

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

Points: 83 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 72

Primary 4 Science (Term 4) 2 pts

Booklet A (28 x 2 marks)

For each question from 1 to 28, four options are given. One of them is the correct answer.

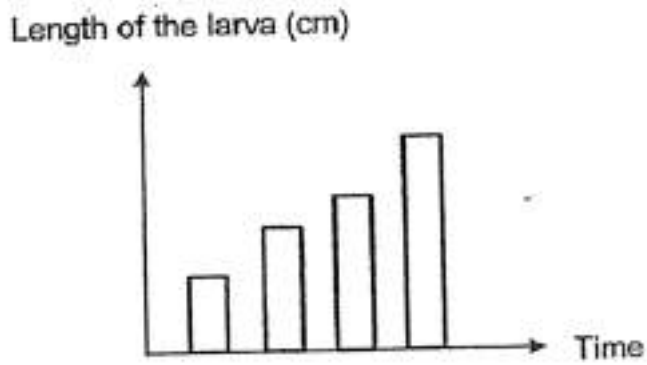
An earthworm coils itself up when touched.



This shows that the earthworm is a living thing because it can _____

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

Nancy observed the larva of an insect over three weeks. She measured the length of the larva and plotted the graph shown below.



Which characteristics of living things is shown from the above results?

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

The table below shows the characteristic(s) of organisms A, B and C.
A tick (✓) indicates that the characteristic is present.

	A	B	C
Has a 3-stage life cycle	✓	✓	
Young resembles adult		✓	
Adult has wings		✓	✓

Which one of the following is correct?

	A	B	C
(1)	cockroach	frog	butterfly
(2)	cockroach	butterfly	frog
(3)	butterfly	frog	cockroach
(4)	frog	cockroach	butterfly

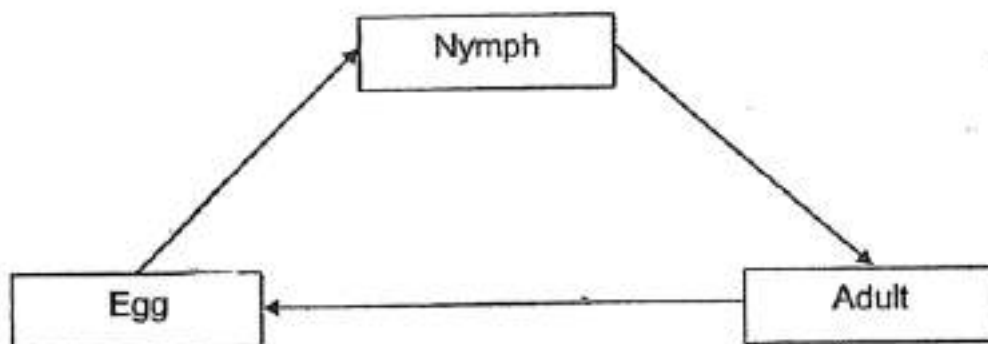
- A) 1
- B) 2
- C) 3
- D) 4

Which one of the following comparisons between **fungi** and non-flowering plants is correct?

	Fungi	Non-flowering plant
(1)	can only be seen under a microscope	can be seen without a microscope
(2)	reproduces from spores	reproduces from seeds
(3)	cannot make its own food	can make its own food
(4)	does not move by itself	moves by itself

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

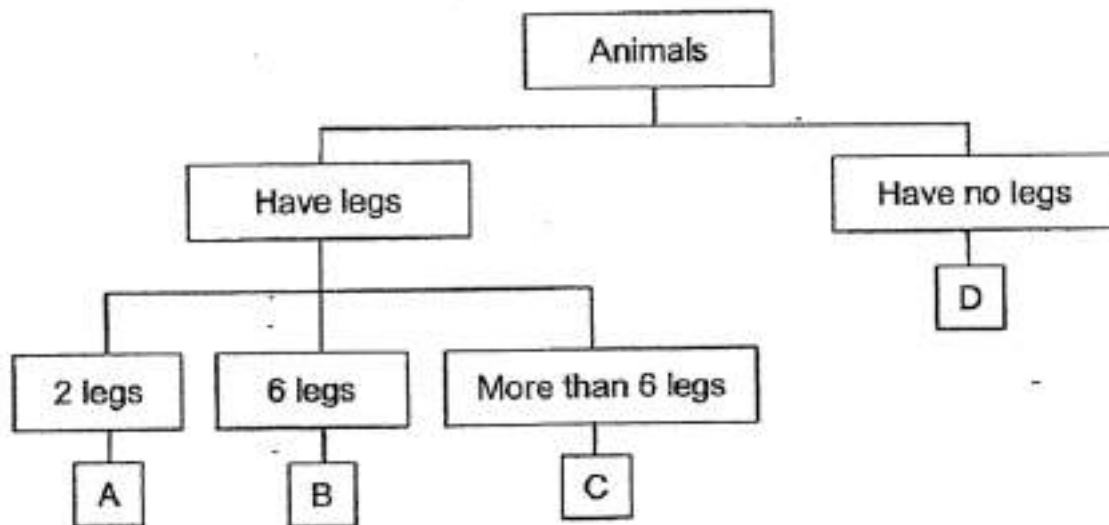
The diagram below shows the life cycle of an **animal**.



Which animal is likely to have the life cycle as shown above?

- A) frog
- B) chicken
- C) butterfly
- D) cockroach

Study the classification chart below.



Which animal is most likely an insect?

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

Two identical boxes were hung on material A and material B. The strip of material B broke after the box was hung on it.

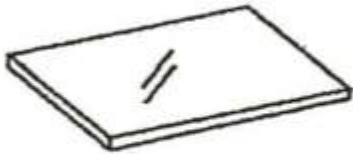


Based on the observation above, what can we conclude about materials A and B?

-
- A) Material A is stronger than Material B
 - B) Material B is stronger than Material A
 - C) Material A is more flexible than Material B
 - D) Material B is more flexible than Material A

Which one of the following objects can be bent easily without breaking?

A)



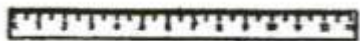
A sheet of glass

B)



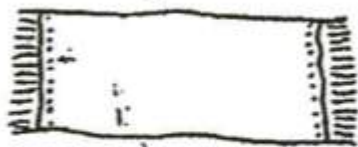
A wooden spoon

C)



A metal ruler

D)



A towel

Which one of the following is true for both air and water?

- A) They can be seen
- B) They take up space
- C) They have fixed shapes
- D) They have fixed volumes

Sally set up an experiment as shown below.



What is the aim of her experiment?

-
- A) To find out if air has mass
 - B) To find out if air has volume
 - C) To find out if air can be compressed
 - D) To find out if air has a definite shape

Matter is anything that has mass and occupies space.
Which one of the followings is not matter?

-
- A) air
 - B) oil
 - C) light
 - D) stone

Bala was asked to measure the volume of a marble. Which of the apparatus show below should be use to get a more accurate reading?

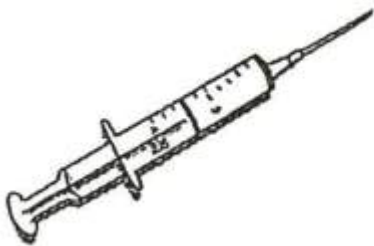
A)



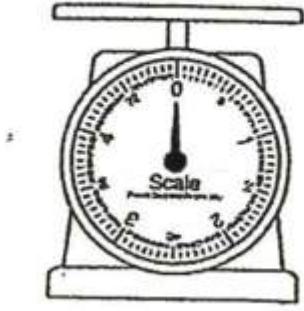
B)



C)



D)



Which one of the following is a source of light?

A)



a mirror

B)



a shadow

C)



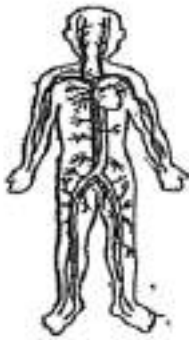
candle

D)

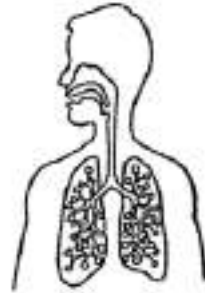


moon

The diagrams below show the human body systems.



System P



System Q



System R



System S

Which of the following body systems carries substances to all parts of our body?

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

In which part of the digestive system is digested food absorbed into the blood?

-
- A) Gullet
- B) Stomach
- C) Small intestine
- D) Large intestine

Which one of the following is the function of a leaf of a plant?

-
- A) makes food
- B) takes in water
- C) holds plant upright
- D) takes in mineral salts

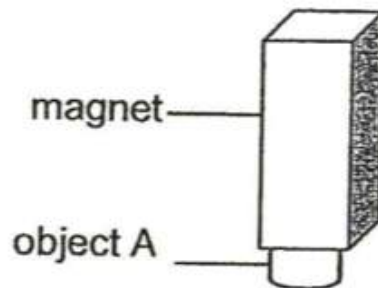
Noah boiled some water in the kettle shown below.



He is able to hold the kettle of hot water using the plastic handle because plastic is a _____.

-
- A) flexible material
 - B) lightweight material
 - C) poor conductor of heat
 - D) good conductor of heat

Object A was attracted to a magnet as shown in the figure below.



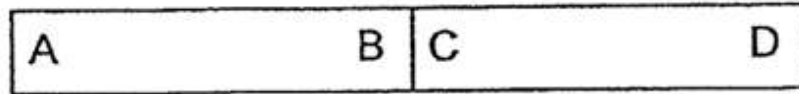
Which of the following could object A be made of?

-
- A) steel
 - B) wood
 - C) plastic
 - D) rubber

In which direction will a freely-suspended magnet come to rest?

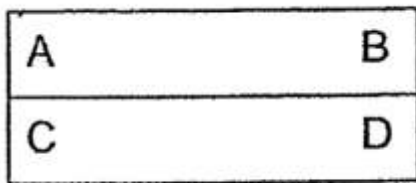
- A)** East-West
- B)** South-East
- C)** North-South
- D)** North-West

Dylan arranged two magnets AB and CD as shown below.

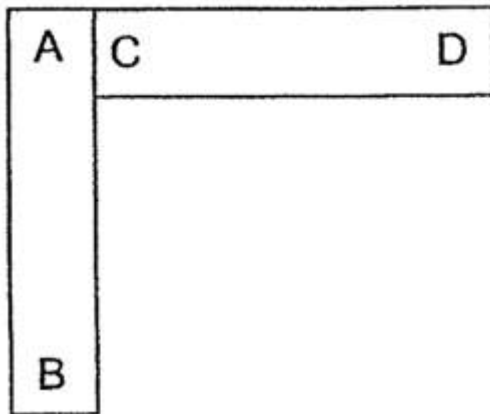


Which one of the following arrangements is possible?

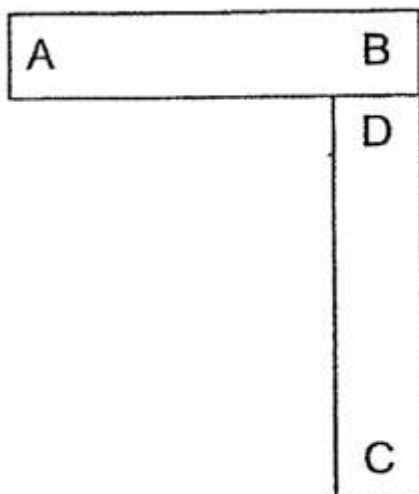
A)



B)



C)



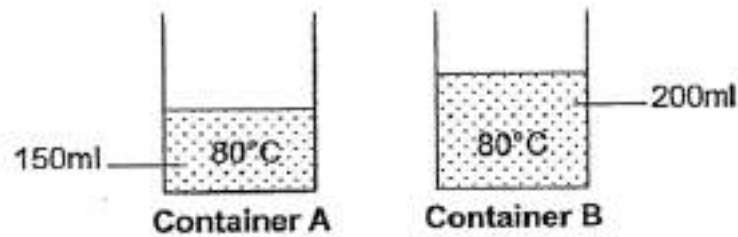
D)

D	C
A	B

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Primary 4 Science (Term 4) 2 pts

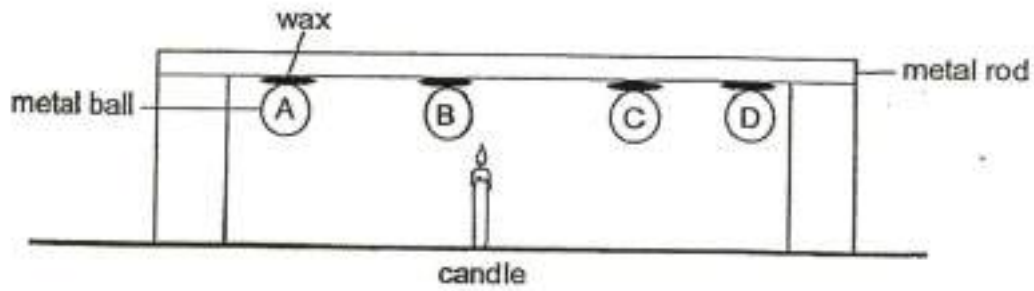
The diagram below shows two identical containers filled with different amounts of water at the same temperature.



Which of the following statements is true?

-
- A) A has more heat than B
 - B) B has more heat than A
 - C) B has a higher temperature than A
 - D) A and B have the same amount of heat

! All stuck four metal balls, A, B, C and D, to a metal rod using equal amounts of wax. A lit candle was placed below the metal rod as shown in the diagram.

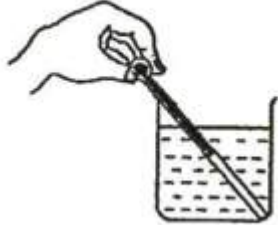


The metal balls will fall off the metal rod when the wax melts.
Which of the following metal balls will fall off first?

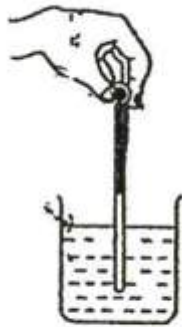
- A) A
- B) B
- C) C
- D) D

Cathy wants to measure the temperature of hot water in a beaker. Which one of the following diagrams shows the correct position of the thermometer when taking the temperature reading?

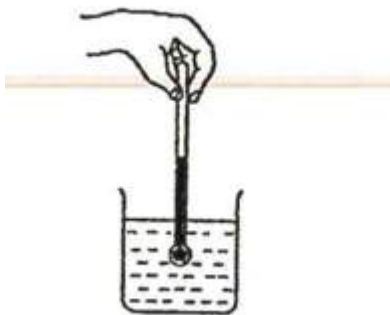
A)



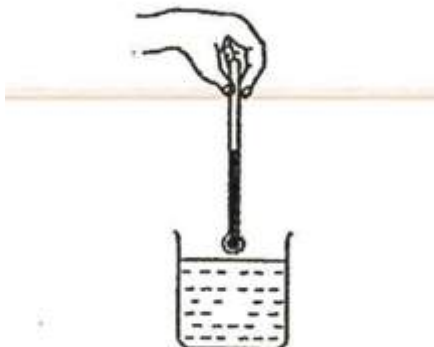
B)



C)



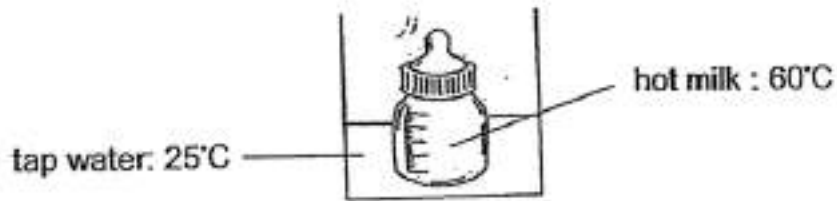
D)



Question 24 of 72

Primary 4 Science (Term 4) 2 pts

Jack's mother put the bottle of hot milk into a basin of tap water to cool it down.



The temperature of the milk after 5 minutes will likely be _____.

- A) 20°C
- B) 38°C
- C) 60°C
- D) 85°C

Question 25 of 72

Primary 4 Science (Term 4) 2 pts

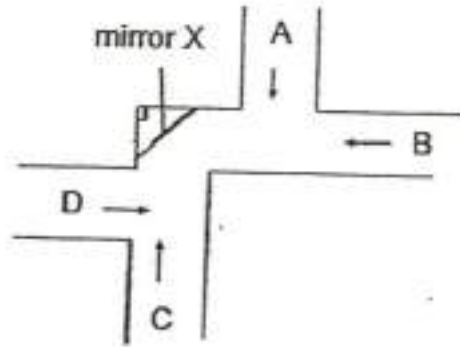
Hannah tested the magnetic strength of the 4 electromagnets and recorded the results in the table below.

Electromagnet	Number of coils of wire	Number of paper clips attracted
W	6	1
X	13	3
Y	22	5
Z	35	9

What can Hannah conclude from the results above?

- A) W has not been magnetised
- B) Y is the strongest electromagnet
- C) The more coils of wire the weaker the magnetism
- D) The more coils of wire the stronger the magnetism

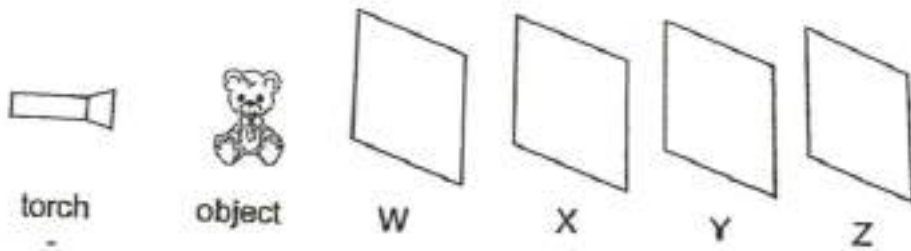
The diagram below shows four boys, A, B, C and D, walking from different directions.



Which two boys can see each other in mirror X?

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

Samuel carried out the following experiment in a dark room. He arranged sheets W, X, Y and Z in a straight line and placed an object in front of the torch.



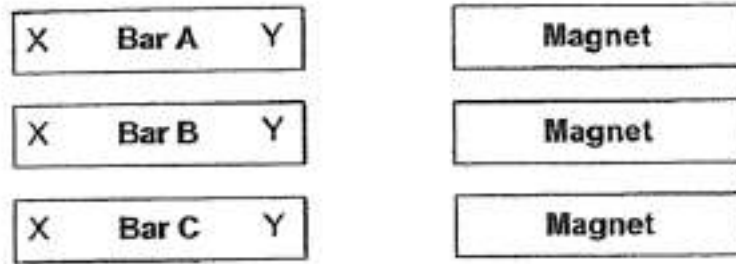
He switched on the torch and a shadow of the object was formed on sheet Y.

Which of the following about the properties of sheets W, X, Y and Z is correct?

	Allow most light to pass through	Do(es) not allow light to pass through
(1)	W and X	Y
(2)	W and X	Z
(3)	Y	W and X
(4)	Z	W and X

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

Kate has three bars, A, B and C. She carried out an experiment by placing a magnet near each of these bars. X and Y shows the ends of the bars.



Kate recorded her observations in the table below.

Bar	Observations
A	X is attracted to both poles of the magnet. Y is attracted to both poles of the magnet.
B	X is attracted to one pole of the magnet. Y repelled one pole of the magnet.
C	Both X and Y are not attracted by the magnet.

Which of the following statements about bar A, B and C is correct?

- A) Both bars A and B are magnets
- B) Bar C can be made into a magnet
- C) Bar A cannot be made into a magnet
- D) Both bars A and B are made of magnetic materials

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.

W	X
tiger ant mushroom	stone cloth pen

(a) What are the suitable headings for W and X?

[2]

Group W: _____

Group X: _____

Would you place yeast in group W or group X?

- A) W
- B) X

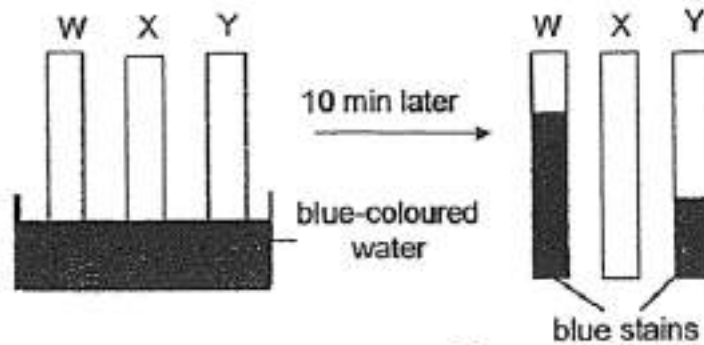
Question 32 of 72

Primary 4 Science (Term 4)

1 pt

Match the options below:

An experiment was conducted to find out the absorptency of 3 materials, W, X and Y. The results are as shown below.



Arrange materials W, X and Y starting from the most absorbent material. [1]

1. [] Most absorbent

A. Y

2. [] absorbent

B. W

3. [] Least absorbent

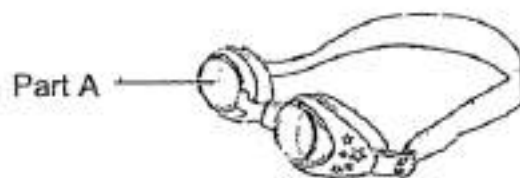
C. X

Question 33 of 72

Primary 4 Science (Term 4)

1 pt

Swimmers wear goggles to allow them to see clearly underwater.



(b) Which material, W, X or Y, is most suitable to make part A of the goggles? [1]

A) W

B) X

C) Y

Question 34 of 72

Primary 4 Science (Term 4)

0 pts

Based on the results of the experiment, give a reason for your answer in (b)

Question 35 of 72

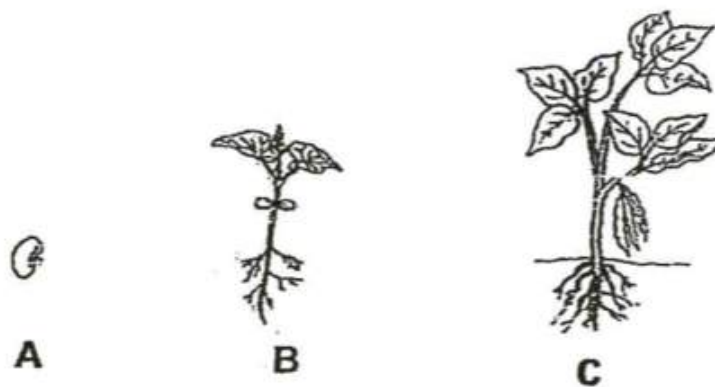
Primary 4 Science (Term 4) 1 pt

State another property of material that part A must have to allow the swimmer to see clearly underwater

Question 36 of 72

Primary 4 Science (Term 4) 1 pt

The diagram below shows the stages in the life cycle of a plant.



Choose the correct words from the box to answer question 31 (a).

egg seed young plant adult plant

Name stages A and B in the life cycle of the plant.

A: _____

- A) egg
- B) seed
- C) young plant
- D) adult plant

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Primary 4 Science (Term 4) 1 pt

B: _____

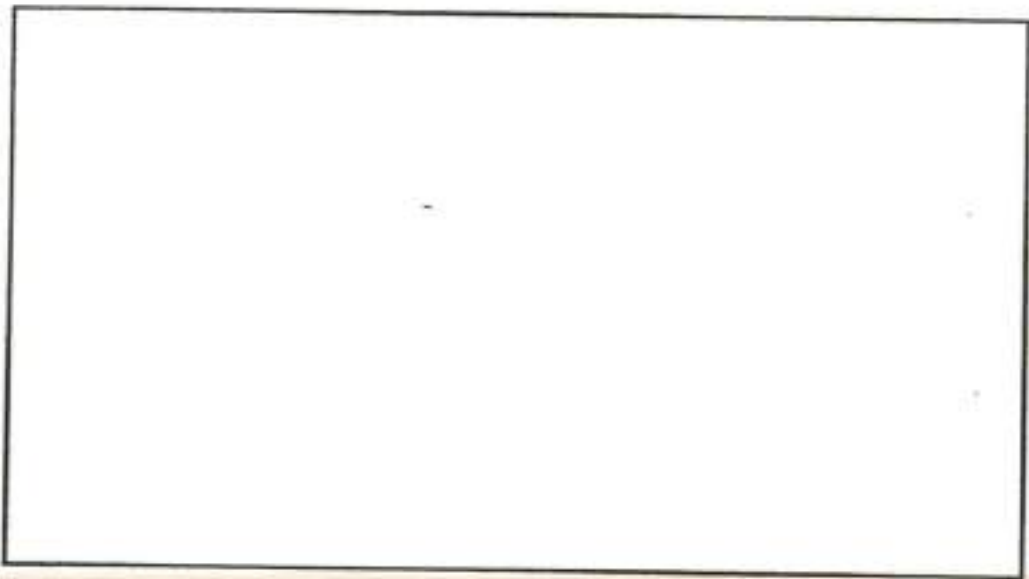
- A) egg
- B) seed
- C) young plant
- D) adult plant

Question 38 of 72

Primary 4 Science (Term 4) 0 pts

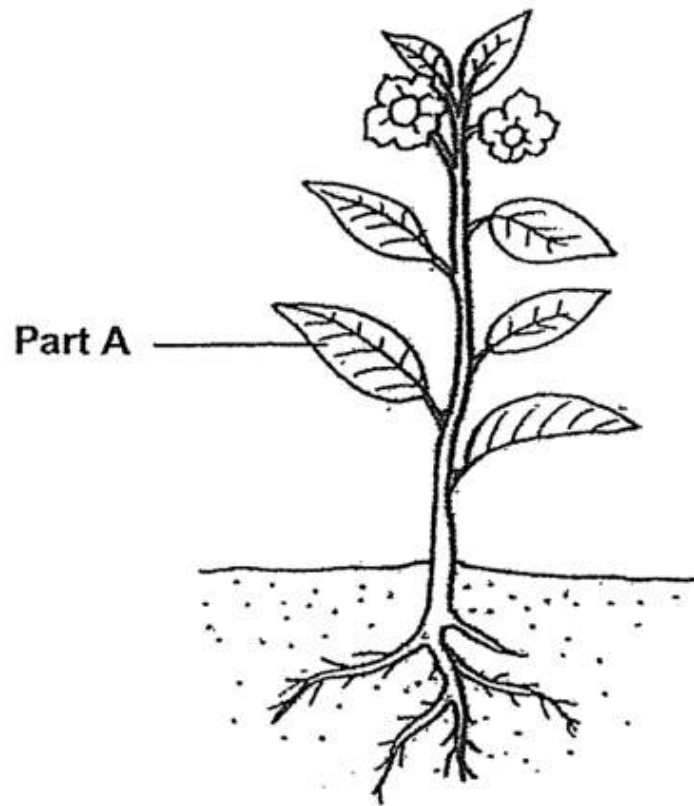
(b) Draw the life cycle of the plant using letters A, B and C.

[1]



Please type "done" to proceed to the next question

The diagram below shows a plant.



Name plant part A.

Name one substance that the roots of the plant take in from the soil.

Question 41 of 72

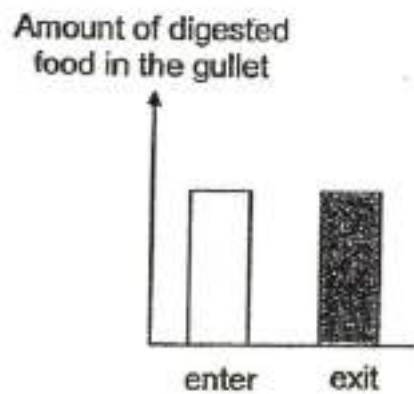
Primary 4 Science (Term 4) 0 pts

Besides taking in substances from the soil, state another function of the roots

Question 42 of 72

Primary 4 Science (Term 4) 0 pts

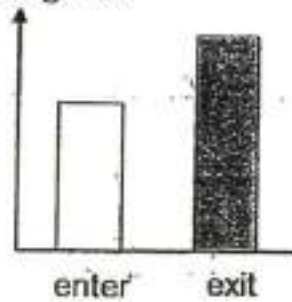
The graph below represents the amount of digested food entering and exiting the gullet.



Why was there no change in the amount of digested food entering and exiting the gullet? [1]

Study the graph below.

Amount of digested food in organ X



Circle the correct answer.

The amount of digested food exiting organ X was

(more than/ less than/ the same as) the amount of food entering it.

[1]

- A) more than
- B) less than
- C) the same as

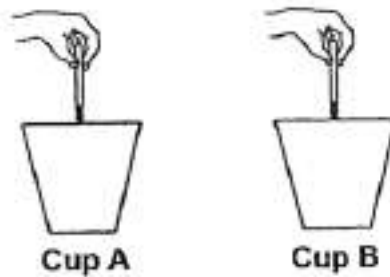
What could organ X be?

Question 45 of 72

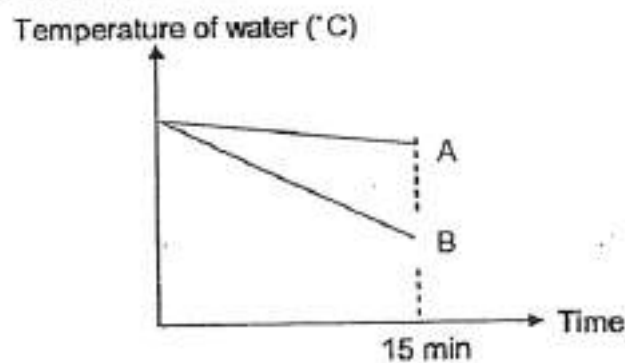
Primary 4 Science (Term 4)

1 pt

All conducted an experiment to find out which cup is made of a better conductor of heat. He poured the same amount of hot water into each cup and measured the temperature of the water over a period of 15 minutes.



The graph below shows his results.



Which cup, A or B is made of a better conductor of heat?

[1]

A) A

B) B

Question 46 of 72

Primary 4 Science (Term 4)

0 pts

Give a reason for your answer in (a)

Question 47 of 72

Primary 4 Science (Term 4)

0.5 pts

Indicate the heat transfer between the hot water and the cup when hot water was poured into the cup:

Cup: _____

A) Heat gain

B) Heat loss

Question 48 of 72

Primary 4 Science (Term 4) 0.5 pts

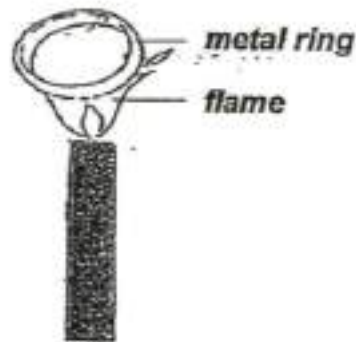
Hot water: _____

- A) Heat gain
- B) Heat loss

Question 49 of 72

Primary 4 Science (Term 4) 1 pt

A metal ring was heated over the flame.



Will the size of the metal ring increase, decrease or remain the same after heating? [1]

- A) increase
- B) decrease
- C) remain the same

Question 50 of 72

Primary 4 Science (Term 4) 0 pts

Give a reason for your answer in (a)

Question 51 of 72

Primary 4 Science (Term 4) 1 pt

Two pots were stuck together as shown together.



Which pot, A or B, should be heated so that the pots can be separated more easily? [1]

- A) A
- B) B

Question 52 of 72

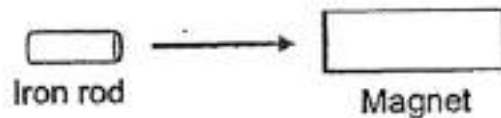
Primary 4 Science (Term 4) 1 pt

Pots are usually made of metal because metal is a ___ conductor of heat

Question 53 of 72

Primary 4 Science (Term 4) 1 pt

Sarah places a magnet near an iron rod. The iron rod moves towards the magnet.



The magnet exerts a _____ on the iron rod. [1]

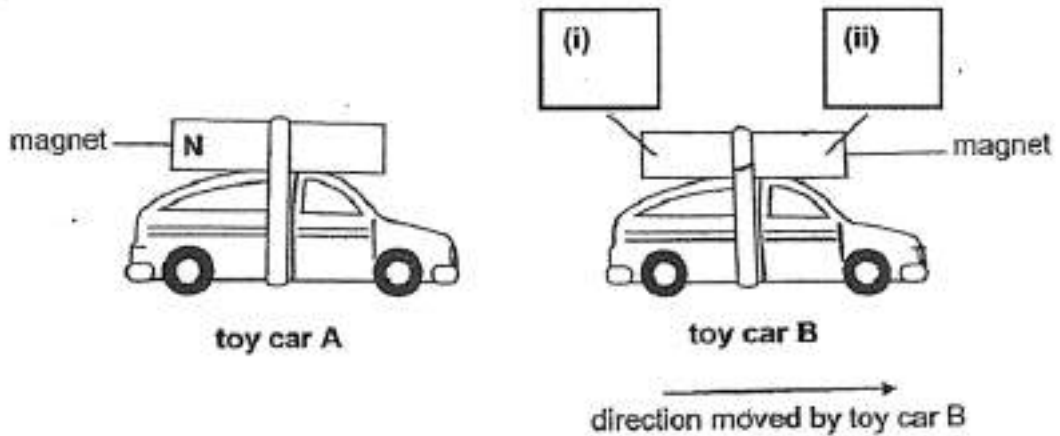
Question 54 of 72

Primary 4 Science (Term 4) 1 pt

Sarah's observation shows that iron is a ___ material.

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

Sarah placed toy cars A and B next to each other as shown in the diagram below.



She observed that toy car B moved away from toy car A.

- (c) The N-pole of the magnet on car A has been labelled. Label the poles of the magnet on car B with letters 'N' and 'S' in the diagram above. [1]

Study the table below.

Set-up	Number of batteries	Number of coils of wire	Number of paper clips attracted
P	1	15	10
Q	1	20	20
R	2	15	25

Joan wants to find out if the number of batteries affects the magnetic strength of the electromagnet.

Which two set-ups should she choose? [1]

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

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Primary 4 Science (Term 4) 0 pts

What is the relationship between the number of batteries and the number of paper clips attracted by the electromagnet?

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Primary 4 Science (Term 4) 0 pts

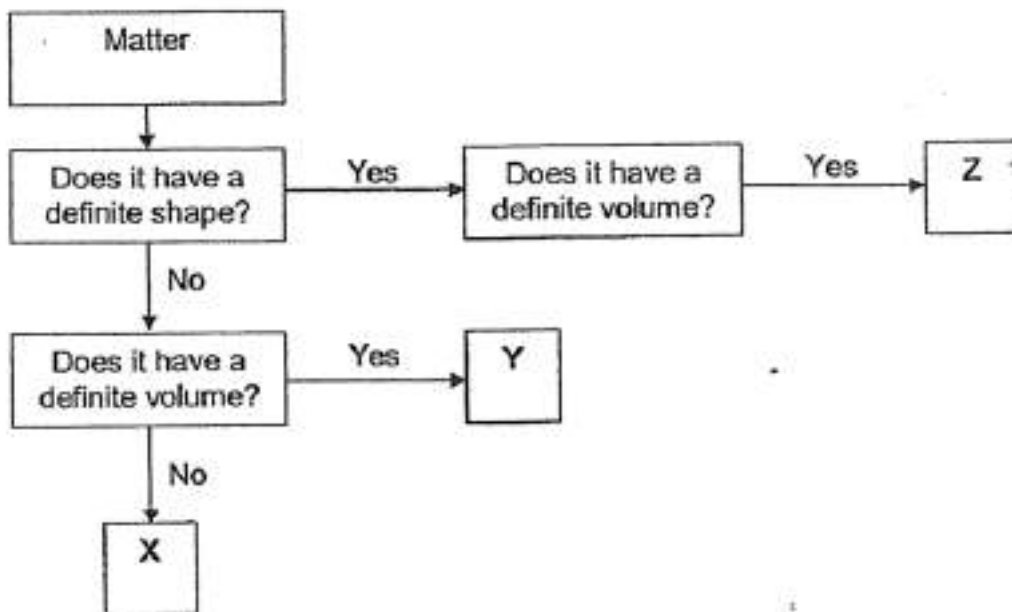
Besides changing the number of batteries, what is another way to increase the magnetic strength of the electromagnet?

Question 59 of 72

Primary 4 Science (Term 4) 0 pts

State another method to make a temporary magnet

Study the flow chart below.



Which letter, X, Y or Z, represents the following states of matter?

[2]

Solid: _____

A) x

B) y

C) z

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Primary 4 Science (Term 4)

1 pt

Liquid: _____

A) x

B) y

C) z

Question 62 of 72

Primary 4 Science (Term 4)

0 pts

state one similarity between X and Y

Question 63 of 72

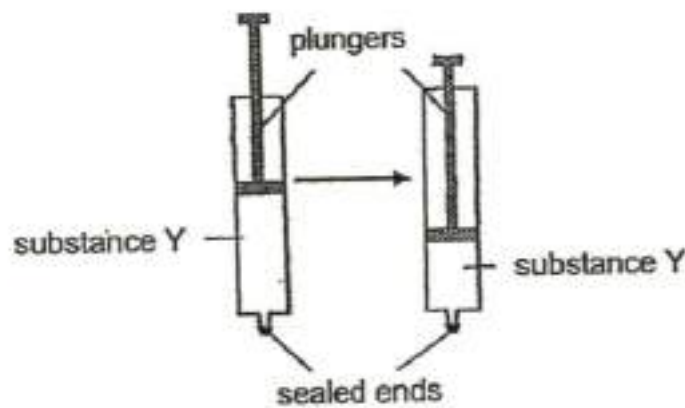
Primary 4 Science (Term 4) 0 pts

State one difference between Y and Z

Question 64 of 72

Primary 4 Science (Term 4) 1 pt

Tom filled a syringe with substance Y and sealed the end of the syringe to stop substance Y from coming out. The diagram below shows what happens when the plunger is pushed into the syringe.



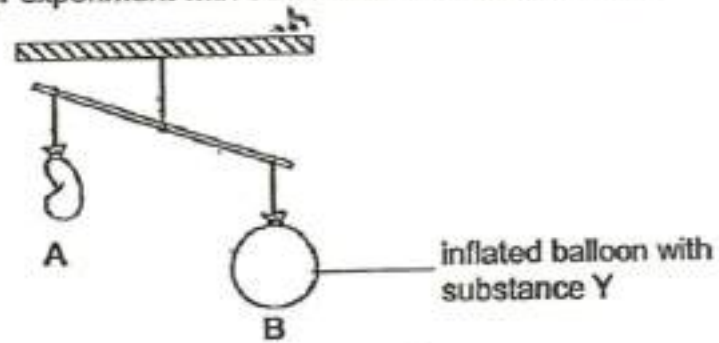
) Based on the observation above, what is the state of matter of substance Y? [1]

Question 65 of 72

Primary 4 Science (Term 4) 0 pts

Based on the observation above, state one property of substance Y

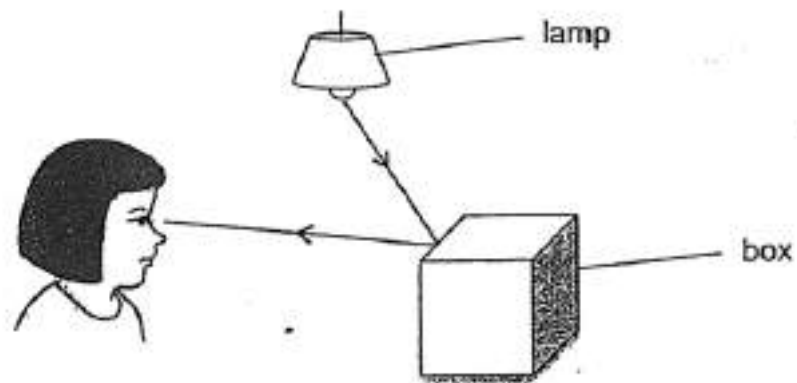
Tom conducted another experiment with substance Y as shown below.



It was observed that B moved downwards.

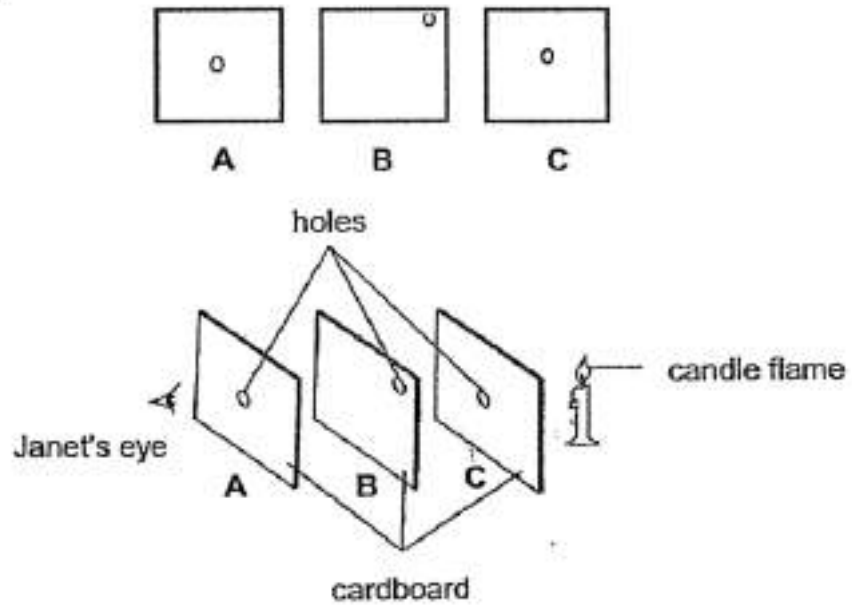
- c) Based on his observation, what can you conclude about substance Y? [1]

The diagram below shows how Janet sees the box.



The _____ from the lamp is _____ by the box and enters Janet's eye. [2]

Janet made some holes in three pieces of cardboard and arranged them as shown below.



- (b) Janet could not see the flame from where she is. Which property of light does this show?

[1]

Edward conducted an experiment as shown below.



Torch



Material



Light sensor

- The amount of light detected by the light sensor when different materials were placed between the torch and the light sensor is recorded below.

Material	No material	X	Y
Amount of light detected (lux)	500	200	0

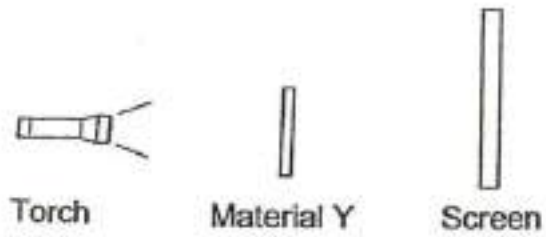
Based on the results, state the properties of materials X and Y.

[2]

Material X: _____

Material Y: _____

Material Y is placed between a torch and the screen as shown in the diagram below.



- i) What will Edward observe on the screen when the torch is switched on? [1]

Without moving the screen and torch, how can Edward make the shadow bigger?