

PEI HWA PRESBYTERIAN PRIMARY SCHOOL  
**Weighted Assessment 1**

**PRIMARY 3  
SCIENCE**

Total time for paper: Max 50 min

**INSTRUCTIONS TO CANDIDATES**

1. Write your Name, Class and Register No. in the spaces provided above.
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 all your answers in this booklet.

Marks (Booklet A) :	12
Marks (Booklet B) :	8
Total Marks (Booklets A & B) :	20

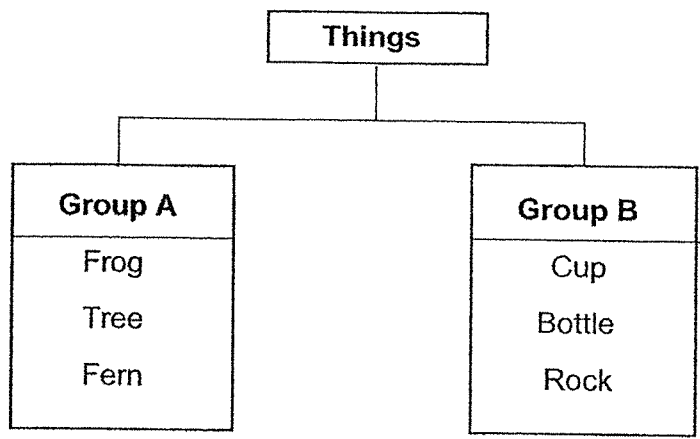
This booklet consists of 6 printed pages, excluding the cover page.



For each question from 1 to 6, four options are given. One of them is the correct answer. Make your choice and write your answer in the bracket provided. (12 marks)

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1 Study the classification table below.



Which one of the following can be placed in the same group of things as group A?

- (1) Car
- (2) Table
- (3) Lizard
- (4) Mobile phone ( )

2. The table below show 3 things, L, M and N and their characteristics. A tick (✓) shows that the thing has the characteristic.

Things	Need air food and water	Moves from place to place by themselves	Respond to changes	Grow
L	✓	✓	✓	✓
M	✓	X	✓	✓
N	X	X	X	X

Based on the table above, which of the following statements below describes L, M and N correctly?

- 
- (1) N is a non-living thing.
- (2) L is the only living thing.
- (3) L, M and N are living thing.
- (4) M and N are the only living things. ( )

- 3 There are 4 statements, A, B, C and D made about living things.

- A They have young.
- B They can reproduce.
- C They come in different sizes and shapes.
- D They feed on other living things for food.

Which statements state the similarities between plants and animals?

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

4. Which of the following statements about a non-flowering plant is **not** true?

- (1) It does not have fruits.
- (2) It reproduces by spores.
- (3) It does not have any flowers.
- (4) It has roots, stems, leaves and seeds. ( )

5. The characteristics of living thing K are listed below.

- Has a cap, stalk and gills
- Can be seen with naked eyes
- Feed on dead and living organisms.

Which of the following represents living thing K?

- (1) Yeast
- (2) Bacteria
- (3) Mushroom
- (4) Bread Mould ( )

6 Study the diagram below.



They are living things that \_\_\_\_\_

- (1) produce flowers
- (2) can be useful to us
- (3) reproduce by spores
- (4) are called micro-organisms

( )

Write your answers to the questions 7 and 8 in the spaces provided. The marks is shown in brackets [ ] at the end of each question or part question. (8 marks)

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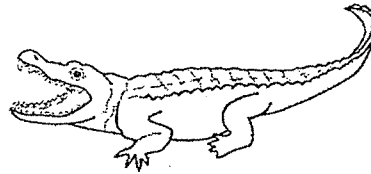
7. Study the animals shown below.



A



B



C

(a) Which animal group does Animal B belongs to? [1]

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(b) State two characteristics of Animal B that is used to classify it as the animal group stated in part (a). [2]

1. 

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2. 

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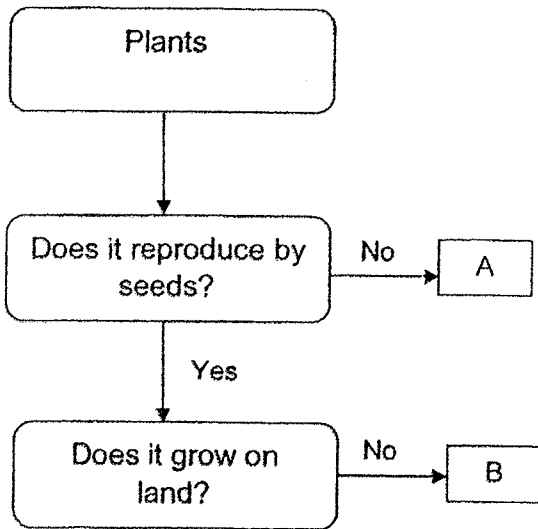
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(c) State the difference between Animals A and C in terms of its body covering. [1]

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8. Study the flow chart below.



(a) List one characteristic of B based on the flow chart. [1]

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(b) Based on the flow chart, state one difference between A and B. [1]

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(c) Mrs Tan said that A is not a mushroom. Why do you think she said so? [1]

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(d) Which of the following can be an example of B? Circle the correct answer. [1]

Water Lily / Rose / Orchid

End of paper

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

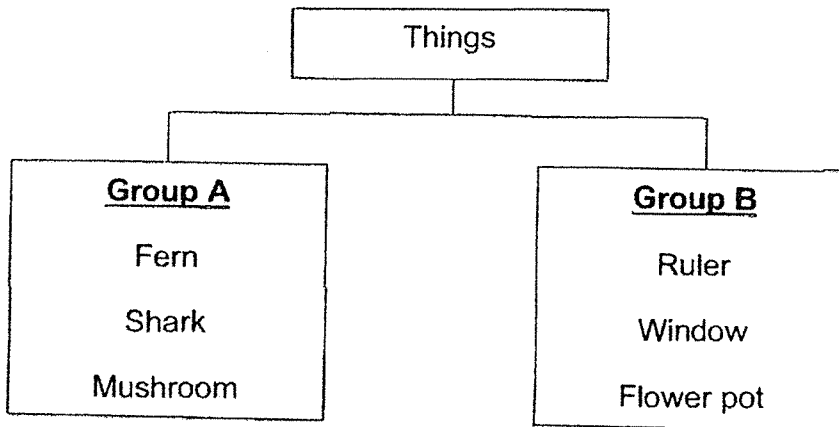
For each question, from 1 to 24, four options are given. One of them is correct. Make your choice and shade the oval (1, 2, 3, or 4) on the Optical Answer Sheet.

[ 48 Marks ]

1 Which one of the following observations below is correctly matched to its characteristics of living things?

	Observations	Characteristics
(1)	The tortoise lays eggs.	Living things can reproduce.
(2)	A baby growing into an adult.	Living things can respond to changes.
(3)	A monkey swings from tree to tree.	Living things need air, food and water.
(4)	The leaves of a mimosa plant close up when we touch them.	Living things can grow.

2 The classification chart below shows two different groups of things.



Which of the following should be placed in Group A?

- (1) Butter
- (2) Mould
- (3) T-shirt
- (4) Feather

- 3 Jane kept 8 hamsters in a cage. The number of hamsters was counted and recorded over 24 months in the table below.

Number of months	Number of hamsters
6	10
12	14
18	9
24	8

Based on the information recorded in the table, which two statements below are true about the hamsters?

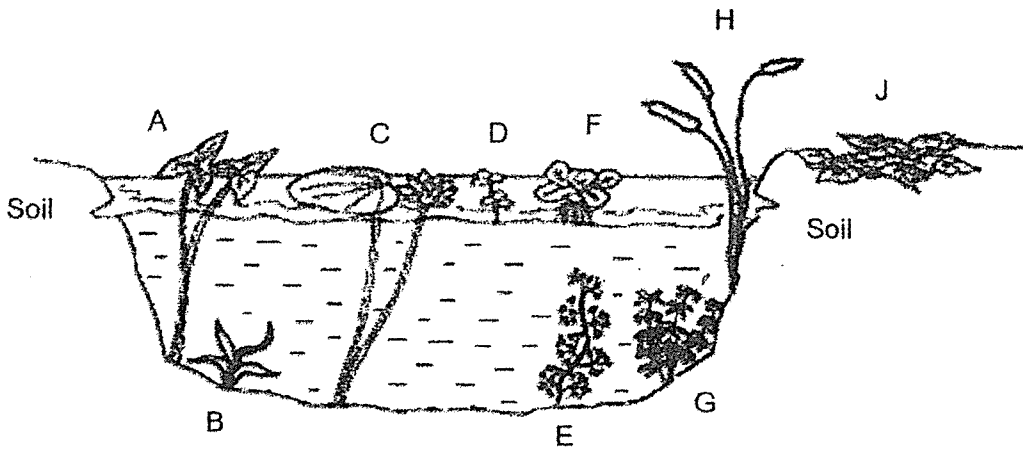
- A Living things can die.
- B Living things can reproduce.
- C Living things need air, food and water.
- D Living things respond to changes around them.

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

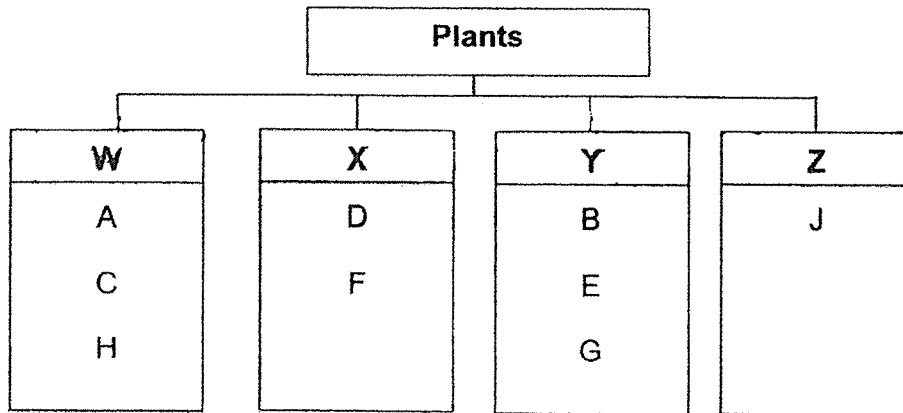
- 4 Which of the following statements is true?

- (1) All plants bear flowers.
- (2) Plants can only grow in soil.
- (3) Plants reproduce by seeds only.
- (4) Plants can respond to changes around them.

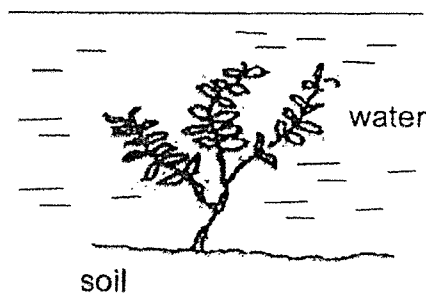
5 Sheela saw some plants in the school pond.



She classified the plants she saw in 4 different groups based on their characteristics.



Which group (W, X, Y or Z) should Sheela placed the plant below?



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

6 Below are some characteristics that describes Plant X.

- It grows on rock.
- It does not bear flowers.
- It reproduce by spores.

What could Plant X be?

- (1) Moss
- (2) Mould
- (3) Orchid
- (4) Mimosa

7 Which of the following are true about spores?

- A They are very small.
- B They help in reproduction.
- C They can only be found in fungi.
- D They can be developed into fruits.

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

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



Mushroom



Bird's nest fern

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

9 Which of the following groups consist of different types of fungi?

- (1) Mould and fern
- (2) Fern and mushroom
- (3) Mushroom and toadstool
- (4) Toadstool and Bougainvillea

10 Look at the pictures below carefully.

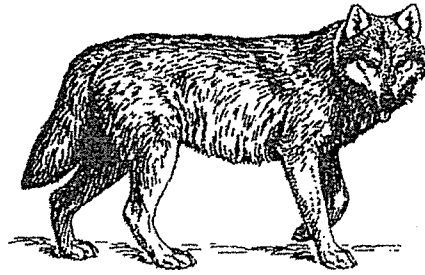


How are the animals above similar?

- A They have wings.
- B They have six legs.
- C They have feelers.
- D They have a beak.

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

11 This living thing can be found in the wild.

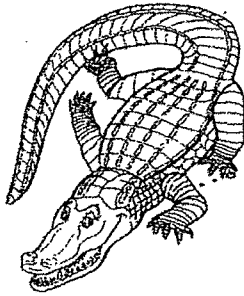


Which of the following characteristics of the above living thing are useful in the classification of it as a mammal?

- A It has thick hair.
- B It has strong legs.
- C It feeds its young with milk.
- D It feeds on other animals only.

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

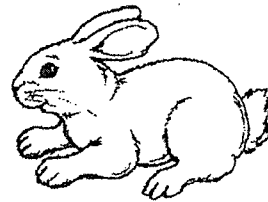
12 Study the pictures below.



Animal A



Animal B

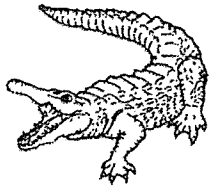


Animal C

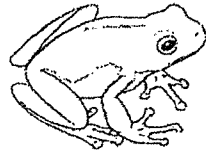
Which of the following shows the correct body coverings of Animals A, B and C?

	Animal A	Animal B	Animal C
(1)	Dry skin with scales	Feathers	Hair
(2)	Feathers	Scales	Hard outer covering
(3)	Scales	Hair	Feathers
(4)	Hair	Hard outer covering	Dry skin with scales

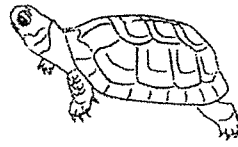
13 Study the group of animals below.



Crocodile



Frog



Turtle



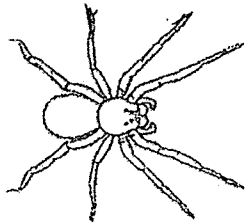
Lizard

Why does the frog not belong to the group above?

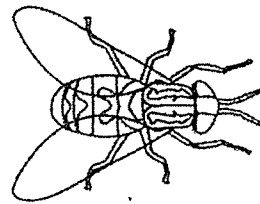
- (1) It has a tail.
- (2) It lays eggs.
- (3) It has 4 legs.
- (4) It has moist skin.

14 Which one of the following is an insect?

(1)



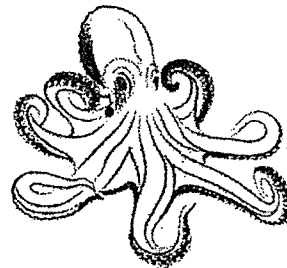
(2)



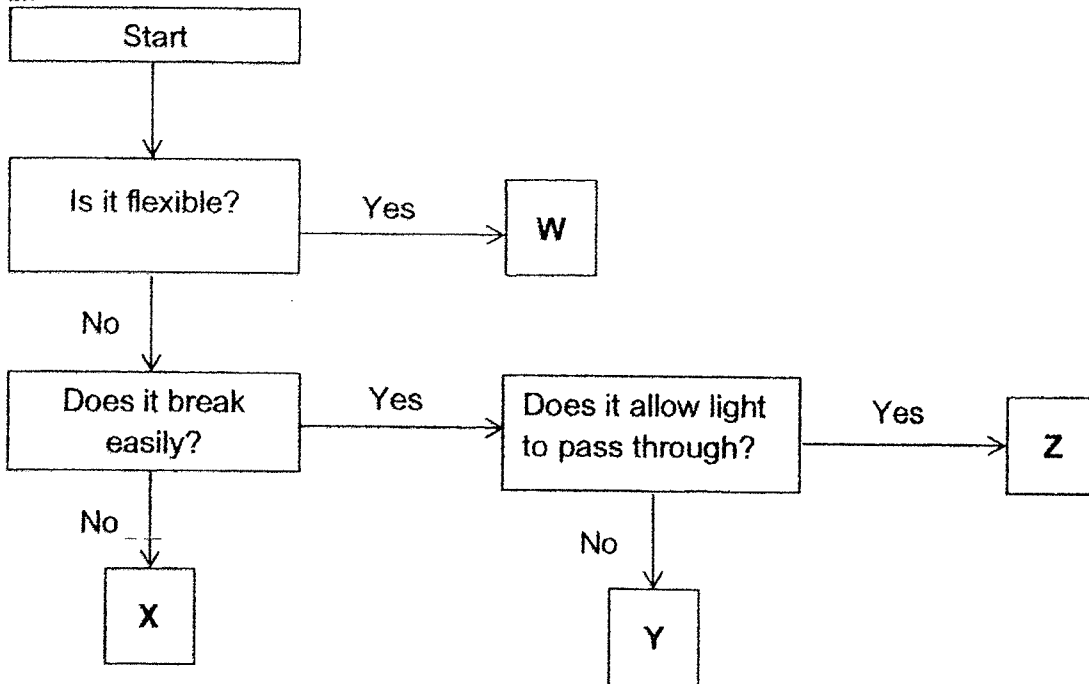
(3)



(4)



15 The flow chart below shows the properties of four different objects W, X, Y and Z.



Which of the following best represents objects W, X, Y and Z?

	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
(1)	Skipping rope	Rubber hose	Window pane	School gate
(2)	Mirror	Skipping rope	School gate	Rubber hose
(3)	Plastic ruler	Window pane	Fish tank	Mirror
(4)	Rubber hose	School gate	Mirror	Fish tank

16 Kathy described a material as follows:

- It is flexible.
- It is waterproof.
- It comes from plant.

Which object below is most likely made of the material that Kathy has described?

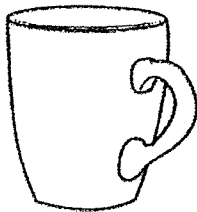
(1)



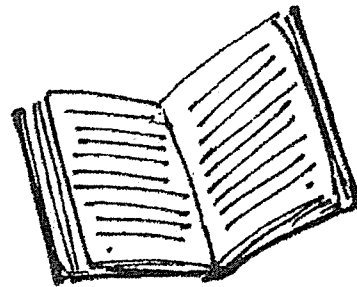
(2)



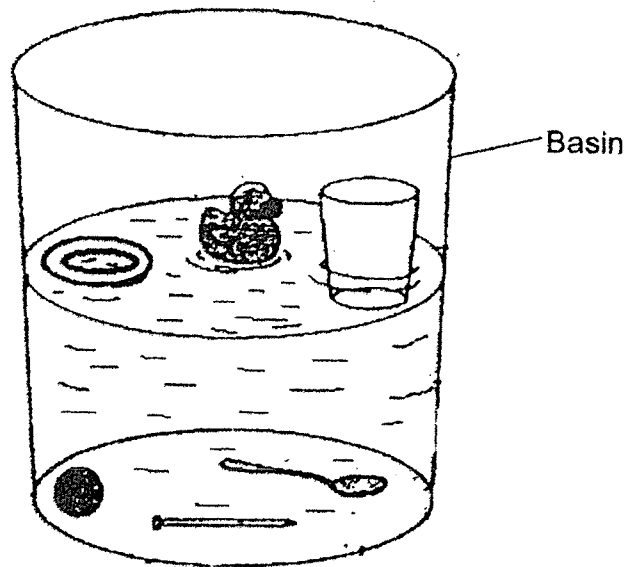
(3)



(4)



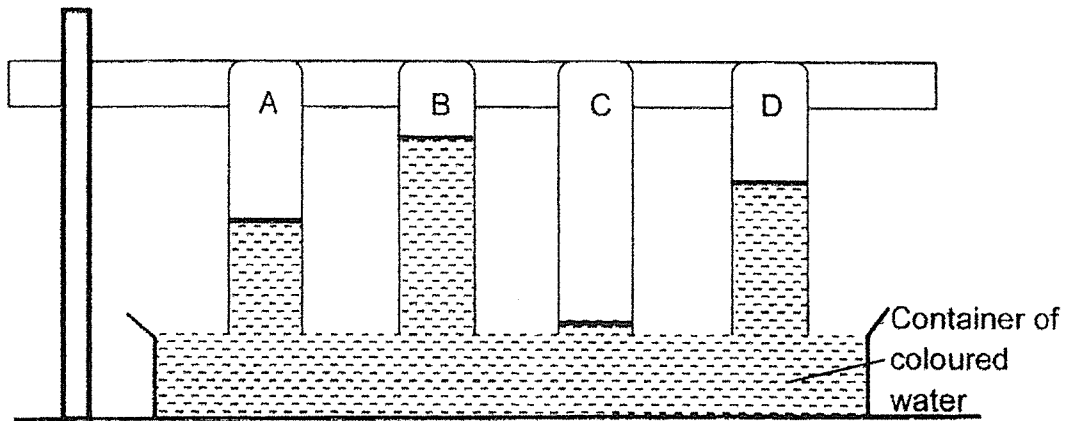
- 17 John put six objects made of different materials into a basin of water. The diagram below shows what he observed.



What was he trying to find out?

- (1) Flexibility of the objects
- (2) Transparency of the objects
- (3) Whether the objects sink or float
- (4) Whether the objects absorb water

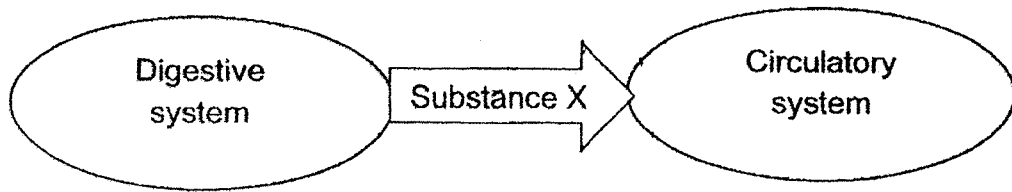
- 18 Sue set up an experiment to find out which 4 materials A, B, C and D is able to absorb water in the shortest time. She drew a line on the 4 materials to show the amount of water absorbed by each material as shown below.



Which of the material above is most suitable to make raincoat?

- (1) Material A
  - (2) Material B
  - (3) Material C
  - (4) Material D
- 19 The bones support our body and gives us shape. Which of the following systems works with our bones to enable movements?
- (1) Muscular system
  - (2) Digestive system
  - (3) Circulatory system
  - (4) Respiratory system

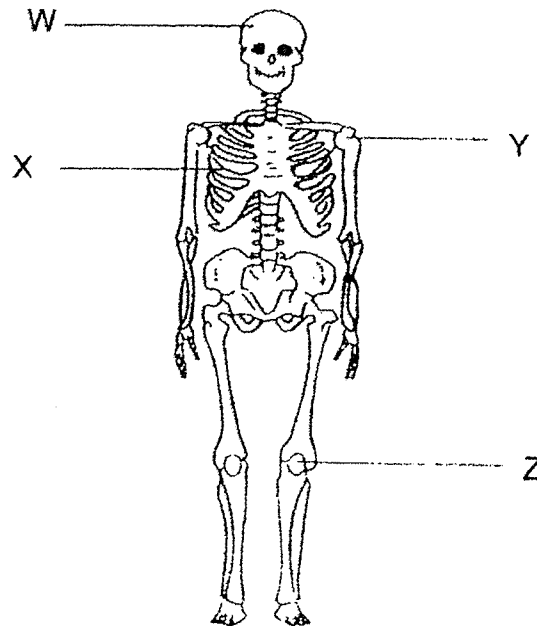
20 Study the diagram below.



What is the substance X that is absorbed into the circulatory system from the digestive system?

- (1) Solid waste
- (2) Digested food
- (3) Digestive juice
- (4) Undigested food

21 The diagram below shows the skeletal system.



Which parts of the skeletal system protect our organs?

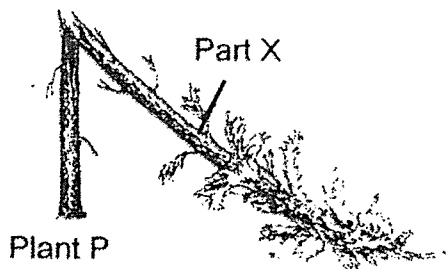
- (1) X only
- (2) W and X only
- (3) X and Y only
- (4) W, X, Y and Z

22 What is the main function of the stem of a plant?

- A Hold the plant upright
- B Absorb water and minerals
- C Trap sunlight to make food
- D Anchor the plant firmly to the ground

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

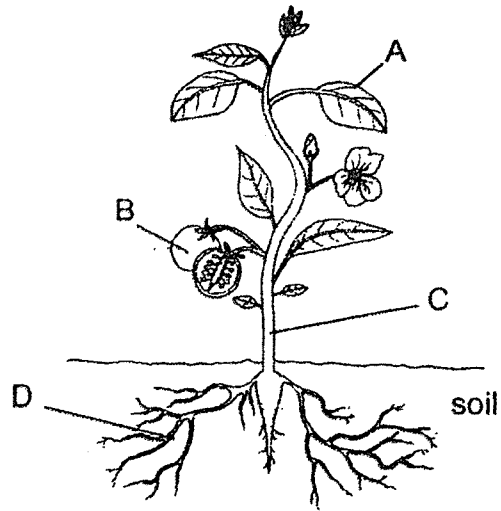
23 Study the diagram below carefully.



After a thunderstorm, Daniel noticed that the plant in front of his house died after a few days. What is the possible reason that caused Plant P to die?

- (1) Part X of the plant could not bear flowers.
- (2) Exchange of gases could not take place.
- (3) The leaves in Part X could not trap enough sunlight to make food.
- (4) Water was not able to be transported from the roots to the other parts of the plant.

- 24 Gina removed one of the parts in the plant below and she noticed that the plant can still survive after a few days.

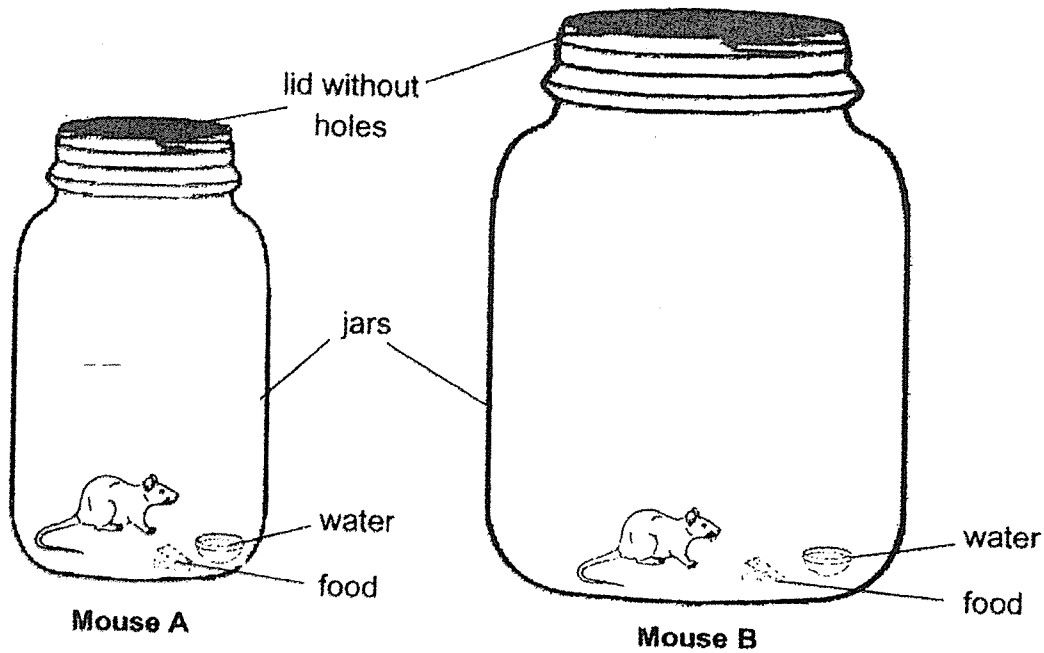


Which part of the plant did she remove?

- (1) All of A
- (2) All of B
- (3) All of D
- (4) Whole of C

For questions 25 to 33, 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 A mouse is kept in each of the jars as shown below.



(a) After a few hours, Mouse A and Mouse B died.  
What characteristic of living things did the mice show? [1]

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(b) Which of the mice will survive for a longer time?

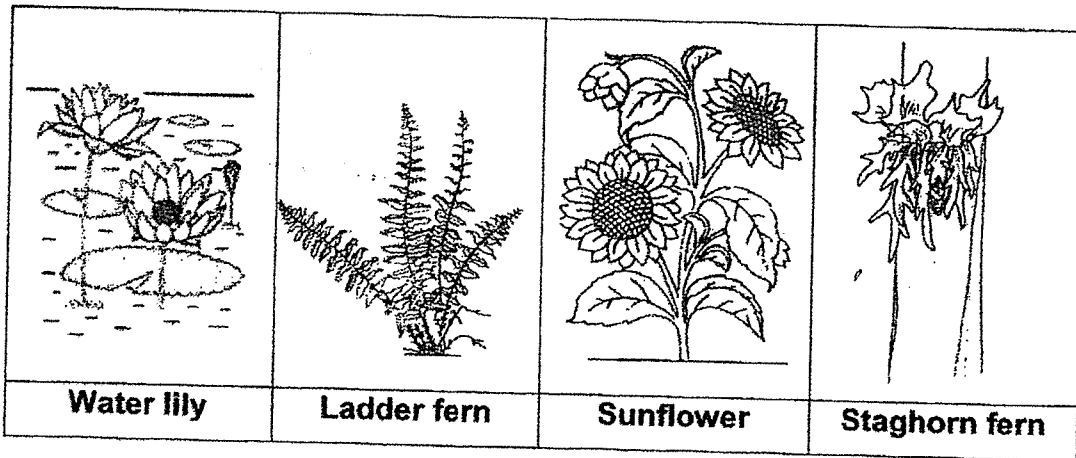
Mouse \_\_\_\_\_

Give a reason for your answer. [1]

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26 Study the following plants shown below carefully.



(a) Classify the above plants into flowering and non-flowering plants in the table below.

[2]

<b>Flowering Plants</b>	<b>Non-flowering Plants</b>

(b) State a difference between Water lily and Sunflower, in terms of where they are found.

[1]

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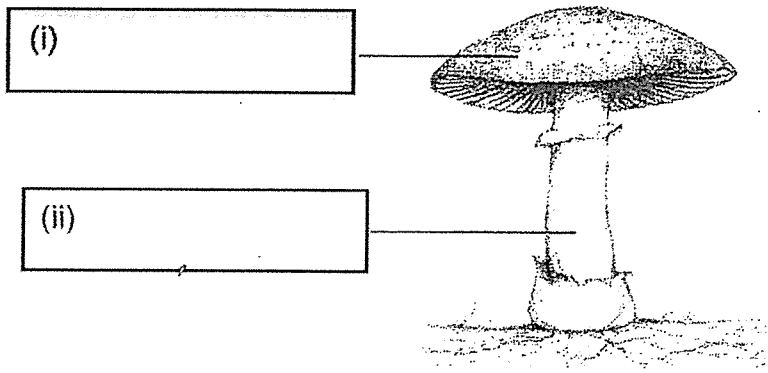
(c) State how Staghorn fern reproduce.

[1]

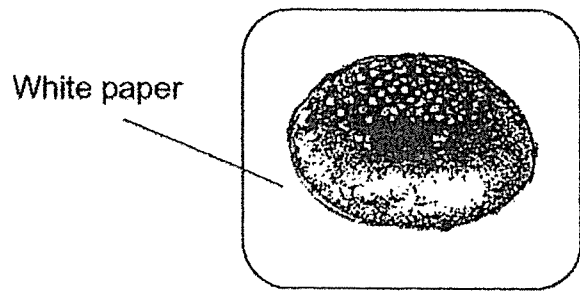
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27 (a) Label all the mushroom parts below.

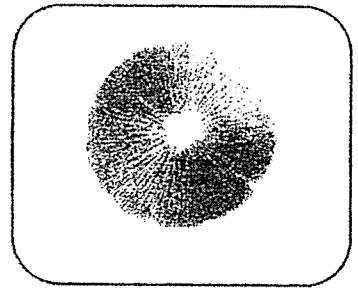
[2]



Mrs Lim plucked a mushroom and placed it on a piece of white paper as shown below.



After a day, she removed the mushroom and used a magnifying glass to look at the powdery black lines formed on the white paper as shown below.



(b) What are the powdery black lines?

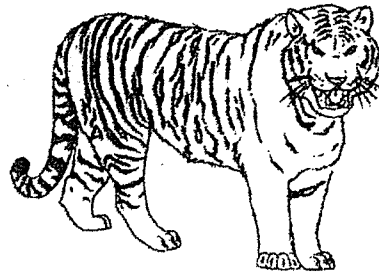
[1]

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28 The diagrams below show a penguin and a tiger.



Penguin



Tiger

(a) State 2 differences between penguin and tiger in terms of:

(i) the way they reproduce.

[1]

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(ii) their outer coverings:

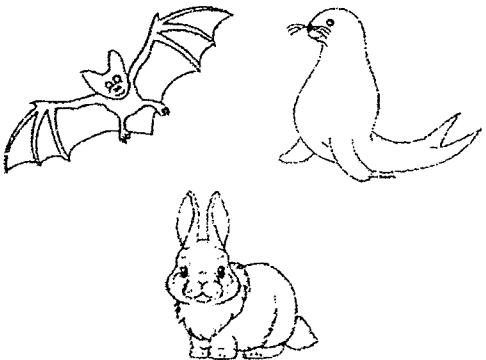
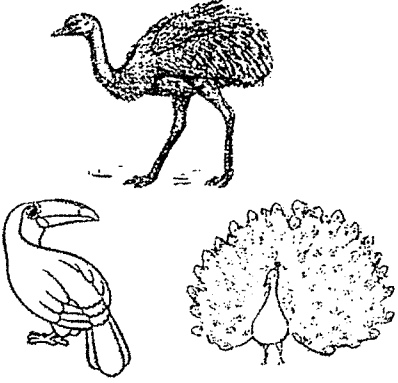
[1]

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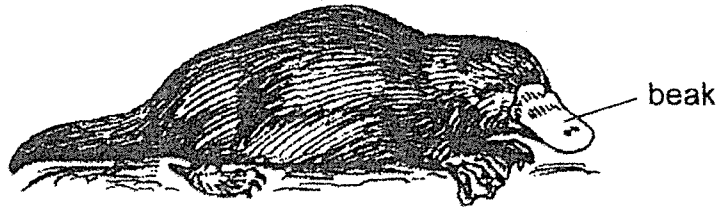
(b) Circle the group to show which group the tiger belongs to.

[1]

Group A	Group B
	

Question 28 continues on page 19

A platypus has a beak like the penguin but it belongs to the same animal group as the tiger.



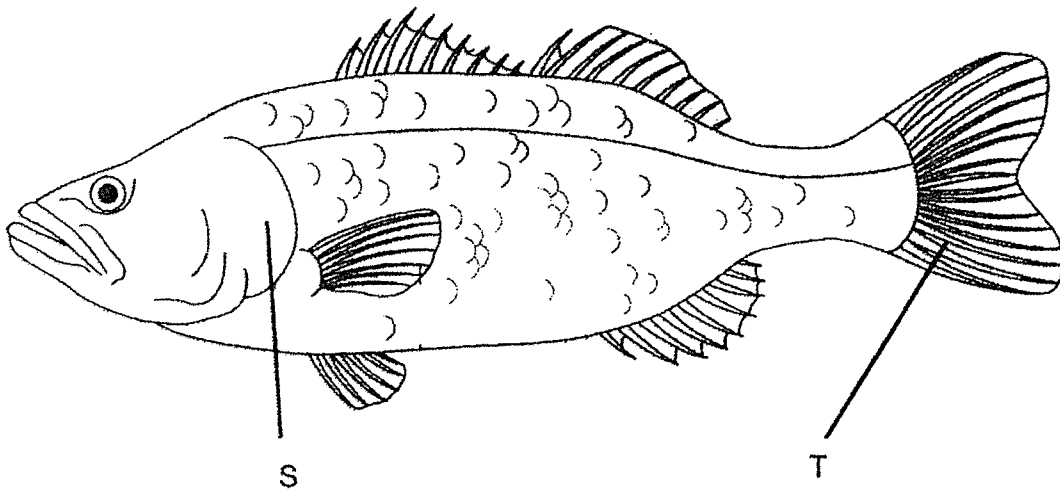
Platypus

- (c) State one characteristic of the platypus that puts the platypus and the tiger in the same animal group. [1]

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29 The diagram below shows a fish.



(a) Name the part that is found underneath Part S. [1]

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(b) What is the function of the part in (a)? [1]

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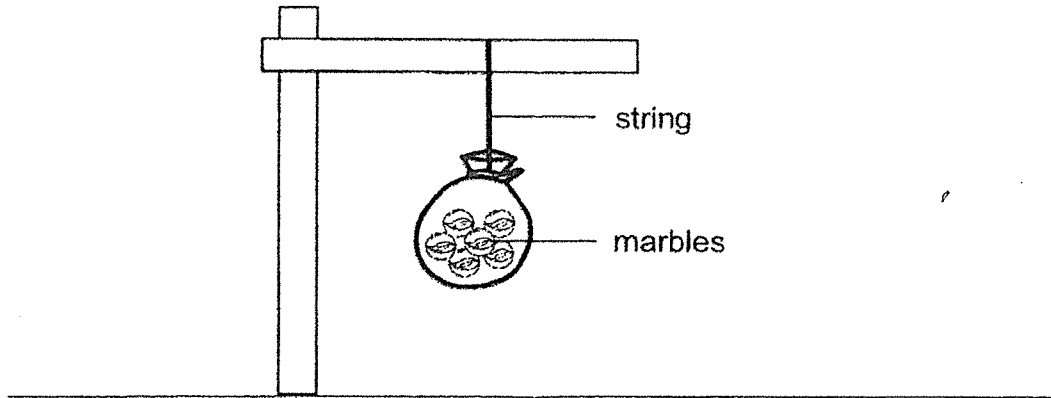
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(c) What is the function of Part T? [1]

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30 Raymond conducted an experiment as shown below to find out which material is able to carry the most number of marbles. He used 3 strings, R, S and T that are made of different materials and hung different number of marbles on the string.



The table below shows the results of his experiment.

Number of marbles	String R	String S	String T
6	✓	X	✓
12	✓	X	✓
20	X	X	✓

Legend:  
 X - string broke  
 ✓ - string did not break

(a) (i) Which two strings will be able to hold 10 marbles? [1]

String \_\_\_\_\_ and String \_\_\_\_\_

(ii) Based on the results from the table, arrange the string (R, S and T) from the strongest to the weakest [1]

Strongest → Weakest

Question 30 continues on page 22

- (b) When fishing, Raymond would throw the fishing line into the water and Part Y was seen on the water, allowing Raymond to see where his fishing bait is when Part Z is in the water.



- (i) State the property of Part Y. [½]

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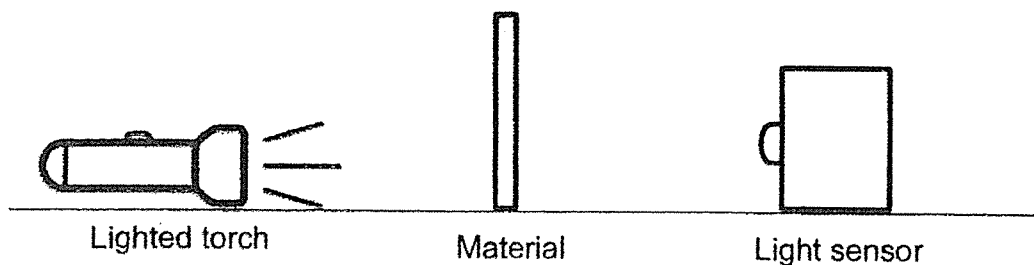
- (ii) State the property of Part Z. [½]

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- (iii) How does the property in (ii) make the Part Z suitable for fishing? [1]

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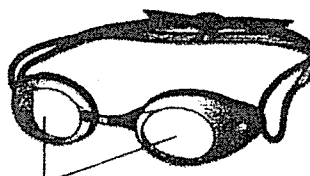
- 31 Lily prepared the following set-up to test 4 different materials A, B, C and D for the amount of light that can pass through each material. He used a light sensor to detect the amount of light.



The table below shows the results.

Material	Amount of light detected (units)
A	22
B	60
C	0
D	100

- (a) (i) Based on the results, which of the material (A, B, C or D) is most suitable to make the lenses of a swimming goggles? [1]



lenses

Material \_\_\_\_\_

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

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Question 31 continues on page 24

(b) Spectacle lenses used to be only made from glass. However, in recent years, more lenses are made of plastic.

(i) State one property that explain why lenses are made of glass or plastic. [1]

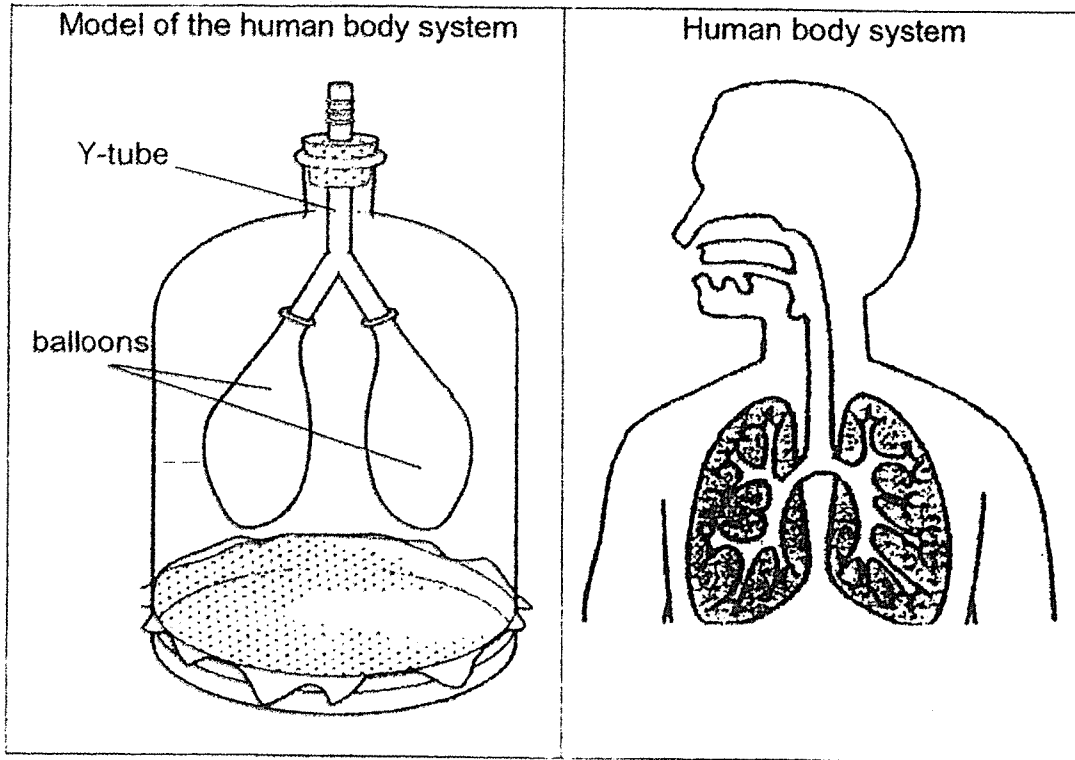
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(ii) Based on the property of materials, give a reason why plastic is used to make lenses instead of glass. [1]

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32 Janel was given some items to make a model of a system in the human body. She referred to the human body system in the right box and put the items together to make a model as shown in the left box below.



(a) Which human body system does the model represent? [1]

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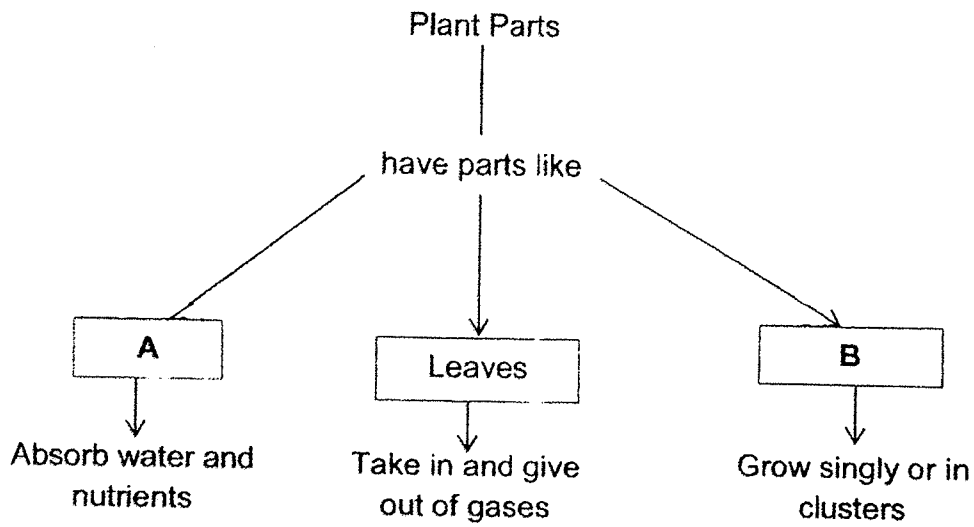
(b) Name the organs in the human body system which the parts in the model represent: [2]

(i)	Y-tube:	
(ii)	Balloons:	

(c) The skeletal system serves to protect important organs. Name the part in the skeletal system which protects the organs in (b)(ii). [1]

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33 The chart below shows the description for the 3 plant parts.



(a) What plant parts could A and B be? [1]

Plant part	
(i) A	
(ii) B	

(b) State one other function of the leaves. [1]

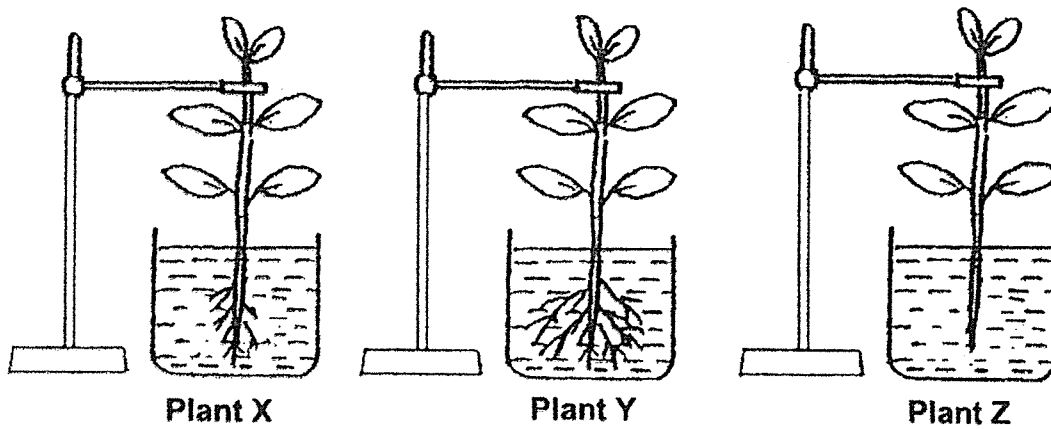
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Question 33 continues on page 27

(c) The diagram below shows three similar plants, Plants X, Y and Z.



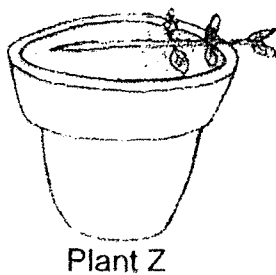
Amy left the three plants in the same room for a few days and recorded the amount of water taken in by the plant in the table below.

Plant	Amount of water taken in by the plant (ml)
X	?
Y	10
Z	3

What is the possible amount of water taken in by Plant X? [1]

\_\_\_\_\_ ml

(d) Amy later transferred Plant Y and Plant Z to two similar pots and placed them in her garden. She observed that only Plant Z fell over after a few days.



Give a reason for her observation above. [1]

\_\_\_\_\_  
 \_\_\_\_\_

End of Paper



## ANSWER KEY

**YEAR : 2022**  
**LEVEL : PRIMARY 3**  
**SCHOOL : PEI HWA PRESBYTERIAN PRIMARY SCHOOL**  
**SUBJECT : SCIENCE**  
**TERM : WA1**

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

- Q7a) Animal B belongs to insect group.  
Q7b) 1. It has 3 body parts.  
2. It has a pair of feelers.  
Q7c) Animal A has feathers and animal C has dry skin.  
Q8a) It reproduces by seeds.  
Q8b) A cannot reproduce by seeds and B can reproduce by seeds.  
Q8c) A mushroom is not a plant, instead it is a fungi.  
Q8d) Water lily



## ANSWER KEY

**YEAR : 2022**  
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**SUBJECT : SCIENCE**

### BOOKLET A

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

### BOOKLET B

<p>Q25a) Both mice show that living things need air, food and water to survive.</p> <p>Q25b) Mouse B.            Mouse B will survive for a longer time because it has a bigger jar which allows it to have more air.</p> <p>Q26a) Flowering plants: Water lily, Sunflower            Non-flowering plants: Ladder fern, Staghorn fern</p> <p>Q26b) The water lily lives in water and the sunflower lives on land.</p> <p>Q26c) The Staghorn fern reproduce by spores.</p> <p>Q27a) i) Cap            ii) Stalk</p> <p>Q27b) The powdery black lines are spores.</p> <p>Q28a) i) The penguin reproduce by laying eggs and the tiger reproduce by giving birth to its young alive.            ii) The penguin has feathers on its body and the tiger has hair on its body.</p>	
Q28b)	<b>Group A</b>
Q28c)	<b>The platypus and the tiger both have hair as their outer covering.</b>
Q29a)	<b>The gills</b>
Q29b)	<b>It helps the fish to breathe in water.</b>
Q29c)	<b>Part T helps the fish to swim in water.</b>
Q30a)	i) String R and String T ii) T, R, S
Q30b)	i) Part Y is light and waterproof so that it can float in the water. ii) Part Z is strong and flexible.

- iii) It is strong so that when the fish bites into it, it can withhold when the fish tugs onto it.
- Q31a) i) Material D
- ii) Material D allows most light to pass through.
- Q31b) i) Both are transparent
- ii) Plastic does not break easily when it is dropped.
- Q32a) It represents the respiratory system.
- Q32b) i) Y-tube: Trachea
- ii) Balloon: Lungs
- Q32c) The ribcage
- Q33a) i) A: Roots
- ii) B: Flowers
- Q33b) It can absorb light to make food.
- Q33c) 5ml
- Q33d) Plant Z fell over because it has no roots.

