

Semestral Assessment 1

Primary Three

2016

**SCIENCE
(Booklet A)**

Name: _____ ()

Class: Primary 3 _____

Date: 10 May 2016

Parent's Signature: _____

48 Marks

Total Time for Booklet A and B: 1h 30 min

INSTRUCTIONS TO CANDIDATES

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.

For each question from 1 to 24, four options are given. One of them is the correct answer. Shade your choice (1, 2, 3, or 4). Shade your answer on the Optical Answer Sheet.

(48 marks)

1 Adam could not fit into a shirt he bought one year ago. What characteristic of living things does this show?

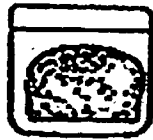
- (1) Living things can grow.
- (2) Living things can move.
- (3) Living things can reproduce.
- (4) Living things need air, food and water.

2 Brenda saw an organism. She wanted to find out if it is a bird. Which of the following actions would enable her to do so?



- (1) Measure its length.
- (2) Count the number of legs.
- (3) Find out whether it has feathers.
- (4) Find out whether it has three body parts.

- 3 Claris set up an experiment to find out the best conditions to grow bread mould as shown below. The slices of bread were placed in sealed bags as shown in the set-ups below.



Set-up A
toasted bread
kept in a warm place



Set-up B
toasted bread
kept in a refrigerator



Set-up C
bread not toasted
kept in a warm place



Set-up D
bread not toasted
kept in a refrigerator

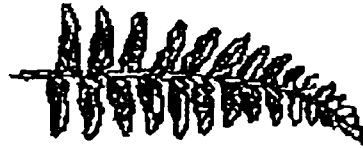
She observed that bread mould started appearing on the bread at different times. In which of the above set-ups A, B, C or D will bread mould most likely appear first?

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

- 4 Compare the two organisms below.



Mushroom

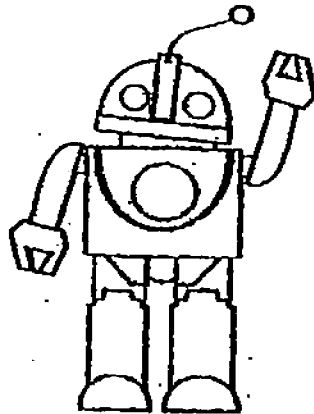


Fern

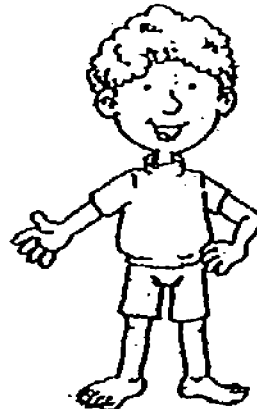
Which of the following statements is/are true?

- A Both produce flowers.
 - B Both reproduce by spores.
 - C Both can make their own food.
 - D Both need air, food and water.
-
- (1) B only
 - (2) B and D only
 - (3) A, C and D only
 - (4) A, B, C and D

- 5 Darren made the following statements about a toy and a man as shown below.



Toy



Man

- A Both can grow.
- B Both need air, water and food.
- C The man can reproduce but not the toy.

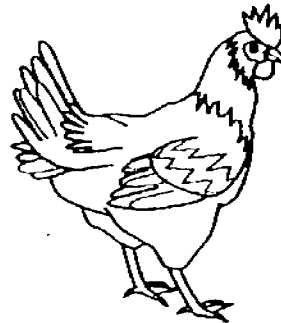
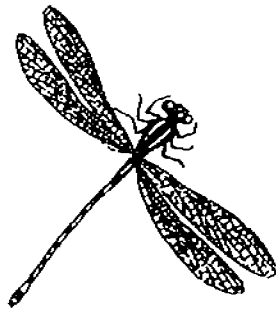
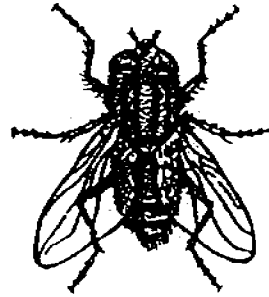
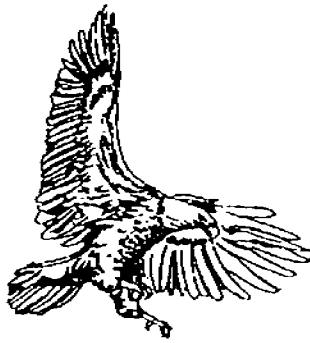
Which of the statements is/are correct?

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

- 6 Adil made the following statements about plants. Which of the following statements is true?

- (1) All plants have flowers.
- (2) All plants reproduce from seeds.
- (3) Plants can make their own food.
- (4) Flowering plants grow only on land.

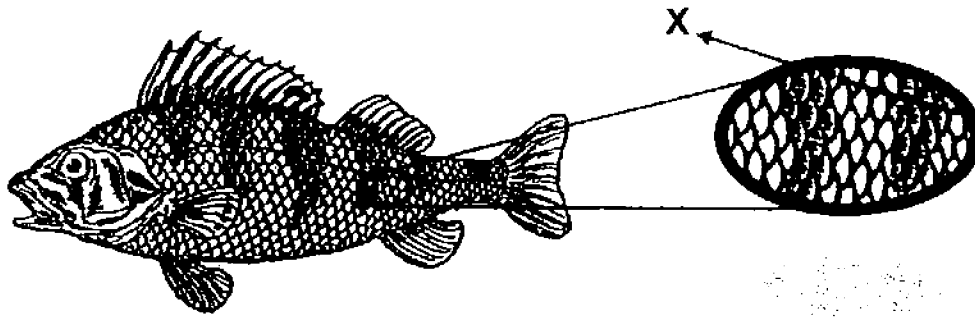
- 7 Look at the pictures below carefully.



Based on the pictures, in what way(s) is/are the animals above similar?

- A They have wings.
 - B They have two legs.
 - C They have three body parts.
-
- (1) A only
 - (2) B only
 - (3) A and C only
 - (4) A, B and C

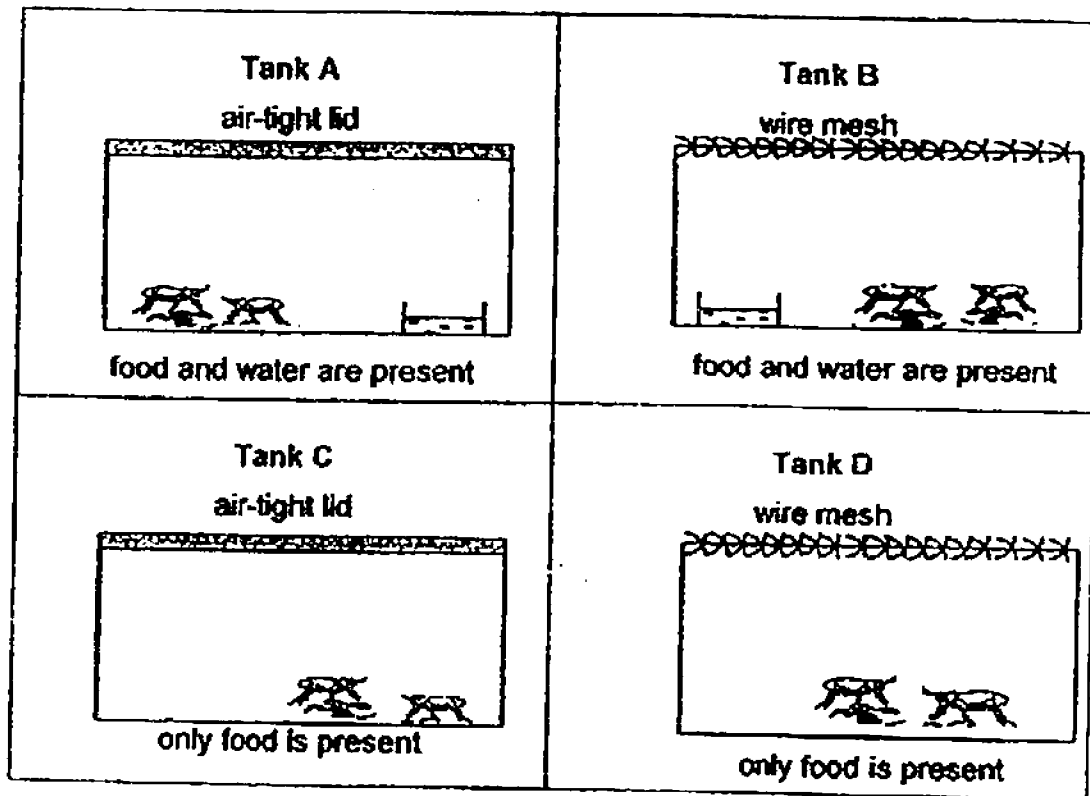
- 8 The diagram below shows a fish.



What is the function of part 'X'?

- (1) Helps the fish breathe in water.
 - (2) Enables the fish to float in water.
 - (3) Helps to protect the body of the fish.
 - (4) Enables the fish to change direction in water.
- 9 Which of the following statements is not correct?
- (1) A staghorn fern can reproduce.
 - (2) An ant needs air, food and water to survive.
 - (3) A monkey can respond to changes around it.
 - (4) A doll can move from one place to another on its own.

- 10 Grasshoppers of a similar size were kept in glass tanks as shown below.



In which one of these tanks would the grasshoppers most likely survive for the longest period of time?

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

11 Eileen wrote some notes about a living thing.

- It produces spores.
- It can make its own food.
- It is green in colour.
- It grows on a tree branch.

Which group does this living thing belong to?

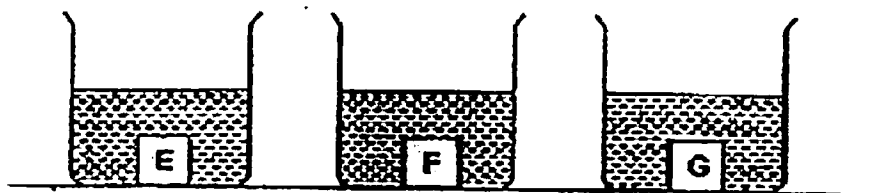
- (1) Plants
- (2) Fungi
- (3) Bacteria
- (4) Animals

12 Fatimah picked up a dried plant. Her teacher said it was a non-living thing because it _____.

- A cannot grow anymore
- B cannot reproduce anymore
- C cannot respond to changes

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

- 13 Three similar-sized sheets made of different materials, E, F, G, were weighed individually before they were put into three beakers containing equal amounts of water. After 15 minutes, each sheet was taken out and weighed again.



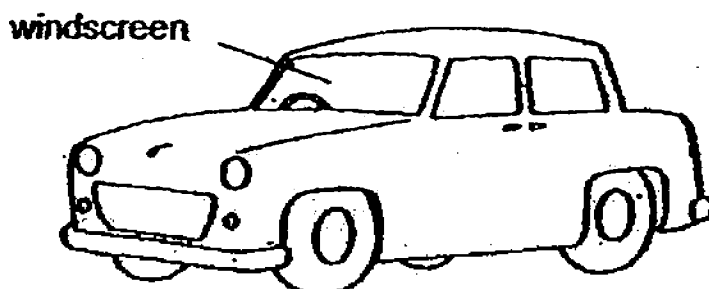
Their masses were recorded in a table as shown below.

	Mass at the beginning (g)	Mass after 15 minutes(g)
E	8	12
F	6	6
G	11	12

Which one of the following shows the arrangement of material E, F and G beginning with the most absorbent to the least absorbent?

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

- 14 A car manufacturer has to decide on the best material to make the windscreen of a car. Some information on the four available materials A, B, C and D is shown in the table below.

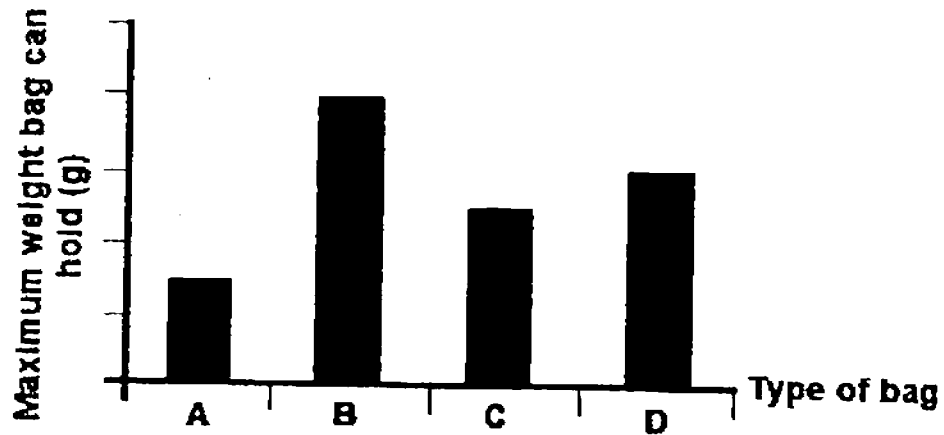


Material	Properties
A	Strong, waterproof and transparent
B	Able to float on water and long-lasting
C	Transparent and long-lasting
D	Waterproof, fragile and transparent

Which material is most suitable for making the windscreen?

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

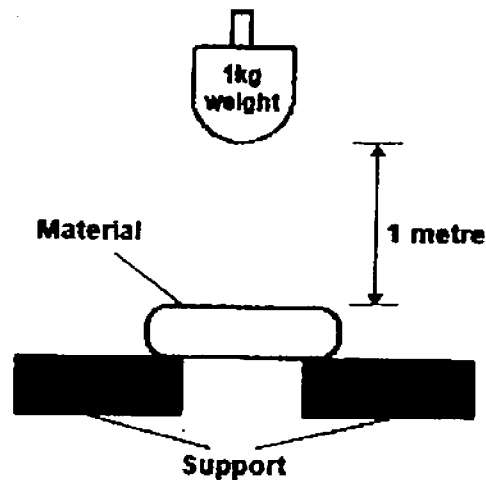
- 15 The bar graph below shows the maximum weight of four different types of bags, A, B, C and D, can hold before tearing.



Based on the graph above, which one of the following statements about the bags is true?

- (1) Bag B is the weakest.
- (2) Bag A is the least flexible.
- (3) Bag D is stronger than Bag C.
- (4) Bag C is more waterproof than Bag A.

- 16 Grace tested the strength of four different materials by dropping a 1 kg weight from a height of 1 metre. All four materials have the same shape and size. She noted the number of times the weight was dropped before the material broke into two pieces.



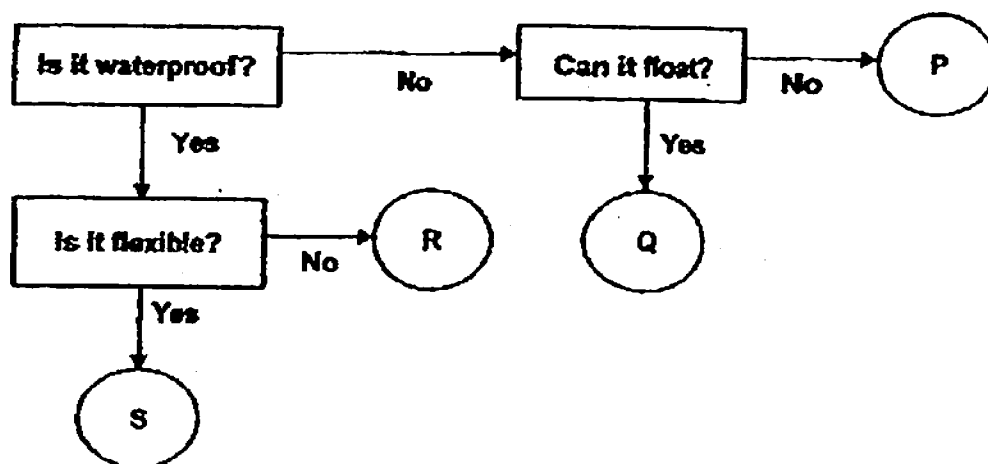
The results were shown in the table below.

Material	Number of drops
A	45
B	39
C	23
D	53

Based on the results above, which one of the following statements best describes the materials correctly?

- (1) Material D is the weakest.
- (2) Material A is the strongest.
- (3) Material B is stronger than Material A.
- (4) Material C will be the first to break if a 2 kg weight is dropped on each material.

- 17 Study the flow chart below.



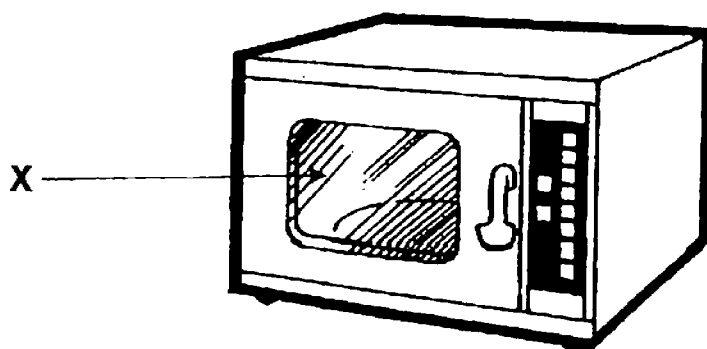
Based on the flow chart, which letter best represents a rubber hose?

- (1) P
 - (2) Q
 - (3) R
 - (4) S
- 18 Henry did an experiment to find out the properties of an object. He dropped the object on the floor and it changed its shape but did not break. He could press the object back to its original shape with his hands. What was the object he was testing?
- (1) Mirror
 - (2) Pencil
 - (3) Plasticine
 - (4) Ceramic Cup

- 19 Jeremy was playing with a ball inside his house. The ball hit a vase and the vase broke. Which of the following materials is the vase most likely to be made of?

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

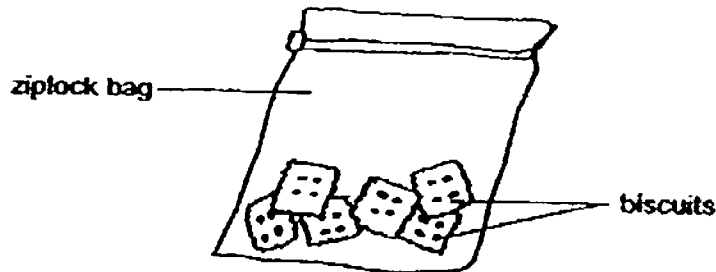
- 20 The diagram below shows a microwave oven.



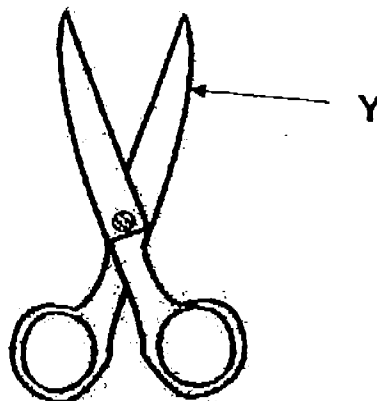
What material and its property should be taken into consideration to make part X of the microwave oven?

	Material	Property
(1)	Glass	It is transparent.
(2)	Metal	It is strong.
(3)	Plastic	It is waterproof.
(4)	Rubber	It is elastic.

- 21 Kelly placed her biscuits in a ziplock bag. She accidentally spilt water over it, but observed that the biscuits inside the bag did not get wet. Which of the following could be the reason for this?



- (1) The ziplock bag was strong.
 - (2) The ziplock bag was flexible.
 - (3) The ziplock bag was waterproof.
 - (4) The ziplock bag was transparent.
- 22 Part Y of a scissors is usually made of metal. Why is metal a suitable material for Part Y?



- (1) It is light.
- (2) It is strong.
- (3) It is flexible.
- (4) It is waterproof.

23 Which of the following are obtained from plants?

- A Silk Scarf
- B Metal Ruler
- C Cotton T-shirt
- D Rubber Glove

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

24 Lisa bought some plates for a birthday party. They were light, cheap and can be thrown away after use. They did not break easily. What material could they be made of?

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

Semestral Assessment 1

**Primary Three
2016**

**SCIENCE
(Booklet B)**

Name _____ ()

Class: Primary 3 _____

Date: 10 May 2016

Parent's Signature: _____

32 Marks

Total Time for Booklet A and B: 1h 30 min

INSTRUCTIONS TO CANDIDATES

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.

Paper	Marks	Scores
Booklet A	48	
Booklet B	32	
Total	80	

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 Some scientists discovered an animal Z. They observed that the animal Z bears the following characteristics:

It lays eggs.
It lives in water.
It breathes through gills.
It has a body covering of scales.

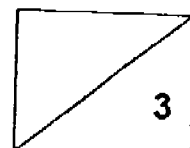
- a) Meena said that animal Z is a frog because it lays eggs. Is she correct? [2]
Give two reasons for your answer.

(i) _____

(ii) _____

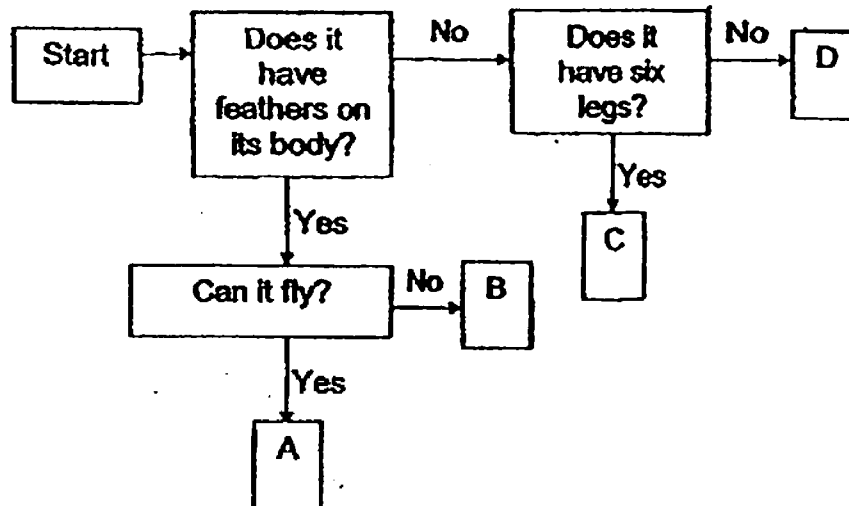
- b) Based on the information above, which animal group would the animal Z [1]
most likely belong to?

(Go on to the next page)



26

Study the flow chart below.



- a) Based on the chart, describe one similarity and one difference between Animal C and Animal D.

(i) Similarity:

[1]

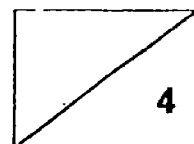
(ii) Difference:

[1]

- b) Using the information from the chart, write the letters, A, B, C or D that represent the animals in the boxes below. [2]

Animals	A, B, C or D
Butterfly	
Eagle	
Penguin	
Goldfish	

(Go on to the next page)

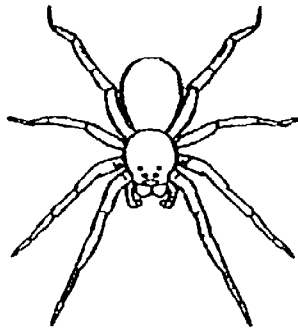


- 27 Nathan wants to find out if an animal is an insect. What are the possible actions he should take to confirm if it is an insect? Put a tick accordingly.

a) [1]

Action	Tick (✓)
Check to see if it has feelers	
Check to see if it has six legs.	
Check to see if it has wings.	
Check to see if it has three body parts.	

Nathan found Animal Y which is shown in the diagram below.

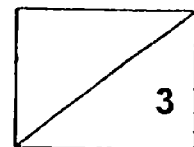


- b) He concluded that Animal Y is not an insect. Do you agree with him? Give [2]
two reasons for your answer.

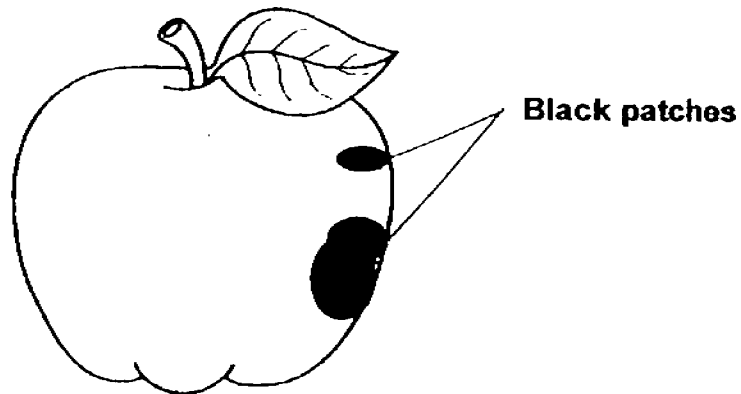
(i) _____

(ii) _____

(Go on to the next page)



- 28 Millie observed some black patches on her apple. Her classmate told her that the apple cannot be eaten anymore.

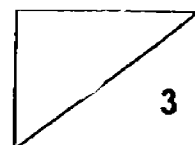


- a) What are the black patches found on the apple? [1]

- b) How do the black patches reproduce? [1]

- c) Name another organism that reproduces in a similar way. [1]

(Go on to the next page)



- 29 Study the table below.

Plants	
Group A	Group B
Papaya tree	Staghorn fern
Rose plant	Moss
Green bean plant	Ladder fern

- a) Give suitable headings for Group A and Group B.

[2]

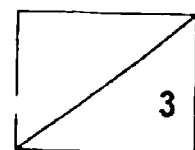
Group A: _____

Group B: _____

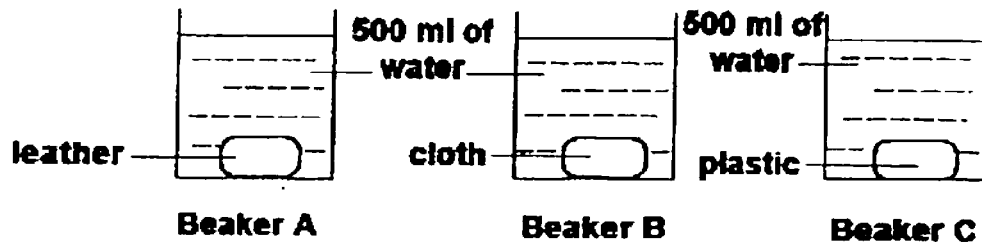
- b) How do the plants in Group A reproduce?

[1]

(Go on to the next page)



- 30 Three different materials, leather, cloth and plastic were placed into beakers containing 500 ml of water each. The materials were of the same shape and size, as shown in the diagrams below.

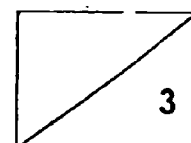


After 30 minutes, the materials were then removed from the beaker and the amount of water left in each beaker was recorded.

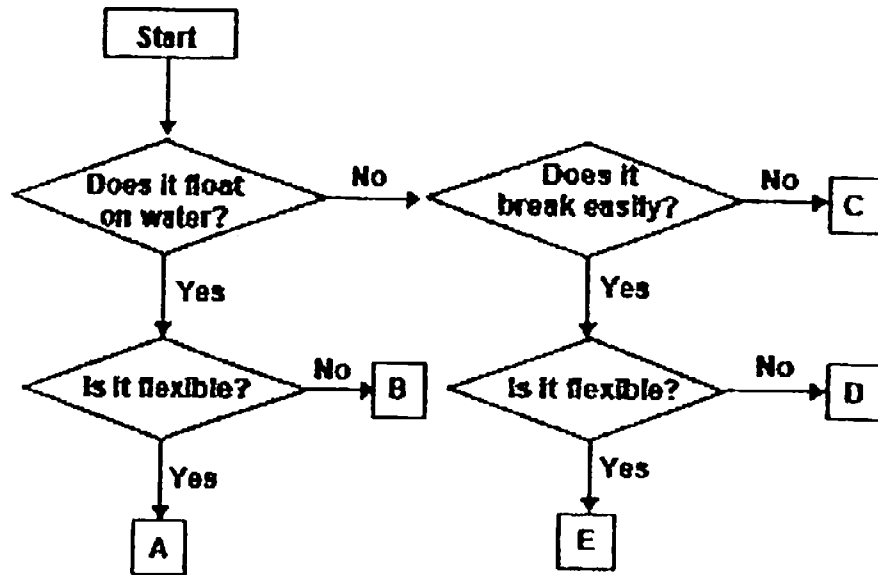
Beakers	Amount of water left in the beaker (ml)
A	480
B	420
C	

- a) Fill in the amount of water that would be left in beaker C in the table above. [1]
- b) Which material, leather, cloth or plastic, is the most suitable for making a towel? Explain your answer. [1]
- c) Which material, leather, cloth or plastic, is most suitable for making an umbrella? Explain your answer. [1]

(Go on to the next page)



- 31 Study the flowchart given below.



- a) Based on the chart, state one similarity and one difference between object A and B.

(i) Similarity:

[1]

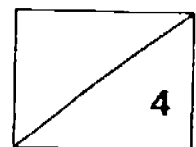
(ii) Difference:

[1]

- b) Using the information from the chart, write the letters, A, B, C, D or E that represent the objects in the boxes below. [2]

Objects	A, B, C, D or E
Metal nail	
Plastic straw	

(Go on to the next page)



- 32 Fandi's class is involved in a recycling project. The following are the objects Fandi found in the recycling bin.

Mineral water bottle
Aluminium drink can
Newspaper
Drinking straw
Magazine
Cardboard box

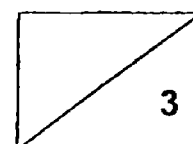
Classify the objects according to the materials they are made of in the [3] boxes below.

Paper

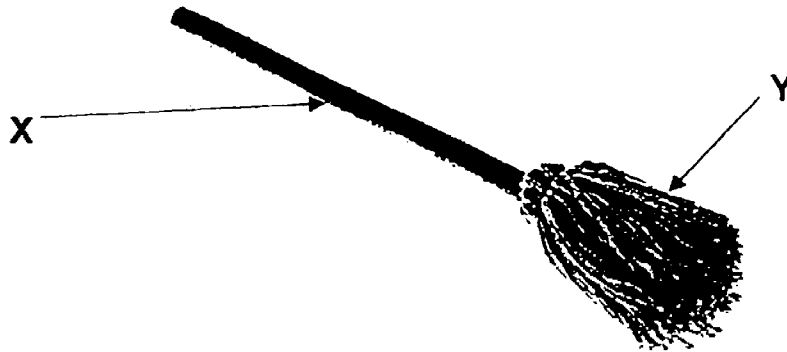
Metal

Plastic

(Go on to the next page)



33 The diagram below shows a mop.



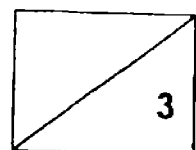
a) Name the materials used to make Parts X and Y of the mop. [2]

X: _____

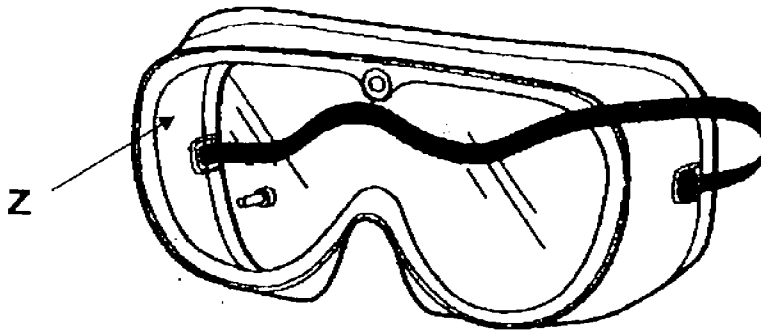
Y: _____

b) Give a reason for your choice for material Y. [1]

(Go on to the next page)



- 34 The diagram below shows a pair of goggles. Goggles are used to protect the eyes when swimming.

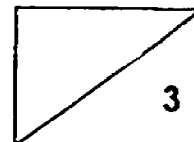


- a) State two physical properties of plastic that make it suitable to be made into [2]
part Z of the goggles.

(i) _____

(ii) _____

- b) State one reason why part Z of the goggles should be made of plastic and [1]
not glass.



End of paper

YEAR : 2016
LEVEL : PRIMARY 3
SCHOOL : TEMASEK PRIMARY
SUBJECT : SCIENCE
TERM : SA1

Booklet A

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

Booklet B

- Q25 (a) (i) Meena is wrong. A frog does not breathe through gills.
- (ii) Meena is wrong. A frog does not have a body covering of scales.
- (b) Animal Z belongs to a fish.

- Q26 (a) (i) Both animal C and animal D have feathers on its body.
- (ii) Animal D does not have six legs but animal C has.

(b)

Animals	A, B, C or D
Butterfly	C
Eagle	A
Penguin	B
Goldfish	D

Q27

(a)	Action	Tick (✓)
	Check to see if it has feelers.	✓
	Check to see if it has six legs.	✓
	Check to see if it has wings.	
	Check to see if it has three body parts.	✓

- (b) (i) Yes agreed. Because animal Y does not have three body parts.
- (ii) Yes agreed. Because animal Y does not have six legs.

Q28

- (a) Mould
- (b) They reproduce by spores.
- (c) Mushroom

Q29

- (a) Group A : Flowering plant.
- Group B : Non-flowering plant.
- (b) By seeds.

Q30

- (a) Beakers C $\Rightarrow$ 500 ml
- (b) Material cloth is the most suitable because the cloth can absorb the most amount of water.
- (c) Material plastic is the most suitable because the plastic absorbs the least amount of water.

Q31

- (a) (i) Similarity : Both object A and B float on water.
- (ii) Difference : Object A is flexible but B is not.

(b)

Objects	A, B, C, D or E
Metal nail	C
Plastic straw	A

Q32

Paper	Metal
Newspaper	Aluminium drink can
Magazine	
Cardboard box	

Plastic
Mineral water bottle
Drinking straw

Q33

(a) X : Plastic

Y : Cloth

(b) Material Y absorbs water.

Q34

(a) (i) Plastic does not break easily.

(ii) It is transparent.

(b) Glass would break easily.

End