

Test: Primary 4 - Term 2 (SA1) Science (Red Swastika)

Points: 62 points

Name: _____

Score: _____

Date: _____

Signature: _____

Select multiple choice answers with a cross or tick:

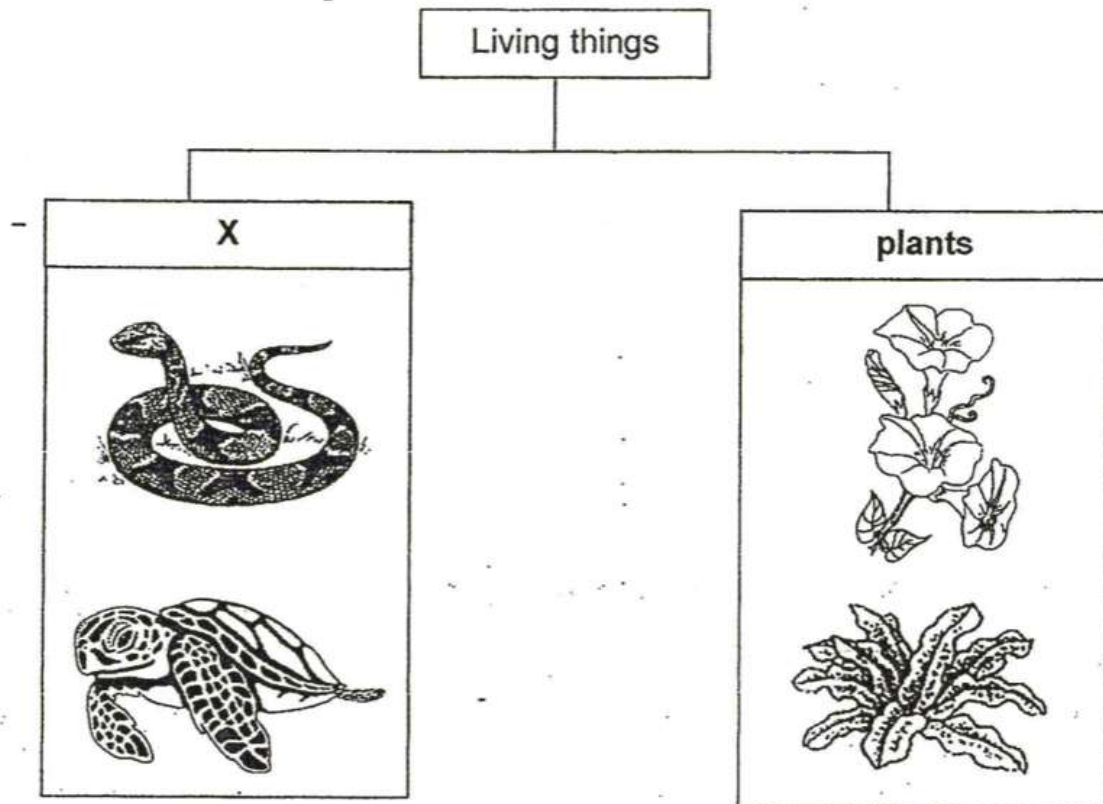
Only select one answer

Can select multiple answers

Booklet A (24 x 2 marks)

For each question from 1 to 24, four options are given. One of them is the correct answer.

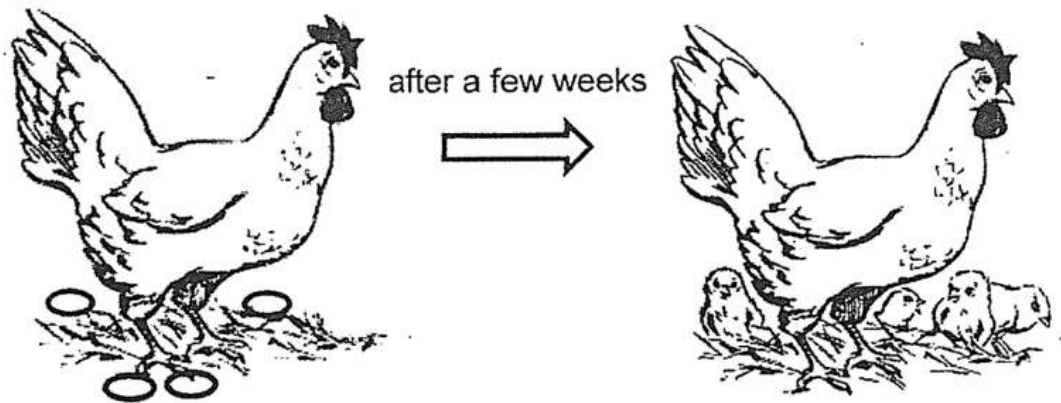
Study the classification table shown.



Which one of the following is the most suitable heading for group X?

- A) birds
- B) insects
- C) reptiles
- D) amphibians

Study the following organism.



What characteristic of living things does it show?

-
- A) Living things can die
 - B) Living things can reproduce
 - C) Living things can respond to changes
 - D) Living things need air, food and water to survive

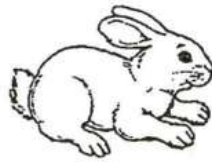
Benny recorded some information in the table shown.

| Animal | Characteristics | Example |
|--------|---------------------------------------|----------|
| fish | has scales and breathes through gills | seal |
| bird | has feathers and a beak | parrot |
| insect | has six legs and three body parts | beetle |
| mammal | has hair and produces milk | elephant |

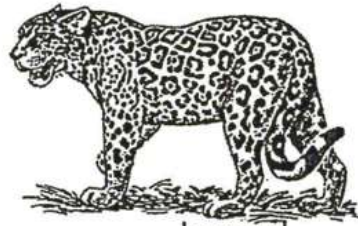
Which one of the following has been grouped wrongly?

-
- A) seal
 - B) parrot
 - C) beetle
 - D) elephant

The diagrams show some animals.



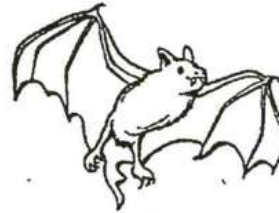
rabbit



leopard



zebra



bat

Based on the animals shown above, which of the following is/are true about all the animals?

- A: They live on land.
- B: They have hair as their outer covering.
- C: They respond to changes around them.

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

Aminah recorded her observations on the development of plant X.

| Day | Development |
|-----|----------------|
| 1 | seed planted |
| 3 | root appeared |
| 7 | shoot appeared |
| 10 | leaf appeared |

When would the seedling be able to start making food?

- A) day 1
 B) day 3
 C) day 7
 D) day 10

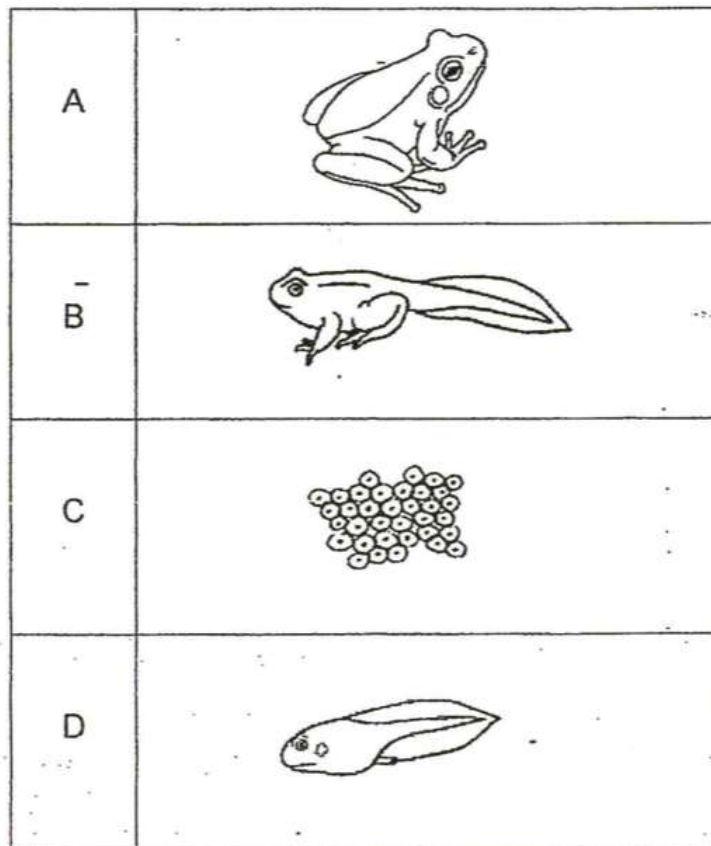
The table shows the characteristics of the life cycles of four animals.

| Animal | P | Q | R | S |
|-----------------------------------|---|---|---|---|
| Young looks like the adult | ✓ | X | ✓ | X |
| Has four stages in its life cycle | ✓ | ✓ | X | X |
| Moults during one of the stages | X | ✓ | ✓ | ✓ |

Which animal most likely represents a butterfly?

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

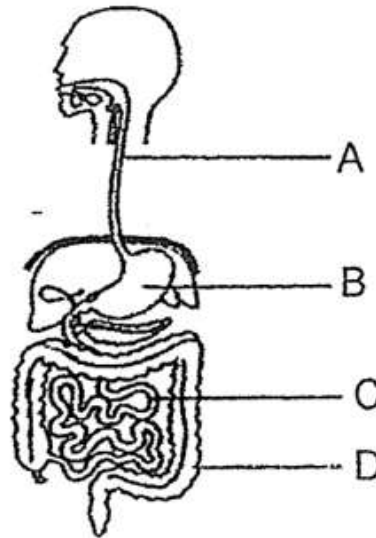
The diagrams show the different stages in the life cycle of a frog. The stages are not arranged in order.



Which of the following shows the correct order of the life cycle of a frog?

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

The diagram shows the human digestive system.



At which parts, A, B, C or D, are digestive juices not added?

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

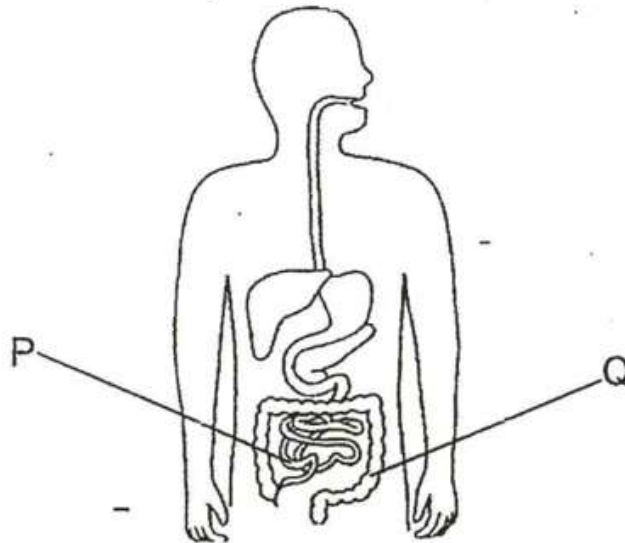
Study the classification table of the organ systems in a human body.

| Respiratory system | Circulatory system | Skeletal system | Muscular system |
|--------------------|--------------------|-----------------|-----------------|
| nose windpipe | lungs heart | skull rib | muscles |

Which organ is placed in the wrong group?

- A) heart
- B) skull
- C) lungs
- D) muscles

The diagram shows a human digestive system.



Compare organ P and Q, which two comparisons are correct?

A : Digestion is completed in organ P.

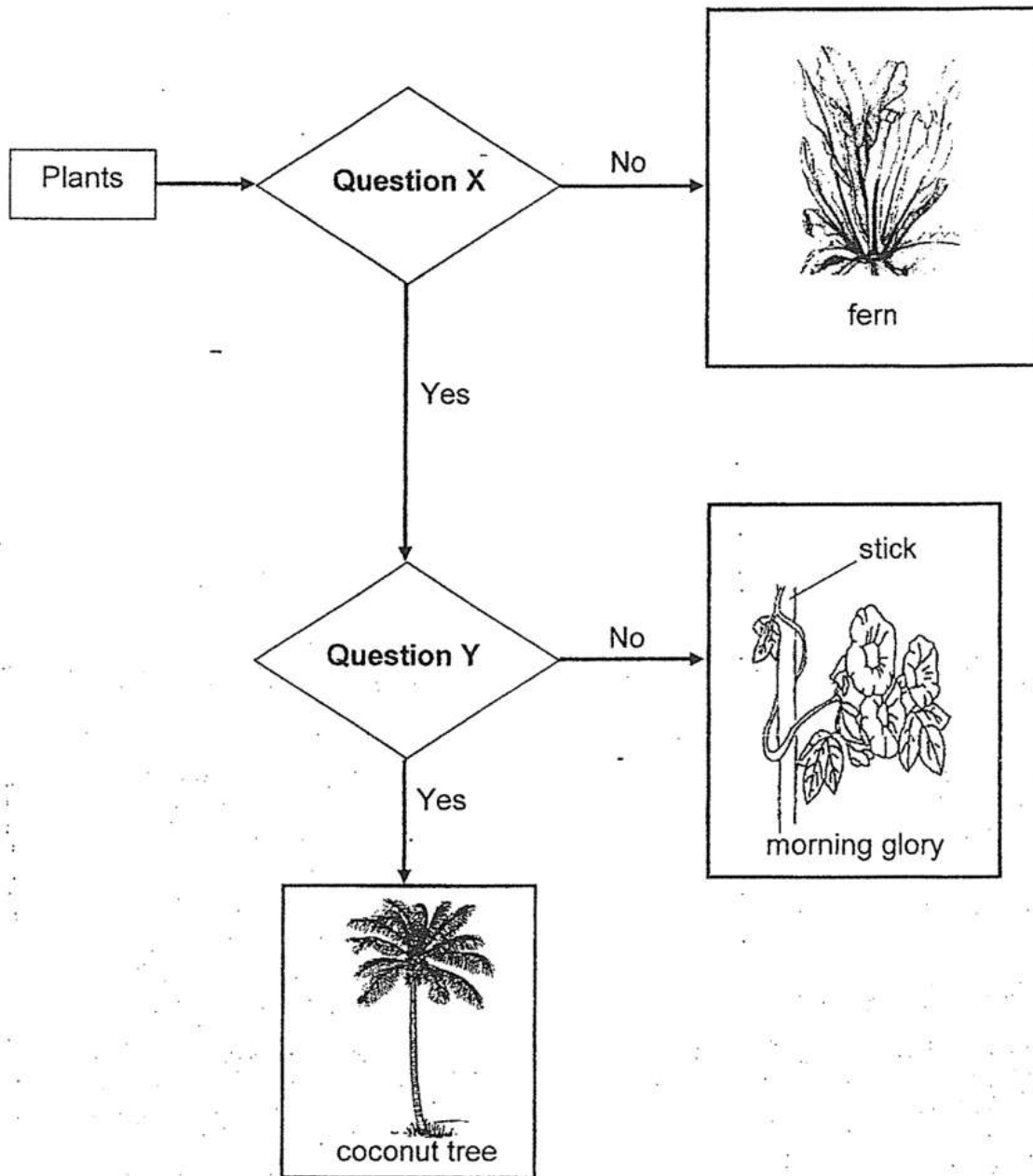
B : Digestion is completed in organ Q.

C : Organ P absorbs digested food while Organ Q absorbs water.

D : Organ Q absorbs digested food while Organ P absorbs water.

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

Study the flow chart below carefully.



Based on the flow chart, which one of the following correctly states what question X and question Y might be?

| | Question X | Question Y |
|-----|-----------------------------|-----------------------------|
| (1) | Does it have a weak stem? | Does it have flowers? |
| (2) | Does it have a strong stem? | Does it have flowers? |
| (3) | Does it have flowers? | Does it have a weak stem? |
| (4) | Does it have flowers? | Does it have a strong stem? |

- A) 1
- B) 2

C) 3

D) 4

Question 12 of 54

Primary 4 Science (Term 2) 2 pts

Which one of the following is not an example of a matter?

A) air

B) jelly

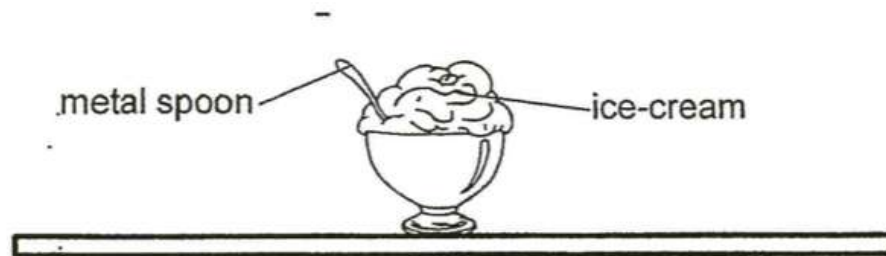
C) oxygen

D) shadow

Question 13 of 54

Primary 4 Science (Term 2) 2 pts

A bowl of ice-cream is put on the kitchen table.



Which of the following correctly shows the heat changes of the ice-cream?

A: The ice-cream loses heat to the surroundings.

B: The ice-cream gains heat from the metal spoon.

C: The ice-cream loses heat to the metal spoon.

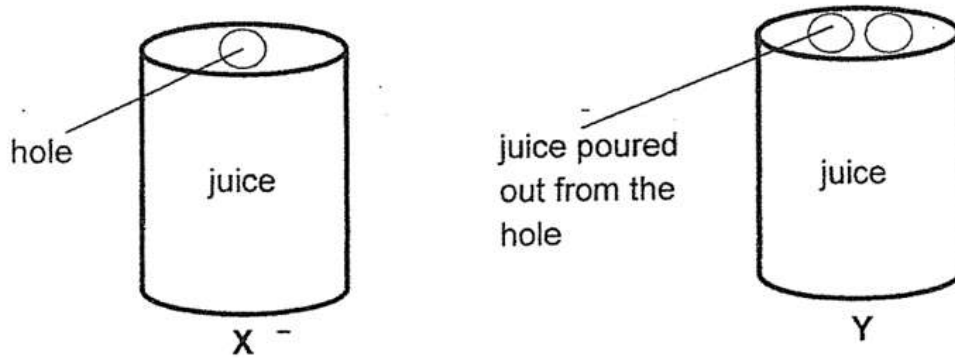
A) A only

B) B only

C) A and B only

D) A and C only

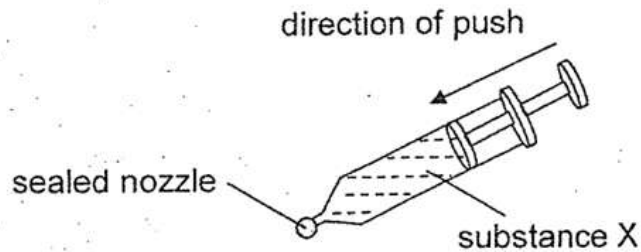
There were two cans of juice, X and Y. Zach poked one hole in can X while David poked two holes in can Y as shown. Next, both of them poured out the juice from the hole of each can.



What would be the immediate observation as the juice was poured out?

-
- A) Juice from X flowed out slower than Y
 - B) Juice from Y flowed out slower than X
 - C) Juice from X and Y flowed out at the same rate
 - D) Juice from Y flowed out but juice from X would not flow out

The syringe below contains 200cm^3 of substance X and its nozzle is sealed tightly. Melody is not able to push the plunger inwards no matter how hard she tried.

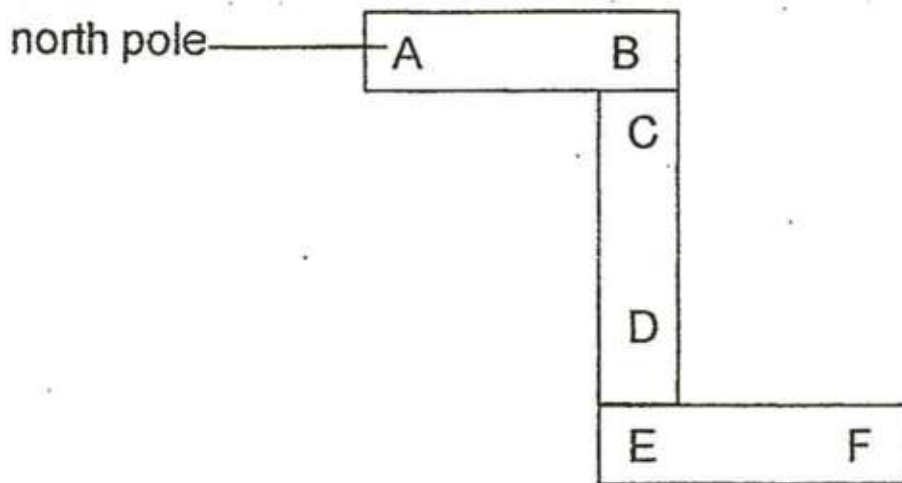


Which of the following is correct about substance X?

| | Substance X | Reason |
|-----|-------------|------------------------|
| (1) | liquid | has no definite volume |
| (2) | liquid | has a definite volume |
| (3) | gas | cannot be compressed |
| (4) | gas | can be compressed |

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

Study the three magnets as shown carefully.

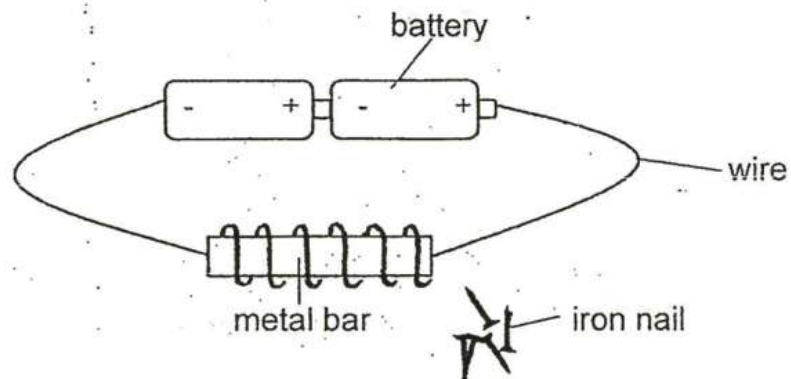


Which of the following correctly identifies poles C and F?

| | C | F |
|-----|------------|------------|
| (1) | north pole | north pole |
| (2) | south pole | north pole |
| (3) | north pole | south pole |
| (4) | south pole | south pole |

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

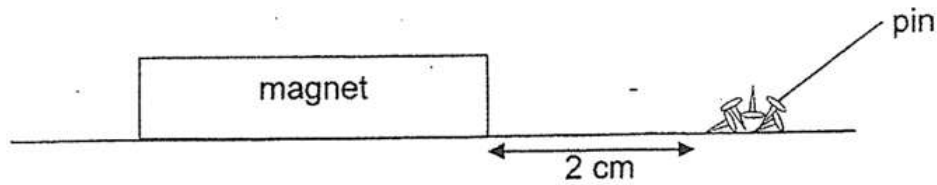
Sally used a wire, metal bar and some batteries to set up an electromagnet as shown.



Which of the following should be done to increase the magnetic strength of the electromagnet?

- A) Decrease the number of batteries in the set-up
- B) Increase the number of iron nails in the set-up
- C) Increase the number of coils around the metal bar
- D) Decrease the number of coils around the metal bar

Caleb wanted to test the magnetic strength of four magnets, W, X, Y and Z. He placed each magnet near some iron pins and recorded his observation.



| Magnet | Distance between the magnet and the pins (cm) | Number of pins attracted to the magnet |
|--------|---|--|
| W | 2 | 6 |
| X | 2 | 5 |
| Y | 2 | 1 |
| Z | 2 | 3 |

Which one of the following statements is most likely to be correct?

- A) Magnet W has the least magnetism
- B) Magnet Y has the greatest magnetism
- C) The magnetism for magnet Z is less than magnet Y
- D) The magnetism for magnet X is less than magnet Z

Which of the following item(s) produce(s) heat?

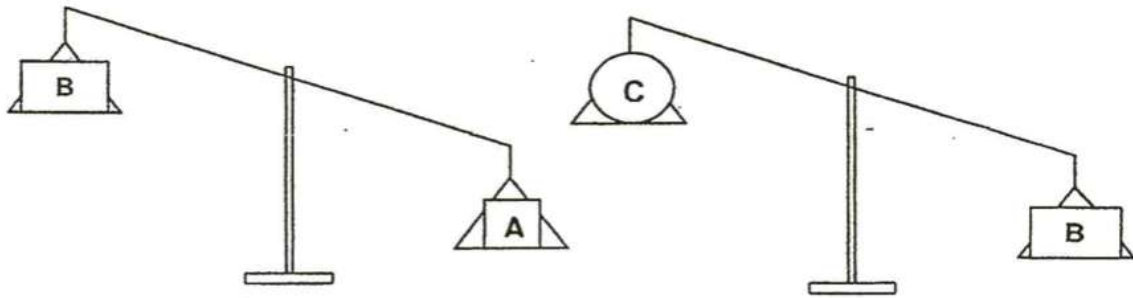
- A: the sun
- B: an ice cube
- C: a candle flame

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

Question 20 of 54

Primary 4 Science (Term 2) 2 pts

Betty is comparing the mass of three objects A, B and C using the balance beam as seen below.



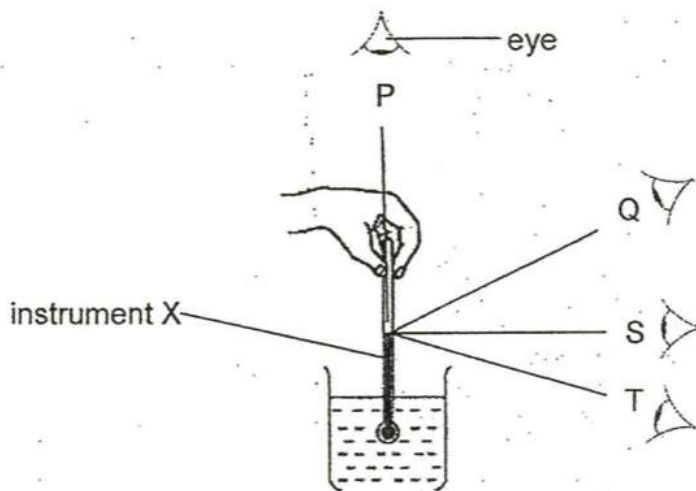
Which of the following statements is true about their masses?

- A) Object A is the heaviest
- B) Object B is the heaviest
- C) Object B is lighter than object C
- D) Object A is lighter than object C

Question 21 of 54

Primary 4 Science (Term 2) 2 pts

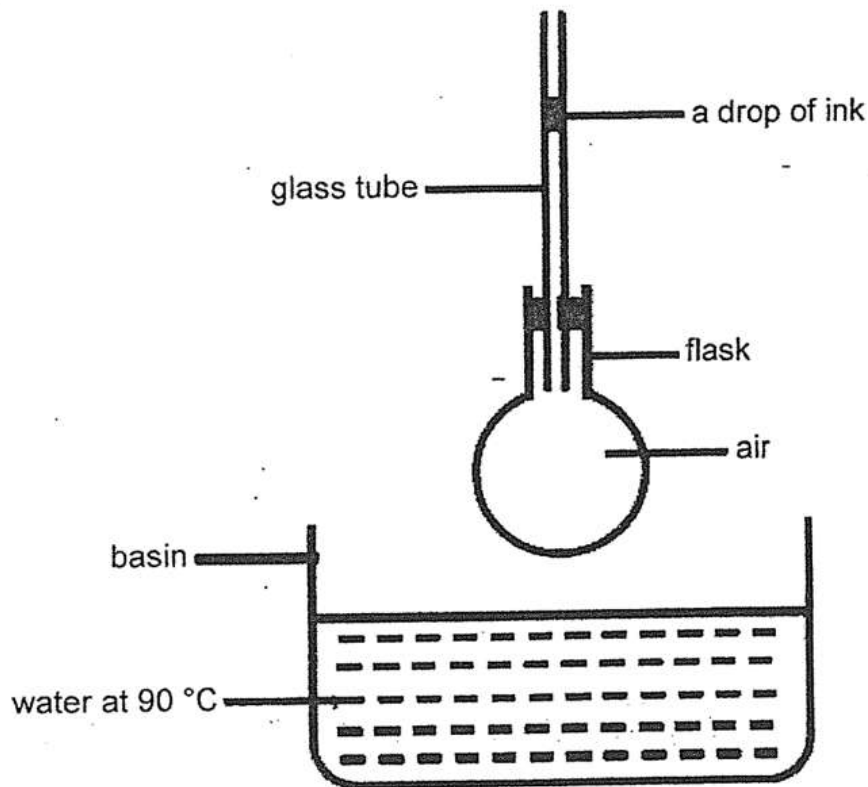
Ahmad used instrument X to find out the temperature of hot water in the beaker.



At which point, P, Q, S or T, should he place his eye to have an accurate reading of the temperature?

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

Minah set up the experiment as shown.



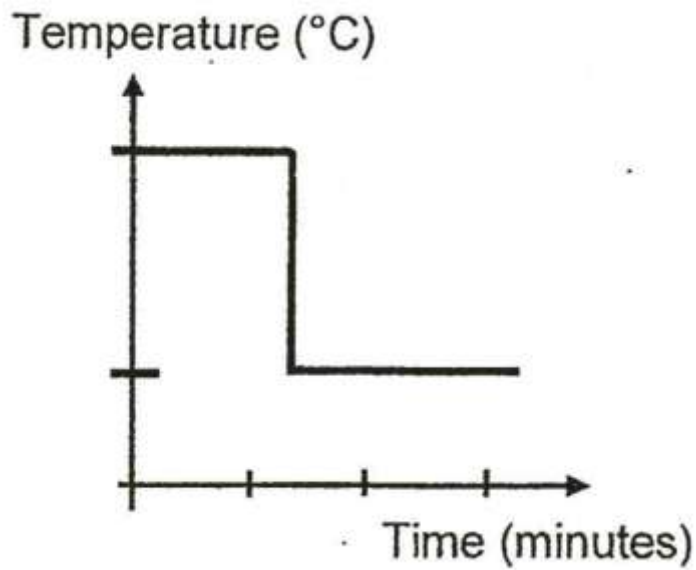
The flask is placed into the water. Which of the following correctly explains what will happen?

| | ink drop | reason |
|-----|------------|------------------------------|
| (1) | moves up | water in the basin expands |
| (2) | moves up | air in the flask expands |
| (3) | moves down | water in the basin contracts |
| (4) | moves down | air in the flask contracts |

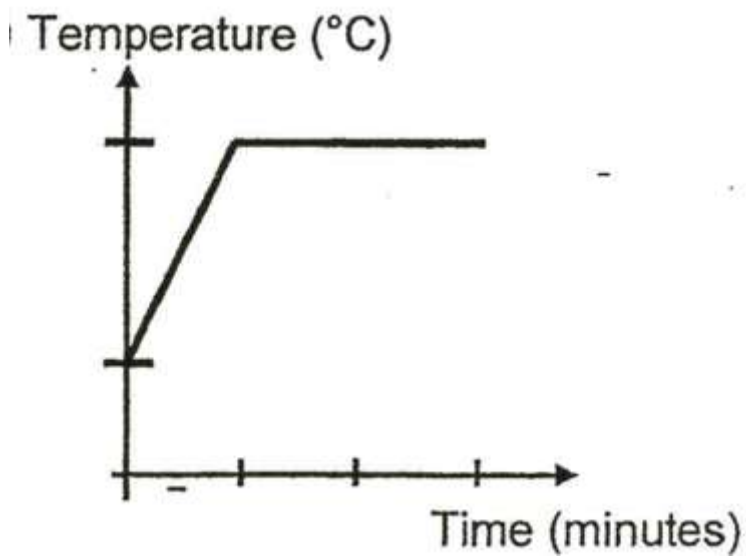
- A) 1
 B) 2
 C) 3
 D) 4

Mrs Tan left a cup of hot tea on the table for 30 minutes. Which graph correctly shows the temperature of the hot tea over a period of 30 minutes?

A)

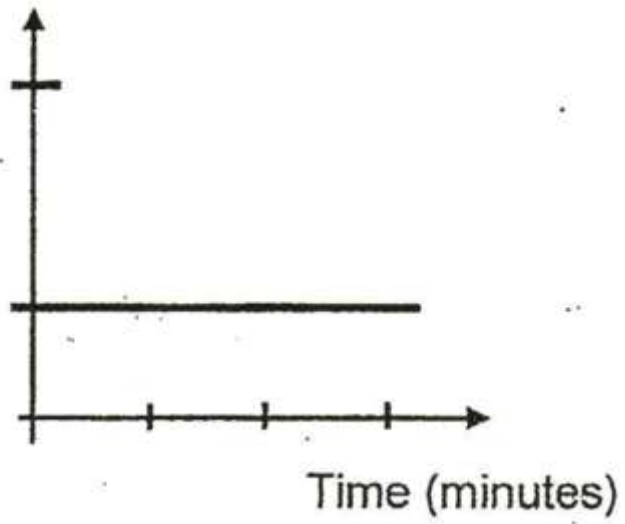


B)



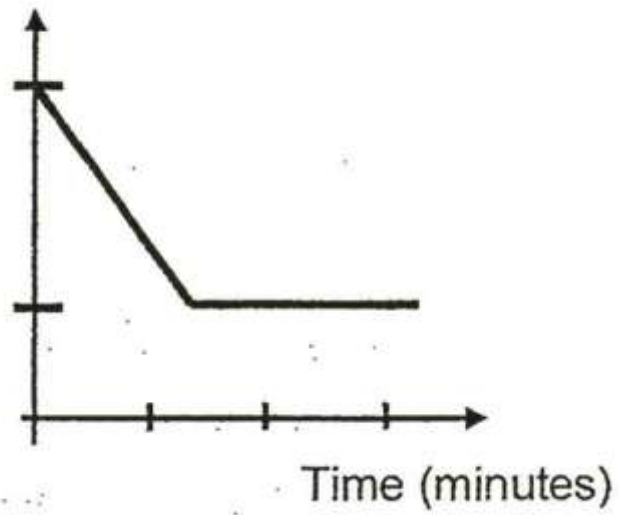
C)

Temperature ($^{\circ}\text{C}$)

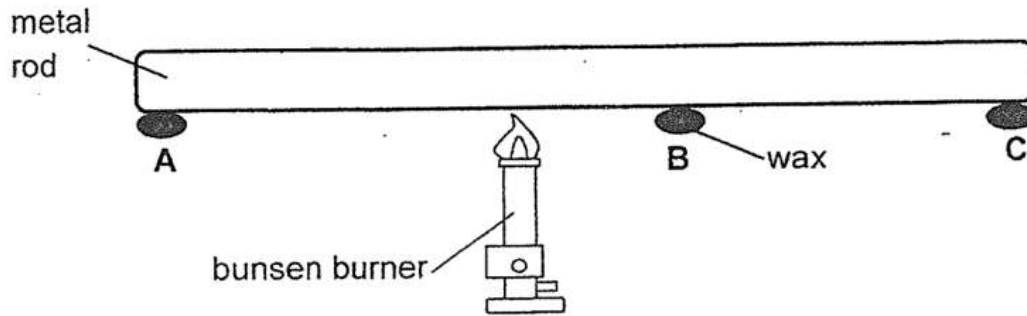


D)

Temperature ($^{\circ}\text{C}$)



Su Ling placed three equal amount of wax, A, B and C, at three different parts of a metal rod as shown.



Which of the following about the wax is correct?

| | first to melt | last to melt |
|-----|---------------|--------------|
| (1) | B | A |
| (2) | C | B |
| (3) | A | C |
| (4) | B | C |

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

Booklet B

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

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

Study the table below carefully. A tick (✓) in each box indicates the characteristics which the living things have.

| Characteristic of living things | Living things | | | |
|---------------------------------|---------------|---|---|---|
| | W | X | Y | Z |
| Lives in water to survive | ✓ | | ✓ | ✓ |
| Produces milk for their young | | | ✓ | |
| Has a beak and feathers | | ✓ | | |
| Has leaves, stem and roots | ✓ | | | |
| Can move around freely | | ✓ | ✓ | ✓ |

The diagram below shows organism A.



Organism A

Based on the table, under which group of living things, W, X, Y or Z, would you place organism A? (1m)

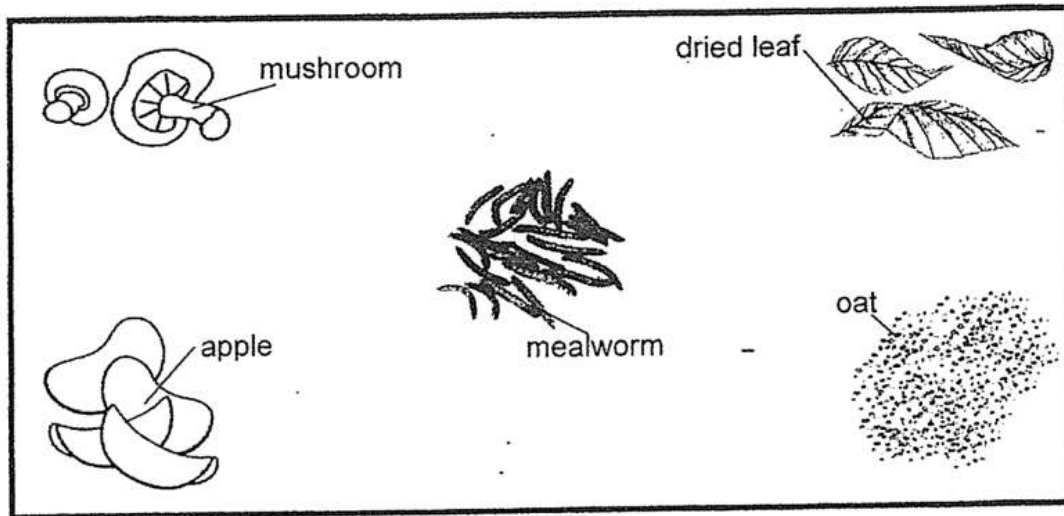
- A) W
- B) X
- C) Y
- D) Z

b) Based on the table, state one reason why organism A cannot be classified in the same group as organism W? (1m)

c) State one similar characteristic of living things, X, Y and Z. (1m)

d) Based on the table, which characteristic can be used to identify a living thing as a mammal? (1m)

Sofia carried out an experiment with some mealworms in the Science room. She placed the mealworms in the centre of a tray. Then, she placed different types of food at four corners of the tray as shown in the diagram.



After some time, she counted the number of mealworms found at each corner. The table below showed the results.

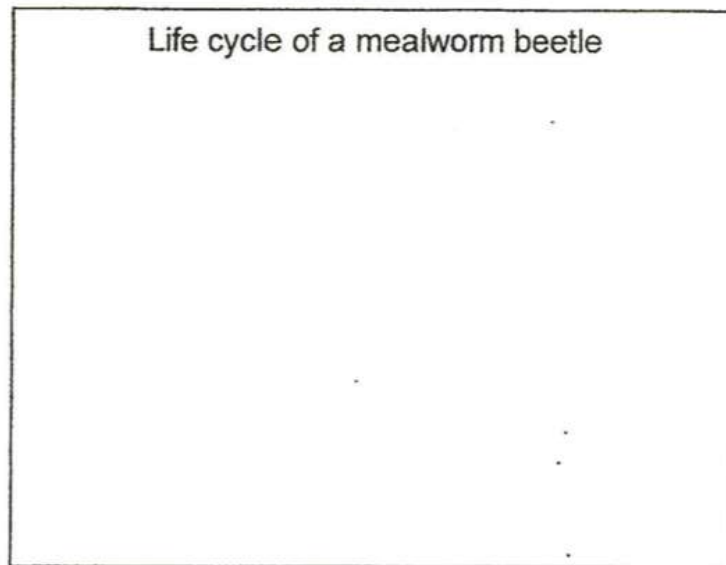
| Type of Food | mushroom | dried leaf | apple | oat |
|---------------------|----------|------------|-------|-----|
| Number of mealworms | 2 | 1 | 4 | 13 |

Based on the table, which type of food did the mealworms like the least? (1m)

Sofia also observed some insect skin on the tray. However, there were no dead mealworms or other insects found on the tray.

Suggest a reason why insect skin was found on the tray

The mealworm will turn into a beetle eventually. Draw the life cycle of the mealworm beetle in the box below. Use only words and arrows. (1m)

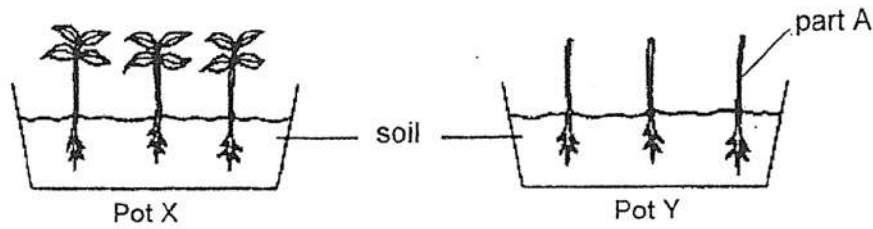


Please type "done" to proceed to the next question

At which stage of the life cycle of the mealworm beetle does reproduction take place?

Question 31 of 54

Leon grew two pots of seedlings, X and Y, from seeds of the same kind of plant. When the plants of both pots were of the same height, he cut away the leaves of the plants in pot Y. He left both plants at the window and watered them daily.



a) Leon observed that the plants in pot Y died first. Explain why it was so. (2m)

b) What is the function of part A of the plant? (1m)

Question 32 of 54

Ramesh wrote some notes on two cards about the digestive system.

Card A

Food moves down this tube into the stomach.

Card B

Food is chewed into smaller pieces in this part of the system.

Name the part of the digestive system that Ramesh wrote about on card A and card B. (1m)

Card A: _____

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Primary 4 Science (Term 2) 0.5 pts

Card B: _____
_____**Question 34 of 54**

Primary 4 Science (Term 2) 0.5 pts

Digested food passes through the walls of the stomach into the blood

- A) True
- B) False

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Primary 4 Science (Term 2) 0.5 pts

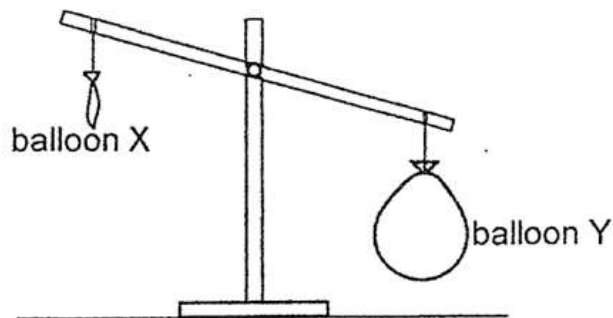
Saliva contains digestive juices to stop digestion

- A) True
- B) False

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Primary 4 Science (Term 2) 1 pt

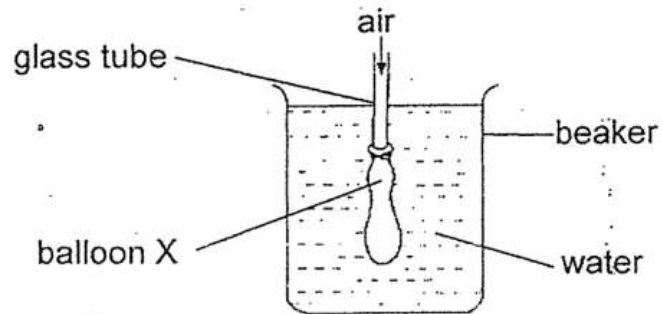
May Ling set up the following experiment using two balloons, X and Y, as shown.



Which balloon, X or Y, has less mass? (1m)

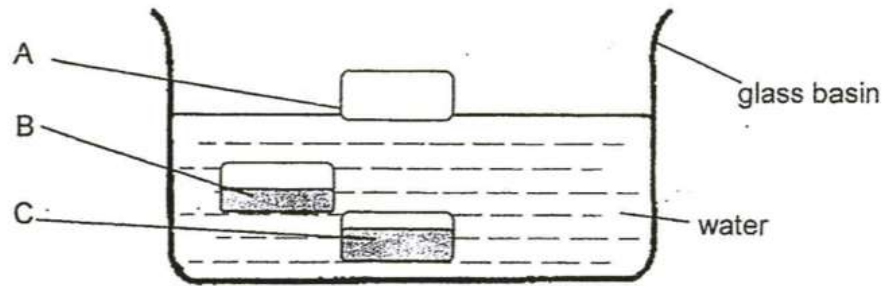
- A) X
- B) Y

Next, Mei Ling placed the deflated balloon X into a beaker filled with water as shown below. She blew some air into the balloon through the glass tube and the balloon inflated.



She observed that the water in the beaker overflowed. Explain why. (2m)

Sam filled three similar containers, A, B and C, with different amounts of water. He placed them in the same glass basin as shown.

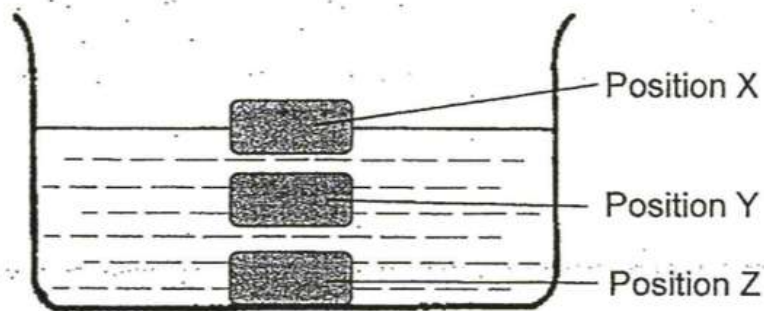


He recorded the amount of water in each container in the table shown below.

| Container | Amount of water in the container (ml) |
|-----------|---------------------------------------|
| A | 0 |
| B | 30 |
| C | 50 |

What is the relationship between the amount of water in the container and the depth of the container in the glass basin? (1m)

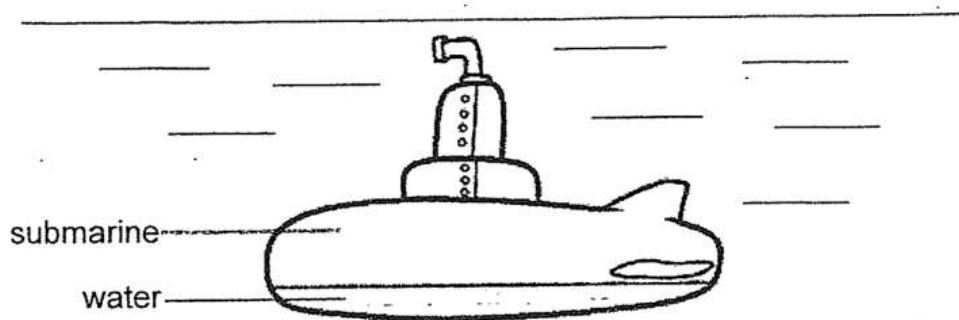
Sam filled another similar container, D, fully with water and placed it in the glass basin as shown.



Predict at which position, X, Y or Z, will container D be found? (1m)

- A) X
- B) Y
- C) Z

A submarine is a type of boat that can travel underwater in the sea by controlling the amount of water inside the submarine.



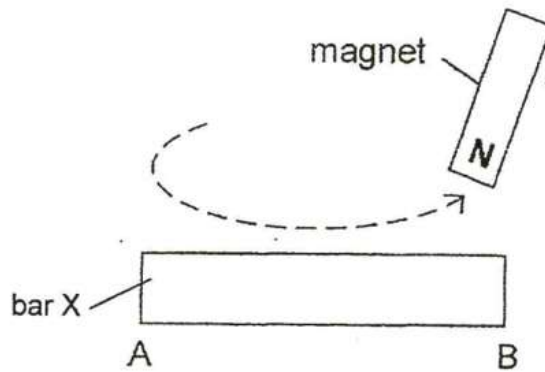
Based on Sam's experiment, what could be done to the water in the submarine to help the submarine rise to the surface of the sea? (1m)

Question 41 of 54

Primary 4 Science (Term 2)

1 pt

Krishnan magnetised bar X using a bar magnet as shown. He then used bar X to attract some pins.



What was the method that Krishnan used to make a temporary magnet? (1m)

Question 42 of 54

Primary 4 Science (Term 2)

1 pt

Give an example of a material that bar X should be made of in order for his experiment to work

Question 43 of 54

Primary 4 Science (Term 2)

1 pt

Identify what was pole A of bar X

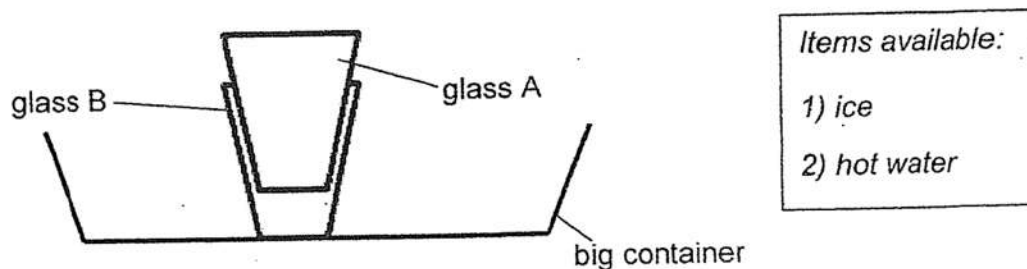
Next, Krishnan tested the magnetic strength of bar X by counting the number of pins attracted to bar X. He recorded his results in the table below.

| Number of strokes | Number of pins attracted |
|-------------------|--------------------------|
| 10 | 2 |
| 15 | 3 |
| 20 | 6 |
| 25 | 8 |

Based on the results shown, what could Krishnan conclude from his experiment about the magnetic strength of the magnet? (1m)

Question 45 of 54

Mrs Lee had problem separating the two glasses, A and B, as they were stuck together.



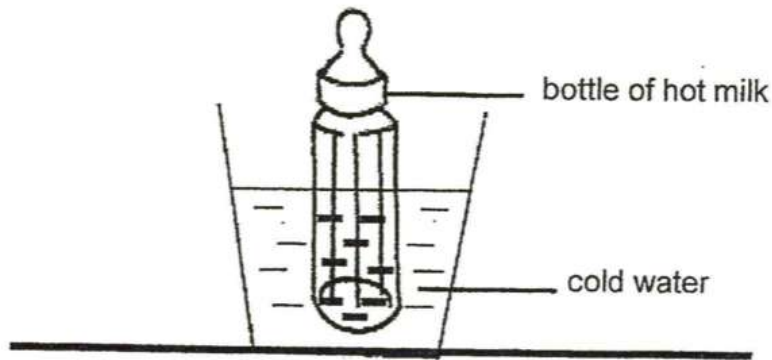
Using one of the items listed in the box, suggest a way to separate glasses, A and B, quickly. (1m)

Explain your answer in part (a). (1m)

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Primary 4 Science (Term 2) 0.5 pts

Robin carried out an experiment as shown. He placed a bottle of hot milk into a glass of cold water.



What would happen to the temperature of the hot milk and cold water? Put a tick (✓) in the correct boxes. (1m)

Temperature of milk:

- A) Increase
- B) Remain the same
- C) Decrease

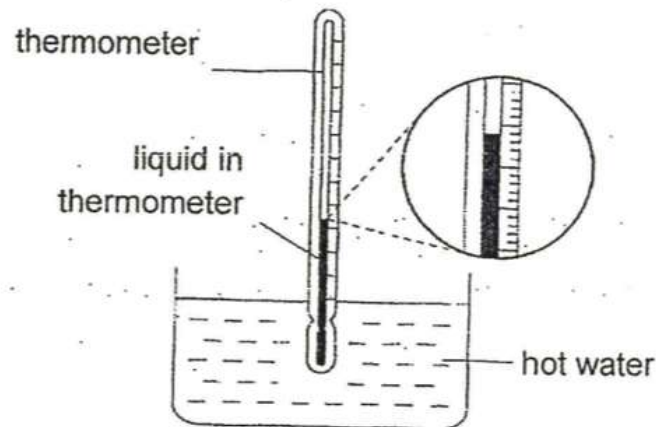
Question 47 of 54

Primary 4 Science (Term 2) 0.5 pts

Temperature of cold water:

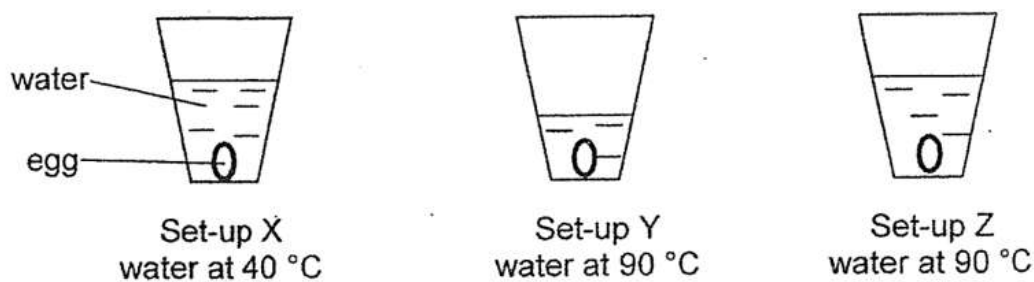
- A) Increase
- B) Remain the same
- C) Decrease

Robin conducted another experiment. He dipped a thermometer into a glass of hot water as shown. He noticed that the liquid in the thermometer rose.



Explain why the liquid in the thermometer rose. (1m)

Jamal wanted to conduct an experiment to see if the amount of water affected the amount of heat in the water. He had three set-ups, X, Y, and Z, as shown.



Which two set-ups should he use to carry out a fair experiment? (1m)

- A) Set-up X
- B) Set-up Y
- C) Set-up Z

Question 50 of 54

Primary 4 Science (Term 2) 0.5 pts

Choose the correct box for each of the following variables in order for him to have a fair test

Material of cup

- A) variable to keep the same
- B) variable to change

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Primary 4 Science (Term 2) 0.5 pts

Type of egg:

- A) variable to keep the same
- B) variable to change

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Primary 4 Science (Term 2) 0.5 pts

Amount of water:

- A) variable to keep the same
- B) variable to change

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Primary 4 Science (Term 2) 0.5 pts

Location to place the cups:

- A) variable to keep the same
- B) variables to change

Question 54 of 54

Primary 4 Science (Term 2) 0 pts

Based on the experiment, which set-up X, Y or X has the egg that was the most cooked?
Explain why?
