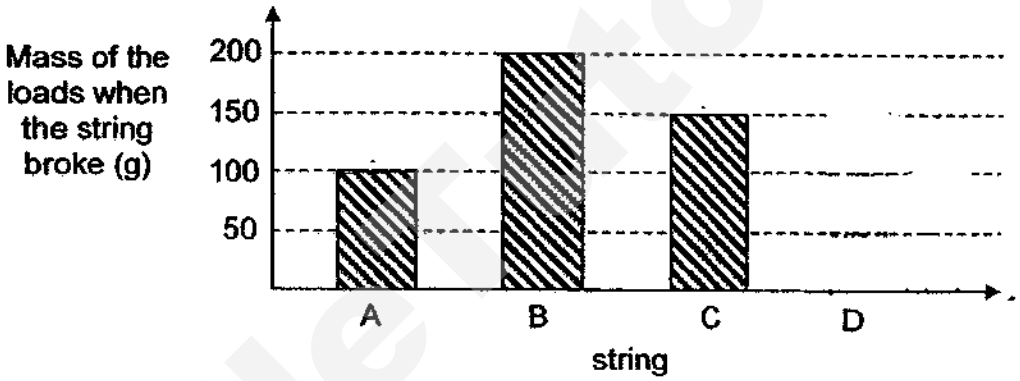
Need a home tutor? Visit smiletutor.sg

28. Alysa used the set-up below to study a material.



In her study, she used four strings, A, B, C and D, and some 10 g loads. She added the 10 g loads to the string one at a time until each string broke.

The following graph shows the mass of the loads that can be placed on each string until it broke.



(a) Alysa tested another string, D. String D was able to carry a load up to 100g when it broke. **Draw** a bar for string D in the graph above. [1]

(b) Based on the graph above, which string, A, B or C is the strongest? [1]

_____

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

_____

_____

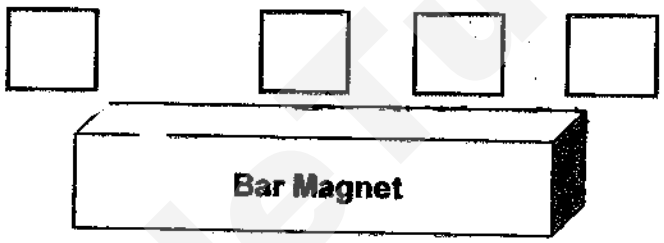
3

Need a home tutor? Visit smiletutor.sg

29. Visa dropped a bar magnet into a box of paper clips. When she picked up the magnet, paper clips were attracted to different parts of the magnet. She counted the paper clips and recorded them in a table shown below.

Part of the magnet	Number of paper clips attracted to the part of the magnet
W	10
X	1
Y	9
Z	3

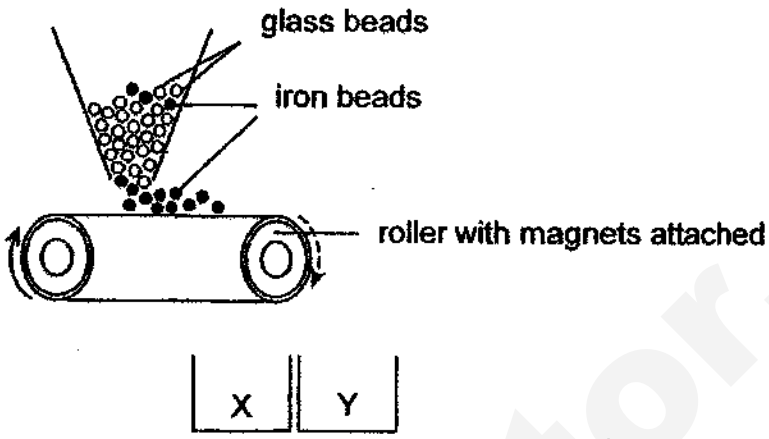
Based on Visa's results, label the parts by writing W, X, Y and Z in the boxes provided below. [2]



2

Need a home tutor? Visit smiletutor.sg

30. A beads factory uses the machine below to separate iron beads from glass beads.



a) Which containers will the iron and glass beads fall into? [1]

Type of beads	Container
iron	
glass	

After using the machine for many hours, the roller got very hot and the machine was unable to separate the beads into the two containers.

b) Give a reason why the machine did not work anymore. [1]

_____

_____

2

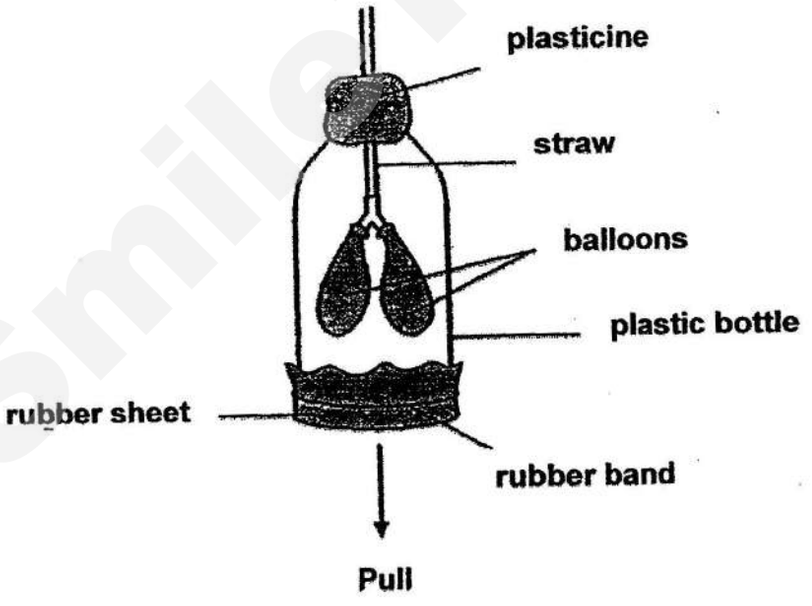
Need a home tutor? Visit smiletutor.sg

31.

a) To stay alive, the seedling needs food, _____ and _____. [2]

b) The seedling becomes taller and bigger after some time. This shows that it can _____. [1]

32. Sophie was asked by her teacher to make a model of the human respiratory system.



Name the organs found in the system which are represented by the following objects in the model. [2]

Object	Organ
straw	
balloons	

5

End of Booklet B

Need a home tutor? Visit smiletutor.sg

YEAR : 2018
LEVEL : PRIMARY 3
SCHOOL : SINGAPORE CHINESE GIRLS' SCHOOL
SUBJECT : SCIENCE
TREM : SA2

BOOKLET A

Part 1

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

BOOKLET B

Part 2

Q21. a) **Similarity:** Both A and B has six legs.
Difference: A have wings but B does not have.

b) Both animals belong to the insect group.

Q22. a) Animals C, F, G are mammals.

b) Animal A is a fish.

c) Animal B.

Q23. a) i) leaves on Plant A will grow bigger.

b) Plant A can make its own food but plant B cannot.

Q24. a) Bird's Nest Fern have been classified wrongly.

b) Bird's Nest Fern reproduce by spores.

Q25. a) Mould

b) i) True ii) False
iii) True iv) True

Need a home tutor? Visit smiletutor.sg

Q26. a) **Material D is flexible, strong and not transparent.**

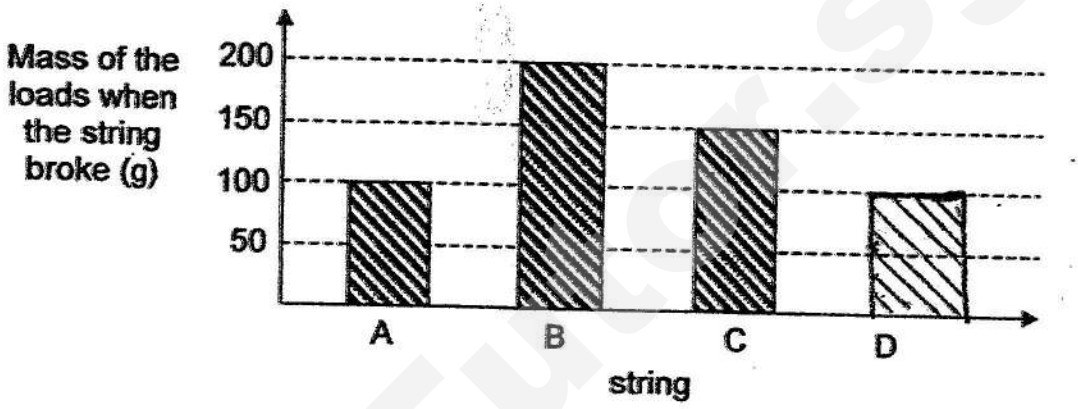
b) **Material B is weak and not transparent but Material C is strong and transparent.**

Q27. a) **If it sinks or floats.**

b) **Material P as boats need to float on water.**

c) **Material Q.**

Q28. a)



b) **String B**

c) **It can hold the most number of 10g loads.**

Q29. **W, X, Z, Y**

Q30. a) **iron – X**
glass – Y

b) **Heat cause the magnet to lost its magnetism.**

Q31. a) **air and water**

b) **grow.**

Q32. **straw – windpipe**
balloons – lungs

2NP

Need a home tutor? Visit smiletutor.sg

TAO NAN SCHOOL 道南学校

SINCERITY & PERSEVERANCE

2018 PRIMARY 3 SEMESTRAL ASSESSMENT 2

Name : _____ ( )

Class : Primary 3 ( )

Parent's Signature: _____

Date: 22 October 2018

Time: 8.00 a.m. - 9.30 a.m.

Duration: 1 hour 30 minutes

SCIENCE

BOOKLET A

INSTRUCTIONS TO CANDIDATES

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

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Booklet A (22 x 2 marks)

For each question from 1 to 22, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade your answer on the Optical Answer Sheet.

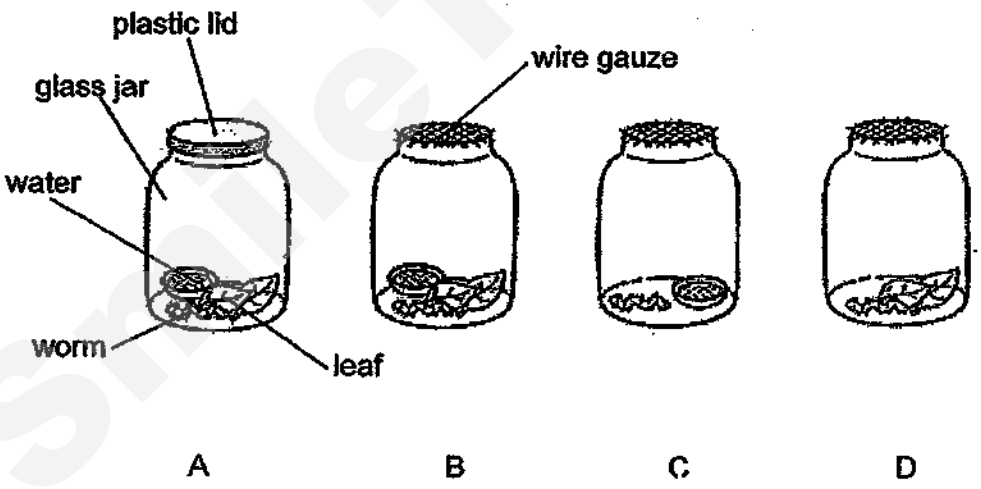
(44 marks)

---

1. Which of the following shows the correct examples of living things and non-living things?

	Living things	Non-living things
(1)	Cat	Fish
(2)	Tree	Lamp
(3)	Vase	Table
(4)	Grass	Bread mould

2. Mary set up four jars, A, B, C and D, as shown below.



Which two set-ups should Mary use to find out whether living things need water to survive?

(1) A and B

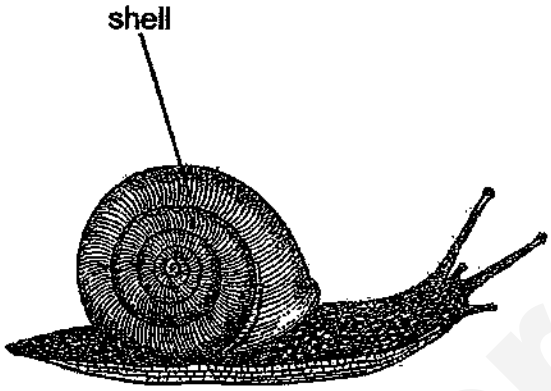
(2) A and C

(3) B and D

(4) C and D

Need a home tutor? Visit smiletutor.sg

3. Ravi watched a snail in his garden. He touched it gently and observed that the snail moved into its shell immediately.



Which characterisic of living things did the snail display?

(1) Living things can die.

(2) Living things can grow.

(3) Living things respond to changes around them.

(4) Living things need air, food and water to survive.

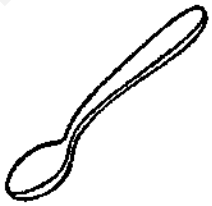
SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

4. Susan wanted to find out what A and B are. She placed A and B each in a brightly lit room on Day 1 with a daily supply of water. 500g of leaves was placed in each room on the first day. On Day 4, she measured the amount of leaves left. Her readings are shown in the table below.

	A	B
Amount of food given on Day 1 (g)	500	500
Amount of food left on Day 4 (g)	500	100

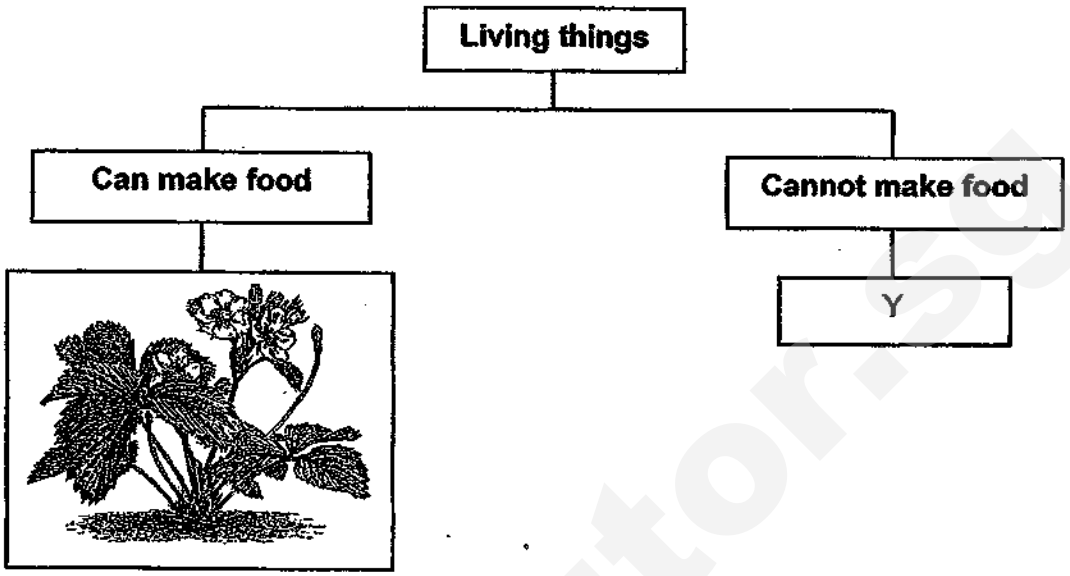
Which of the following could A and B be?

	A	B
(1)	A towel	A hamster
(2)	A bird	A laptop
(3)	 A spoon	A nail
(4)	A goat	A rabbit

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

5. The diagram below shows the classification of living things.



Which of the following could Y be?

(1)

Tree

(2)

Plant

(3)

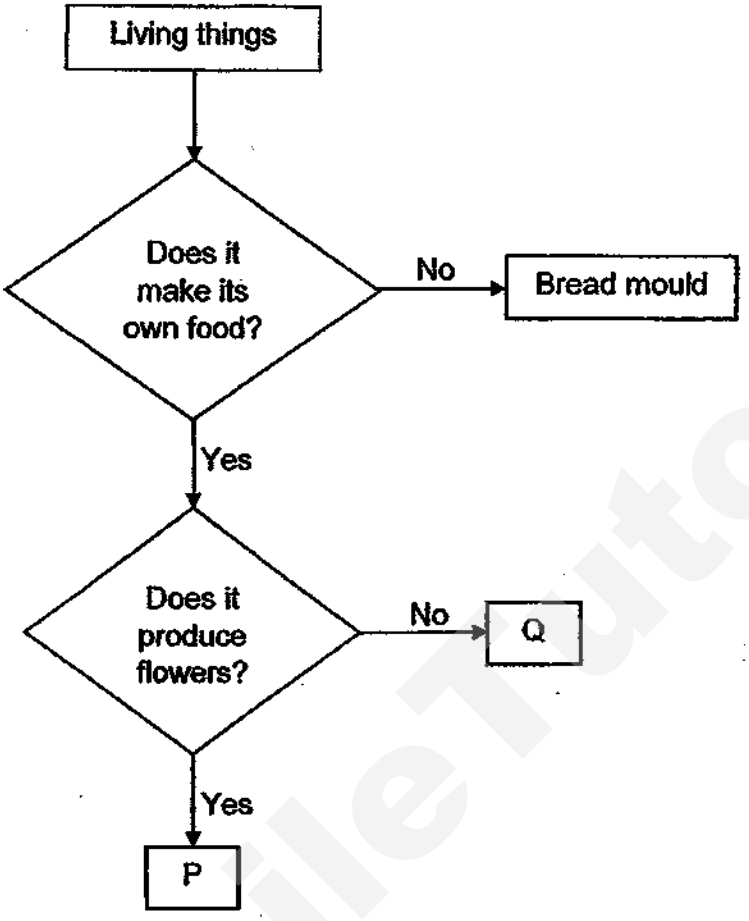
Mushroom

(4)

Water plant

Need a home tutor? Visit smiletutor.sg

6 Study the flow chart below.



Which of the following best describe P and Q?

	P	Q
(1)	P is a plant.	Q is an animal.
(2)	P has leaves.	Q does not have leaves.
(3)	P needs sunlight to survive.	Q does not need sunlight to survive.
(4)	P bears fruits.	Q does not bear fruits.

Need a home tutor? Visit smiletutor.sg

7. Study the animals below.

Snake

Fish

Crocodile

What do these animals have in common?

(1) They have scales.

(2) They have four legs.

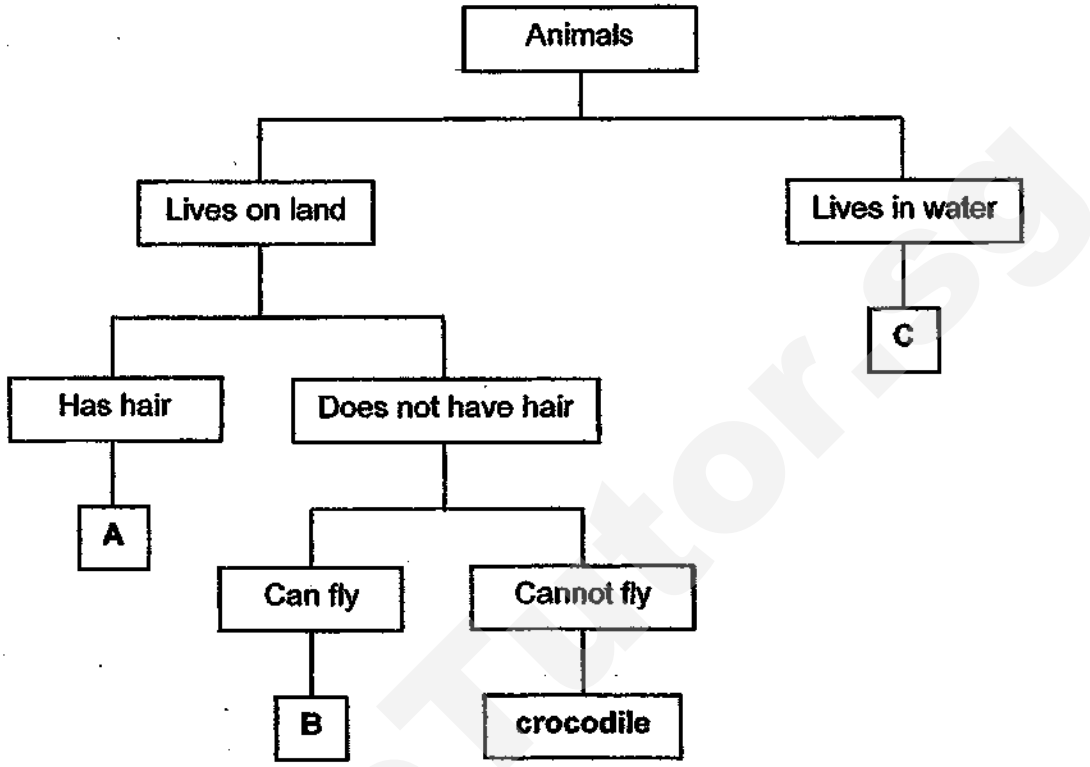
(3) They swim using their fins.

(4) They give birth to their young alive.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

8. Study the classification chart below.



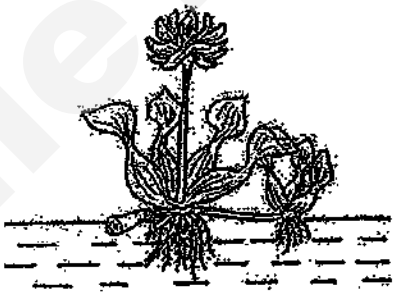
What do A, B and C represent?

	A	B	C
(1)	dog	eagle	goldfish
(2)	eagle	goldfish	butterfly
(3)	dog	butterfly	eagle
(4)	butterfly	dog	goldfish

Need a home tutor? Visit smiletutor.sg

9. The table below shows some information on four plants, A, B, C and D.
A tick (✓) shows that the characteristic is present in that plant.

Plant	Characteristics		
	Has fruits	Can make its own food	Grows on land
A			
B			
C			
D			



The plant shown in the diagram above has similar characteristics as _____.

(1) A

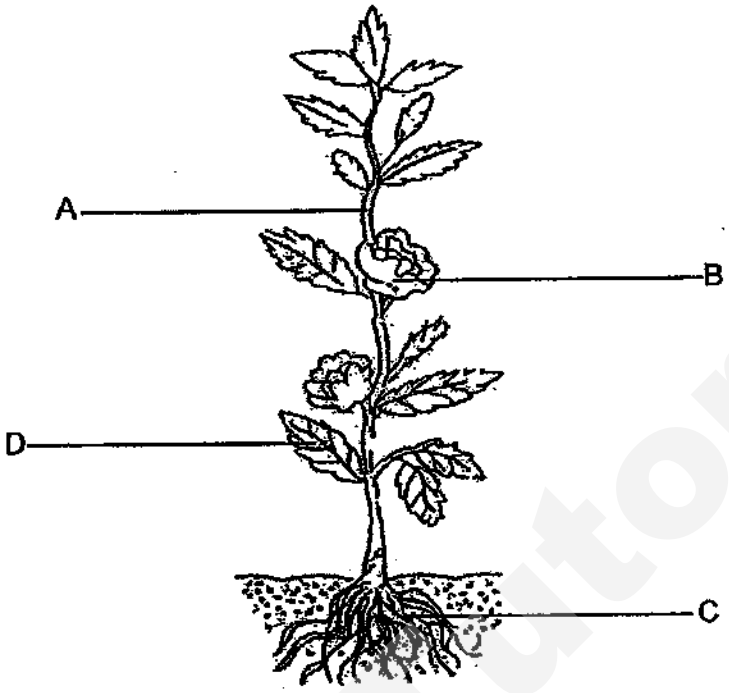
(2) B

(3) C

(4) D

Need a home tutor? Visit smiletutor.sg

10. Study the plant shown below.



Which plant part shown above, A, B, C or D, supports the plant?

(1) A

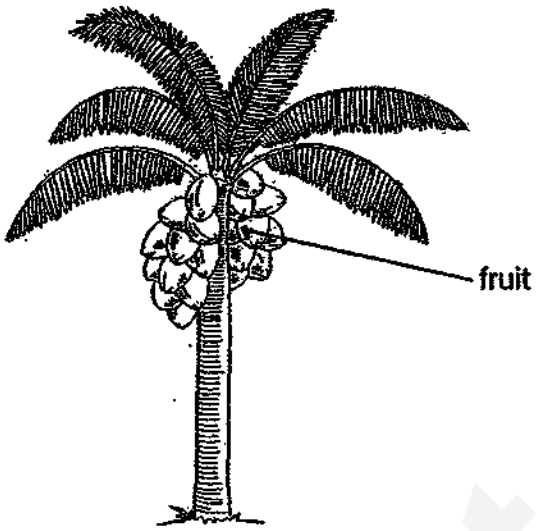
(2) B

(3) C

(4) D

Need a home tutor? Visit smiletutor.sg

11. The diagram below shows a coconut tree.



Based on the above diagram, which of the following is true about the coconut tree?

(1) It is a flowering plant with a weak stem.

(2) It is a flowering plant with a strong stem.

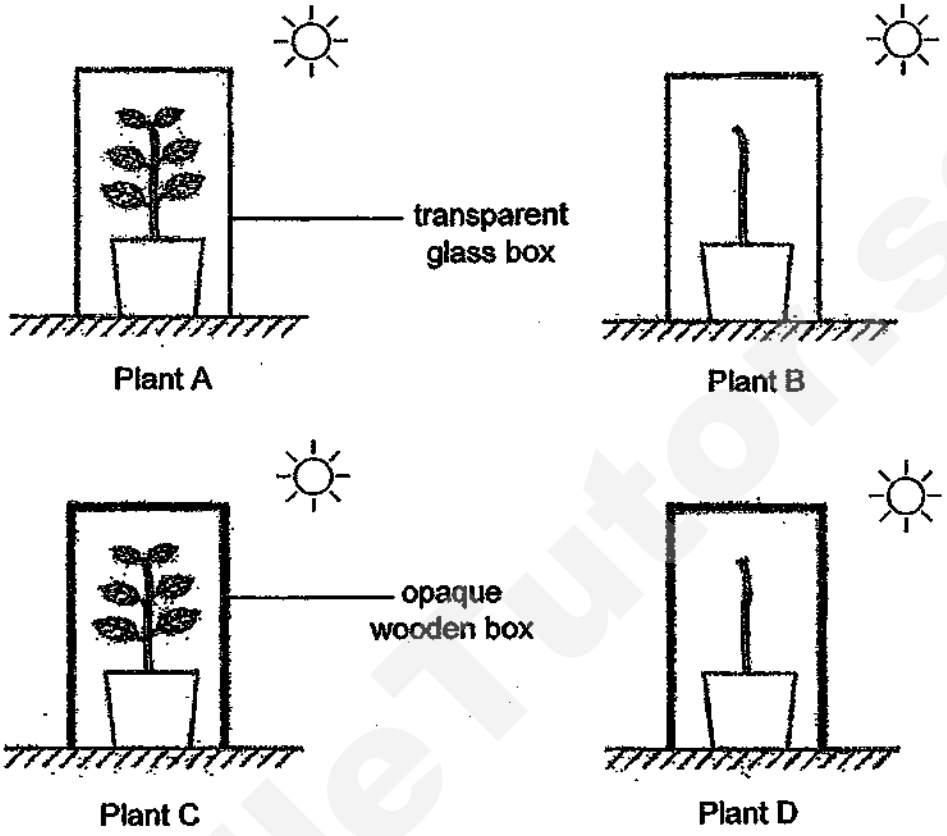
(3) It is a non-flowering plant with a weak stem.

(4) It is a non-flowering plant with a strong stem.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

12. Wendy placed 4 similar plants in the set ups as shown below. She watered the plants daily with the same amount of water.



Which plant is most likely to continue growing after 1 month?

(1) Plant A

(2) Plant B

(3) Plant C

(4) Plant D

Need a home tutor? Visit smiletutor.sg

13. Sean is running with his net to catch a butterfly immediately after a meal.

Which organ systems in Sean's body are working together when he is catching the butterfly?

A Skeletal system

B Digestive system

C Circulatory system

D Respiratory system

(1) B and C

(2) C and D

(3) A, B and D

(4) A, B, C and D

Need a home tutor? Visit smiletutor.sg

14. Sarah's grandmother has lost most of her teeth but she still needs to eat her food. What will most likely happen to the food that she has taken as compared to her having her full set of teeth?

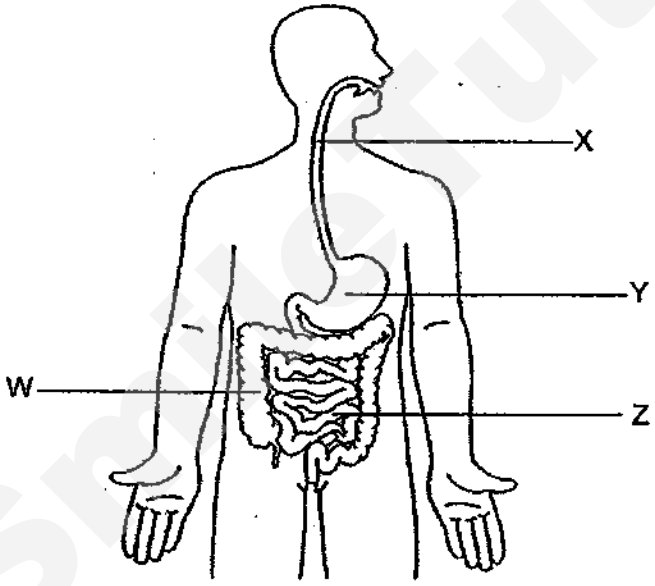
(1) The food canot be digested at all.

(2) The food cannot be absorbed at all.

(3) The food will take a longer time to digest.

(4) The food can be chewed into smaller pieces.

15. Study the diagram of the human digestive system below.



In the human digestive system, which parts do not contain digestive juices?

(1) W and X

(2) W and Z

(3) X and Y

(4) Y and Z

Need a home tutor? Visit smiletutor.sg

16. The diagram below shows a pair of reading spectacles.

Which is the most important property to consider when selecting a suitable material to make part E?

(1) It is light.

(2) It can bend easily.

(3) It does not break easily.

(4) It allows most light to pass through it.

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

17. The table below shows the properties of three materials, P, Q and R.
A tick (✓) shows that the property is present.

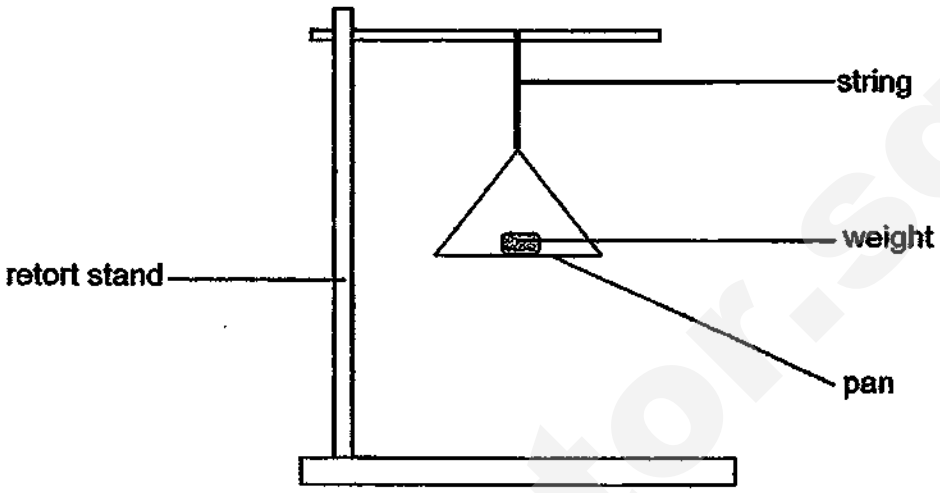
Properties	Materials		
	P	Q	R
Flexible			
Absorbent to water			
Allows light to pass through			

Based on the information given in the table above, what would P, Q and R most likely be?

	P	Q	R
(1)	rubber	steel	fabric
(2)	clear glass	fabric	steel
(3)	clear glass	steel	rubber
(4)	rubber	fabric	clear glass

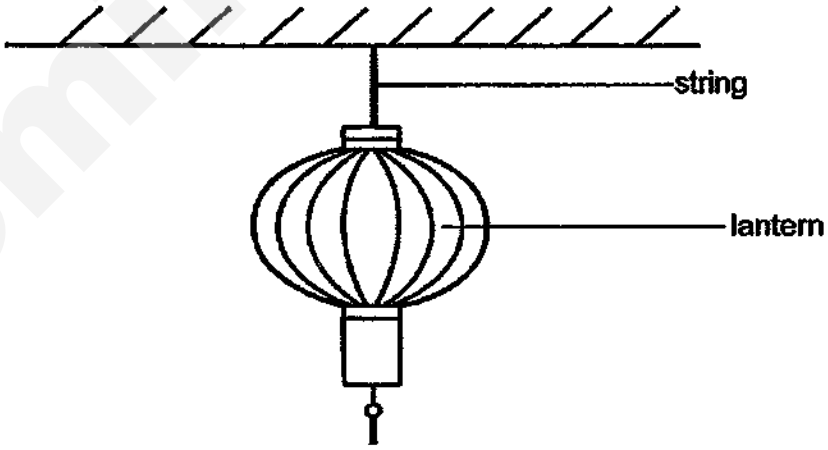
Need a home tutor? Visit smiletutor.sg

18. Benjamin set up an experiment as shown below. He decided to test the strings of different materials that are of similar length and thickness. He added weights, of equal mass, onto the pan until the string broke. His results were shown in the table below.



	A	B	C	D
Number of 10 g weights added before the string broke	3	8	9	10

From the table above, which string A, B, C or D, would be able to hang a 95g lantern from the ceiling without breaking?



(1) A

(2) B

(3) C

(4) D

Need a home tutor? Visit smiletutor.sg

19. Alice lowered the bar magnet below into a container filled with iron pins.

bar magnet

Which parts of the magnet are likely to attract the most number of iron pins?

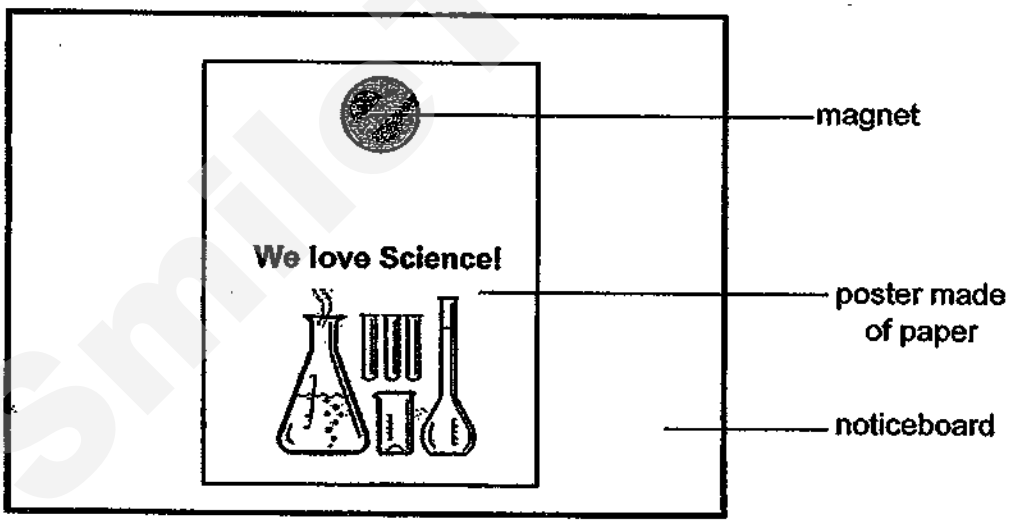
(1) C and D

(2) C and F

(3) D and E

(4) E and F

20. Ken displayed a poster on the class noticeboard using a magnet as shown below.



What material is the noticeboard made of?

(1) iron

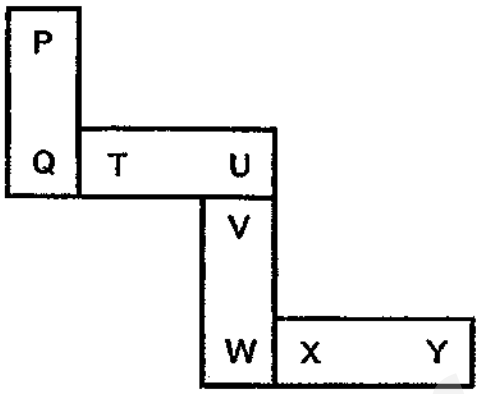
(2) gold

(3) wood

(4) plastic

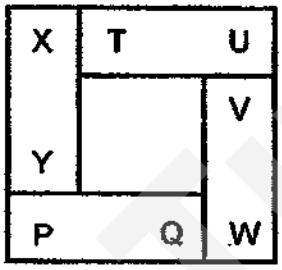
Need a home tutor? Visit smiletutor.sg

21. Four bar magnets can be arranged as shown below. Their poles are P, Q, T, U, V, W, X and Y.

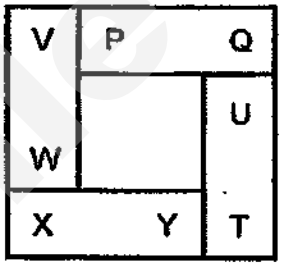


Which is another possible arrangement of the magnets?

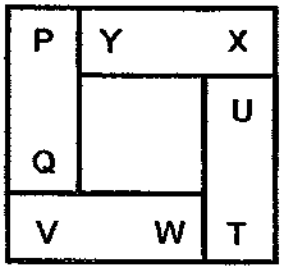
(1)



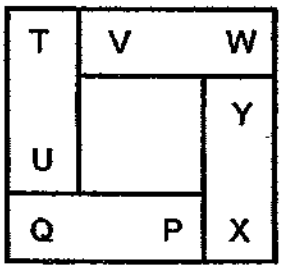
(2)



(3)

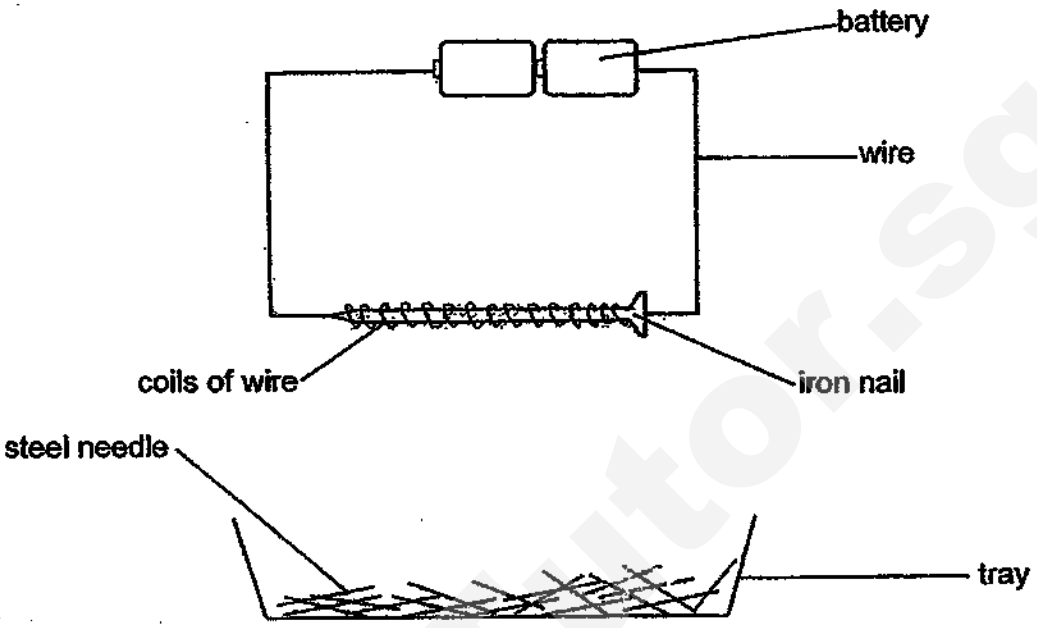


(4)



Need a home tutor? Visit smiletutor.sg

22. Juliana prepared the set-up below. When the tray of needles was brought near to the iron nail, ten needles were attracted to the iron nail.



What change can she make to the set-up so that the nail can attract more needles?

(1) Increase the number of batteries

(2) Change the iron nail to an aluminium nail

(3) Change the steel needles to plastic needles

(4) Decrease the number of coils of wire around the iron nail

End of Booklet A

Need a home tutor? Visit smiletutor.sg

2018 PRIMARY 3 SEMESTRAL ASSESSMENT 2

Name : _____ ( )

Class : Primary 3 ( )

Parent's Signature : _____

Date: 22 October 2018

Time: 8.00 a.m. – 9.30 a.m.

Duration: 1 hour 30 minutes

SCIENCE

BOOKLET B

INSTRUCTIONS TO CANDIDATES

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

Booklet A	44
Booklet B	36
Total	80

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

Booklet B (36 marks)

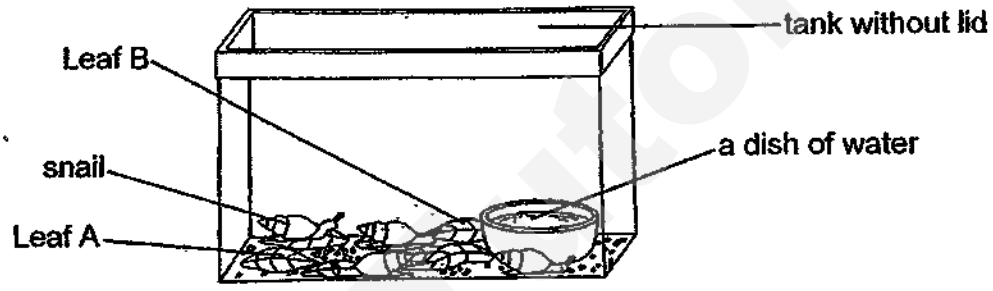
For questions 23 to 34, write your answers clearly in this booklet.

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

(36 marks)

---

23. Alex put some snails, a dish of water and two different types of leaves, Leaf A and Leaf B, in a tank.



Over the next few weeks, he observed the number of snails, the amount of leaf A and the amount of Leaf B left in the tank. He recorded these in the table below.

Day	Number of snails	Amount of Leaf A (g)	Amount of Leaf B (g)
1	4	300	300
5	4	250	300
10	4	200	300
15	5	150	300
20	5	100	300

Need a home tutor? Visit smiletutor.sg

(a) Based on the table, what do the snails eat? [1]

_____

_____

(b) The number of snails had increased over 20 days. Explain why. [1]

_____

_____

(c) What can you conclude about the characteristics of living things from the table? [1]

_____

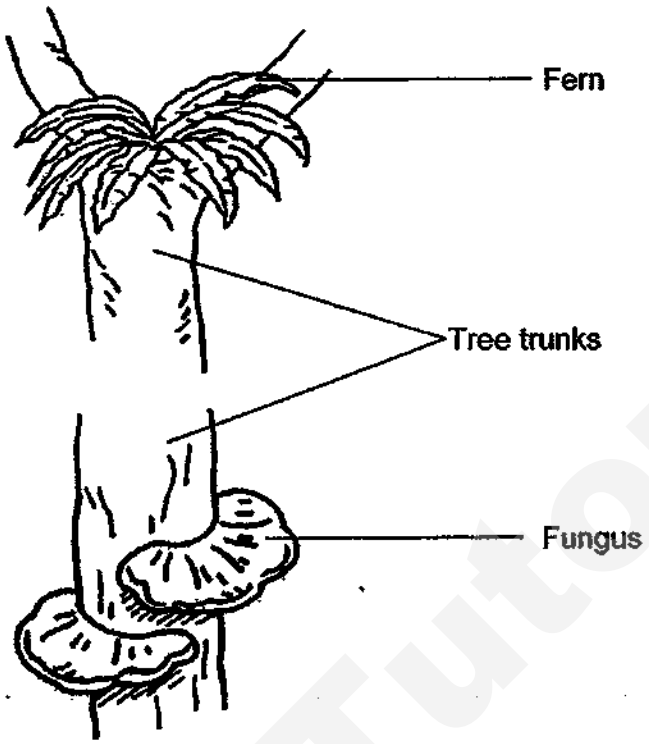
_____

Score	3

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

24. Study the diagrams below.



(a) Besides both living on a tree, state another similarity between the above fern and fungi. [1]

_____

_____

(b) State a difference between the fern and the fungi. [1]

_____

_____

Score	/ 2

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

(c) Two similar pieces of meat, A and B, were placed in different conditions as shown below.

Meat	**A**	**B**
Location of meat	On the table	In refrigerator

After 5 hours, which piece of meat, A or B, would have more bacteria? Explain your answer. [1]

_____

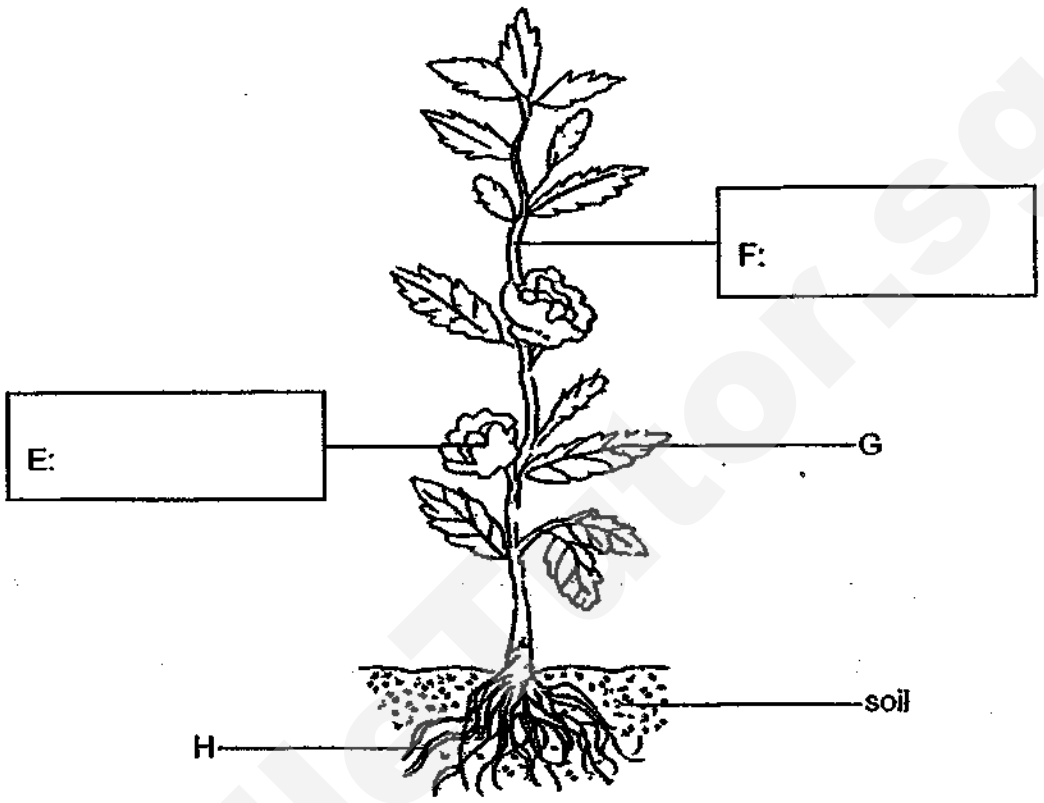
_____

Score	/ 1

Need a home tutor? Visit smiletutor.sg

25. The drawing below shows a plant and its plant parts.

(a) Name the plant parts, E and F, in the boxes below. [1]



(b) State two functions of the part H. [2]

Function 1: _____

_____

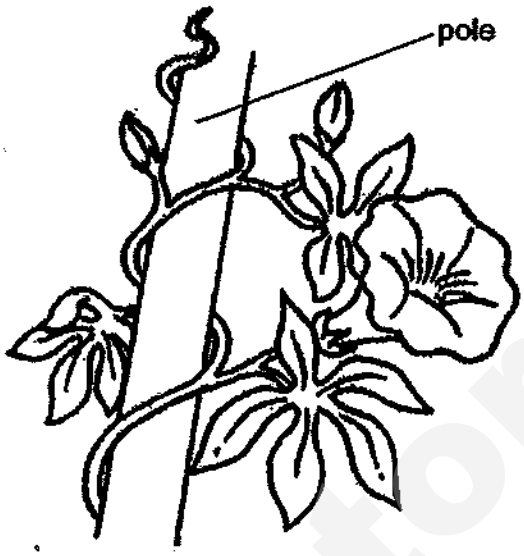
Function 2: _____

_____

Score	/ 3

Need a home tutor? Visit smiletutor.sg

26. The diagram below shows a plant with weak stem climbing up a pole.



(a) What would happen to the plant if the pole is removed? [1]

_____

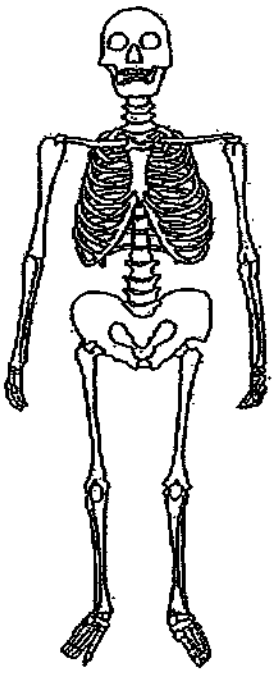
(b) Explain how climbing up the pole helps the above plant to grow better. [2]

_____

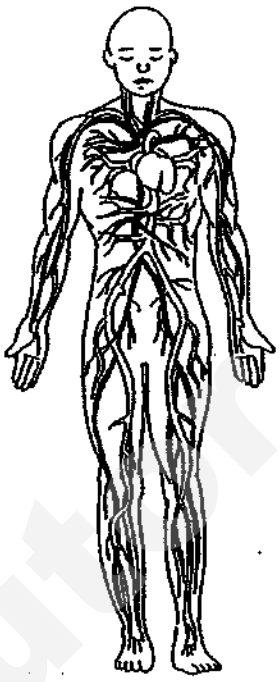
Score	/ 3

Need a home tutor? Visit smiletutor.sg

27. The diagrams below show two human organ systems.



System X



System Y

(a) Name System X and System Y, in the blanks below. [2]

System X: _____

System Y: _____

(b) State one function of System X. [1]

_____

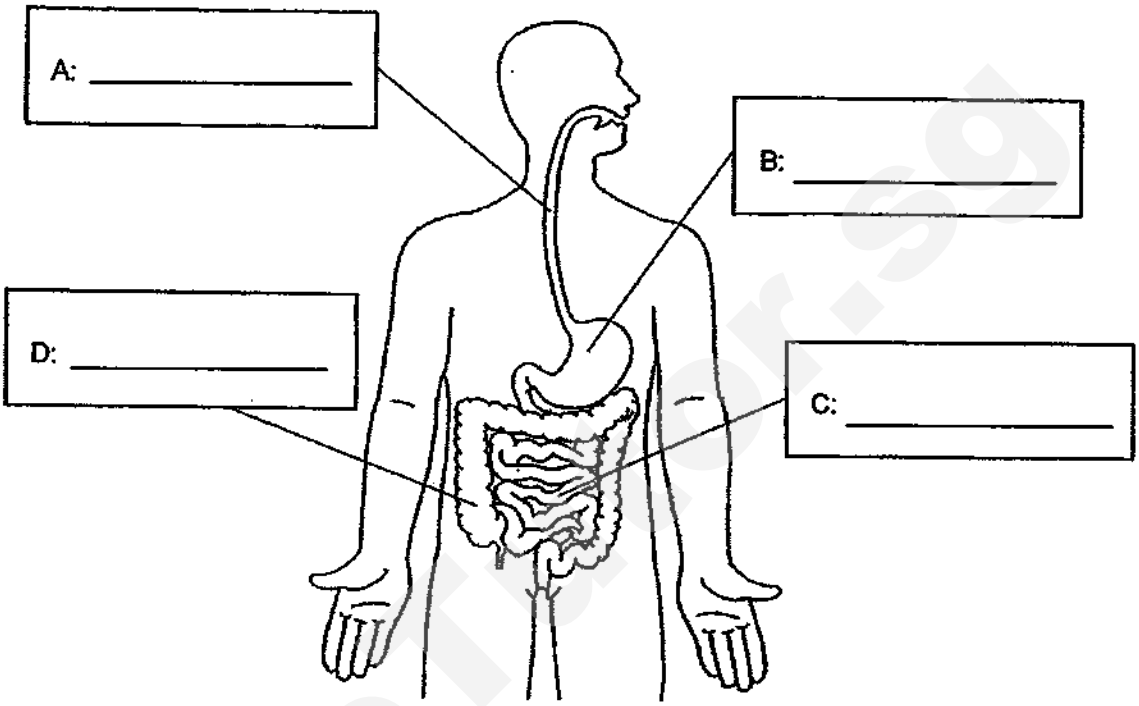
_____

Score	/ 3

Need a home tutor? Visit smiletutor.sg

28. The human digestive system is shown below.

(a) Label the parts shown. [2]



(b) Linda made a statement, "Digestion ends at D."

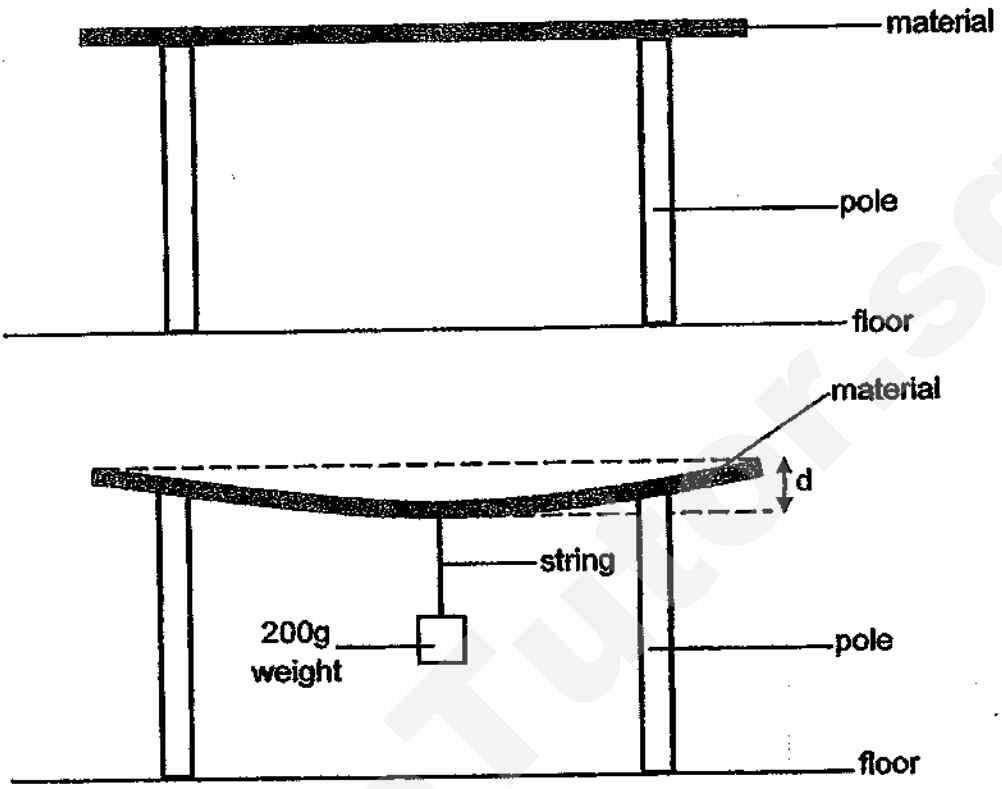
Linda's teacher said that her statement was incorrect. Explain why. [1]

_____

Score	3

Need a home tutor? Visit smiletutor.sg

29. Mandy wanted to compare the flexibility of four materials of similar thickness, P, Q, R and S. She prepared the set-up below.



She hung a 200g weight on each sheet of material using a string of the same length and thickness and observed how much the material bent. She then measured the distance d shown above. She recorded the results in the table below.

Material	Distance d (cm)
P	0
Q	8
R	3
S	5

(a) Arrange the materials, P, Q, R and S, from the most flexible to the least flexible. [1]

Most flexible → Least flexible

Score 1

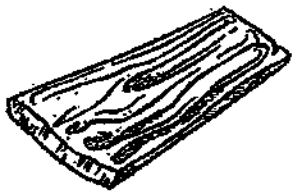
Need a home tutor? Visit smiletutor.sg

(b) The diagram below shows a ladder.

Which material, P, Q, R or S, is most suitable to make the ladder? Explain why. [1]

(c) Andy fell into the water from a boat. He cannot swim.

His younger brother threw him the following two objects.

ceramic tile	wooden plank
	

Assuming both objects are strong, which object should Andy hold on in the water to till help arrives? Explain your answer. [1]

Score	/ 2

Need a home tutor? Visit smiletutor.sg

30. Ken wants to pitch a tent for camping as shown below. The tent is to protect him from the wet weather when Ken sleeps in the night. The tent must be light enough for him to carry. It can also be folded to be kept in his bag.

(a) Which property must material X have in order to protect Ken from wet weather? Explain your answer. [1]

_____

_____

(b) Based on the above diagram, what property must material Y have? Explain your answer. [1]

_____

_____

(c) What would Material X most likely be? Put a tick (✓) in the correct box below. [1]

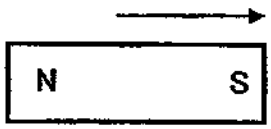
Wood	☐
Metal	☐
Plastic	☐
Ceramic	☐

Score	/ 3

Smile Tutor.sg

Need a home tutor? Visit smiletutor.sg

31. Ben carried out an experiment with a bar magnet and 3 different bars, W, X and Y. The ends of the bars are labelled as A and B. He brought the south pole of the bar magnet near the ends of the three bars.



bar magnet

bar W

bar X

bar Y

He recorded his observations in the table below.

Bar	Reaction to the south pole of the magnet	
	A	B
W	repel	attract
X	attract	attract
Y	no reaction	no reaction

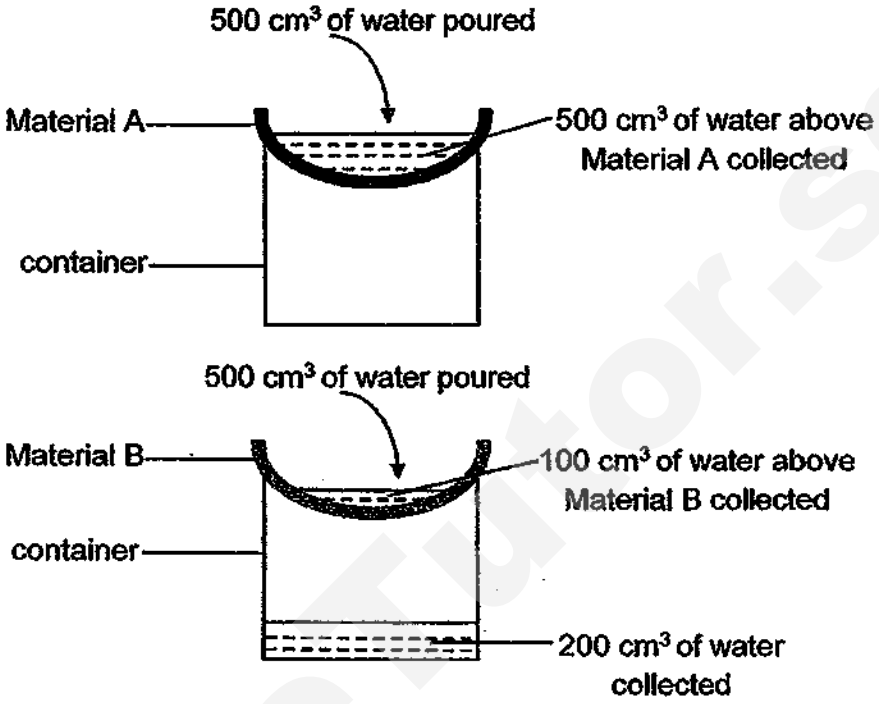
(a) Based on the results above, can bar Y be made of plastic? Explain your answer. [2]

(b) Which bar, W, X or Y, is a magnet? Explain your answer. [1]

Score 3

Need a home tutor? Visit smiletutor.sg

32. Jessica placed a piece of material A and B of the same thickness over the mouth of two similar empty containers. She then poured the same amount of water onto each material. The diagrams below show what she observed after 5 minutes.



(a) What property of the material was Jessica trying to find out? [1]

_____

_____

(b) What can Jessica do to make the results of her experiment more reliable? [1]

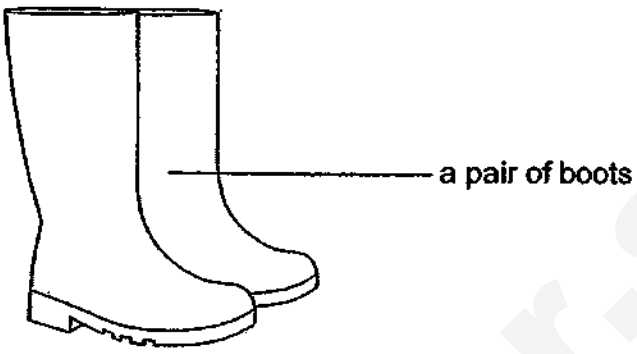
_____

_____

Score	2

Need a home tutor? Visit smiletutor.sg

(c) Uncle John works in a market with wet floor. He wears the following pair of boots to work.

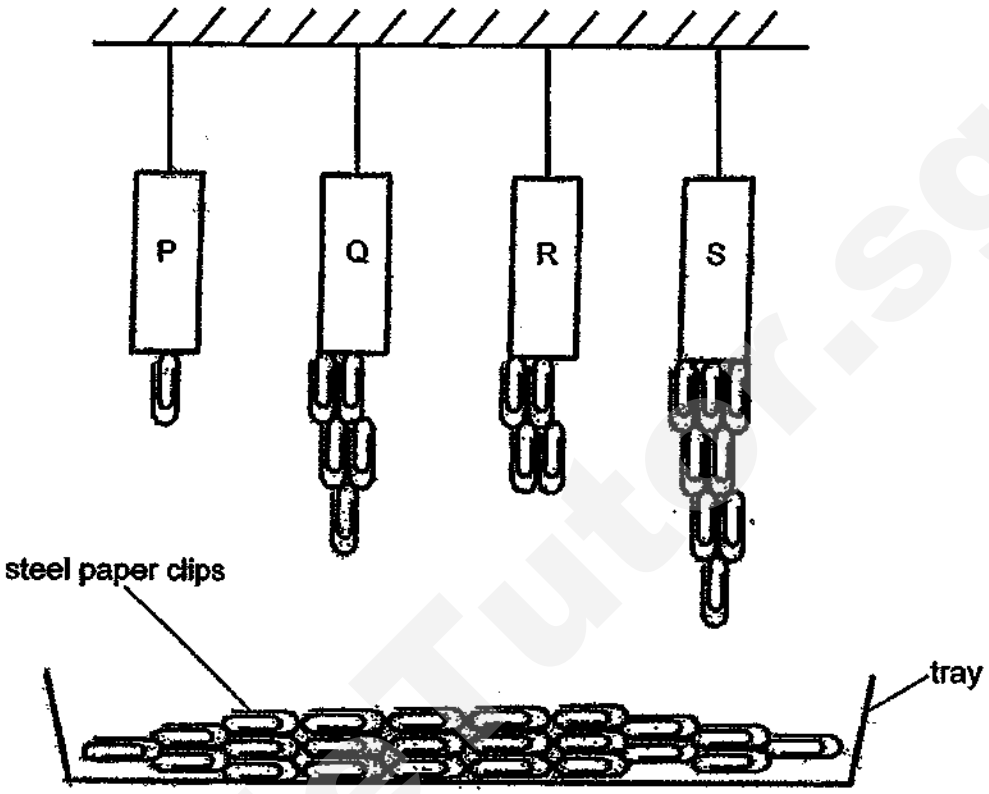


Based on the observations above, which material, A, B, C or D, is most suitable for making his boots? Explain your answer. [1]

Score	/ 1

Need a home tutor? Visit smiletutor.sg

33. Jasmine hung four magnets, P, Q, R and S, above a tray of identical steel paper clips. Her observation is shown below.

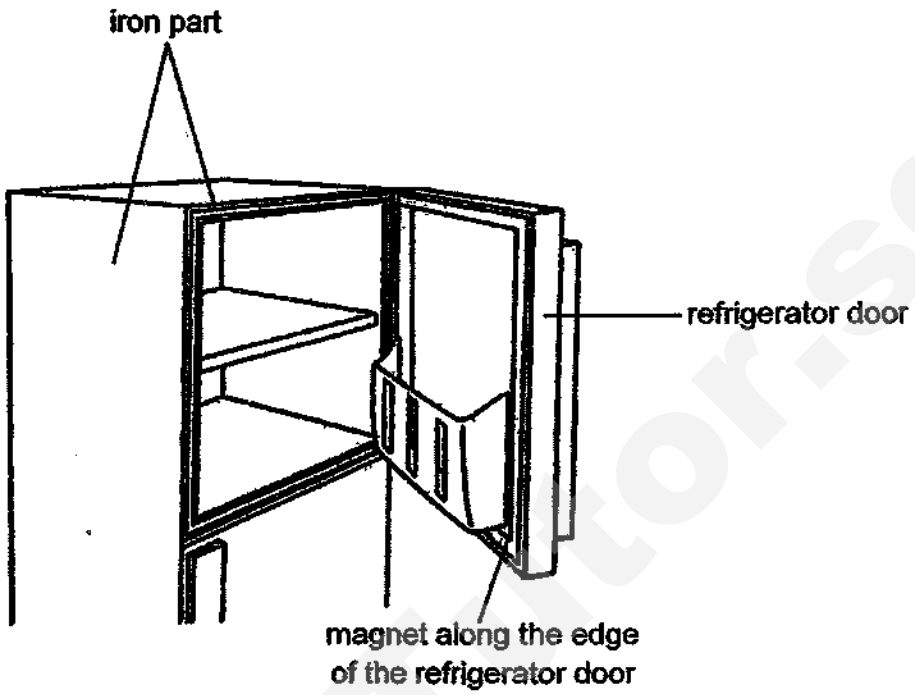


(a) Based on her observation, which is the strongest magnet? Explain your answer. [1]

Score	/ 1

Need a home tutor? Visit smiletutor.sg

The diagram below shows a refrigerator with its door open.



(b) Explain how the magnet along the edge of the refrigerator door keep the refrigerator door tightly shut. [2]

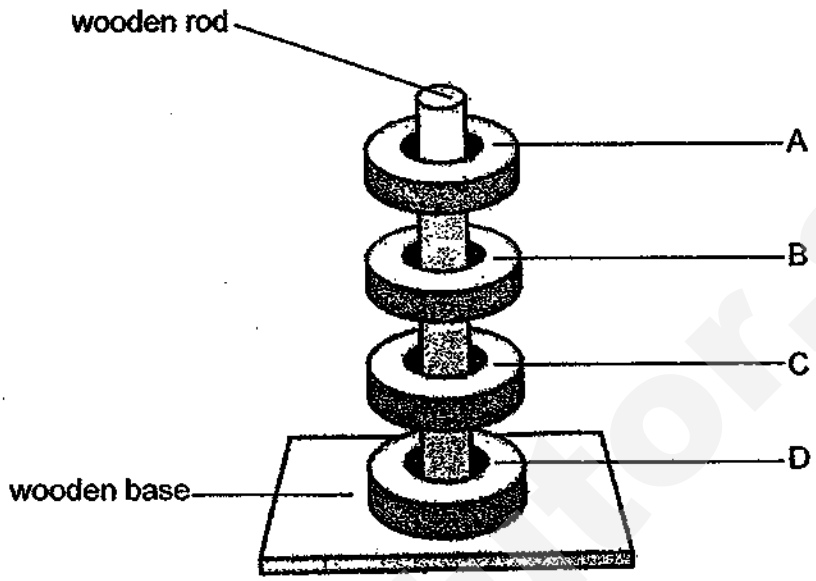
_____

_____

Score	/ 2

Need a home tutor? Visit smiletutor.sg

34. Joanna placed four identical ring magnets, A, B, C and D, through a wooden rod on a wooden base. She observed that these magnets were able to float at a distance away from each other as shown in the drawing below.



(a) Explain why the magnets, A, B, C and D, were floating a distance away from each other. [2]

_____

_____

(b) What can be done to make all the four magnets, A, B, C and D, attract each other? [1]

_____

_____

Score	/ 3

End of Paper

Need a home tutor? Visit smiletutor.sg

ANSWER SHEET

EXAM PAPER 2018 (P3)

SCHOOL : TAO NAN

SUBJECT : SCIENCE

TERM : SA2

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

Q23) a) snails eat leaves

b) The mother snail is giving birth.

c) Living things need air, food and water to survive.

Q24) a) Both reproduce by spores.

b) Fern is a plant but Fungus is not a plant.

c) A. As A has more warmth for bacteria to grow faster.

Q25) a) F : stem E : flowers

b) Function 1 : Part H holds the plant firmly to the ground.

Function 2 : Part H absorb water and mineral salt.

SmileTutor.sg

Need a home tutor? Visit smiletutor.sg

Q26) a) There will fall and die.

b) The plant can trap more sunlight to make more food.

Q27) a) System X : Skeletal system

System Y : Circulatory

b) System X gives our body shape.

Q28) a) A : Gullet B : Stomach C : small intestine D : large intestine

b) Digestion ends at C.

Q29) a) Q – S – R – P

b) P. Because P is the least flexible so the ladder will not bend when the person climbs on it.

c) Wooden plank as it can float while ceramic tile will sink.

Q30) a) Waterproof. If it is not the tent will be soaked with water.

b) Y must be strong so that it can hold the tent in place.

c) Plastic

Q31) a) Yes. Plastic is non-magnetic and cannot attracted by the magnet just like Y.

b) W, because it can repel and attract another magnet.

Q32) a) Water proof or not

b) Repeat the experiment a few minutes.

c) Material A. As his boots must be waterproof so that water cannot enter his boots.

Q33) a) S. It can hold the most steel paper clips.

b) Iron is magnetic so the magnet attracts the iron part.

Q34) a) They are repelling each other. The likes poles of the magnet are facing each other so the magnet repel.

b) Flip A and C

Need a home tutor? Visit smiletutor.sg