Test: Primary 6 Science (Prelim) - Rosyth (Y0)

Points: 63 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 64

Primary 6 Science (Prelim) 2 pts

For each question, four options are given. One of them is the correct answer and make your choice below. (56 marks)

All plants _____

- **A)** make their own food
- **B)** reproduce by seeds
- **C)** bear flowers and fruits
- **D)** need oxygen at night only

Question 2 of 64

Primary 6 Science (Prelim) 2 pts

Many years ago, a scientist discovered an animal P and studied its characteristics. Some of the characteristics of animal P are as follows:

A lays egg
B has four legs
C can swim in water
D can produce milk to feed the young

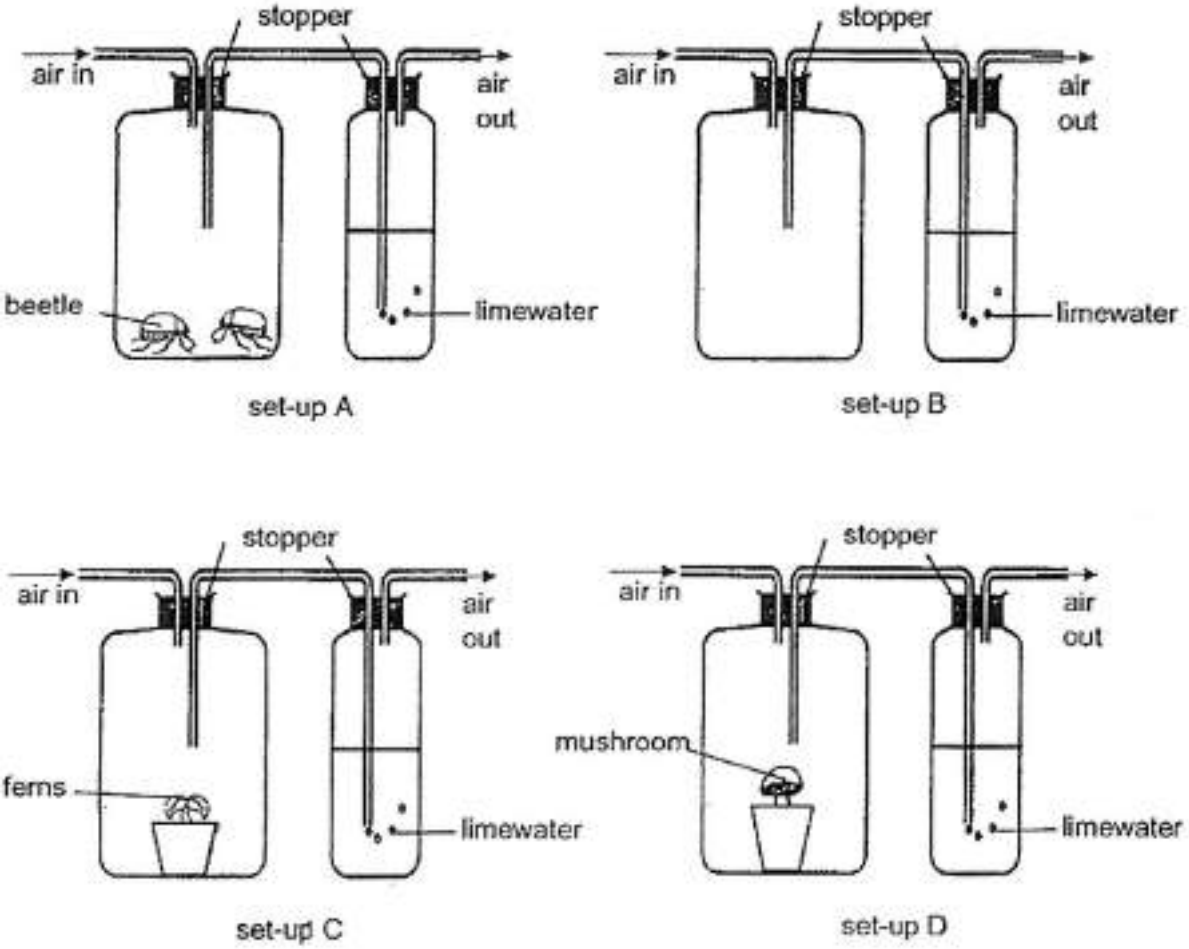
Which of the above characteristics made it difficult to classify animal P as a mammal?

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

Question 3 of 64

Primary 6 Science (Prelim) 2 pts

Study the four set-ups as shown below. All set-ups were placed near a window on a sunny day.



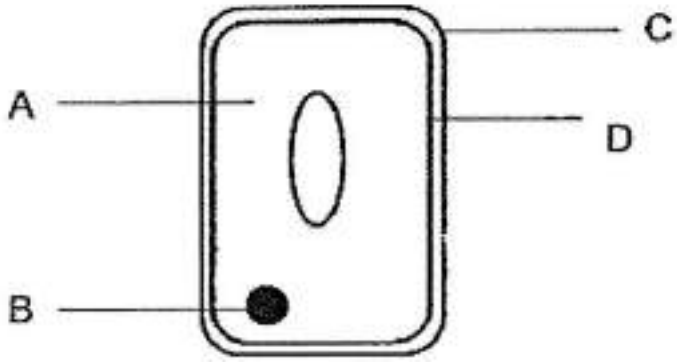
Limewater changes from colourless to chalky in the presence of carbon dioxide.
In which set-up will the limewater turn chalky the slowest?

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

Question 4 of 64

Primary 6 Science (Prelim) 2 pts

Some scientists claim that plants will glow in the dark when modified.
Which part of the plant cell has been modified for the investigation?



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

Question 5 of 64

Primary 6 Science (Prelim) 2 pts

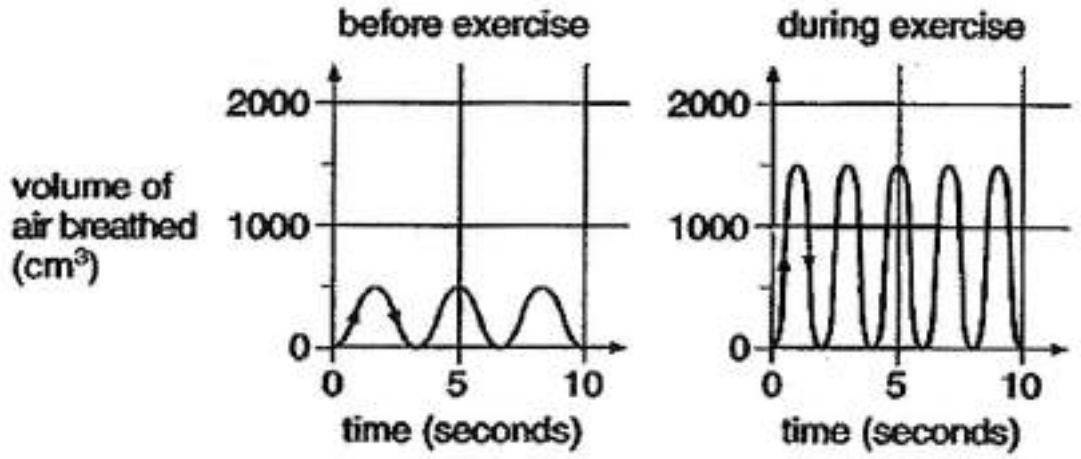
Which one of the substances is not transported by the human circulatory system?

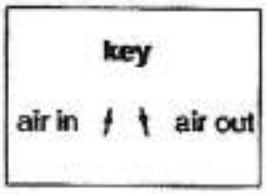
- **A)** water
- **B)** digested food
- **C)** carbon dioxide
- **D)** undigested food

Question 6 of 64

Primary 6 Science (Prelim) 2 pts

The two graphs below show Mary's breathing before exercise and during exercise respectively.





In which ways will Mary's breathing change during ex

A Time taken for one breath

B Volume of oxygen breathed in

C Volume of nitrogen breathed out

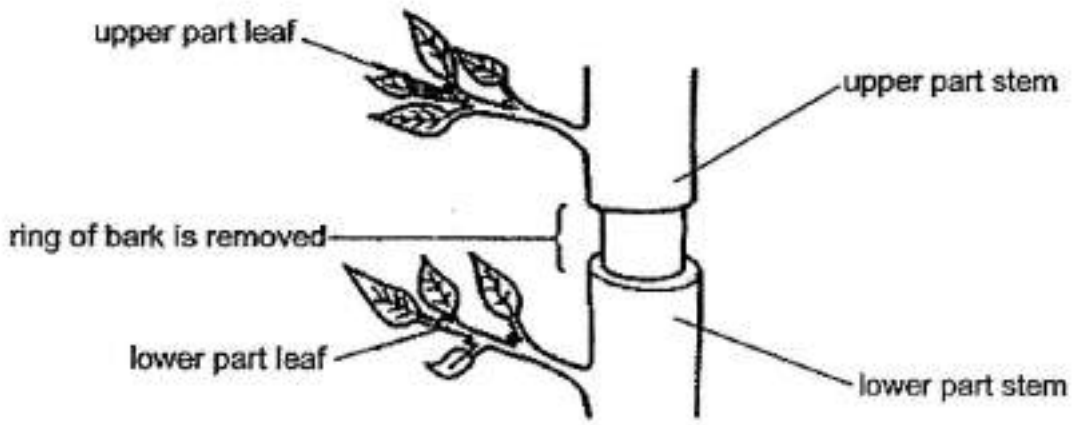
D Volume of carbon dioxide breathed out

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

Question 7 of 64

Primary 6 Science (Prelim) 2 pts

The diagram shows part of the stem of a small tree with a ring of bark removed. Removing the ring of bark takes away the food–carrying tube but not the water-carrying tube.



The effect of removing the ring of bark was observed after some time.

What would be the effect ?

A) **Upper Part** **Lower Part**

Stem	Leaf	Stem	Leaf
normal	green	normal	green

B)

Stem	Leaf	Stem	Leaf
swollen	wilt	swollen	wilt

C)

Stem	Leaf	Stem	Leaf
swollen	green	normal	wilt

D)

Stem	Leaf	Stem	Leaf
swollen	green	normal	green

Question 8 of 64

Primary 6 Science (Prelim) 2 pts

A group of boys wanted to carry out an experiment to find out if mopping the floor will increase their pulse rate.

The steps of their experiment are as follows:

A Take a wet mop
B Mop the floor continuously for 10 minutes
C Stop mopping and measure the pulse rate immediately

Their teacher said that they have forgotten an important step and without that step, they cannot make a conclusion.

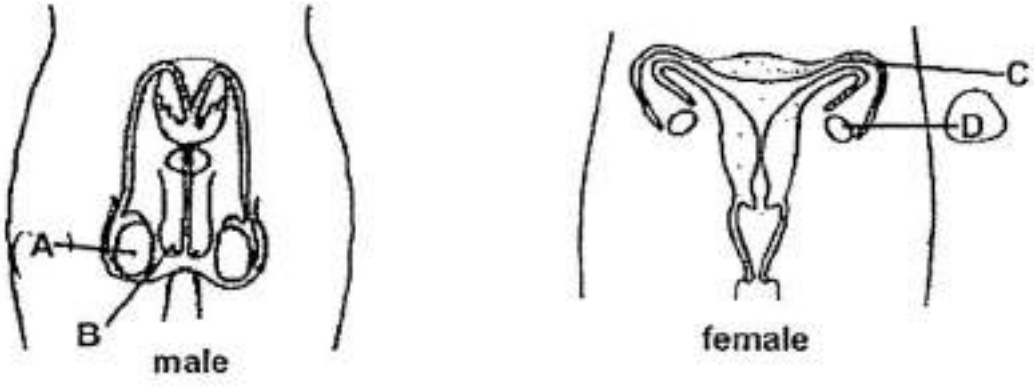
Which step should they include in their experiment so that they can make a conclusion?

- **A)** Repeat the experiment
- **B)** Record the results in a table
- **C)** Measure the pulse rate at rest
- **D)** Measure the heart rate after mopping

Question 9 of 64

Primary 6 Science (Prelim) 2 pts

The diagram below shows the human reproductive systems.

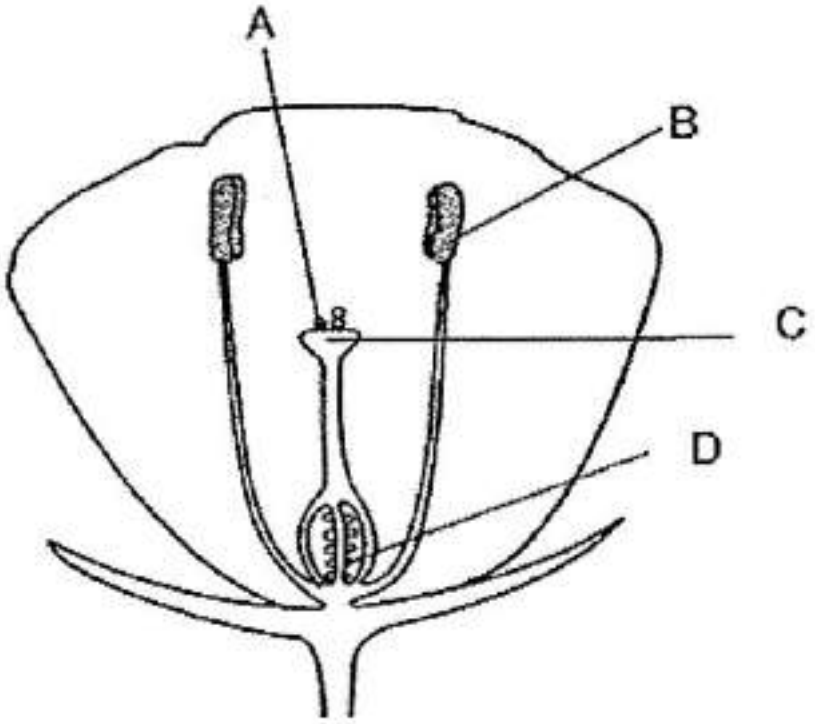


Where are the human reproductive cells produced?

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

Question 10 of 64 Primary 6 Science (Prelim) 2 pts

The diagram shows a cross-section of a flower.



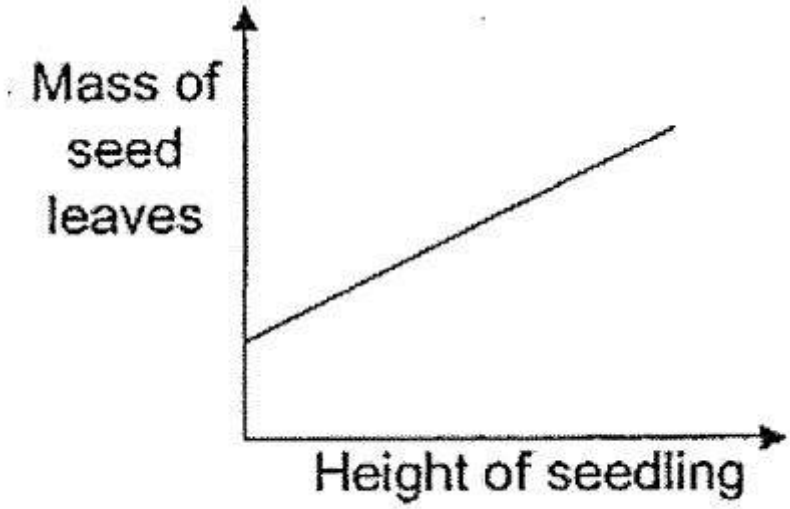
Which one of the following statements is correct?

- **A)** Fertilisation occurs at D.
- **B)** A will become a seed after fertilisation.
- **C)** Pollen grains are transferred by insects to B.
- **D)** The reproductive cells are found in B and C.

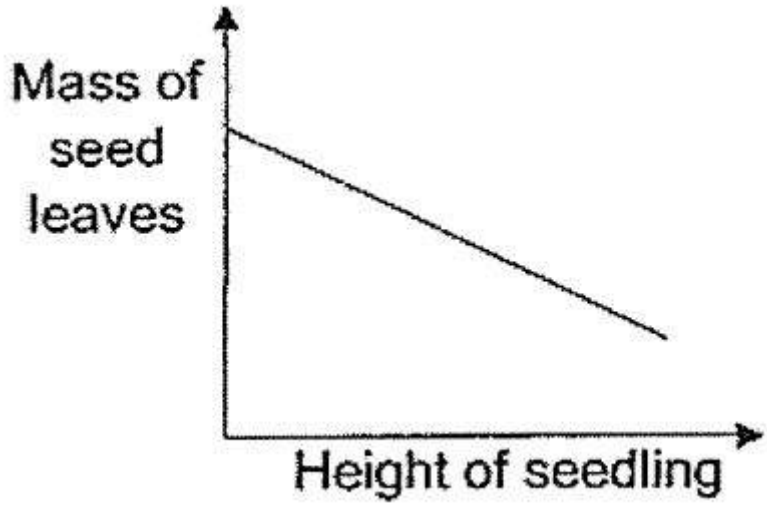
Question 11 of 64 Primary 6 Science (Prelim) 2 pts

Which graph correctly shows the relationship between the mass of seed leaves and the height of the seedling?

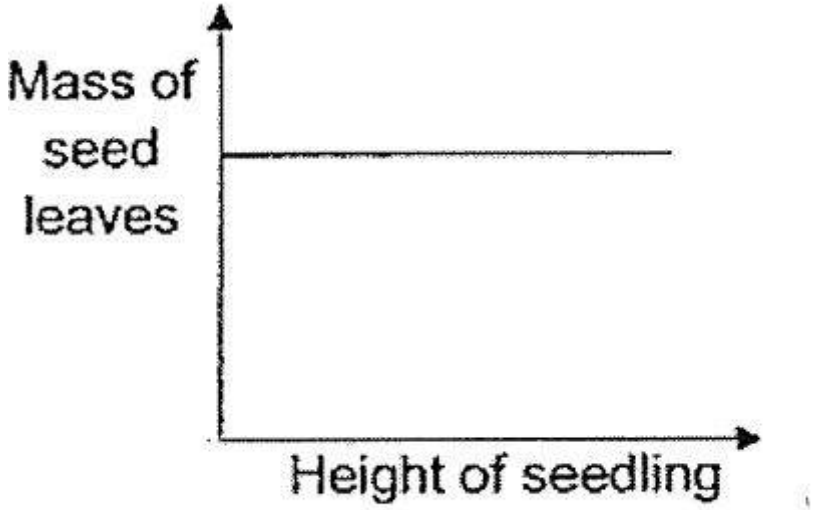
A)



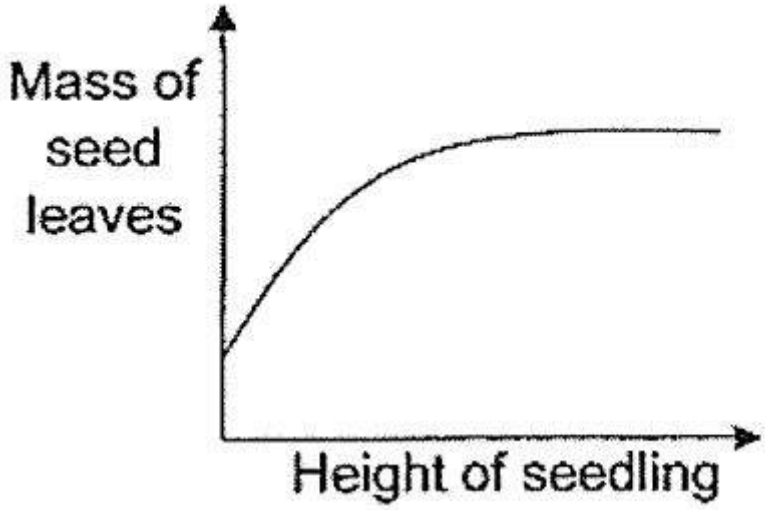
B)



C)

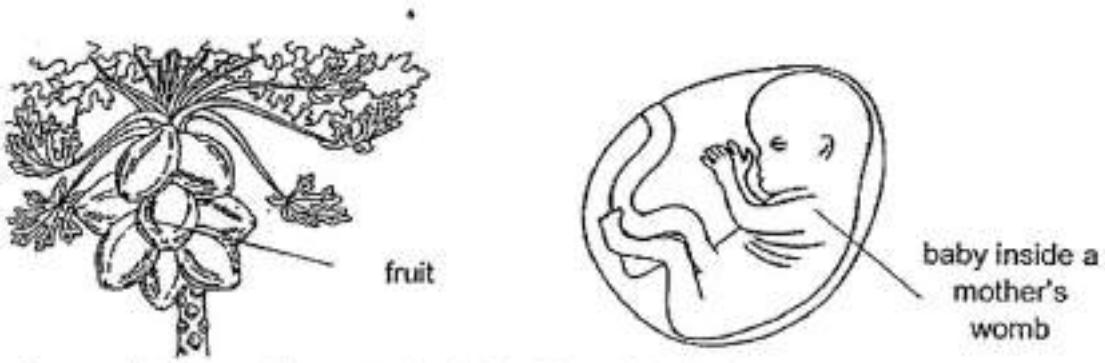


D)



Question 12 of 64 Primary 6 Science (Prelim) 2 pts

The diagrams below show some fruits on a tree and a baby inside a mother's womb.



Alex made three statements about the fruit and the baby.

A It develops into an adult.

B It developed after fertilisation.

C It obtains food from its parent for growth.

Which of the following is correct?

A)

Fruit	Baby inside a mother's womb
A, B, C	A, B, C

B)

Fruit	Baby inside a mother's womb
A, B	A, B, C

C)

Fruit	Baby inside a mother's womb
B, C	A, B, C

D)

Fruit	Baby inside a mother's womb
B, C	A, C

Question 13 of 64

Primary 6 Science (Prelim) 2 pts

Ravi compared the life cycles of two animals and made the following statements.

- Both their young resemble the adult.
- Both animals have 3 stages in their life cycles.

Which animals was Ravi comparing?

A) Chicken and beetle

B) Butterfly and chicken

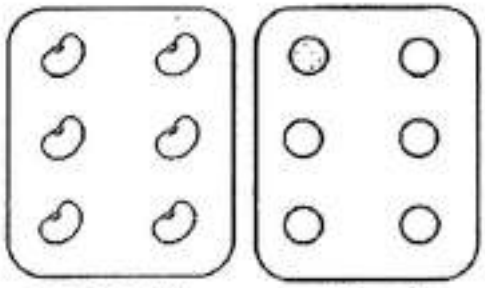
C) Grasshopper and beetle

D) Chicken and grasshopper

Question 14 of 64

Primary 6 Science (Prelim) 2 pts

Siti carried out an experiment on germination of seeds using two different types of seeds placed in identical containers A and B as shown below.



container A container B

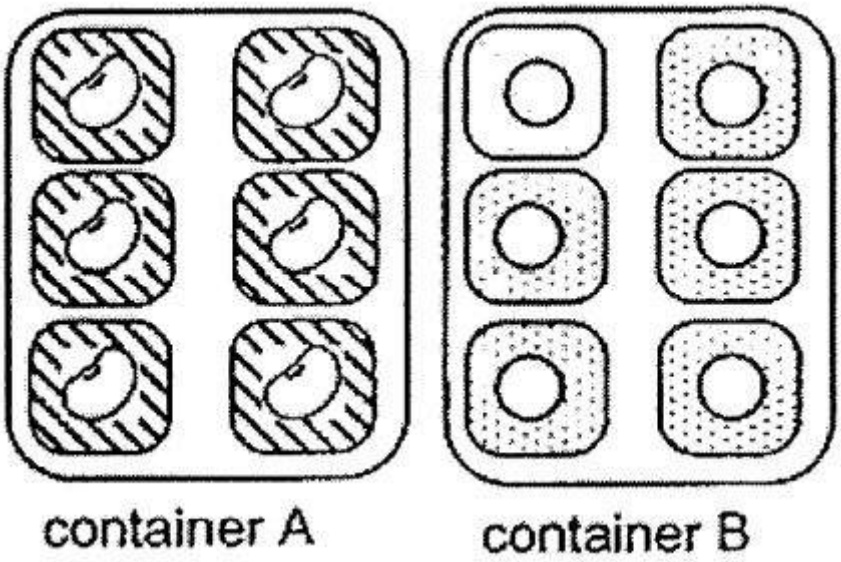
She predicted that the seeds will germinate faster with 50 ml of water.
However, her friend predicted that adding only 10 ml of water will help the seeds to germinate faster.

Which of the following set-ups should Siti use to provide a correct test for **both** their predictions?

 Cotton wool
50 ml of water

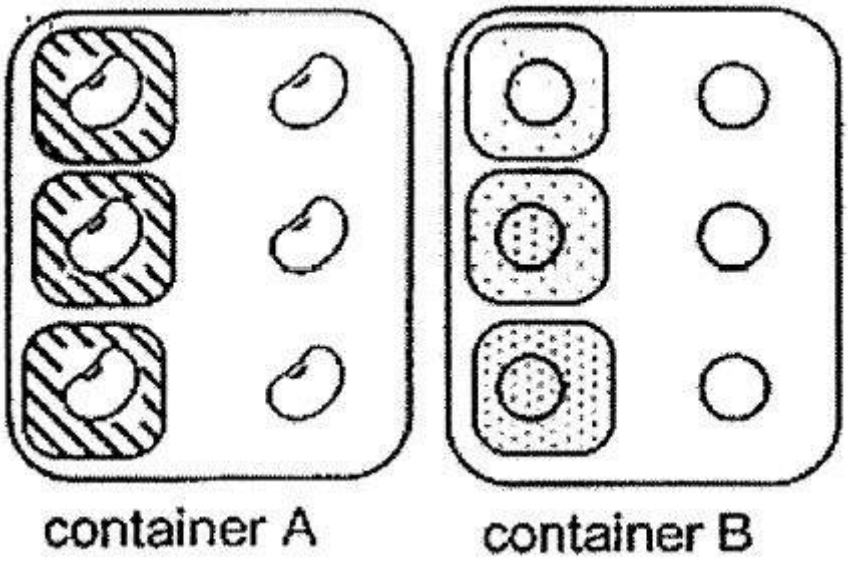
 Cotton wool
10 ml of water

○ **A)**

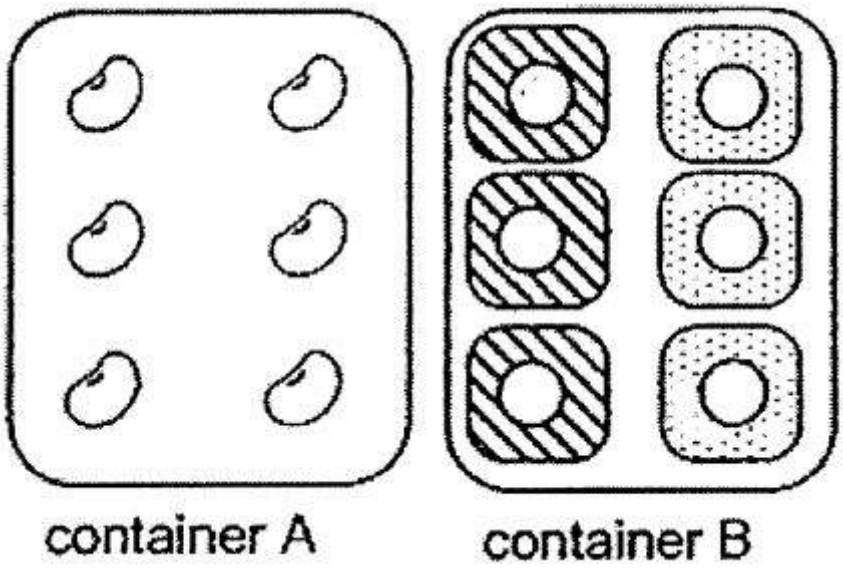


container A container B

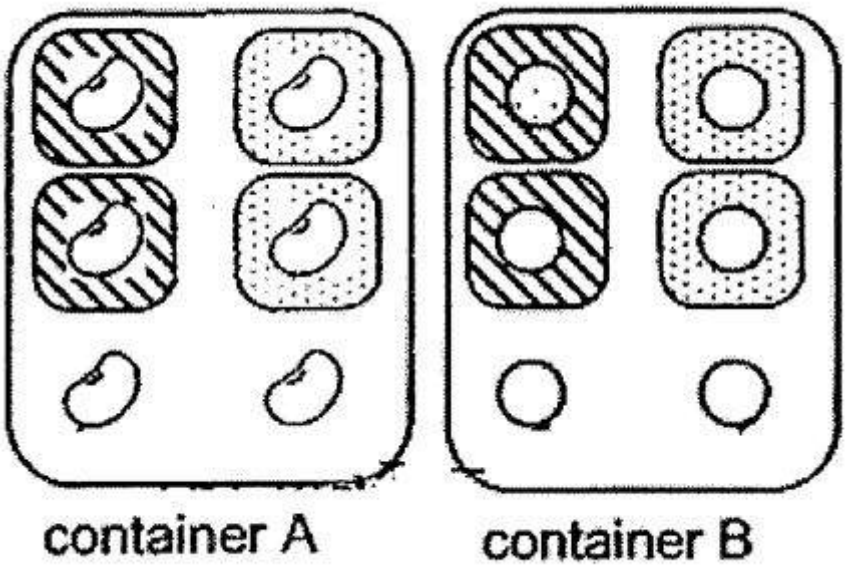
○ **B)**


container A
container B

C)


container A
container B

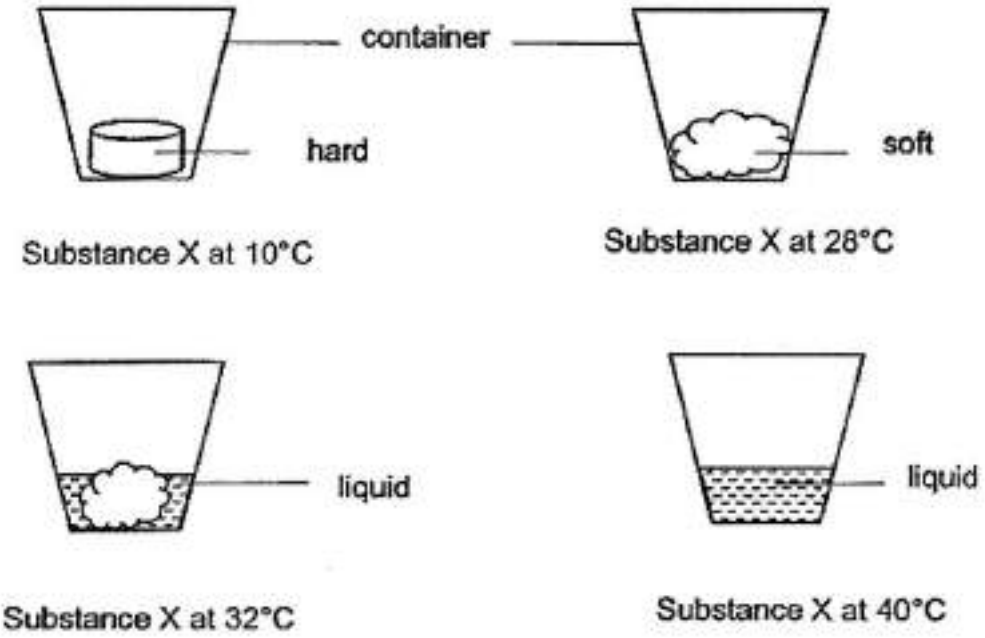
D)


container A
container B

Question 15 of 64

Primary 6 Science (Prelim) 2 pts

The diagram below shows Substance X in a container at various temperatures.

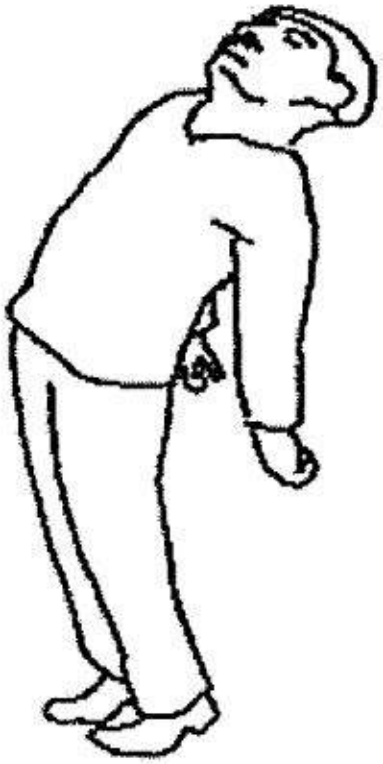


Based on the above information, which one of the following is the melting point of Substance X?

- **A)** 10°C
- **B)** 28°C
- **C)** 32°C
- **D)** 40°C

Question 16 of 64 Primary 6 Science (Prelim) 2 pts

The diagram shows what a person can do.



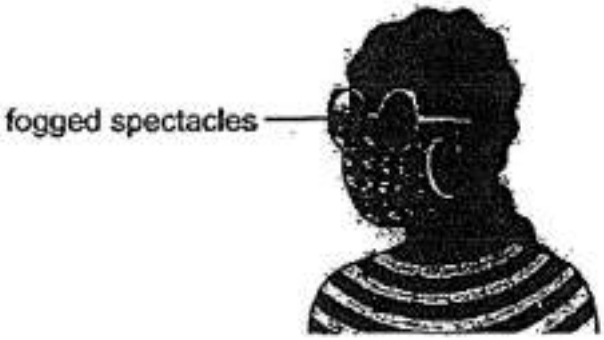
This shows the property of _____.

- **A)** strength
- **B)** elasticity
- **C)** flexibility
- **D)** waterproof

Question 17 of 64

Primary 6 Science (Prelim) 2 pts

Mrs Tan realises that there is fogging on her spectacles when she wears her mask as shown.



Which of the following correctly shows where the fogging takes place and where the warmer water vapour comes from?

A)

Fogging takes place on the _____ surface of spectacles	Warmer water vapour comes from _____
inner	Mrs Tan's breath

B)

Fogging takes place on the _____ surface of spectacles	Warmer water vapour comes from _____
outer	Mrs Tan's breath

C)

Fogging takes place on the _____ surface of spectacles	Warmer water vapour comes from _____
inner	the surrounding air

D)

Fogging takes place on the _____ surface of spectacles	Warmer water vapour comes from _____
outer	the surrounding air

Question 18 of 64 Primary 6 Science (Prelim) 2 pts

Diagram 1 shows the mass of magnet M when it is placed on an electronic balance. Diagram 2 shows its mass when another object Y is placed above it.

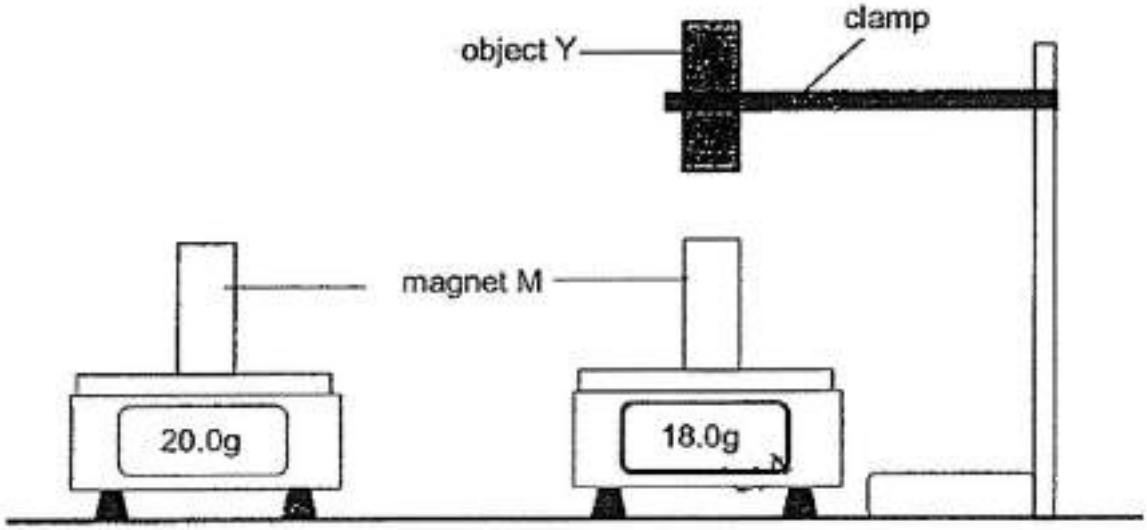


Diagram 1 Diagram 2

Which of the following shows the material of object Y and the direction of the magnetic force acting on object Y?

A)

Material of object Y	Magnetic force acting on Y
copper	↑

B)

copper	↓

C)

steel	↓

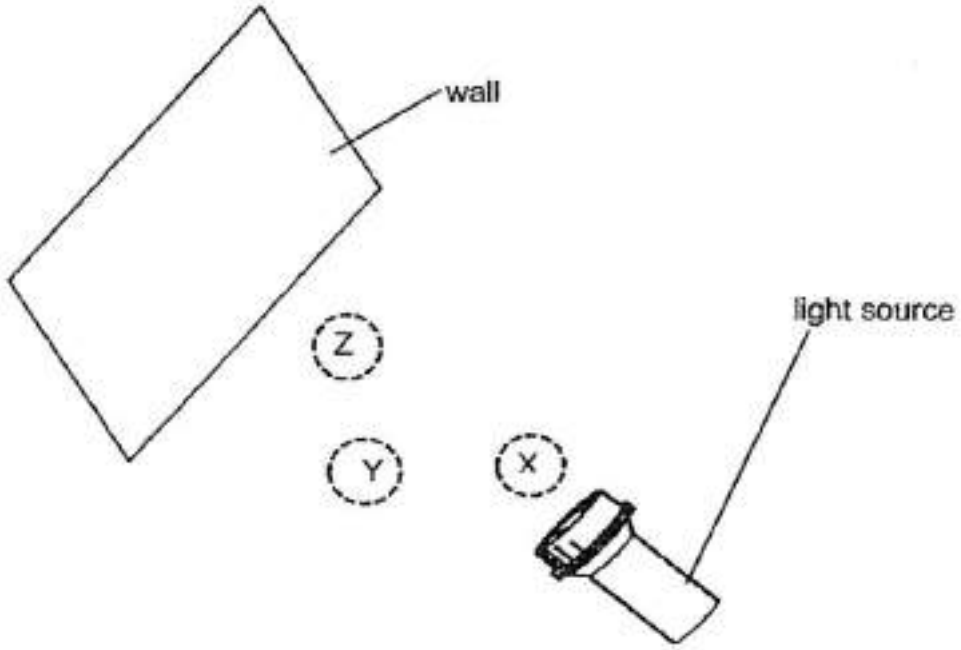
D)

steel	↑

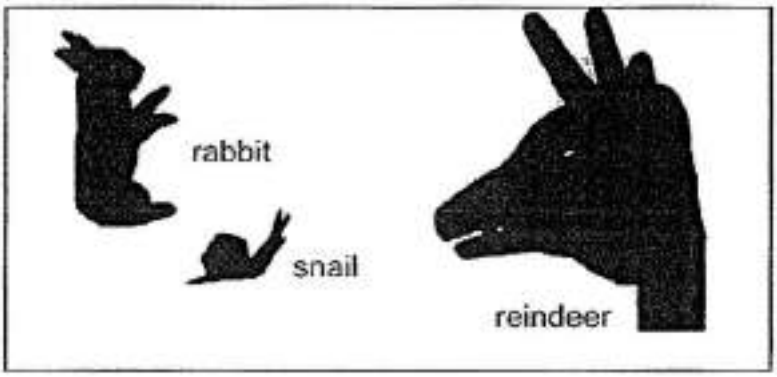
Question 19 of 64

Primary 6 Science (Prelim) 2 pts

Three children were making shadow animals with their hands. They placed their hands which were of the same size at positions X, Y and Z between a light source and a wall as shown below.



The size of each shadow animal was seen on the wall as shown below.



Which of the following shows the positions of the children's hands, X, Y and Z?

A)

reindeer	rabbit	snail
X	Y	Z

B)

reindeer	rabbit	snail
X	Z	Y

C)

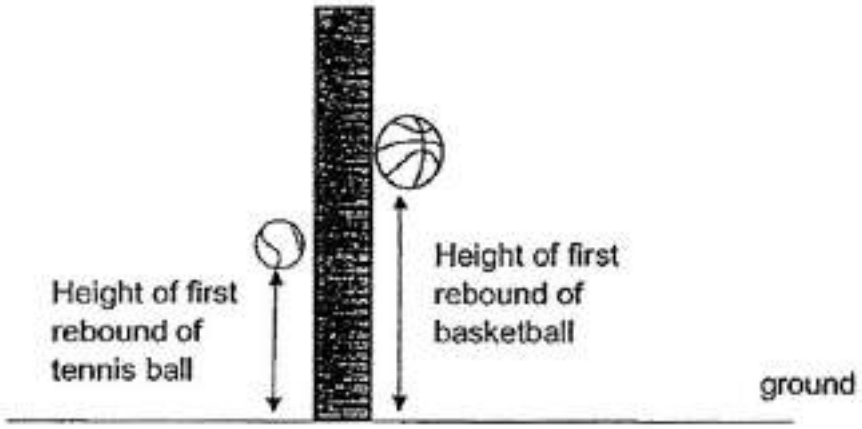
reindeer	rabbit	snail
Z	Y	X

D)

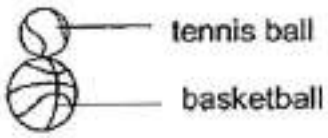
reindeer	rabbit	snail
Z	X	Y

Question 20 of 64 Primary 6 Science (Prelim) 2 pts

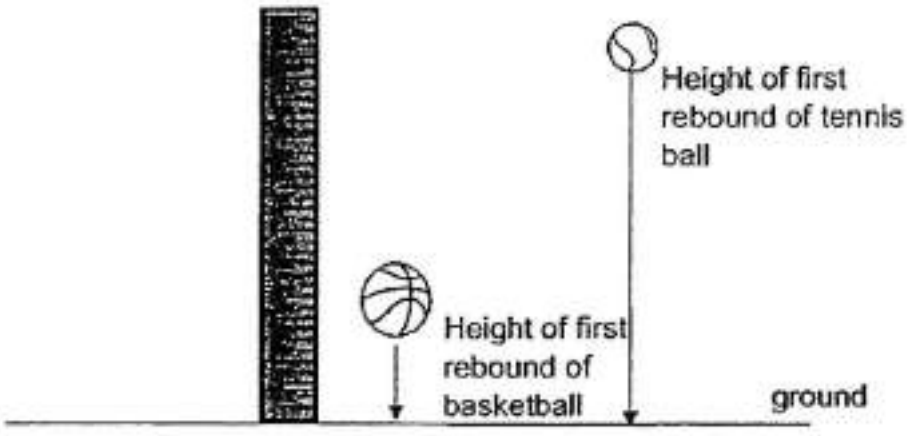
Dan released a tennis ball and a basketball each from the same height above the ground. The balls hit on the ground and bounced a few times before stopping. He measured the height of the first rebound for each ball as shown below.



Next, he placed the tennis ball on top of the basketball as shown below before releasing them from the same height.



He observed that the tennis ball bounced higher into the air than before as shown below.



Which one of the following is the best explanation for his observation?

- **A)** There was less friction between the tennis ball and the air.
- **B)** There was less friction between the basketball and the tennis ball.
- **C)** The gravitational potential energy of the basketball was converted to kinetic energy of the tennis ball.
- **D)** The elastic potential energy of the compressed basketball when it hit the ground was converted to kinetic energy of the tennis ball.

Question 21 of 64

Primary 6 Science (Prelim) 2 pts

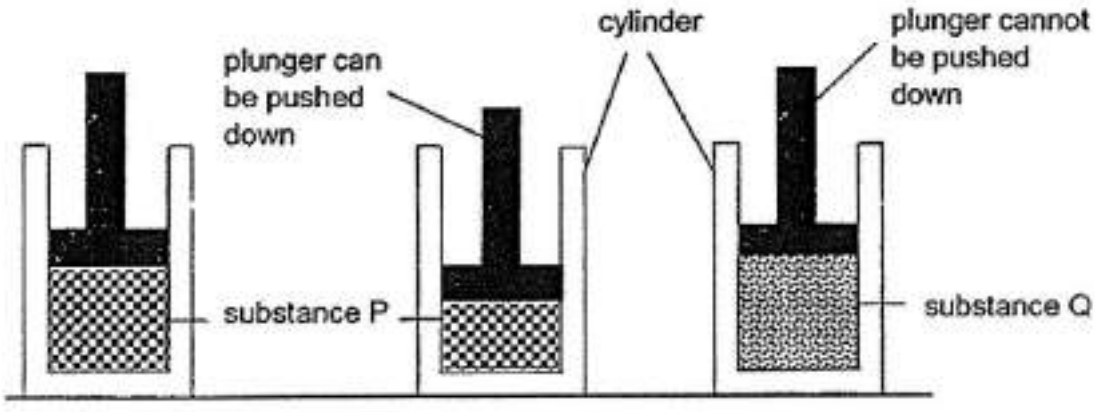
Which one of the following is an example of the effect of a force?

- **A)** Leaves falling from a tree.
- **B)** Ice cubes melting on a table top.
- **C)** Fish being cooked by the steam in a food steamer.
- **D)** A puddle of water gaining heat from the sun and evaporating.

Question 22 of 64

Primary 6 Science (Prelim) 2 pts

The diagram shows a cylinder and a plunger. When the cylinder was filled with substance P, the plunger was able to be pushed down to a certain extent but not when it was filled with substance Q.



Based on the observations, which of the following are correct?

A Substance Q has definite volume.

B Substance Q has a definite shape.

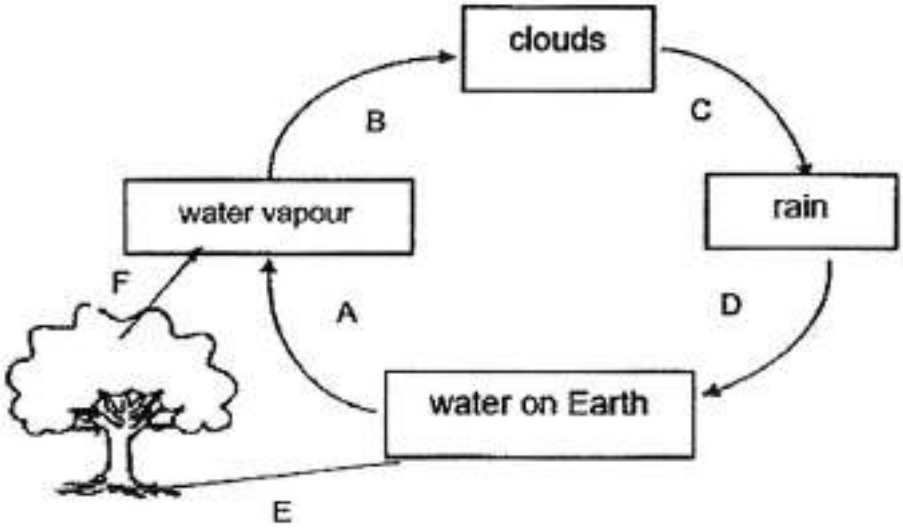
C There are air spaces in substance P.

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

Question 23 of 64

Primary 6 Science (Prelim) 2 pts

The diagram below shows the different processes, A, B, C, D, E and F, in a water cycle.



Which one of the following is correct?

A)

Involve a change of state	Involve(s) heat loss
A and B	B

B)

Involve a change of state	Involve(s) heat loss
A, B and F	B

C)

Involve a change of state	Involve(s) heat loss
A, B and F	C

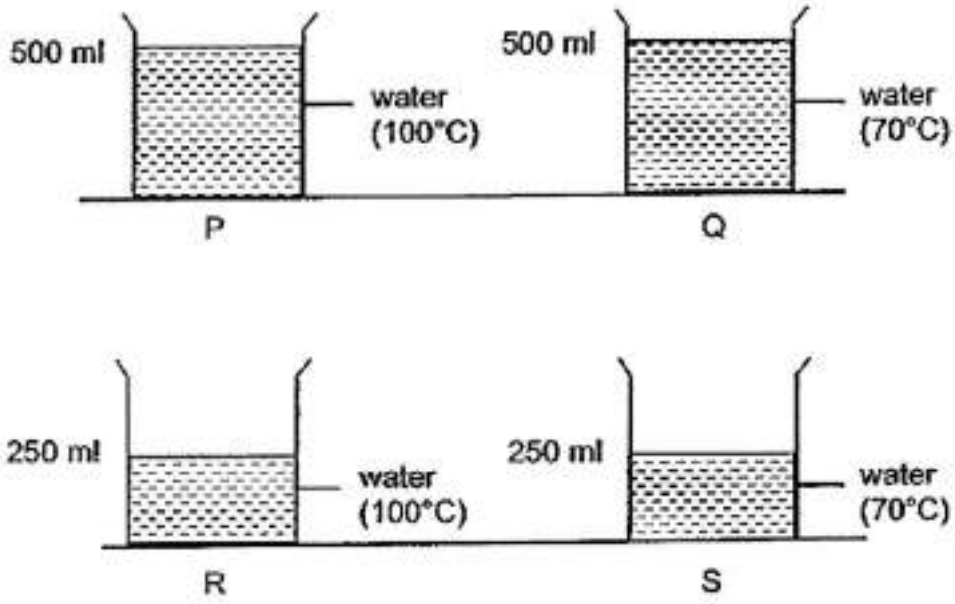
D)

Involve a change of state	Involve(s) heat loss
B, C, D and E	C

Question 24 of 64

Primary 6 Science (Prelim) 2 pts

Ahmad wanted to find out how the volume of water will affect the temperature of hot water over a period of time. He used four identical containers to set up P, Q, R and S as shown below.



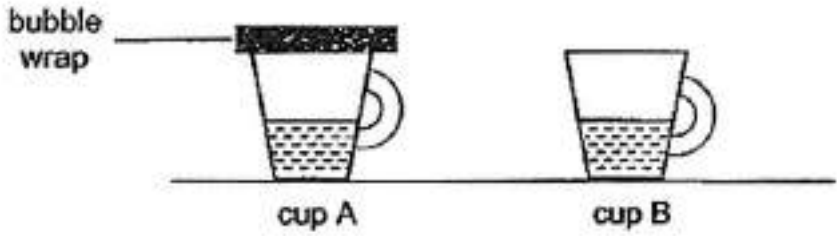
Which two set-ups should he use for his experiment?

- **A)** P and Q only
- **B)** P and R only
- **C)** Q and R only
- **D)** R and S only

Question 25 of 64

Primary 6 Science (Prelim) 2 pts

There were two identical cups, A and B, containing same amount of hot water on a table. The water was at the same temperature in both cups. Bala placed a piece of bubble wrap onto cup A as shown in the diagram below.



After five minutes, Bala observed that the water in cup A had a higher temperature than that in cup B.

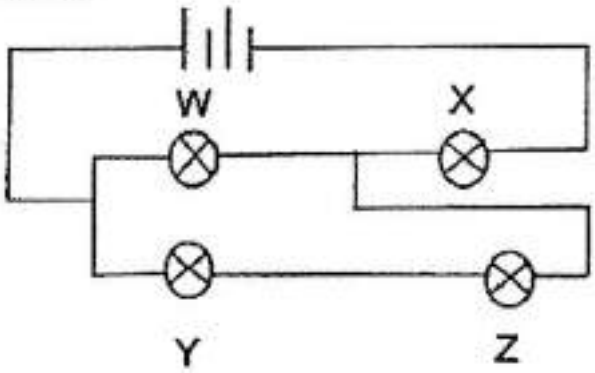
Which of the following could be the most likely reason for the observation above?

- **A)** Heat was transferred from the bubble wrap to the water in cup A.
- **B)** The bubble wrap increased the rate of evaporation of the water in cup A.
- **C)** The bubble wrap increased the rate of condensation of the water in cup A.
- **D)** The bubble wrap reduced the heat transfer from the water in cup A to the surroundings.

Question 26 of 64

Primary 6 Science (Prelim) 2 pts

Study the circuit.



Which bulb when blown allows the other three bulbs to remain lit?

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

Question 27 of 64 Primary 6 Science (Prelim) 2 pts

Ravi placed a book on a wooden plank as shown in Diagram 1. He raised the wooden plank till the book starts to slide down and then he measured the angle of plank as shown in Diagram 2.

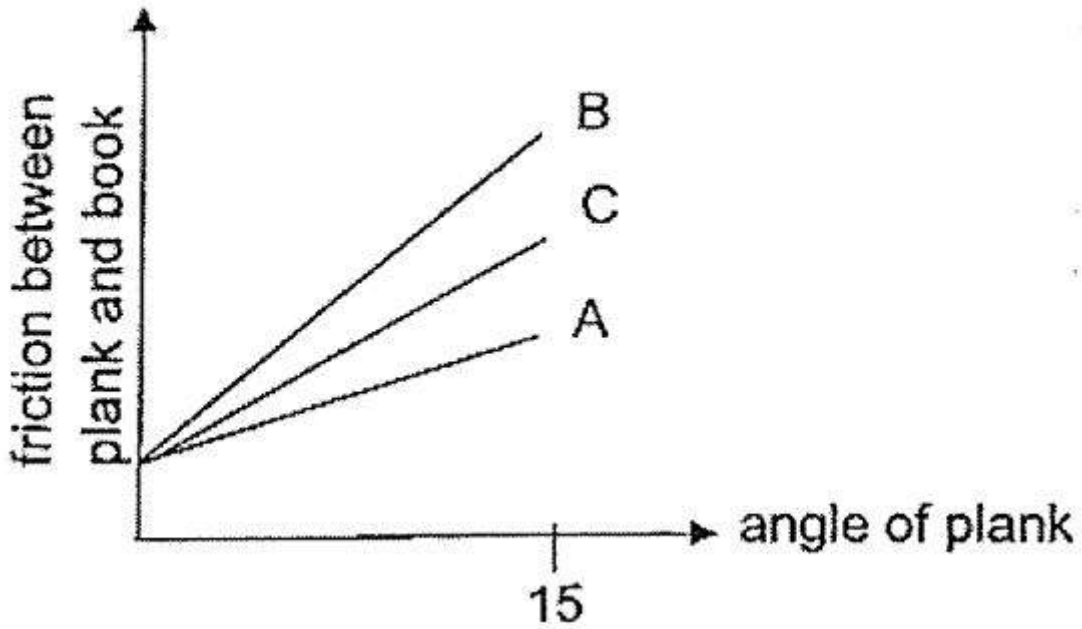
Diagram 1 Diagram 2

The table below shows the results for different types of wooden planks, A, B and C.

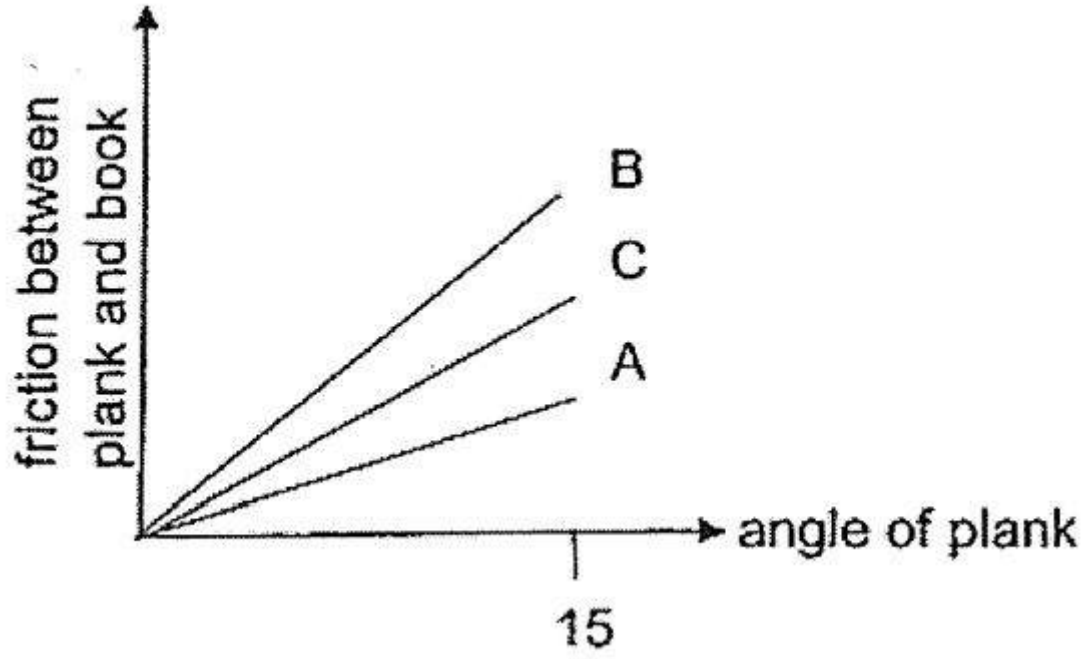
Wooden Plank	Angle of plank when the book starts to slide down (°)
A	20
B	70
C	50

Which of the following correctly shows the relationship between the angle of plank and the amount of friction between the plank and the book?

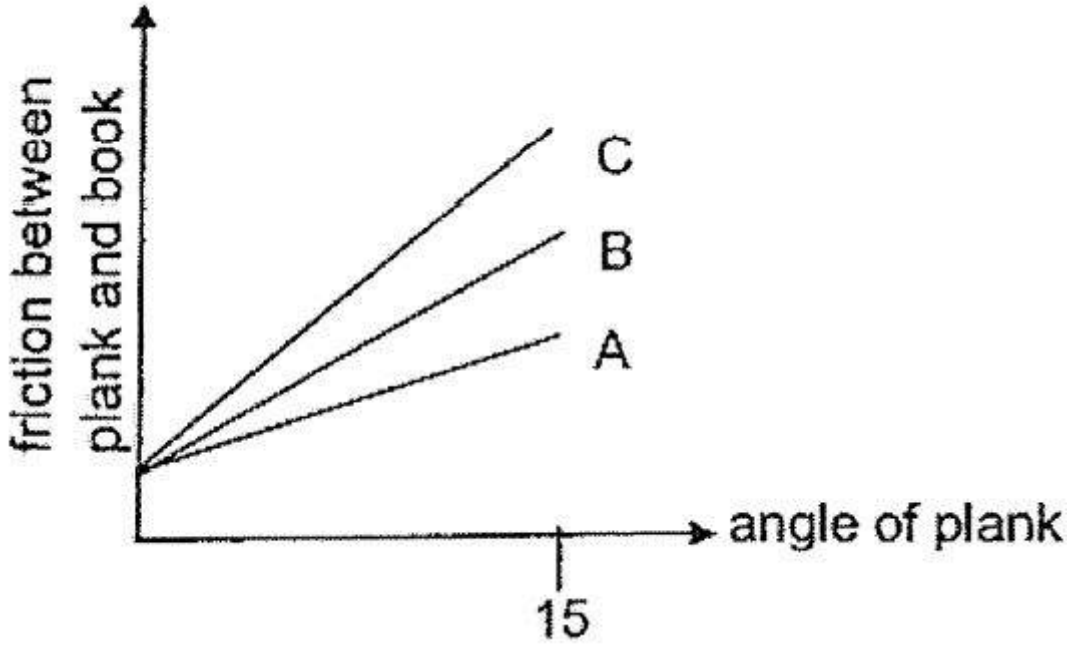
A)



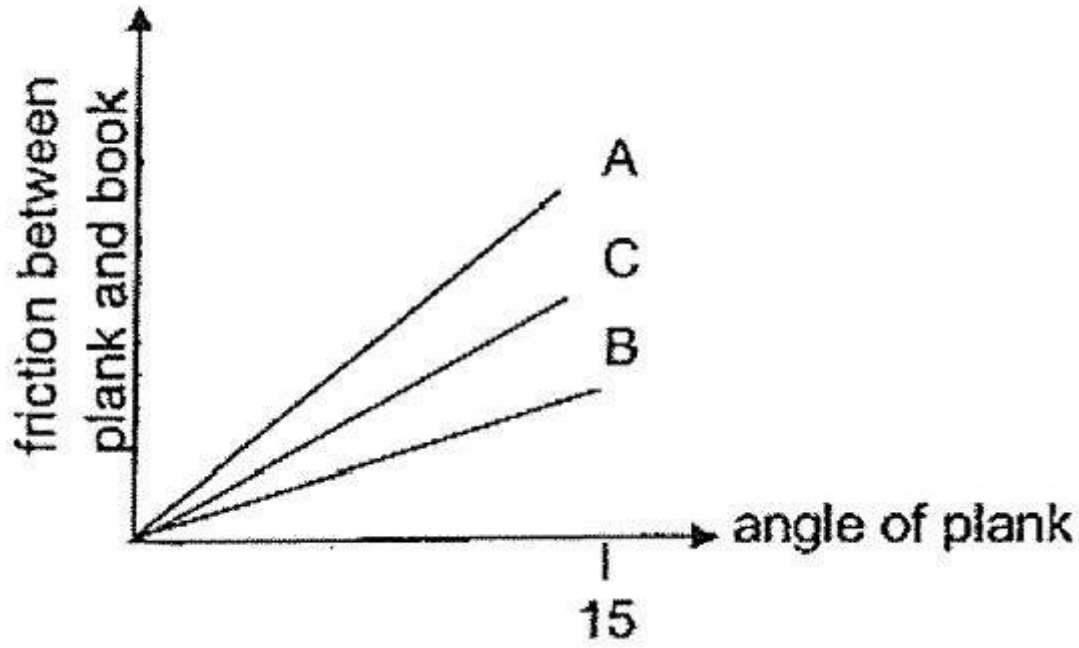
B)


friction between
plank and book
B
C
A
angle of plank
15

C)


friction between
plank and book
C
B
A
angle of plank
15

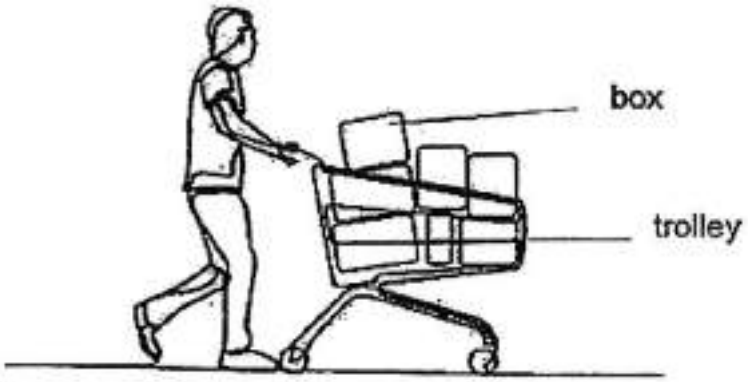
D)


friction between
plank and book
A
C
B
angle of plank
15

Question 28 of 64

Primary 6 Science (Prelim) 2 pts

Asri used a trolley to push some boxes for delivery. He was able to push the trolley faster after each box was delivered.



Which of the following explain the phenomenon?

A There was less friction between the trolley and the floor.

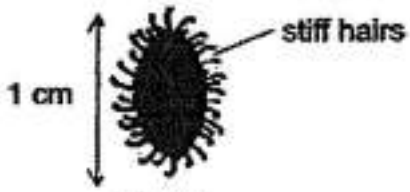
B He has to overcome less gravitational force between the trolley and the Earth.

C More kinetic energy of Asri was converted to more kinetic energy of the trolley.

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

Question 29 of 64 Primary 6 Science (Prelim) 0.5 pts

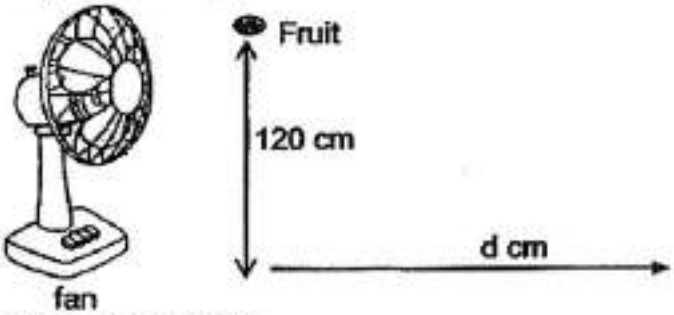
May conducted an experiment with two fruits, T and U, as shown.



Fruit T

Fruit U

She dropped fruit T and U from a height of 120 cm in front of a fan. She measured the distance,d, travelled by the fruits.



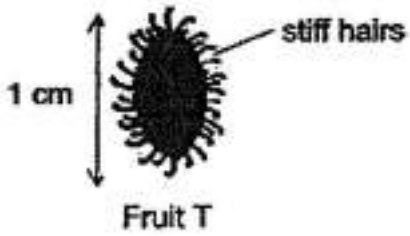
The results are shown below.

Fruit	T	U
Distance,d / cm	5	50

State the method of dispersal for fruit T.

Question 30 of 64 Primary 6 Science (Prelim) 0.5 pts

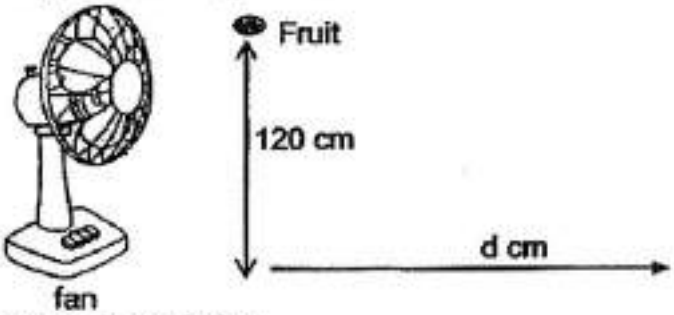
May conducted an experiment with two fruits, T and U, as shown.



Fruit T

Fruit U

She dropped fruit T and U from a height of 120 cm in front of a fan. She measured the distance,d, travelled by the fruits.



The results are shown below.

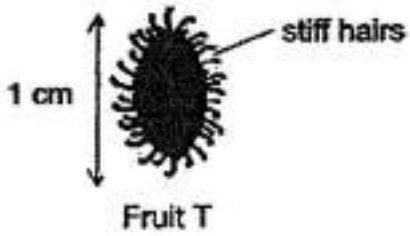
Fruit	T	U
Distance,d / cm	5	50

State the method of dispersal for fruit U.

Question 31 of 64

Primary 6 Science (Prelim) 0 pts

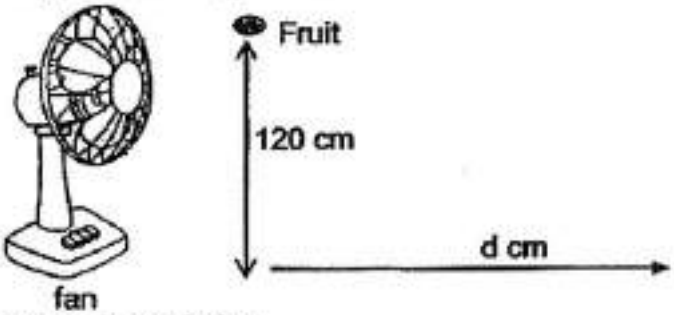
May conducted an experiment with two fruits, T and U, as shown.



Fruit T

Fruit U

She dropped fruit T and U from a height of 120 cm in front of a fan. She measured the distance,d, travelled by the fruits.



The results are shown below.

Fruit	T	U
Distance,d / cm	5	50

Explain why the distance travelled by Fruit U is further. (1 mark)

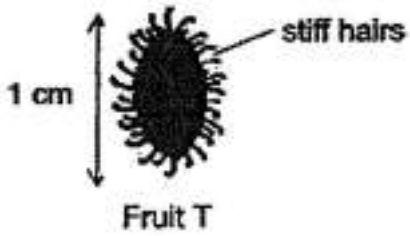
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 32 of 64

Primary 6 Science (Prelim) 0 pts

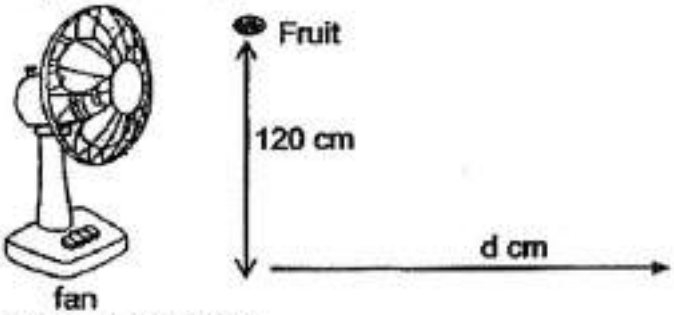
May conducted an experiment with two fruits, T and U, as shown.



Fruit T

Fruit U

She dropped fruit T and U from a height of 120 cm in front of a fan. She measured the distance,d, travelled by the fruits.



The results are shown below.

Fruit	T	U
Distance,d / cm	5	50

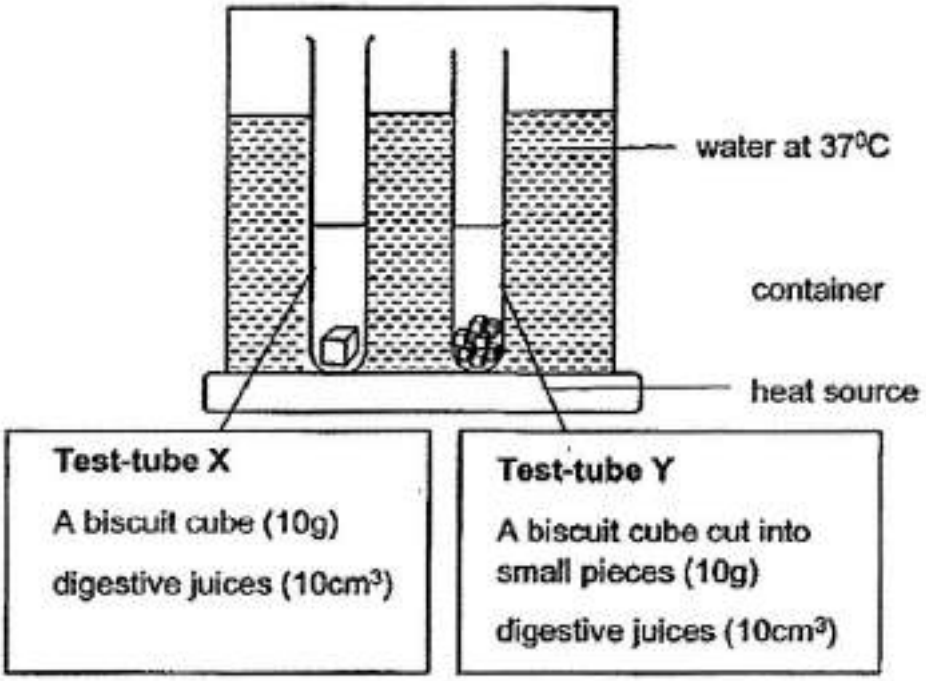
How do young plants benefit when they grow further away from the parent plants? (1 mark)

This question 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.

Question 33 of 64 Primary 6 Science (Prelim) 0 pts

Hani wanted to investigate the process of digestion in human body using digestive juices. The diagram shows the two test-tubes, X and Y, at the start of experiment.



He measured the time for the biscuits to be completely digested.

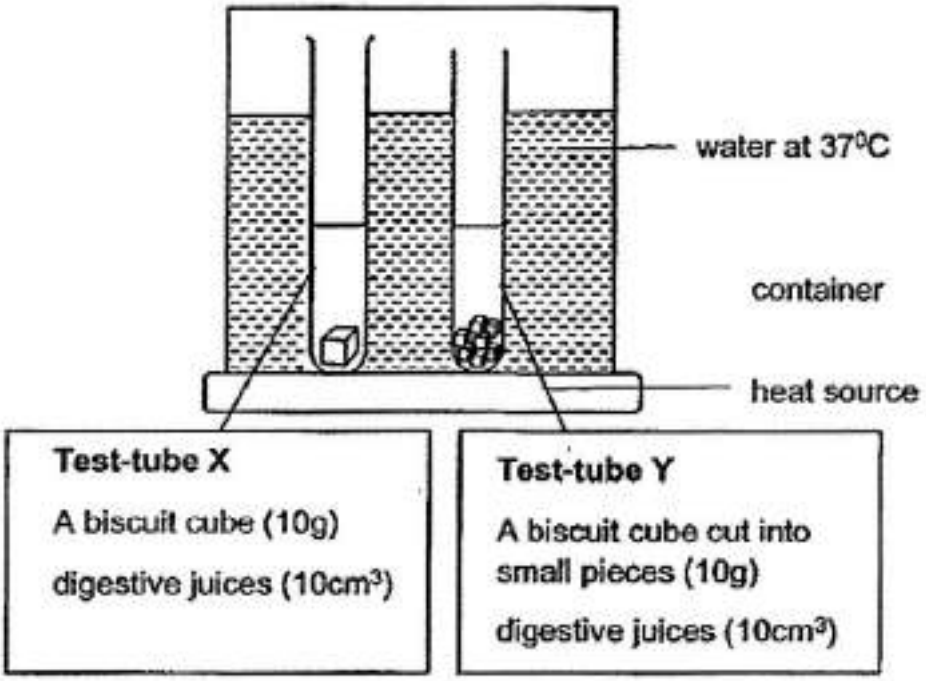
Give a reason why Hani choose a temperature of 37°C for the water in the container. (1 mark)

This question 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.

Question 34 of 64 Primary 6 Science (Prelim) 2 pts

Hani wanted to investigate the process of digestion in human body using digestive juices. The diagram shows the two test-tubes, X and Y, at the start of experiment.



He measured the time for the biscuits to be completely digested.

In which test tube would the biscuit be completely digested first? Explain why. (2 marks)

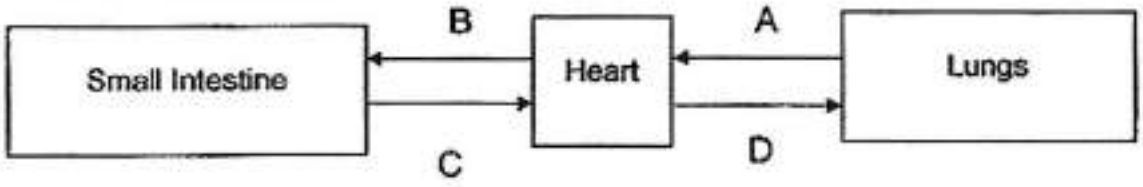
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 35 of 64

Primary 6 Science (Prelim) 1 pt

Hani studied the body systems in the human body as shown below. The arrows represent the flow of blood.



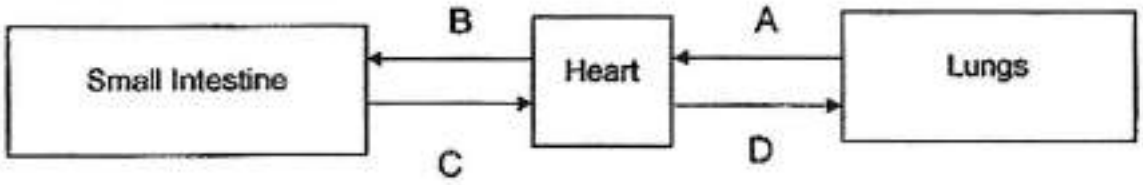
Which arrow represents the blood rich in digested food?

Arrow: _____

Question 36 of 64

Primary 6 Science (Prelim) 0 pts

Hani studied the body systems in the human body as shown below. The arrows represent the flow of blood.



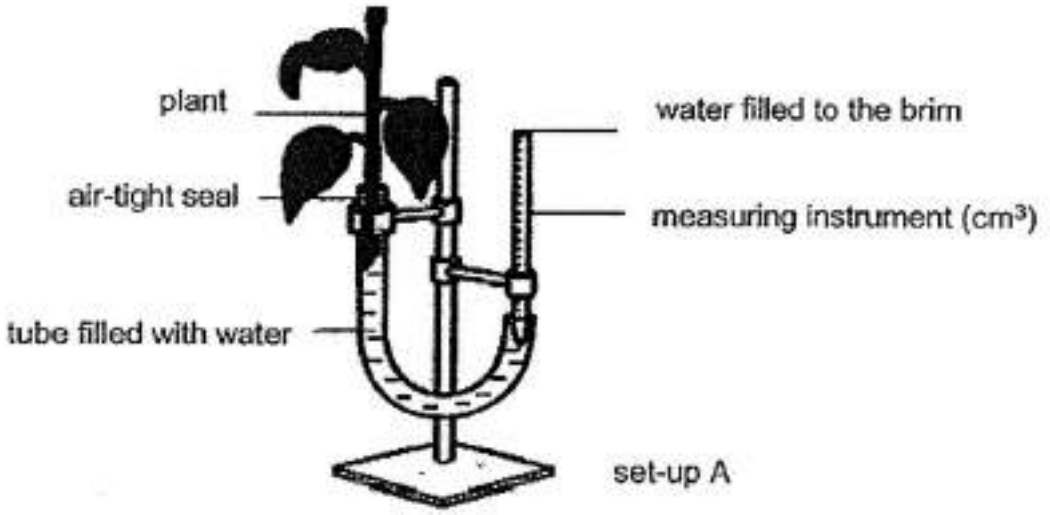
Describe how oxygen in the lungs reach the other parts of the body? (1 mark)

This question 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.

Question 37 of 64 Primary 6 Science (Prelim) 0 pts

May Ling investigated the volume of water taken in by plants using set-up A as shown below. She filled the tube with water until it reached the brim of the measuring instrument. Then she made a plant cutting to put in the tube and sealed it tightly.



She measured the volume of water taken in by the plant in 30 minutes.

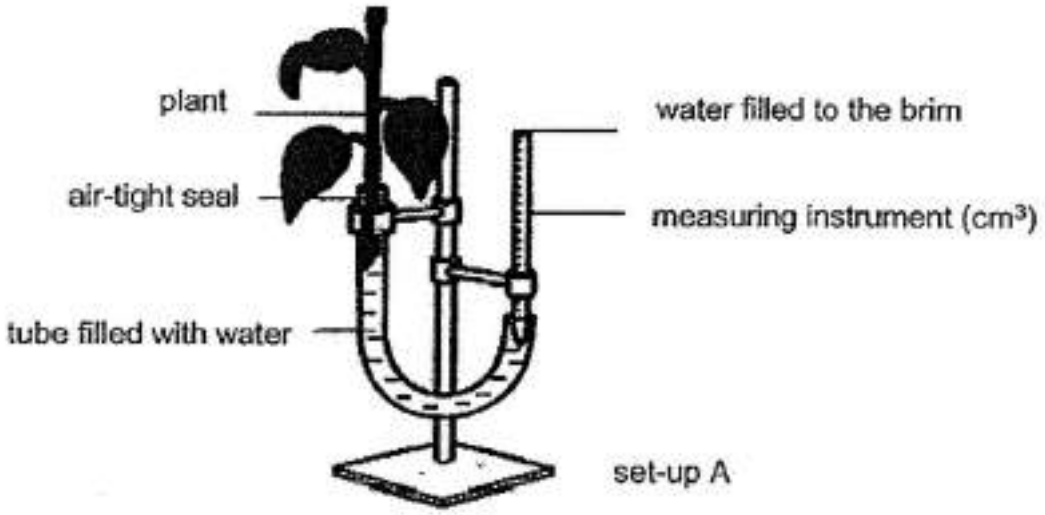
How did she measure the volume of water taken in by the plant? (1 mark)

This question 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.

Question 38 of 64 Primary 6 Science (Prelim) 0 pts

May Ling investigated the volume of water taken in by plants using set-up A as shown below. She filled the tube with water until it reached the brim of the measuring instrument. Then she made a plant cutting to put in the tube and sealed it tightly.



She measured the volume of water taken in by the plant in 30 minutes.

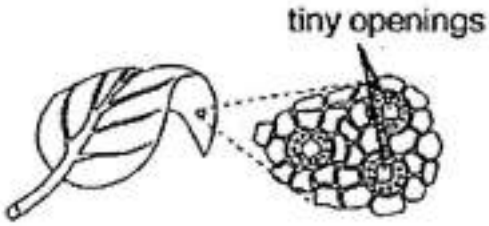
She repeated her experiment in the similar condition using two other set-ups, B and C, applying oil on different surfaces of the leaves as shown in the table below.

Set-up	Upper surface	Lower surface
B	Oil applied	No oil applied
C	No oil applied	Oil applied

She recorded the volume of water taken in by the plant as shown below.

Set-up	Volume of water taken in by plants in 30 minutes (cm^3)
A	10
B	6
C	4

Leaves have tiny openings on their surfaces.



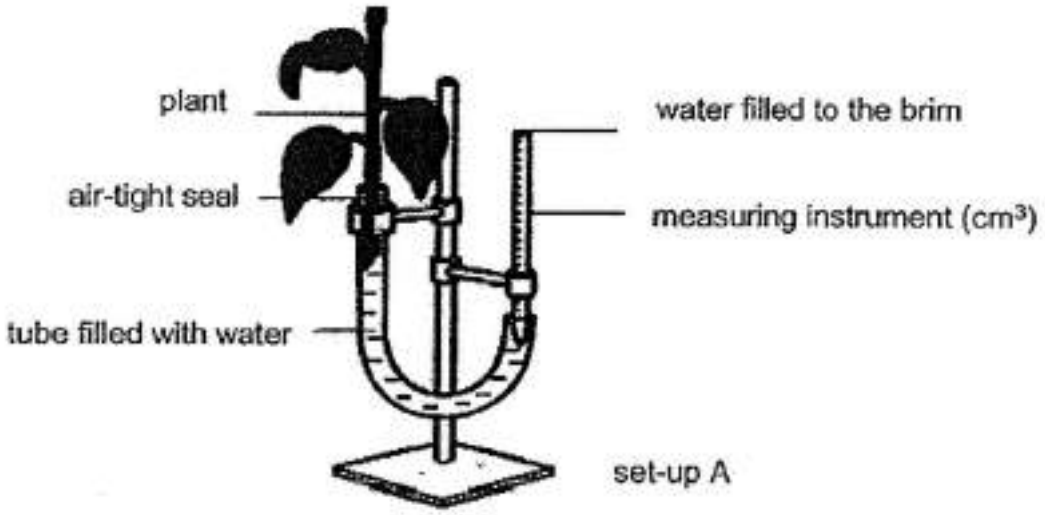
State one function of the tiny openings. (1 mark)

This question 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.

Question 39 of 64 Primary 6 Science (Prelim) 0 pts

May Ling investigated the volume of water taken in by plants using set-up A as shown below. She filled the tube with water until it reached the brim of the measuring instrument. Then she made a plant cutting to put in the tube and sealed it tightly.



She measured the volume of water taken in by the plant in 30 minutes.

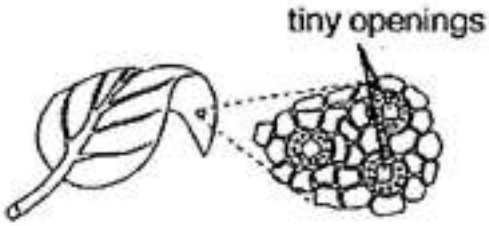
She repeated her experiment in the similar condition using two other set-ups, B and C, applying oil on different surfaces of the leaves as shown in the table below.

Set-up	Upper surface	Lower surface
B	Oil applied	No oil applied
C	No oil applied	Oil applied

She recorded the volume of water taken in by the plant as shown below.

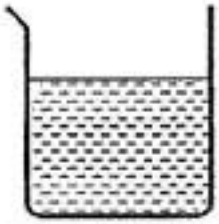
Set-up	Volume of water taken in by plants in 30 minutes (cm^3)
A	10
B	6
C	4

Leaves have tiny openings on their surfaces.



Based on the results in the table above, which surface of leaves (upper or lower) has more tiny openings?

Using only the materials shown below, describe a method and the observation to show your answer. [2]



beaker of hot water

leaf

Method:

Observation:

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

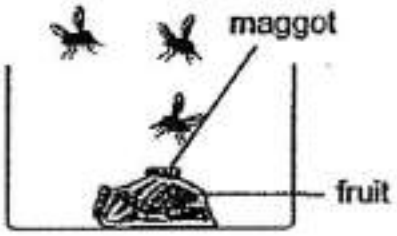
Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 40 of 64 Primary 6 Science (Prelim) 0 pts

Paul left a piece of fruit in an open container A. After three days, he found maggots on a piece of fruit as shown below.

Container A

There were maggots on the fruit.



He researched and found out that maggots are the larvae of fruit flies.

Draw and label the life cycle of the fruit fly in the box below. (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

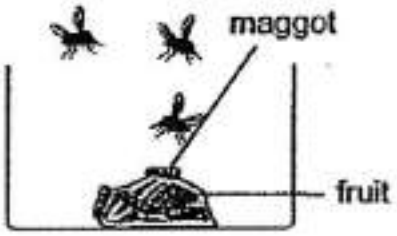
Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 41 of 64 Primary 6 Science (Prelim) 0 pts

Paul left a piece of fruit in an open container A. After three days, he found maggots on a piece of fruit as shown below.

Container A

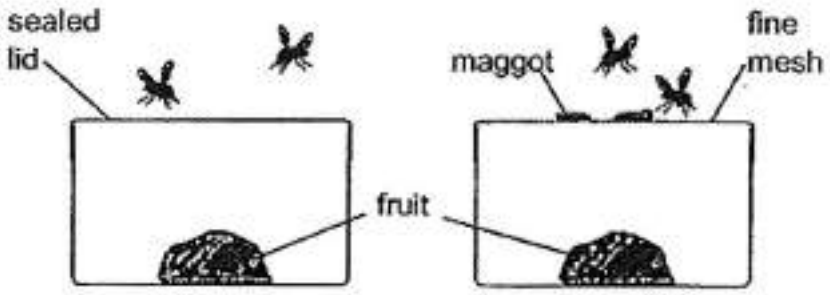
There were maggots on the fruit.



He researched and found out that maggots are the larvae of fruit flies.

Paul wanted to investigate if the type of seal of the container would affect the life cycle of fruit flies.

He placed a piece of fruit of the same size in two set-ups. After three days, the results were as shown below.



Container B

There were no maggots on the fruit

Container C

There were maggots on fine mesh but not on the fruit

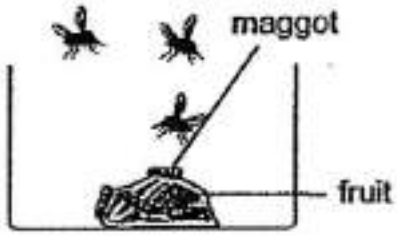
Explain why the maggots that hatched on the fine mesh in container C could not complete their life cycle. (1 mark)

This question 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.

Question 42 of 64 Primary 6 Science (Prelim) 0 pts

Paul left a piece of fruit in an open container A. After three days, he found maggots on a piece of fruit as shown below.



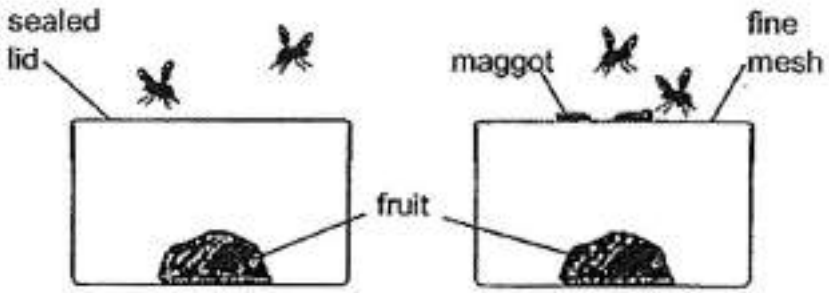
Container A

There were maggots on the fruit.

He researched and found out that maggots are the larvae of fruit flies.

Paul wanted to investigate if the type of seal of the container would affect the life cycle of fruit flies.

He placed a piece of fruit of the same size in two set-ups. After three days, the results were as shown below.



Container B

There were no maggots on the fruit

Container C

There were maggots on fine mesh but not on the fruit

Can containers, A and B, be used to confirm that maggots did not come from fruit? Explain why. (2 marks)

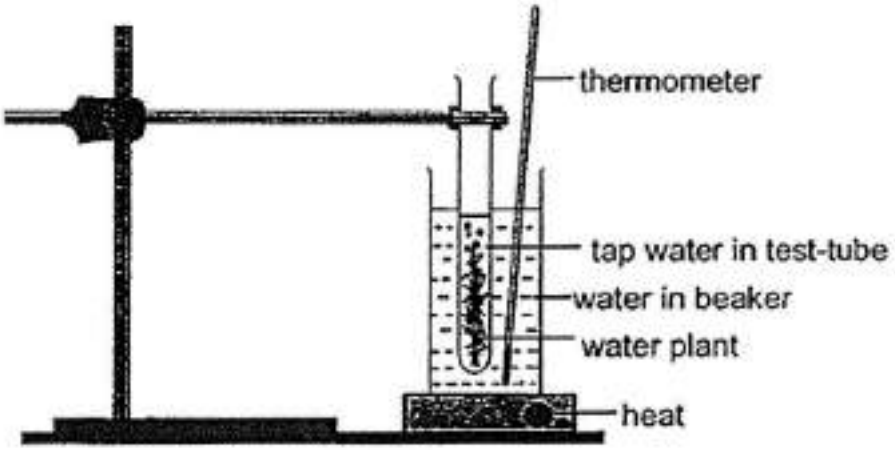
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 43 of 64

Primary 6 Science (Prelim) 0 pts

Andrew wants to investigate how temperature of water affects the number of bubbles produced by the water plant in one minute. He set up the experiment as shown below in a lit room.



State all the requirements for the water plant to produce the bubbles. (1 mark)

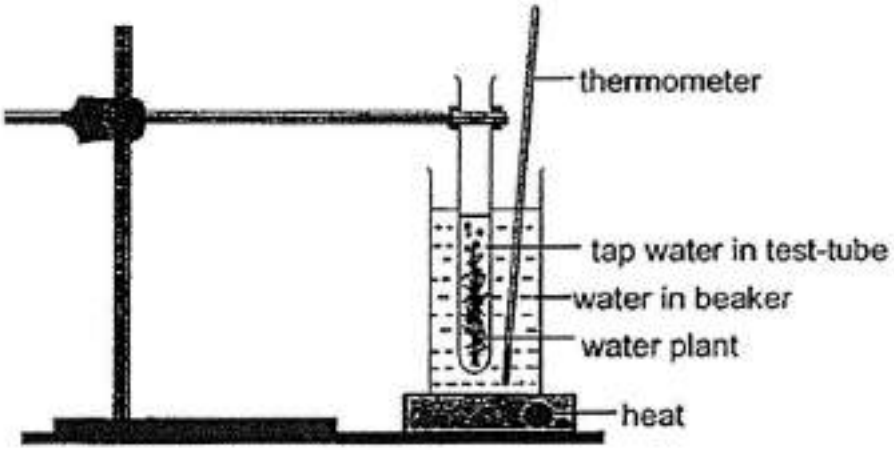
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

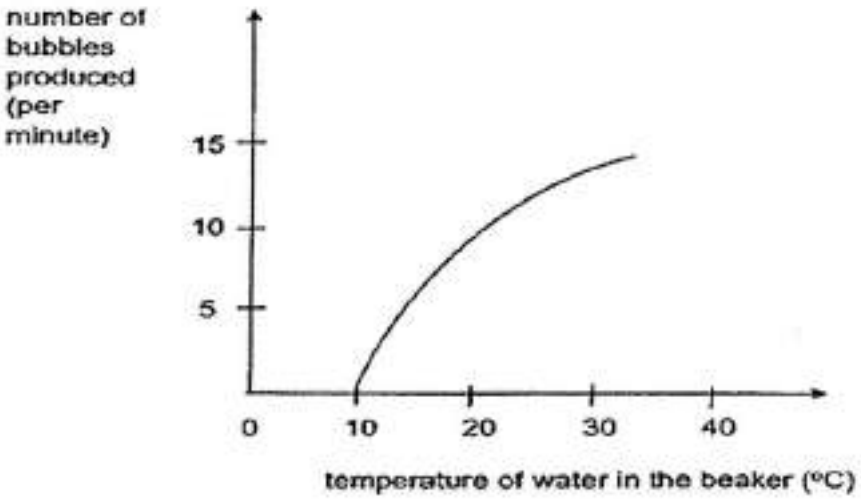
Question 44 of 64

Primary 6 Science (Prelim) 0 pts

Andrew wants to investigate how temperature of water affects the number of bubbles produced by the water plant in one minute. He set up the experiment as shown below in a lit room.



Andrew counted the number of bubbles produced at different temperatures. His results are shown on the graph below.



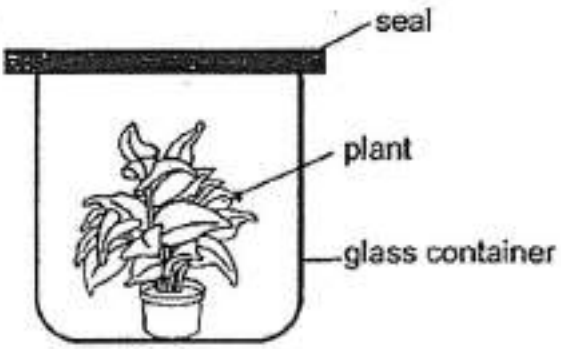
State the relationship between the temperature of water and the number of bubbles produced. [2]

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

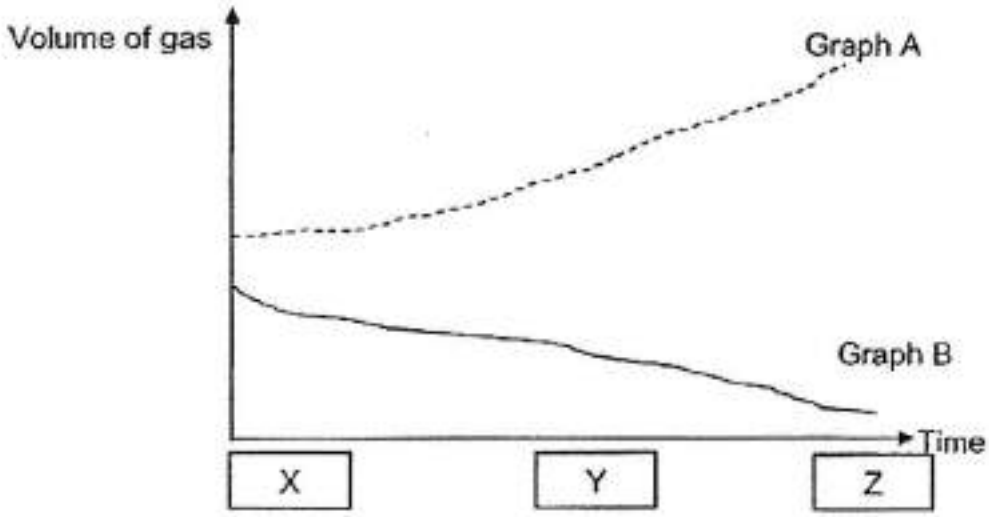
Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 45 of 64 Primary 6 Science (Prelim) 0.5 pts

Melvin wanted to find out how the amount of oxygen and carbon dioxide changes in a plant. He placed a plant in a sealed glass container in a bright place.



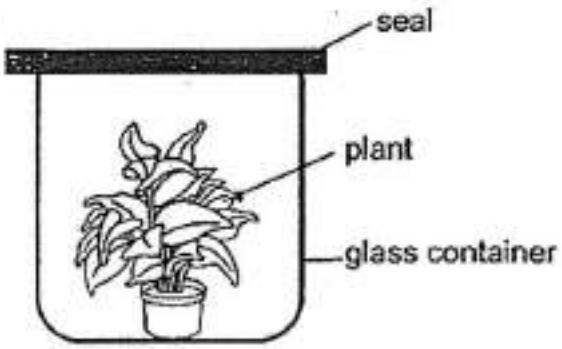
He carried out his experiment and using his results, he plotted the graphs as shown below.



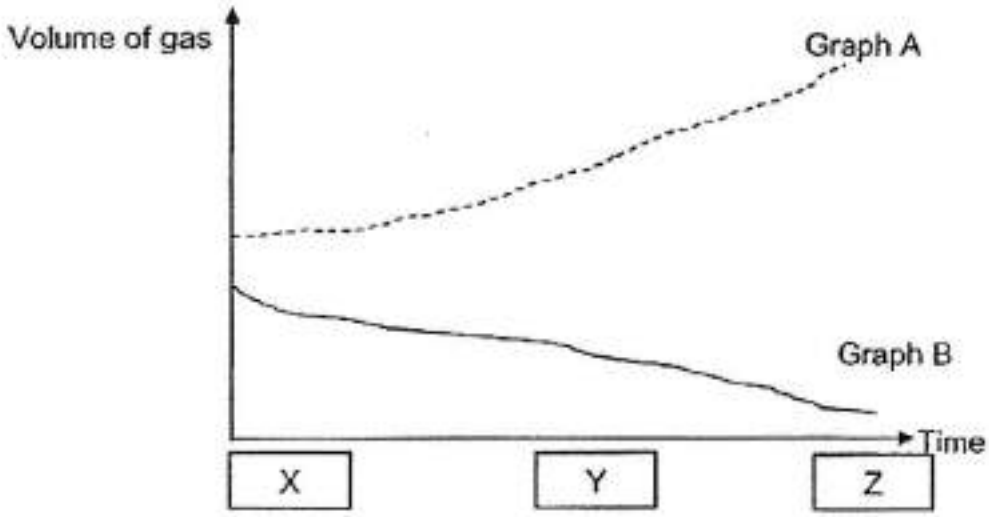
Identify the gas for Graph A.

Question 46 of 64 Primary 6 Science (Prelim) 0.5 pts

Melvin wanted to find out how the amount of oxygen and carbon dioxide changes in a plant. He placed a plant in a sealed glass container in a bright place.



He carried out his experiment and using his results, he plotted the graphs as shown below.

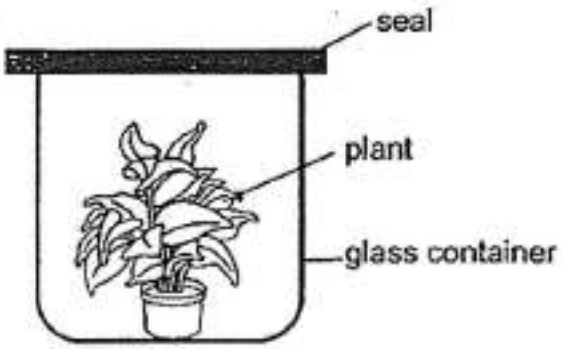


Identify the gas for Graph B.

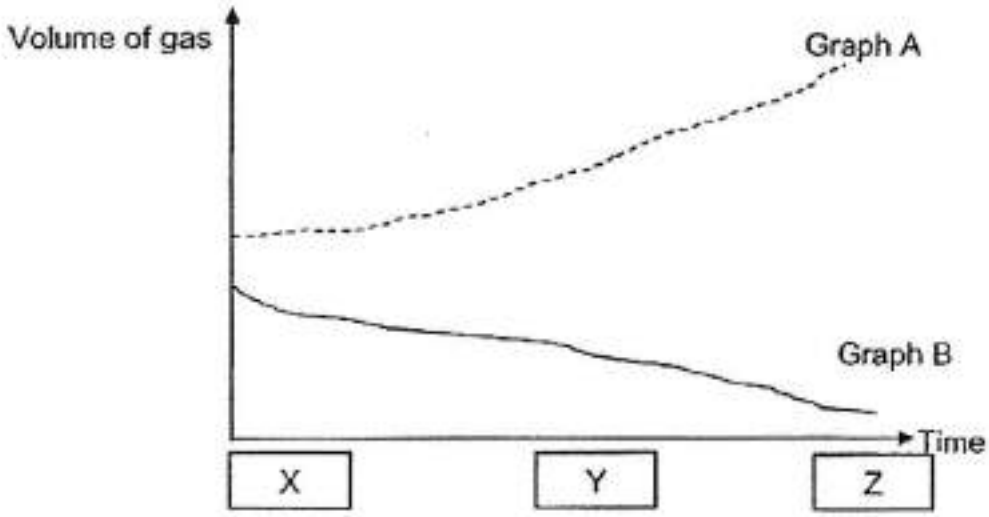
Question 47 of 64

Primary 6 Science (Prelim) 0 pts

Melvin wanted to find out how the amount of oxygen and carbon dioxide changes in a plant. He placed a plant in a sealed glass container in a bright place.



He carried out his experiment and using his results, he plotted the graphs as shown below.



Which letter X, Y or Z represent 'Noon Time'? Explain why? (2 marks)

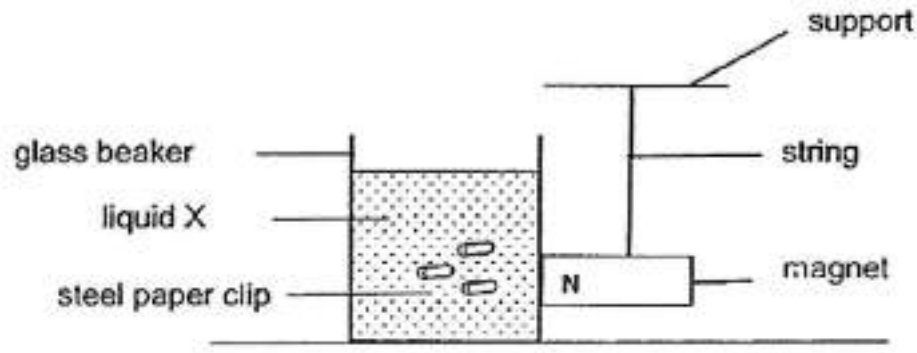
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 48 of 64

Primary 6 Science (Prelim) 0 pts

Kumar placed three steel paper clips into a glass beaker containing liquid X. He used the North pole (N) of the magnet to touch the glass beaker as shown below.



State a property of magnets that Kumar is trying to show? (1 mark)

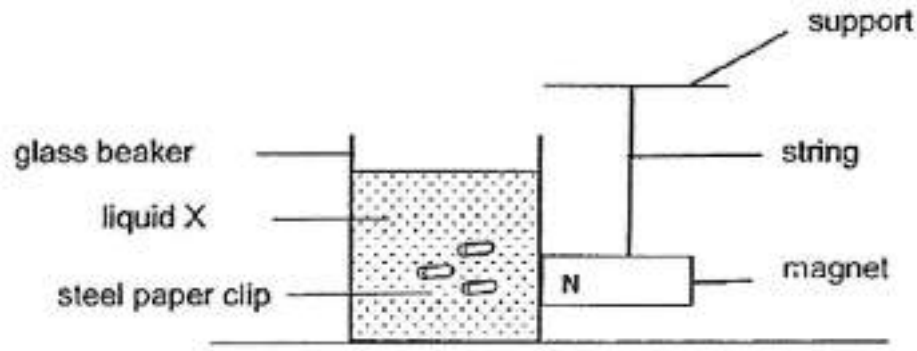
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 49 of 64

Primary 6 Science (Prelim) 0 pts

Kumar placed three steel paper clips into a glass beaker containing liquid X. He used the North pole (N) of the magnet to touch the glass beaker as shown below.



Kumar repeated the same experiment but he changed the part of the magnet touching the glass beaker. Using the same beaker, steel paper clips and magnet, he observed that the steel paper clips moved slower towards the magnet.

Which part of the magnet was touching the glass beaker? Explain. (1 mark)

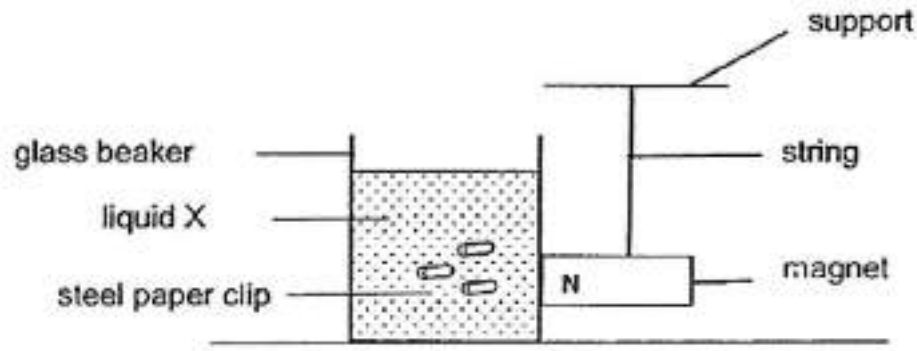
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 50 of 64

Primary 6 Science (Prelim) 0 pts

Kumar placed three steel paper clips into a glass beaker containing liquid X. He used the North pole (N) of the magnet to touch the glass beaker as shown below.



Kumar repeated the same experiment but he changed the part of the magnet touching the glass beaker. Using the same beaker, steel paper clips and magnet, he observed that the steel paper clips moved slower towards the magnet.

State another variable that Kumar must keep the same in the above experiment. (1 mark)

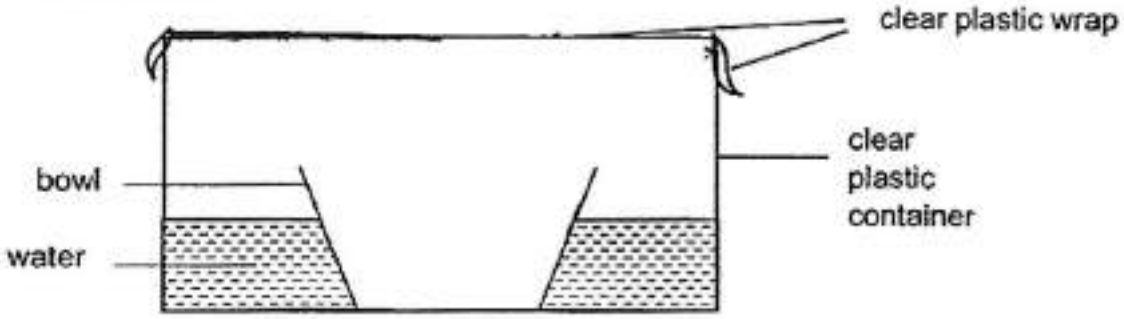
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 51 of 64

Primary 6 Science (Prelim) 0 pts

A teacher, Mr Lim, set up the apparatus as shown. He placed it under the sun for a few hours.



Mr Lim then observed a decrease in the water level in the container.

Draw, in the diagram above, another possible observation he can make on the plastic wrap. (1 mark)

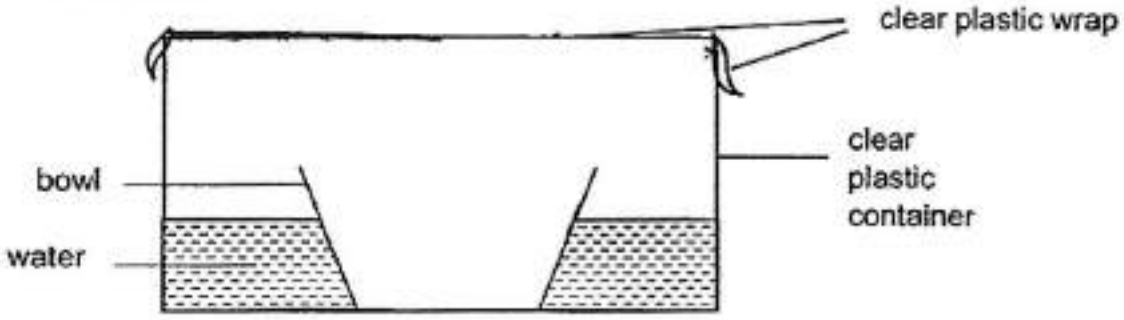
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 52 of 64

Primary 6 Science (Prelim) 1 pt

A teacher, Mr Lim, set up the apparatus as shown. He placed it under the sun for a few hours.

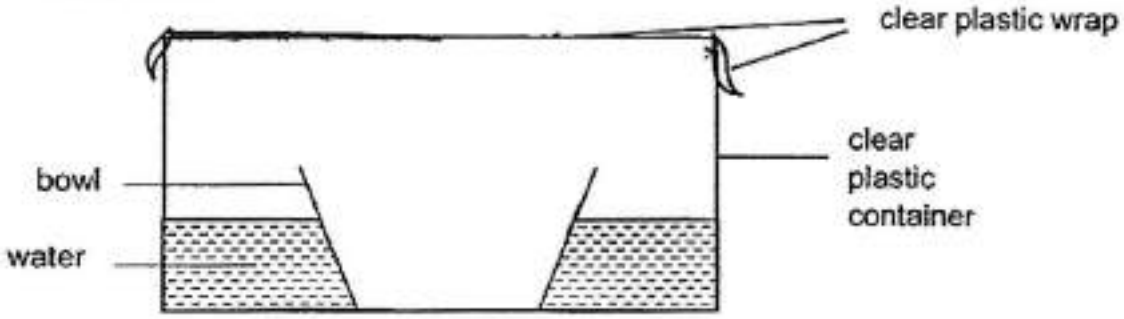


Mr Lim then observed a decrease in the water level in the container.

State the two processes involved for his observations to take place. (1 mark)

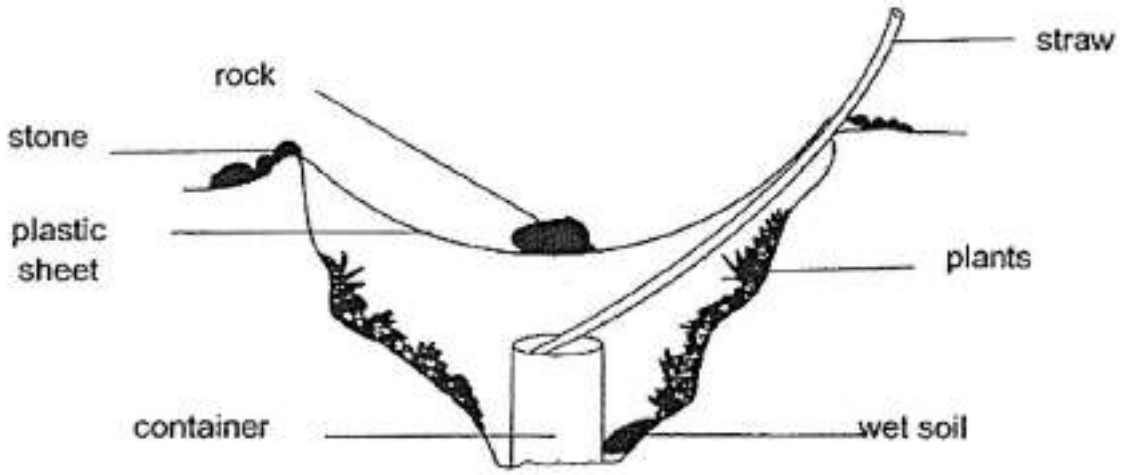
Question 53 of 64 Primary 6 Science (Prelim) 0 pts

A teacher, Mr Lim, set up the apparatus as shown. He placed it under the sun for a few hours.



Mr Lim then observed a decrease in the water level in the container.

Mr Lim's students went for a hike in a jungle and they decided to use their teacher's method to collect drinkable water as shown below.



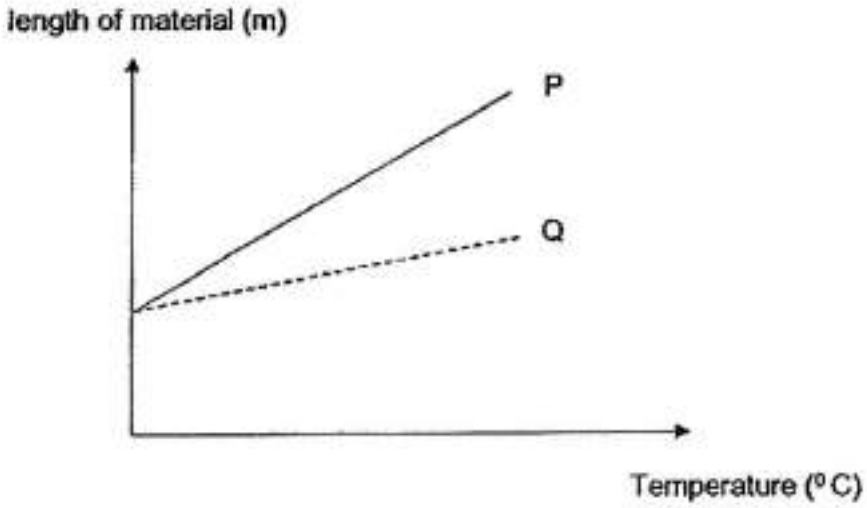
Suggest one way the students can collect more water. Explain why the method works. [2]

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

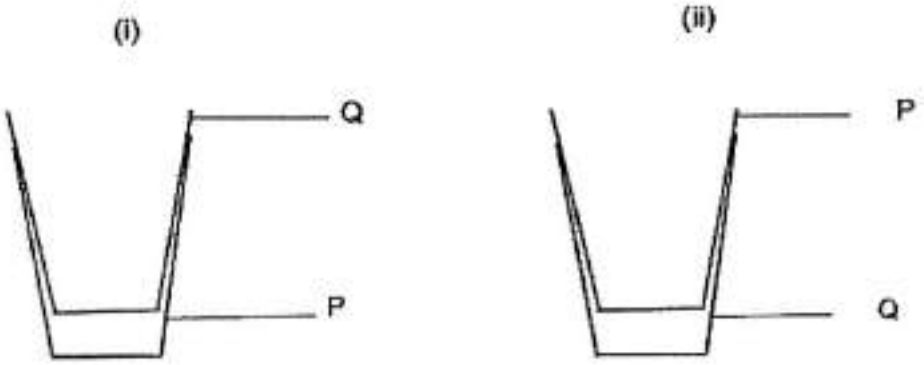
Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 54 of 64 Primary 6 Science (Prelim) 0 pts

The graph below shows how the length of materials, P and Q, changes as temperature changes.



The containers made of material, P and Q, are stuck together in two different positions, (i) and (ii), as shown below.



Diwei was given a basin of hot water to separate P and Q.

Based on the graph above, in which position (i) or (ii), could she use hot water to separate P and Q in a shorter time?

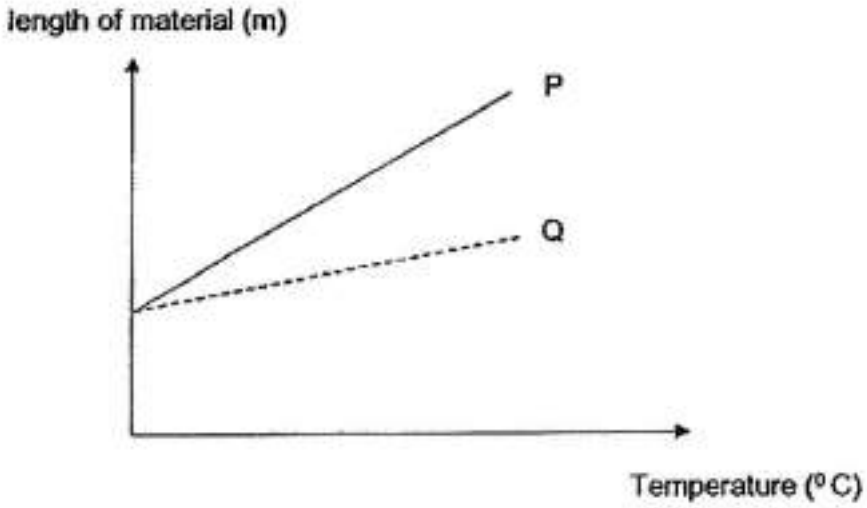
Draw and label to show how she could separate them. (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

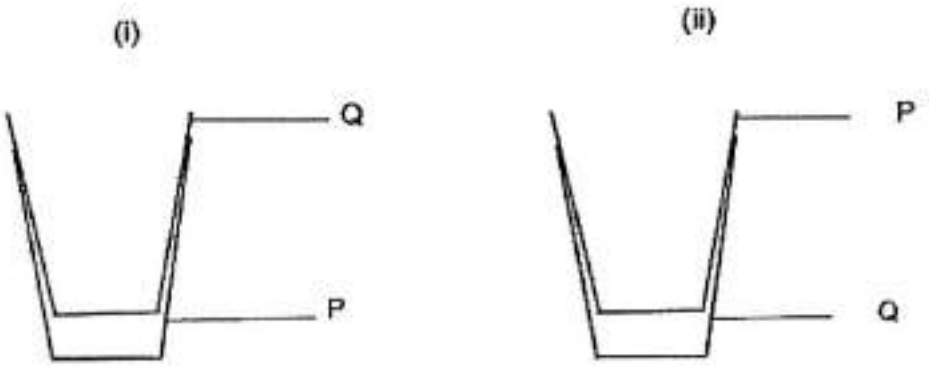
Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 55 of 64 Primary 6 Science (Prelim) 0 pts

The graph below shows how the length of materials, P and Q, changes as temperature changes.



The containers made of material, P and Q, are stuck together in two different positions, (i) and (ii), as shown below.



Explain how the way in the previous question works to separate P and Q in a shorter time. (2 marks)

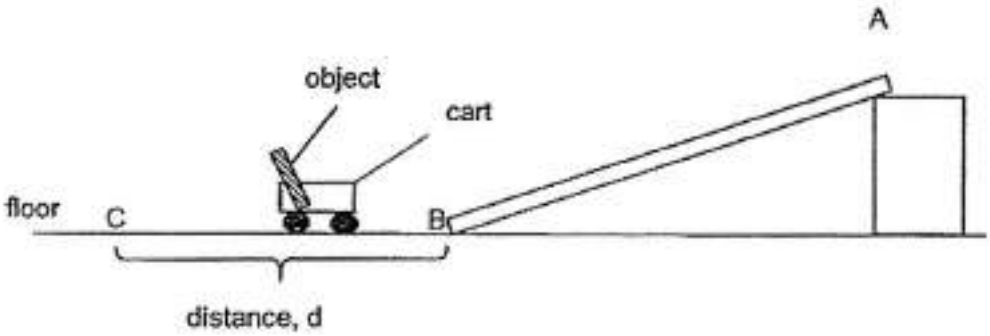
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 56 of 64

Primary 6 Science (Prelim) 0 pts

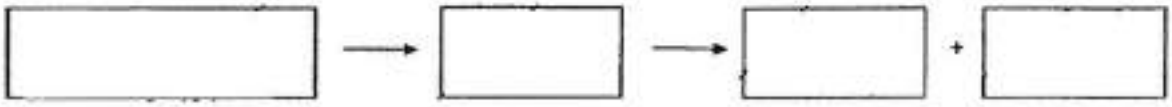
Pauline set up the apparatus below to investigate how mass of the object in the cart affects the distance, d, travelled by the cart when it hit the floor at B and stopped at C.



Pauline repeated the experiment using objects of different mass placed inside the cart. The results of her experiment are shown in the table below.

Mass of Object in the cart (g)	Distance, d (cm)
50	10
100	16
150	22

Fill in the boxes below to show the energy conversion as the cart moved from A to C. [1]



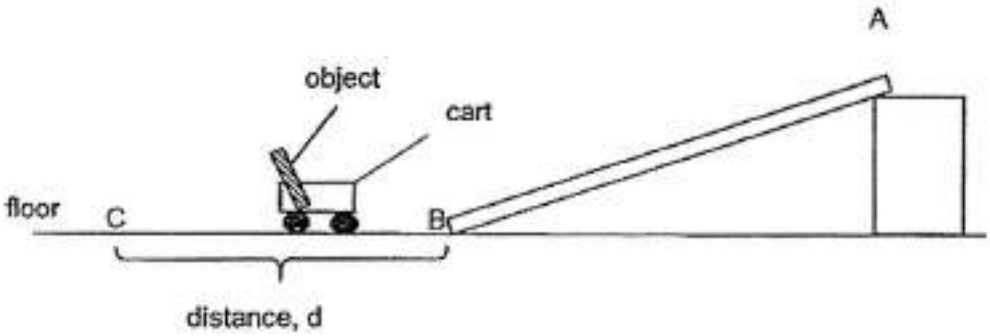
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 57 of 64

Primary 6 Science (Prelim) 0 pts

Pauline set up the apparatus below to investigate how mass of the object in the cart affects the distance, d, travelled by the cart when it hit the floor at B and stopped at C.



Pauline repeated the experiment using objects of different mass placed inside the cart. The results of her experiment are shown in the table below.

Mass of Object in the cart (g)	Distance, d (cm)
50	10
100	16
150	22

Explain how the mass of the object affects the distance, d, that the cart moved. (2 marks)

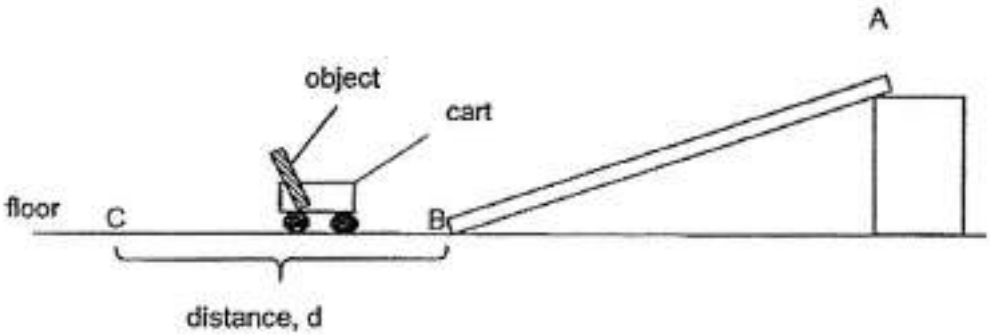
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 58 of 64

Primary 6 Science (Prelim) 0 pts

Pauline set up the apparatus below to investigate how mass of the object in the cart affects the distance, d, travelled by the cart when it hit the floor at B and stopped at C.



Pauline repeated the experiment using objects of different mass placed inside the cart. The results of her experiment are shown in the table below.

Mass of Object in the cart (g)	Distance, d (cm)
50	10
100	16
150	22

Give a reason why Pauline used the same cart for her experiment. (1 mark)

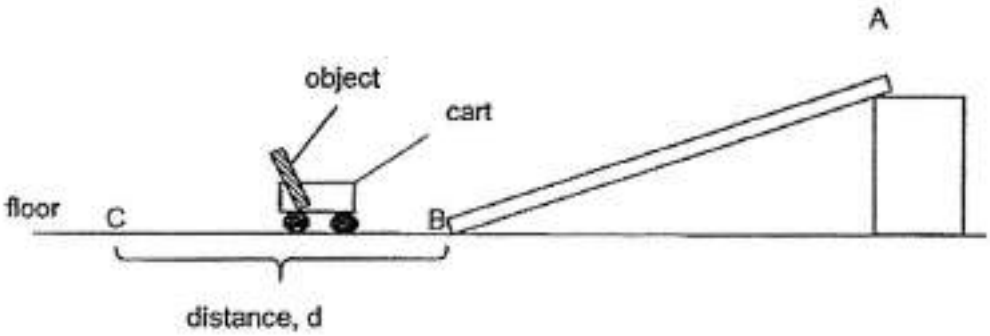
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 59 of 64

Primary 6 Science (Prelim) 0 pts

Pauline set up the apparatus below to investigate how mass of the object in the cart affects the distance, d, travelled by the cart when it hit the floor at B and stopped at C.



Pauline repeated the experiment using objects of different mass placed inside the cart. The results of her experiment are shown in the table below.

Mass of Object in the cart (g)	Distance, d (cm)
50	10
100	16
150	22

Pauline wants to modify her set-up to find out the relationship between the height of the ramp and the distance, d.

Suggest two ways to change her set-up. (1 mark)

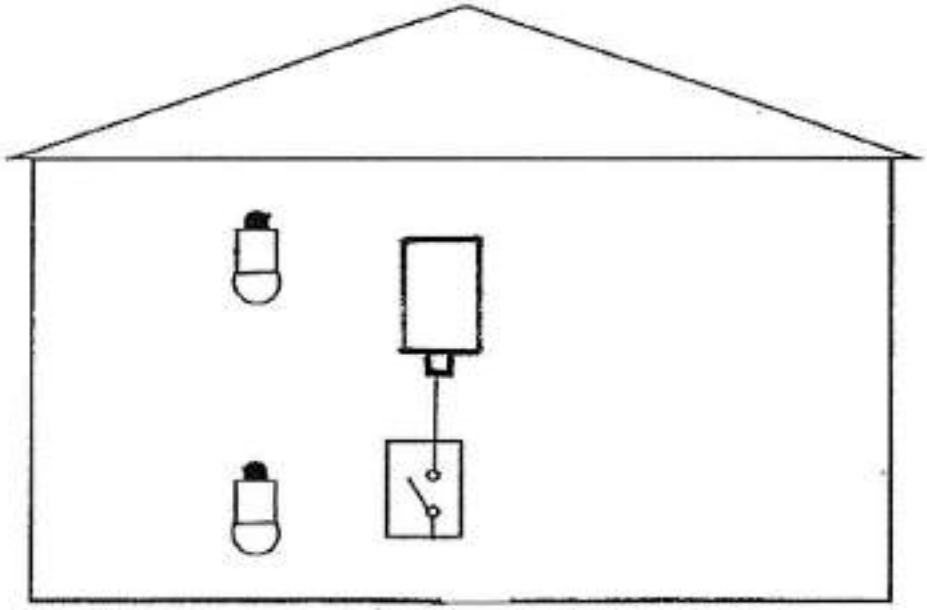
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 60 of 64

Primary 6 Science (Prelim) 0 pts

Mei Ling sets up a toy house as shown in the diagram. She wants the two bulbs to be lit at the same time and of equal brightness when she closes the switch.



Complete the circuit in the diagram above so that it will work as described. (2 marks)

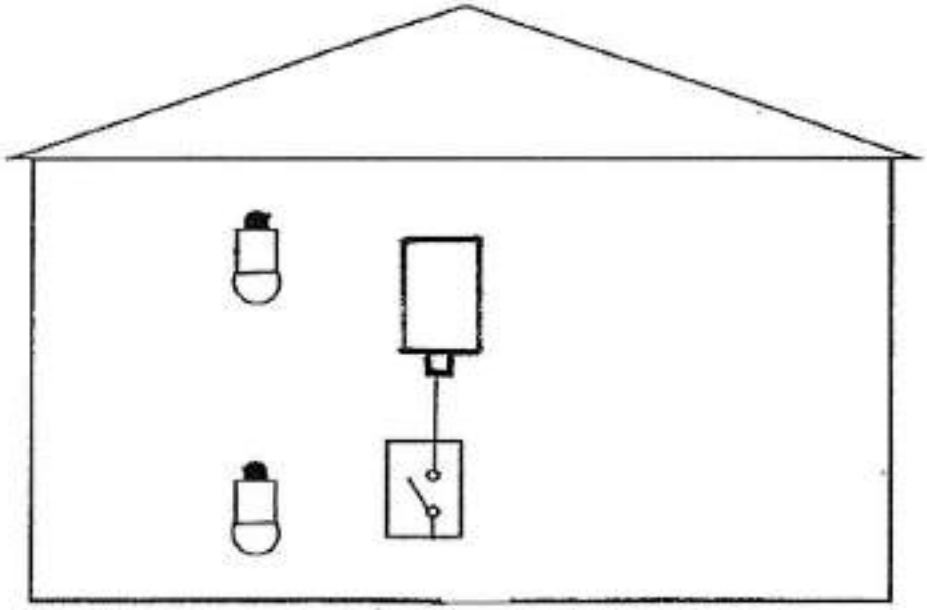
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 61 of 64

Primary 6 Science (Prelim) 1 pt

Mei Ling sets up a toy house as shown in the diagram. She wants the two bulbs to be lit at the same time and of equal brightness when she closes the switch.

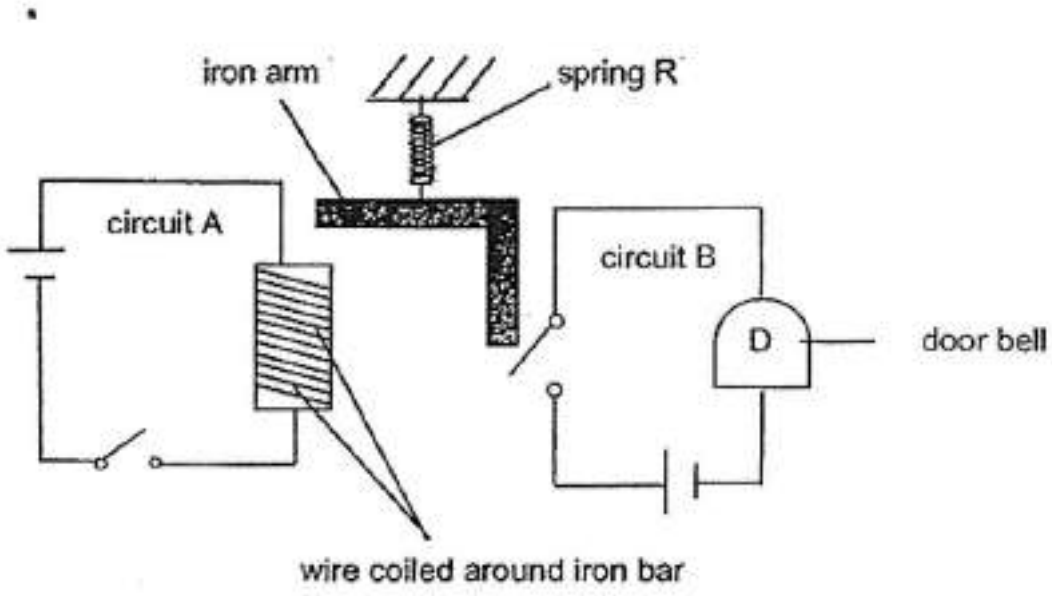


State the arrangement of the bulbs in your drawing. (1 mark)

Question 62 of 64

Primary 6 Science (Prelim) 0 pts

Tom set up a doorbell D using two circuits containing two switches as shown.



Explain how the doorbell rang when Tom closed circuit A. (2 marks)

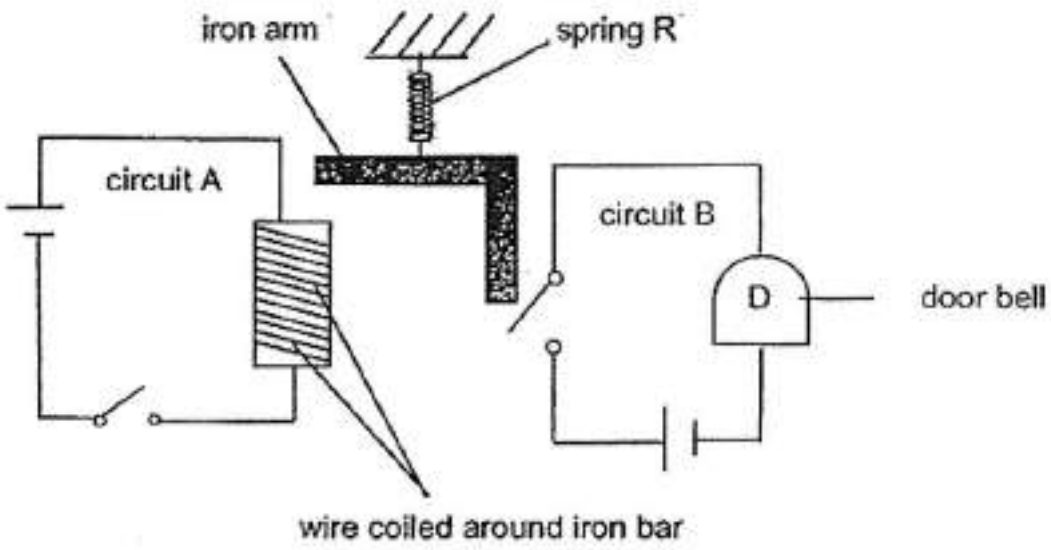
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

Question 63 of 64

Primary 6 Science (Prelim) 0 pts

Tom set up a doorbell D using two circuits containing two switches as shown.



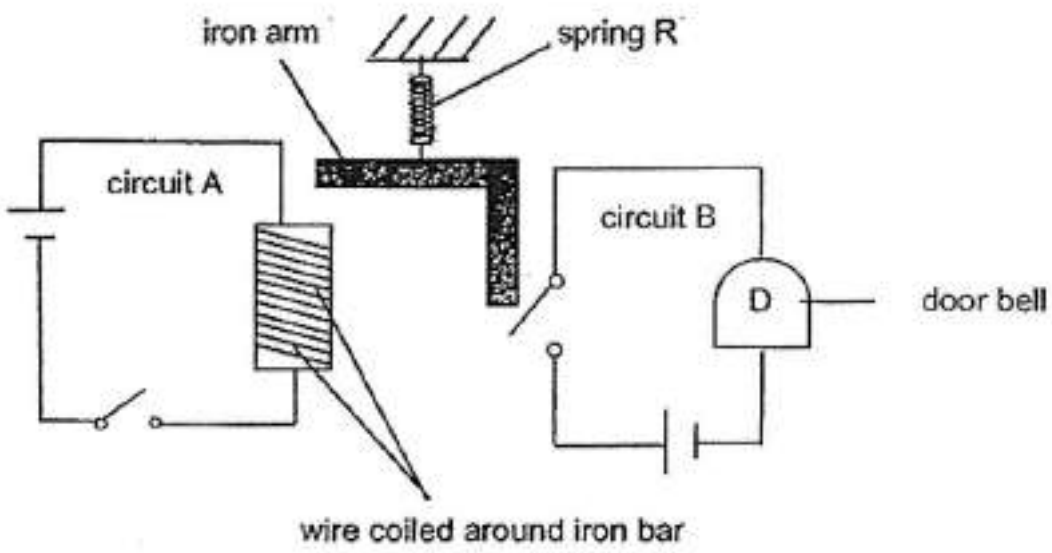
Tom replaced spring R with another spring S and observed that the doorbell did not ring when circuit A was closed. Give a reason for his observation. (1 mark)

This question 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.

Question 64 of 64 Primary 6 Science (Prelim) 0 pts

Tom set up a doorbell D using two circuits containing two switches as shown.



Without changing spring S, what can Tom do if he wants the doorbell to ring when circuit A is closed? (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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