

PEI CHUN PUBLIC SCHOOL

PRIMARY 3

END-OF-YEAR EXAMINATION 2021 (PRACTICE)

SCIENCE
(BOOKLET A)

Additional Materials: Optical Answer Sheet (OAS)

Total Time for Booklets A and B: 1 h 10 min

Name: _____ ()

Class: Primary 3 / () _____

Date: _____

Science Teacher: _____

INSTRUCTIONS TO CANDIDATES

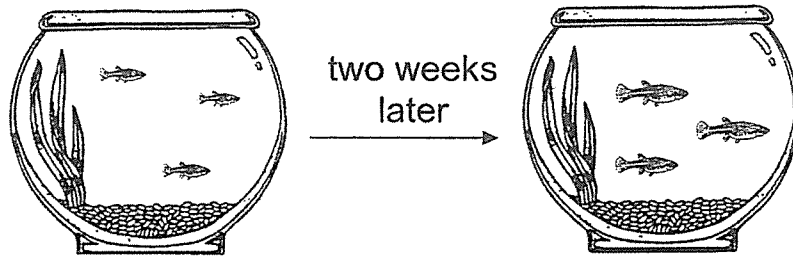
1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers on the Optical Answer Sheet (OAS) provided.



Section A (18 × 2 marks)

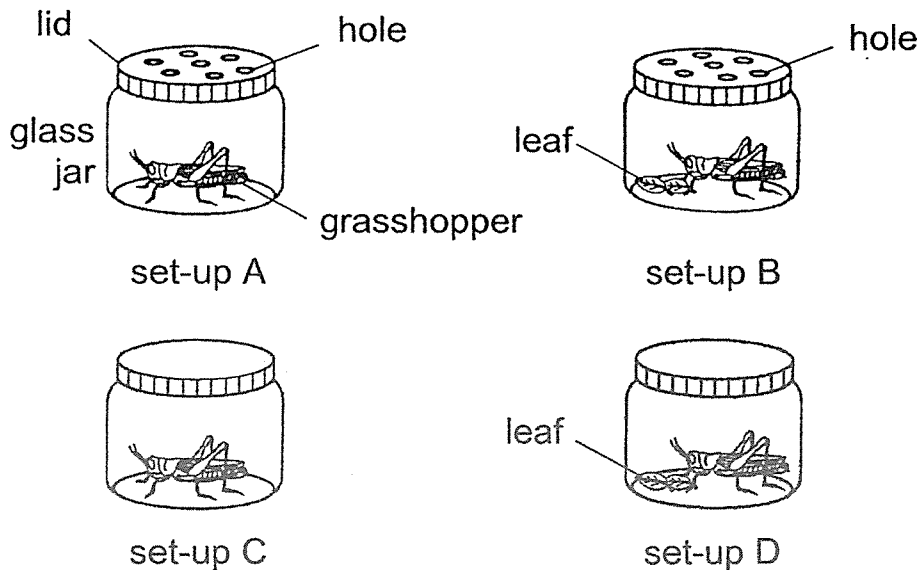
For questions 1 to 18, choose the most suitable answer and shade its number (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

- 1 Bala bought some guppies and kept them in a fish tank. Two weeks later, he observed the following.



From his observation, Bala can conclude that the guppies are living things because they _____.

- (1) can grow
 - (2) can breathe
 - (3) can reproduce
 - (4) need water to stay alive
- 2 Pete wanted to find out if living things need air to survive. Which two set-ups should he use to make a conclusion?



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

3 The table below shows how four organisms can be grouped.

	Can make its own food	Cannot make its own food
Reproduce by seeds	E	F
Does not reproduce by seeds	G	H

Which group of organisms does the fern belong to?



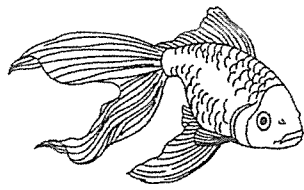
- (1) E
- (2) F
- (3) G
- (4) H

4 Which of the following characteristics are found in birds, but **not** in other animals?

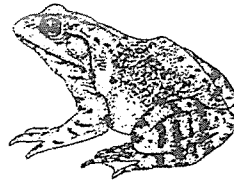
- A : They can fly.
- B : They lay eggs.
- C : They have wings.
- D : They have feathers.

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

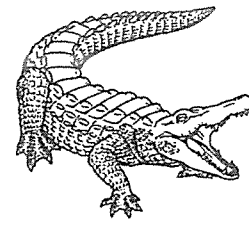
5 Muthu had to classify the three animals shown below.



goldfish

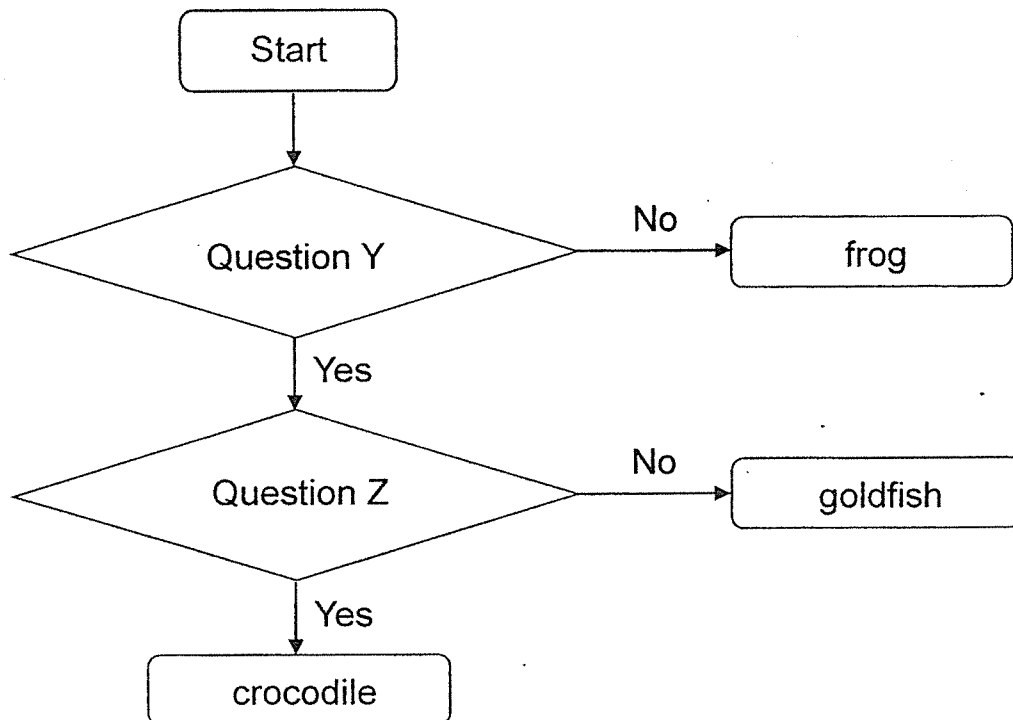


frog



crocodile

He classified them with the help of the chart below.



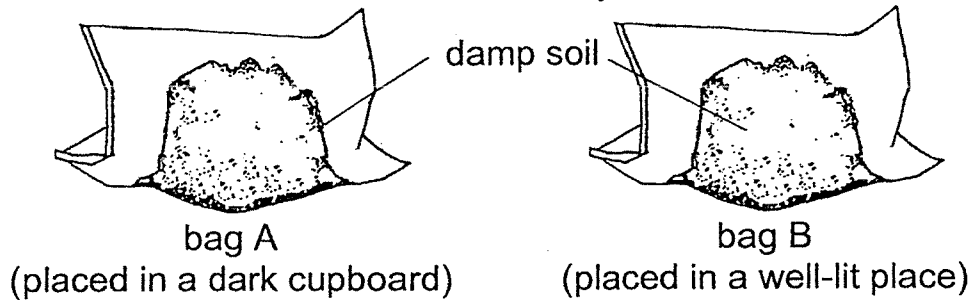
What are questions Y and Z?

	Question Y	Question Z
(1)	Does it have legs?	Can it live on land?
(2)	Can it live on land?	Does it have scales?
(3)	Does it have legs?	Does it have scales?
(4)	Does it have scales?	Does it have legs?

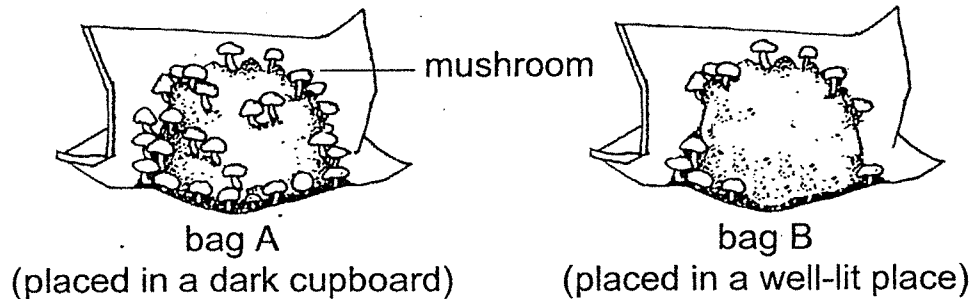
- 6 Yun Hui carried out an experiment to find out if mushrooms need light to grow. She placed the same amount of mushroom spores in two bags of damp soil and left the bags in different places.

The diagrams below show what she observed after a few weeks.

At the start of the experiment



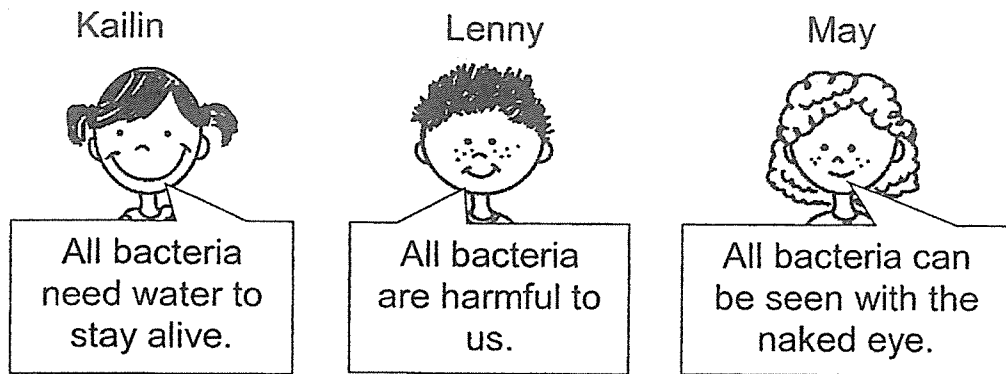
After a few weeks



Based on Yun Hui's experiment, which of the following statements about mushrooms is correct?

- (1) They need light to grow.
- (2) They do not need light to grow.
- (3) They can only grow in the dark.
- (4) They grow faster in places with light.

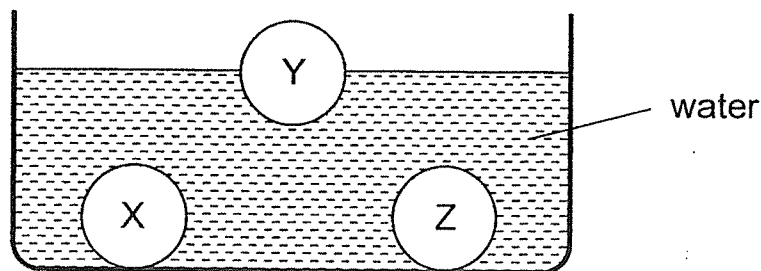
7 Each of the three pupils made a statement about bacteria.



Which of the pupils is/are correct?

- (1) Kailin only
- (2) Kailin and May only
- (3) Lenny and May only
- (4) All of them

8 Lionel placed three solids made of materials X, Y and Z into a tank of water. His observation is shown below.



Which of the following statements can be concluded from his observation?

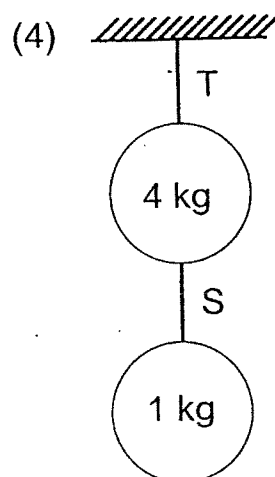
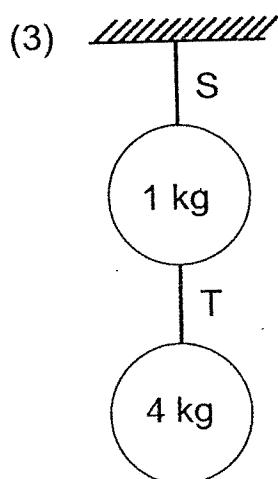
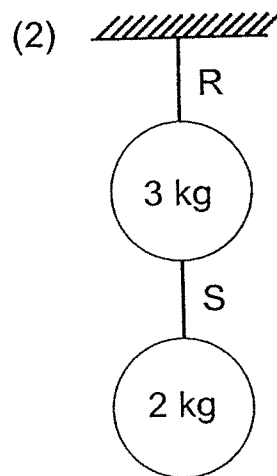
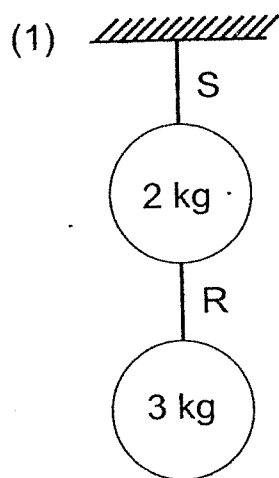
- (1) X and Z are different materials.
- (2) X and Z are the same material.
- (3) Y and Z are different materials.
- (4) Y and Z are the same material.

- 9 Kelly tested three types of string, R, S and T, by hanging loads from each string. He increased the mass of the load until the strings broke. The maximum mass that each string could hold before breaking is shown in the table below.

String	Maximum mass that the string can hold before breaking (kg)
R	2
S	3
T	5

Kelly tried a few arrangements of hanging different loads.

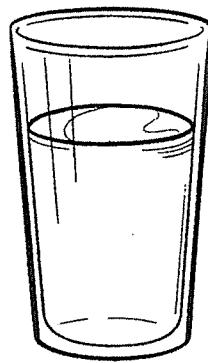
Which of the following arrangements would be possible?



10 The table below shows the properties of objects K, L, M and N.

Objects	Breaks easily when dropped	Allows light to pass through it
K	Yes	Yes
L	Yes	No
M	No	Yes
N	No	No

Which of the following objects is most likely to be a drinking glass?



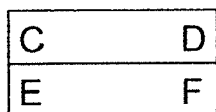
- (1) K
- (2) L
- (3) M
- (4) N

- 11 Four bar magnets with their ends marked A to H can be arranged as shown below.

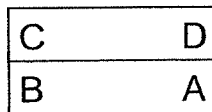


Which of the following arrangement of two of the magnets is **not** possible?

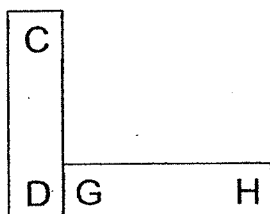
(1)



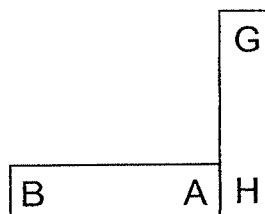
(2)



(3)

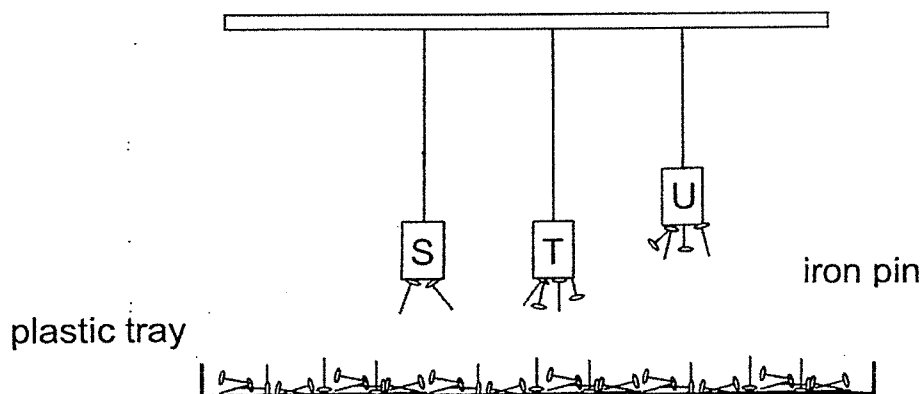


(4)



- 12 S, T and U are magnets hanging from strings of two different lengths as shown in the diagram below. S and T are hung at the same height.

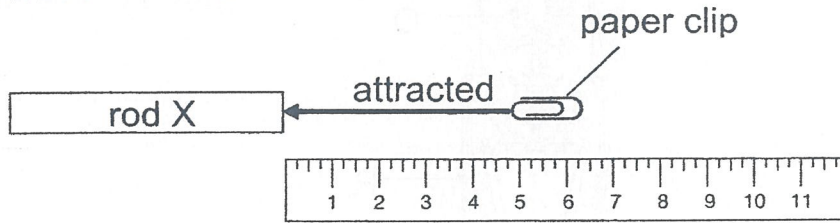
A plastic tray of iron pins is placed below the magnets and different numbers of pins are attracted to the magnets.



Based on the diagram, which of the following statements is true?

- (1) T is the strongest magnet.
- (2) T is as strong a magnet as U.
- (3) U is a weaker magnet than S.
- (4) U is a stronger magnet than T.

- 13 Richard made three magnets using the stroking method. He used the same bar magnet to stroke three identical iron rods, X, Y and Z, for different number of times. He placed rod X at one end of a ruler and slowly pushed a paper clip towards it until the paper clip was attracted to the rod.



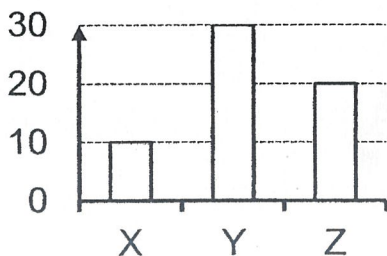
He repeated the experiment with rods Y and Z. He measured the distance at which the paper clip was attracted by each of the rods. His results are shown in the table below.

Magnet	Distance at which the paper clip was attracted to the magnet (cm)
X	5
Y	3
Z	4

Which of the following graph correctly shows the number of times each of the rods was stroked with the bar magnet?

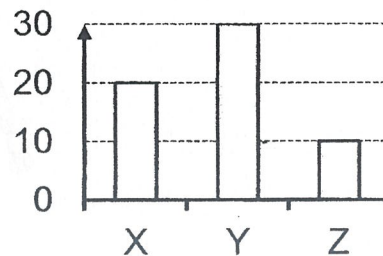
(1)

Number of times stroked



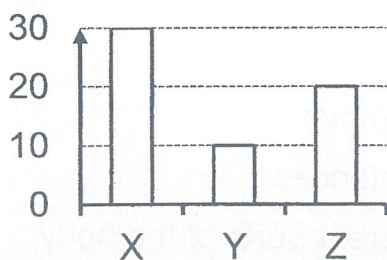
(2)

Number of times stroked



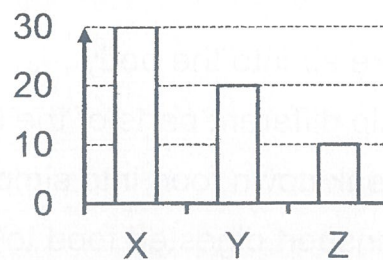
(3)

Number of times stroked

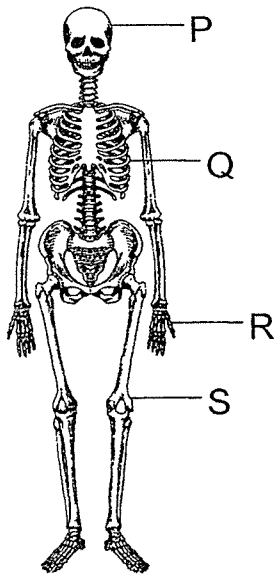


(4)

Number of times stroked



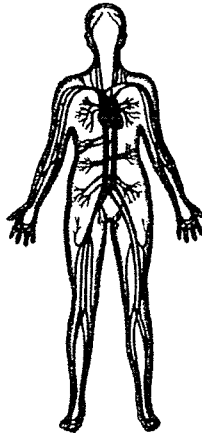
14 Study the diagram below.



Which parts of this system protect our organs?

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

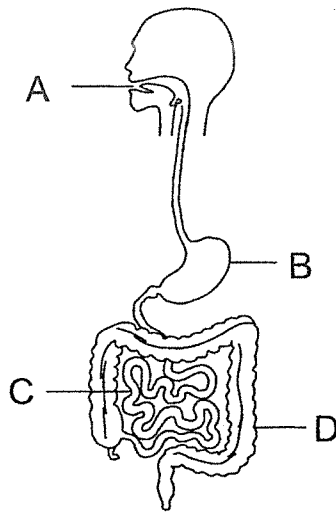
15 The diagram below shows a body system.



The function of this body system is to _____.

- (1) take air into the body
- (2) help different parts of the body to move
- (3) break down food into simpler substances
- (4) transport digested food to the different parts of the body

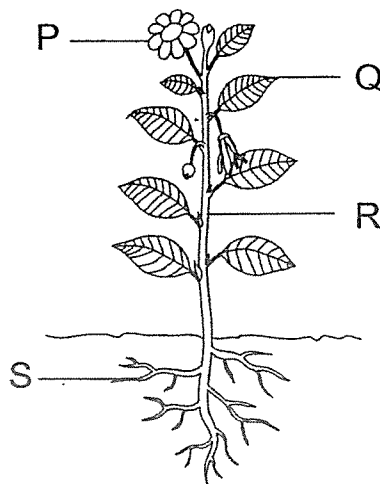
16 The diagram below shows the human digestive system.



Which of the following correctly shows where digestive juices are added to the food?

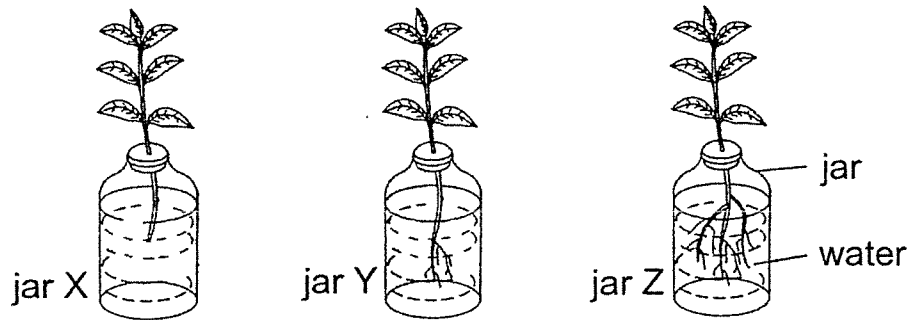
- (1) B and C only
- (2) A, B and C only
- (3) A, C and D only
- (4) B, C and D only

17 Which part of the plant, P, Q, R or S, makes food for the plant?



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

- 18 Ali removed some parts of the roots from three similar plants. He used the set-ups below for his experiment. The three jars contained the same amount of water at the start of his experiment.



After two days, he measured the amount of water left in each jar. Which of the following correctly shows the results of his experiment?

	Jar with the <u>most</u> amount of water left	Jar with the <u>least</u> amount of water left
(1)	Y	Z
(2)	Z	X
(3)	X	Z
(4)	Z	Y

End of Section

PEI CHUN PUBLIC SCHOOL

PRIMARY 3

END-OF-YEAR EXAMINATION 2021 (PRACTICE)

SCIENCE
(BOOKLET B)

Total Time for Booklets A and B: 1 h 10 min

Name: _____ ()

Class: Primary 3 / () _____

Date: _____

Science Teacher: _____

Parent's Signature: _____

SECTION A	36
SECTION B	24
TOTAL	60

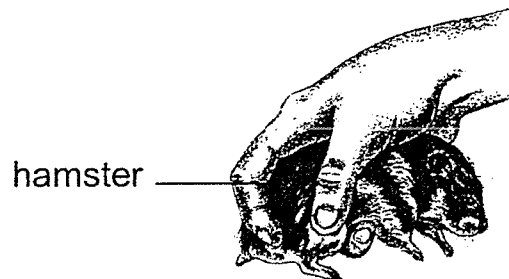
INSTRUCTIONS TO CANDIDATES

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

Section B (24 marks)

For questions 19 to 27, write your answers in the spaces provided.

- 19 Sally tried to pick up her pet hamster as shown below. It jumped out of her hand as she picked it up.



- (a) What characteristic of living thing was shown by the hamster? [1]

- (b) The following table gives information on four animals, D, E, F and G, based on two characteristics. A tick (✓) shows that the animal has the characteristic.

Characteristic	D	E	F	G
Can fly		✓	✓	
Has hair on its body	✓		✓	

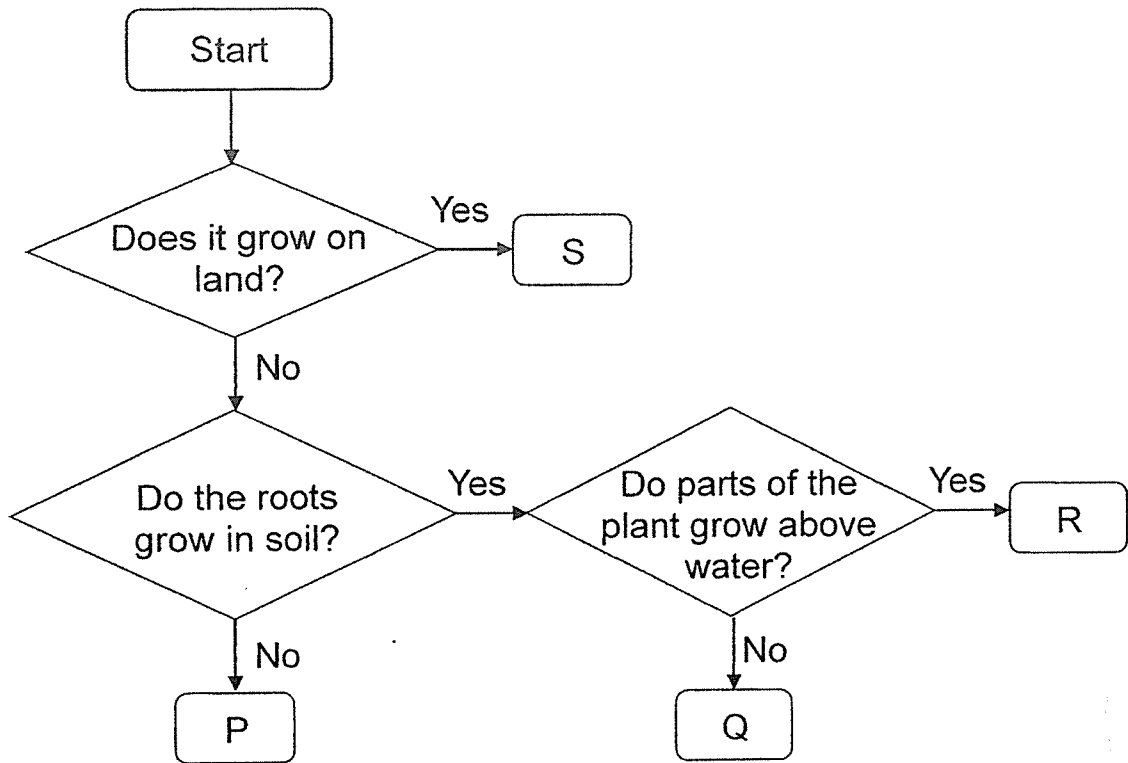
- (i) Based on the table above, state one similarity between animals D and G. [1]

- (ii) Match the hamster to the correct letter (D, E, F, or G) in the table.

It is animal _____ [1]

SCORE	
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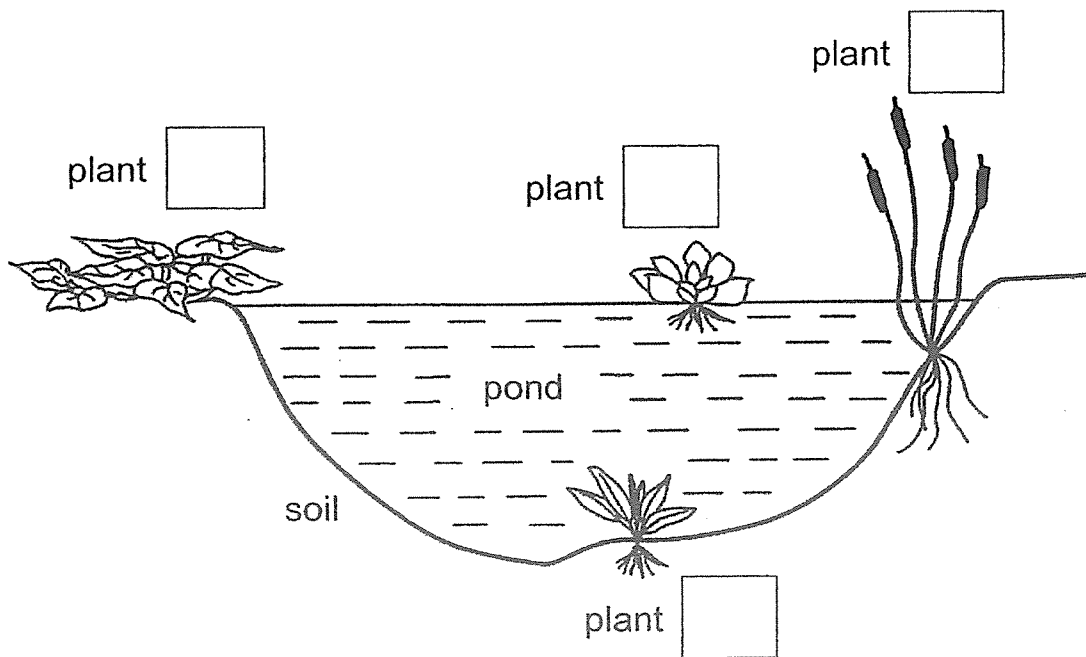
20 Study the flowchart below. Letters P, Q, R and S represent four different plants.



Match each of the plants in the diagram below to the correct letter (P, Q, R or S) in the flow chart.

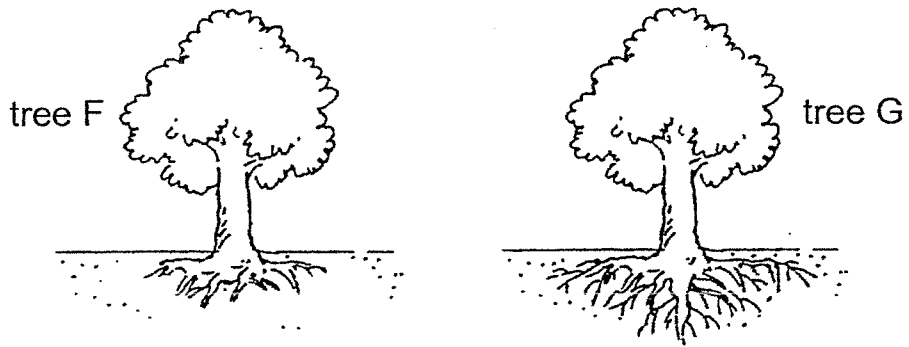
Write the letters in the boxes provided.

[2]



SCORE	<input type="text"/>
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21 Study the diagrams below carefully.



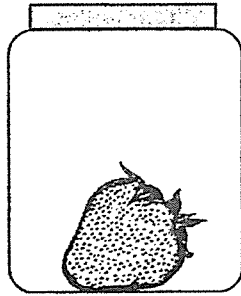
(a) Which tree, F or G, is more likely to fall over when blown by a strong wind? Explain your answer. [2]

(b) Other than water, state another substance that is taken in from the soil by the roots of the tree. [1]

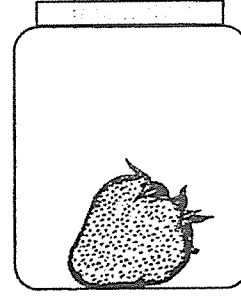
SCORE	
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- 22 Aini placed two similar strawberries, A and B, in different places. After five days, she observed mould growing on the two strawberries as shown below.

At the start of the experiment

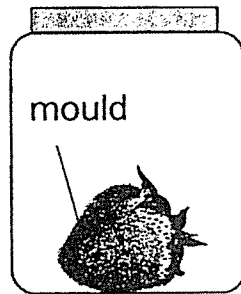


strawberry A
(placed in a cupboard)

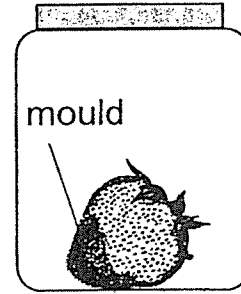


strawberry B
(placed in the refrigerator)

After five days



strawberry A
(placed in a cupboard)



strawberry B
(placed in the refrigerator)

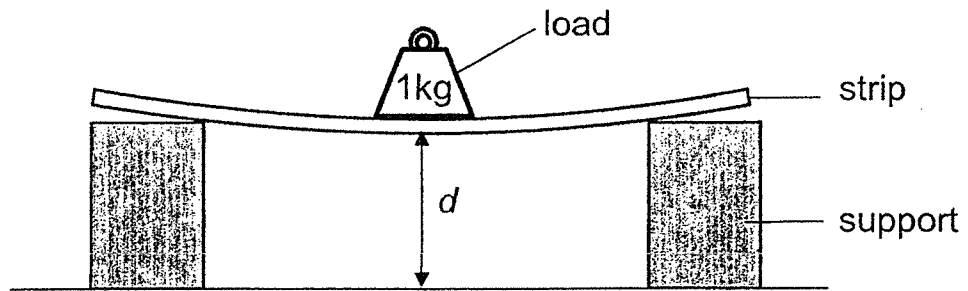
- (a) Which group of living things does mould belong to? [1]

- (b) What could the mould get from the strawberries to grow? [1]

- (c) Explain why there was more mould growing on strawberry A after five days. [1]

SCORE	
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- 23 Tammy set up an experiment as shown below to compare a property of three strips made of materials X, Y and Z.



She placed a load of 1 kg on each strip and measured the distance d .

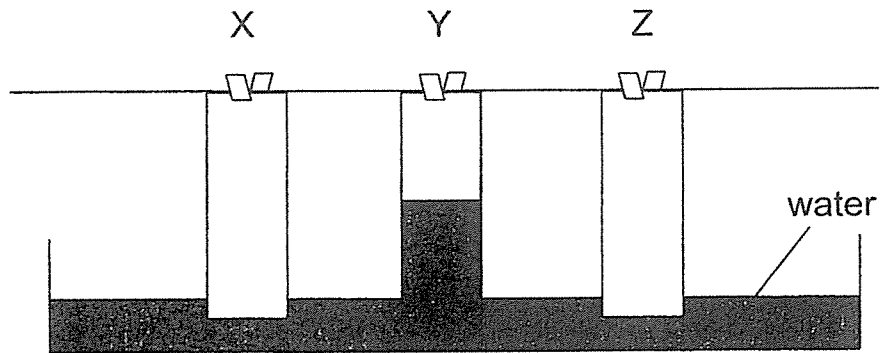
Her results are shown below.

Material of strip	Mass of load (kg)	Distance d (cm)
X	1	5
Y	1	8
Z	1	15

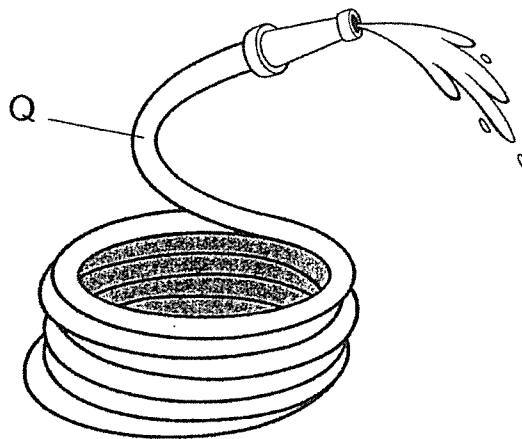
- (a) Which property of material was Tammy testing?

[1]

- (b) Tammy conducted another experiment to test the materials' ability to absorb water. She soaked three strips of materials X, Y and Z in water. The diagram below shows the results after fifteen minutes.



The diagram below shows a water hose. It is used to water plants.



Based the results of Tammy's experiments, which material, X, Y or Z, is most suitable to make part Q of the water hose? [1]

- (c) Give two reasons to support your answer in (b). [2]

Reason 1 : _____

Reason 2 : _____

SCORE	
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- 24 Jerome had two metal rods, X and Y. The diagrams below show what he observed when he brought a bar magnet close to the ends of each rod. C and D are the ends of rod X, while E and F are the ends of rod Y.

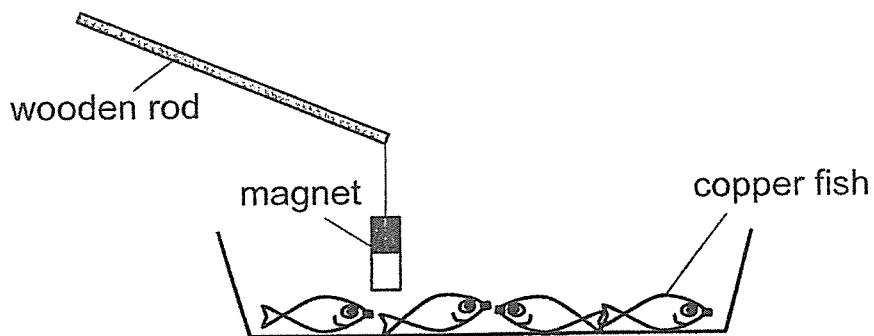
Rod	Observations
X	
Y	

Based on his observations, which of the following statements correctly describe rods X and Y? Tick (✓) the correct boxes. [2]

Description	X	Y
It is made of a magnetic material.		
It is a magnet.		
It is not a magnet.		

SCORE	
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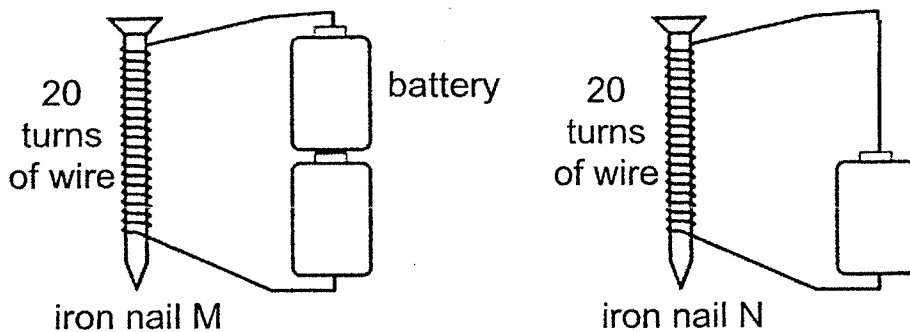
- (b) Jerome had a tray of toy fish that were made of copper. He brought the bar magnet close to the fish as shown below



Would Jerome be able to pick up the copper fish with the magnet?
Give a reason for your answer. [1]

SCORE	
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- 25 Ya Qi used the set-ups shown below to attract some iron clips. She used identical iron nails and batteries for both set-ups



She lowered iron nails M and N into a tray of iron clips and counted the number of clips attracted by each nail.

- (a) Which iron nail, M or N, would attract more iron clips?
Explain your answer.

[1]

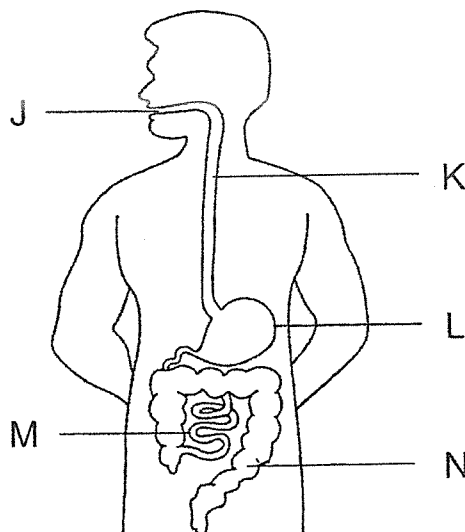
- (b) Ya Qi removed iron nail M from the turns of wire and lowered nail M into the tray of iron clips.

Would nail M still be able to attract any clips?
Give a reason for your answer.

[1]

SCORE	
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26 The diagram below shows the human digestive system.



(a) Name parts K and L.

[2]

Part	Part of the digestive system
K	
L	

(b) In which part, J, K, L, M or N, is digested food absorbed by the body?

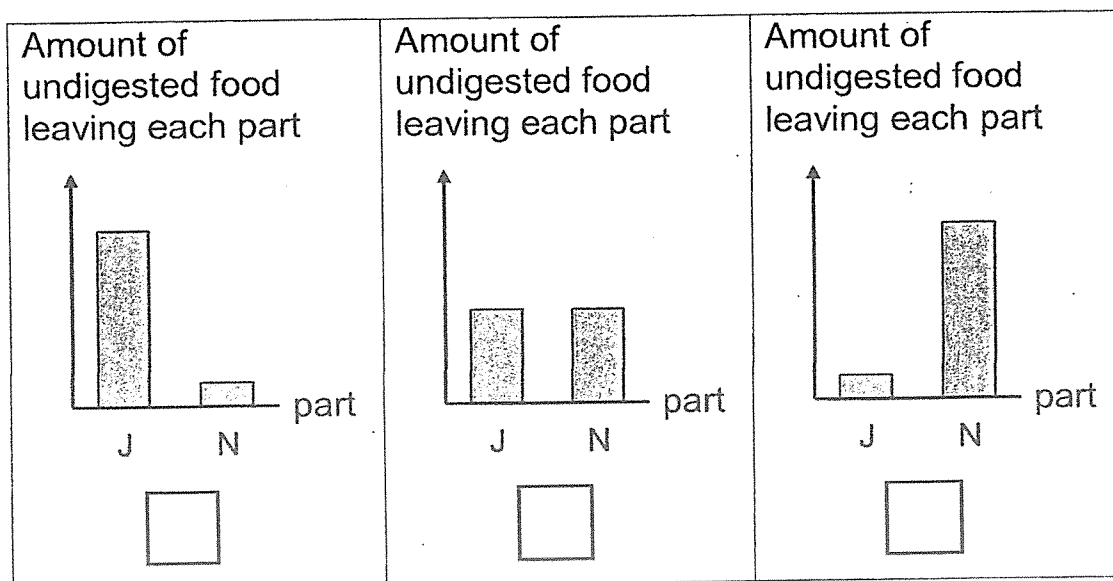
[1]

part _____

(c) Which of the graphs below correctly shows the amount of undigested food leaving parts J and N after a meal?

Tick (✓) the box under the correct graph.

[1]



End of Section B

SCORE	
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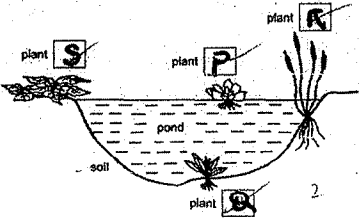
ANSWER KEY

YEAR : 2021
LEVEL : Primary 3
SCHOOL : Pei Chun Public School
SUBJECT : SCIENCE
TERM : End-of-Year Examination (Practice)

BOOKLET A

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

BOOKLET B

Q19	(a) Living things responds to changes around them. (b) (i) Both animals D and G cannot fly. (ii) It is animal D.		
Q20			
Q21	(a) Tree F. Tree F has less roots so the roots hold the tree less firmly to the soil. (b) Minerals is also taken in from the soil by the roots of the tree.		
Q22	(a) Mould belongs to fungi. (b) The mould could get moisture and food. (c) Strawberry ^{AA} was kept in a warmer place which allowed mould to grow faster.		
Q23	(a) Tammy was testing for flexibility. (b) Material X is the most suitable to make part Q of the water hose. (c) Reason 1 : Material X is waterproof as it did not absorb any water. Reason 2 : Material X was more flexible than material Z as its distance from the ground is the least with a 1 kg load on it. <i>X is waterproof.</i>		
Q24	(a)		
	Description	X	Y
	It is made of a magnetic material.	✓	✓
	It is a magnet.	✓	
	It is not a magnet.		✓

	(b) No. Copper is not a magnetic material.
Q25	<p>(a) Iron nail M. More batteries were used so the magnetic strength is stronger thus attracting more iron clips.</p> <p>(b) No. It loses its magnetism and hence not being able to attract and iron clips.</p>
Q26	<p>(a) K : gullet L : stomach</p> <p>(b) Part M</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; width: 30%;"> <p style="font-size: small;">Amount of undigested food leaving each part</p> <p style="font-size: x-small;">J N part</p> <p style="text-align: center;"><input checked="" type="checkbox"/></p> </div> <div style="border: 1px solid black; padding: 5px; width: 30%;"> <p style="font-size: small;">Amount of undigested food leaving each part</p> <p style="font-size: x-small;">J N part</p> <p style="text-align: center;"><input type="checkbox"/></p> </div> <div style="border: 1px solid black; padding: 5px; width: 30%;"> <p style="font-size: small;">Amount of undigested food leaving each part</p> <p style="font-size: x-small;">J N part</p> <p style="text-align: center;"><input type="checkbox"/></p> </div> </div> <p>(c)</p>

2
END