

Test: Primary 4 - Term 2 (SA1) Science (Maris Stella)

Points: 58 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 52

Primary 4 Science (Term 2) 2 pts

Booklet A (24 x 2 marks)

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

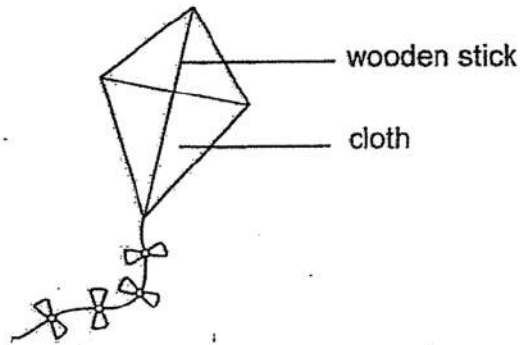
Which of the following statements about living things is false?

-
- A)** They reproduce
 - B)** They need air to survive
 - C)** They require food to grow
 - D)** They cannot respond to changes

Question 2 of 52

Primary 4 Science (Term 2) 2 pts

The diagram below shows a kite made up of wooden sticks and cloth. The wooden stick gives the kite its shape.



Which of the following human body systems has the same function as the wooden sticks of the kite?

- A) Skeletal system
- B) Muscular system
- C) Circulatory system
- D) Respiratory system

Question 3 of 52

Primary 4 Science (Term 2) 2 pts

Which of the following is true about insects and birds?

- A) They can fly
- B) They have three body parts
- C) They reproduce by laying eggs
- D) They have the same type of body covering

Question 4 of 52

Primary 4 Science (Term 2) 2 pts

How are the life cycles of the cockroach and the grasshopper similar?

- A) Their young have wings
- B) Their young are called nymphs
- C) Both have four-stage life cycles
- D) Their young does not look like the adult

Question 5 of 52

Primary 4 Science (Term 2) 2 pts

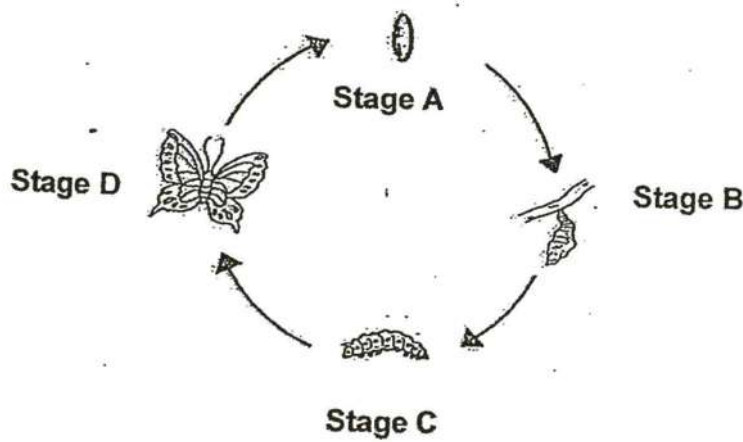
What part of the human digestive system is digestion completed?

- A) Mouth
- B) Stomach
- C) small intestine
- D) large intestine

Question 6 of 52

Primary 4 Science (Term 2) 2 pts

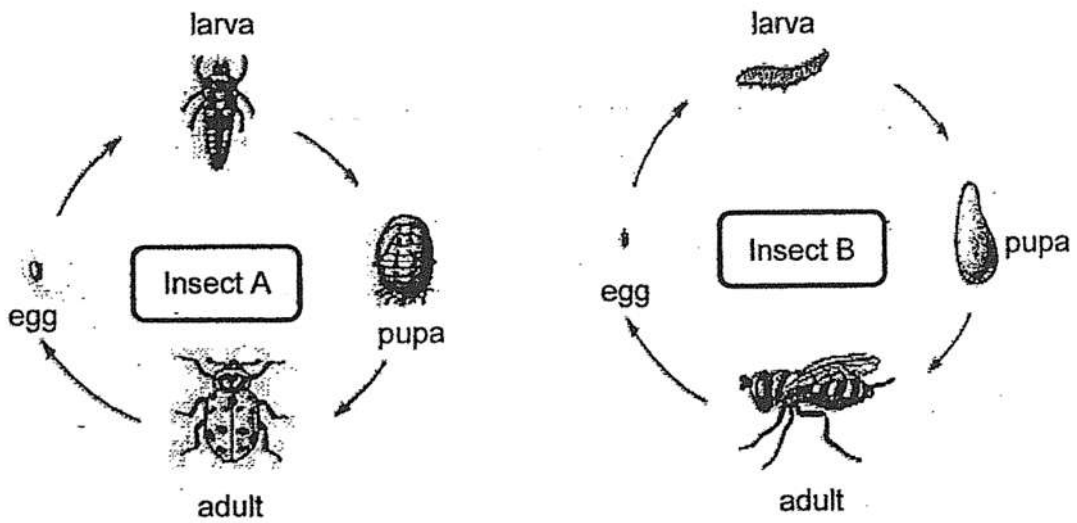
Alex drew the life cycle of a butterfly. His teacher told him that the order of the stages drawn in the life cycle is wrong.



Which of the following shows the correct order of the stages of the butterfly?

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

Study the life cycle of Insect A and Insect B.



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

- A) Insects A and B feed on plants
- B) Insect A has a longer life span than Insect B
- C) Insects A and B have young that do not look like their adults
- D) Insect A takes a shorter time to hatch from an egg than Insect B

The table below shows some observations of A, B and C.

	Needs air, food and water to survive	Respond to changes around it
A	√	√
B		√
C		

Which one of the following statements is definitely true?

- A) A is a plant
- B) B is a fungi
- C) C is a plant
- D) C is not an animal

Question 9 of 52

Primary 4 Science (Term 2) 2 pts

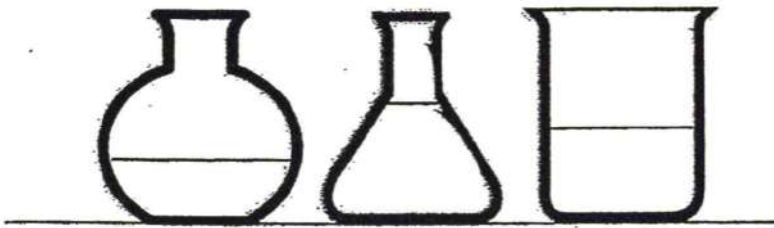
Which of the following is matter?

- A) air
- B) heat
- C) light
- D) sound

Question 10 of 52

Primary 4 Science (Term 2) 2 pts

The diagram below shows 3 different containers each filled with 500 ml of water.



Based on the above observations, we can conclude that water : _____

- A) can be compressed
- B) has no definite mass
- C) has no definite shape
- D) has no definite volume

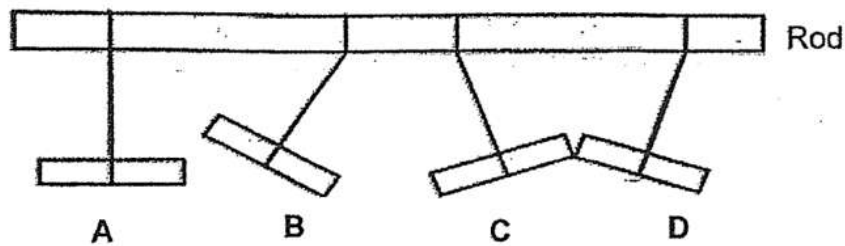
Question 11 of 52

Primary 4 Science (Term 2) 2 pts

Which of the following statements about matter is not true?

- A) Both solid and liquid have mass
- B) Both solid and liquid occupy space
- C) Both solid and liquid have definite shape
- D) Both solid and liquid have volume

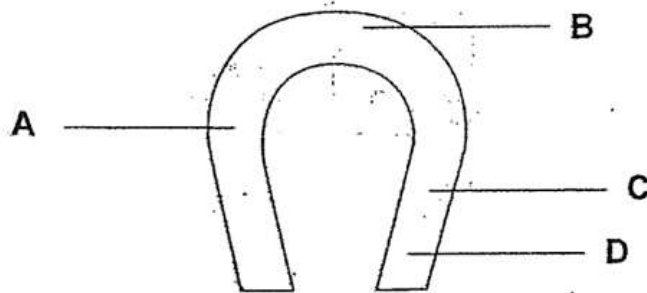
When four metal bars were hung from a rod, they moved in different directions as shown in the diagram below.



Which two metal bars are most likely magnets?

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

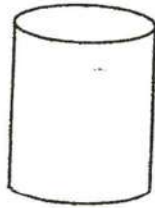
Fizal places a horseshoe magnet into a container of paper clips.



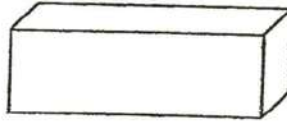
Which part of the magnet can attract the most number of paper clips?

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

Gary used a piece of plasticine to make model A. He then used the same piece of plasticine to make model B.



Model A



Model B

Which of the following statements is correct about the two models?

- A) Both models have different mass and volume
- B) Both models have the same mass and volume
- C) Both models have the same mass but different volume
- D) Both models have the same volume but different mass

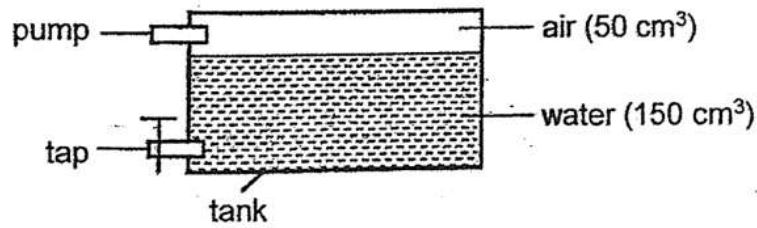
The table below shows the properties of 4 materials, W, X, Y and Z.

Property	Material			
	W	X	Y	Z
Allows water to pass through	√			√
Bends easily without breaking		√	√	√
Allows light to pass through	√		√	√

Which of the following materials represents a clear plastic sheet?

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

Timothy conducted an experiment using the set-up as shown below.



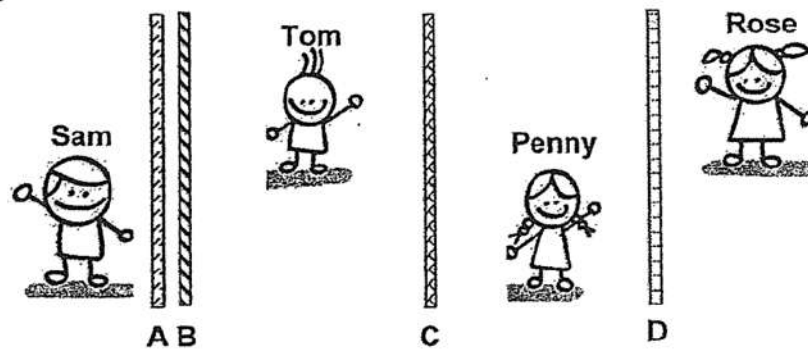
He removed 20 cm³ of water from the tank and pumped 10 cm³ of air into the tank.
 What was the final volume of air in the tank?

- A) 50cm³
- B) 70cm³
- C) 80cm³
- D) 130cm³

Four unknown materials, A, B, C and D, are classified in the table as shown below.

Allows light to pass through	Does not allow light to pass through
A D	B C

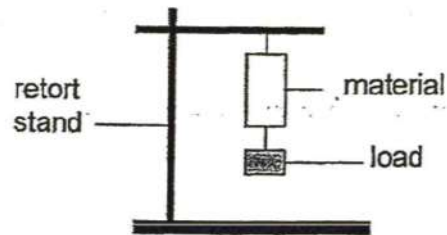
Four children stood between walls made of the four unknown materials as shown in the diagram below.



Which of the following statements is true?

- A) Sam can see Tom
- B) Sam can see Penny
- C) Penny cannot see Tom
- D) Penny cannot see Rose

Ahmad used the set-up below to find out which material could hold a 50 g load without breaking.



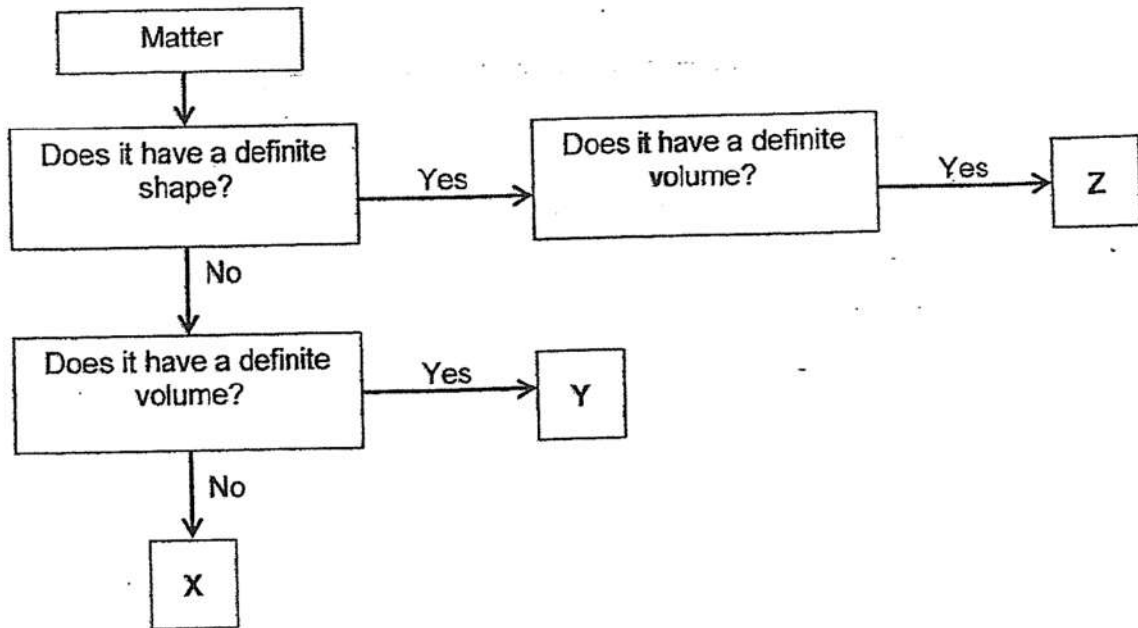
He repeated the experiment with 4 different materials and recorded the results in the table below.

Material	Heaviest load at which the material snapped (g)
A	30
B	20
C	50
D	70

Which material(s) should Ahmad use to hold an item that is 50 g?

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

Study the flowchart below.

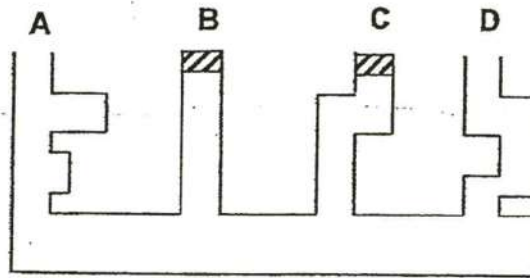


Which one of the following represents X, Y and Z?

	X	Y	Z
(1)	air	sand	stone
(2)	air	sand	honey
(3)	sand	honey	air
(4)	air	honey	sand

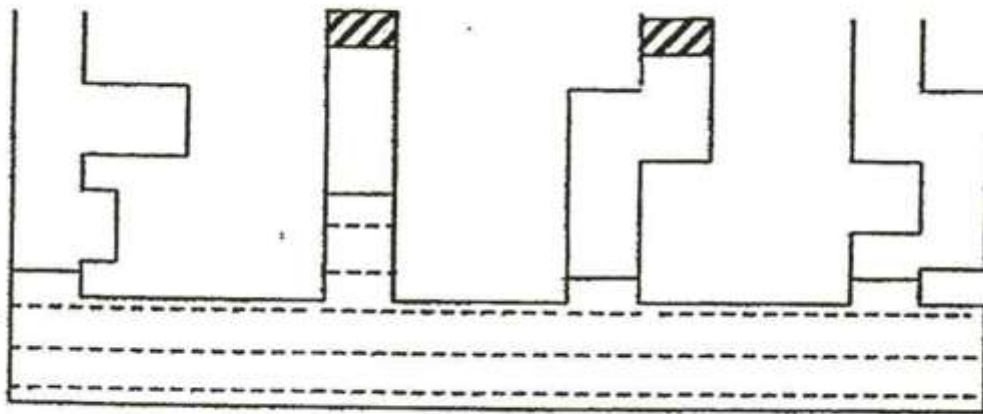
- A) 1
- B) 2
- C) 3
- D) 4

The diagram below shows a communicating vessel with openings B and C covered with stoppers.

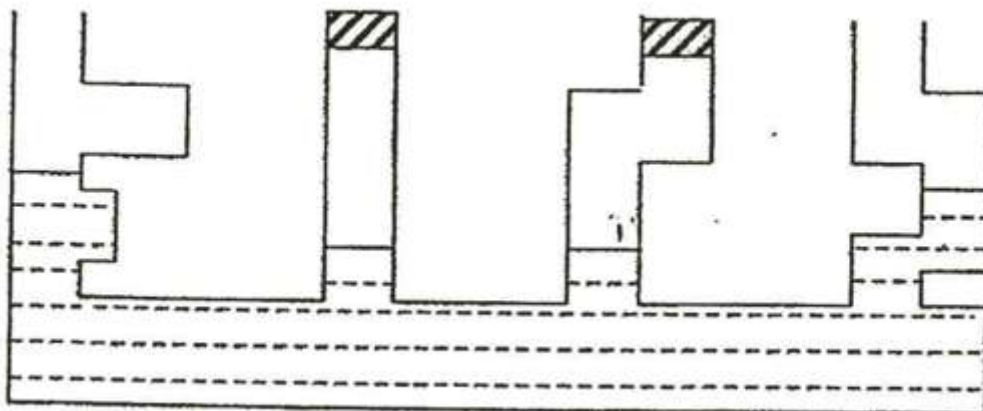


Which of the following shows the correct water level in the vessels after water is poured through opening D?

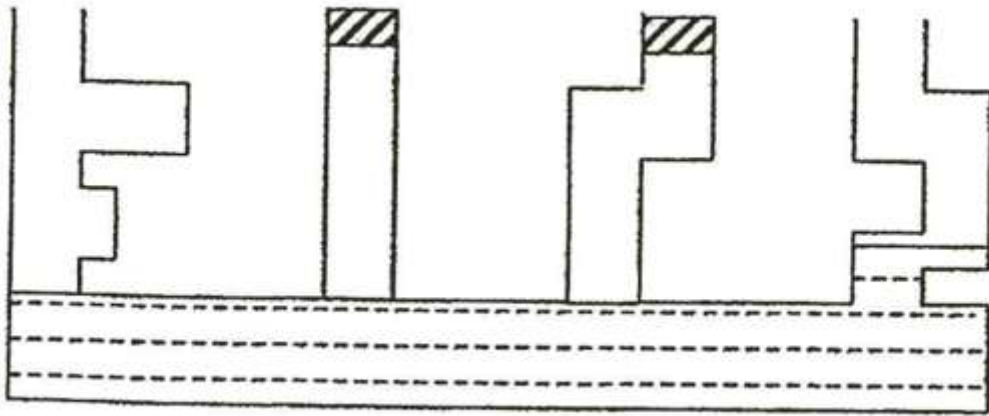
A)



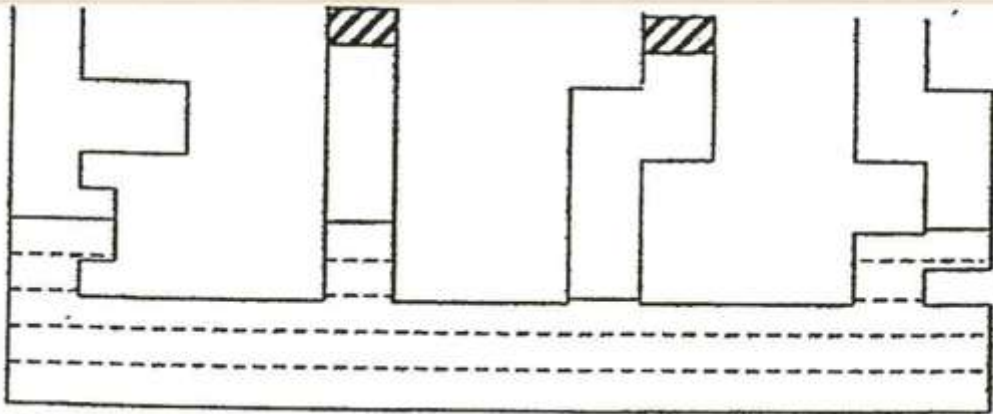
B)



C)

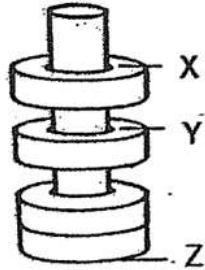


D)



98

The diagram below shows 4 magnets placed through a wooden pole.

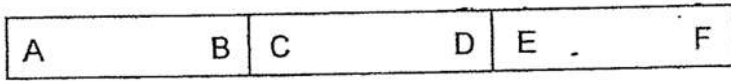


Identify the poles X, Y and Z.

	X	Y	Z
(1)	South	South	North
(2)	South	North	North
(3)	North	North	South
(4)	North	South	North

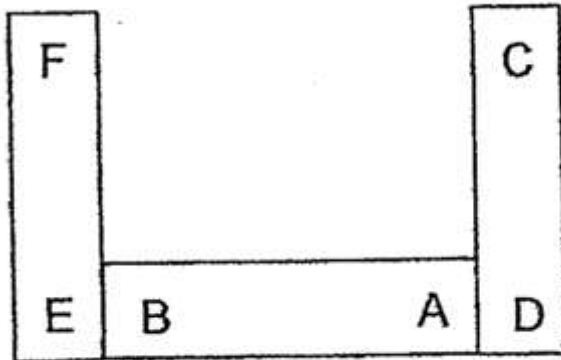
- A) 1
- B) 2
- C) 3
- D) 4

The diagram below shows the arrangement of three bar magnets when placed next to each other.

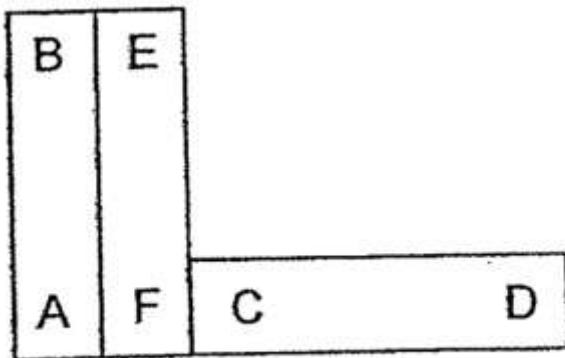


Which one of the following arrangements is **not** possible?

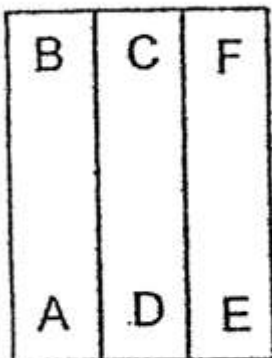
A)



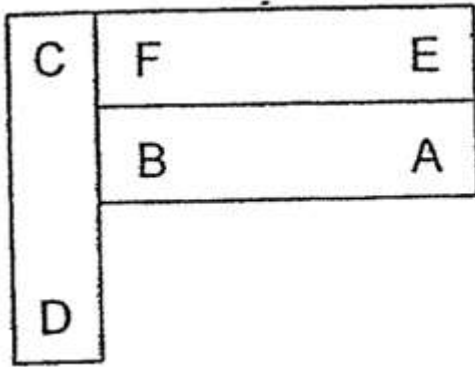
B)



C)



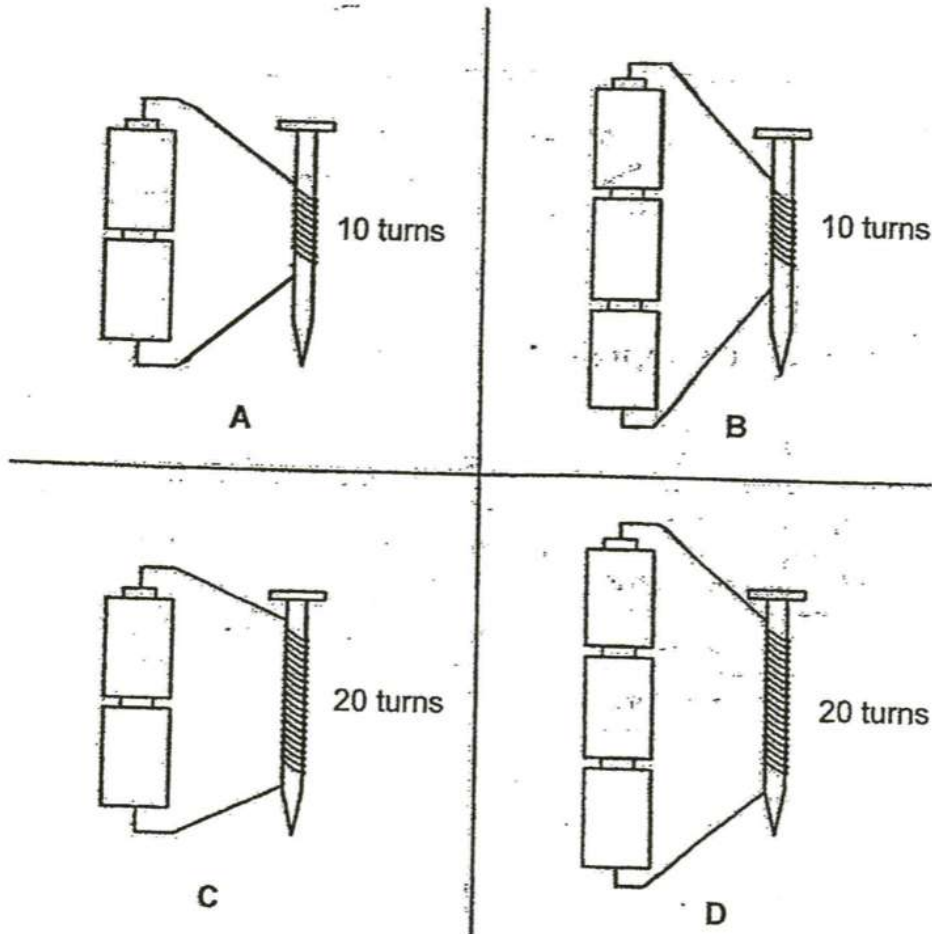
D)



Question 23 of 52

Primary 4 Science (Term 2) 2 pts

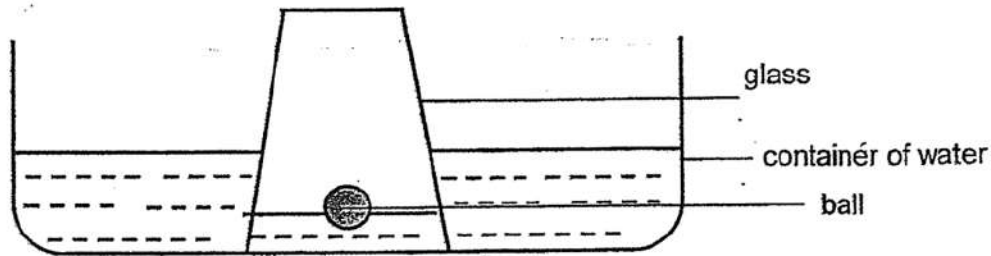
Benedict wants to find out if the number of coils of wire around an iron nail affects its magnetism.



Which two arrangements can he use to ensure a fair test?

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

Deborah placed a ball inside an inverted glass as shown below. She observed that the water level inside the glass was lower than the water level in the container of water.



Which of the following best explains the difference in the water level inside and outside the glass?

- A) The air in the glass has mass
- B) The ball in the glass has mass
- C) The air in the glass occupies space
- D) The ball in the glass occupies space

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.

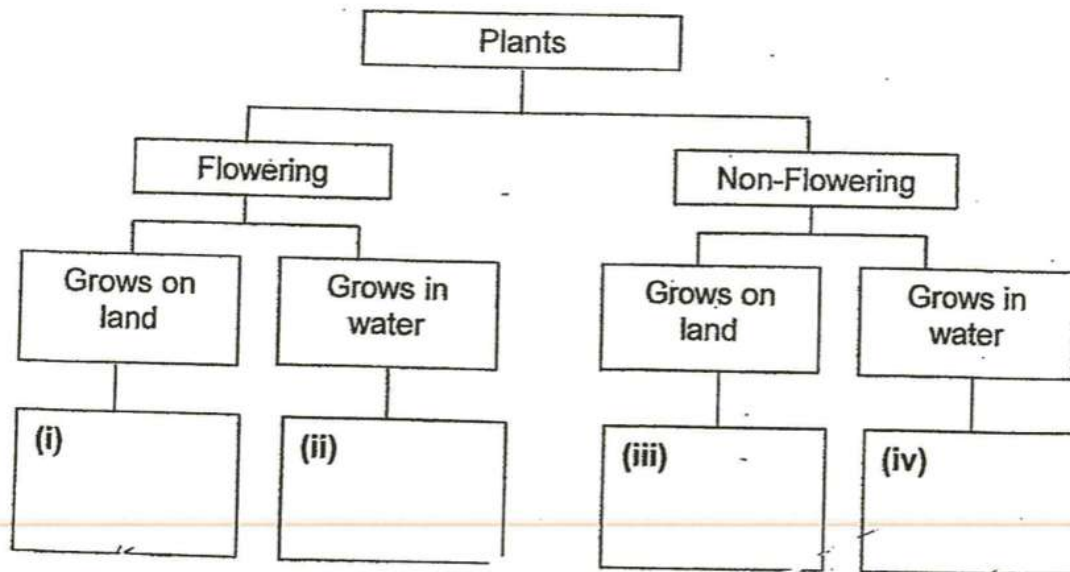
Characteristics	Plant P	Plant Q	Plant R	Plant S
Bears flowers	√		√	
Grows on land		√	√	

Describe Plant Q.

[1]

Match the options below:

Based on the information in the table above, classify the four plants P, Q, R and S in the classification chart below. [1]



1. [] I

A. S

2. [] ii

B. Q

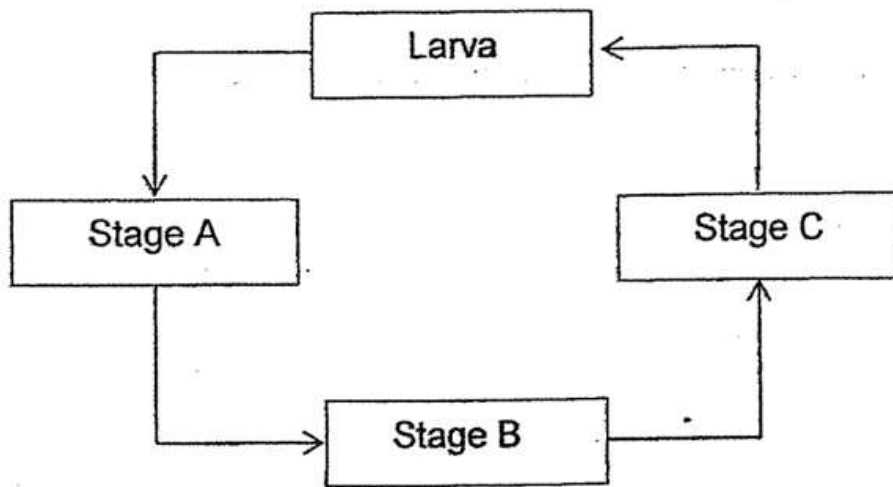
3. [] iii

C. P

4. [] iv

D. R

The diagram below shows the life cycle of an insect.



Name stages A and B.

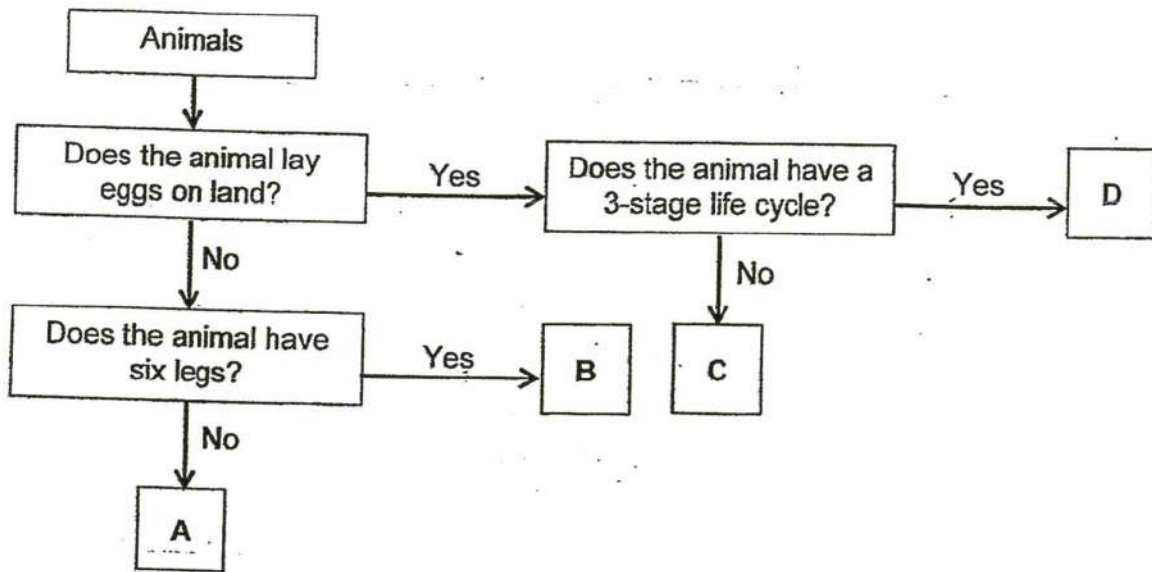
Stage A: _____

Stage B: _____

Which of the following insects has a similar life cycle as the one shown above?

- A) beetle
- B) cockroach
- C) grasshopper

Study the flowchart below.



Describe Animal D.

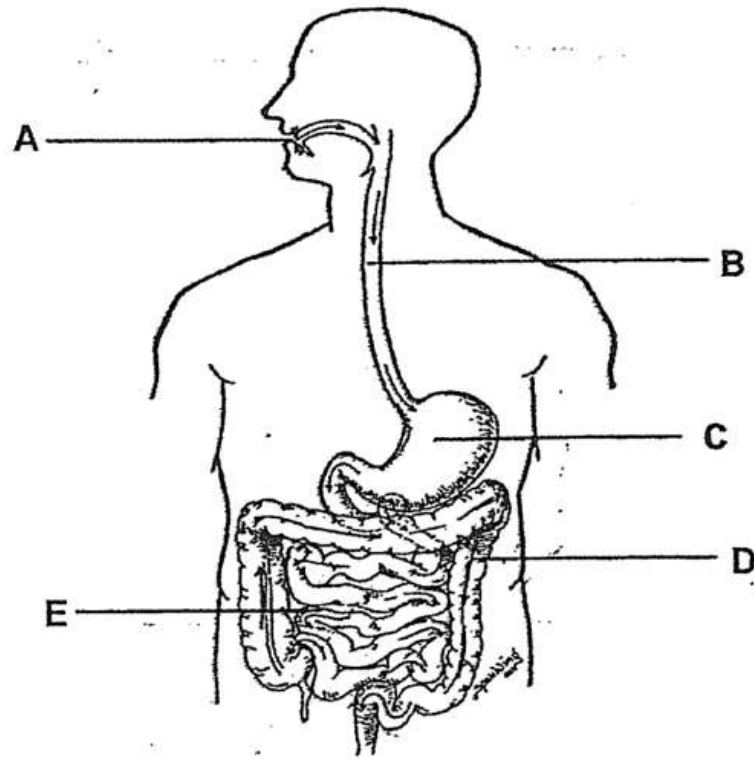
[1]

State one similarity between animal C and animal D

Which animal, A, B, C or D, is most likely a mosquito?

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

The diagram below shows the human digestive system.



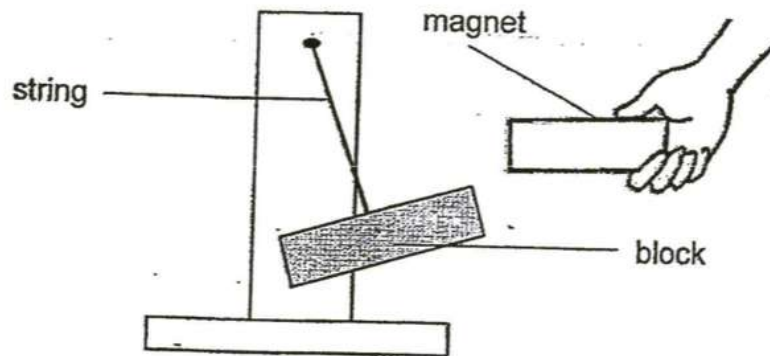
Human digestive system

In which parts, A, B, C, D and E, do digestion take place?

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

State the function of Part D in the human digestive system

Susan hung a block on a string. She held a magnet near the block and observed that the block moved towards the magnet.



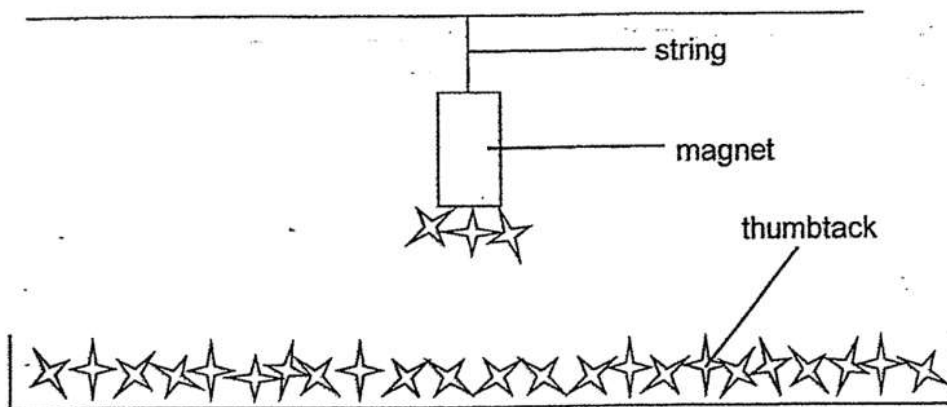
What observation will Susan make when a piece of thin glass is placed between the block and the magnet? [1]

Explain your answer in (a)

Question 37 of 52

Primary 4 Science (Term 2) 0 pts

Oliver conducted an experiment as shown below. He changed the distance between the magnet and the tray of thumbtacks and counted the number of thumbtacks attracted.



The table below shows his results.

Distance between the magnet and the tray of thumbtacks (cm)	3	5	7
Number of thumbtacks attracted	6	3	1

What is the aim of Oliver's experiment?

[1]

Question 38 of 52

Primary 4 Science (Term 2) 0 pts

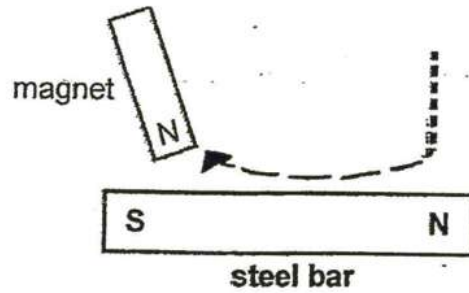
What is the relationship between the distance between the magnet and thumbtacks and the number of thumbtacks attracted?

Question 39 of 52

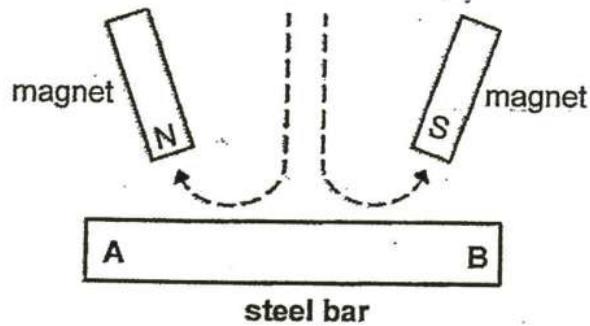
Primary 4 Science (Term 2) 1 pt

What is the likely number of thumbtacks the magnet will attract when the distance between the magnet and the tray of thumbtacks is 10cm?

In Experiment 1, a steel bar was magnetised using the stroke method. The poles of the steel bar after being magnetised are shown below.



In Experiment 2, two magnets are used to stroke a steel bar in two different directions as shown below.



Based on what was observed in Experiment 1, identify the poles of steel bar at A and B after it is being stroked by the two magnets. [1]

(i) A: - _____

B: _____

Suggest two ways to increase the magnetism of the steel bar in Experiment 1

Question 43 of 52

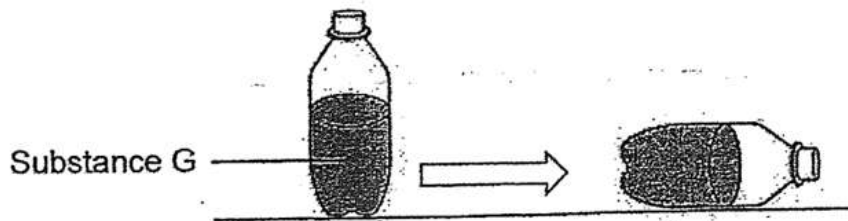
Primary 4 Science (Term 2) 0 pts

Randy could not magnetise an aluminium bar using the same stroke method. Explain why

Question 44 of 52

Primary 4 Science (Term 2) 1 pt

The bottle below contains Substance G. The bottle is **tilted** and placed in different positions as shown below.



Based on the observations made on Substance G, identify the state that Substance G is in. [1]

Question 45 of 52

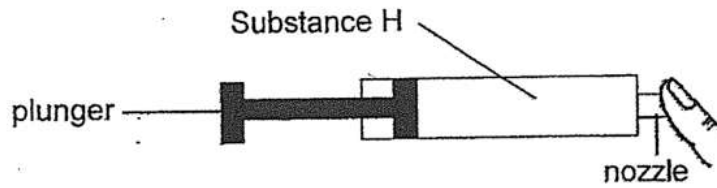
Primary 4 Science (Term 2) 0 pts

State a property of Substance G

Question 46 of 52

Primary 4 Science (Term 2) 1 pt

The syringe below is filled with Substance H. When the plunger is pushed in with a finger tightly placed at the nozzle, the plunger moved in a little.



- (i) Identify the state that Substance H is in. [1]

Question 47 of 52

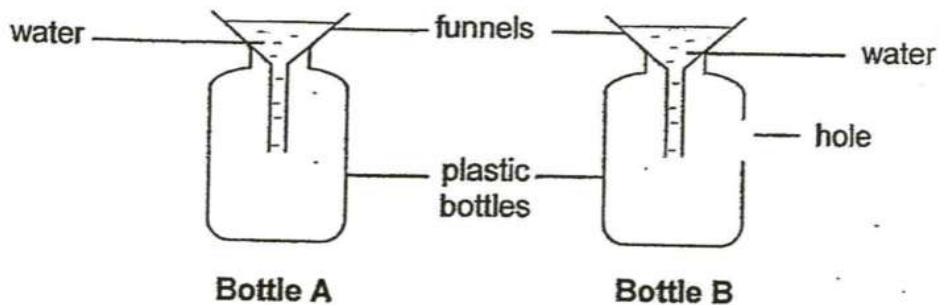
Primary 4 Science (Term 2) 0 pts

State a property of Substance H

Question 48 of 52

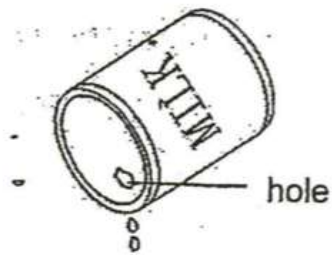
Primary 4 Science (Term 2) 0 pts

Bottles A and B are similar except that bottle B has a hole at the side of the bottle. Clive poured an equal amount of water into bottles A and B using two funnels as shown below.



Which bottle, A or B, would water flow in faster? Explain your answer. [2]

A can of milk was emptied out as shown below.



The milk flowed out of the can very slowly.

Based on your answer in (a), suggest a way to allow the milk to flow out faster.

Give a reason for your answer in (b)

A raincoat is used to prevent the user from getting wet on a rainy day.



Elena conducted an experiment to find out which material, A or B, is more suitable to make a raincoat. The mass of each material was measured before and after they were completely soaked in water.

The table below shows the results.

Material	Mass of material <u>before</u> it was soaked in water (g)	Mass of material <u>after</u> it was soaked in water (g)
A	30	30
B	30	42

Based on Elena's results, which material, A or B, is a suitable material to make a raincoat? Explain your answer. [2]

State two important variables that should be kept the same too ensure a fair test