

Test: (2020) Primary 5 Science (Term 4) - Maris Stella

Points: 61 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 66

Primary 5 Science (Term 4) 2 pts

For each question, four options are given. One of them is the correct answer.

Which of the following is a non-flowering plant?

-
- A)** fern
- B)** yeast
- C)** mould
- D)** mushroom

Question 2 of 66

Primary 5 Science (Term 4)

2 pts

The table below compares the life cycle of a cockroach and a butterfly.

	Characteristics	Cockroach	Butterfly
A	It has an egg stage in its life cycle.	X	✓
B	It has four stages in its life cycle.	X	✓
C	Its young resemble its adult.	✓	X

Key
✓ : yes
X: no

Which of the following comparison(s) is/are correct?

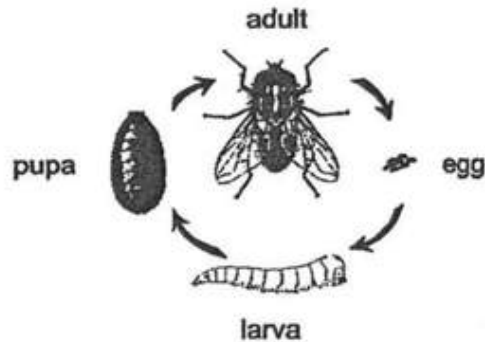
- A) B only
- B) A and C only
- C) B and C only
- D) A, B and C

Question 3 of 66

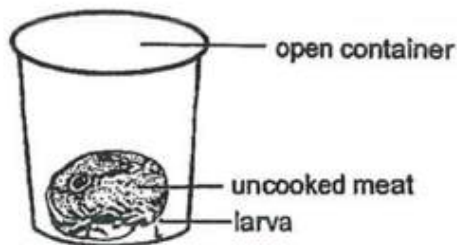
Primary 5 Science (Term 4)

2 pts

The life cycle of a housefly is shown below. The adult housefly lays its eggs on food so that its young will have access to an immediate source of food after the eggs hatch.

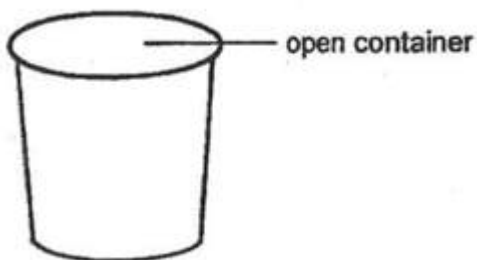


Joshua placed a piece of uncooked meat in an open container in a shady part of a garden. After a week, housefly larvae were observed on the uncooked meat as shown below.

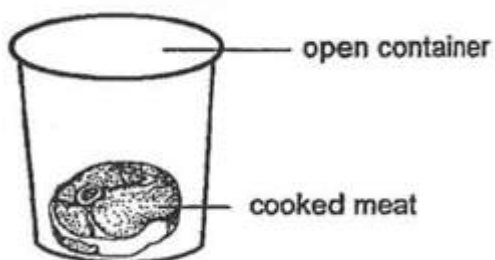


Which of the following set-ups should Joshua use to compare with the set-up above to prove that the larvae were not from the meat but from houseflies found in the garden?

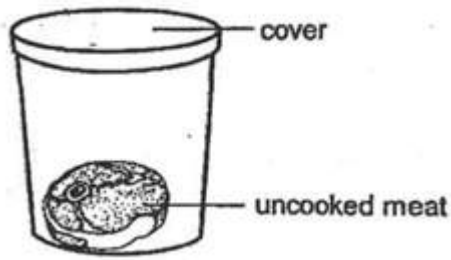
A)



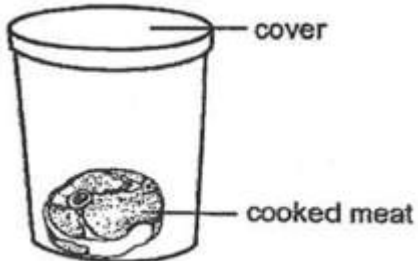
B)



C)



D)

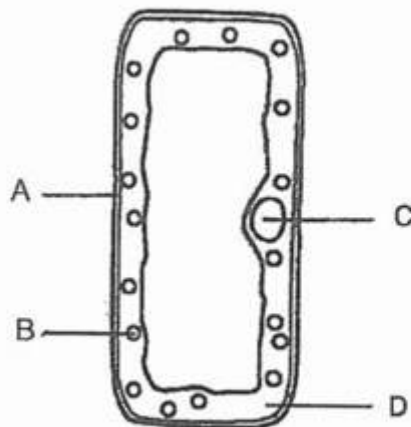


Question 4 of 66

Primary 5 Science (Term 4)

2 pts

The diagram below shows a plant cell.



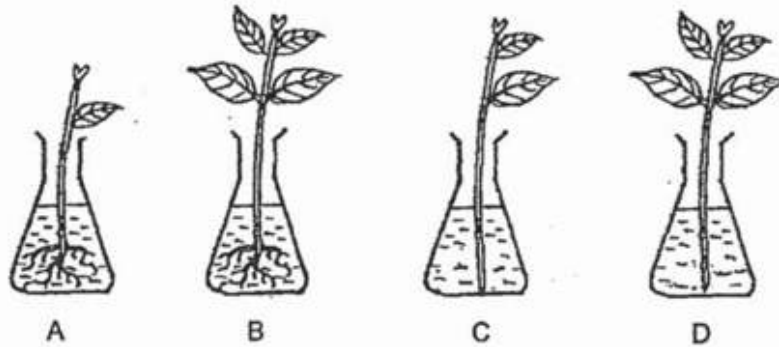
Which of the following cell parts is/are not found in an animal cell?

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

Question 5 of 66

Primary 5 Science (Term 4) 2 pts

Anna wanted to find out if the presence of roots will affect the amount of water taken in by a plant.



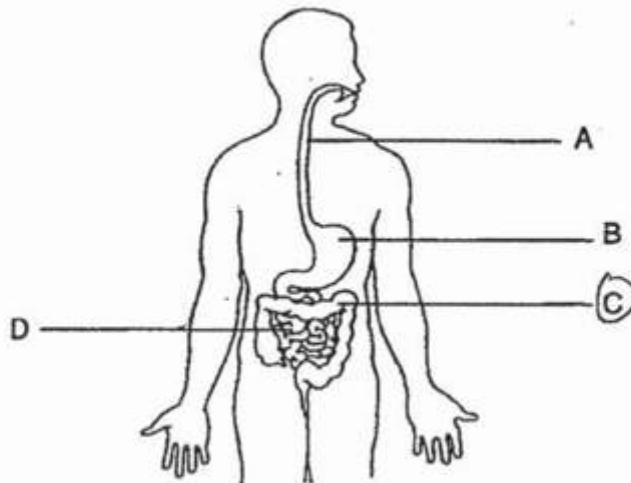
Which two set-ups should Anna choose to conduct her experiment?

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

Question 6 of 66

Primary 5 Science (Term 4) 2 pts

The diagram below shows the human digestive system.



Which part of the digestive system absorbs water from undigested food?

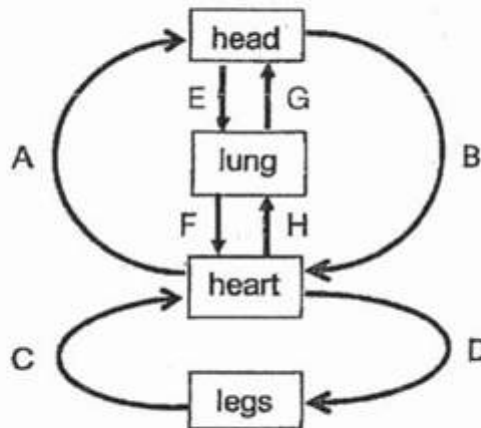
- A) A
- B) B
- C) C
- D) D

Question 7 of 66

Primary 5 Science (Term 4)

2 pts

Eva drew the diagram below to show the blood flow in some parts of the human body.



Which two arrows were not drawn correctly?

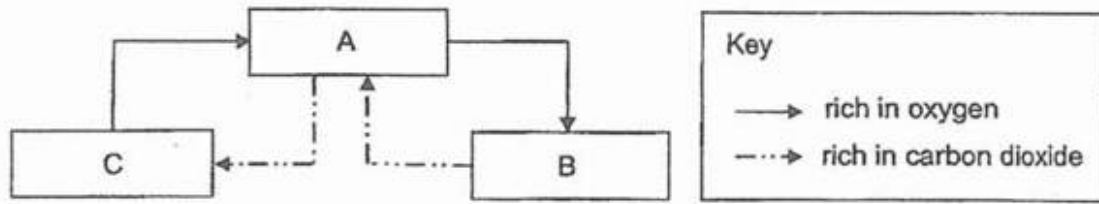
- A) A and C
- B) B and D
- C) E and G
- D) F and H

Question 8 of 66

Primary 5 Science (Term 4)

2 pts

The diagram below shows the direction of blood flow in some parts of the human body.



What do A, B and C represent?

	A	B	C
(1)	lungs	heart	other parts of the body
(2)	lungs	other parts of the body	heart
(3)	heart	other parts of the body	lungs
(4)	heart	lungs	other parts of the body

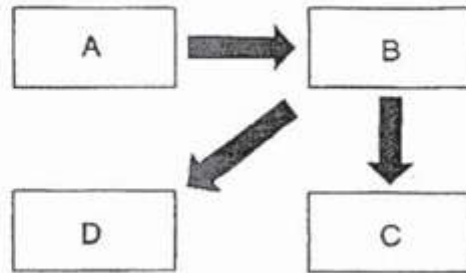
- A) 1
 B) 2
 C) 3
 D) 4

Question 9 of 66

Primary 5 Science (Term 4)

2 pts

The diagram below shows the transport of food in plants.



Which of the following correctly represents A, B, C and D?

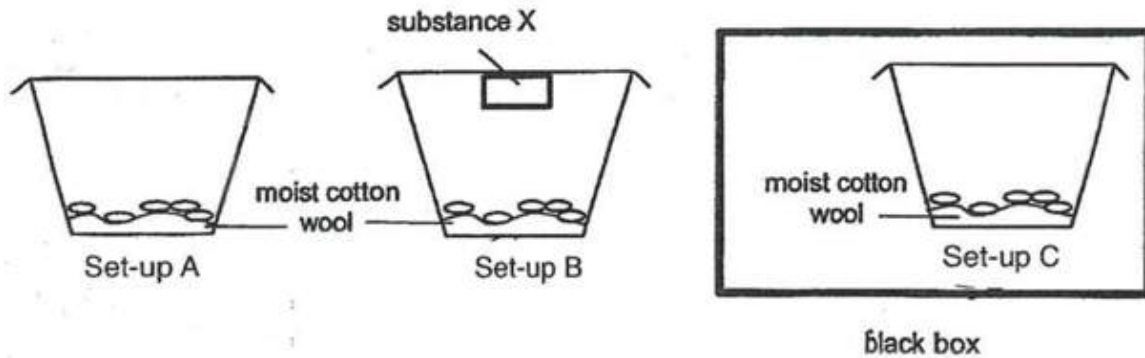
	A	B	C	D
(1)	leaf	stem	root	fruit
(2)	leaf	fruit	root	stem
(3)	root	stem	leaf	fruit
(4)	fruit	stem	leaf	root

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

Question 10 of 66

Primary 5 Science (Term 4) 2 pts

Siti placed five identical seeds in three clear plastic containers as shown below in the garden. Substance X absorbs carbon dioxide.



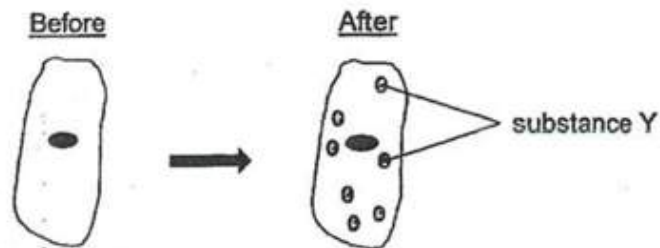
In which of the following set-ups will the seeds germinate?

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

Question 11 of 66

Primary 5 Science (Term 4) 2 pts

The diagrams below show the observations of an animal cell before and after placing it in a liquid containing substance Y.



Which cell part allowed for the movement of substance Y into the cell?

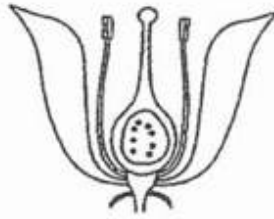
- A) nucleus
- B) cell wall
- C) cytoplasm
- D) cell membrane

Question 12 of 66

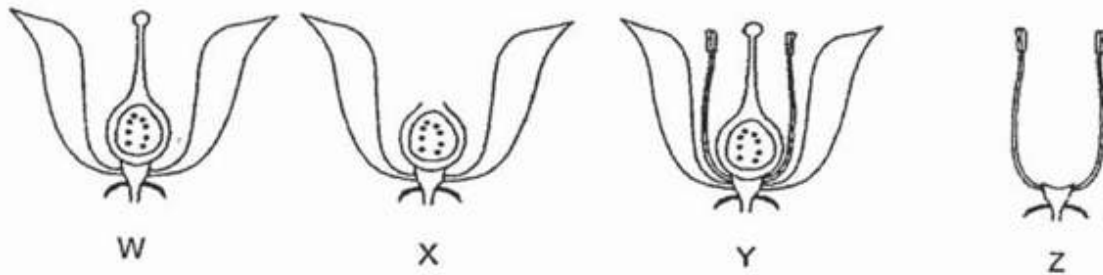
Primary 5 Science (Term 4)

2 pts

Below is a diagram of a flower from Plant P.



W, X, Y and Z are flowers from the plant P. However, some of their parts have been removed as shown below.



Which flowers can develop into fruits?

- A) Y only
- B) Z only
- C) W and Y only
- D) W, X and Y only

Question 13 of 66

Primary 5 Science (Term 4)

2 pts

A helmet is used to protect the head of a motorcyclist in an event of an accident.



The table below shows the properties of materials W, X, Y and Z.

Material	Property			
	flexible	waterproof	strong	allows light to pass through
W	X	✓	✓	✓
X	✓	✓	X	X
Y	✓	X	X	✓
Z	X	✓	✓	X

key

✓: yes

X: no

Which of the following shows the most suitable materials for making parts A and B of the helmet?

	Part A	Part B
(1)	W	Z
(2)	Z	W
(3)	Y	X
(4)	X	Y

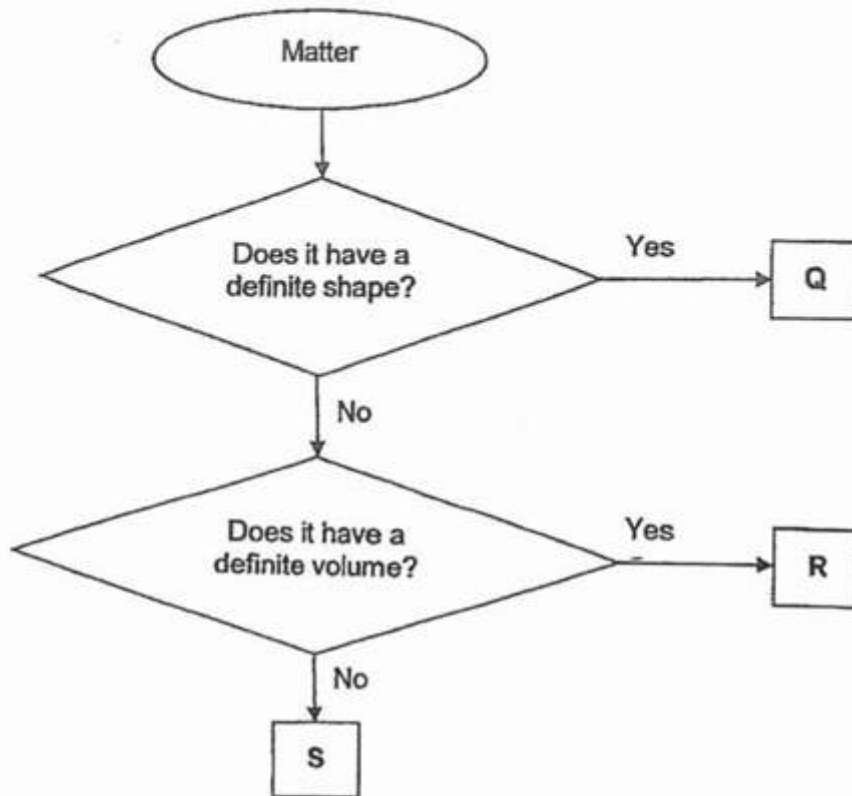
- A) 1
 B) 2
 C) 3
 D) 4

Question 14 of 66

Primary 5 Science (Term 4)

2 pts

Study the flow chart below.



Which of the following could Q, R and S be?

	Q	R	S
(1)	oxygen	orange juice	ice cube
(2)	ice cube	orange juice	oxygen
(3)	ice cube	oxygen	orange juice
(4)	orange juice	ice cube	oxygen

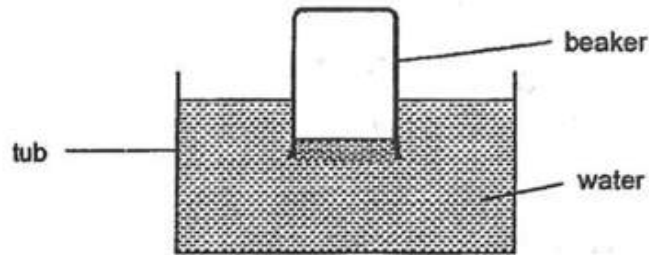
- A) 1
 B) 2
 C) 3
 D) 4

Question 15 of 66

Primary 5 Science (Term 4)

2 pts

The diagram below shows an empty beaker being inverted and pushed gently into a tub of water.



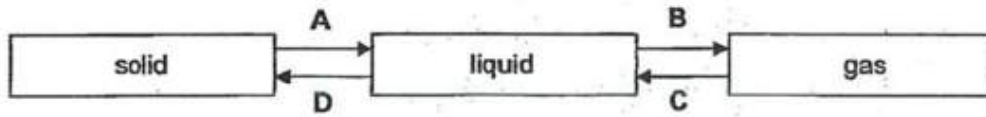
Which of the following best explains why the water level in the beaker is lower than the water level in the tub?

-
- A) The air in the beaker has mass
 - B) The air in the beaker occupies space and cannot escape
 - C) The air in the beaker is compressed by the water in the beaker
 - D) The air in the beaker occupies space previously occupied by water in the beaker

Question 16 of 66

Primary 5 Science (Term 4) 2 pts

In the diagram below, A, B, C and D represent the different processes that result in the change of states of water.



Which of the following processes correctly represents A, B, C and D?

	A	B	C	D
(1)	freezing	evaporation	condensation	melting
(2)	melting	boiling	condensation	freezing
(3)	freezing	evaporation	boiling	melting
(4)	melting	boiling	evaporation	freezing

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

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Primary 5 Science (Term 4) 2 pts

Which of the following statements about condensation and evaporation are correct?

- A Both processes involve a change in state
 B Both processes do not occur at fixed temperature
 C One process involves heat gain while the other involves heat loss

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

Question 18 of 66

Primary 5 Science (Term 4) 2 pts

Study the table below.

Substance	State of substance at		
	10°C	50°C	90°C
A	solid	solid	solid
B	solid	liquid	liquid
C	solid	solid	liquid
D	gas	gas	gas

Which of the following statements is definitely correct?

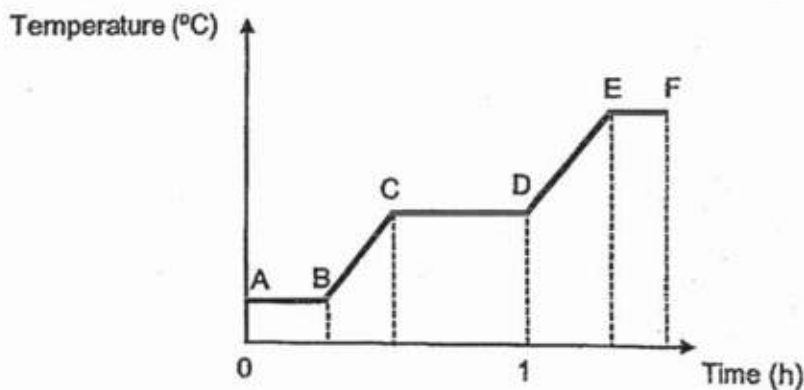
- A) Substance C 's boiling point is 85
- B) Substance B 's freezing point is 5
- C) Substance D has the lowest boiling point
- D) Substance A has the lowest freezing point

Question 19 of 66

Primary 5 Science (Term 4) 2 pts

When taken out of the fridge, substance X was in solid state. It was then left on the table for an hour. After one hour, substance X was heated till it boiled.

The graph below shows the temperature of substance X recorded from the time it was taken out of the fridge till it boiled.



Which of the following about substance X is correct?

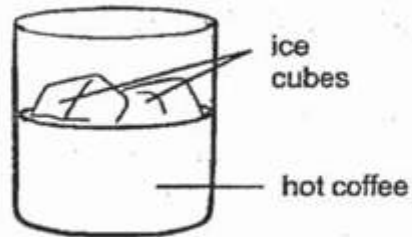
- A) Substance X lost heat from A to B
- B) Substance X was boiling from C to DAC
- C) Substance X was melting from A to B
- D) Substance X did not heat from E to F

Question 20 of 66

Primary 5 Science (Term 4)

2 pts

The picture below shows ice cubes in a cup of hot coffee.



Which of the following statements best describes the heat change involved?

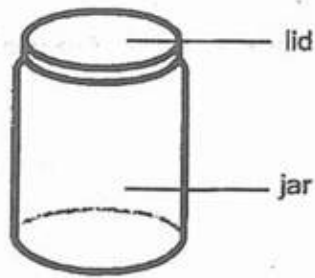
- A) The ice cubes lost heat to the surroundings
- B) The ice cubes gains heat from the hot coffee
- C) The hot coffee gains coldness from the ice cubes
- D) The hot coffee gains heat from the surrounding air

Question 21 of 66

Primary 5 Science (Term 4)

2 pts

Bala could not open a jar because the lid was too tight.



Which of the following shows the correct action and explanation that would help Bala open the jar?

	Action	Explanation
(1)	Heat the lid over a flame.	The heat will cause the lid to contract and loosen.
(2)	Wrap the lid with a piece of warm cloth.	The heat will cause the lid to expand and loosen.
(3)	Heat the bottom of the jar.	The heat will cause the lid to contract and loosen.
(4)	Submerge the jar and lid into hot water.	The heat will cause both the jar and the lid to expand and loosen.

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

Question 22 of 66

Primary 5 Science (Term 4) 2 pts

Simon had three rods, W, X and Y. He placed one end of each rod, one at a time, to the north-seeking pole of a magnet. He then recorded his observations in the table below.

Rod	Observations
W	moved towards magnet
X	moved away from magnet
Y	remained where it was

Based on Simon's observations, which of the following can he conclude?

- A W is a magnet.
- B X is a magnet.
- C Y is not made of metal.

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

Question 23 of 66

Primary 5 Science (Term 4) 2 pts

Ken conducted an experiment to compare the magnetic strength of magnets A, B, C and D.

He recorded the number of paper clips each magnet attracted when placed 3 cm away from a pile of paper clips in the table below.

Magnet	Distance between the magnet and the paper clips (cm)	Number of paper clips attracted
A	3	2
B	3	5
C	3	3
D	3	0

Which of the following correctly shows the magnetic strength of the magnets, starting from the magnet with the strongest magnetic strength to the weakest magnetic strength?

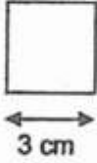
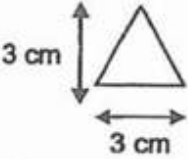
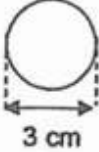
- A) B, A, C, D
- B) C, D, B, A
- C) B, C, A, D
- D) D, A, C, B

Question 24 of 66

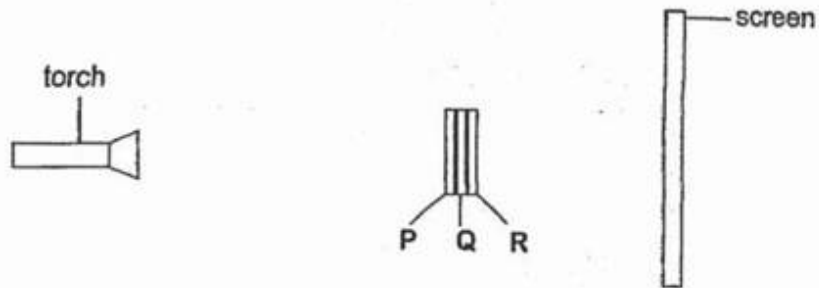
Primary 5 Science (Term 4)

2 pts





The diagram below shows the size and property of objects P, Q and R. The three objects have the same thickness.

P	Q	R
		
allows some light to pass through	does not allow light to pass through	allows most light to pass through

The three objects were positioned as shown below.



Which one of the following shadows will be cast on the screen when the torch is switched on?

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

Question 25 of 66

Primary 5 Science (Term 4)

2 pts

A wooden cylinder is shown below.



At which position should Samuel place the wooden cylinder to cast the biggest shadow of the cylinder on the screen?



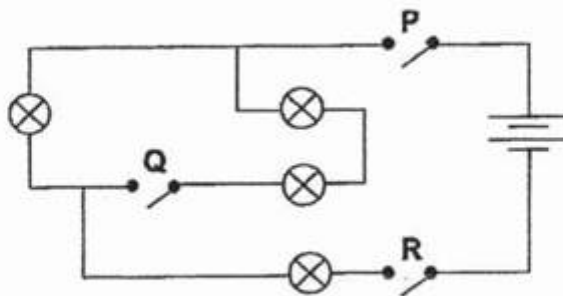
- A) A
- B) B
- C) C
- D) D

Question 26 of 66

Primary 5 Science (Term 4)

2 pts

Study the circuit diagram below.



Which switches must be closed so that **only two bulbs** will be lighted up?

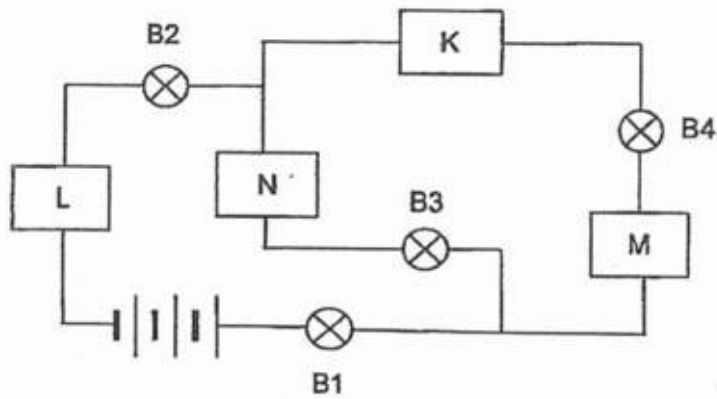
- A) Q and P
- B) Q and R
- C) P and R
- D) P, Q and R

Question 27 of 66

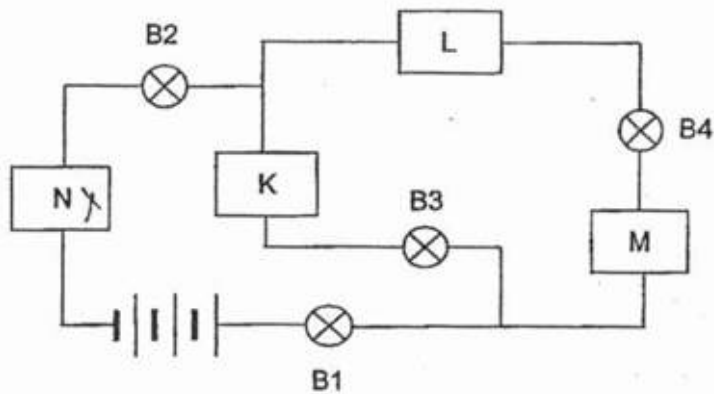
Primary 5 Science (Term 4)

2 pts

Zhi Wei connected four different objects, K, L, M and N, to an electrical circuit as shown in the diagram below. He observed that only bulbs B1, B2 and B4 lit up.

Arrangement 1

He then rearranged the positions of the objects as shown below.

Arrangement 2

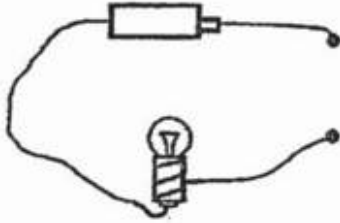
Which of the following shows the correct number of bulbs that light up in Arrangement 2?

- A) 0
- B) 2
- C) 3
- D) 4

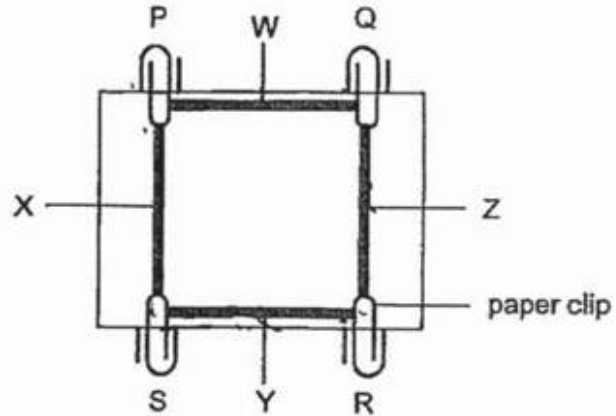
Question 28 of 66

Primary 5 Science (Term 4) 2 pts

Benjamin set up a circuit card and a circuit tester as shown below. Paper clips P, Q, R and S are connected by four different strips of material, W, X, Y and Z.



circuit tester



circuit card

He connected the circuit tester to the various paper clips and recorded the results in the table below.

Paper clips connected to circuit tester				Did the bulb light up?
P	Q	R	S	
	✓		✓	Yes
✓		✓		No
	✓	✓		No

Based on the results above, which one of the following correctly matches W, X, Y and Z to their electrical properties?

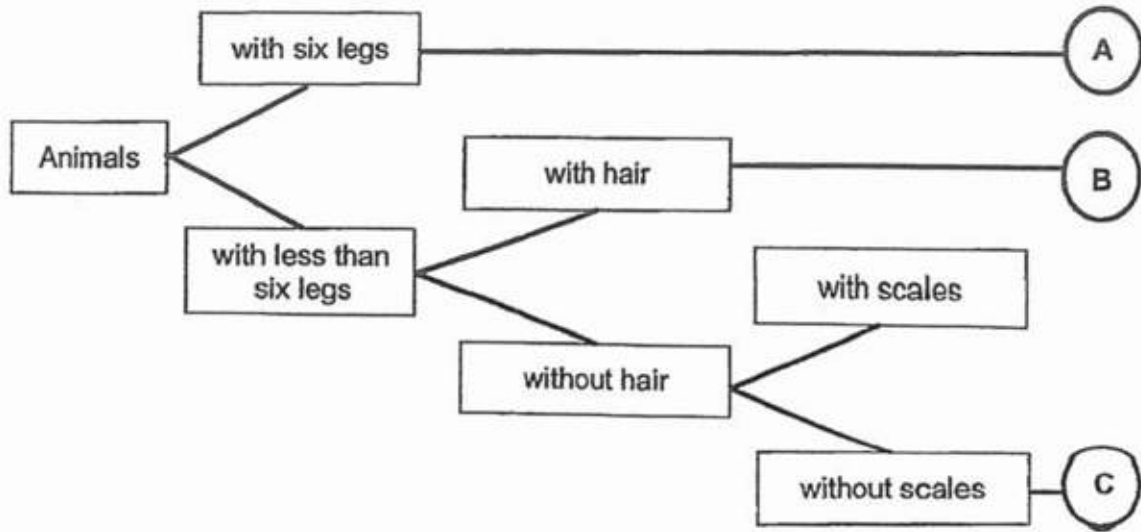
	Conductor of electricity	Non-conductor of electricity
(1)	X	W, Y, Z
(2)	W, X	Y, Z
(3)	W, Z	X, Y
(4)	Y, Z	W, X

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

Question 29 of 66

Primary 5 Science (Term 4) 0 pts

Study the chart below.



- (a) Other than the characteristic mentioned in the chart above, state another characteristic that animal A will definitely have. [1]

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Primary 5 Science (Term 4) 0 pts

Which animal groups does animal B and C belong to?

B: _____

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Primary 5 Science (Term 4) 0 pts

C: _____

Question 32 of 66

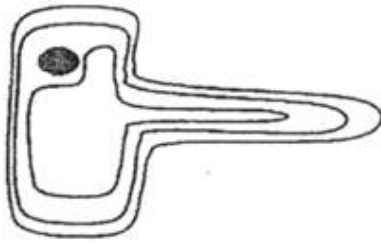
Primary 5 Science (Term 4) 0 pts

c) Compare the method of reproduction of animal A and B

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Primary 5 Science (Term 4) 0 pts

Cells Q and R are taken from the same organism.

**Cell Q****Cell R**

- (a) Based on the observation of the cells, name all the cell parts that are present in both cells Q and R. [1]
-

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Primary 5 Science (Term 4) 0 pts

b) Based on the cell parts observed, state a difference in the functions of cells Q and R

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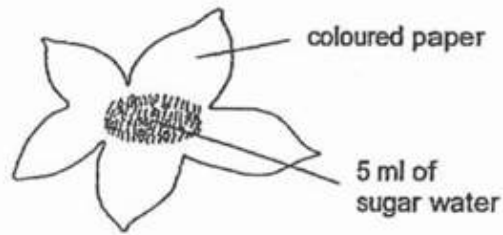
Primary 5 Science (Term 4) 0 pts

c) Are cells Q and R taken from an animal or a plant? Explain your answer

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Primary 5 Science (Term 4) 0 pts

Amy wanted to find out the colour of flowers which most bees prefer. She made flower models using different coloured paper. She then put 5 ml of the sugar water in the centre of each flower. These model flowers were left in the open field.



Amy counted the number of bees that visited the flower models over 3 hours. The results are recorded in the table below.

Colour of flower	Number of bees visiting the flower		
	1 st hour	2 nd hour	3 rd hour
Black	1	3	2
Yellow	15	11	7
Green	2	2	3

(a) What is the purpose of placing sugar water on the flower models? [1]

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Primary 5 Science (Term 4) 0 pts

b) Based on the results, why is it more advantageous for plants to have yellow flowers over black and green flowers.

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Primary 5 Science (Term 4) 0 pts

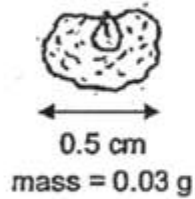
c) Amy wanted to find out how the size of the flowers affects the number of bees visiting it. How should Amy make her flower models for a fair experiment?

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Primary 5 Science (Term 4)

0 pts

The picture below shows a seed.



- (a) State two characteristics of the seed that help in its dispersal.

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Primary 5 Science (Term 4)

0 pts

- b) Explain how the characteristic named in (a) helps the seed in dispersal

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Primary 5 Science (Term 4)

0 pts

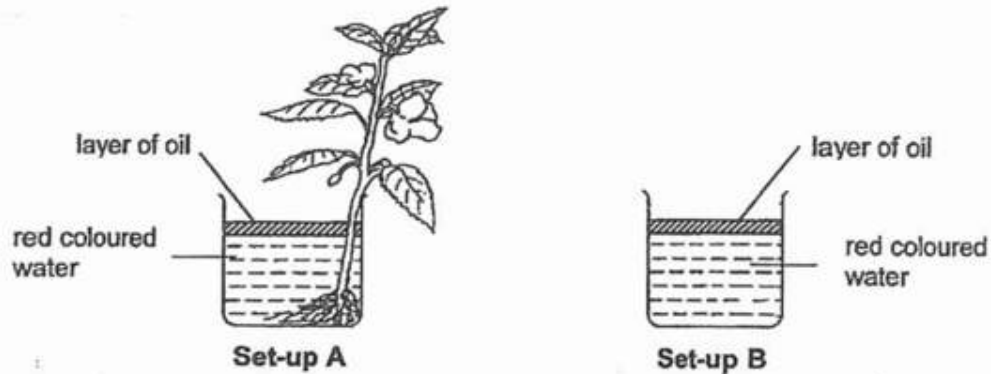
- c) What is the advantage of having seeds dispersed far away from their parent plants?

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Primary 5 Science (Term 4)

1 pt

Ashley conducted an experiment using similar beakers in the set-ups as shown in the diagram below.



She recorded the amount of water in the beakers at the start of the experiment and after one day.

	Set-up A	Set-up B
Amount of water at the start of the experiment	250 ml	250 ml
Amount of water after one day	200 ml	_____ ml

- (a) Fill in the likely amount of water in set-up B after one day in the table above. [1]

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0 pts

- b) Explain your answer for (a)

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Primary 5 Science (Term 4)

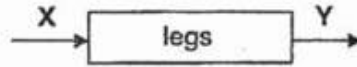
0 pts

- c) Explain the decrease in the amount of water in set-up A after one day

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Primary 5 Science (Term 4) 0 pts

The diagram below shows the direction of blood flow in blood vessels, X and Y, in Jane's legs.

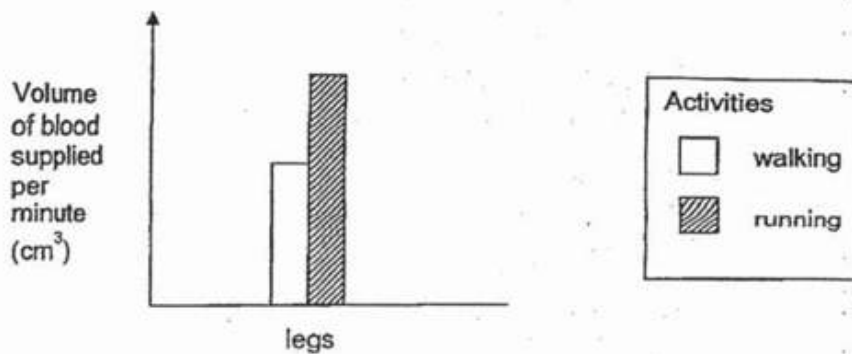


- (a) State the difference between the amount of oxygen at X and Y. [1]

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Primary 5 Science (Term 4) 0 pts

The graph below shows the volume of blood supplied per minute to Jane's legs during two activities, walking and running.



- (b) Describe how oxygen in the surroundings reaches Jane's legs. [2]

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Primary 5 Science (Term 4) 0 pts

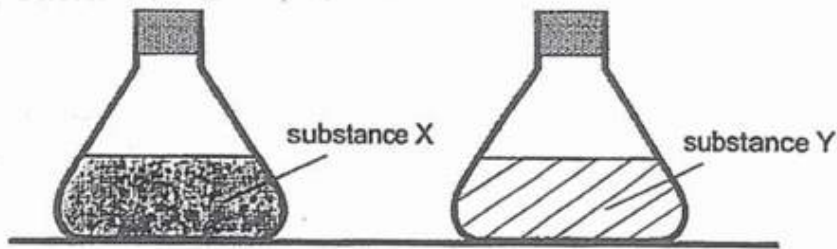
- c) Based on the graph above, explain how running affects the amount of oxygen supplied to the legs

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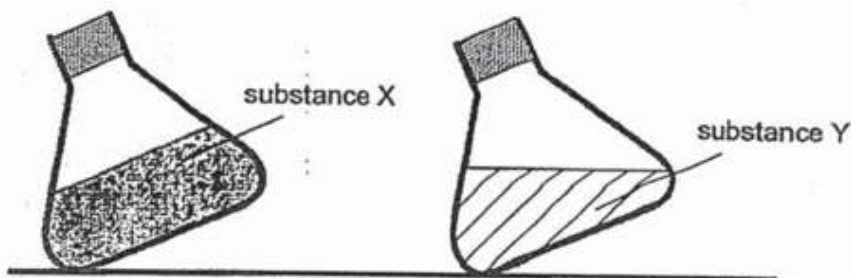
Primary 5 Science (Term 4)

1 pt

Julian placed 500 ml of substance X and Y respectively into two identical flasks as shown below.



Julian then tilted the flasks.



(a) What is the state of substances X and Y?

X: _____

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1 pt

Y: _____

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Primary 5 Science (Term 4)

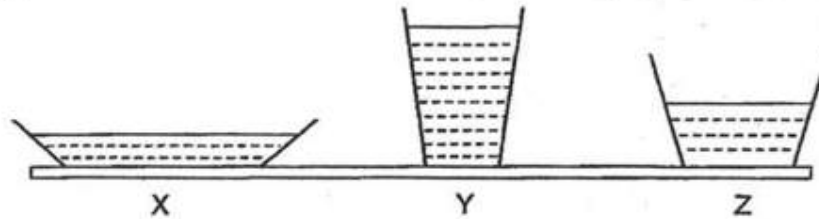
0 pts

b) Based on the observation, state a difference in the property of substances X and Y

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Primary 5 Science (Term 4) 0 pts

Alice filled three containers, X, Y and Z with the same amount of water and left them in the same location.



She measured and recorded the amount of water left in each of the containers after one day in the table below.

Container	Volume of water in the container (cm ³)	
	Start of the experiment	After one day
X	50	19
Y	50	48
Z	50	28

- (a) Based on the results of her experiment, what can you conclude about exposed surface area and rate of evaporation? [1]

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Primary 5 Science (Term 4) 0 pts

b) Explain why the following actions would help ensure a fair test

- i) placing all three containers at the same location
- ii) Using containers made of the same material

Question 53 of 66

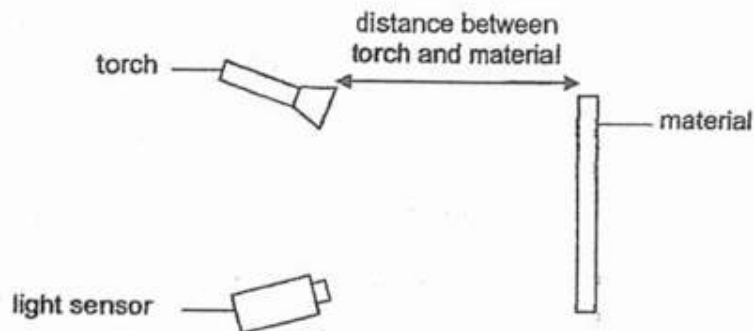
Primary 5 Science (Term 4) 0 pts

c) Other than the actions listed (b), state another action that should be taken to ensure a fair test

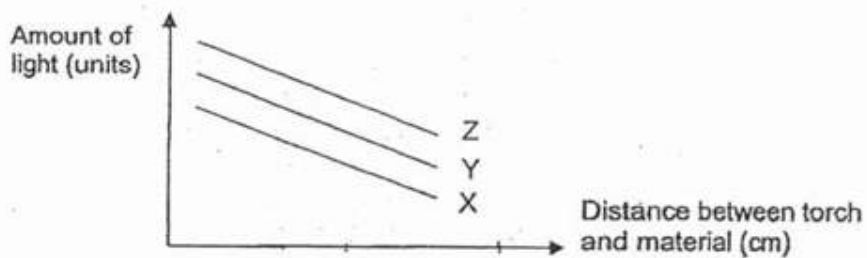
Question 54 of 66

Primary 5 Science (Term 4) 0 pts

Aaron wanted to find out how the amount of light reflected by different materials is affected by the distance between the torch and the materials. He conducted his experiment as shown in the set-up below using materials X, Y and Z in a completely dark room.



Aaron recorded the amount of light reflected by the materials using the light sensor as he changed the distance between the torch and the material. The graph below shows his results.



- (a) What is the relationship between the amount of light reflected by material Z and the distance between the torch and material Z? [1]

Question 55 of 66

Primary 5 Science (Term 4) 0 pts

- b) How does conducting the experiment in a completely dark room ensure that accurate results are obtained?

Question 56 of 66

Primary 5 Science (Term 4) 0 pts

Wearing a safety vest at night helps cyclists stay safe on the road as they are more visible to drivers on the road.

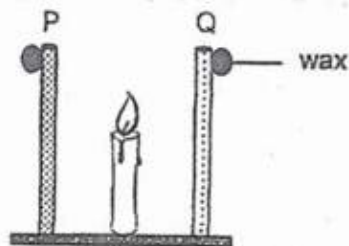


- (c) Based on Aaron's results, which material, X, Y or Z, is most suitable for making the safety vest? Give a reason for your answer. [1]

Question 57 of 66

Primary 5 Science (Term 4) 0 pts

Kaven placed a candle at equal distance between two sheets of materials, P and Q. An equal amount of wax was attached to the materials as shown below.



Kaven recorded the amount of time taken for the wax on materials P and Q to melt in the table shown below.

Material	Time taken for the wax to melt (min)
P	10
Q	2

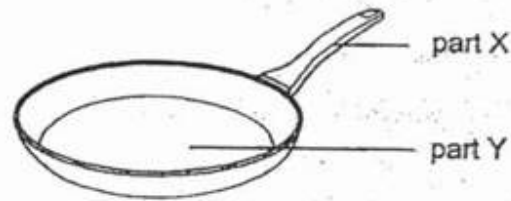
- (a) Based on the results, what can you conclude about the physical property of materials P and Q? [1]

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Primary 5 Science (Term 4)

1 pt

The diagram below shows a frying pan.



(b) Which material, P or Q, should he use to make parts X and Y?

[1]

Part X: _____

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1 pt

Part Y: Q

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Primary 5 Science (Term 4)

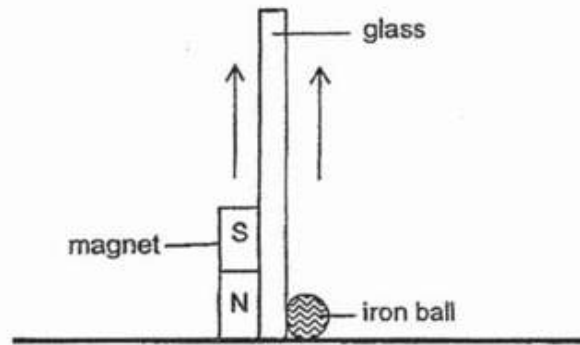
0 pts

c) Give a reason for the material chosen to make part Y in (b)

Question 61 of 66

Primary 5 Science (Term 4) 0 pts

Mary prepared the experiment as shown in the diagram below. When she moved the magnet up the glass surface, the iron ball moved up with it.



(a) Based on the observation made, list two properties of magnets.

[2]

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Primary 5 Science (Term 4) 0 pts

b) Many charged the iron ball to a metal ball. The metal ball did not move up the glass surface when the magnet is moved up. Explain why.

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Primary 5 Science (Term 4) 0 pts

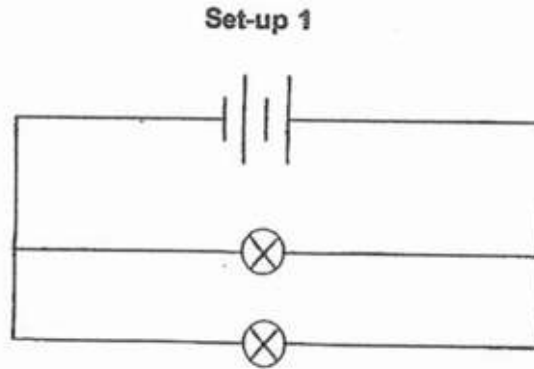
c) After Mary dropped the magnet on the floor several times, the magnet could no longer move the iron ball up the glass surface. Explain why.

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Primary 5 Science (Term 4) 0 pts

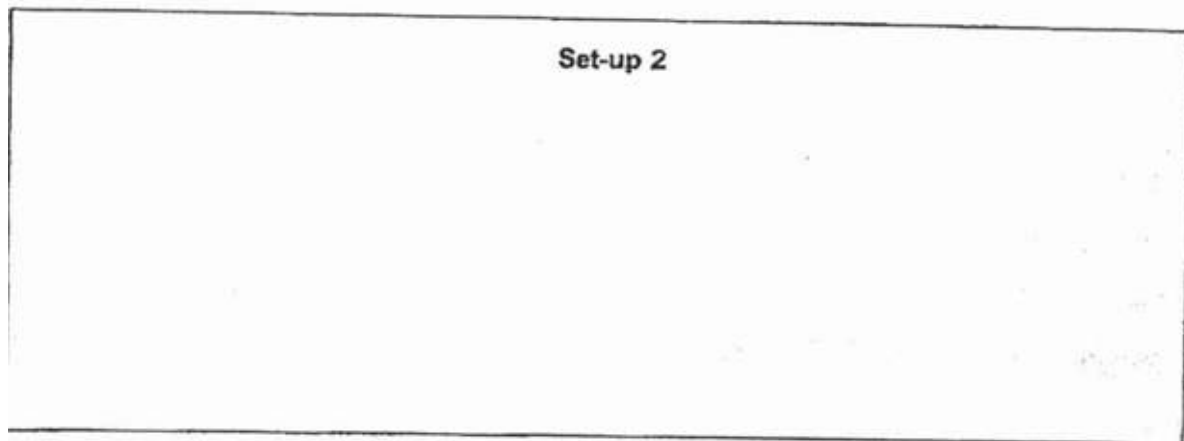
Mark wants to find out if the arrangement of the bulbs will affect the bulbs' brightness.

He prepared Set-up 1 as shown in circuit diagram below.



In order to draw a conclusion to the aim of his experiment, Mark will need another set-up, Set-up 2, for comparison.

- (a) Draw a circuit diagram for Set-up 2 using electrical symbols. [1]

**Question 65 of 66**

Primary 5 Science (Term 4) 0 pts

- b) Compare the brightness of bulbs in set-up 1 and set-up 2

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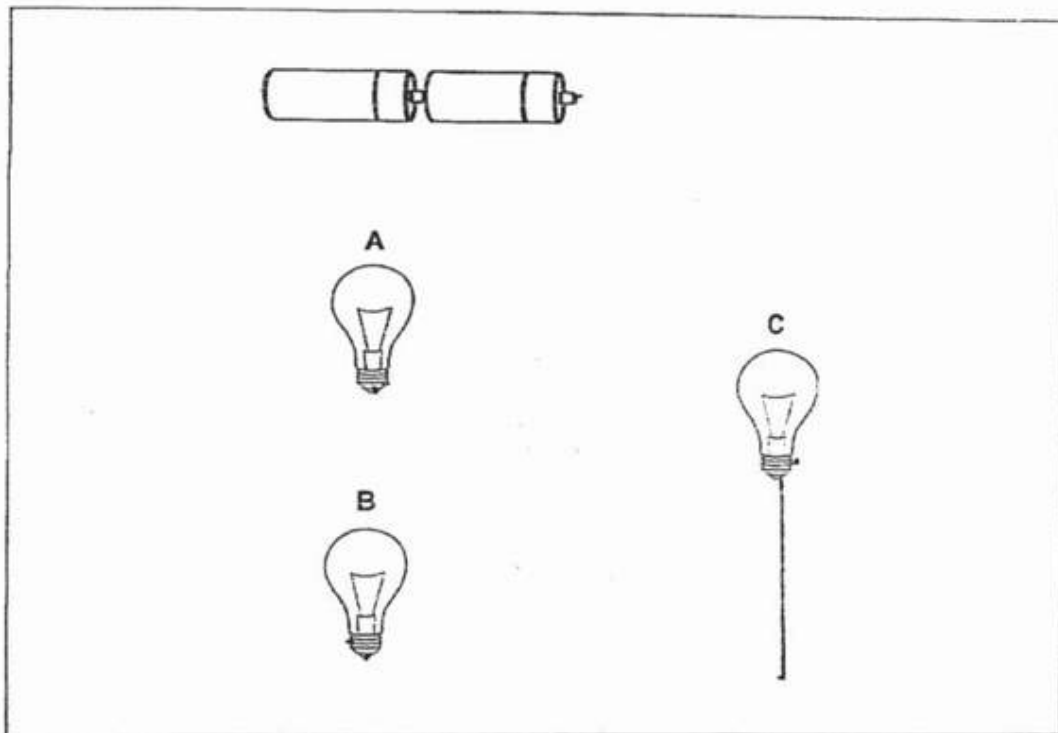
Primary 5 Science (Term 4)

0 pts

Nathan constructed an electrical circuit with three identical bulbs, A, B and C, and two batteries. He then removed one bulb at a time and recorded his observations of the other two bulbs. His observations are recorded in the table below.

Bulbs removed	Observations
A only	B and C remained lit
B only	A remained lit but not C
C only	A remained lit but not B

- (a) Based on the observations above, complete the electrical circuit below by adding wires to show how the three bulbs could be connected to the batteries. [2]



- (b) Nathan added a switch to the above circuit in (a) so that he could switch all three bulbs on and off at the same time.

Mark 'X' on the wire you have drawn in (a) to indicate where this switch could be placed.

[1]