



AI TONG SCHOOL
2013
CONTINUAL ASSESSMENT 1
PRIMARY FOUR

SCIENCE

DURATION : 1hr

DATE: 7th March 2013

INSTRUCTIONS

Do not open the booklet until you are told to do so.
Follow all instructions.
Answer all questions.

Name : _____ ()

Class : Primary _____

Parent's Signature : _____

Date : _____

MARKS	50
--------------	-----------

Section A (15 x 2 marks)

For each question from 1 to 15, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. A robotic toy dog can run and bark when its head is patted.
However, it will definitely not be able to _____.

- A grow
- B move
- C respond
- D reproduce

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

2. Ahmad, Ben, Clara and David are given some blocks to arrange into 2 groups, A and B.



Ahmad	
A	B

Ben	
A	B

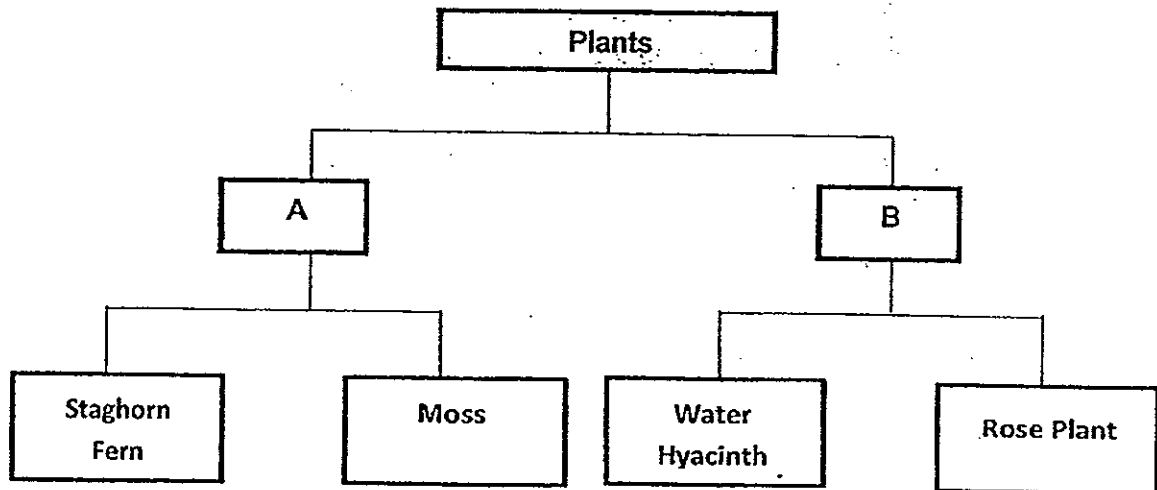
Clara	
A	B

David	
A	B

Who has classified the blocks correctly?

- (1) Ahmad
- (2) Ben
- (3) Clara
- (4) David

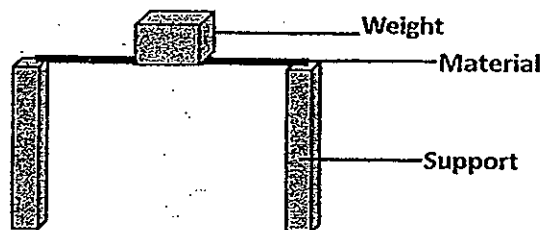
3. Study the classification chart below.



Which of the following are suitable headings for A and B?

	A	B
(1)	Poisonous	Non-Poisonous
(2)	Fungi	Plant
(3)	Live on land	Live in water
(4)	Non-Flowering	Flowering

4. Jill carried out an experiment as shown in the diagram below. A piece of material was placed on top of two supports. Weights were then stacked on the material one at a time until it broke.

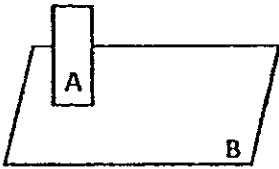
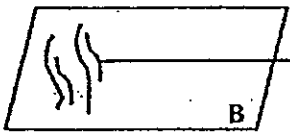
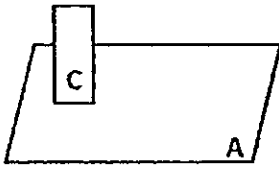
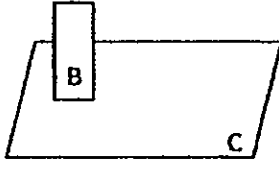
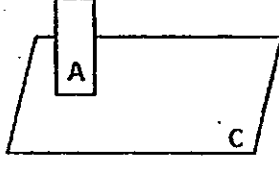
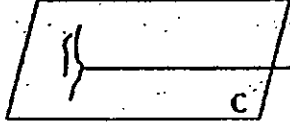


This was repeated using a different material placed on top of the supports each time.

What was the aim of the experiment?

- (1) To find out which material is the hardest.
- (2) To find out which material is the heaviest.
- (3) To find out which material is the strongest.
- (4) To find out which material is the most flexible.

5. Jamie carried out an experiment to test the hardness of objects A, B and C. The results of the experiment are shown in the table below.

Scratch Test	Results
	 Scratch marks
	
	
	 Scratch marks

Which of the following shows the correct order of hardness of A, B and C starting from the softest?

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

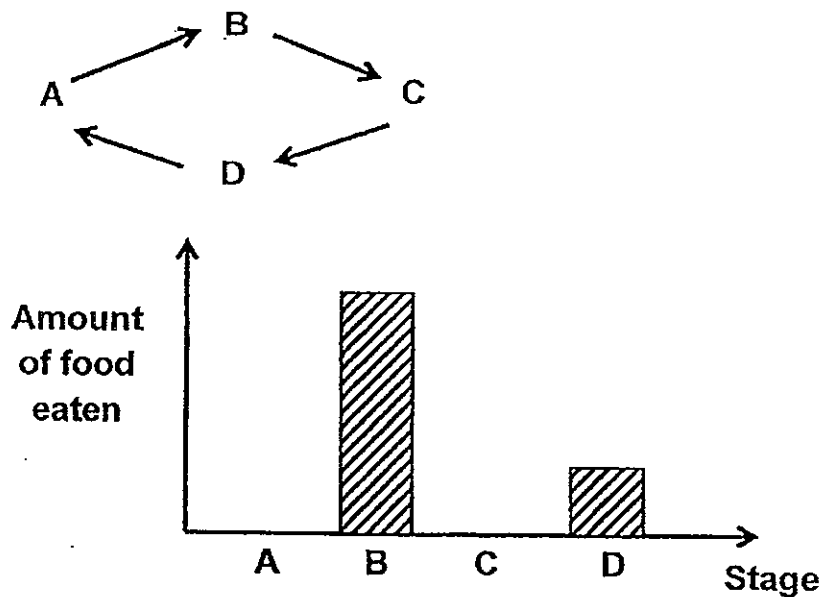
6. Peter wanted to conduct an experiment to find out if plants can take in water without roots.

Which of the following variables should he keep constant in order for the experiment to be fair one?

- A Type of plant
- B Amount of water given to each plant daily
- C Number of leaves
- D Presence of roots

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

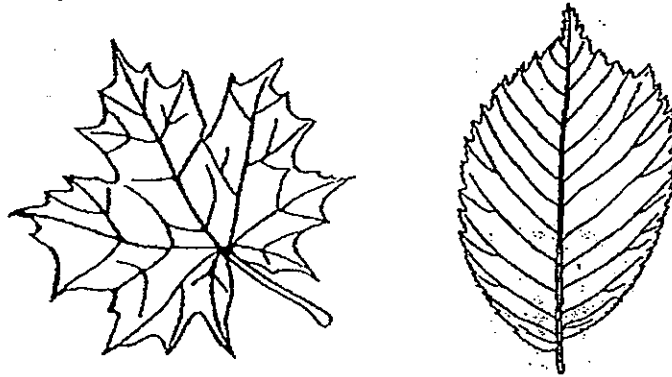
7. The graph below shows the life cycle and the amount of food eaten by a mealworm beetle. A, B, C and D are stages in the life cycle.



At which stage is the mealworm beetle in its pupa stage?

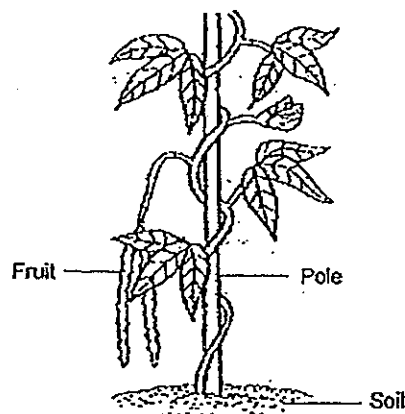
- (1) A
- (2) B
- (3) C
- (4) D

8. Study the diagram of the two leaves shown below.



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

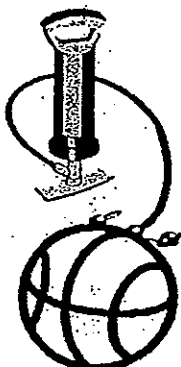
- (1) Both leaves have veins.
 - (2) Both leaves have stalks.
 - (3) Both leaves have jagged edges.
 - (4) Both leaves have the same shape.
9. The diagram below shows a plant growing in a garden.



Based on the diagram, which of the following statements are correct?

- A The fruit is edible.
 - B The plant has a weak stem.
 - C The plant is a flowering plant.
- (1) A and B only
 - (2) A and C only
 - (3) B and C only
 - (4) A, B and C

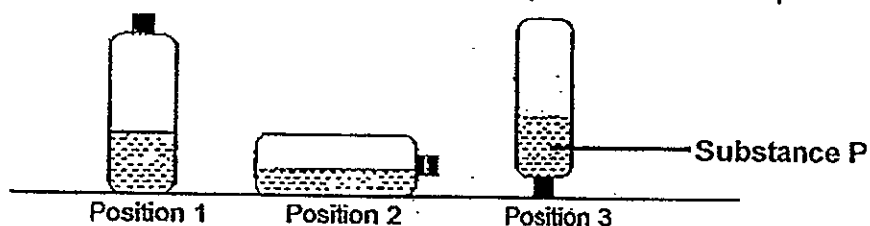
10. Peter pumps in more air into a fully inflated ball.



What happens to the mass and volume of the air in the ball?

	Volume of Air	Mass of Air
(1)	Decrease	Increase
(2)	No Change	Increase
(3)	Decrease	Decrease
(4)	No Change	Decrease

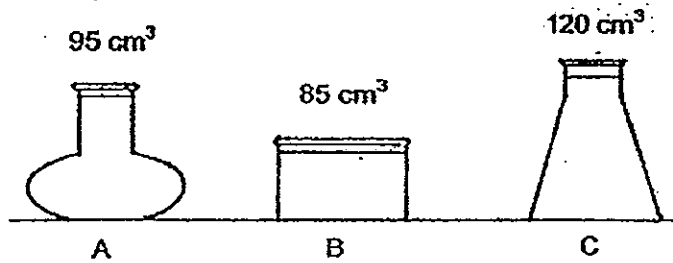
11. A bottle was filled with substance P and put into 3 different positions.



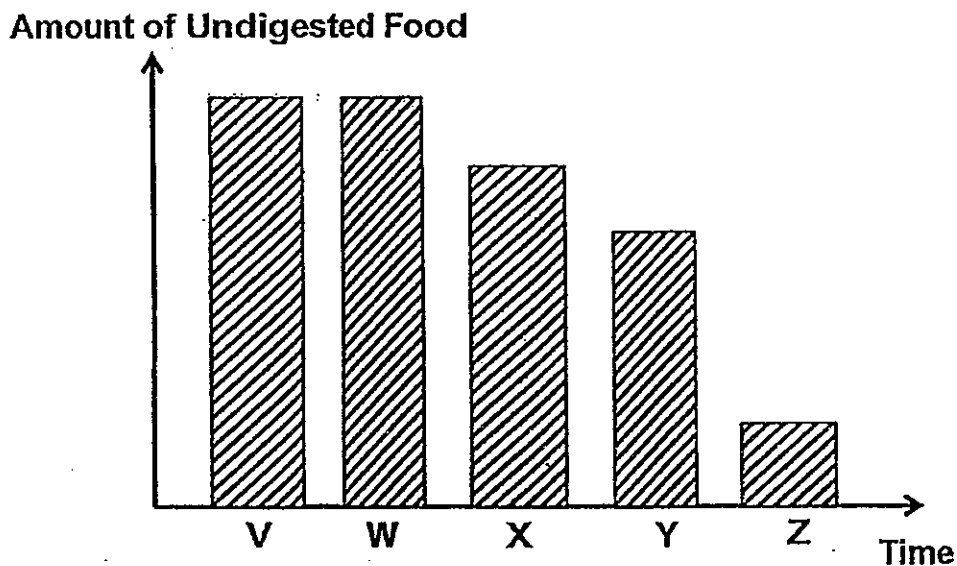
Based on this experiment, what can you conclude about substance P?

- A It has no mass.
 - B It has no definite shape.
 - C It has no fixed volume.
- (1) B only
 - (2) A and B only
 - (3) B and C only
 - (4) A, B and C

12. In which container, A, B or C, can 95cm^3 of air be pumped into?



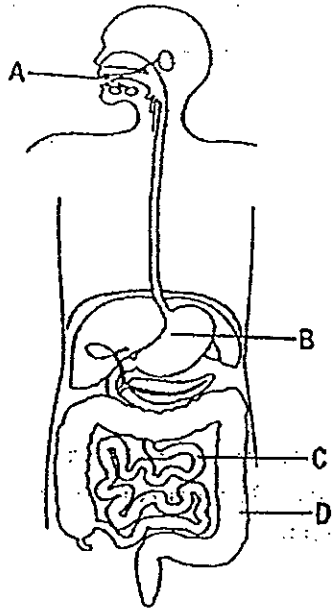
- (1) C only
 (2) A and B only
 (3) A and C only
 (4) A, B and C
13. Jack ate chicken rice for lunch. V, W, X, Y and Z represent the sections present in the digestive system in sequence. The amount of undigested food present at each section is shown in the graph below.



Based on the graph, which of the following best represents W, X and Y?

	W	X	Y
(1)	Gullet	Stomach ✓	Small intestine
(2)	Gullet	Stomach	Large intestine
(3)	Stomach	Small intestine	Large intestine
(4)	Small	Large intestine	Rectum

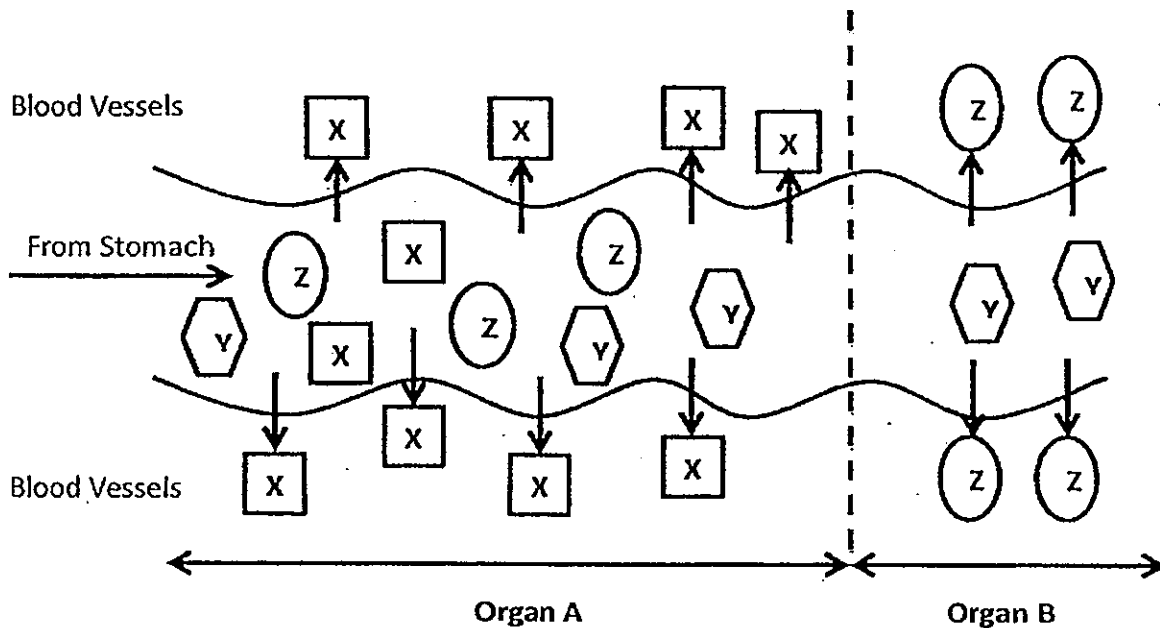
14. Look at the picture below.



At which parts of the digestive system does digestion take place?

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

15. The diagram below represents part of the digestive system of a boy. X, Y and Z represent different substances that are being absorbed into the bloodstream at different parts as shown below.



Based on the diagram above, which of the following best represents organ B, substances X, Y and Z?

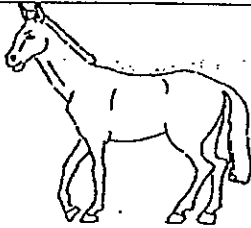
	Organ B	Substance X	Substance Y	Substance Z
(1)	Large Intestine	Water	Digested Food	Undigested Food
(2)	Large Intestine	Digested Food	Undigested Food	Water
(3)	Anus	Water	Digested Food	Undigested Food
(4)	Anus	Digested Food	Undigested Food	Water

Name: _____ ()
 Class P4 ()

Section B: 20 marks

Read the questions carefully and write down your answers in the spaces provided.

16. Study the animals below and state their outer coverings. [2]

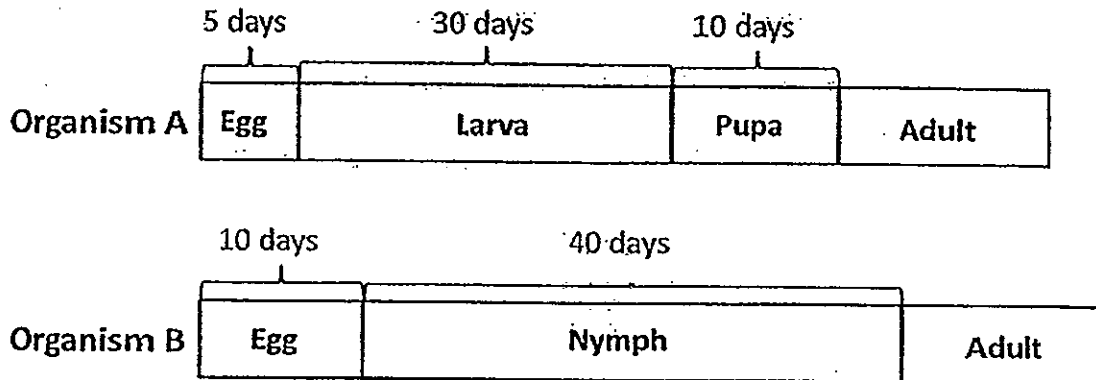
(a)	Animal	Outer Covering
(i)	 Crab	
(ii)	 Horse	
(iii)	 Bird	
(iv)	 Fish	

(b) State two functions of the horse's outer covering. [2]

- i) _____

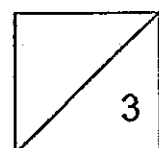
- ii) _____

17. The diagram below shows the life cycles of organisms A and B. Organism A goes through the larva and pupa stage while Organism B goes through the nymph stage.

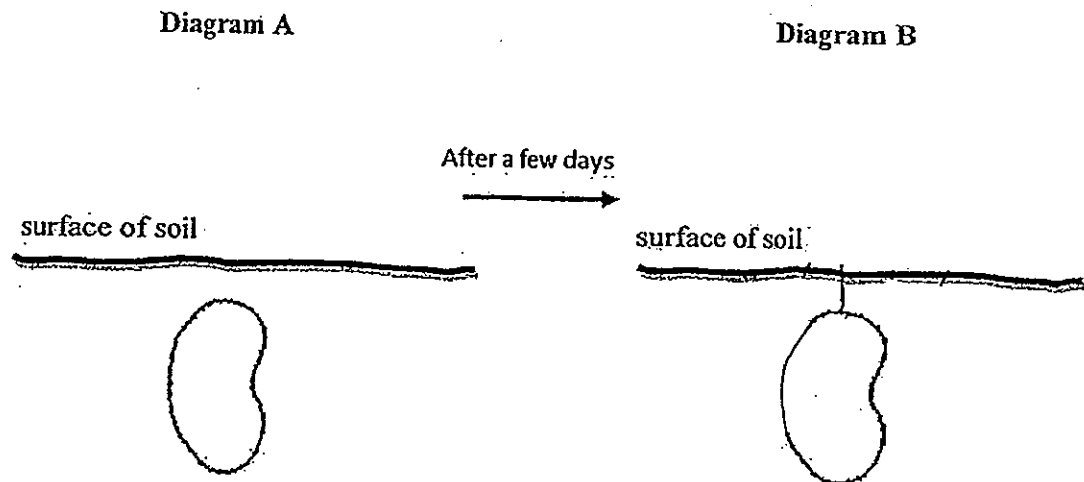


- (a) Based on the information given in the diagram above, write down one difference between the life cycles of Organisms A and B. [1]

- (b) The young and adult of Organism A live in different places. Explain how this would benefit Organism A. [2]

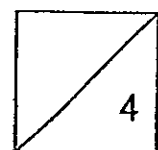


18. Diagram A shows a seed beneath some soil. After a few days, the seed would have germinated.

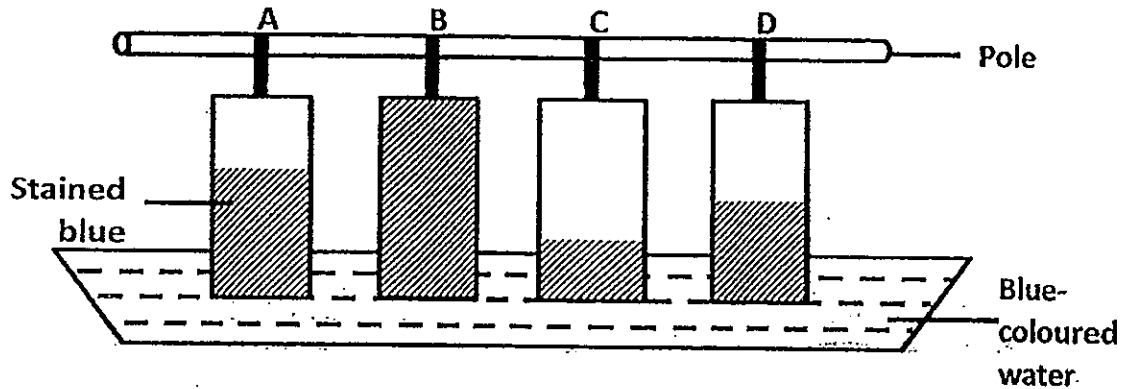


- (a) On diagram B, draw what the root and shoot of the seedling would look like after germination. Label the shoot and root on Diagram B above. [2]

- (b) Explain why the shoot and root grew in the directions as drawn on Diagram B. [2]

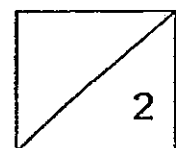


19. Jane carried out an experiment using 4 different types of materials, A, B, C and D of equal lengths. She dipped them into a container of blue-coloured water. The shaded portions show the amount of water absorbed by the materials after half an hour.

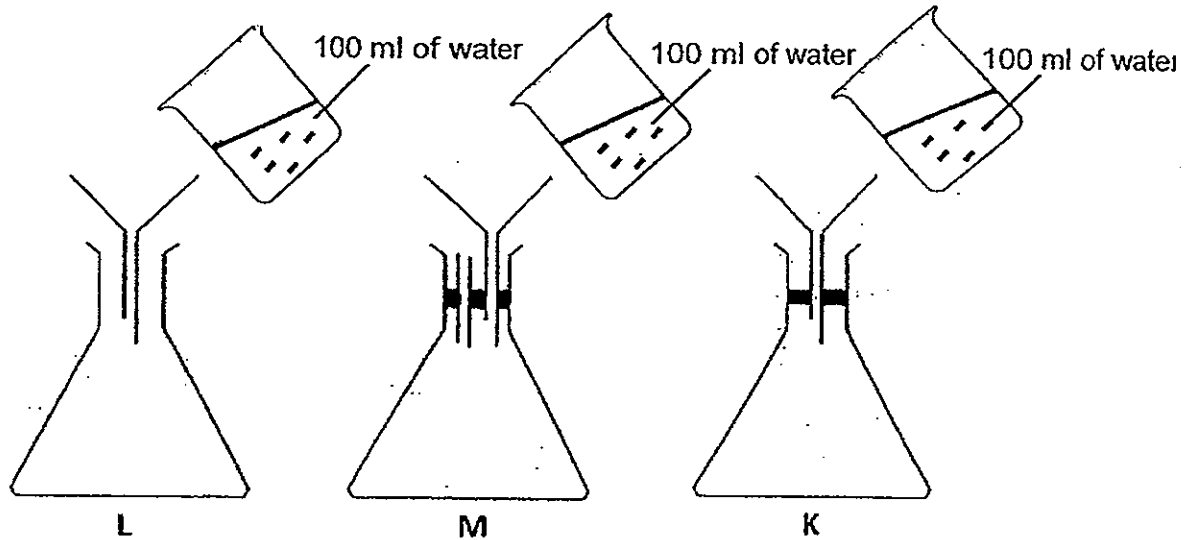


- (a) Which variable did Jane change in the experiment? [1]

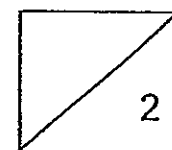
- (b) What was the aim of the experiment? [1]



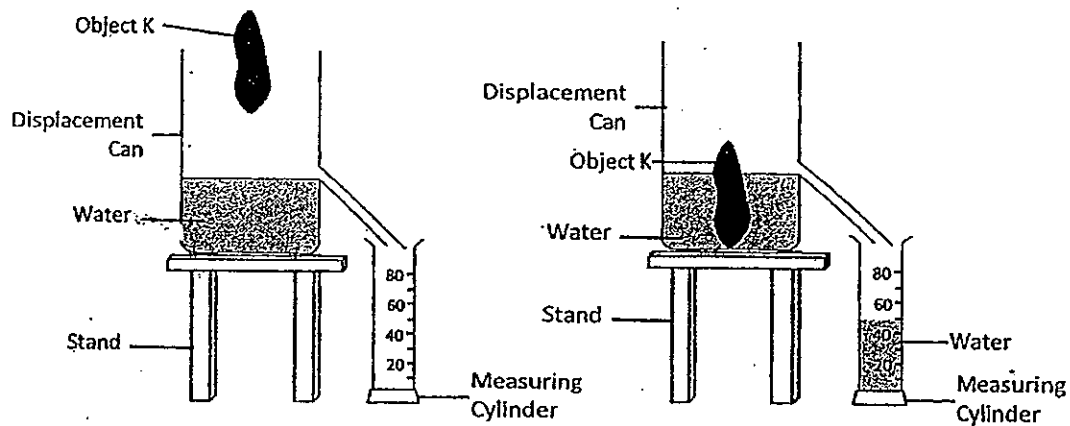
20. Ricky prepared 3 set-ups as shown below. He then poured 100ml of water into each flask.



Based on the diagram above, which flask would collect the least amount of water in 2 minutes? Explain your answer. [2]

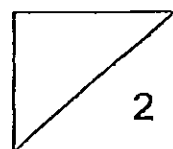


21. Gary wanted to find out the volume of object K. He used a displacement can filled with water and placed object K gently into the water as shown below.

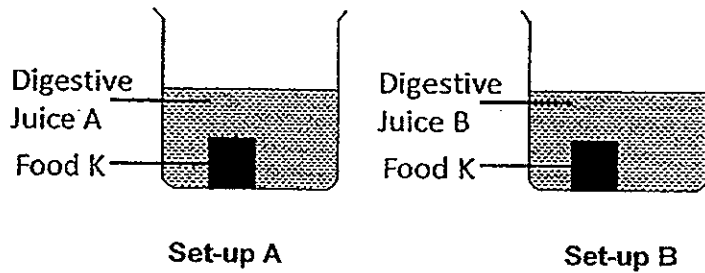


Gary concluded that the volume of object K was 50ml as shown in the measuring cylinder.

Do you agree that the volume of object K was 50ml? Explain your answer. [2]



22. Anita carried out an experiment using 2 types of digestive juices A and B and Food K. She placed equal amounts of digestive juices A and B in each set-up. 2 drops of iodine were placed in each set-up after 10 minutes.



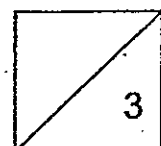
Anita recorded down her observations of the colour of the mixture in the table below.

Type of Digestive Juice	Colour of Mixture after Adding Iodine Solution
A	Solution turns dark blue.
B	Solution remains yellowish-brown.

- (a) What is the purpose of adding iodine solution to the mixture after 10 minutes? [1]

- (b) Based on the results, in which set-up, A or B, did digestion take place? Explain your answer. [2]

- END OF PAPER -



ANSWER SHEET

EXAM PAPER 2013

SCHOOL : AI TONG SCHOOL

SUBJECT : PRIMARY 4 SCIENCE

TERM : CA1

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

Section B

Q16

ai) shell

aii) fur

aiii) feathers

aiv) scales

bi) Keep warm during cold days

bii) Protect it

Q17

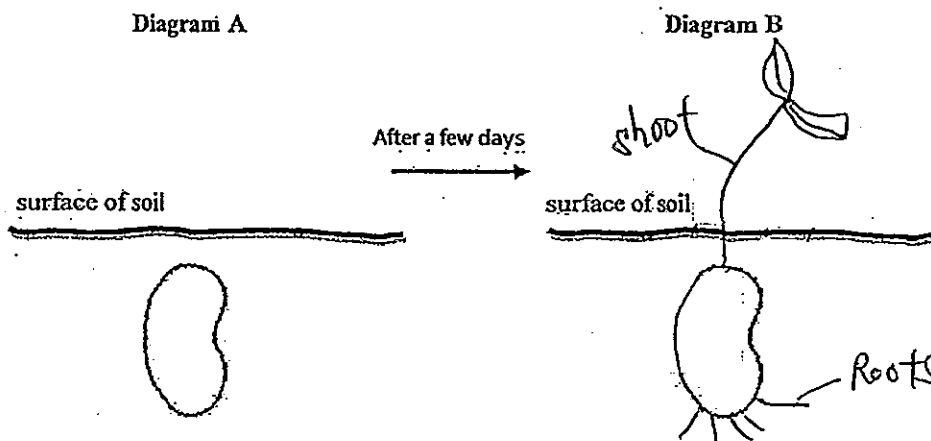
a) Organism A has a four staged life cycle while organism B only have three stages

b) The young organism does not have to compete for space with the adult organism.

Q18) a)

Diagram A

Diagram B



b) As it germinates the root grows downwards and deeper in search of water. The shoot grows upwards towards the surface of the soil and the sun.

Q19

a) The types of materials

b) To observe the rates at which each material absorbs the water.

Q20

Flask L . Air is able to escape as it has the largest opening.

Q21

No. The object was not fully submerged in the water, so the correct volume of water was not displaced.

Q22

a) To find out which Digestive juice had digested the food

b) A. Iodine turns dark blue in the presence of sugar. Sugar is formed when food gets digested. As solution in Set up A changed to dark blue, only A had digestion take place.