

Test: Primary 4 - Term 4 Science (Red Swastika)

Points: 71 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 60

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.

A puppy becomes bigger in size after one year.



→
after one year



From the observation, it can be concluded that the puppy is a living thing because it can _____.

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

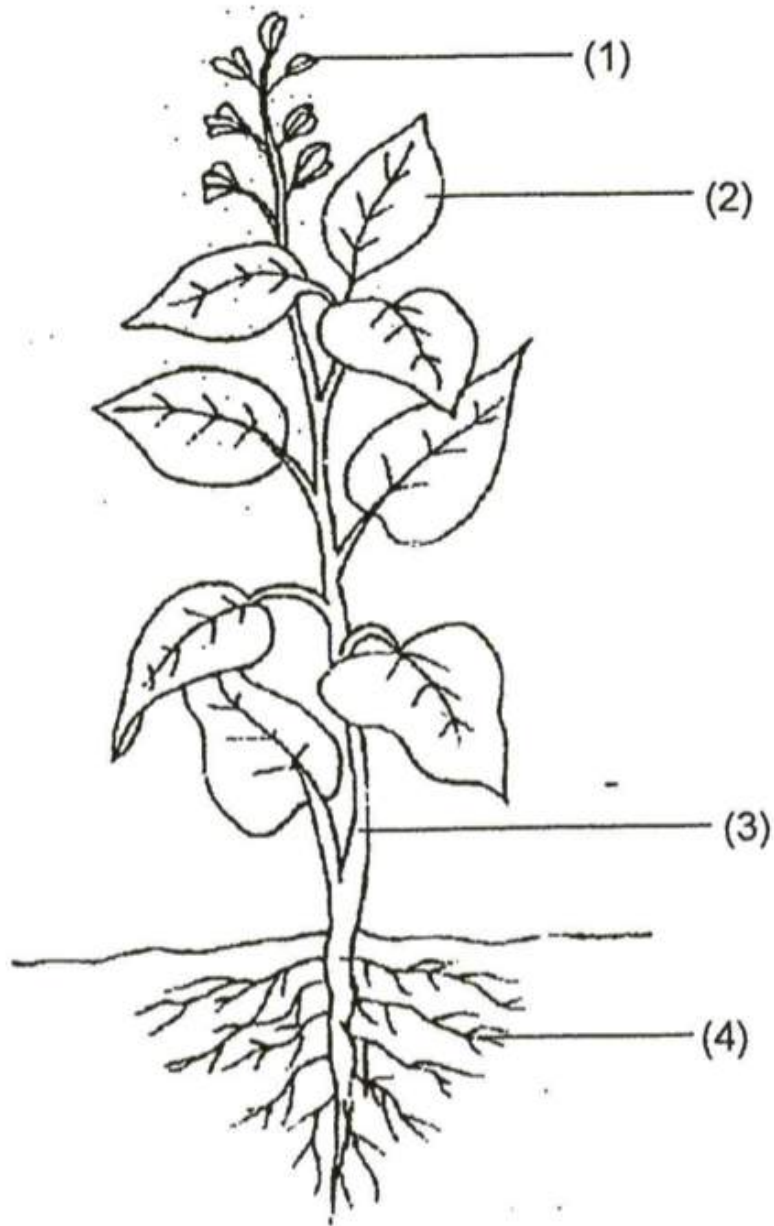
The diagram shows a rain coat made of plastic.



Plastic is used to make the rain coat because plastic _____.

-
- A) conducts heat well
 - B) is colourful
 - C) is waterproof
 - D) floats on water

Which part, (1), (2), (3) or (4), helps to keep the plant upright?

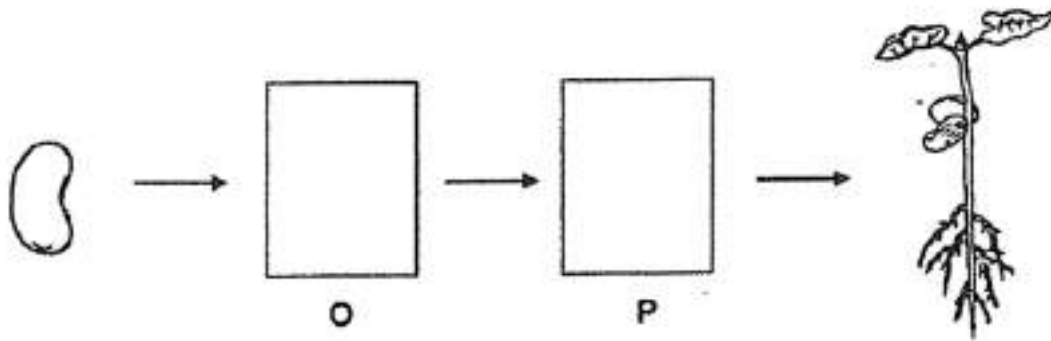


- A) 1
- B) 2
- C) 3
- D) 4









In which part of the digestive system is water absorbed from undigested food?

- A)** mouth
- B)** stomach
- C)** smal intestine
- D)** large intestine

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



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

	O	P
(1)		
(2)		
(3)		
(4)		

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

Question 6 of 60

Primary 4 Science (Term 4)

2 pts

Jiaxuan made the following observations on the life cycle of an animal

- There are three stages in the life cycle
- The young does not look like the adult

What animal was Jiaxuan observing?

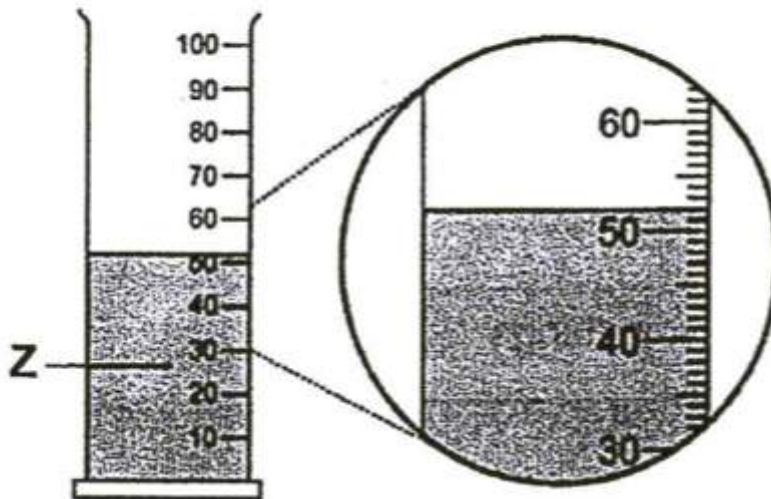
- A) frog
- B) duck
- C) beetle
- D) butterfly

Question 7 of 60

Primary 4 Science (Term 4)

2 pts

In the diagram, what is the volume of liquid Z?



- A) 50ml
- B) 52 ml
- C) 54 ml
- D) 68 ml

Question 8 of 60

Primary 4 Science (Term 4)

2 pts

Which one of the following is a source of light?

A)



a leaf

B)



a mirror

C)



the moon

D)



a candle flame

Question 9 of 60

Primary 4 Science (Term 4)

2 pts

Which one of the following the the best conductor of heat?

- A) glass spoon
- B) rubber spoon
- C) metal spoon
- D) wooden spoon

Question 10 of 60

Primary 4 Science (Term 4)

2 pts

Which one of the following can be attracted by a magnet?

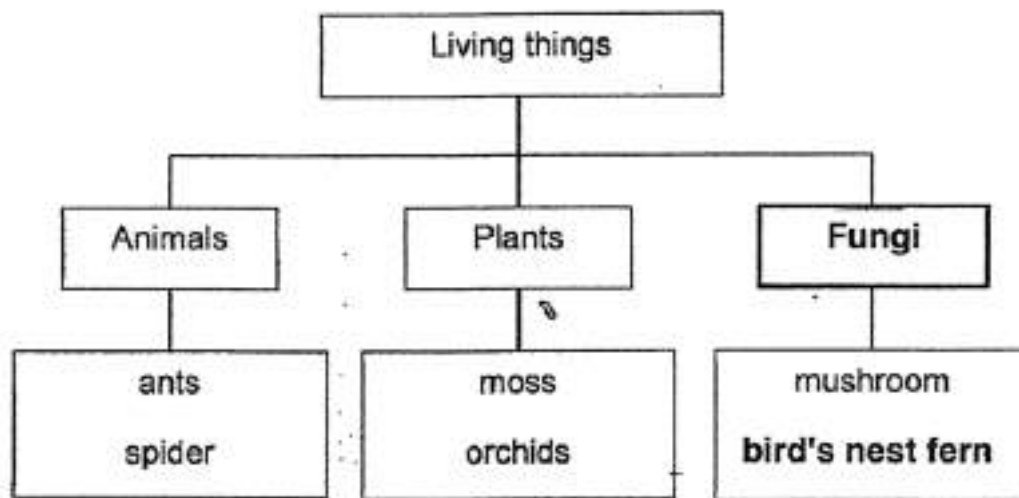
- A) ceramic cup
- B) glass cup
- C) steel cup
- D) plastic cup

Question 11 of 60

Primary 4 Science (Term 4)

2 pts

Erica found some living things in her school garden and classified them in the table shown below.



Which one of the above living things is classified wrongly?

- A) bird's nest fern
- B) moss
- C) mushroom
- D) spider

Question 12 of 60

Primary 4 Science (Term 4) 2 pts

Which one of the following characteristic(s) is/are found in birds, but not in other animals?

- A: They can fly
 - B: They have feathers
 - C: They reproduce by laying eggs
-

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

Question 13 of 60

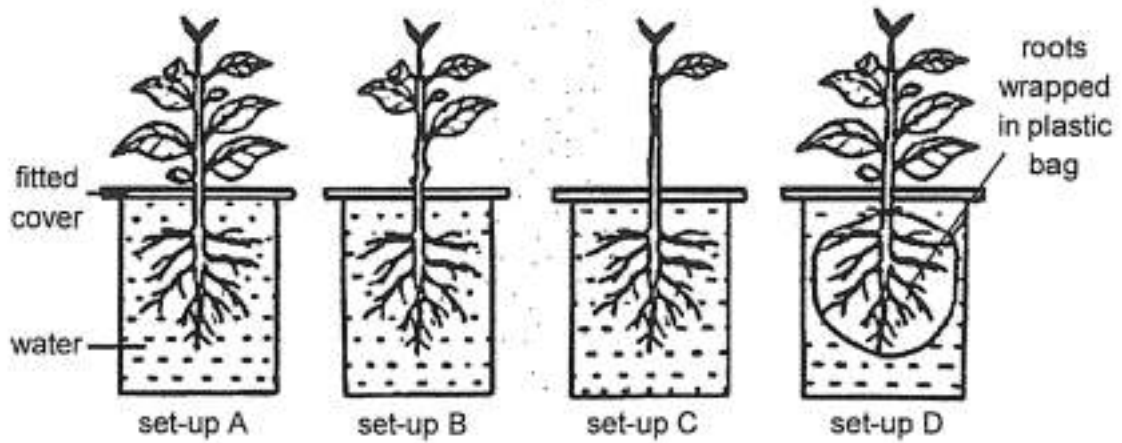
Primary 4 Science (Term 4) 2 pts

Which one of the following statements are true of the digestive system?

- A: The windpipe is part of the digestive system
 - B: Digested food is absorbed in the small intestine
 - C: It helps to break down food into simpler substances
 - D: Digestion starts at the mouth and ends at the stomach
-

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

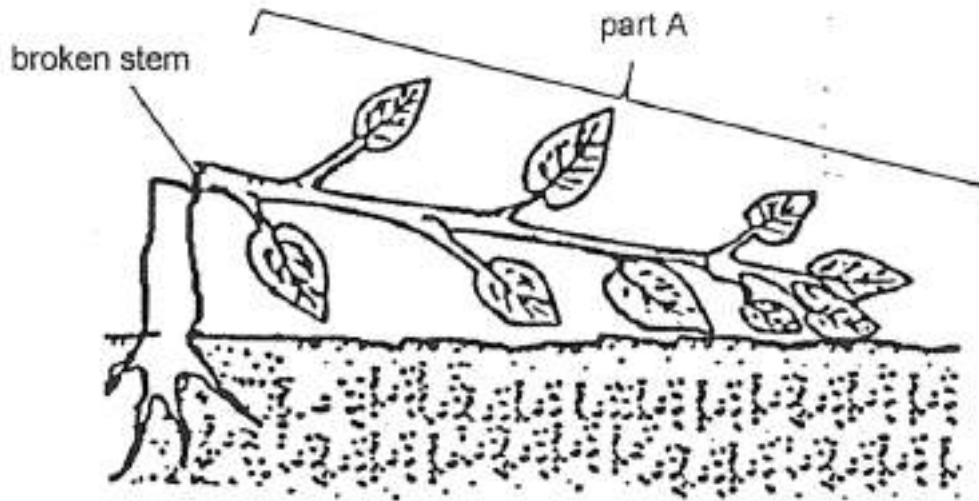
Steven wanted to find out if the roots of a plant absorb water.



He should choose set-ups _____ for the test.

- A) A and B
- B) B and C
- C) B and D
- D) A and D

Tommy saw a tree that had been struck by lightning during a recent thunderstorm at the back of his school field. He noticed that the leaves at part A has turned yellow.

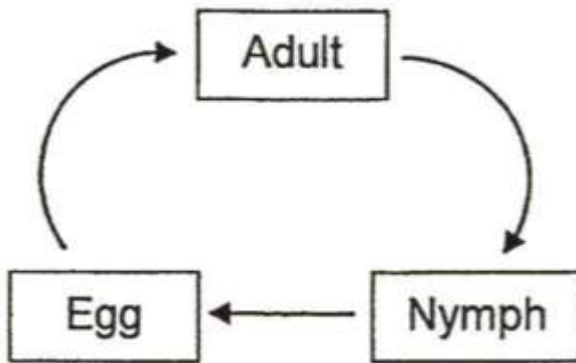


What could be the main reason for the leaves to turn yellow?

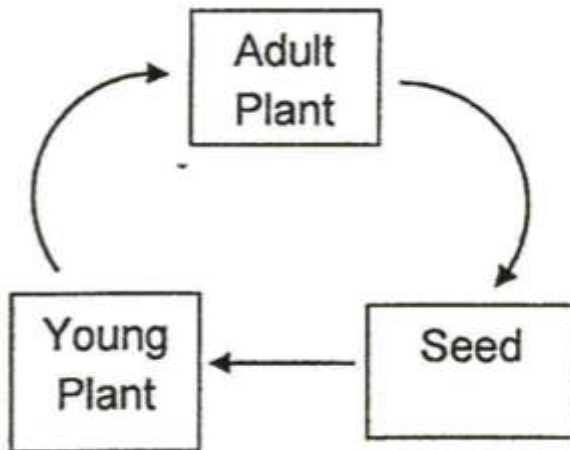
- A) The roots cannot take in water from the ground
- B) The stem cannot transport water to the leaves
- C) The roots cannot anchor the plant to the ground
- D) The leaves cannot hold the plant upright

Which one of the following life cycles is wrong?

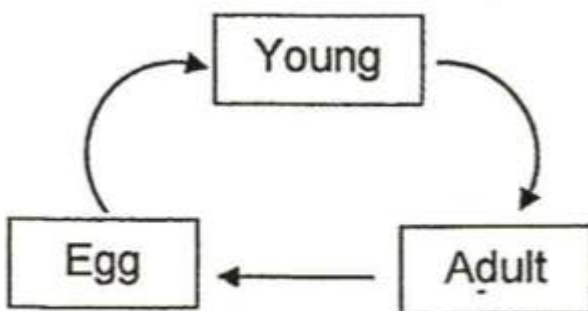
A)



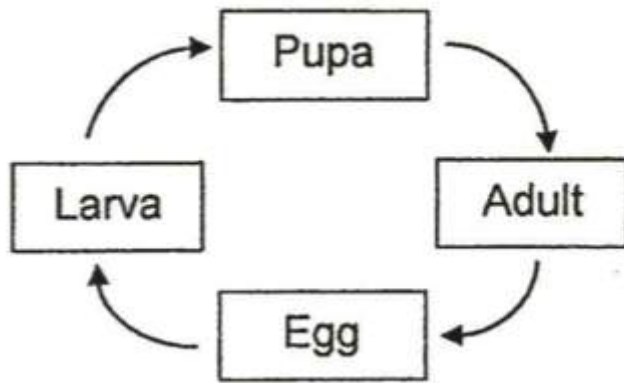
B)



C)



D)

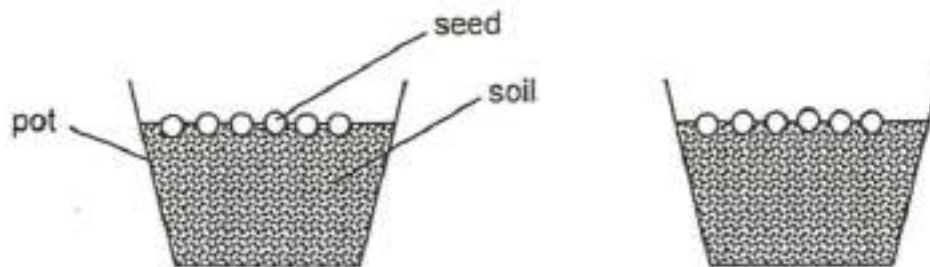


Question 17 of 60

Primary 4 Science (Term 4)

2 pts

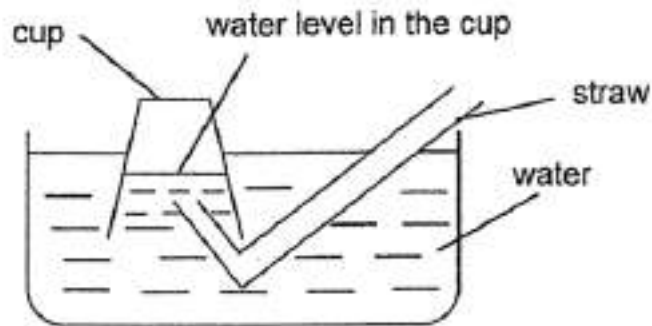
Devi wants to find out if the amount of light affects the time taken for seeds to germinate.



Which variable should she change when conducting her experiment?

-
- A) type fo soil
 - B) type of seeds
 - C) location of the pots
 - D) amount of water added

Nasir sets up an experiment as shown in the diagram below.



Nasir blows some air into the straw.

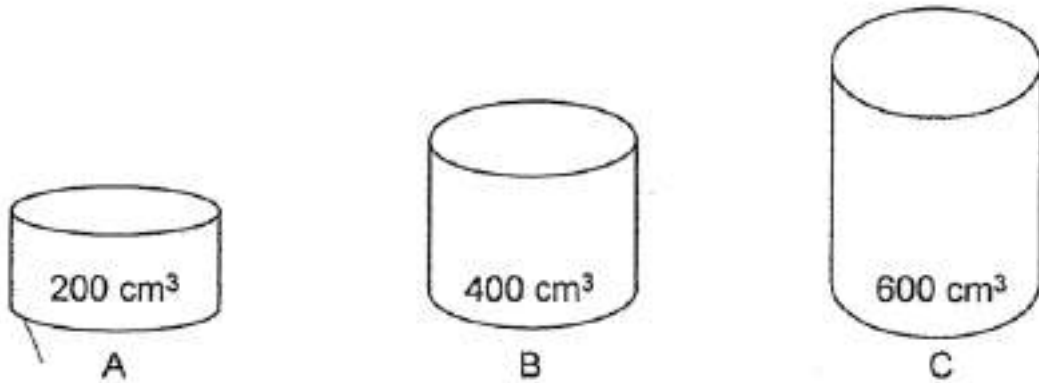
Which of the following options best describes the observation in the cup and the reason?

	Water level in the cup	Reason
(1)	fall	Water in the cup entered the straw.
(2)	fall	Air blown out pushed the water out of the cup.
(3)	rise	Air blown out pulled more water into the cup.
(4)	remain unchanged	No water entered or left the cup.

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

Anqi wants to transfer 400cm^3 of liquid from a tank to a container.

Which of the following container(s) can she use to hold the liquid?

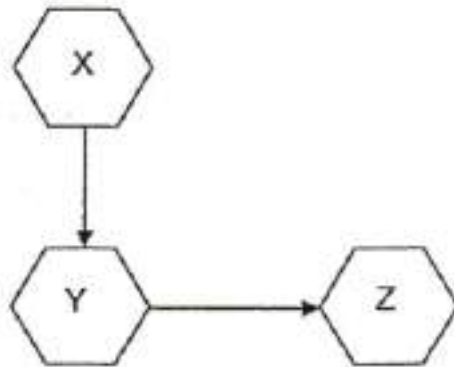


-
- A) B only
- B) A and C only
- C) B and C only
- D) A, B and C

A piece of glass is used to protect a photograph in a photo frame. You can see the photograph because glass _____

-
- A) is a solid
- B) reflects light
- C) gives off light
- D) allows light to pass through

In the diagram below, the arrows indicate the path of light.



Which of the following options best fits X, Y, and Z for us to see a book?

	X	Y	Z
(1)	lamp	book	eyes
(2)	book	lamp	eyes
(3)	eyes	lamp	book
(4)	book	eyes	lamp

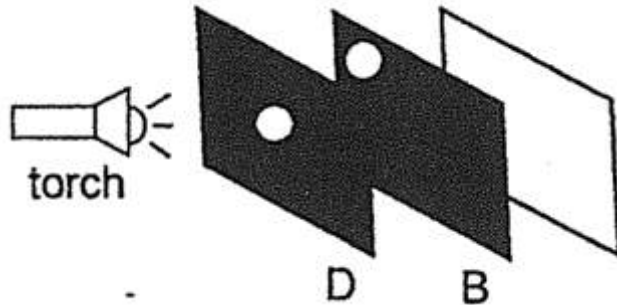
-
- A) 1
- B) 2
- C) 3
- D) 4

Germaine set up an experiment to show that light travels in a straight line. She took four cards, A, B, C and D, with holes punched through them as shown below.

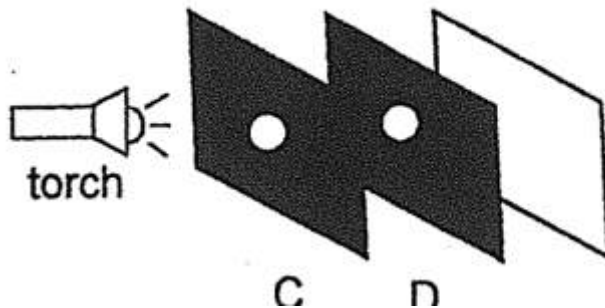


She used different combinations of these cards with a blank white card placed at the back as shown below. Which of the four experiments would a spot of light form on the white card?

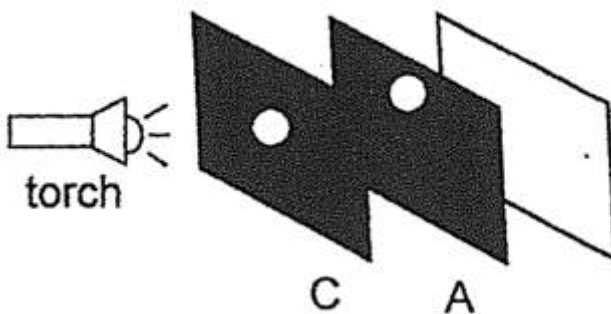
A)



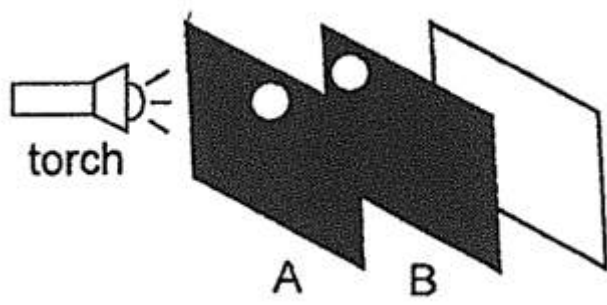
B)



C)



D)

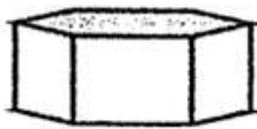


The following shadow was formed on a wall by an object.



Which one of the following objects could not have possibly formed the above shadow?

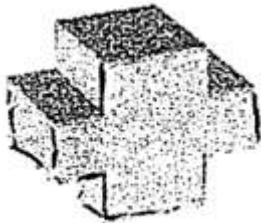
A)



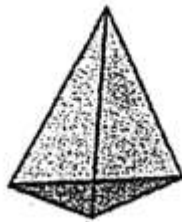
B)



C)



D)



Ivan tried to open a strawberry jam jar with a tight metal lid and he found it hard to do so.

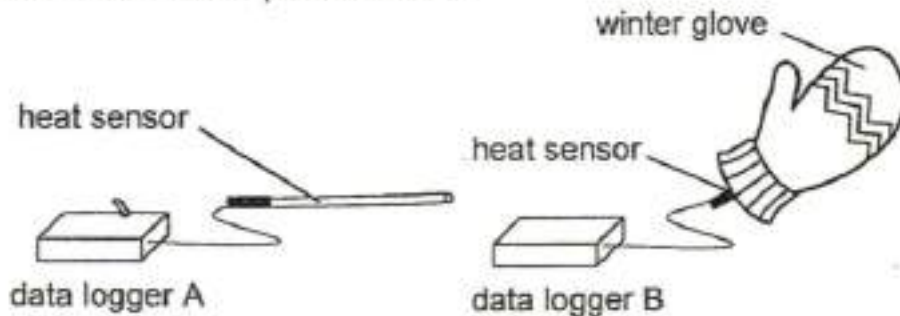


What could Ivan do to open the metal lid without breaking the jar?

-
- A) Pour hot water only on the metal lid
 - B) Pour hot water only on the glass jar
 - C) Put the whole jar in a basin of hot water
 - D) Pour cold water only on the metal lid

Sam conducted an experiment using two data loggers, A and B, that are connected with heat sensors.

He left the heat sensor of data logger A on the table while placing the heat sensor of data logger B into a winter glove. Both heat sensors are kept in the same room for the same period of time.

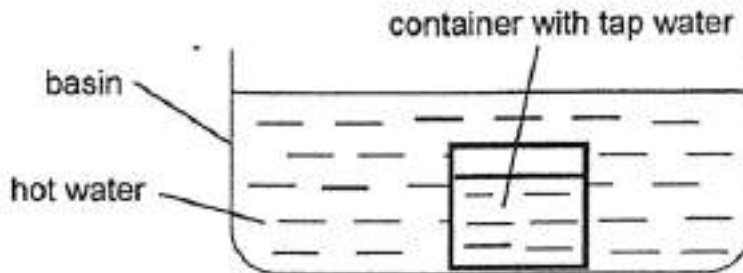


After fifteen minutes, Sam compared the temperature measurements of both data loggers. Which of the following set of results would be what Sam had recorded?

	Data logger A	Data logger B
(1)	28°C	28°C
(2)	28°C	35°C
(3)	28°C	21°C
(4)	35°C	28°C

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

Josiah had four containers, P, Q, R and S, made of different materials. He filled them with the same amount of tap water and placed them in a basin of hot water for fifteen minutes as shown in the diagram below.



He recorded the temperature of the water in the container as shown in the table below.

Container	Temperature of water at the start of experiment (°C)	Temperature of water after experiment (°C)
P	28	40
Q	28	35
R	28	37
S	28	50

Which container conducted heat the slowest?

- A) P
- B) Q
- C) R
- D) S

Gopal used the stroke method to magnetise an iron nail. He placed the magnetised iron nail near three different objects, L, M and N, and recorded his observation in the table below.

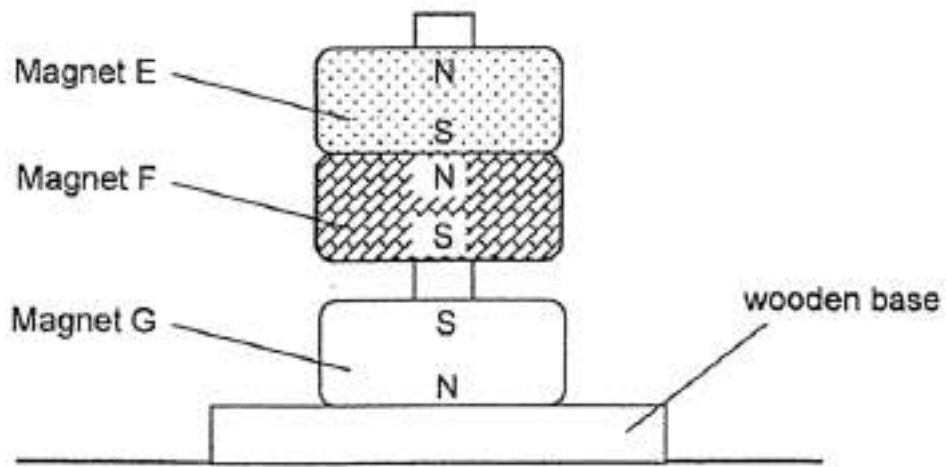
	Objects		
	L	M	N
Attracted by the iron nail	No	Yes	Yes
Repelled by the iron nail	No	Yes	No

Which of the following statements about objects L, M and N is/are definitely true?

- A: Object M is a magnet.
- B: Object L is made of a non-magnetic material.
- C: Object N is made of a non-magnetic material.

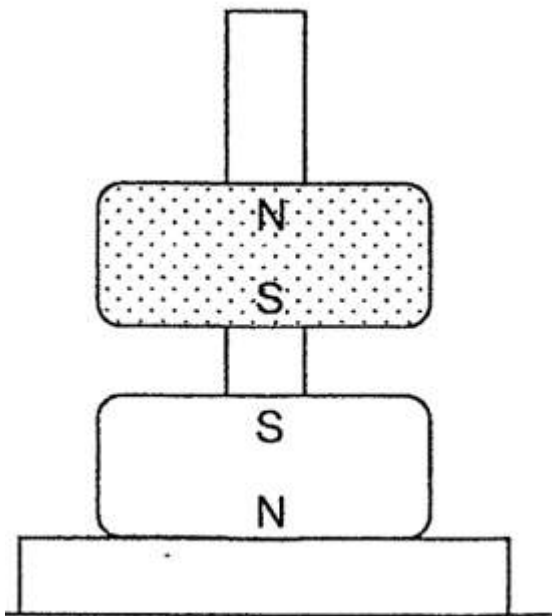
-
- A) B only
 - B) A and B only
 - C) A and C only
 - D) A, B and C

Krishnan placed three ring magnets, E, F and G, through a holder as shown below.

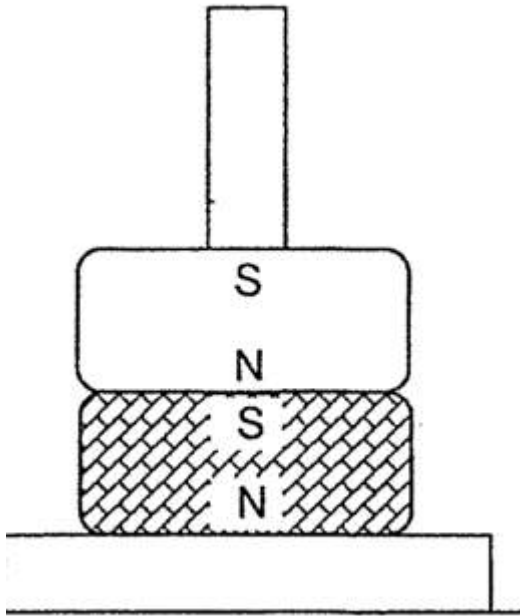


Which one of the following arrangements is not possible?

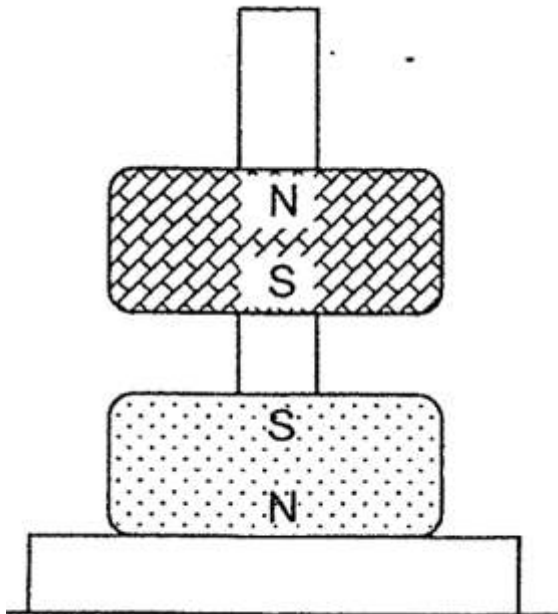
A)



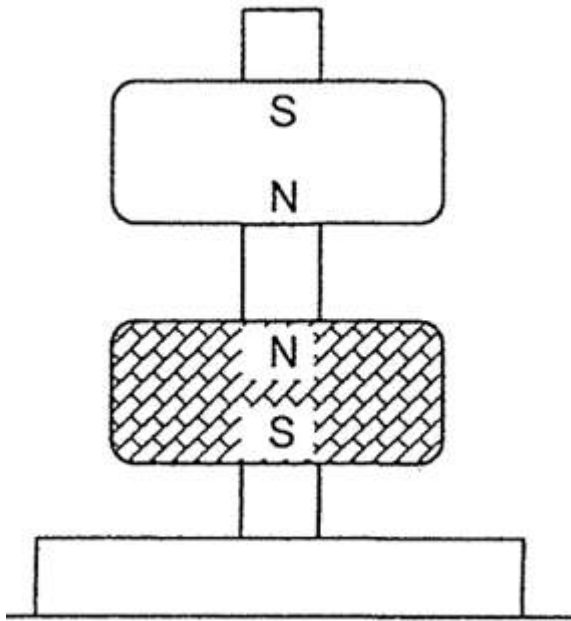
B)



C)



D)



Question 29 of 60

Primary 4 Science (Term 4) 2 pts

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.

Match the animals to the correct groups

1. []

A. fish



2. []

B. insect



Fill in the correct parts of a plant in the table. (2m)

Functions of plant parts	Plant parts
It holds the plant firmly in the ground.	
It helps the plant to make food.	

A, B, C and D are the various stages in the life cycle of a mosquito.



A



B

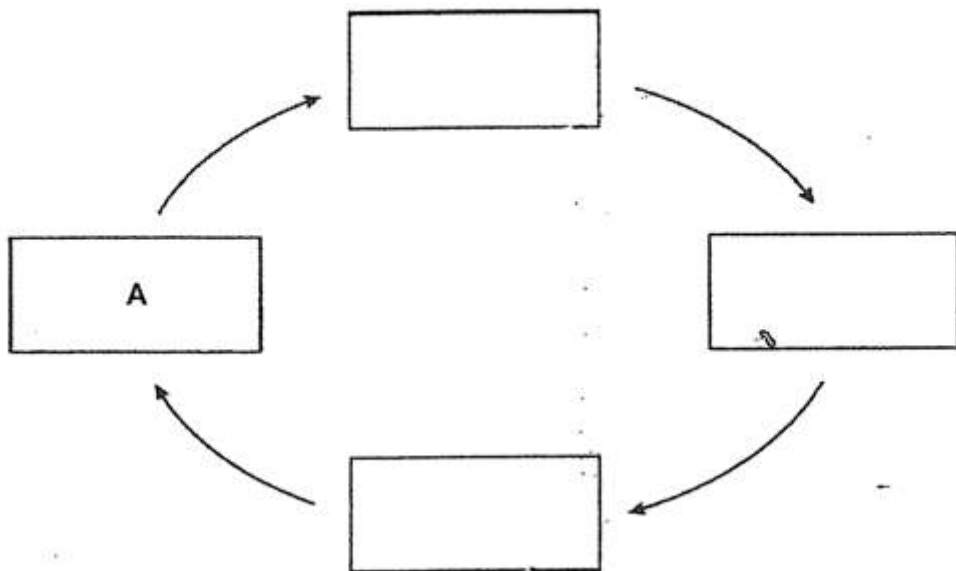


C



D

Arrange A, B, C and D in the correct order of the life cycle starting from A. (1m)



type "done" to proceed to the next question

Please

State one other animal that has a similar life cycle as a mosquito

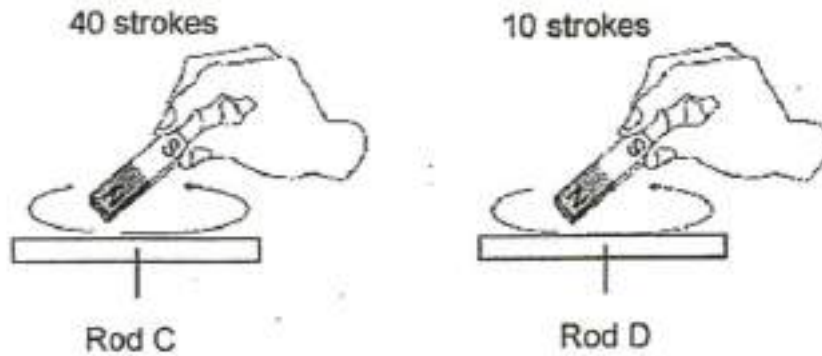
The diagram below shows a cooking pot.



The handles of the pot are made of plastic because plastic is a _____ conductor of heat. (1m)

The pot is made of metal because metal is a _____ conductor of heat. (1m)

Joy stroked two similar iron rods, C and D, with the same magnet as shown in the figure below.



Both rods became magnets and were used to attract similar iron pins.

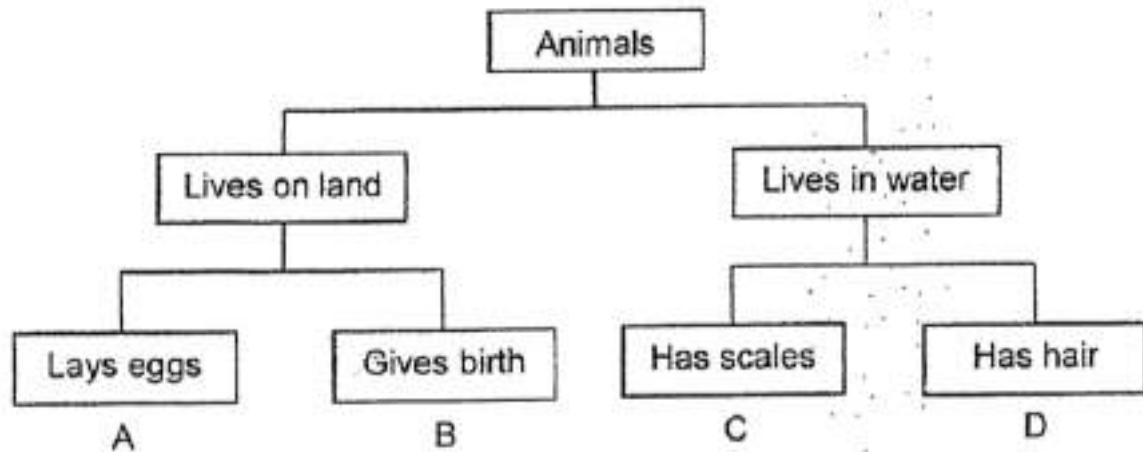
Rod C attracted _____ than rod D

- A) less pins than
- B) the same number of pins as
- C) more pins than

Joy's observation shows that iron is a _____ material.

- A) flexible
- B) magnetic
- C) strong

Study the classification chart below carefully.



Based on the chart, what are the characteristics of animal A? (2m)

In which group could the following animals be classified?

Goldfish: _____

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

Monkey: _____

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

Question 39 of 60

Primary 4 Science (Term 4) 0 pts

Based on the chart, what is the breathing method for animal D?

Question 40 of 60

Primary 4 Science (Term 4) 0 pts

Gareth had two identical pots of plant X that were of the same height. He wanted to find out if the amount of fertilisers added to the soil would affect the height of the plant. The table below shows how Gareth set up his experiment.

Variable	Set-up A	Set-up B
Type of plant	Plant X	Plant X
Amount of fertilisers added each day	5g	25g
Number of leaves on the plant in the beginning	20	60
Amount of water given each day	800 ml	500 ml
Location of the pot	In the garden	In the garden

From the table above, what are the two changes to set-up B Gareth must make so that the test is fair. (2m)

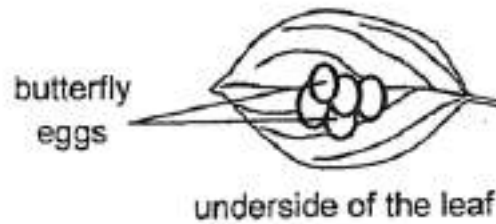
Change 1: _____

Change 2: _____

Question 41 of 60

Primary 4 Science (Term 4) 0 pts

Farmer Tan spotted some butterfly eggs on the underside of a leaf of a plant in his farm.



State an advantage why butterflies lay their eggs on the underside of the leaf. (1m)

Question 42 of 60

Primary 4 Science (Term 4) 0 pts

At which stage of the butterfly's life cycle is it most damaging to the leafy vegetables that Farmer Tan grows? Explain your answer

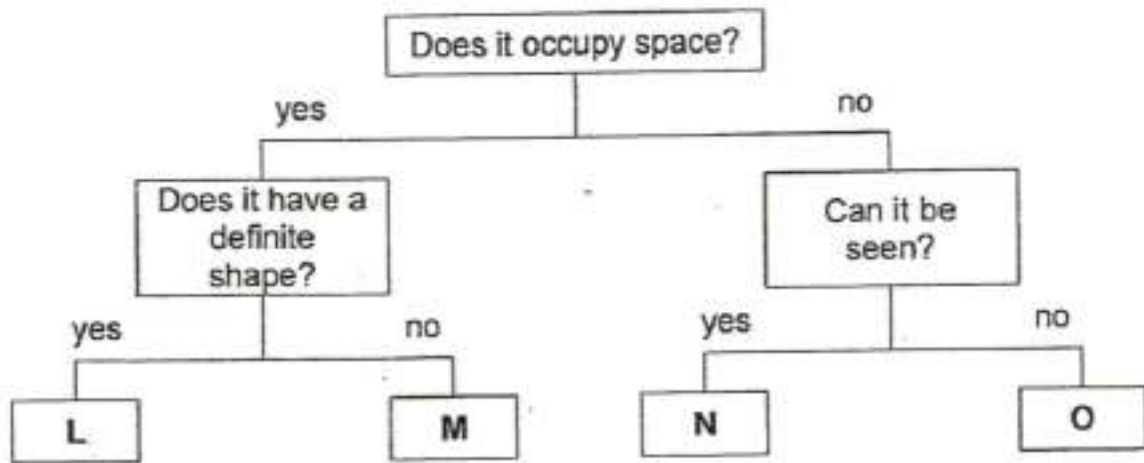
Question 43 of 60

Primary 4 Science (Term 4) 1 pt

Which shows the living thing that Farmer Tan drew the life cycle of?

- A) Mushroom
- B) Tomato plant
- C) Bird's nest fern

Study the flow chart below carefully.



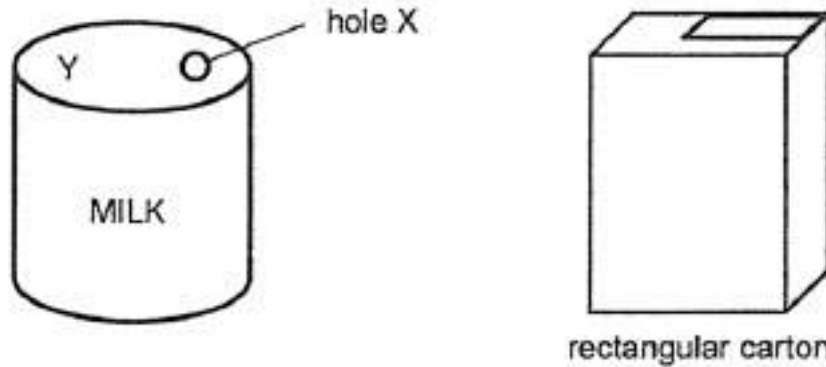
) In which group, L, M, N and O, would the following items be classified? (2m)

Match the options below:

1. [] ice	A. N
2. [] sound	B. O
3. [] oxygen	C. M
4. [] shadow	D. L

Gensen poked hole X on a tin of milk and tried to pour the milk out into a rectangular carton. He found that the milk was flowing too slowly.

His mother suggested to him to poke another hole at Y so that the milk can flow out faster from hole X.



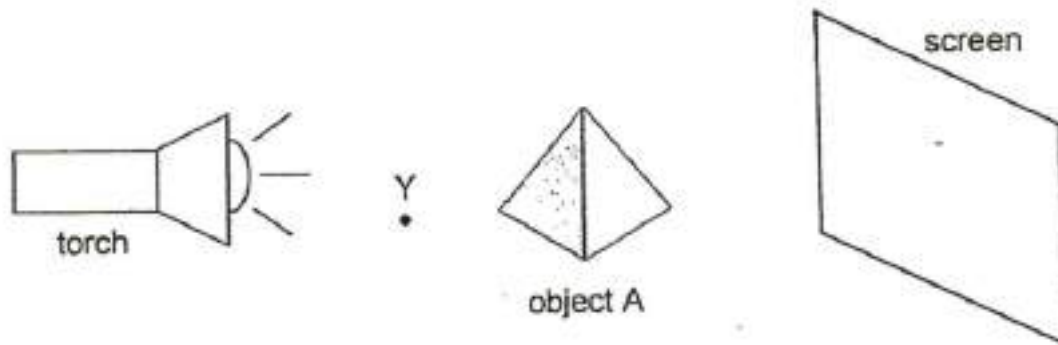
Explain how poking another hole at Y allowed the milk to flow out faster from hole X. (2m)

State the property of the milk that allowed the milk to be stored in containers of different shapes.

Question 47 of 60

Primary 4 Science (Term 4) 0 pts

Kai Zhen placed object A between a torch and a screen in a dark room as shown below.



She observed a shadow formed on the screen.

- i) Explain how the shadow of object A was formed on the screen. (1m)

Question 48 of 60

Primary 4 Science (Term 4) 0 pts

Kai Zhen shifted object A to position Y. What would be the change in size of the shadow observed on the screen?

Kai Zhen replaced object A with objects B and C, one after the other. The three objects are of the same shape and size but made of different materials.

She recorded her observation of the darkness of the shadow formed in the table below.

Objects	Observation of the shadow formed
A	very dark
B	less dark
C	no shadow formed

) Classify the objects, A, B and C, in the box under the most suitable headings. (1m)

Match the options below:

1. [] Allows most light to pass through

A. C

2. [] Allows some light to pass through

B. A

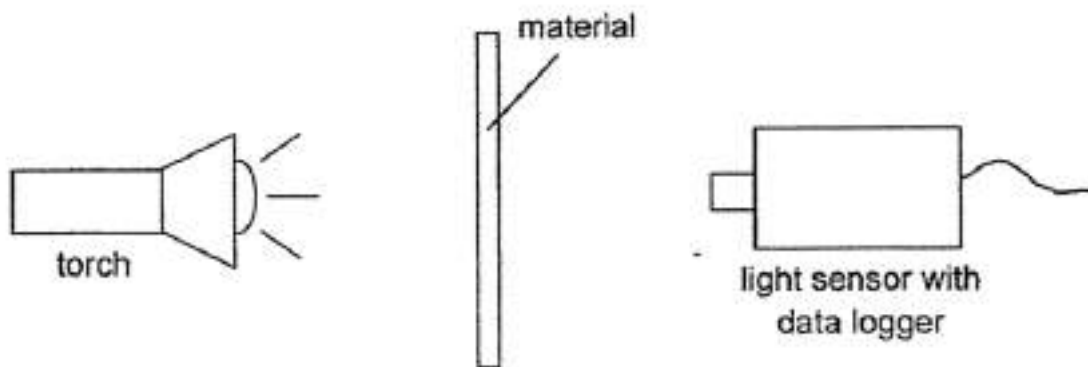
3. [] Does not allow light to pass through

C. B

Kai Zhen had to bring a bottle to school as she had to create a terrarium as shown below.



She conducted an experiment in a dark room to find out which material would be the most suitable to be selected for the bottle.

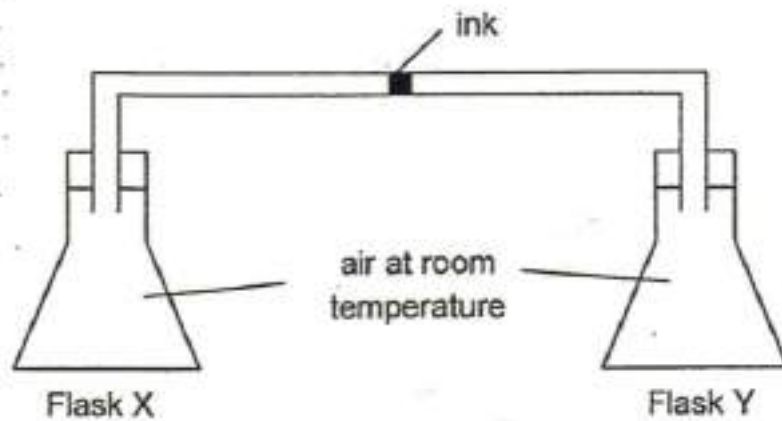


The results are shown in the table below.

Material	Light measured by the data logger (unit)
X	200
Y	250
Z	180

Based on the table, explain which material, X, Y or Z, would be the most suitable for the bottle to allow the plants in the terrarium to grow the best. (2m)

Khairul sets up an experiment using two identical glass flasks, X and Y, connected by a glass tube which contains a drop of ink as shown below.



Put a tick (✓) in the correct box on what Khairul will observe about the drop of ink in the glass tube after flask Y is placed in ice water for five minutes. (1m)

- A) The ink remains at its original position
- B) The ink moves towards flask X
- C) The ink moves towards flask Y

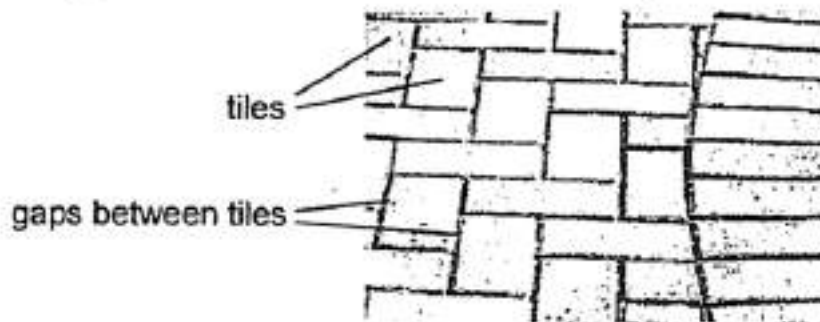
Question 52 of 60

Explain your answer in part (a)

Khairul conducts another experiment by heating two different materials, P and Q, that are of the same size and thickness for the same amount of time. The results are shown in the table below.

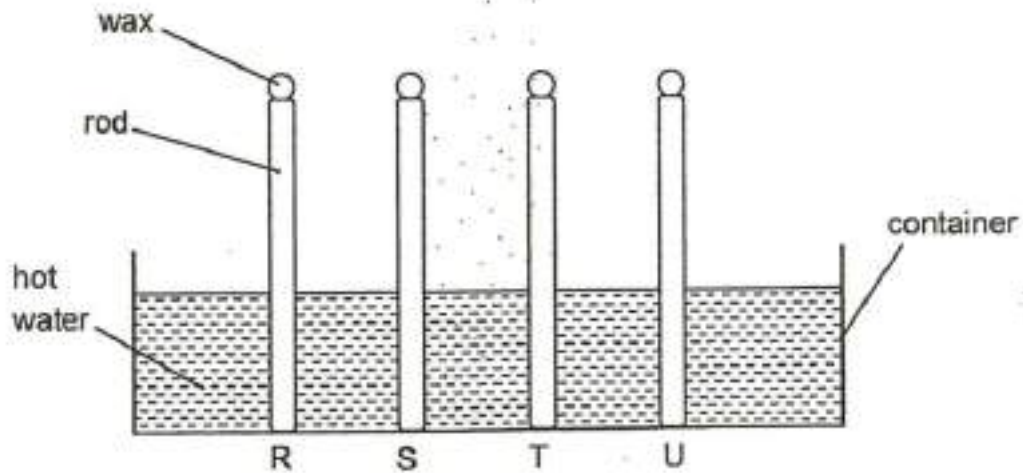
Material	Length before heating (cm)	Length after heating (cm)
P	20	24
Q	20	20.5

The diagram below shows the tiles used on a pavement.



Based on the table, which material, P or Q, is more suitable to be used to make the tiles for the pavement? Explain your answer. (2m)

Danny placed four rods made of different materials, R, S, T and U, into a container of hot water as shown below.



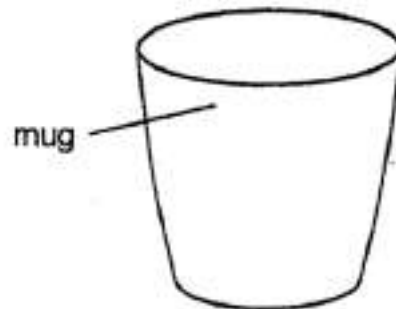
The rods had the same amount of wax on top of it. He recorded the time taken for each wax to melt completely on the rod in the table as shown below.

Material of rod	Time taken for the wax to melt completely (min)
R	10
S	2
T	15
U	8

) What was the aim of Danny's experiment? (1m)

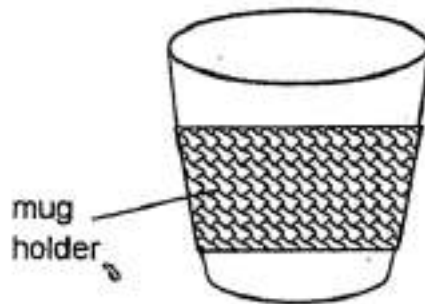
Name one variable that Danny needed to keep constant to ensure a fair test.

Danny brought a mug without a handle for his school camp to contain drinks.



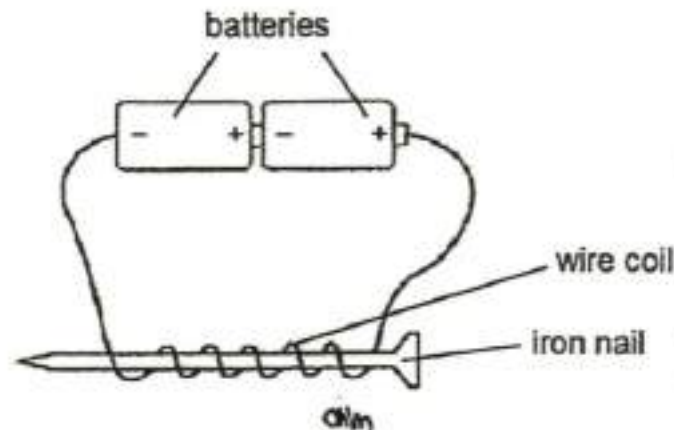
When he was served with hot milo in his mug, his hand felt warm while holding the mug of hot milo. Explain, in terms of heat flow, how his hand felt warm. (1m)

Danny decided to make a mug holder so that his hands would not feel warm whenever he held his mug filled with hot drinks.



- From the experiment that Danny had conducted in part (a), suggest which would be the best material, R, S, T or U, he should use to make the mug holder. Explain your answer. (2m)
-

Nigel created an electromagnet as shown below.



He wanted to find out if the number of coils around the nail would affect the magnetic strength of the electromagnet.

He increased the number of coils around the nail and placed eight paper clips at the same distance from the electromagnet before recording down the results as shown in the table below.

Number of coils around the nail	5	10	15	20	25
Number of paper clips attracted to the electromagnet	3	4	5	5	5

What is the relationship between the number of coils around the nail and the magnetic strength of the electromagnet until 15 coils? (1m)

What could Nigel do to the batteries for the electromagnet to attract more than five paper clips?

For the nail to be an electromagnet, give an example of another material that the nail could be made of.
