Test: Primary 4 - Term 4 Science (Ai Tong)

Points: 66 points

Name: _____ **Score:** _____

Date: _____

Signature: _____

Select multiple choice answers with a cross or tick:

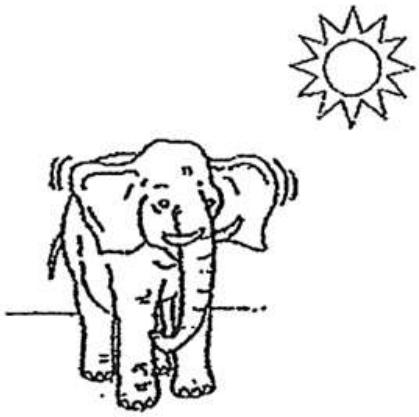
- ○ Only select one answer
- ☐ Can select multiple answers

Question 1 of 63

Primary 4 Science (Term 4) 2 pts

Booklet A (28 x 2 marks)
For each question from 1 to 28, four options are given. One of them is the correct answer.

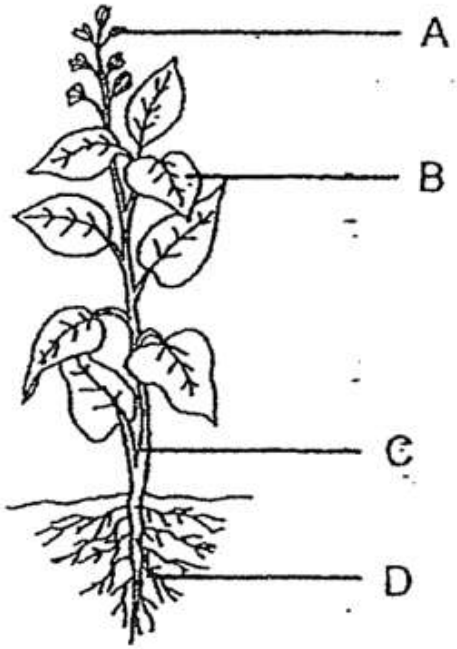
In hot weather, an elephant flaps its ears to cool down.



This shows that the elephant is a living thing because it can _____.

- ○ **A)** grow
- ○ **B)** breathe
- ○ **C)** respond
- ○ **D)** reproduce

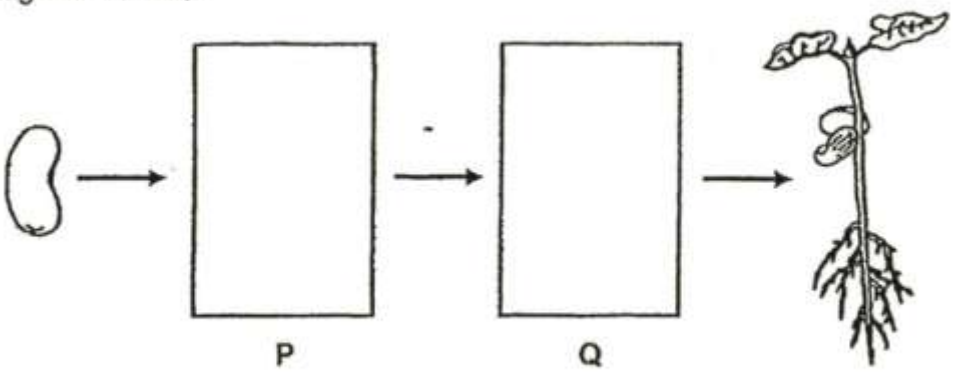
The diagram below shows a plant.



Which part, A, B, C or D, supports the plant?

- **A)** A
- **B)** B
- **C)** C
- **D)** D

The diagram below shows the growth of a young plant with two missing stages P and Q.



Which one of the following shows the correct stages for P and Q?

	P	Q
(1)		
(2)		
(3)		
(4)		

A) 1

B) 2

C) 3

D) 4

Question 4 of 63

Primary 4 Science (Term 4) 2 pts

In which part of the digestive system is digested food absorbed into the blood?

A) gullet

B) stomach

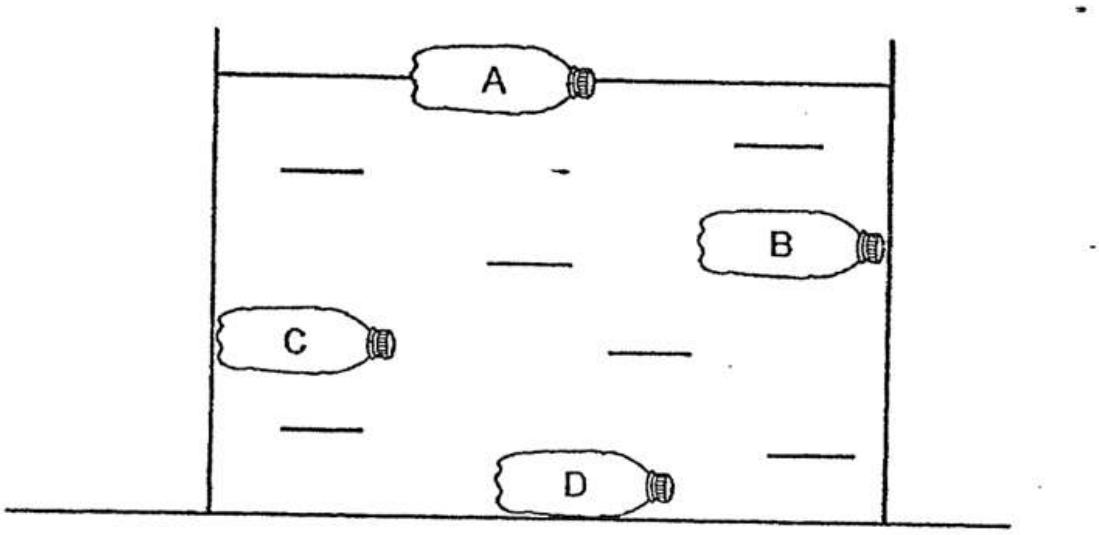
C) small intestine

D) large intestine

Question 5 of 63

Primary 4 Science (Term 4) 2 pts

Alice put an empty plastic bottle into a container of water.



At which position, A, B, C or D, would the empty plastic bottle most likely be found?

A) A

B) B

C) C

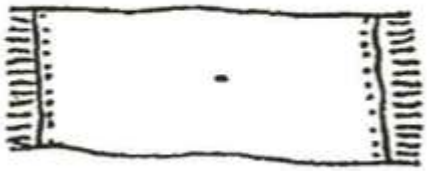
D) D

Question 6 of 63 Primary 4 Science (Term 4) 2 pts

Which one of the following objects will break easily when bent?

A)

A cotton towel



B)

A wooden ice-cream stick

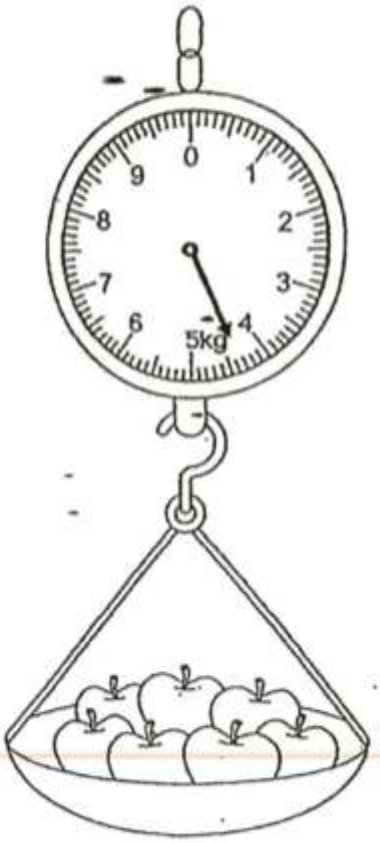
C)

A metal wire

D)

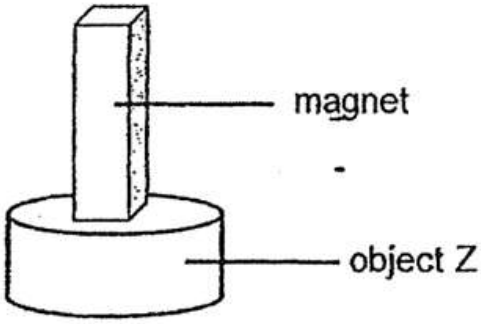
A rubber glove

The reading on the weighing scale shows that the mass of the apples is _____ kg.



- **A)** 4.0
- **B)** 4.3
- **C)** 5.0
- **D)** 5.7

An object Z was attracted to a magnet, as shown in the figure below.



Object Z is made of _____.

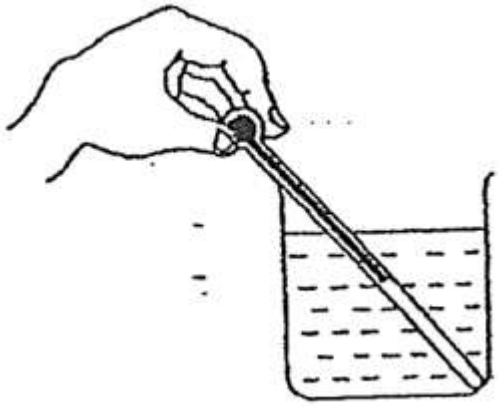
- **A)** steel
- **B)** wood
- **C)** glass
- **D)** plastic

Question 9 of 63

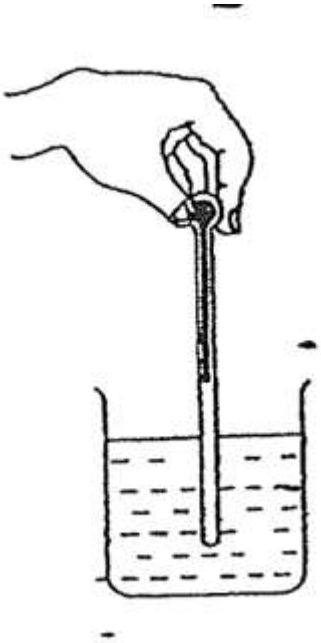
Primary 4 Science (Term 4) 2 pts

Ignatius wants to measure the temperature of hot water in a beaker. Which one of the following diagrams shows the correct position of the thermometer when taking temperature reading?

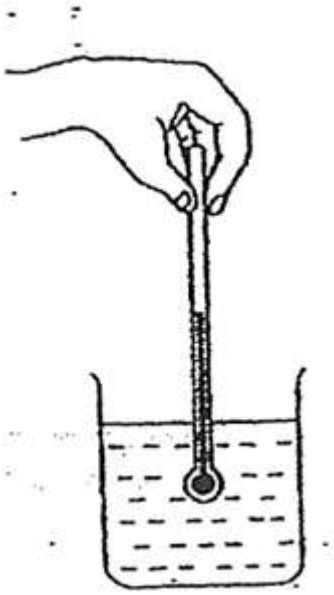
A)



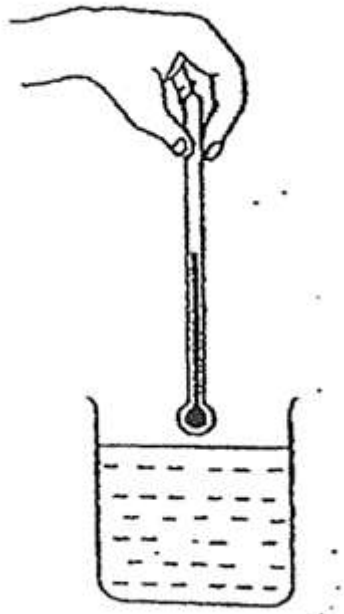
B)



C)

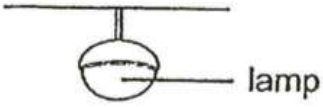


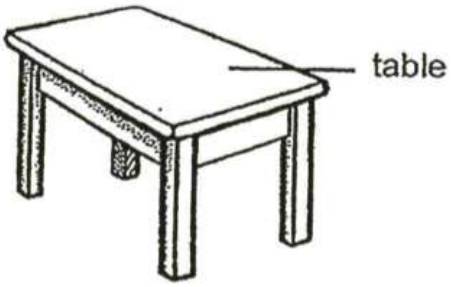
D)



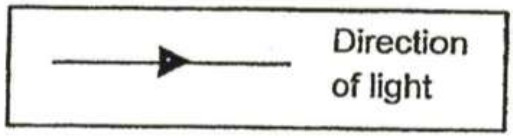
Question 10 of 63 Primary 4 Science (Term 4) 2 pts

Look at the picture below.

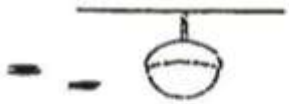


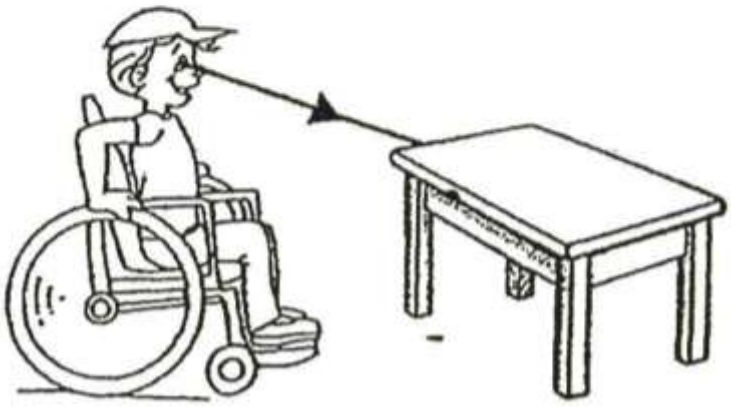


Which one of the following explains why Zachary can see the table?



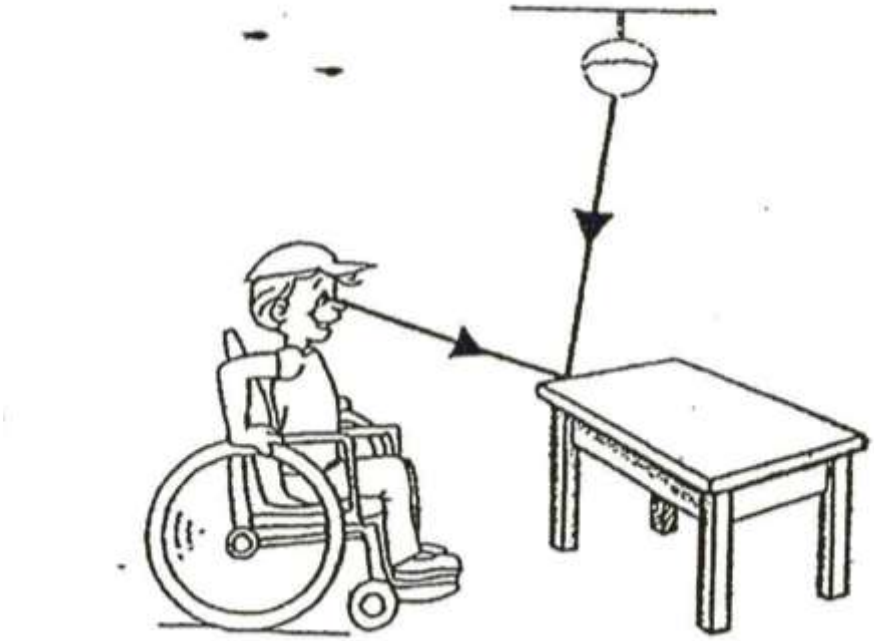
A) (1)





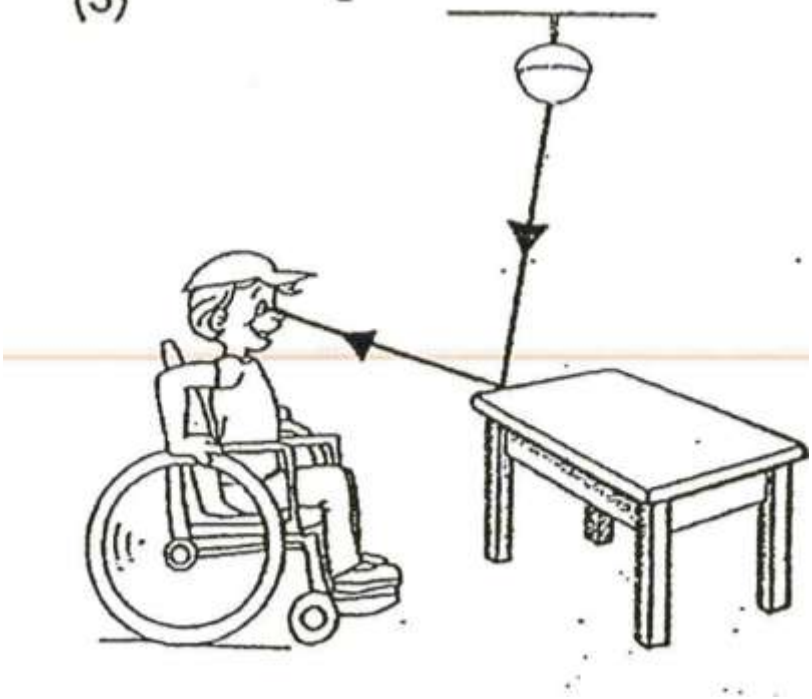
B)

(2)



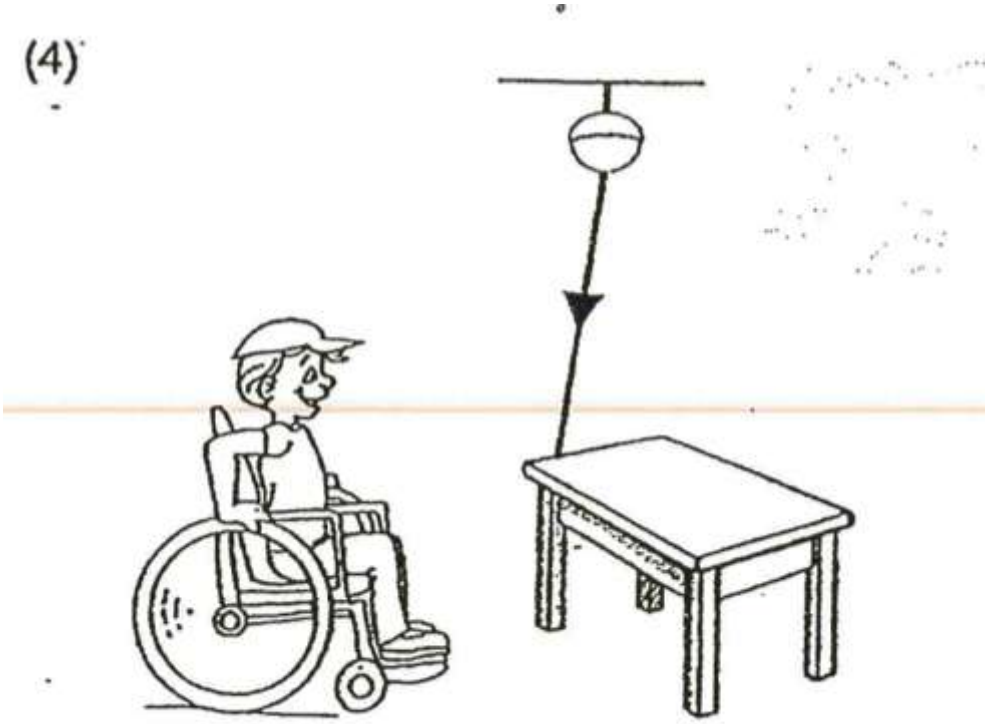
C)

(3)



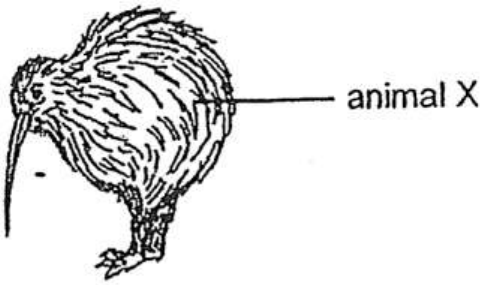
D)

(4)



Question 11 of 63 Primary 4 Science (Term 4) 2 pts

Lily saw animal X in the zoo.



Which of the following action(s) should Lily do to find out if animal X is a bird?

A Check if animal X can fly.
B Check if animal X has a tail.
C Check if animal X has feathers.
D Check if animal X reproduce by laying eggs.

A) C only
B) A and B only
C) C and D only
D) A, C and D only

The diagram below shows two living things.

fern

mushroom

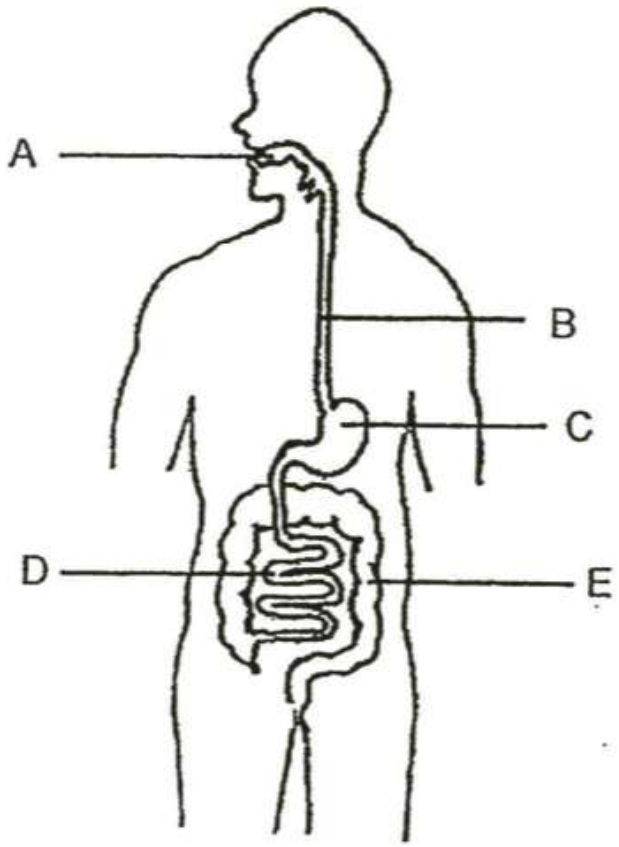
Which of the following statements are true about them?

A Both bear flowers.
B Both reproduce from spores.
C Both will grow towards light to make food.
D Both do not move from place to place on their own.

- **A)** A and C only
- **B)** B and D only
- **C)** A, B and D only
- **D)** B, C and D only

Question 13 of 63

Primary 4 Science (Term 4) 2 pts



Which parts of the digestive system produce digestive juice?

- **A)** A, C and D only
- **B)** A, C and E only
- **C)** B, C and D only
- **D)** B, D and E only

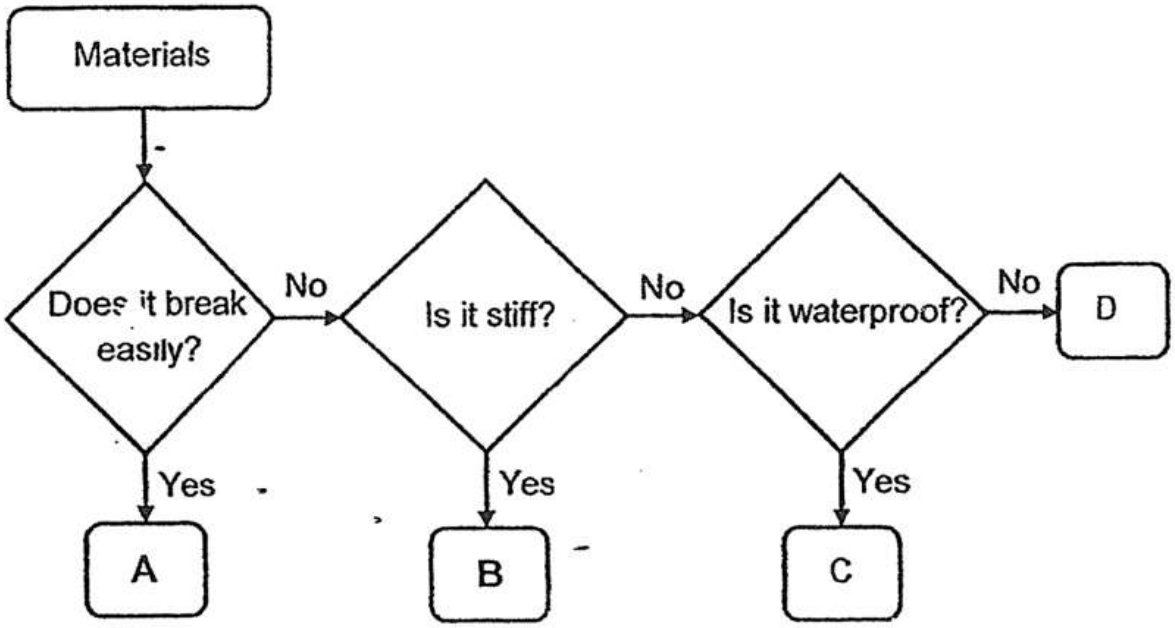
Question 14 of 63

Primary 4 Science (Term 4) 2 pts

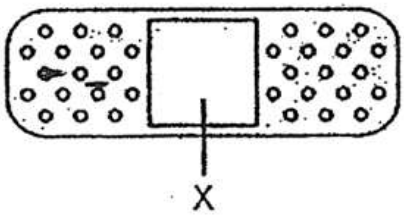
Which one of the following will happen if part E is not functioning properly?

- **A)** Food will not be digested at all
- **B)** More digestive juice will be added to the food
- **C)** Digested food will not be removed from the body
- **D)** Less water will be removed from the undigested food

Study the flow chart below.



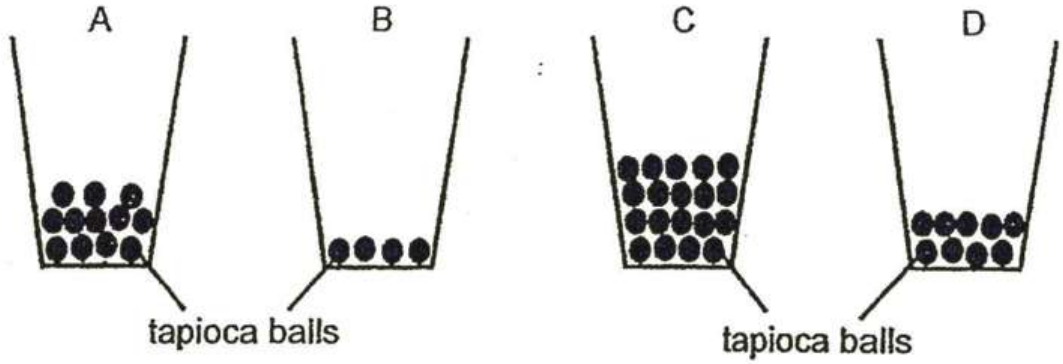
The diagram below shows a plaster.



Based on the flow chart, which of the materials is most suitable for making part X of the plaster to cover a bleeding wound?

- **A)** A
- **B)** B
- **C)** C
- **D)** D

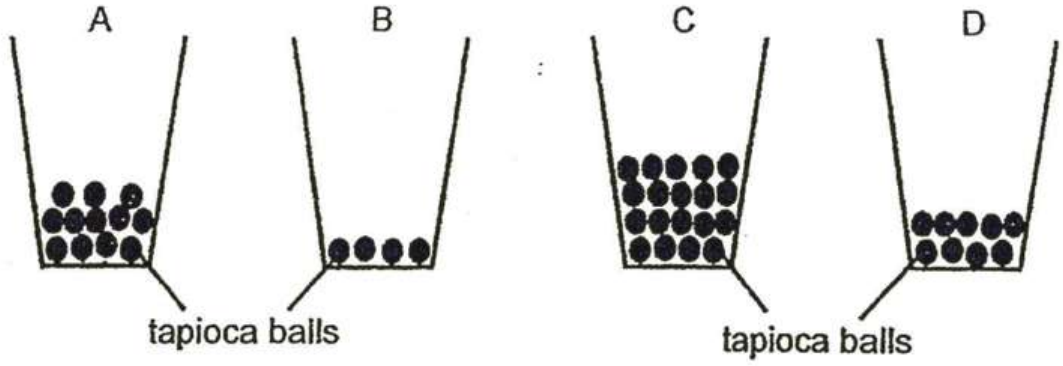
Different amount of tapioca balls (pearls) were placed into four identical bubble tea cups, A, B, C and D, as shown below. Mrs Lim poured milk tea into the four cups until they were filled to the brim.



Which one of the bubble tea cups contained the least amount of milk tea?

- **A)** A
- **B)** B
- **C)** C
- **D)** D

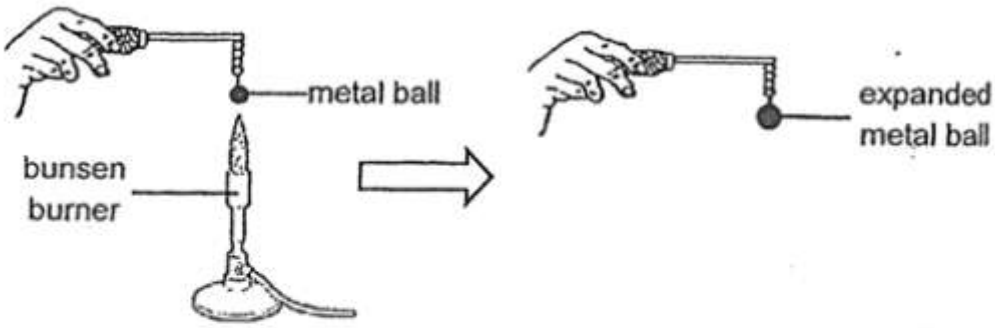
Different amount of tapioca balls (pearls) were placed into four identical bubble tea cups, A, B, C and D, as shown below. Mrs Lim poured milk tea into the four cups until they were filled to the brim.



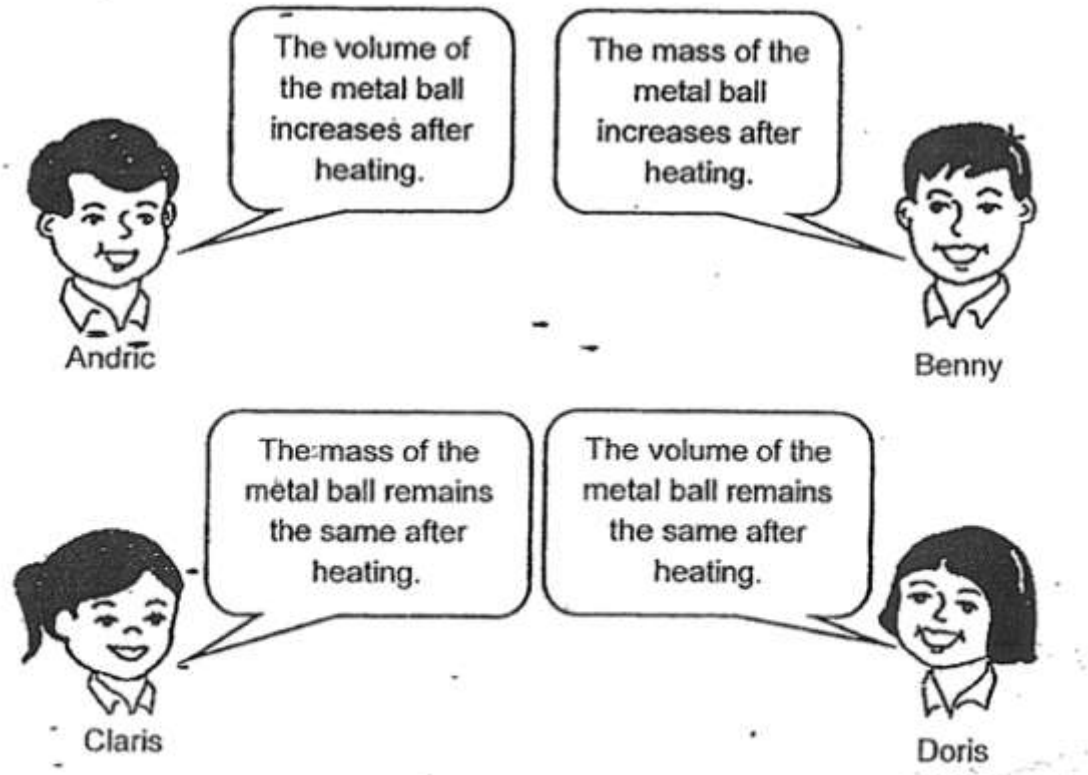
Which one of the bubble tea cups contained the least amount of milk tea?

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

A metal ball was heated and it expanded as shown below.



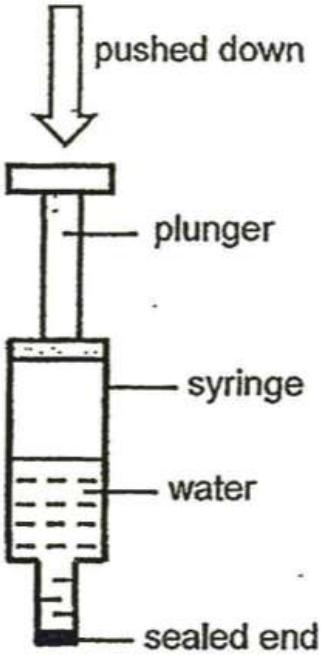
Four pupils made the following statements about the metal ball.



Which pupils are correct?

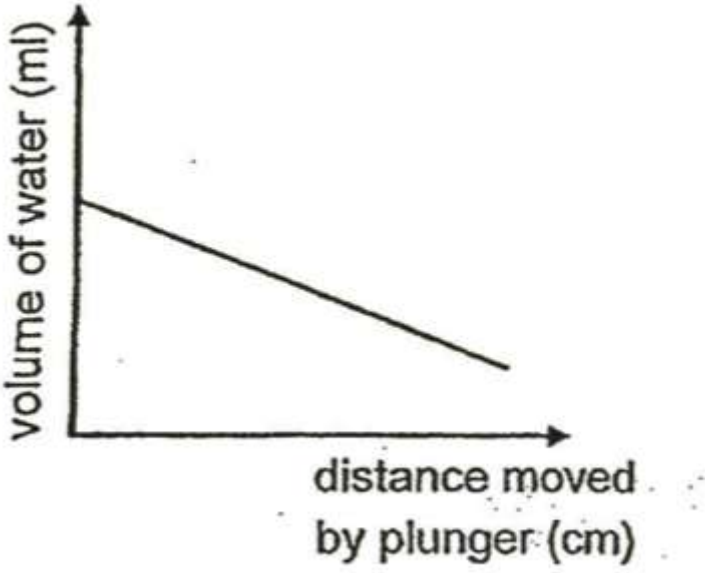
- **A)** Andric and Benny only
- **B)** Andric and Claris only
- **C)** Benny and Doris only
- **D)** Claris and Doris only

The diagram below shows a syringe half-filled with water. The end of the syringe is sealed and the plunger is then pushed down.

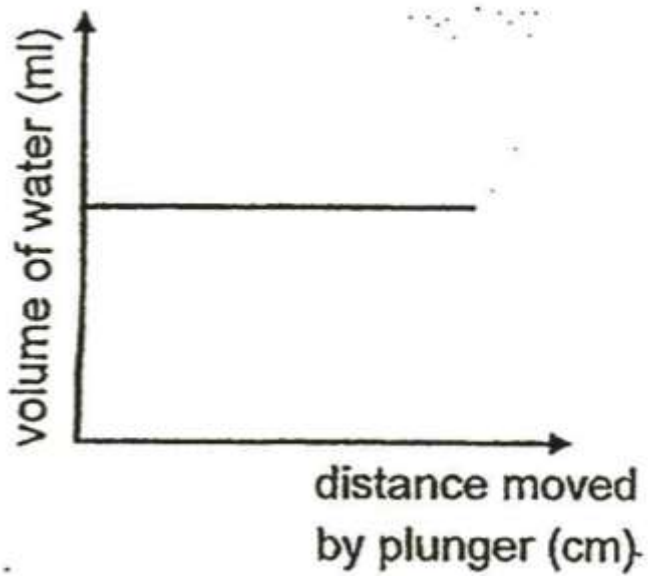


Which one of the following graphs shows the correct change in the volume of water as the plunger was pushed down?

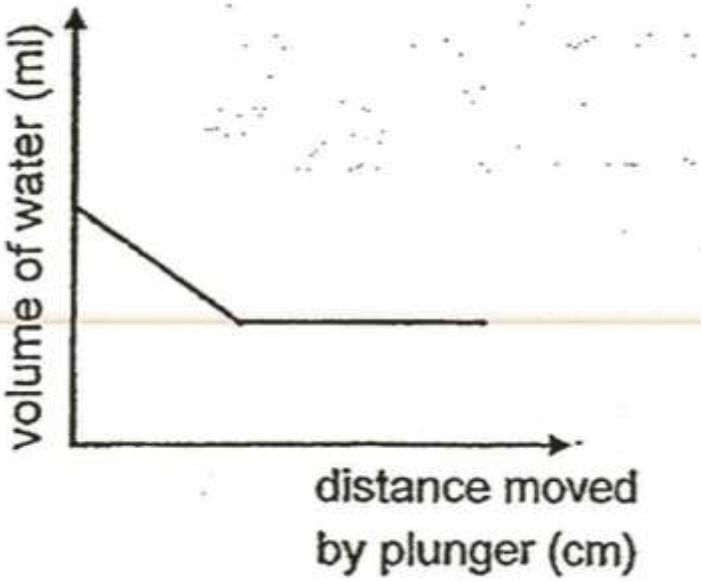
A)



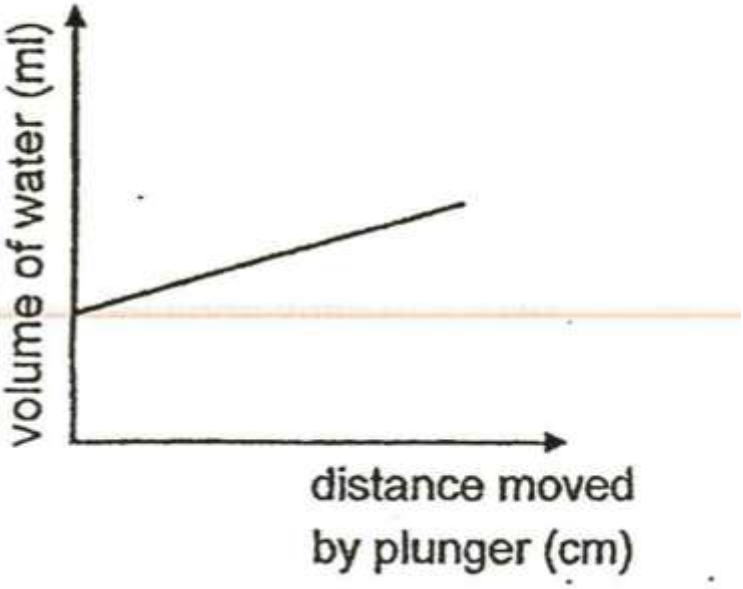
B)


volume of water (ml)
distance moved
by plunger (cm)

C)


volume of water (ml)
distance moved
by plunger (cm)

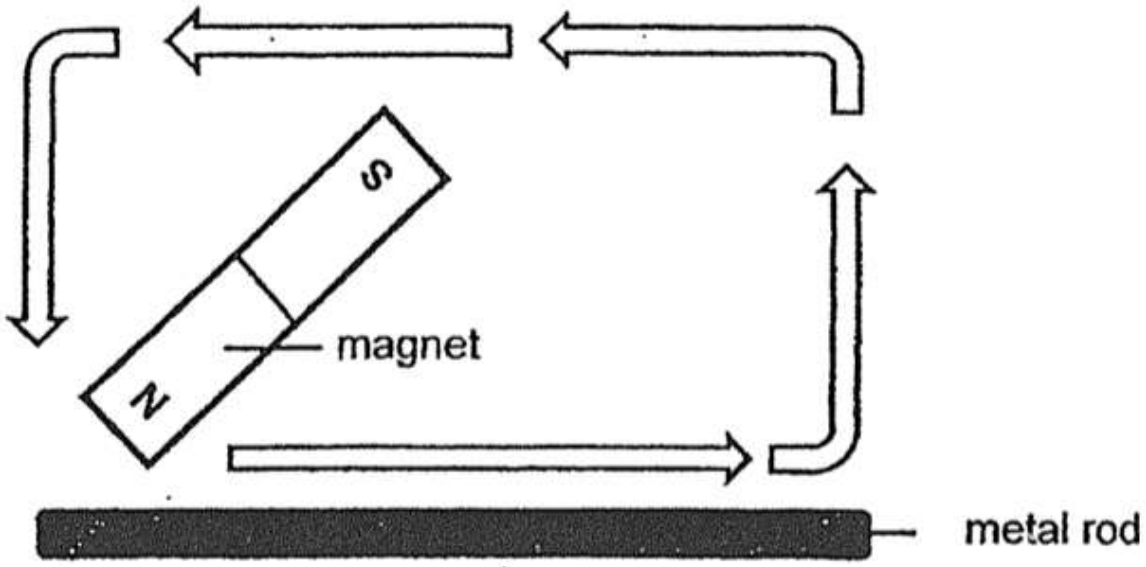
D)


volume of water (ml)
distance moved
by plunger (cm)

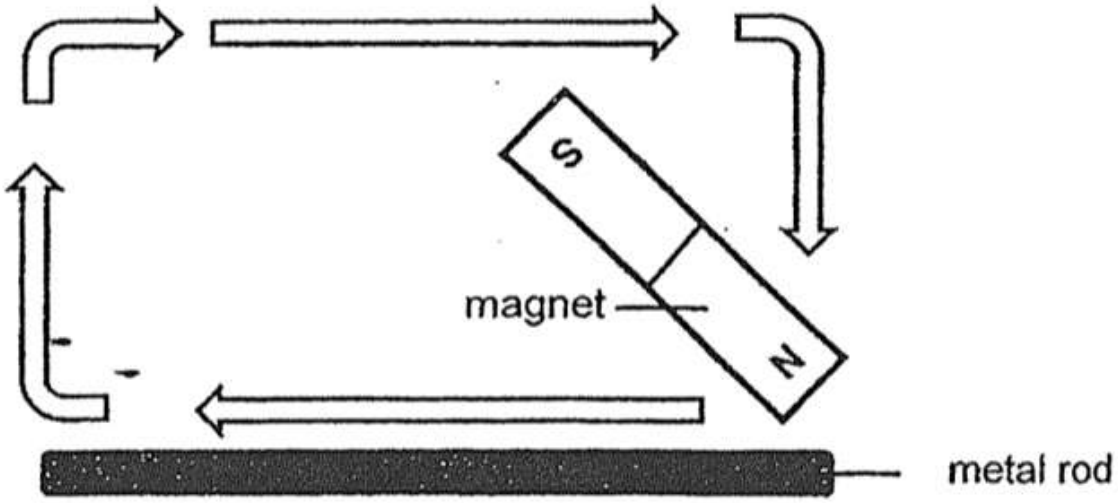
Question 20 of 63 Primary 4 Science (Term 4) 2 pts

Ali wanted to make a magnet using the stoke method. The diagram below shows the different ways Ali used to stroke the metal rod. Which one of the following ways is incorrect?

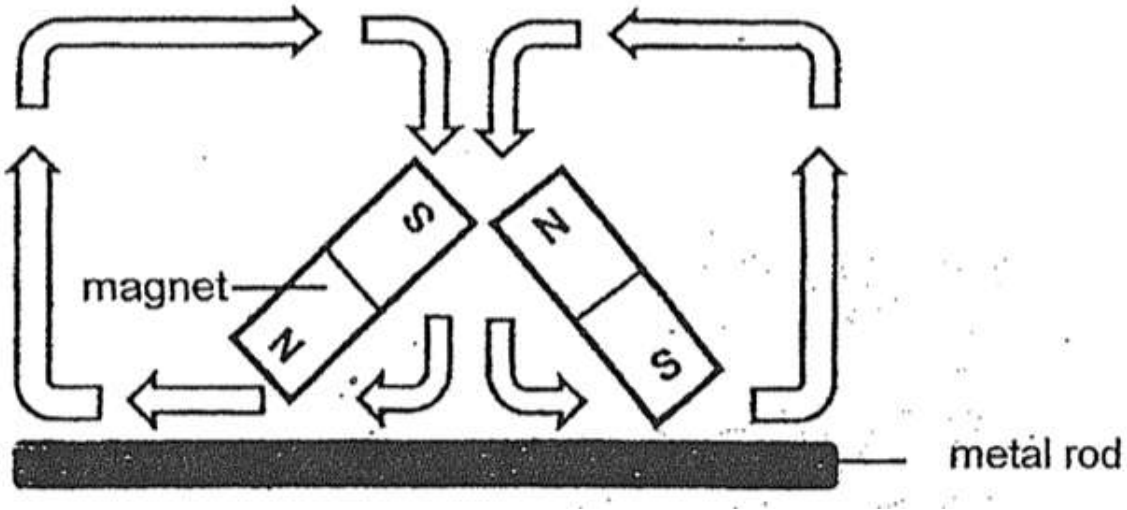
A)



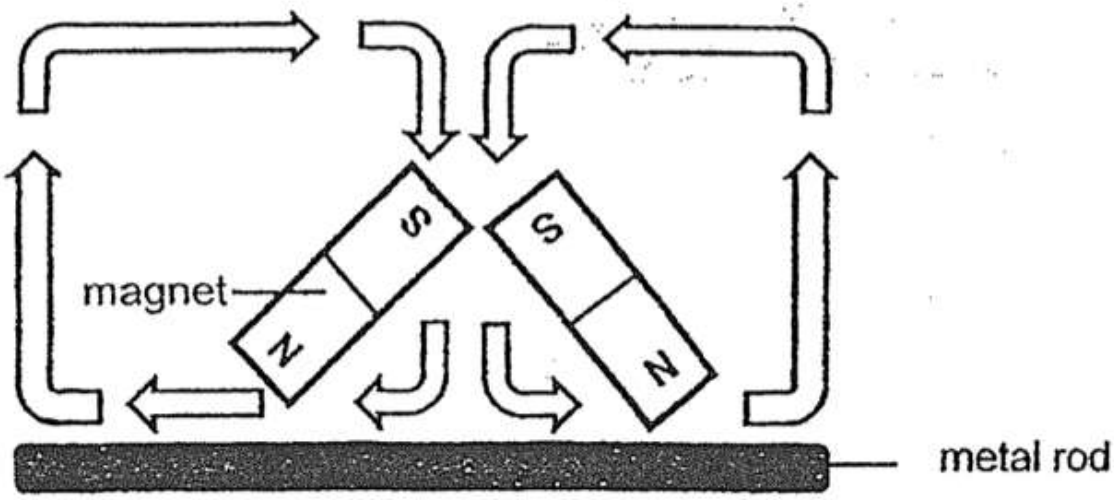
B)



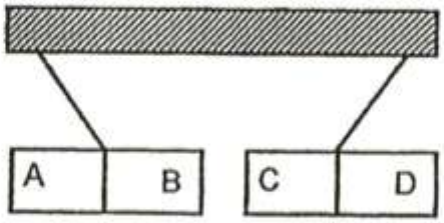
C)

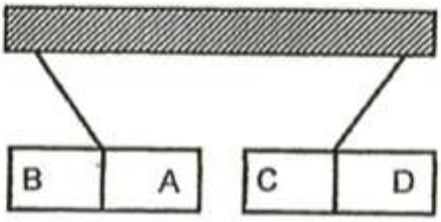


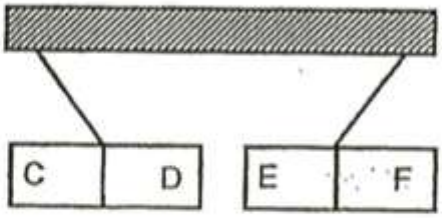
D)

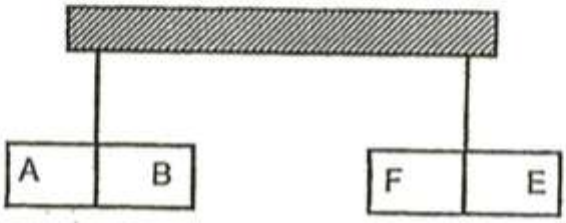

magnet
S
N
S
N
metal rod

Four experiments were conducted to find out which bar AB, CD or EF is a magnet. The bars were hung from a string and brought near to each other. The observations were shown below.









Which conclusion is correct?

	Bar AB	Bar CD	Bar EF
(1)	Magnetic material	Magnetic material	Magnet
(2)	Magnet	Magnetic material	Non-magnetic material
(3)	Magnetic material	Magnet	Magnetic material
(4)	Non-magnetic material	Magnetic material	Magnet

A) 1

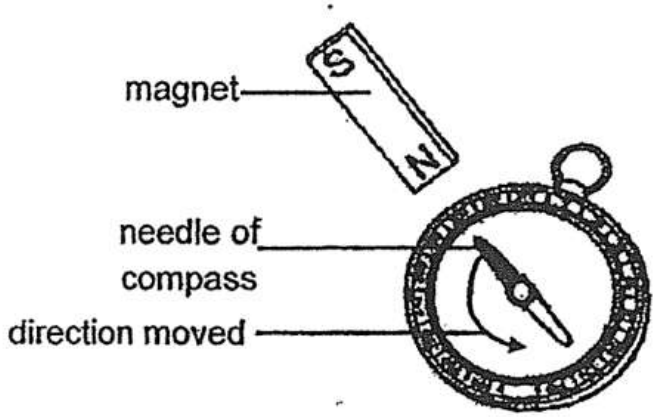
B) 2

C) 3

D) 4

Question 22 of 63 Primary 4 Science (Term 4) 2 pts

Sarah conducted an experiment as shown below. She brought a magnet near a compass and observed that the needle of the compass moved away from the magnet as shown below by the arrow.



Which of the following best explains her observations?

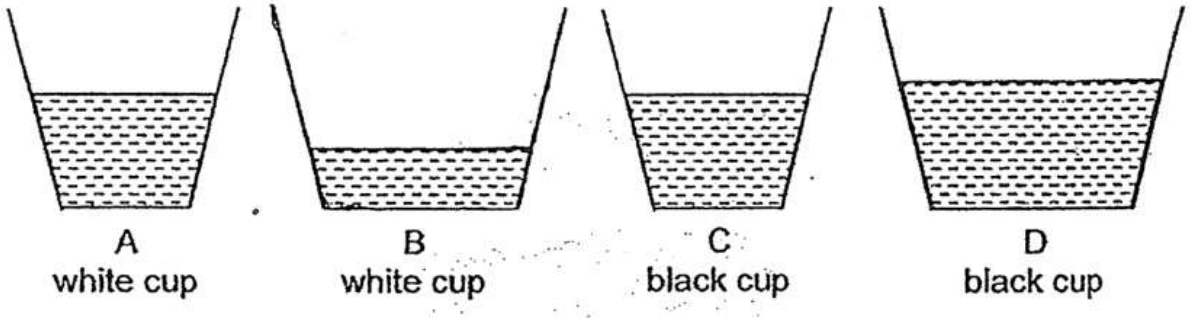
A) The North Pole of the magnet magnetised the needle

B) The magnet attracted the needle as it is a magnetic material

C) The North Pole of the magnet repelled the North Pole of the needle

D) The needle moved away and came to rest in a North-South direction

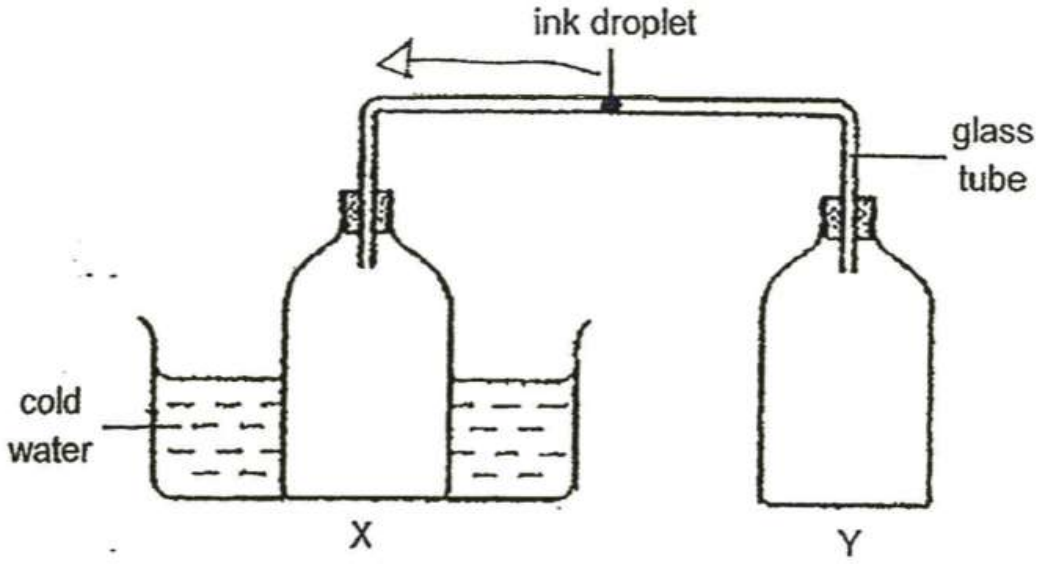
Fatimah wants to find out if the colour of paper cups affects the rate of heat loss of hot water inside them. The cups below contain hot water of the same temperature.



Which of the following pairs of cups should Fatimah use to ensure a fair test?

- **A)** A and C only
- **B)** A and D only
- **C)** B and C only
- **D)** B and D only

The diagram below shows two identical bottles, X and Y, connected by a glass tube with an ink droplet. Bottle X was placed into a basin of cold water but not bottle Y.

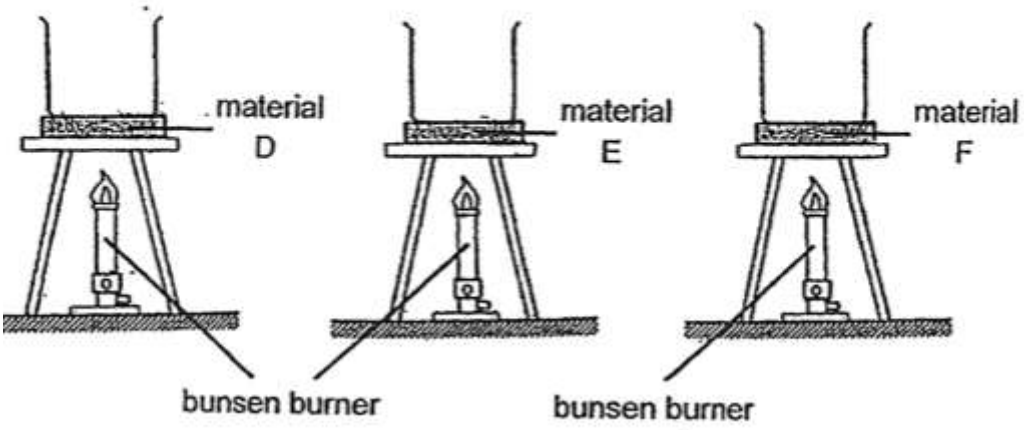


What can be observed about the ink droplet in the glass tube? Why?

	Observation of ink droplet	Explanation
(1)	Moves towards bottle X	The air in bottle X lost heat and contracted
(2)	Moves towards bottle X	The cold water in the basin lost heat and contracted.
(3)	Moves towards bottle Y	The air in bottle Y gained heat and expanded.
(4)	Moves towards bottle Y	The air in bottle Y lost heat and contracted.

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

Xiao Ming conducted an experiment using three set-ups as shown below.



Different amounts of water at room temperature were poured into the beakers and heated.

The table below shows the time taken for the water in each set-up to boil.

Material	How fast the material conducts heat	Time taken for water to start boiling in the set-up (min)
D	very fast	10
E	slow	10
F	fast	10

Which one of the following correctly shows the volume of water used in each set-up at the start of the experiment?

	Volume of water at the start of experiment (ml)		
	Set-up with material D	Set-up with material E	Set-up with material F
(1)	100	200	300
(2)	300	100	200
(3)	100	300	200
(4)	300	200	100

A) 1

B) 2

C) 3

D) 4

Question 26 of 63 Primary 4 Science (Term 4) 2 pts

Mrs Goh was in a dark room. She switched on the lamp shown in diagram 1.

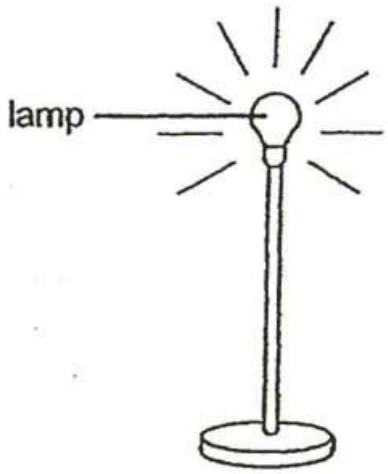


diagram 1

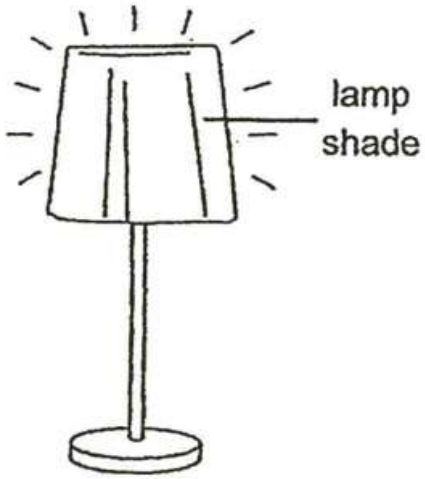


diagram 2

She then placed a lamp shade on the lamp as shown in diagram 2.

Which of the following best explains why the lamp in diagram 2 looks less bright than in diagram 1?

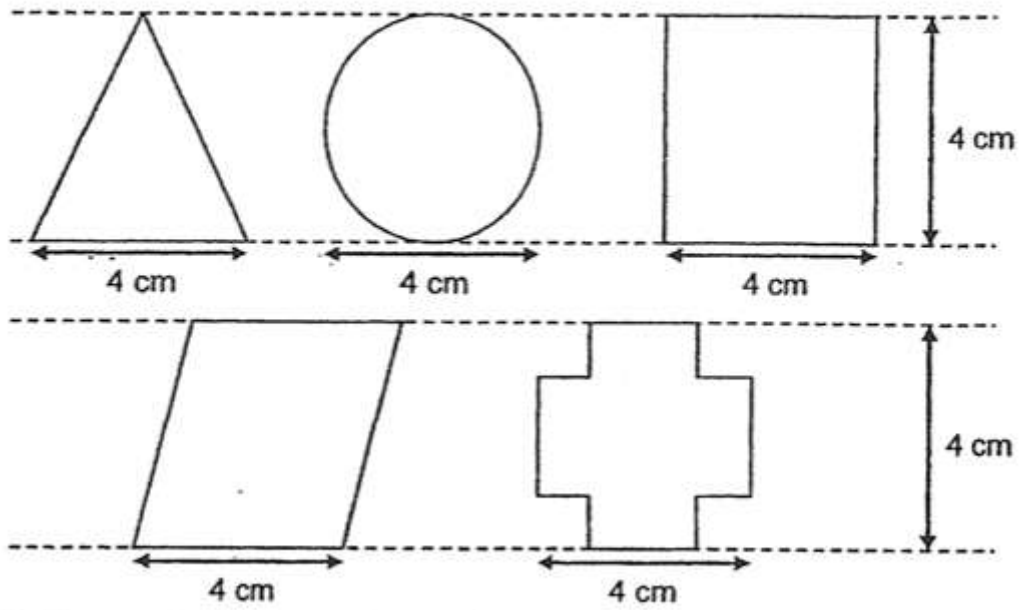
A) Less light from the lamp enter Mrs Goh's eyes

B) The lamp shade blacks all the light from the lamp

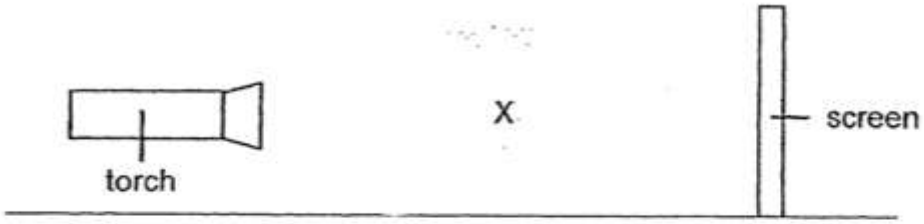
C) Less light is reflected from he lamp into Mrs Goh's eyes

D) Shadow of the lamp formed on the lamp shade blocked the light from entering Mrs Goh's eyes

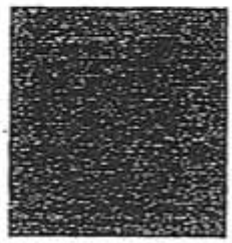
Justin was given five pieces of cardboards in different shapes as shown below.



He then stacked some cardboards together and placed them between a torch and a screen at point X.

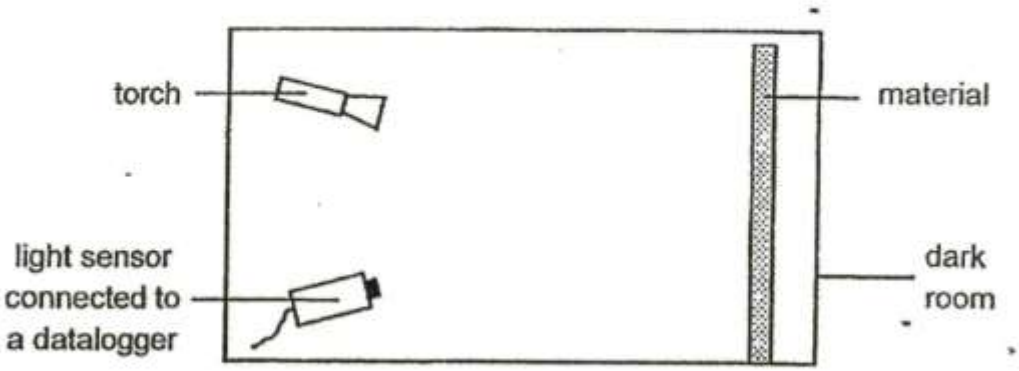


What is the most number of pieces of cardboards Justin could stack together and still form the following shadow on the screen?



- **A)** 2
- **B)** 3
- **C)** 4
- **D)** 5

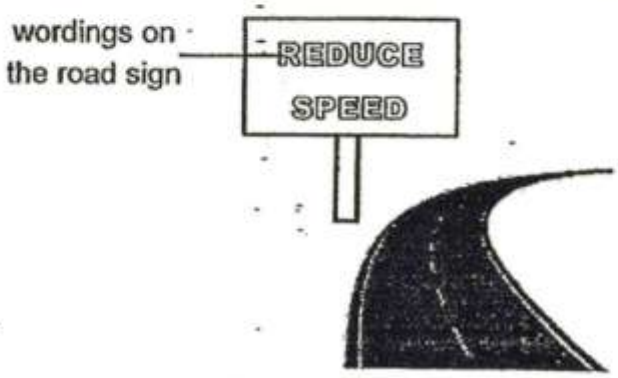
Feng Ming set up an experiment as shown below to measure the amount of light reflected from four materials, W, X, Y and Z. A light sensor connected to a datalogger was used to measure the amount of light reflected by each material.



He recorded the readings in the table below.

Materials	Reading on datalogger (Units)
W	2750
X	580
Y	1100
Z	3000

Based on the results above, which of the following materials W, X, Y or Z is most suitable to make the wordings on the road sign as shown below?



- **A)** W
- **B)** X
- **C)** Y
- **D)** Z

Booklet B
This section is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.
Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

The diagram below shows the young and adult of some organisms.
Draw lines to match the young with the correct adult.





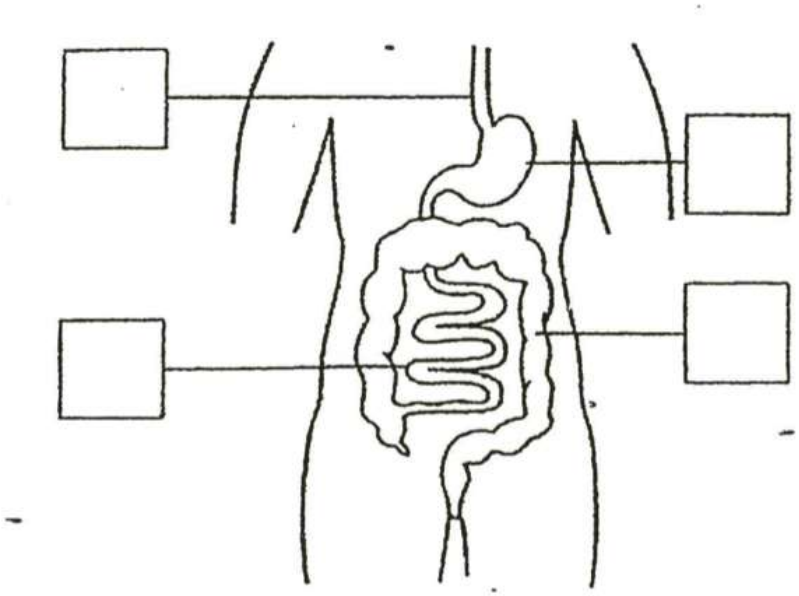


Please type "done" to proceed to the next question

Question 30 of 63

Primary 4 Science (Term 4) 0 pts

The diagram shows part of the human digestive system. Tick one box to show where the stomach is. [1]



Question 31 of 63

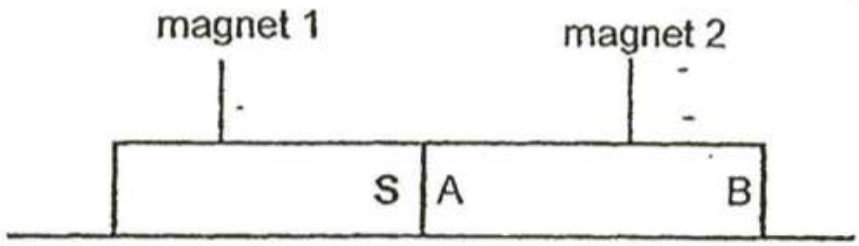
Primary 4 Science (Term 4) 1 pt

Food from the stomach is next passed on to the ____

- **A)** large intestine
- **B)** gullet
- **C)** small intestine
- **D)** mouth

Question 32 of 63 Primary 4 Science (Term 4) 1 pt

Two magnets are placed together as shown below.



The south pole of magnet 1 is labelled S.

Name the poles labelled A and B on magnet 2.

A : _____

Question 33 of 63 Primary 4 Science (Term 4) 1 pt

B:_____

Question 34 of 63 Primary 4 Science (Term 4) 2 pts

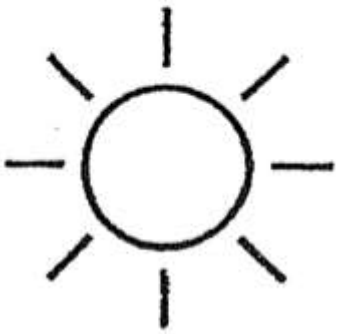
Choose the sources of light

A)

mirror

B)

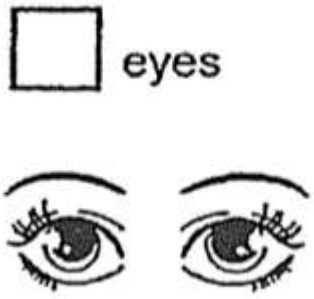
Sun



C)

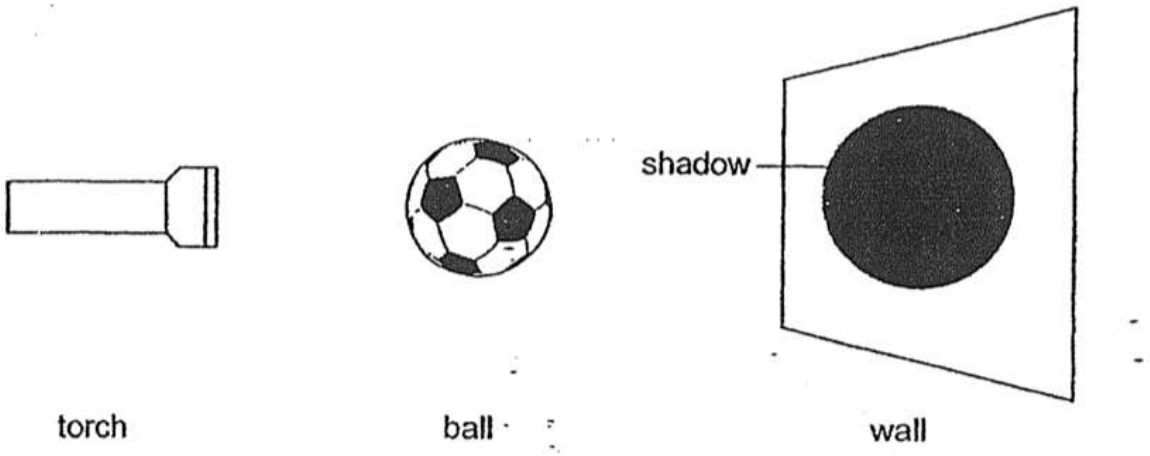
fire

D)



Question 35 of 63 Primary 4 Science (Term 4) 1 pt

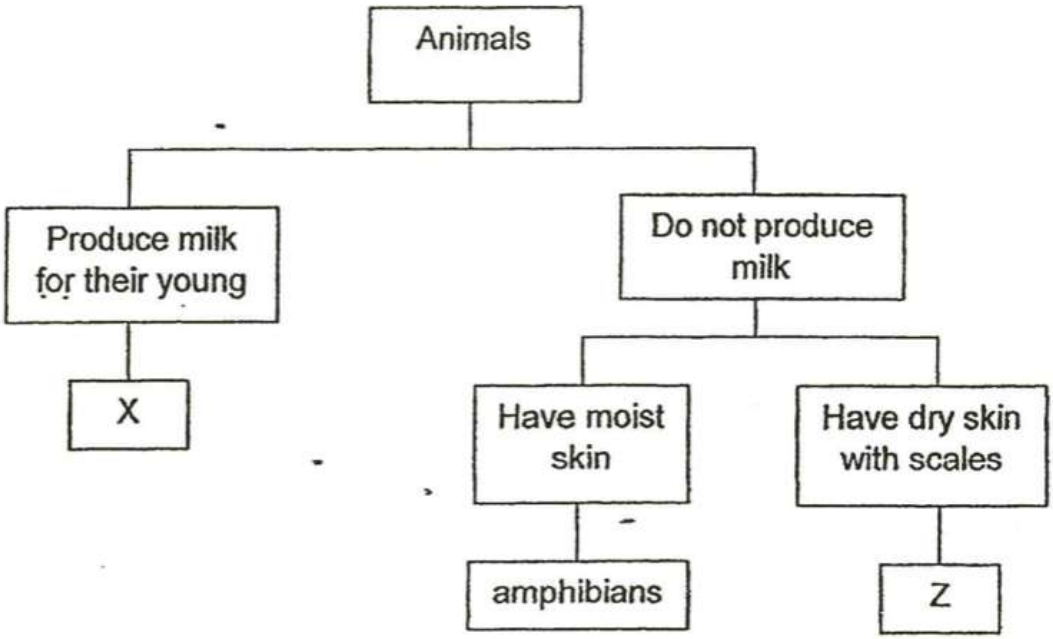
Xiao Hui shines a torch on a ball and a shadow is formed on a smooth wall.



A shadow is formed when light is _____ by an object. [1]

Question 36 of 63 Primary 4 Science (Term 4) 1 pt

Study the chart below.



(a) Which animal group does X and Z each represents?

X: _____

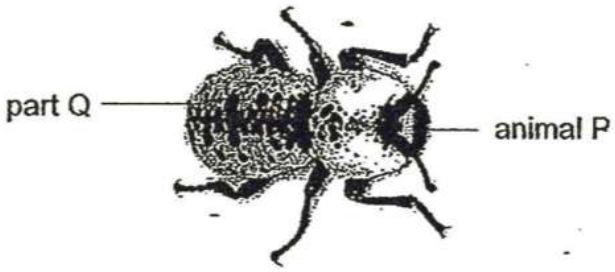
Question 37 of 63 Primary 4 Science (Term 4) 1 pt

Z:_____

Question 38 of 63

Primary 4 Science (Term 4) 0 pts

Study the diagram below.



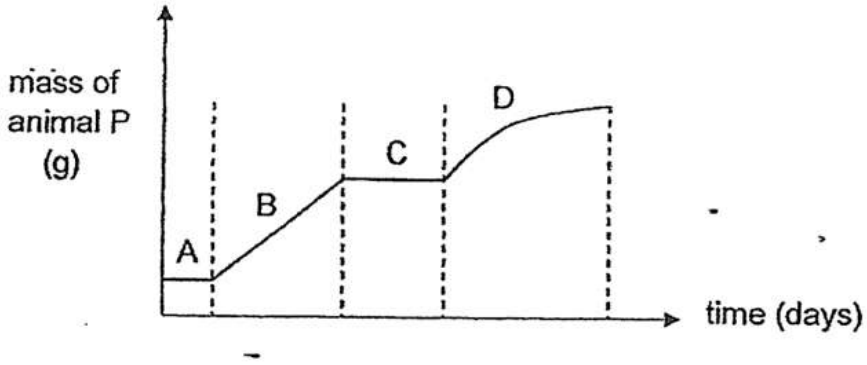
Part Q is the outer covering of animal P which protects it from other animals or fallen objects from trees.

(b) What property must part Q have? [1]

Question 39 of 63

Primary 4 Science (Term 4) 0 pts

The life cycle of animal P is similar to that of a beetle. The graph below shows the mass of animal P during different stages of its life cycle.

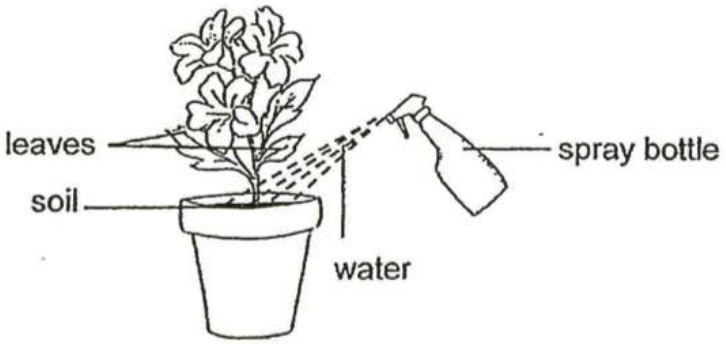


State the name of stage C of the life cycle of animal P. Suggest a reason why there is no gain in mass during stage C. [1]

Question 40 of 63

Primary 4 Science (Term 4) 0 pts

The diagram below shows how a plant is watered by Kim.

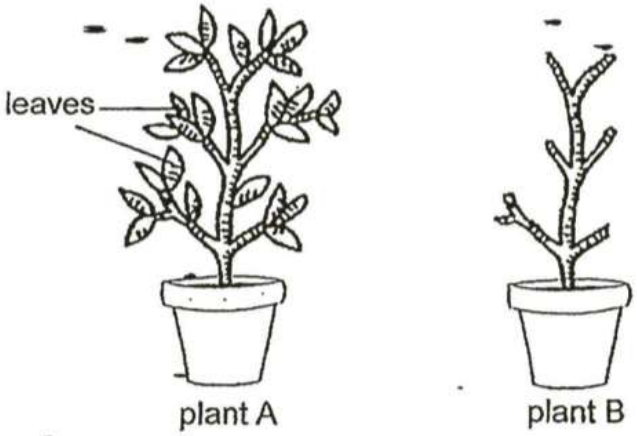


(a) Explain why water is sprayed at the soil instead of the leaves. [1]

Question 41 of 63

Primary 4 Science (Term 4) 0 pts

Kim conducted an experiment with two young plants, A and B. He cut off all the leaves of plant B as shown. Over the next few days, Kim ensured that any new leaves growing from plant B would be cut off.



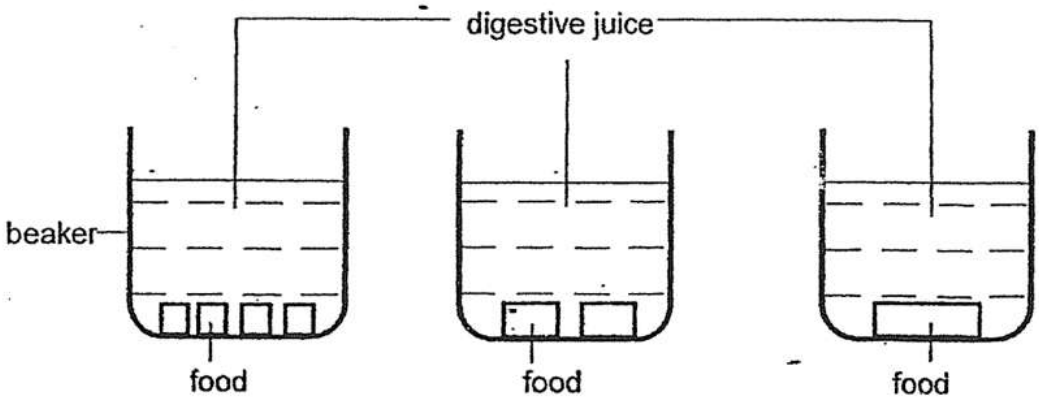
(b) Suggest what will happen to plant B after one week. Explain your answer. [2]

Question 42 of 63

Primary 4 Science (Term 4) 0 pts

. Jiaxuan wanted to find out how the size of food affects the time taken for the food to be digested.

She performed an experiment using the set-up as shown below.



(a) What is the measured variable of the experiment? [1]

Question 43 of 63

Primary 4 Science (Term 4) 0 pts

If Jiaxuan did not use the same type of digestive juice for all three breakers, how will that affect the experiment? Explain your answer

Question 44 of 63

Primary 4 Science (Term 4) 0 pts

Suggest another variable that Jiaxuan has to keep constant when conducting the experiment.

Question 45 of 63

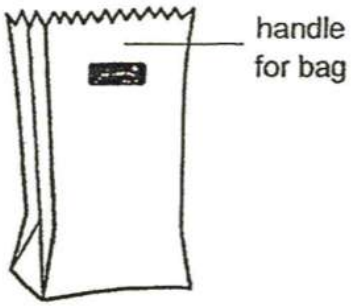
Primary 4 Science (Term 4) 0 pts

Jiaxuan concluded that the smaller the size of food, the shorter the time taken for it to be digested. Explain Jiaxuan's conclusion

Question 46 of 63

Primary 4 Science (Term 4) 0 pts

Uncle Lim sells buns and drinks in a coffee shop. He uses paper bags for his customers to carry their buns and plastic bags for them to carry coffee.



paper bag for buns

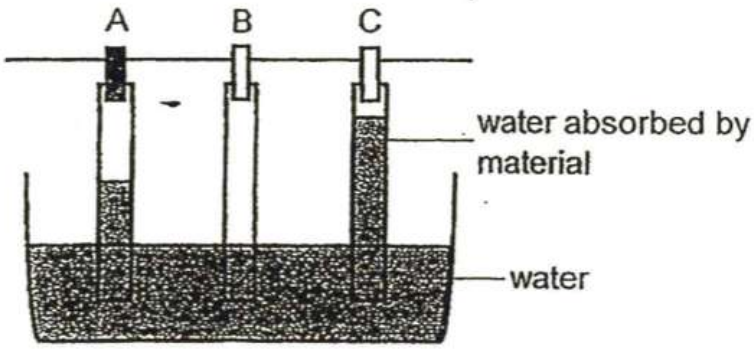
plastic bag for coffee

(a) What property does plastic have that makes it suitable to contain coffee? [1]

Question 47 of 63

Primary 4 Science (Term 4) 0 pts

Uncle Lim performed an experiment using the set-up as shown below.



He placed three strips of different materials, A, B and C, into a container of water from the same distance. After two minutes, he observed the height of water absorbed by each material.

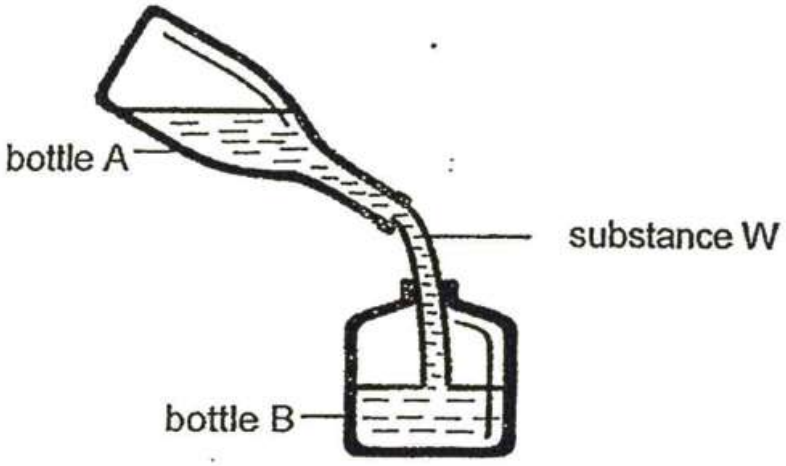
Based on the diagram above, which material, A, B or C, could be plastic? Explain your answer. [1]

Question 48 of 63 Primary 4 Science (Term 4) 0 pts

When Uncle Lim's customers wanted to eat the buns, they realised that the buns were too hot to hold with their bare hands. They would use the paper bag to hold the buns instead. Explain why.

Question 49 of 63 Primary 4 Science (Term 4) 0 pts

Shima poured substance W from bottle A into bottle B as shown.



(a) What is the state of matter of substance W? Explain your answer.

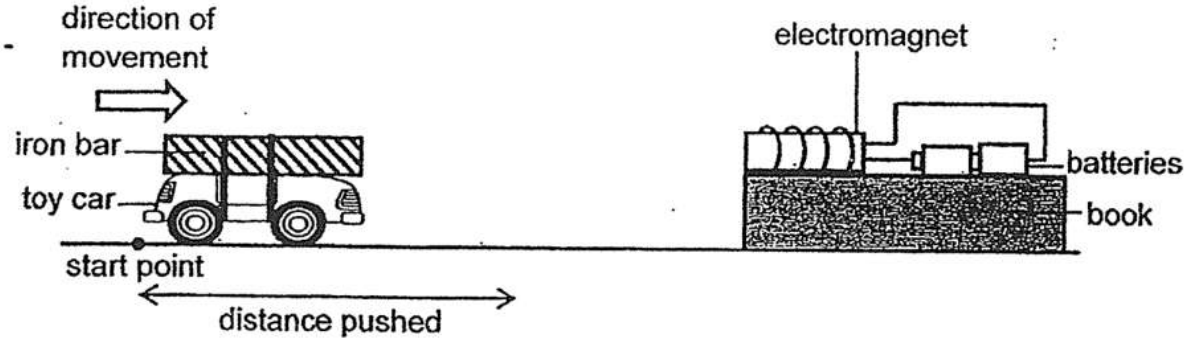
Shima then placed bottle B into the freezer overnight. When she removed bottle B from the freezer the next morning, she observed that she could not pour substance W out of bottle B.

(b) Explain her observation. [2]

Question 51 of 63

Primary 4 Science (Term 4) 0 pts

Albert attached an iron bar on a toy car. He placed the toy car at the start point and slowly pushed the toy car towards the electromagnet. Albert recorded the distance the toy car was pushed before the electromagnet could attract it.



He repeated the experiment, each time changing the number of batteries in the set-up. His results were recorded in the table as shown.

Number of batteries	Distance the toy car was pushed before being attracted by the electromagnet (cm)
2	8
3	6
4	4
5	2

(a) Why did Albert choose to use an iron bar instead of a wooden bar for this experiment? [1]

Question 52 of 63

Primary 4 Science (Term 4) 0 pts

State the relationship between the number of batteries and the magnetic strength of electromagnet

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Question 53 of 63

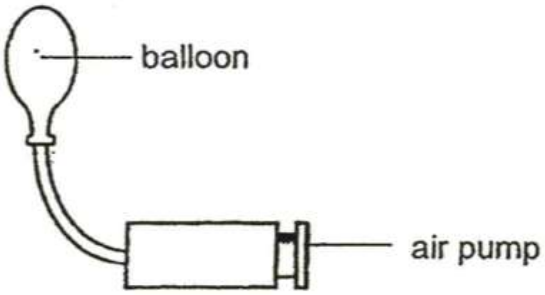
Primary 4 Science (Term 4) 0 pts

If Albert fixed the number of batteries used to three, suggest another way to make the distance the toy car was pushed before being attracted by the electromagnet to be shorter than 6cm

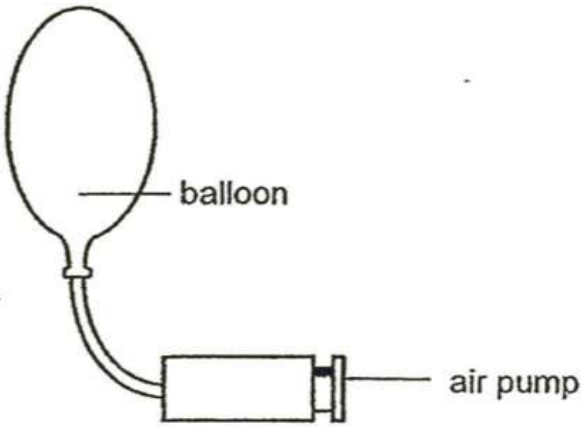
Question 54 of 63

Primary 4 Science (Term 4) 0 pts

The diagram shows a balloon connected to an air pump.



Li Ern pressed the air pump once. She noticed that the balloon became bigger. When she pressed on the air pump three times, the balloon became even bigger.

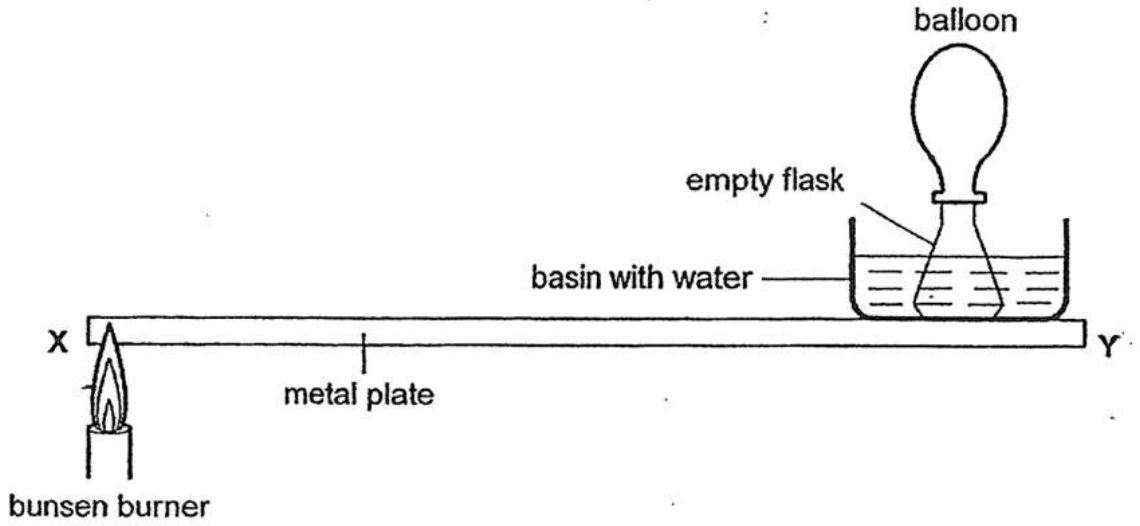


(a) Explain Li Ern's observation.

Question 55 of 63

Primary 4 Science (Term 4) 0 pts

Using the balloon, Li Ern carried out an experiment as shown in the diagram below. The whole metal plate was at room temperature at the start of the experiment.



(b) After part X of the metal plate was heated for three minutes, Li Ern touched part Y of the metal plate and felt that it was hot. Explain why. [1]

Question 56 of 63

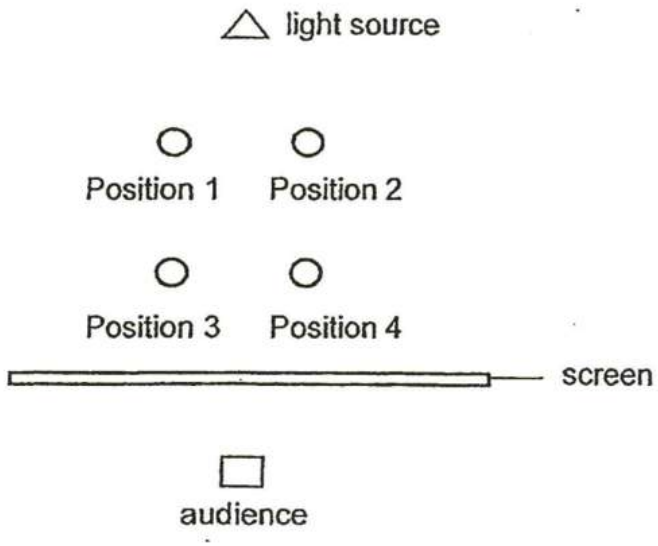
Primary 4 Science (Term 4) 0 pts

After a while, the balloon became bigger. Explain why.

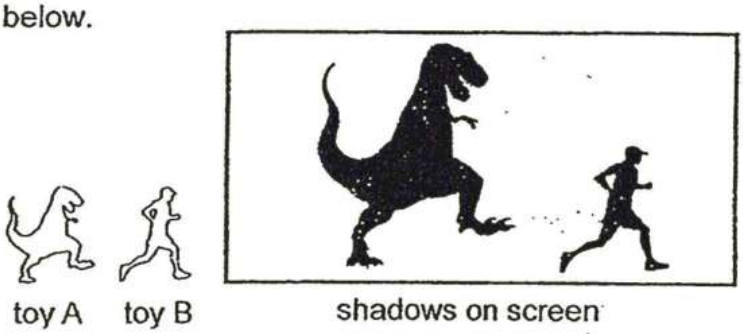
Question 57 of 63

Primary 4 Science (Term 4) 1 pt

The diagram below shows the layout for a shadow performance.



Gerald has two toys of the same height. He created the following shadows with his toys as shown below.



(a) Suggest the position of each toy. [2]

Position of toy A: _____

- **A)** position 1
- **B)** position 2
- **C)** position 3
- **D)** position 4

Question 58 of 63

Primary 4 Science (Term 4) 1 pt

Position of Toy B:_____

- **A)** position 1
- **B)** position 2
- **C)** position 3
- **D)** position 4

Question 59 of 63

Primary 4 Science (Term 4) 0 pts

Explain your answer in (a)

Question 60 of 63

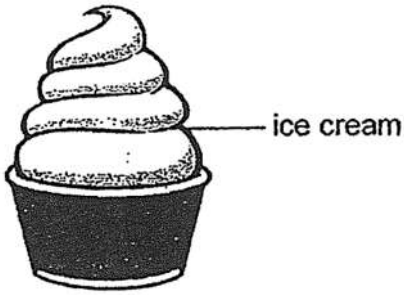
Primary 4 Science (Term 4) 0 pts

For the shadow performance to be successful, explain why the screen should not be made of wood.

Question 61 of 63

Primary 4 Science (Term 4) 0 pts

. Minghui placed a cup of ice cream in the living room as shown.



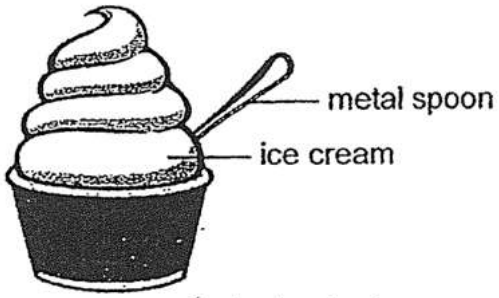
(a) State the change in state of the ice cream after some time. [1]

Question 62 of 63

Primary 4 Science (Term 4) 0 pts

Explain your answer in (a)

Minghui's sister placed a similar cup of ice cream in the same room. She added a metal spoon into the ice cream as shown.



(c) Will the ice cream with the metal spoon melt faster, slower, or at the same rate? Explain your answer. [2]