

Test: (2020) Primary 5 Science (Term 4) - Tao Nan

Points: 59 points

Name: _____

Score: _____

Date: _____

Signature: _____

Select multiple choice answers with a cross or tick:

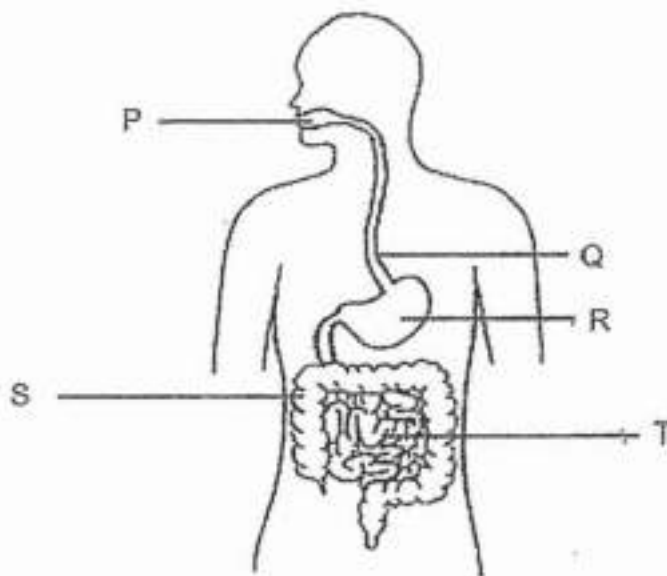
- Only select one answer
- Can select multiple answers

Question 1 of 61

Primary 5 Science (Term 4) 2 pts

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

The diagram below shows parts, P, Q, R, S and T, of the human digestive system.



Where does digestion occur?

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

Question 2 of 61

Primary 5 Science (Term 4)

2 pts

Which of the following controls the substances moving in and out of a cell?

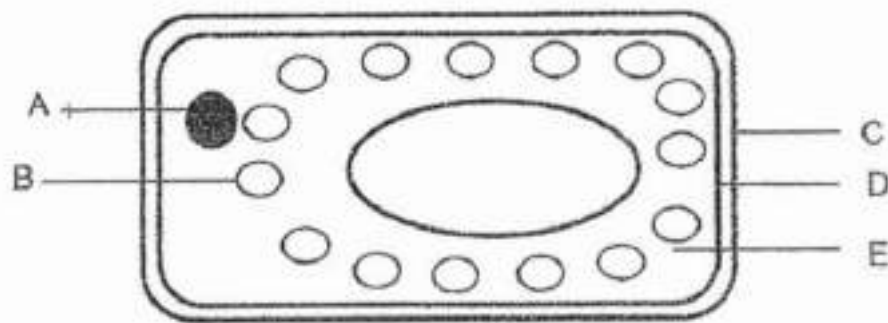
- A) nucleus
- B) cell wall
- C) cytoplasm
- D) cell membrane

Question 3 of 61

Primary 5 Science (Term 4)

2 pts

The diagram below shows a leaf cell.



Which part(s) of the leaf cell is/are also found in a human cheek cell?

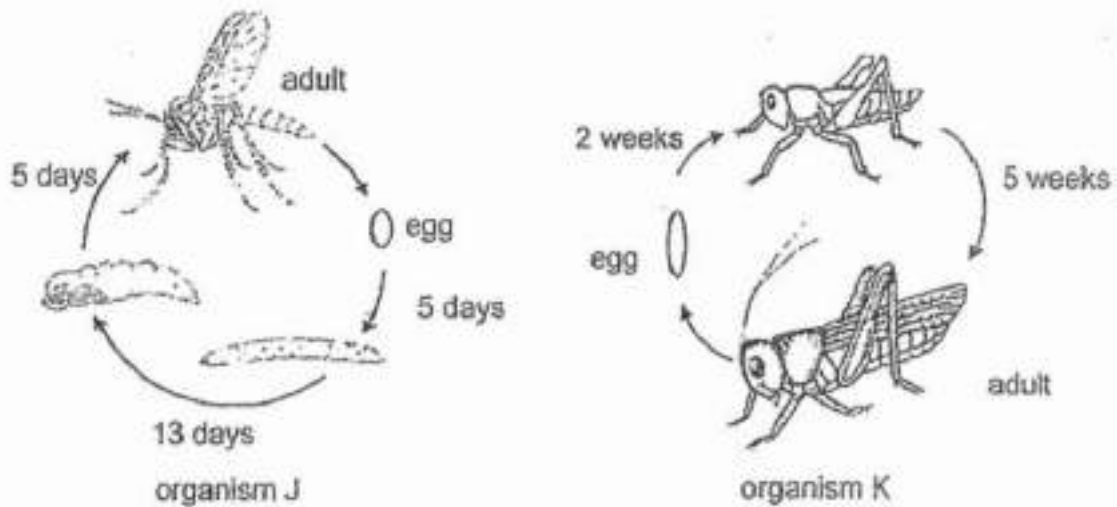
- A) A only
- B) B and C only
- C) A, D and E only
- D) A, B, D and E only

Question 4 of 61

Primary 5 Science (Term 4)

2 pts

The diagrams below show the life cycles of organisms J and K.



Based on the diagrams above, which of the following statements is true?

- A) Organism K does not feed during the nymph stage
- B) Both the young of the organisms J and K resemble the adult
- C) Organism J has a 3 stage life cycle while organism K has a 4 stage life cycle
- D) The young of organism J takes shorter time to develop into an adult than that of Organism K

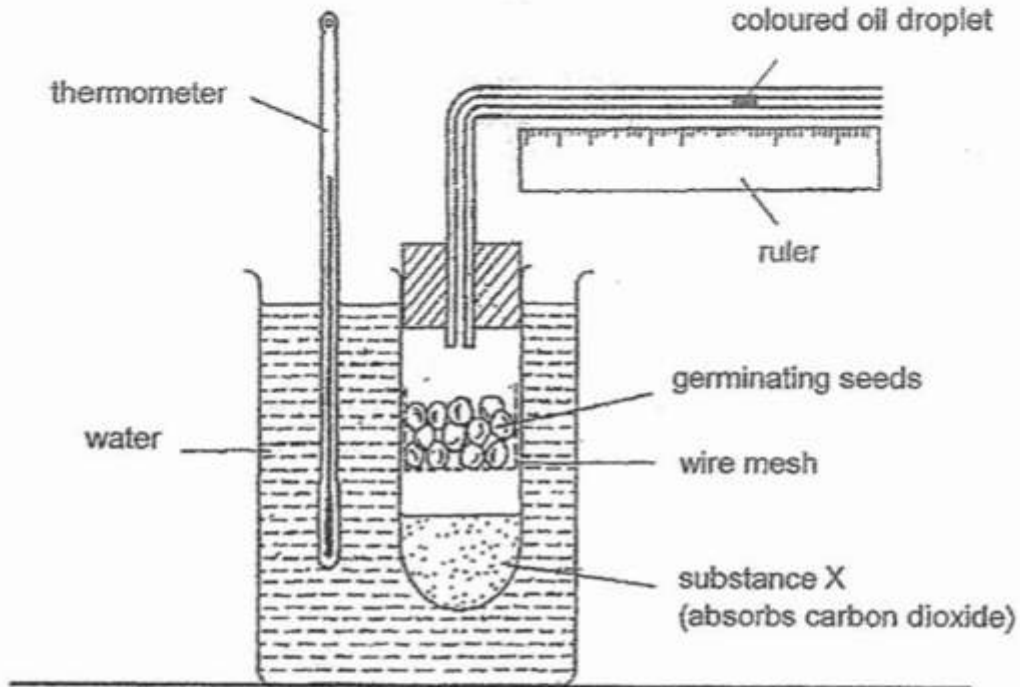
Question 5 of 61

Primary 5 Science (Term 4)

2 pts

Seeds take in oxygen during germination.

The set-up below is used to show that oxygen is taken in by the germinating seeds.



What measurement(s) should be taken to show that oxygen is taken in?
 ("✓" means measurement is needed)

	Size of germinating seeds (cm)	Distance moved by droplet (cm)	Temperature (°C)
(1)			✓
(2)		✓	
(3)	✓	✓	
(4)	✓		✓

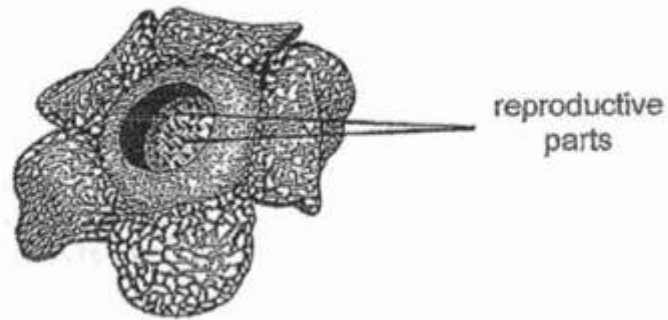
- A) 1
- B) 2
- C) 3
- D) 4

Question 6 of 61

Primary 5 Science (Term 4)

2 pts

Rafi recorded his observations on the flowers of plant X:



flower of plant X

Observations:

- The flowers give off a strong smell.
- Their reproductive parts are hidden in the flowers.
- Each flower has either male or female reproductive parts.

Which of the following can be inferred from Rafi's observation?

	Method of pollination	Least number of flowers involved in pollination
(1)	insect	one
(2)	insect	two
(3)	wind	one
(4)	wind	two

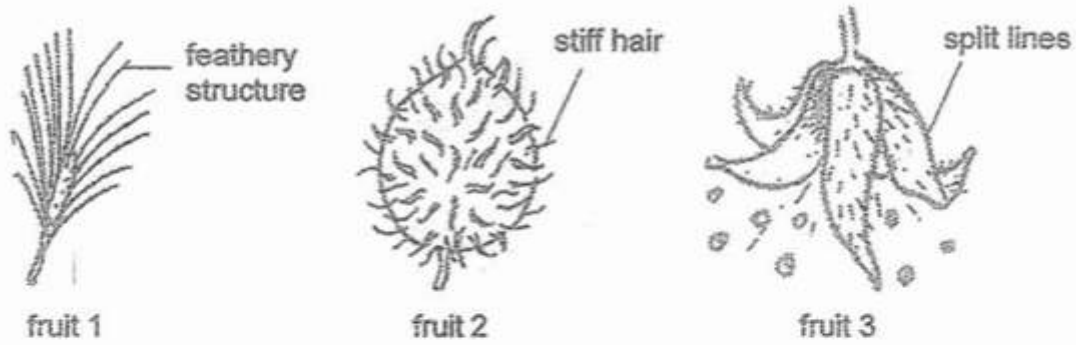
- A) 1
 B) 2
 C) 3
 D) 4

Question 7 of 61

Primary 5 Science (Term 4)

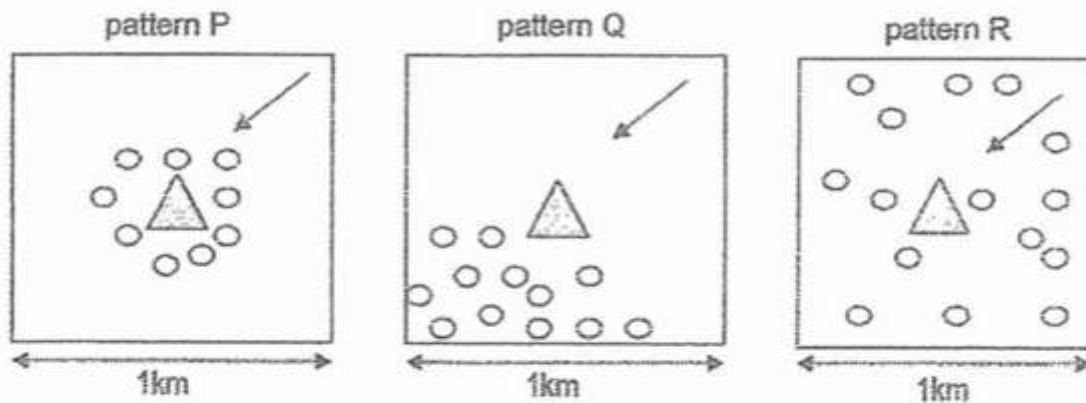
2 pts

The diagrams below show three different fruits.



The dispersal patterns of the fruits of these three types of plants are shown below.

	Represents the parent plant
	Represents the seedlings
	Represents the direction of wind



Which dispersal patterns, P, Q and R, matches fruits 1, 2 and 3?

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

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

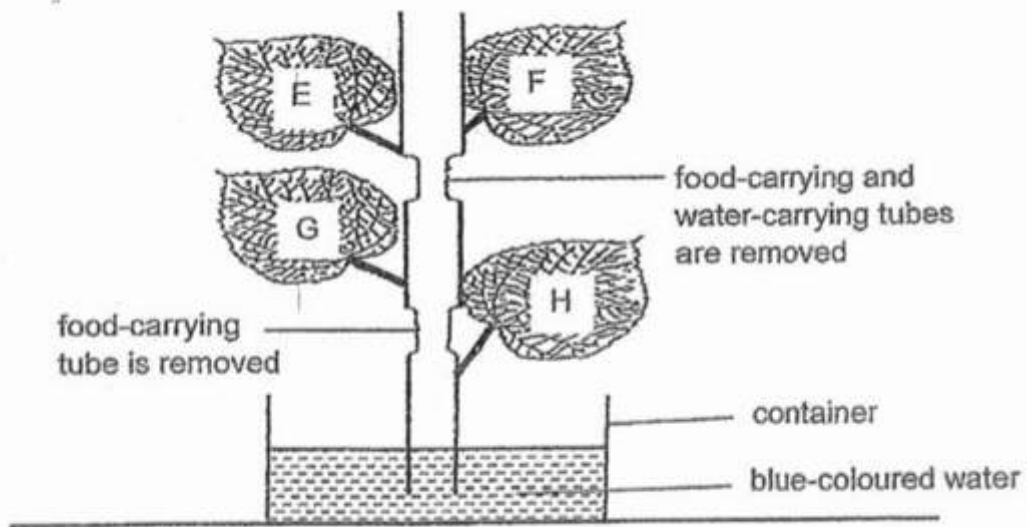
D) 4

Question 8 of 61

Primary 5 Science (Term 4)

2 pts

Sam removed parts of the stem of a plant as shown below.



Which of the following leaves, E, F, G and/or H, would turn blue?

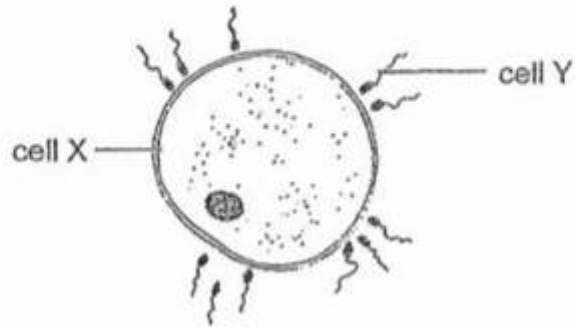
- A) H only
- B) G and H only
- C) E, F, G and H
- D) None of the leaves

Question 9 of 61

Primary 5 Science (Term 4)

2 pts

The diagram below shows two types of reproductive cells, cell X and cell Y.



Which of the following are the reproductive organs where cell X and cell Y are produced?

	cell X	cell Y
(1)	ovule	testes
(2)	ovary	penis
(3)	ovary	testes
(4)	womb	penis

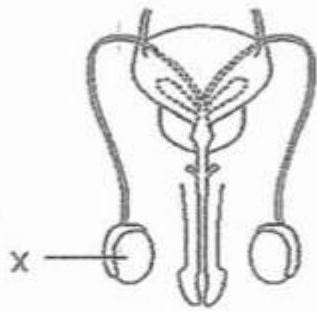
- A) 1
 B) 2
 C) 3
 D) 4

Question 10 of 61

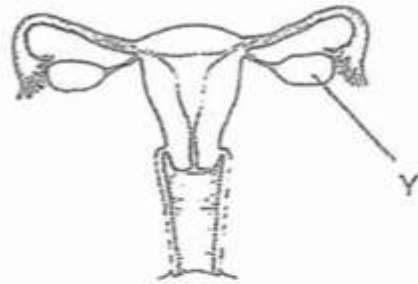
Primary 5 Science (Term 4)

2 pts

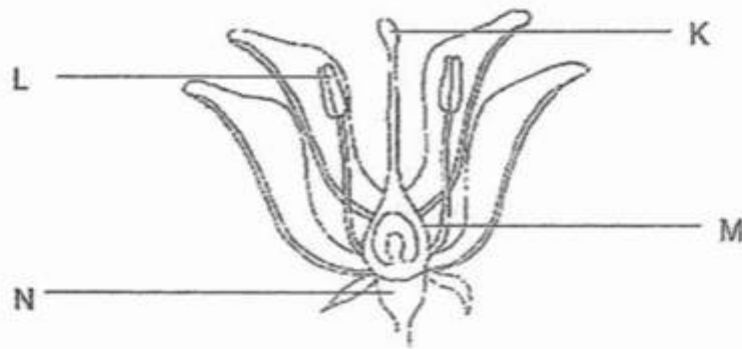
Study the diagrams below.



male reproductive system in human



female reproductive system in human



flower

Which parts, K, L, M or N, of the flower have the same functions as X and Y in a human?

	Part X	Part Y
(1)	K	N
(2)	L	K
(3)	L	M
(4)	M	L

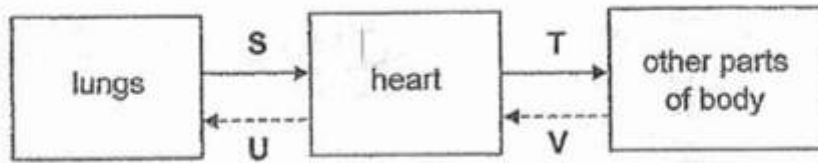
- A) 1
- B) 2
- C) 3
- D) 4

Question 11 of 61

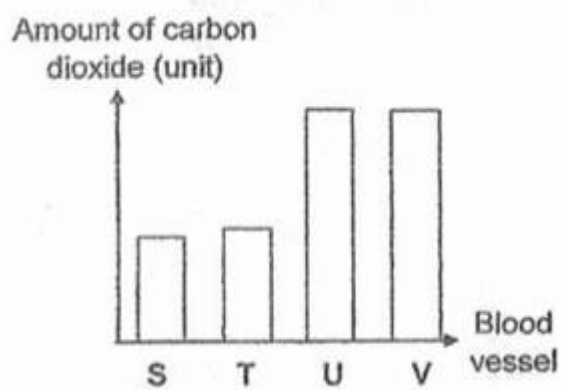
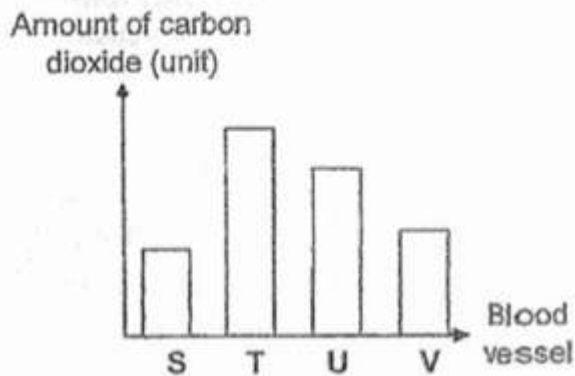
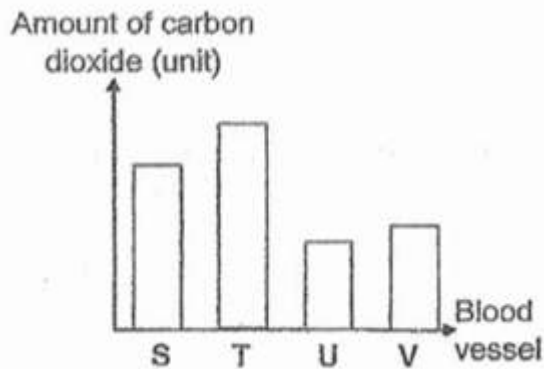
Primary 5 Science (Term 4)

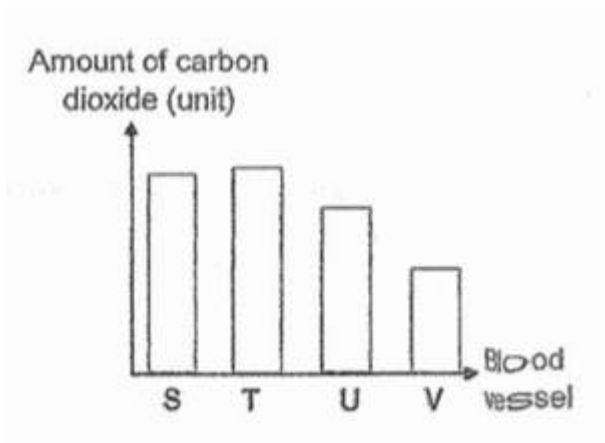
2 pts

The arrows, S, T, U and V, represent the pathways of blood in a human circulatory system.



Which of the following graphs best represents the amount of carbon dioxide in S, T, U and V?

 A)

 B)

 C)

 D)


Question 12 of 61

Primary 5 Science (Term 4) 2 pts

Which of the following parts are grouped correctly according to the body systems.

	Respiratory system	Digestive system	Circulatory system
(1)	windpipe	mouth	blood vessels
(2)	gullet	stomach	heart
(3)	lungs	small intestine	chest cavity
(4)	nose	windpipe	heart

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

Question 13 of 61

Primary 5 Science (Term 4)

2 pts

Alex ran 100 metres. The volume of his lungs was measured before and immediately after he completed the run.

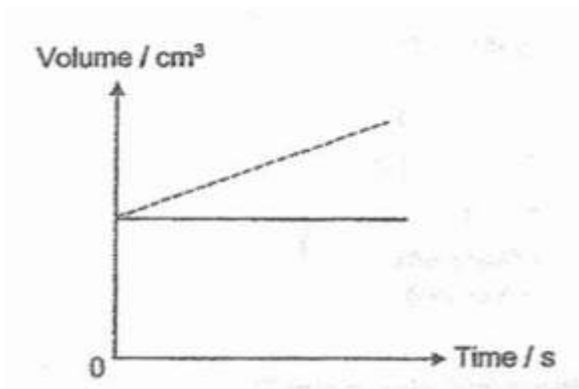
Which of the following graphs correctly shows the change in the volume of Alex's lungs before and after the run?

Key:

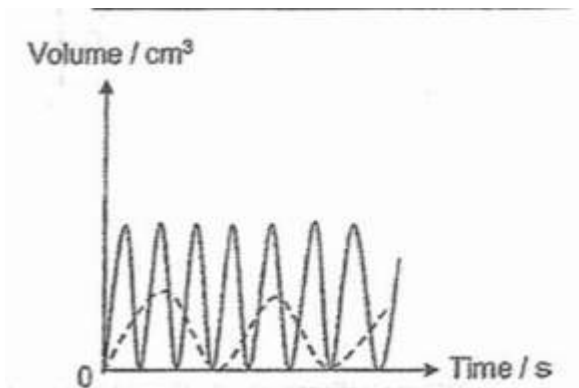
Before Alex ran: —————

After Alex ran: - - - - -

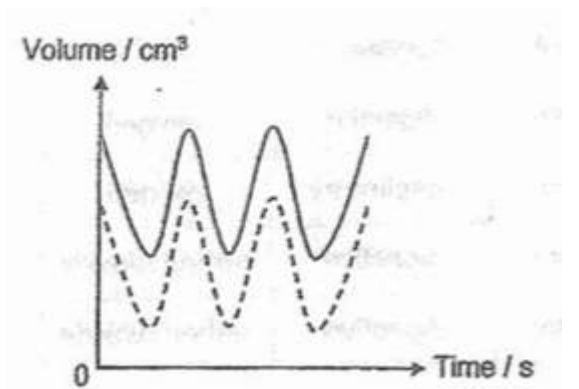
A)



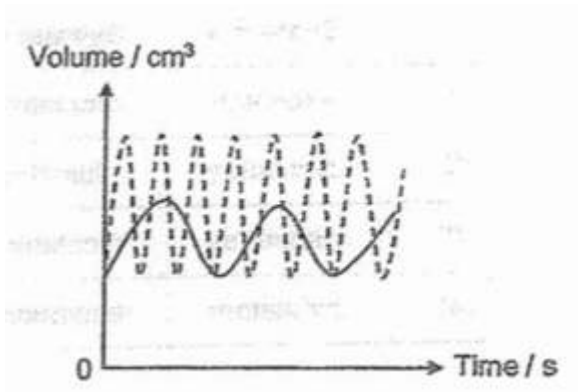
B)



C)



D)

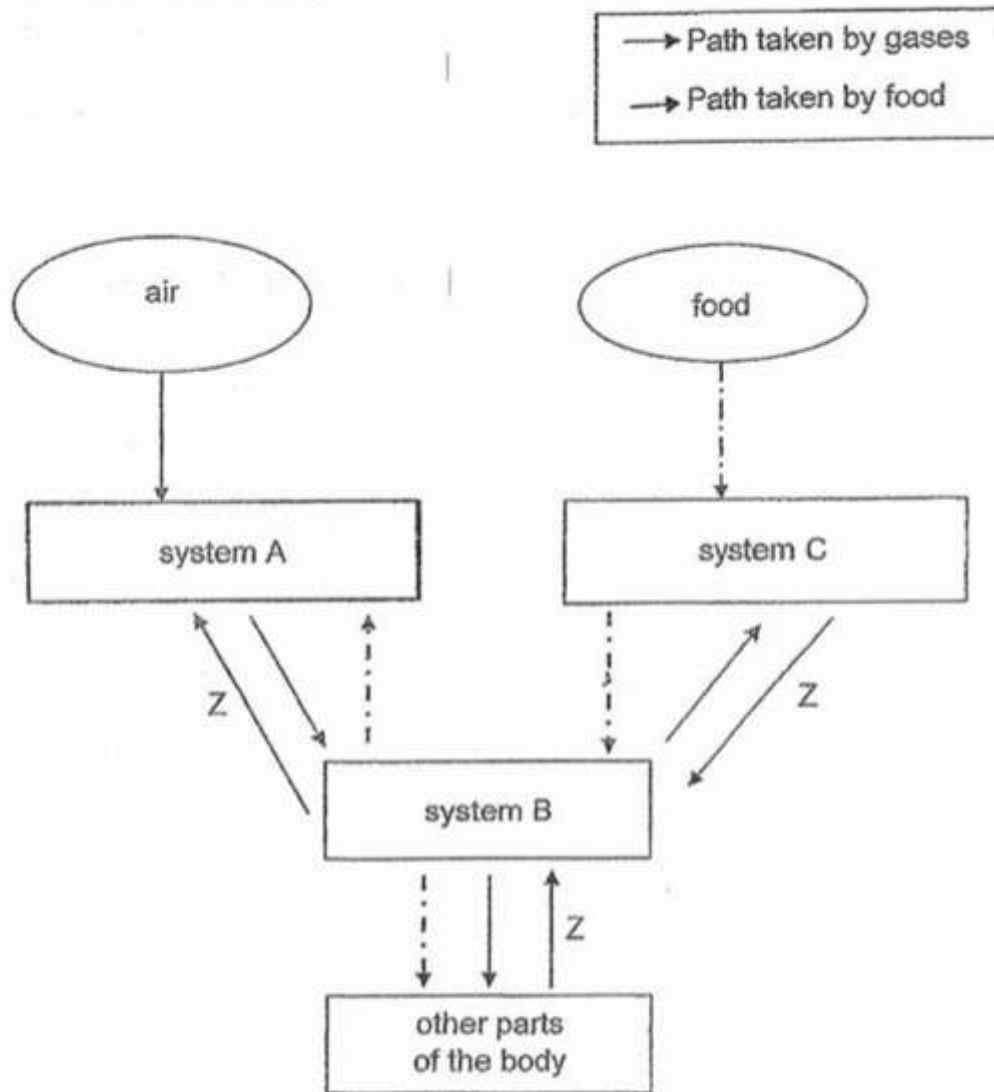


Question 14 of 61

Primary 5 Science (Term 4)

2 pts

The diagram below shows how food and gases are transported between systems A, B and C in the human body.



What systems do A, B and C represent and what is gas Z?

	System A	System B	System C	Gas Z
(1)	respiratory	circulatory	digestive	oxygen
(2)	circulatory	digestive	respiratory	oxygen
(3)	respiratory	circulatory	digestive	carbon dioxide
(4)	circulatory	respiratory	digestive	carbon dioxide

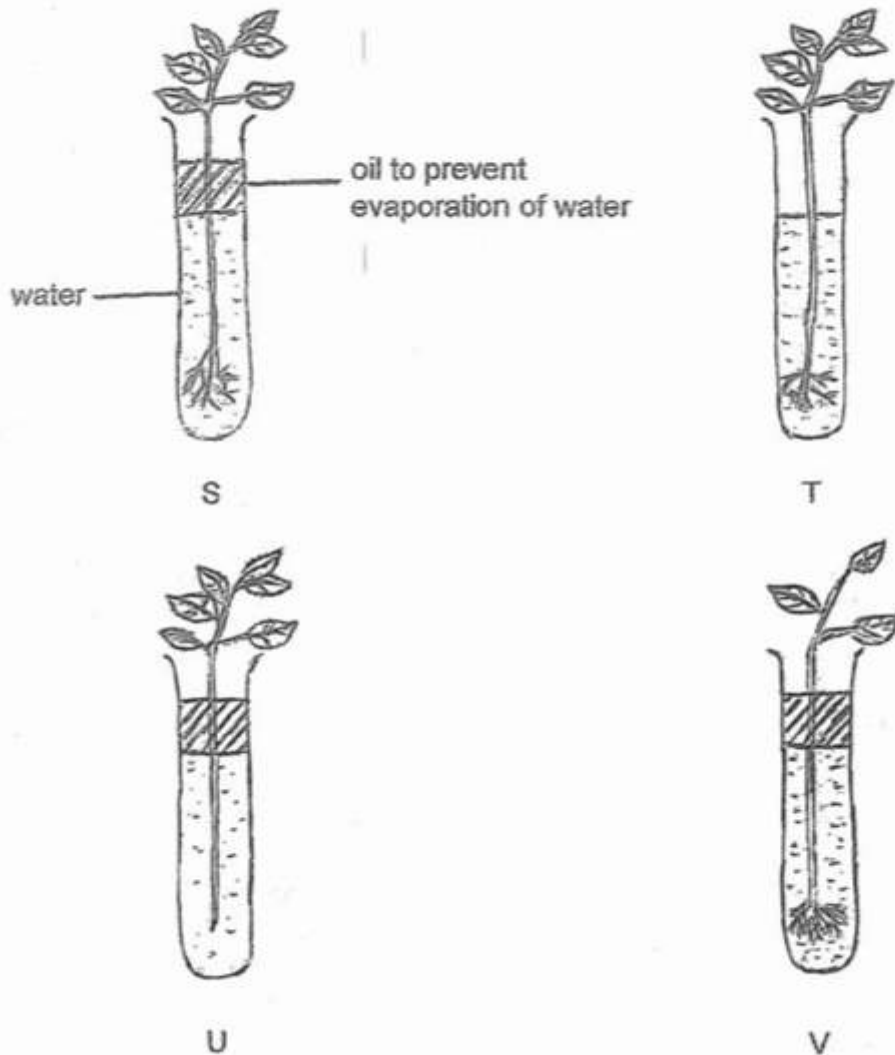
- A) 1
- B) 2
- C) 3
- D) 4

Question 15 of 61

Primary 5 Science (Term 4)

2 pts

Muthu wanted to find out if roots of a plant take in water.



Which of the two set-ups above should he choose to carry out his experiment?

- A) S and T only
- B) S and U only
- C) U and T only
- D) U and V only

Question 16 of 61

Primary 5 Science (Term 4)

2 pts

Which of the following can be attracted by a magnet?

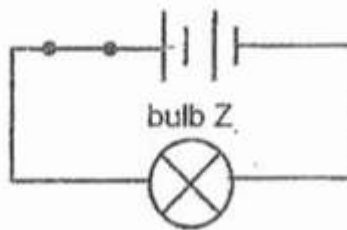
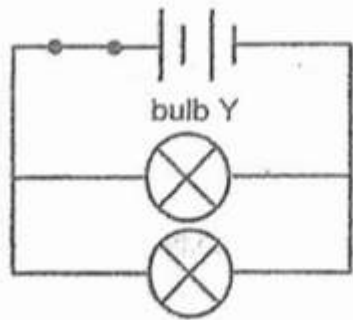
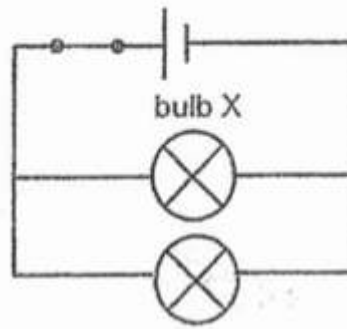
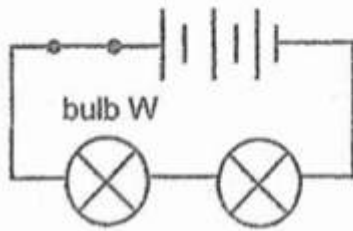
- A) iron
- B) gold
- C) copper
- D) aluminium

Question 17 of 61

Primary 5 Science (Term 4)

2 pts

The diagrams below show four circuits.



Which of the following bulbs are of equal brightness?

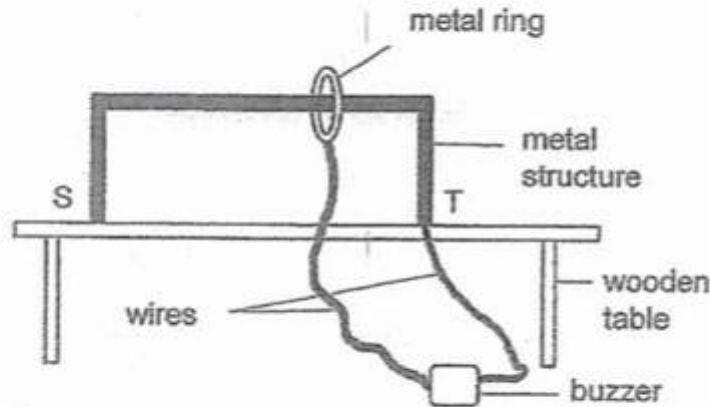
- A) W and Y
- B) X and Y
- C) X and Z
- D) Y and Z

Question 18 of 61

Primary 5 Science (Term 4)

2 pts

A player has to move a ring from S to T without touching the metal structure to win the game. The buzzer would sound if the metal structure is touched.



However, during the game, the buzzer did not sound when the ring touches the metal structure. From the diagram above, what change must be done to the set-up to allow it to work?

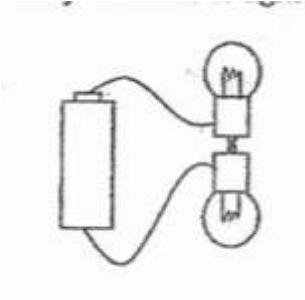
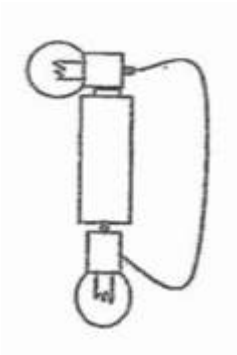
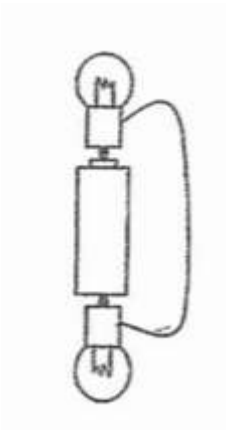
- A) Use a plastic ring
- B) Use a longer wire
- C) Insert a bulb into the circuit
- D) Connect a battery to the wires

Question 19 of 61

Primary 5 Science (Term 4)

2 pts

Which of the following electrical circuits allows only one bulb to light up?

 A) B) C) D)

Question 20 of 61

Primary 5 Science (Term 4) 2 pts

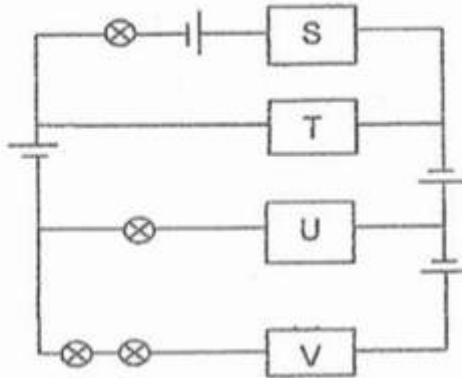
Which of the following actions does not conserve electrical energy?

- A) using energy saving lamps
- B) leaving the lights on when not in the room
- C) using an electric fan instead of an air conditioner
- D) hang the clothes outdoors to dry instead of using an electric dryer

Question 21 of 61

Primary 5 Science (Term 4) 2 pts

Four materials, S, T, U and V, were connected in the electrical circuit as shown below.



Which of the following correctly represents materials, S, T, U and V, in the electrical circuit so that only two of the bulbs light up?

	Material S	Material T	Material U	Material V
(1)	plastic	wood	glass	metal
(2)	metal	metal	plastic	wood
(3)	metal	glass	metal	plastic
(4)	plastic	metal	metal	metal

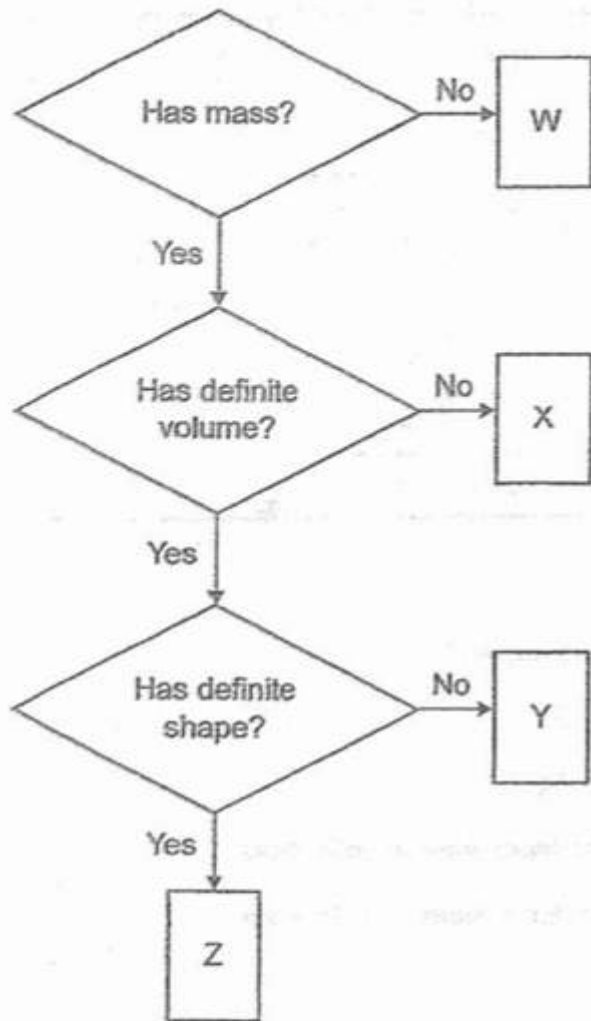
- A) 1
- B) 2
- C) 3
- D) 4

Question 22 of 61

Primary 5 Science (Term 4)

2 pts

Substances W, X, Y and Z are classified in the flowchart shown below.



What could W, X, Y and Z be?

	W	X	Y	Z
(1)	light	water vapour	sand	oil
(2)	sound	oxygen	oil	sand
(3)	heat	sand	water vapour	oxygen
(4)	oxygen	oil	sand	sound

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

Question 23 of 61

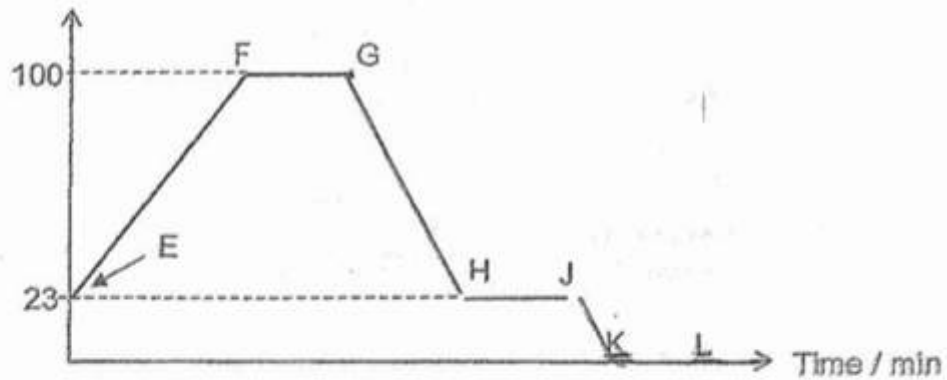
Primary 5 Science (Term 4)

2 pts

Use the graph below to answer Questions 23 and 24.

The graph below shows the change in the temperature of water in a beaker. The water was heated over a flame. Then, the flame was removed. Finally, the beaker of water was placed into the freezer.

Temperature / °C



Which of the following statements is correct?

- A) There was heat gain from E to G
- B) There was no heat gain during FG
- C) During HJ, water changed from liquid state to solid state
- D) During JK, water changed from liquid state to solid state

Question 24 of 61

Primary 5 Science (Term 4)

2 pts

Which of the following correctly matches the time at which the beaker was removed from the flame and placed into the freezer?

	Flame was removed	Beaker was placed into the freezer
(1)	F	H
(2)	F	J
(3)	G	K
(4)	G	J

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

Question 25 of 61

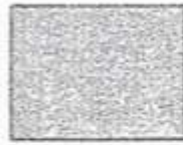
Primary 5 Science (Term 4)

2 pts

Below are the diagrams of the top view of three pieces of foam, foam S, foam T and foam U.



foam S

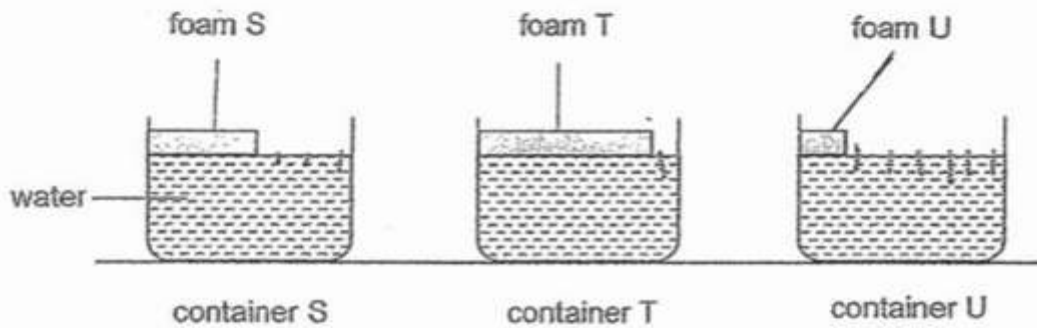


foam T



foam U

These three pieces of foam are placed in three identical containers, container S, container T and container U, with the same amount of water.



The volume of water left in each container was observed after one day.

Which of the following shows the correct order of the volume of water left in the containers, from the most to the least?

Volume of water left (cm ³)			
Most Least			
(1)	S	U	T
(2)	T	U	S
(3)	T	S	U
(4)	U	S	T

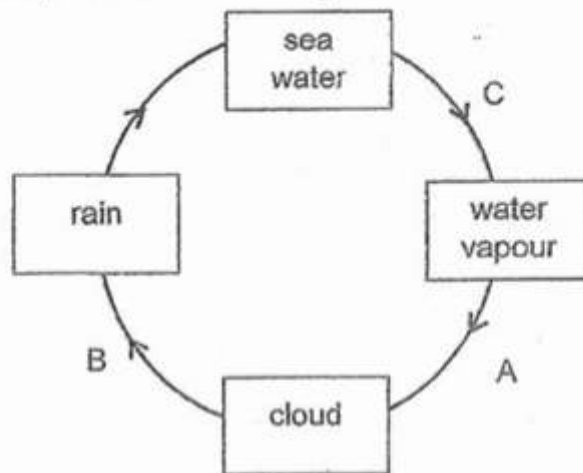
- A) 1
- B) 2
- C) 3
- D) 4

Question 26 of 61

Primary 5 Science (Term 4)

2 pts

The diagram below represents the water cycle.



Which of the following is correct?

	Evaporation occurred at	Condensation occurred at
(1)	A	B
(2)	B	A
(3)	C	A
(4)	C	B

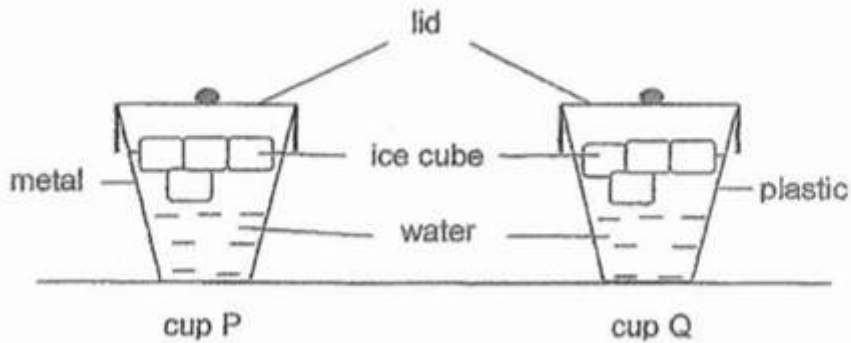
- A) 1
 B) 2
 C) 3
 D) 4

Question 27 of 61

Primary 5 Science (Term 4)

2 pts

Equal amount of iced-water is placed in two similar-sized cups, P and Q, made of different materials. Both cups are placed in a room.



What will most likely happen after some time?

- A) The ice cubes in both cups will lose heat to the water
- B) The ice cubes in cup P will melt more slowly than that in cup Q
- C) The water in cup Q will gain more heat from the surrounding air than that in cup P
- D) The temperature of the water in Cup Q will increase slower than that in cup P

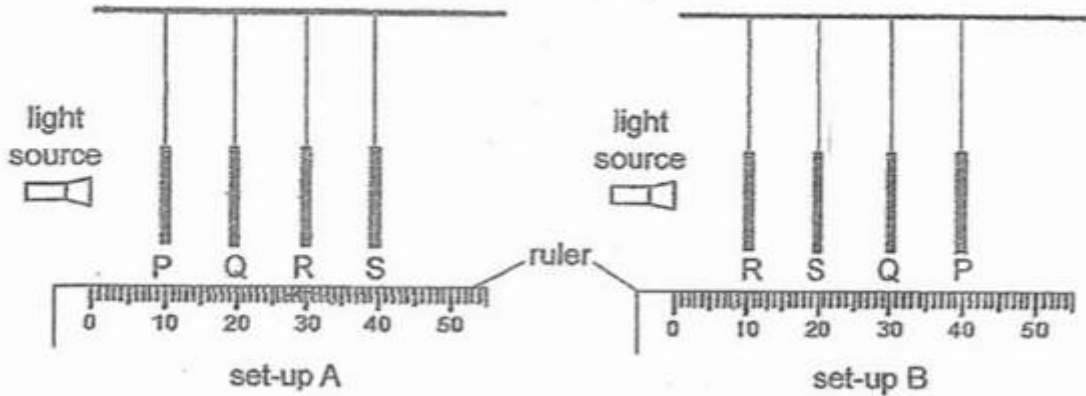
Question 28 of 61

Primary 5 Science (Term 4)

2 pts

An experiment was conducted in a dark room to find out whether light can pass through four sheets, P, Q, R and S, made of different materials but of equal thickness.

A ruler was used to determine how far the light travelled before it was blocked.



The distance travelled by the light for each set-up was measured and the results are shown in the table below.

Set-up	Distance travelled by light (cm)
A	30
B	10

Which one of the following correctly describes sheets P, Q, R and S?

Does it allow light to pass through?				
	P	Q	R	S
(1)	Yes	Yes	No	Not possible to tell
(2)	Yes	Not possible to tell	No	Yes
(3)	Yes	Yes	No	No
(4)	No	Yes	Yes	Not possible to tell

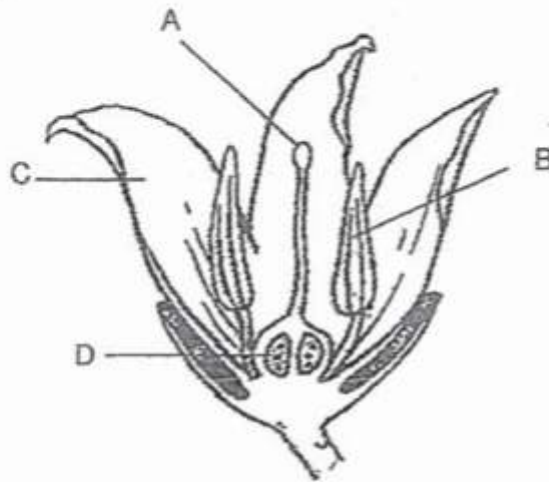
- A) 1
 B) 2
 C) 3
 D) 4

Question 29 of 61

Primary 5 Science (Term 4)

1 pt

A, B, C and D are parts of flower X.



Flower X

Sharon removed two of these parts. Then, she dusted some pollen grains on the remaining two parts of flower X. After some time, a fruit was still observed to be formed.

(a) Based on the diagram above, identify the two parts of flower X which had been removed.

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

Question 30 of 61

Primary 5 Science (Term 4)

0 pts

b) Explain how with the remaining two parts, a fruit can be formed.

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Primary 5 Science (Term 4)

0 pts

The fruit of flower X is shown below.



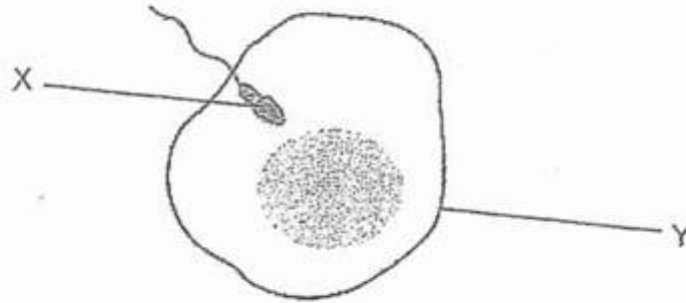
(c) Describe how the seeds of this fruit can be dispersed over a wide area. [2]

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Primary 5 Science (Term 4)

0 pts

The diagram below shows a process that takes place in a female human body.



(a) Describe the process show in the diagram above.

[1]

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Primary 5 Science (Term 4)

0 pts

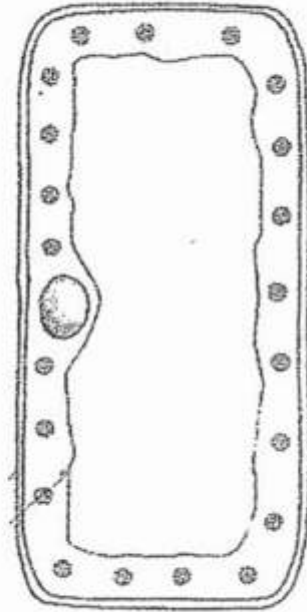
b) Explain why there is a need to have many cell X.

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Primary 5 Science (Term 4)

0 pts

Study the plant cell below.



(a) Identify and label the cell wall in the diagram above.

[1]

Please type "done" to proceed to the next question

Question 35 of 61

Primary 5 Science (Term 4)

0 pts

b) State the function of the cell wall

Question 36 of 61

Primary 5 Science (Term 4)

0 pts

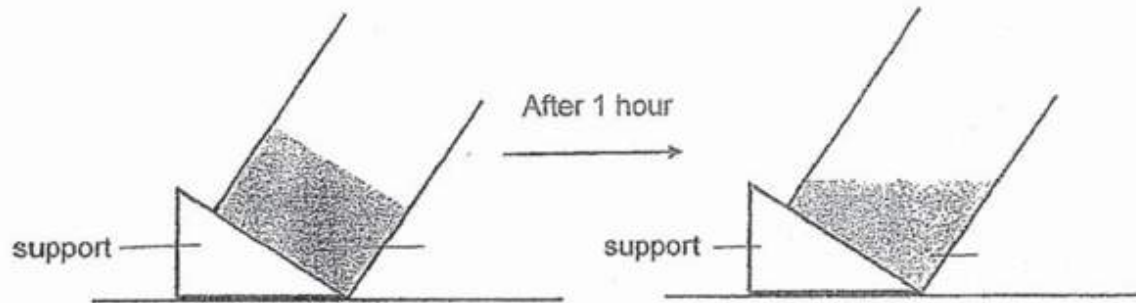
c) Name the part(s) of the cell shown above that is/are also found in the animal cell.

Question 37 of 61

Primary 5 Science (Term 4)

0 pts

Mei Lan placed a container with substance X on a table in a room. The temperature of the room is 32°C. After one hour, she observed a change in substance X.



(a) Explain what had happened to substance X in the above diagram.

[1]

Question 38 of 61

Primary 5 Science (Term 4)

0 pts

The container with substance X was placed in a freezer for 5 hours.

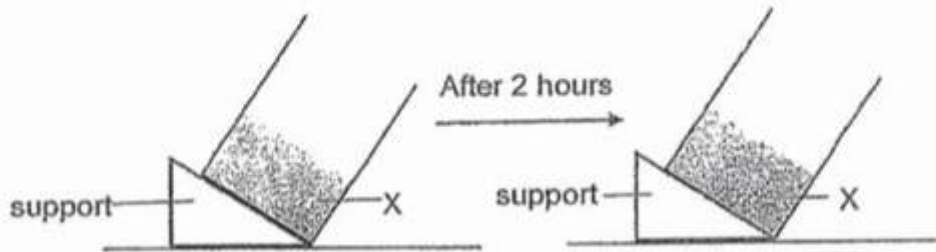
b) Describe the process of freezing

Question 39 of 61

Primary 5 Science (Term 4)

0 pts

Substance X was then taken out of the freezer and left on the table in a room at the temperature of 25°C. After two hours, there was no observable change to substance X as shown below.

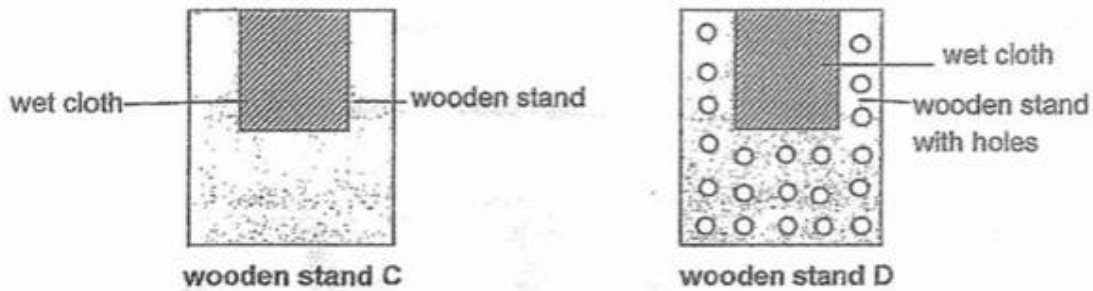


(c) Based on the information above, state a possible freezing point of X. [1]

Question 40 of 61

Primary 5 Science (Term 4) 0 pts

Wee Kiat placed two identical pieces of wet cloth, on wooden stands, C and D, as shown below in a room. He measured the mass of each cloth before and after the experiment.



The results of his experiment are shown in the table below.

	Mass of cloth (g)	
	on wooden stand C	on wooden stand D
Start of the experiment	40	40
End of the experiment	27	24

- (a) On which wooden stands, C or D, did the cloth dry faster? Give a reason for your answer. [2]

Question 41 of 61

Primary 5 Science (Term 4) 0 pts

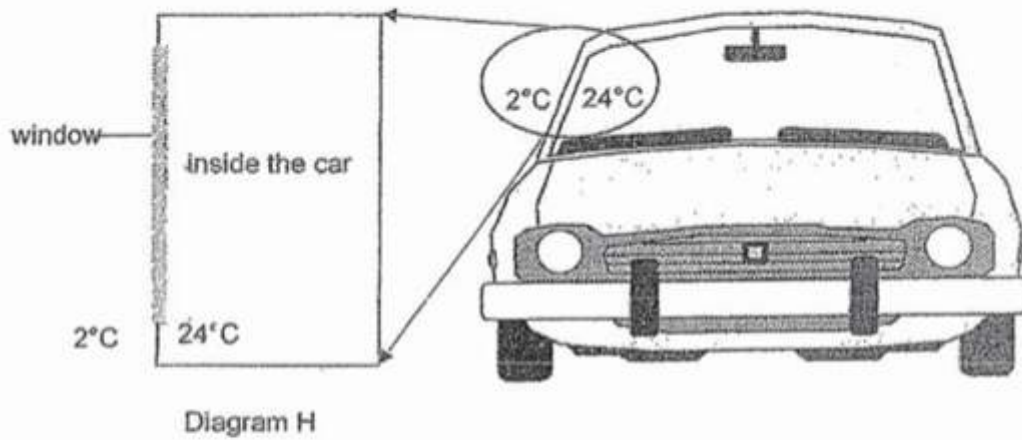
- b) Wee Kiat wanted both cloths to dry faster. Suggest another way for Wee Kiat to dry the clothes faster.

Question 42 of 61

Primary 5 Science (Term 4)

0 pts

The diagram below shows the temperature inside and outside Jeremy's car.



The temperature in the car is 24°C while the temperature outside is 2°C. After some time, water droplets are formed on the window.

- (a) Draw in diagram H the water droplets on the side of the window where they are most likely to be found. [1]

Please type "done" to proceed to the next question

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0 pts

- b) Explain how the water droplets are formed on that side of the car window.

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0 pts

- c) Describe what Jeremy would likely observe if he raises the temperature in his car to 29.

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Primary 5 Science (Term 4)

1 pt

Farah wanted to find out how the different exercises would affect her heart rate. The table below shows Farah's heart rate when she carries out three different forms of exercise.

Exercise	Heart rate (beats per minute)
Walk for 20 minutes	100
Jog for 20 minutes	
Run for 20 minutes	148

- (a) Complete the table above by writing down a possible value for her heart rate during jogging. [1]
-

Question 46 of 61

Primary 5 Science (Term 4)

0 pts

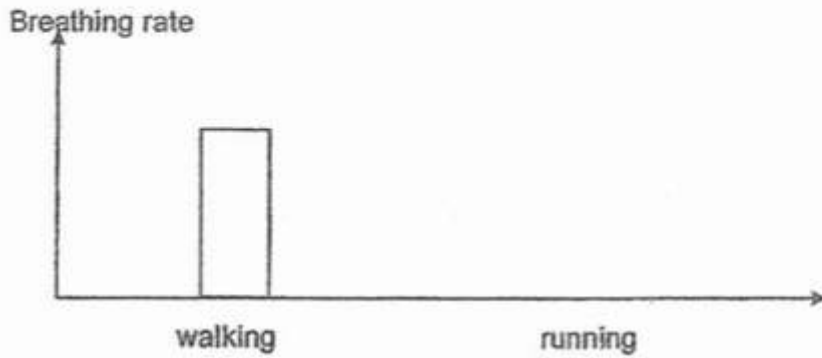
- b) Explain the difference in her heart rate when she runs compared to when she walks
-

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Primary 5 Science (Term 4)

0 pts

Complete the bar graph below to show a possible breathing rate for Farah when she is running. [1]



Please

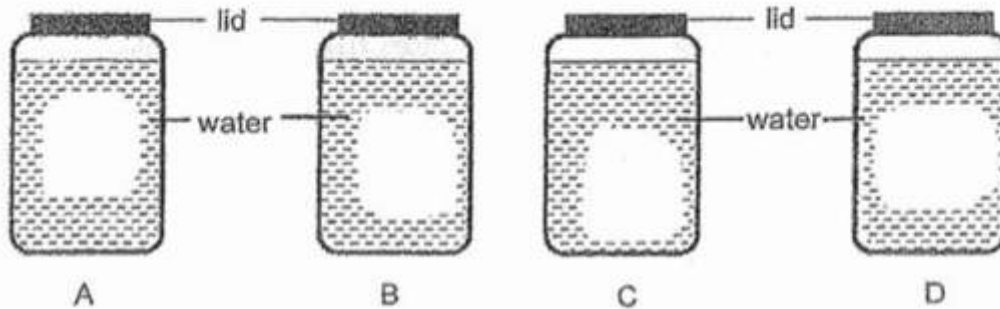
type "done" to proceed to the next question

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Primary 5 Science (Term 4)

0 pts

Anna poured equal amounts of hot water at 80°C into four different containers, A, B, C and D, that of the same size and thickness but made of different materials.



She measured the temperature of water after one hour. Her results are shown below.

Container	Temperature of water after one hour/ °C
A	65
B	50
C	55
D	75

(a) State the aim of this experiment.

[1]

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Primary 5 Science (Term 4)

0 pts

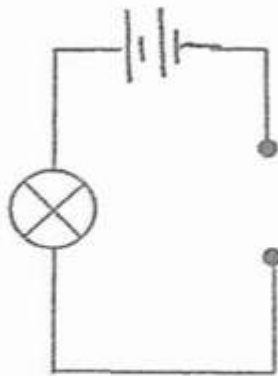
b) State another two variables that must be kept constant for this experiment

Question 50 of 61

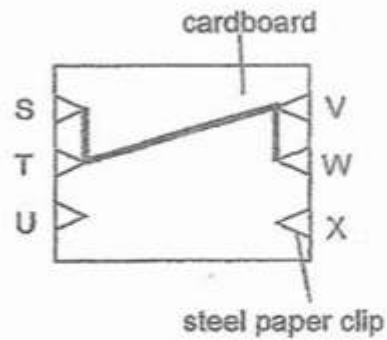
Primary 5 Science (Term 4)

0 pts

Jane connected a circuit tester to the circuit card as shown below.



circuit tester



circuit card

The wires of the circuit card are connected as shown above. Jane connected the two ends of the circuit tester to two different steel paper clips at a time. She recorded her results as shown below.

Points connected to circuit card	Does the bulb light up?
S and W	Yes
T and V	No
W and T	Yes
U and X	No
S and T	Yes

(a) Jane's teacher told her that one of her observations is wrong. Explain why.

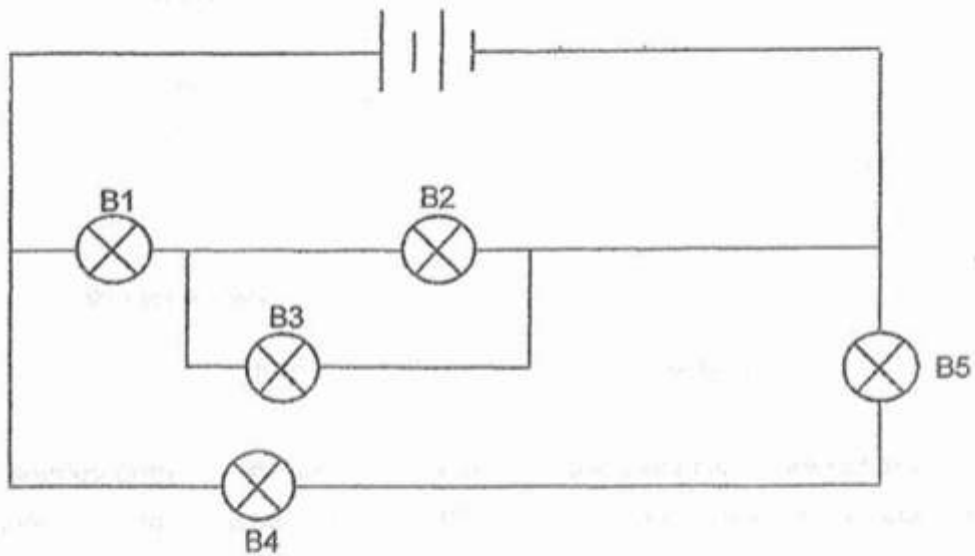
[2]

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0 pts

Jane set up another circuit as shown below.



(b) If B3 fuses, which bulbs will remain lit? Explain why.

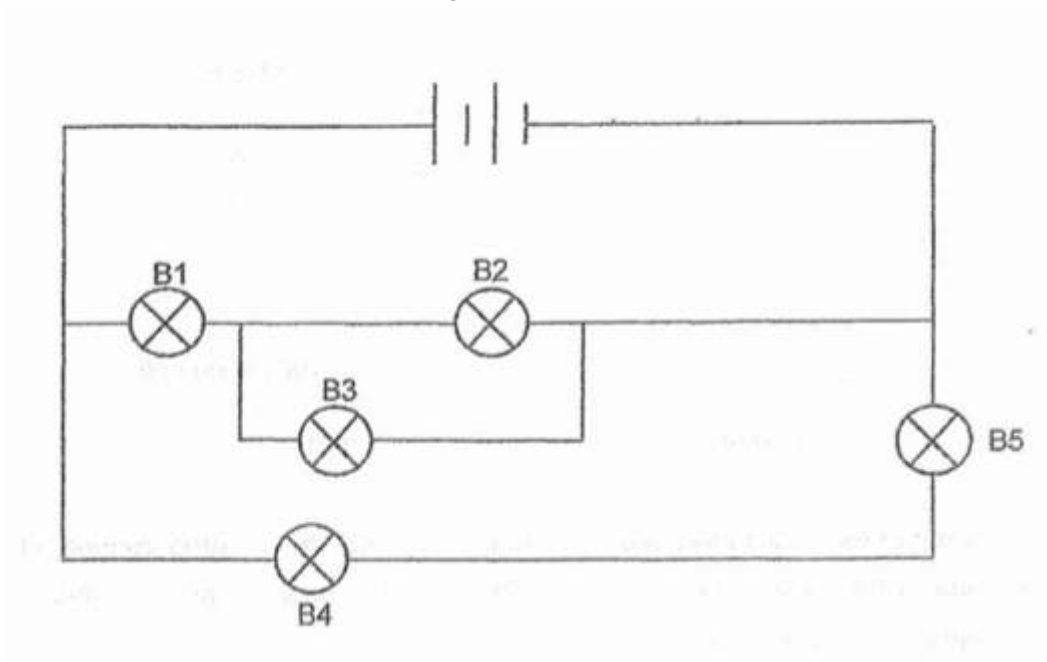
[2]

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0 pts

c) Mark "x" on the circuit diagram to show the position Jane can place a switch so that she can turn all the bulbs on and off together.



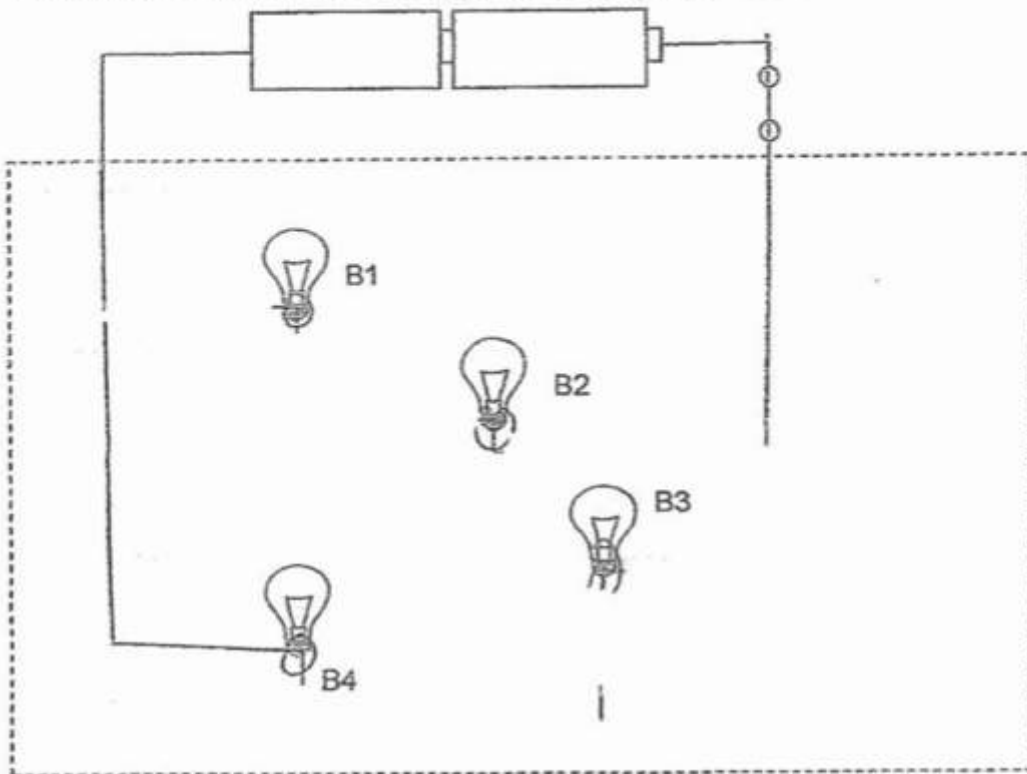
Please type "done" to proceed to the next question

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Primary 5 Science (Term 4)

0 pts

Bulbs B1, B2, B3, and B4 are connected in a circuit hidden in a wooden box as shown below. All the light bulbs lit up when the switch is closed.



Darren removed one light bulb from the electric circuit above each time and observed what happened to the rest of the bulbs. His observations are recorded in the table below.

Bulb removed	Bulb(s) lit
B1	B3, B4
B2	B3, B4
B3	B1, B2
B4	B1, B2

- (a) Based on his observations, draw in the wires in the diagram above to complete the electric circuit [2]

Please type "done" to proceed to the next question

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Primary 5 Science (Term 4) 0 pts

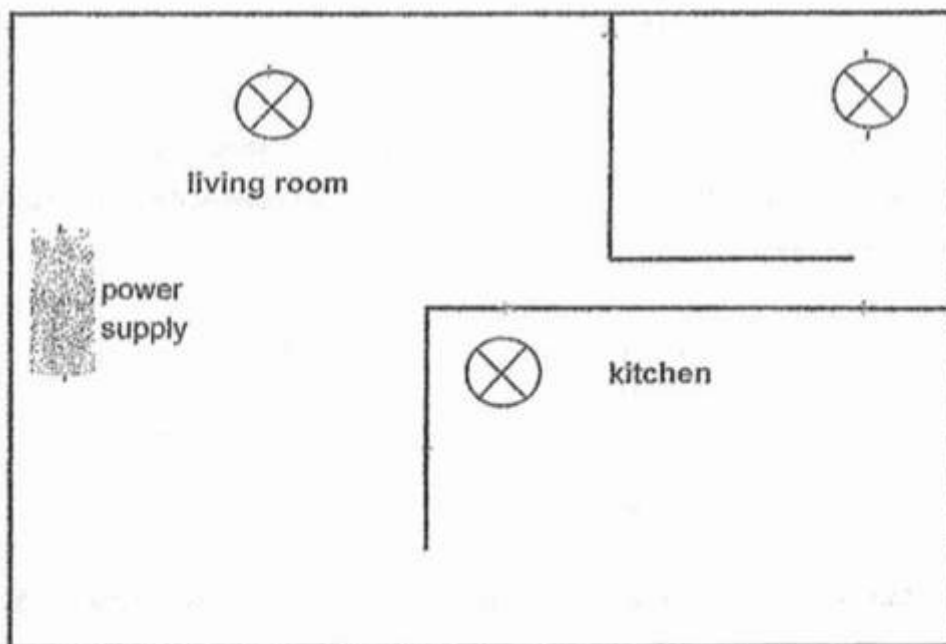
b) Darren added another battery in series to the two batteries. The bulbs in the wooden box lit up very brightly but stopped glowing after some time. Suggest a reason why this happened.

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Primary 5 Science (Term 4) 0 pts

Darren then designed an electrical circuit to light up an apartment with three rooms: a living room, a bedroom and a kitchen.

Complete the circuit diagram below with wires and switches such that all three bulbs will light up with equal brightness and can be switched on or off independently. The power supply is the source of electricity. [2]



type "done" to proceed to the next question

Please

Question 56 of 61

Primary 5 Science (Term 4)

1 pt

Daniel set up an experiment as shown below. He pushed magnet J slowly along the ruler towards the pin. He measured the distance, d , where the pin was just attracted to the magnet.

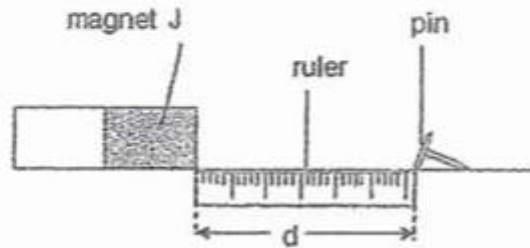


Diagram 1

He repeated these steps with magnets K then L. Daniel recorded his observations in the table below.

Magnet	d (cm)
J	3
K	8
L	5

- (a) Based on the results in the table, arrange the bar magnets, J, K and L, according to their magnetic strength from the weakest to the strongest. [1]

1. [] J

A. neutral magnetic strength

2. [] L

B. weakest magnetic strength

3. [] K

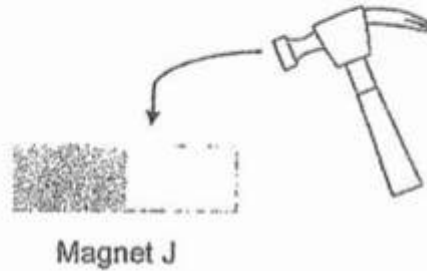
C. strongest magnetic strength

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Primary 5 Science (Term 4)

0 pts

Daniel hammered bar magnet J twenty times.



- (b) He then conducted the same experiment in diagram 1 and observed that the distance from which the pin was attracted to magnet J was less than 3 cm. Give a reason for his observation. [1]

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0 pts

- c) Magnet J was brought close to an object. Instead of being attracted to Magnet J, the object moved away. Explain why this happened

Question 59 of 61

Primary 5 Science (Term 4)

0 pts

- Melanie conducted an experiment using four strips of different materials, W, X, Y and Z, of the same size. She dipped each material into a container with 120 ml of water for 30 seconds. She measured the amount of water remaining in the container after each material was removed. The results are shown in the table below.



Material	W	X	Y	Z
Amount of water left in the beaker (ml)	100	80	60	10

- (a) Explain why it is important that all materials are to be dipped into the water for the same amount of time. [1]

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Primary 5 Science (Term 4)

0 pts

- b) Suggest what Melanie can do to ensure that her results are reliable

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Primary 5 Science (Term 4)

0 pts

- c) Melanie picked Z to make a bath towel. Explain why.