PRIMARY 3 END-OF-YEAR PRACTICE PAPER

Name : _____ ( ) Date: _____

Class : Primary 3 ( )

Parent's Signature : _____

Duration: 1 hour 15 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. Write your answers in the booklet.

Booklet A (19 x 2 marks)

For each question from 1 to 19, 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.

(38 marks)

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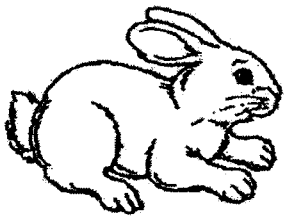
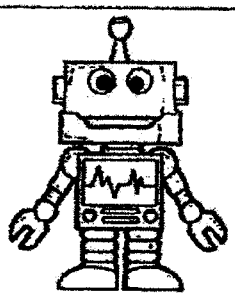
1. Study the table below.

A	B
	

Which one of the following statements is correct?

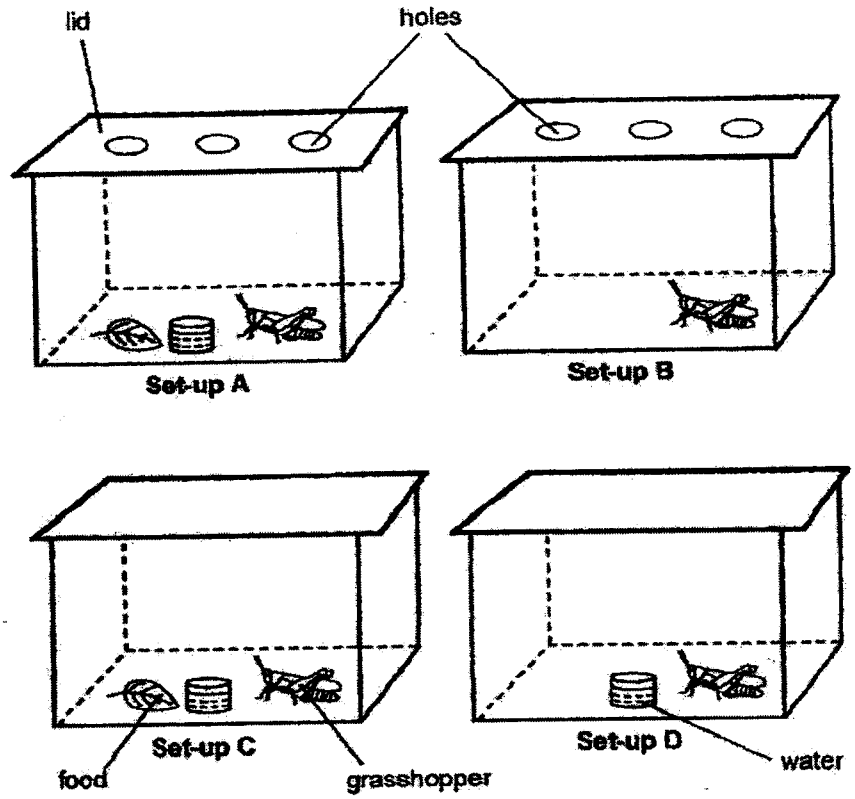
(1) B can grow.

(2) B can reproduce.

(3) A needs air, food and water to survive.

(4) A does not respond to changes around it.

2. Freddy conducted an experiment using four set-ups as shown below.



Which two set-ups should he use to find out if living things need air to survive?

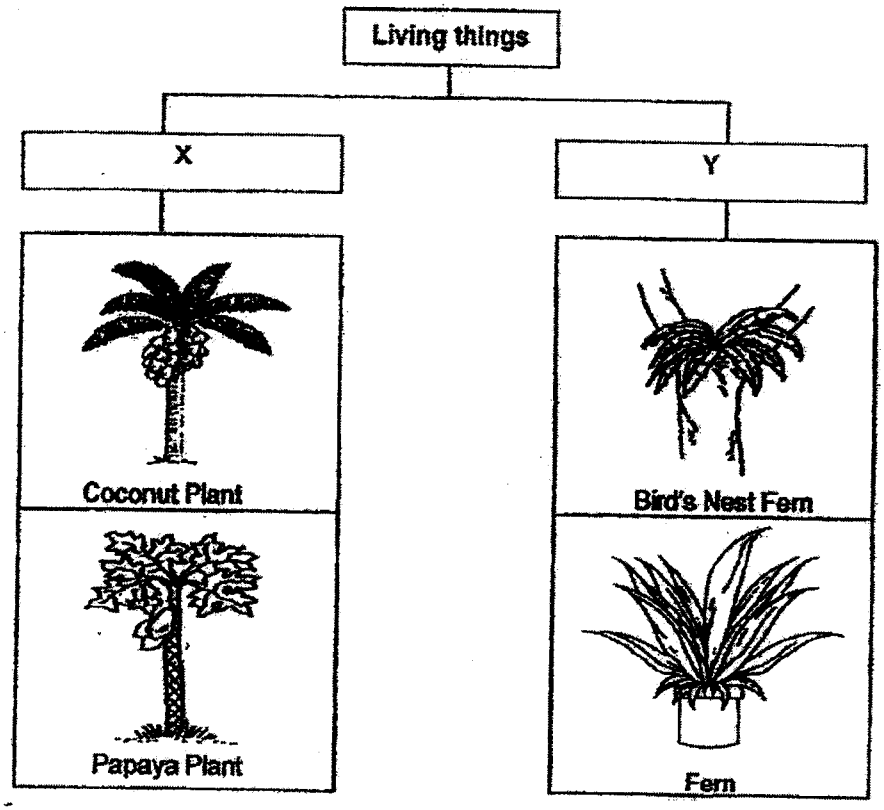
(1) A and D

(2) B and D

(3) A and C

(4) B and C

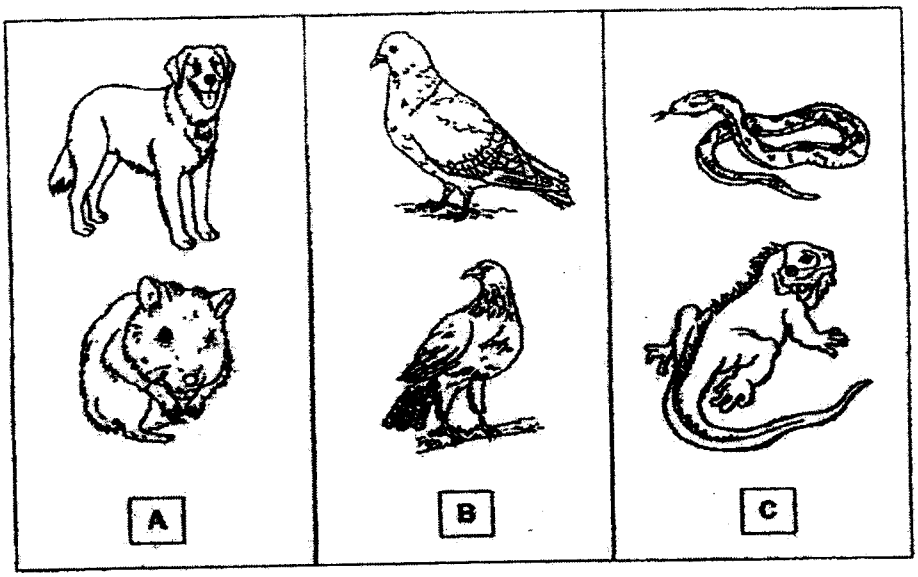
3. The diagram below shows the classification of living things.



Which of the following correctly describes the sub-headings, X and Y?

	X	Y
(1)	Need water to grow	Do not need water to grow
(2)	Cannot reproduce	Can reproduce
(3)	Cannot make its own food	Can make its own food
(4)	Reproduce by seeds	Reproduce by spores

4. Study the table below.



Which of the following statements is correct?

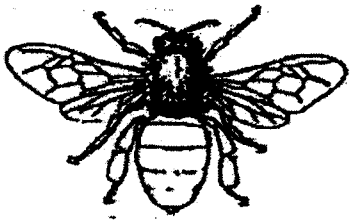
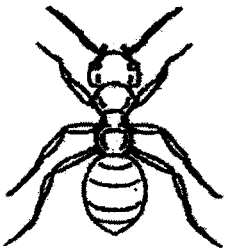
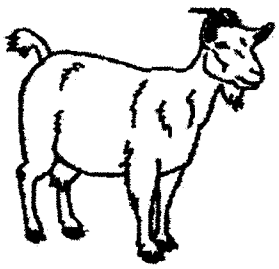
(1) Animals in Group A live in water.

(2) Animals in Group B have a beak.

(3) Animals in Group C have hair as outer covering.

(4) Animals in Group B and Group C use gills to take in air.

5. Huiling grouped some animals into Group A and Group B as shown below.

Group A	Group B
	
	
	

Based on your observation of the above, which characteristic of animals did Huiling use to classify the animals?

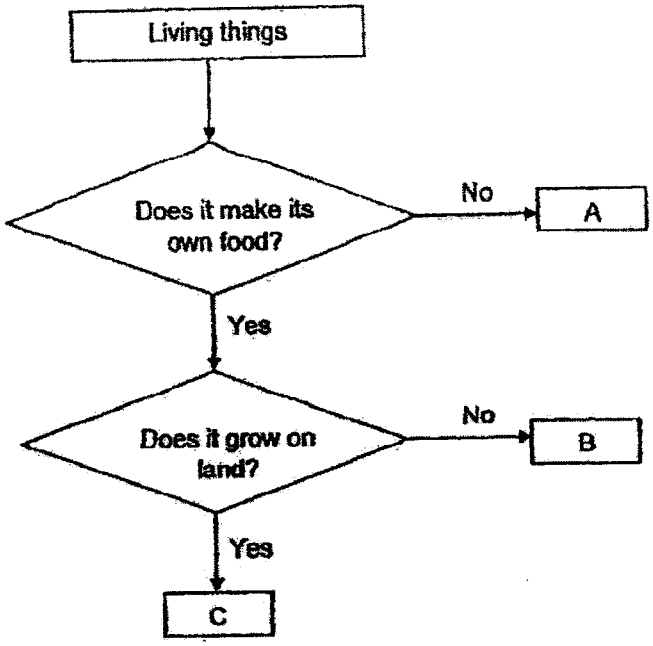
(1) Number of legs

(2) Presence of wings

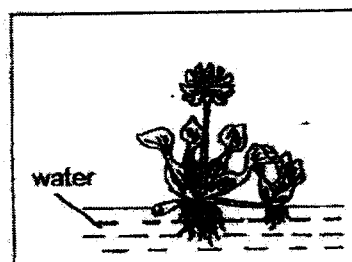
(3) Number of body parts

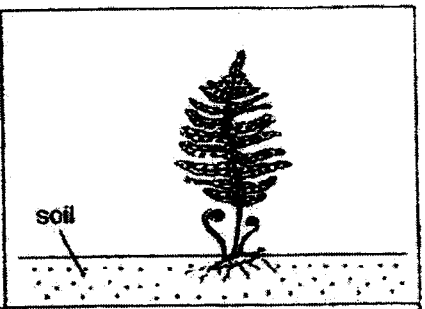
(4) Type of outer body covering

6. Study the chart below.



Which of the following letters, A, B or C, best represents the two living things shown below?



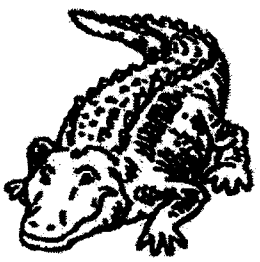
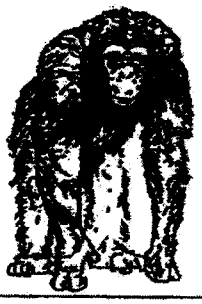


(1)	B	A
(2)	C	B
(3)	A	C
(4)	B	C

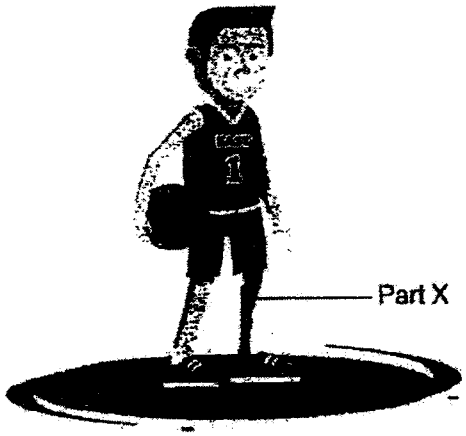
7. Study the table below carefully. A tick (✓) shows that the animal has the characteristic.

Animals	Has wings	Has hair as outer covering	Has dry skin covered with scales
X	✓		
Y		✓	
Z			✓

Which animals, X, Y and Z, can represent Animal A and Animal B shown below?

	Animal A 	Animal B 
(1)	Z	Y
(2)	Y	X
(3)	X	Z
(4)	Z	X

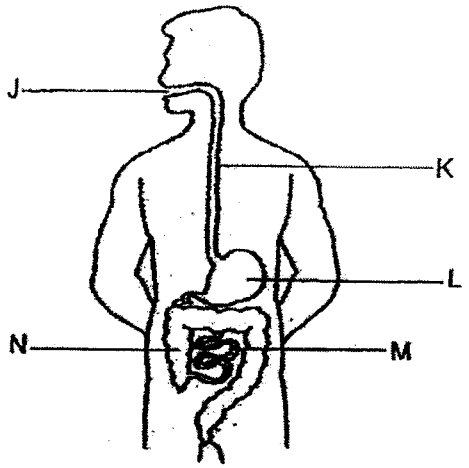
8. Sam had an accident and his left leg was badly injured. After recovery, his left leg was replaced with an artificial one, Part X.



Part X enables Sam to run. Which body system is part X replacing?

(1) skeletal system
(2) digestive system
(3) circulatory system
(4) respiratory system

9. The diagram below shows the human digestive system.

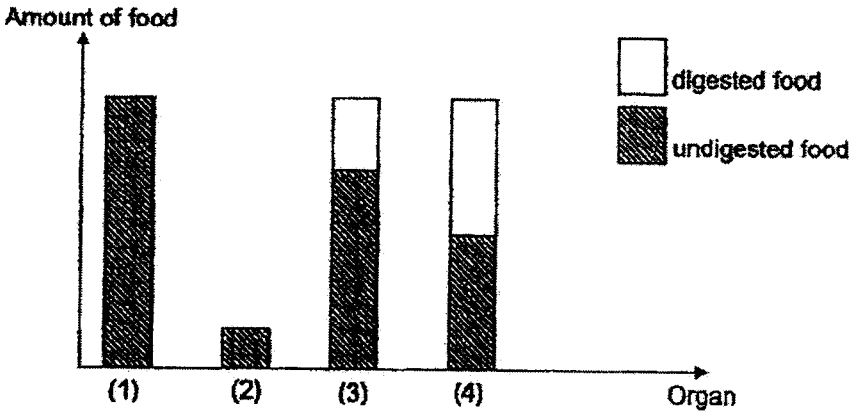


In which of the above organs, J, K, L, M and N, are digestive juices found?

(1) L and M only
(2) J, L and N only
(3) J, L and M only
(4) L, M and N only

10. Below is a bar graph that shows different organs of a human digestive system. The organs are not placed in order. Each bar shows the amount of food digested just before it leaves each organ.

Which digestive organ represents the large intestine?



11. Mindy describes the following human systems.

System A: breaks down food

System B: supports the body

System C: takes in air for the body

Which of the following body systems correctly matches the descriptions given by Mindy?

	System A	System B	System C
(1)	Circulatory system	Muscular system	Skeletal system
(2)	Circulatory system	Respiratory system	Digestive system
(3)	Digestive system	Circulatory system	Muscular system
(4)	Digestive system	Skeletal system	Respiratory System

12. James has a lightweight sanitiser bottle that will not break easily when it is dropped onto the floor. He can also see the amount of sanitiser left in the bottle.

sanitiser bottle

Which of the following is most likely the material of Part X?

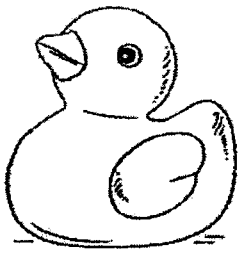
(1) metal

(2) ceramic

(3) clear glass

(4) clear plastic

13. Bala bought a toy duck for his baby sister to play with while bathing in her bathtub filled with water. His baby sister loves squeezing the floating toy duck to make a squeaky sound. She also plays with the toy by throwing it around.

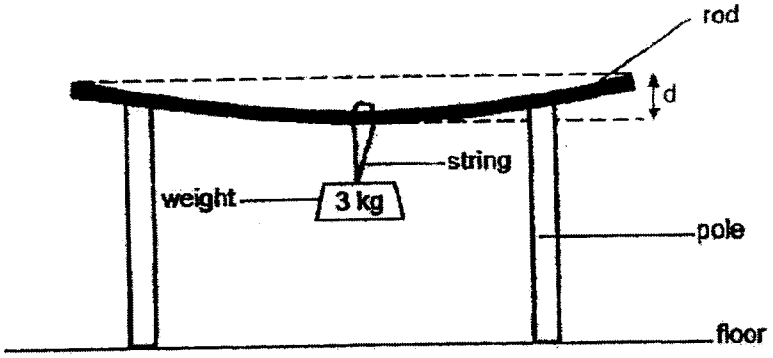


toy duck

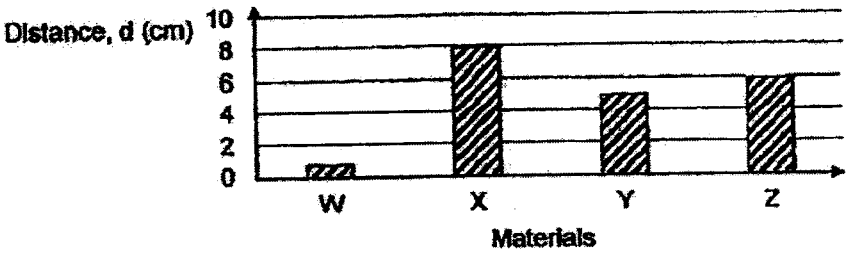
Which material, A, B, C or D, is the toy duck made of?

		Properties		
	Material	Is it flexible?	Is it waterproof?	Is it strong?
(1)	A	Yes	No	Yes
(2)	B	No	Yes	No
(3)	C	Yes	Yes	Yes
(4)	D	No	Yes	Yes

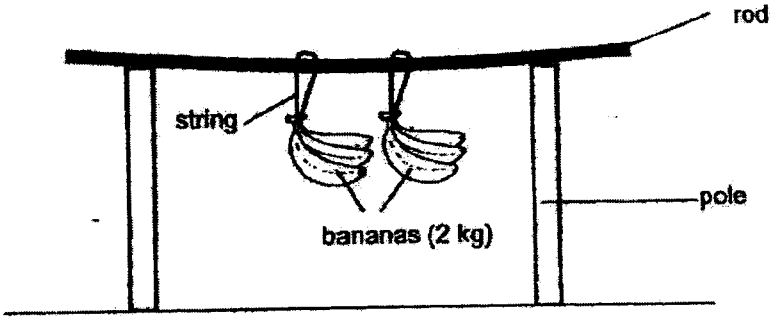
14. Peter carried out an experiment shown below using rods made of different materials, W, X, Y and Z. He attached a 3 kg weight to each rod and measured the distance, d, as shown below.



He recorded his results in the graph below.



Which material, W, X, Y or Z, is most suitable to make the rod to display the bunches of bananas at a fruit stall if the shopkeeper wants the rod to bend the least?



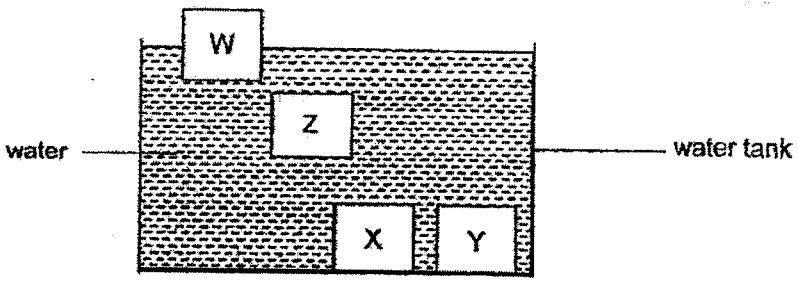
(1) W

(2) X

(3) Y

(4) Z

15. Jane placed 4 solids made of materials W, X, Y and Z into a container of water. The 4 solids were of the same size.



What can Jane conclude based on her observation?

(1) W is the heaviest.

(2) Z is heavier than Y.

(3) X and Y are the same material.

(4) W and X are different materials.

16. Susan carried out an experiment to find out the strength of four magnets, E, F, G and H. She recorded the results in the table below.

Magnet	Number of paper clips attracted
E	4
F	7
G	6
H	5

Based on the results above, which of the following sentence is correct?

(1) Magnet F is the weakest.
(2) Magnet E is the strongest.
(3) Magnet H is weaker than magnet G.
(4) Magnet G is stronger than magnet F.

17. Suyin brought a magnet close to each of the objects below.


A: ceramic tile


B: iron nail

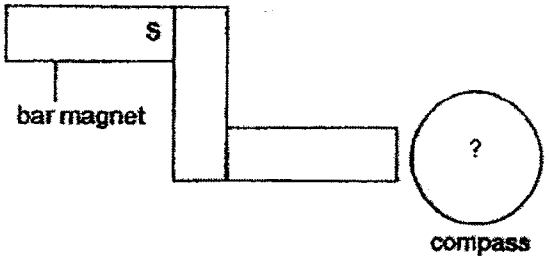

C: glass marble


D: steel cup

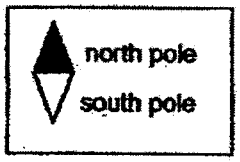
Which of the above items would not be attracted by the magnet?

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

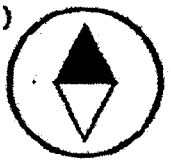
18. David arranged 3 bar magnets and a compass as shown in the diagram below. The needle of the compass is made of a magnet.



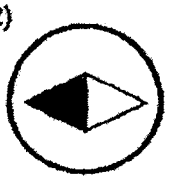
Which of the following shows the correct direction of the compass needle in the above diagram?



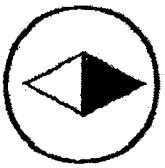
(1)



(2)

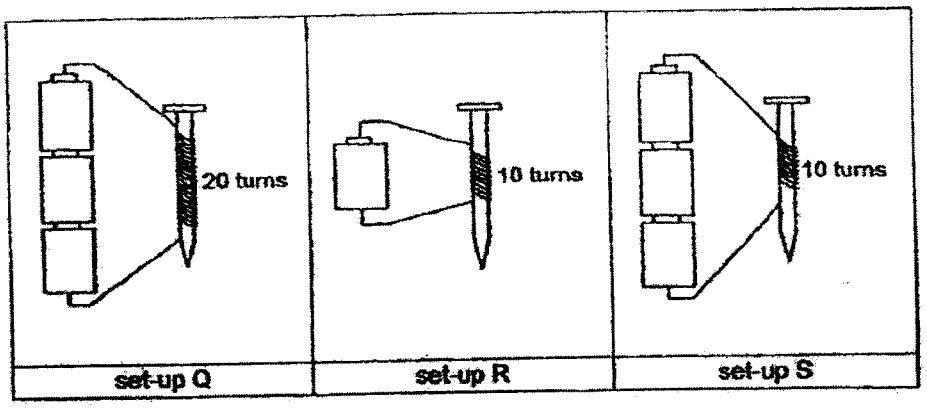


(3)



(4)

19. Study the set-ups below.



Which of the following shows the correct order of the electromagnets from the weakest to the strongest magnetic strength,?

	weakest magnetic strength ⟶ strongest magnetic strength
(1)	Q → R → S
(2)	R → Q → S
(3)	Q → S → R
(4)	R → S → Q

End of Booklet A

PRIMARY 3 END-OF-YEAR PRACTICE PAPER

Name : _____ ( ) Date: _____

Class : Primary 3 ( )

Parent's Signature : _____ Duration: 1 hour 15 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 B (27 marks)

For questions 20 to 29, 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. [27 marks]

20. Sally planted a seed in her garden and observed it over 6 weeks. She measured and recorded its height as shown below.

Number of weeks	Height (cm)
1	3
2	6
3	10
4	14
5	18
6	25

(a) Describe the change in the height of the plant as the number of weeks increases. [1]

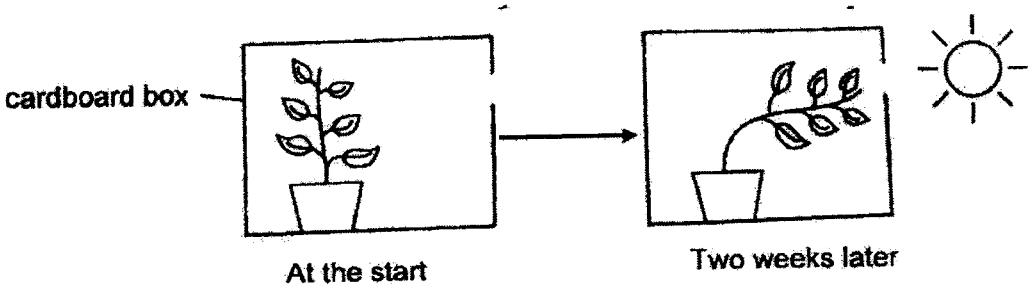
_____

_____

(b) Based on the changes in the height of the plant, state the characteristic of living things shown. [1]

Living things can _____

Sally placed a potted plant in a cardboard box. Her observation is shown below.



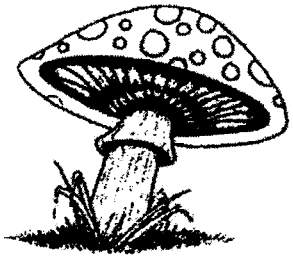
(c) State the characteristic of living things shown here. [1]

Living things can _____

Score 3

21. The diagrams below show living things, A and B.

A



B

Write down two differences between living things, A and B. [2]

Difference 1: _____

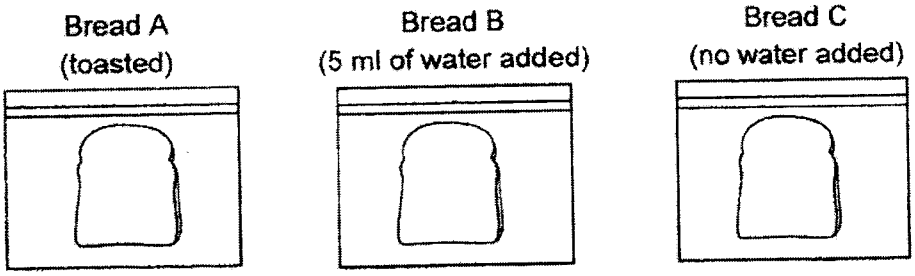
_____

Difference 2: _____

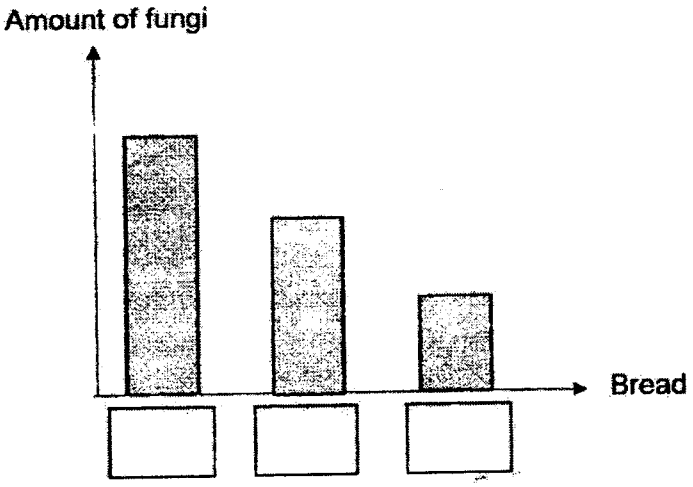
_____

Score	/ 2

22. Devi carried out an experiment using three identical slices of bread, A, B and C as shown below. She toasted bread A and added 5 ml of water to bread B. She placed the three slices of bread into sealed bags and placed them on the kitchen table.



(a) A week later, Devi observed fungi growing on all three slices of bread. Match the above pieces of bread to the amount of fungi found on the bread by writing A, B and C in the boxes below. [1]

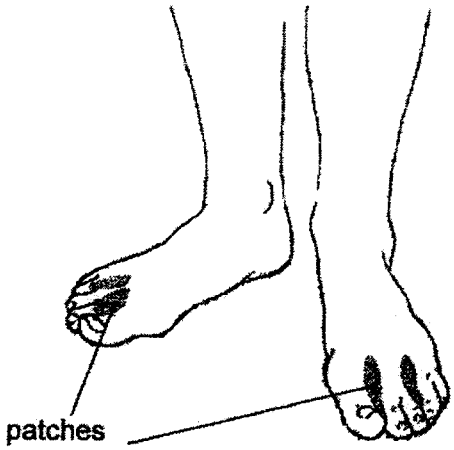


(b) Besides water, state another condition needed for the fungi to grow [1]

_____

Score 2

Devi likes to wear thick socks for many hours a day. When he goes back home and removes his socks, he realises that his feet are hot and sweaty. One day, he found some patches growing on his feet which cannot seem to be wiped off.



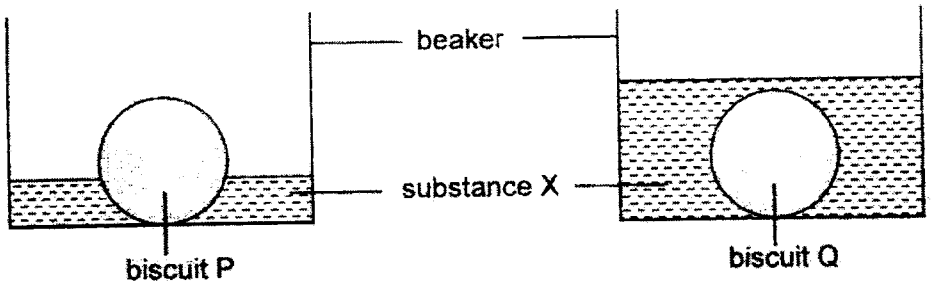
(c) Based on Devi's experiment, what do you think these patches are? [1]

_____

_____

Score	/ 1

23. Jane conducted an experiment to find out if the amount of substance X affected the time taken for the biscuit to break down completely. She placed similar biscuits, P and Q, each into a beaker and poured in different amount of substance X that was taken from the small intestine of a human as shown below.



She recorded the results to her experiment in the table below.

Biscuit	Amount of substance X (ml)	Time taken for the biscuit to break down completely into simpler substances (minutes)
P	100	60
Q	300	20

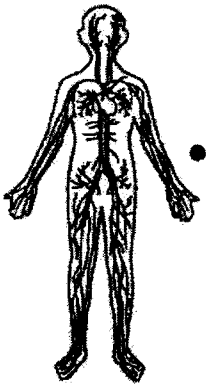
(a) From the results above, state the relationship between the amount of substance X and the time taken for the biscuit to break down completely. [1]

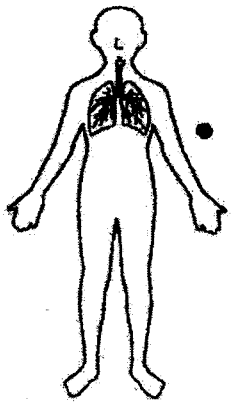
_____

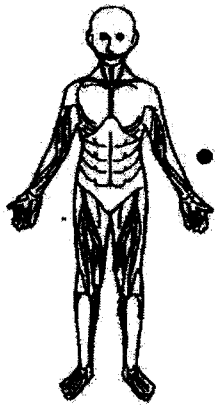
_____

Score 1

24. Study the human systems below and match each system to its function. [3]



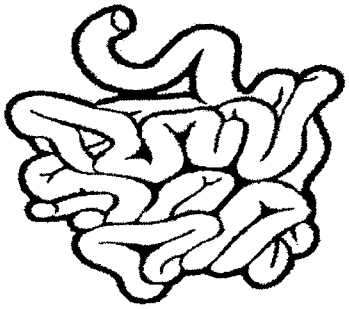




- Takes in air and removes air from the body.
- Carries digested food, water and oxygen in the blood to all parts of the body.
- Helps different parts of the body to move.

Score	3

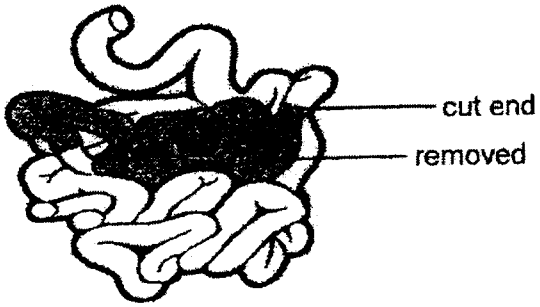
The diagram below shows the human small intestine.



(b) Substance X is found in the small intestine. What is substance X? [1]

_____

The shaded section of Jane's small intestine has been removed and the cut ends are rejoined during a surgery as shown in the diagram below.



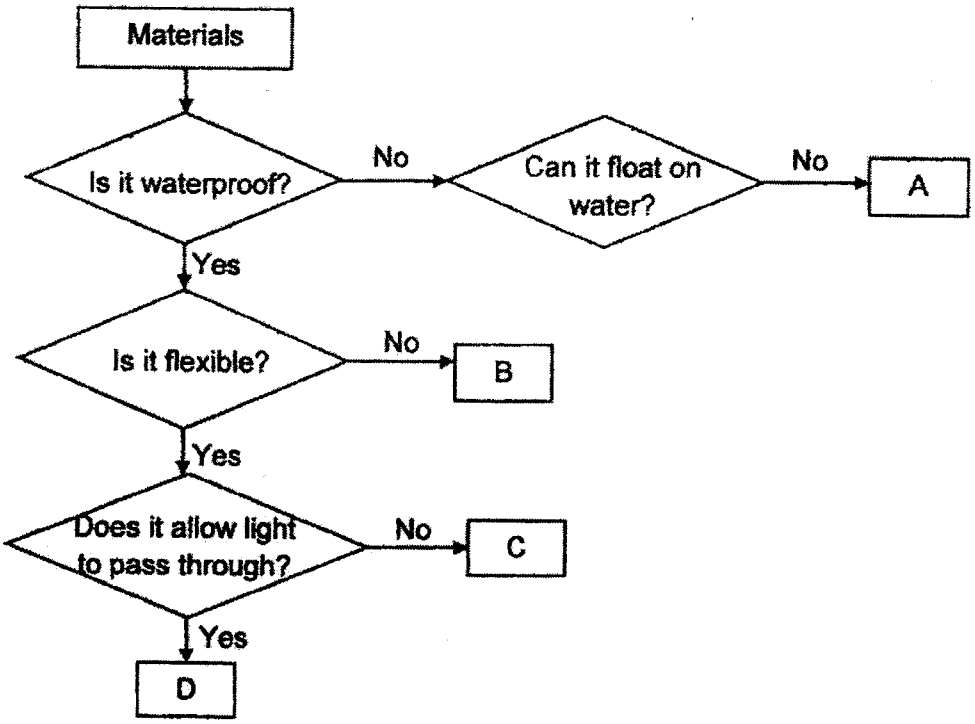
(c) Given the same amount of time and food, how would the surgery affect the amount of food absorbed by her small intestine? [1]

_____

_____

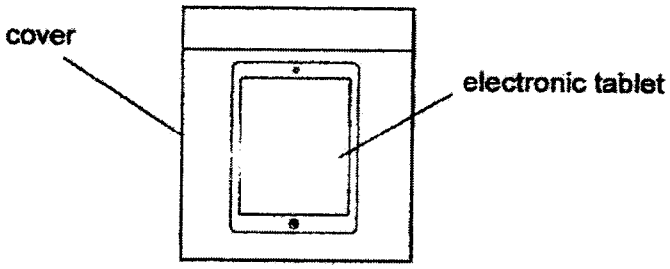
Score	2

25. Study the chart below.



(a) State one difference between materials, A and C. [1]

Mary is looking for a cover to place her electronic tablet into that allows her to look at the screen clearly.

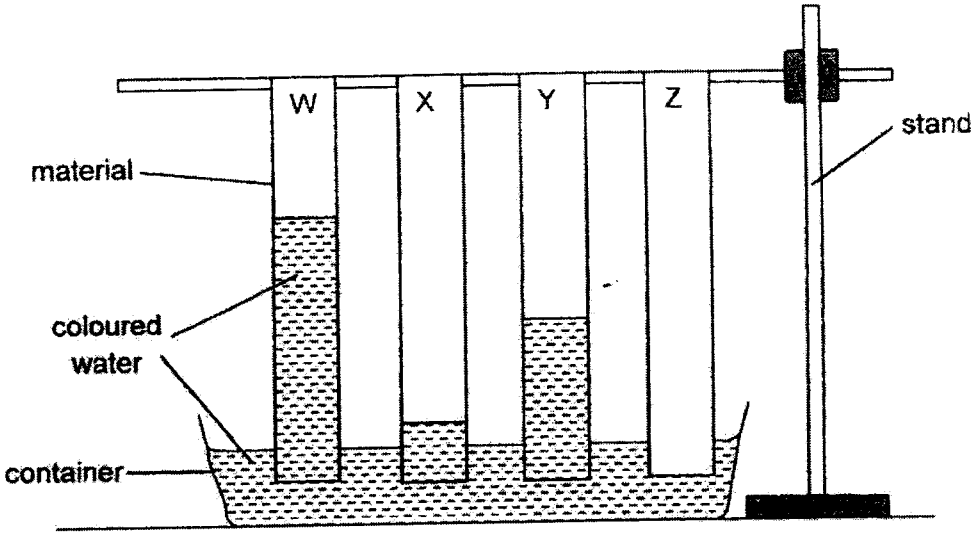


(b) Which of the above material, A, B, C or D, is most suitable to make the cover. Explain why. [1]

Score 2

26. Ben carried out an experiment to find out how well each material can absorb water. He used materials. W, X, Y and Z, which are of the same size, length and thickness. He dipped one end of each material into a container of coloured water.

After 10 minutes, the height of the water level on the strips were observed as shown below.

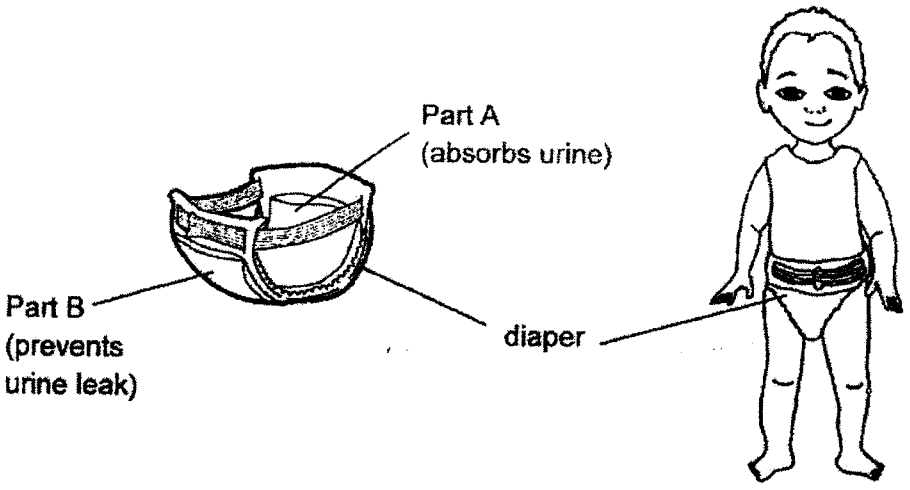


(a) Arrange and write down in the boxes below the materials, W, X, Y and Z, starting from the most absorbent to the least absorbent. [1]

Most absorbent ⟶ **Least absorbent**

Score 1

The picture below shows a diaper for a baby to put on. Part A is the inside of the diaper which absorbs the urine and Part B is the outside of the diaper which prevents the urine from leaking out.



(b) Which material, W or X, is more suitable for making Part A? Explain why. [1]

_____

_____

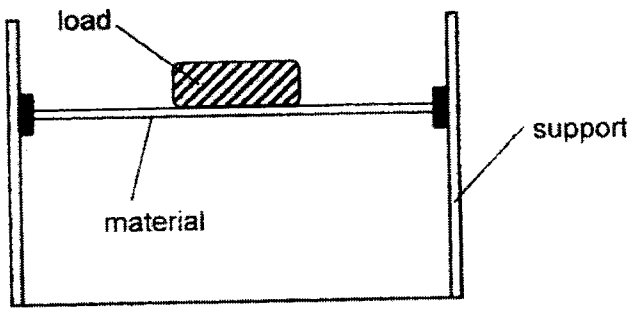
(c) Which material, W, X, Y or Z, is most suitable for making Part B? Explain why. [1]

_____

_____

Score	2

27. Hafiz wanted to find out the strength of four materials, P, Q, R and S. He placed different loads on each material as shown below.



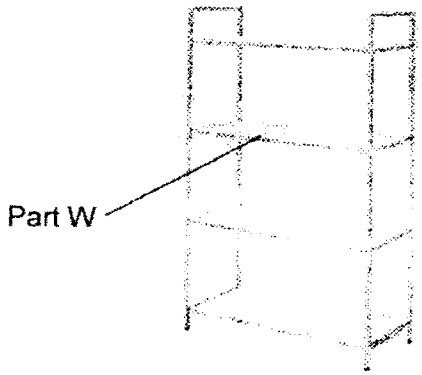
He recorded the least mass of the load that caused each material to break.

Material	Least mass of load before the material breaks (kg)
P	11
Q	6
R	3
S	17

(a) Which material is the strongest? Explain why. [1]

Score 1

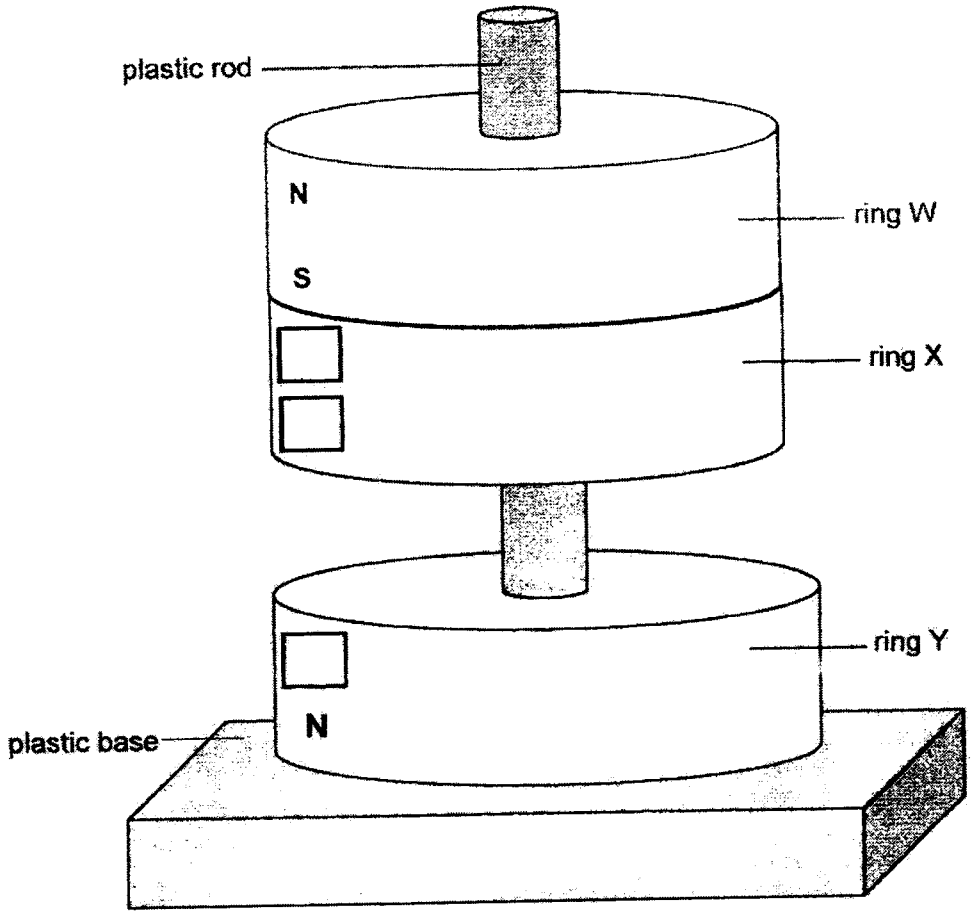
Hafiz wanted to make a storage shelf as shown below.



(b) Which of the materials, P, Q, R or S, could Hafiz use to make Part W of the storage shelf which had to hold 13 kg of books? Explain why. [1]

Score 1

28. Mary used three ring magnets, W, X and Y, for the set-up as shown below.



(a) Based on your observations of the above diagram, write in the boxes above, 'N' and 'S', to identify the poles of the ring magnets. [1]

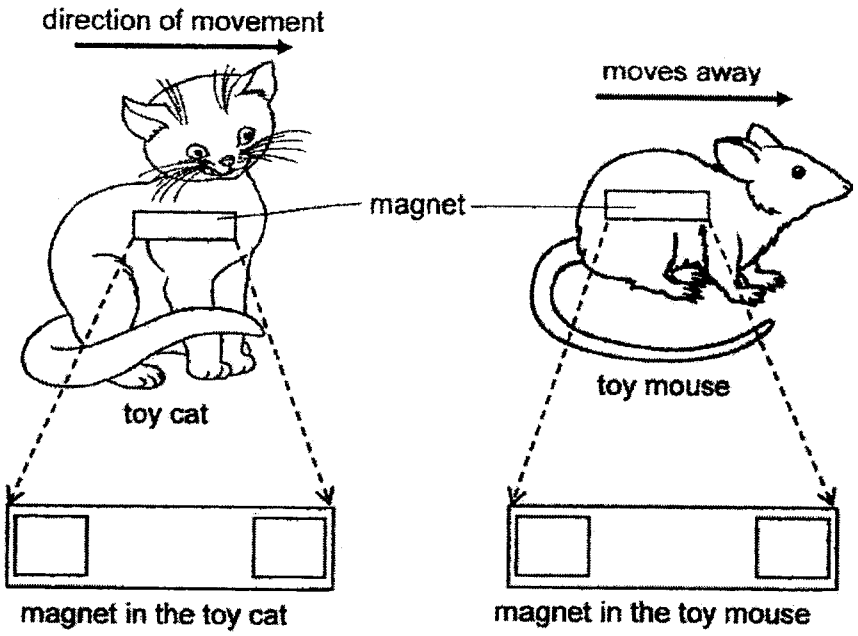
(b) When Mary replaced ring X with a wooden ring, she observed that the wooden ring did not float but rested on ring Y. Explain why. [1]

_____

_____

Score	/ 2

Mary has a toy mouse and a toy cat made of plastic. Each toy has a magnet placed inside as shown in the diagrams below. The mouse moves away when the cat moves towards it.

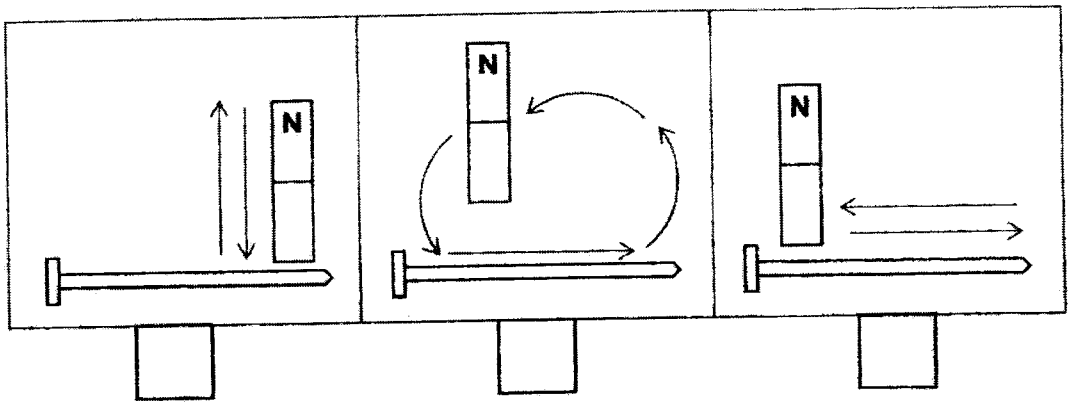


(c) Write in the boxes above, 'N' and 'S' to identify the poles of the magnets behind the toy mouse and toy cat. [1]

Score 1

29. The diagram below shows different ways an iron nail is stroked to make a magnet. The nails are stroke 20 times.

(a) Put a tick (✓) in the box that shows the correct stroking method. [1]



(b) Peter has some paper clips. Explain how he can use them to find out if the iron nail has been magnetised? [1]

_____

_____

(c) If the nail has been magnetised after 30 strokes, how can Peter increase the strength of the magnetised iron nail? [1]

_____

_____

End of Booklet B

Score	3

ANSWER KEY

LEVEL : Primary 3
SCHOOL : Tao Nan School
SUBJECT : SCIENCE
TERM : End-of-Year Practice Paper

BOOKLET A

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

BOOKLET B

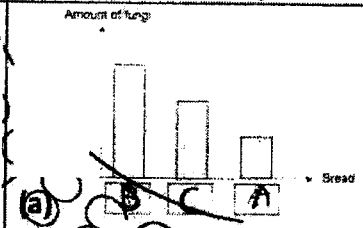
Q20

(a) The height of the plant will increase.
(b) Living things can grow.
(c) Living things can respond to changes around them.

Q21

Difference 1 : A is a flowering plant but B is a fungi.
Difference 2 : A reproduce by seeds but B reproduce by spores.

Q22

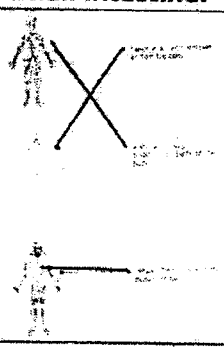


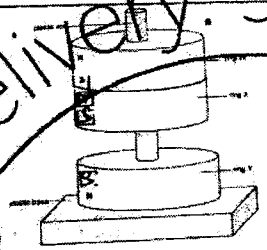
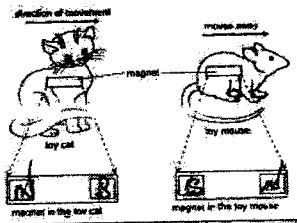
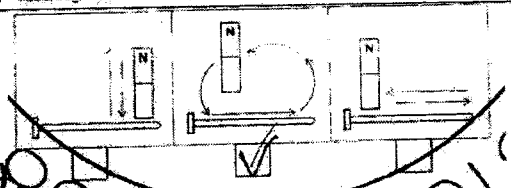
(a)
(b) warmth
(c) Fungi

Q23

(a) The more the amount of substance X, the shorter the time taken for the biscuit to break down completely.
(b) Digestive juice
(c) Her small intestine would absorb less food compared to her original small intestine.

Q24



Q25	(a) C is waterproof but A is not waterproof. (b) D, D allows light to pass through so Mary can see through the screen clearly.
Q26	(a) W Y X Z Most absorbent →Least absorbent (b)W. Material W is the most absorbent material. (c) Z. Material Z is waterproof.
Q27	(a) S. It can hold the highest mass of load before breaking. (b) S. S can hold more than 13kg of mass so the shelf will not break.
Q28	 (a) (b) The wooden ring is not a magnetic material.  (c)
Q29	 (a) (b) Bring the nail near the paper clip, if it attracts the paper clip, it is magnetised. (c) Use a stronger magnet to stroke the iron nail.