

Test: Primary 4 - Term 4 Science (St Nicholas)

Points: 67 points

Name: _____

Score: _____

Date: _____

Signature: _____

Select multiple choice answers with a cross or tick:

Only select one answer

Can select multiple answers

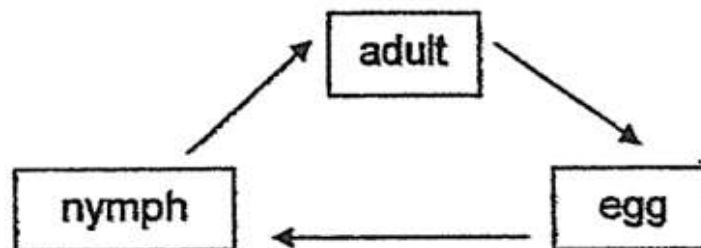
Question 1 of 63

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.

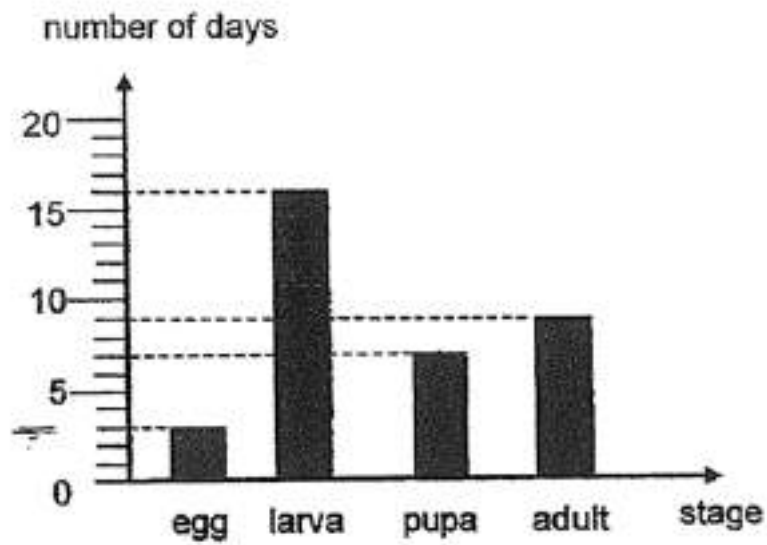
The diagram below shows the life cycle of an animal.



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

-
- A) Frog
 - B) Chicken
 - C) Mosquito
 - D) Cockroach

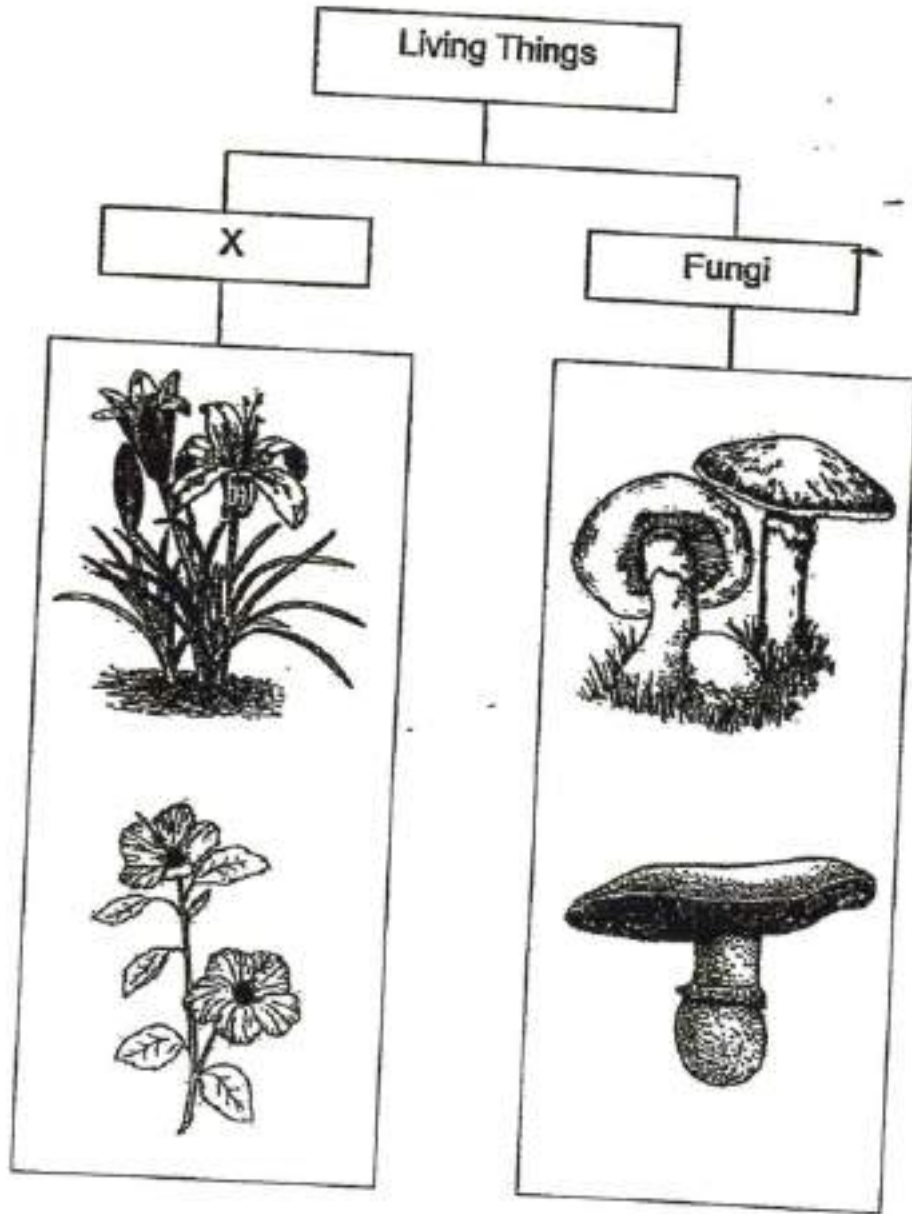
The graph below shows the number of days for each stage of the life cycle of organism X.



How many days would organism X take to become an adult after the egg is hatched?

- A) 9 days
- B) 19 days
- C) 23 days
- D) 26 days

The table below shows how some living things can be grouped.



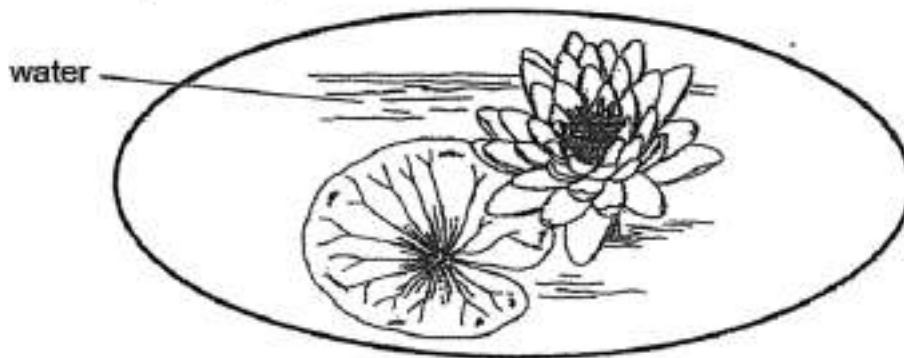
Which one of the following is the most suitable heading for group X?

- A) Ferns
- B) Mosses
- C) Bacteria
- D) Flowering plants

The table below shows the characteristics of four organisms A, B, C and D. A tick (✓) shows that the organism has the characteristic.

Characteristics	Organisms			
	A	B	C	D
produces flowers			✓	– ✓
grows on land	✓	✓		✓
makes food	✓		✓	✓

Joanna saw a plant in a pond shown below.



Which one of the following organisms A, B, C or D represents the plant shown above?

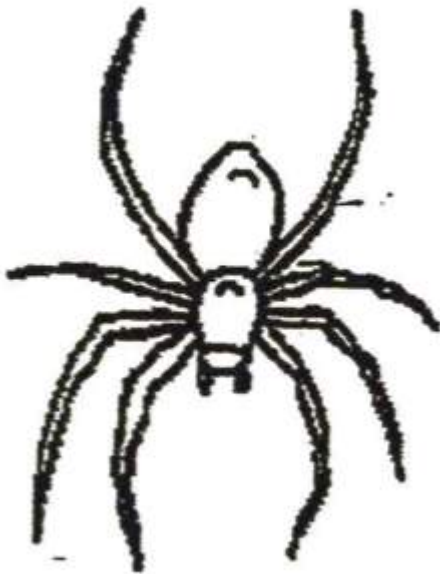
- A) A
 B) B
 C) C
 D) D

Which one of the animals shown below is not an insect?

A)



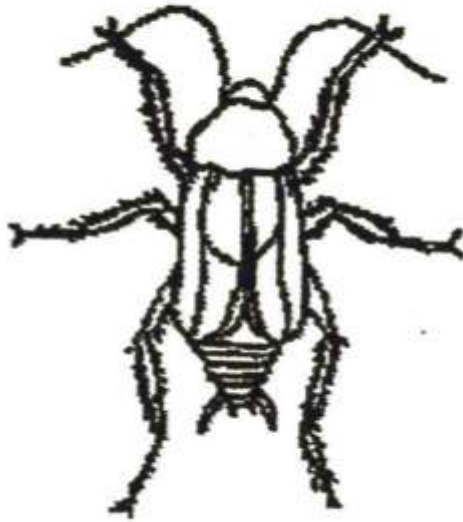
B)



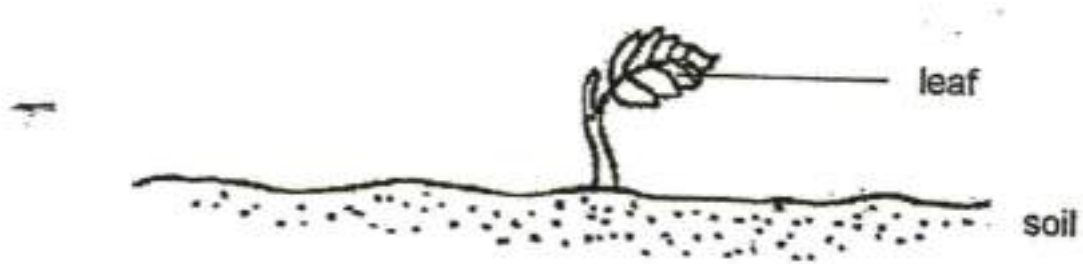
C)



D)



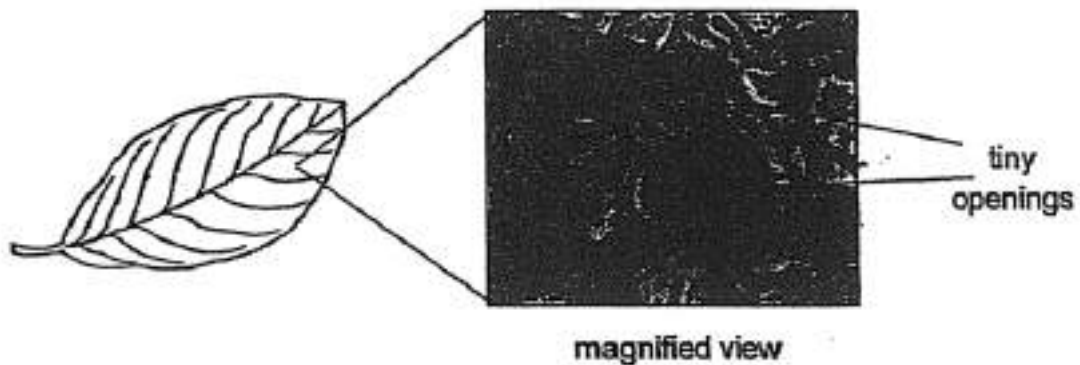
The diagram below shows a young plant.



The leaf helps the plant to _____.

- A) make food
- B) grow upright
- C) take in water
- D) take in minerals

The diagram below shows the tiny openings found on a leaf.



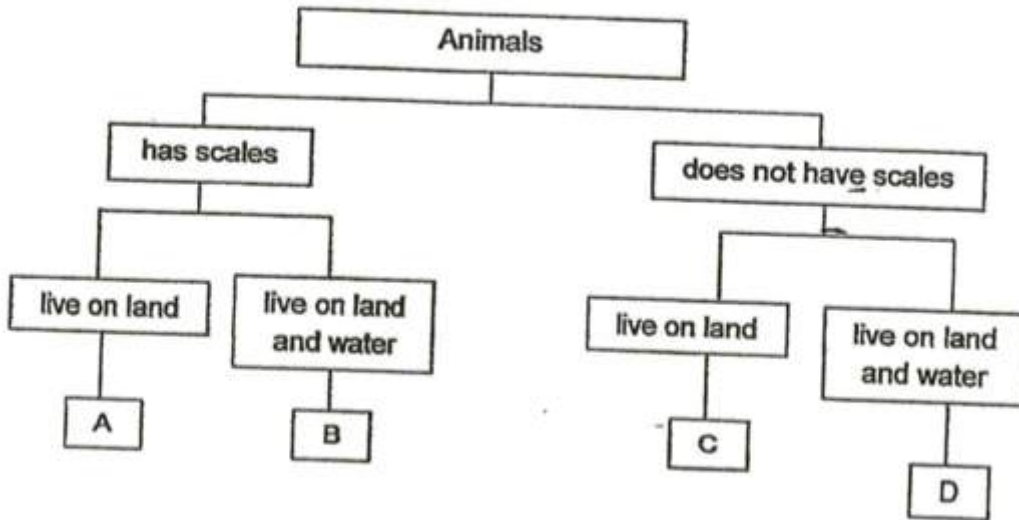
What is the function of the tiny openings on the leaf?

- A) To trap light
- B) To take in light
- C) To help the plant reproduce
- D) To help the plant take in and give out gases

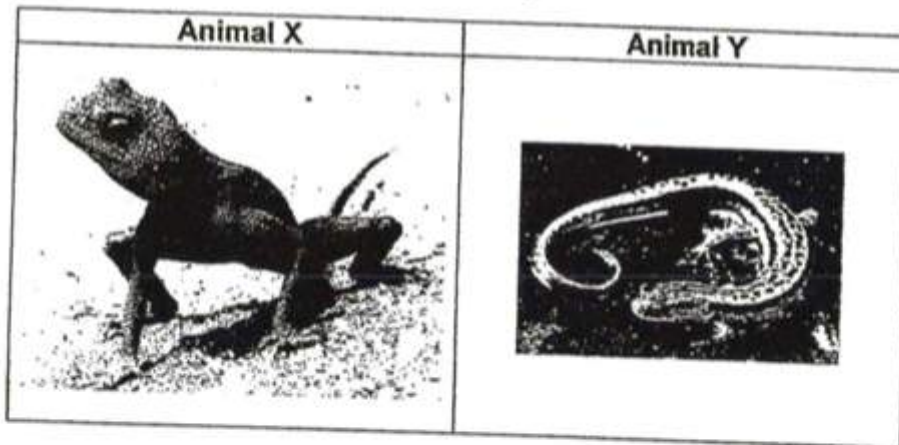
What is generally common among insects and birds?

- A)** They have three body parts
- B)** Their young look like the adult
- C)** They reproduce by laying egg
- D)** They have the same type of body covering

Study the classification chart below.



The diagram below shows animals X and Y.



Which group A, B, C or D do animals X and Y belong to?

	Animal X	Animal Y
(1)	A	C
(2)	A	D
(3)	B	C
(4)	B	D

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

The picture below shows Faisal playing basketball.

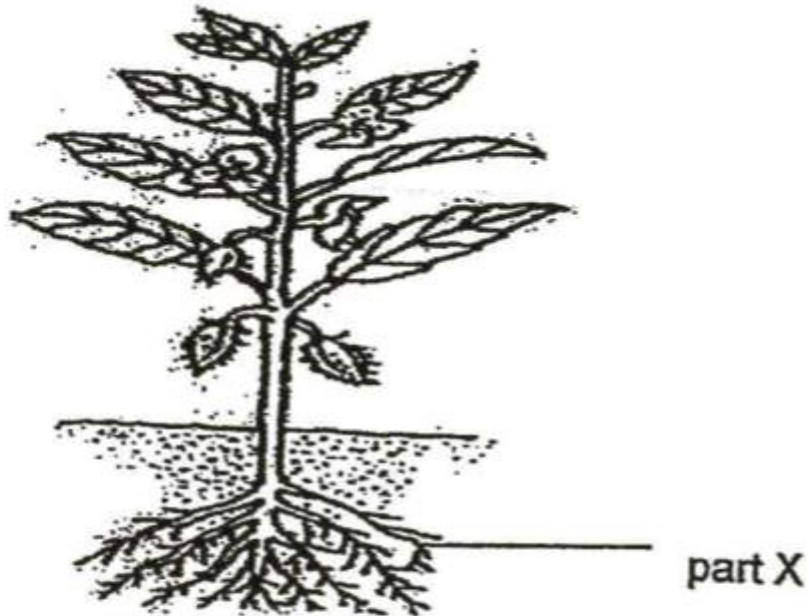


Which organ systems in his body work together when he plays basketball?

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

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

Study the diagram below.



What is the function of part X?

- A Support the plant
- B Absorb water from the soil
- C Absorb minerals from the soil
- D Hold the plant firmly to the ground

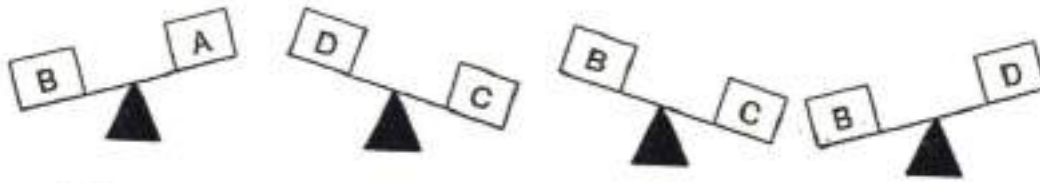
-
- A) A and B only
 - B) B and C only
 - C) A, B and C only
 - D) B, C and D only

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Primary 4 Science (Term 4)

2 pts

Study the diagram below.



Which block A, B, C or D has the most mass?

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

Question 13 of 63

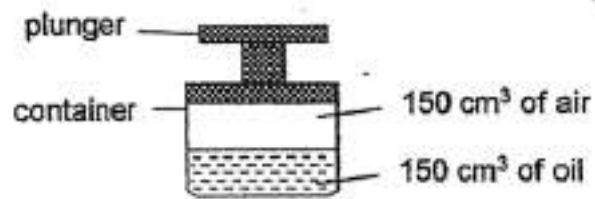
Primary 4 Science (Term 4)

2 pts

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

-
- A) air
 - B) sand
 - C) water
 - D) shadow

Study the diagram below.

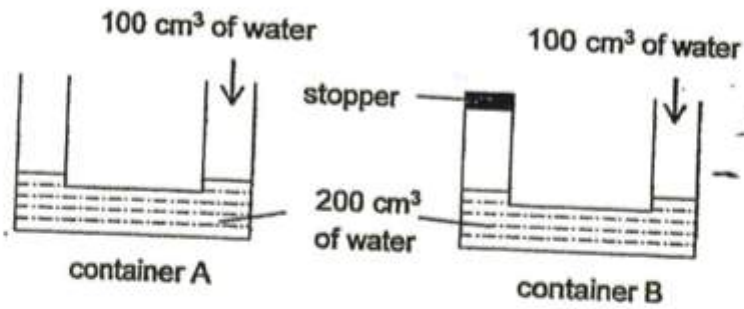


What will happen to the mass and volume of air inside the container when the plunger is pushed in?

	Mass	Volume
(1)	remain the same	decreases
(2)	decreases	decreases
(3)	increases	increases
(4)	remain the same	increases

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

Evelyn filled containers A and B with 200 cm³ of water. Next, she placed a stopper on one opening of container B. Then, she added another 100 cm³ of water to each container.



Which of the following shows the possible water level in both containers at the end of the experiment?

	Container A	Container B
(1)		
(2)		
(3)		
(4)		

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

D) 4

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Primary 4 Science (Term 4) 2 pts

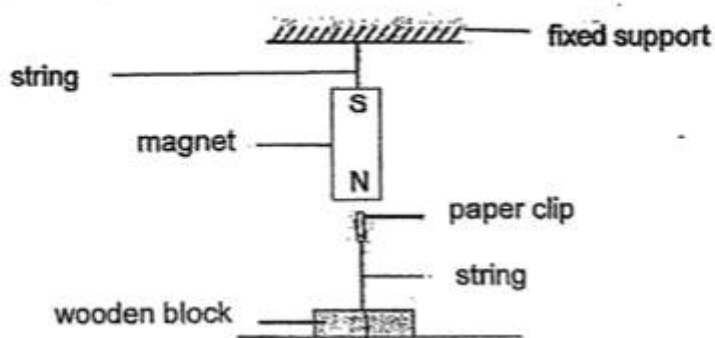
Which one of the following can be attracted by a magnet?

- A) steel ruler
- B) plastic ruler
- C) wooden ruler
- D) aluminium ruler

Question 17 of 63

Primary 4 Science (Term 4) 2 pts

Study the diagram below.



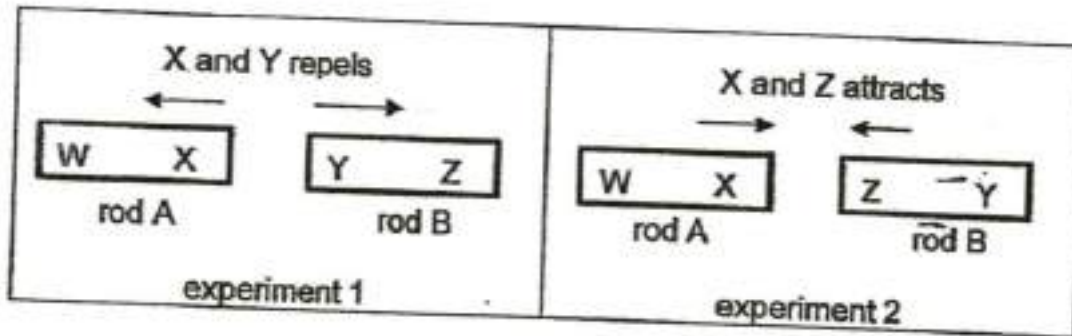
Sue observed that the string with the paper clip remained upright when it was placed near the magnet.

What can Sue conclude from her observation?

- A The string is made of a magnetic material.
- B The paper clip is made of a magnetic material.
- C The magnet and the paper clip are repelling each other.
- D Magnetic force can act at a distance.

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

Tessa placed two metal rods A and B next to each other. The results of her experiment are shown below.

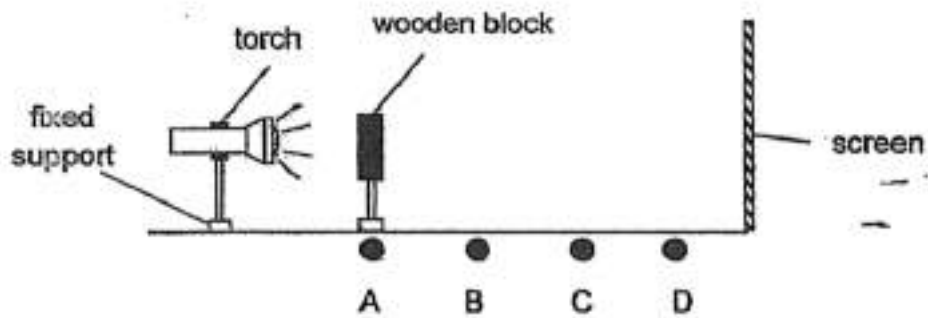


Based on the information given, which of the following statement(s) is/are true?

- A X and Y are unlike poles.
- B Metals rods A and B are magnets.
- C Metal rod B is made of copper.

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

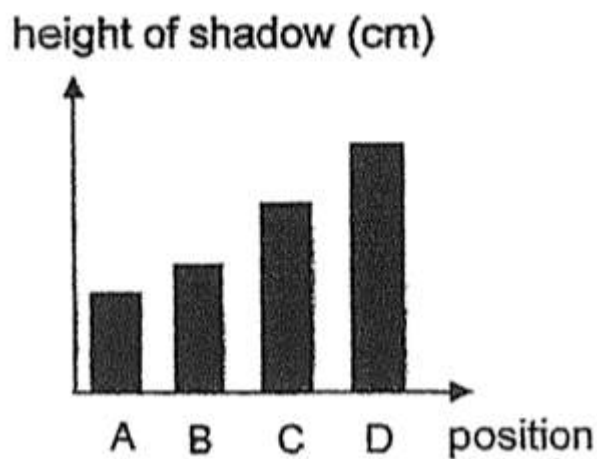
Study the diagram below.



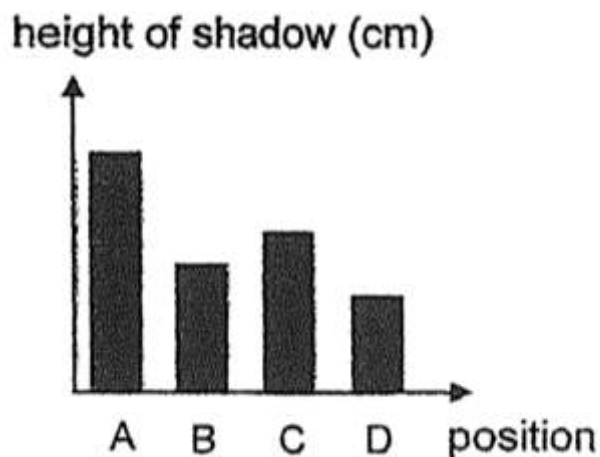
Ali placed the wooden block at position A and recorded the height of the shadow formed on the screen. He repeated the experiment by placing the wooden block at positions B, C and D.

Which of the following graphs correctly shows the height of the shadow of the wooden block at positions A, B, C and D?

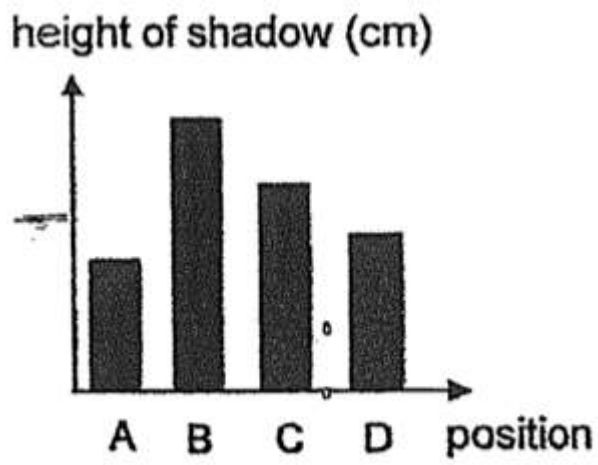
A)



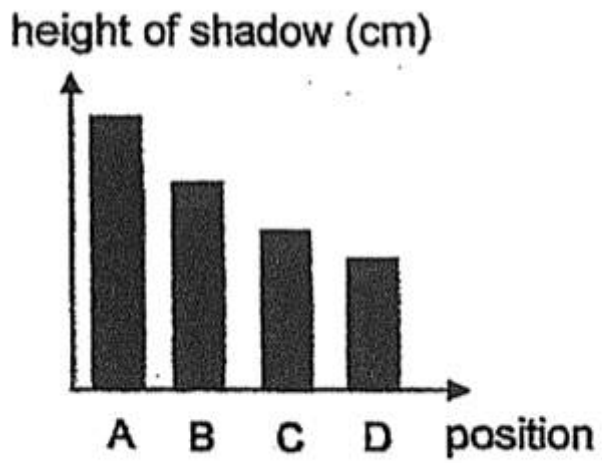
B)



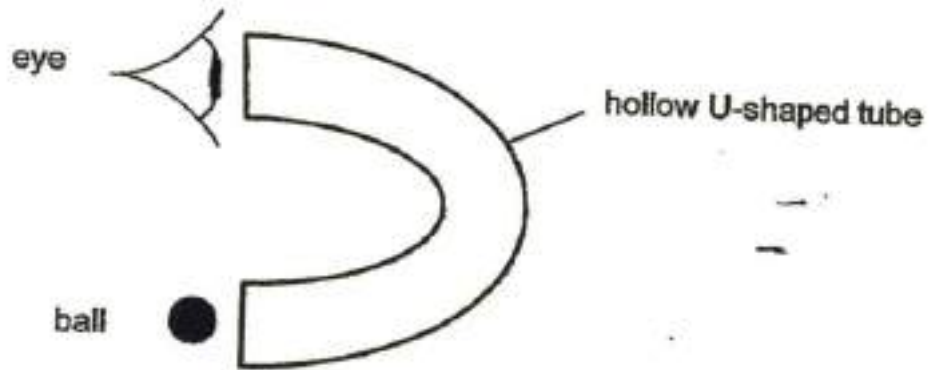
C)



D)



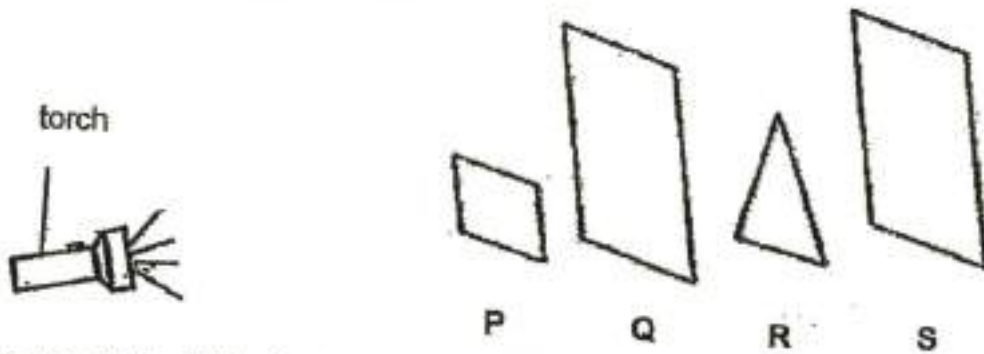
Study the diagram below.



Ivan cannot see the ball through the U-shaped tube because _____.

-
- A) light has no mass
 - B) light can be reflected
 - C) light travels in a straight line
 - D) line does not occupy space

- Kelly arranged four sheets of different shapes P, Q, R and S in a straight line and shone a torchlight as shown in the set-up below. She observed that a small triangular shadow formed on sheet S.

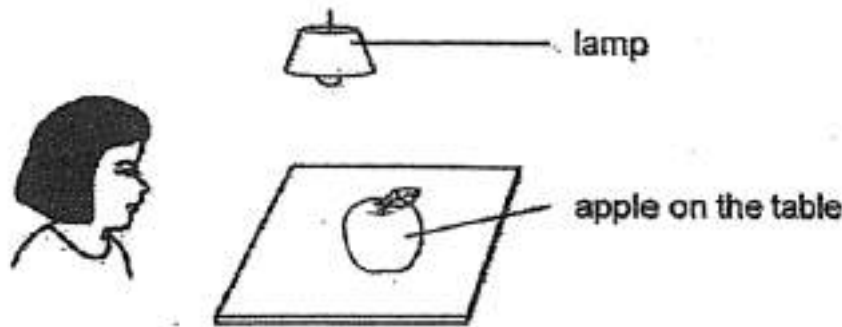


Which one of the following is most likely true?

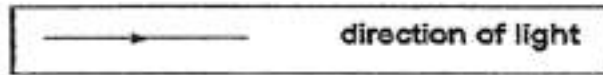
	P	Q	R
(1)	Allow most light to pass through	Allow most light to pass through	Allow no light to pass through
(2)	Allow most light to pass through	Allow no light to pass through	Allow no light to pass through
(3)	Allow some light to pass through	Allow no light to pass through	Allow some light to pass through
(4)	Allow no light to pass through	Allow most light to pass through	Allow some light to pass through

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

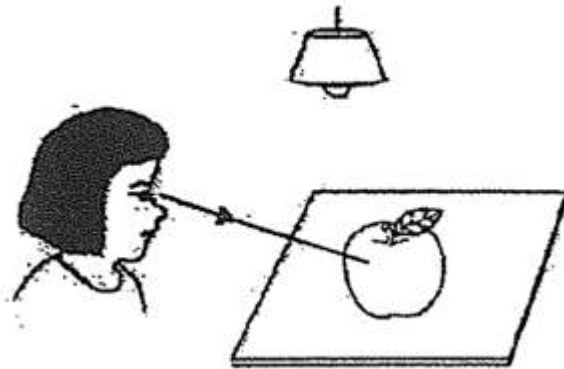
Look at the picture below.



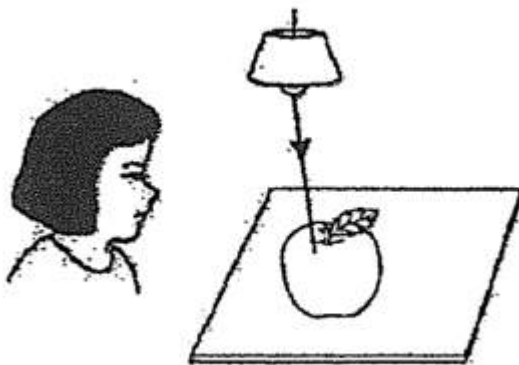
Which one of the following explains why Nirmala can see the apple on the table?



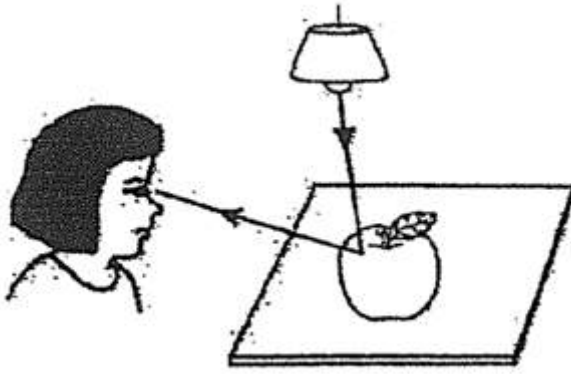
A)



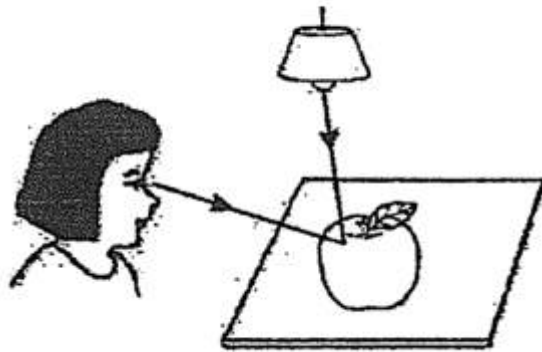
B)



C)



D)



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Which one of the following is not a source of heat?

- A) The sun
- B) A lighted bulb
- C) A cotton shirt
- D) A candle flame

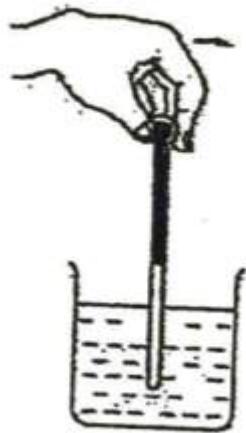
Bonnie wants to measure the temperature of cold water in a beaker.

Which one of the following diagrams shows the correct position of the thermometer when taking the temperature reading?

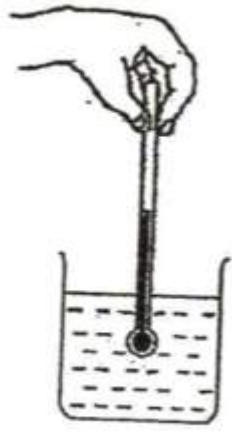
A)



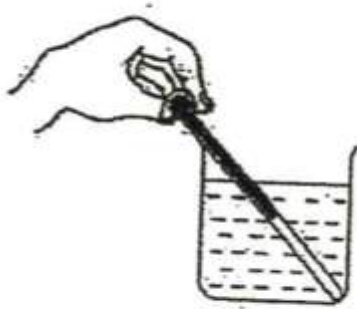
B)



C)



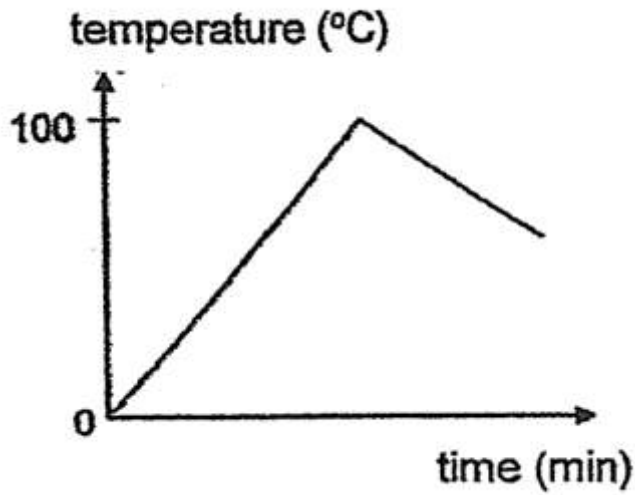
D)



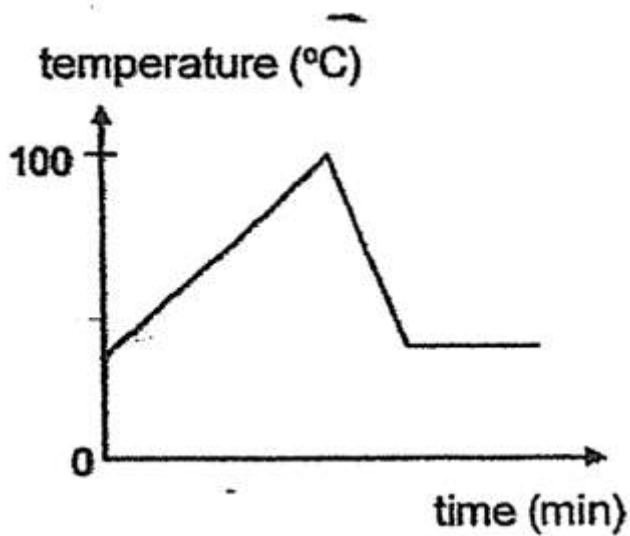
Mary heated a beaker of tap water until it boiled. She kept it boiling for another two minutes. Then, she placed the beaker of water in the refrigerator.

Which of the following graphs shows the changes in the water temperature from the time she started to heat the water to the time she placed it in the refrigerator?

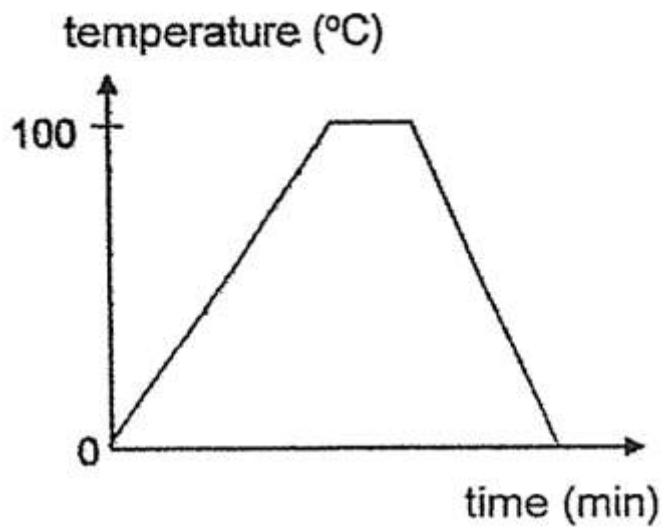
A)



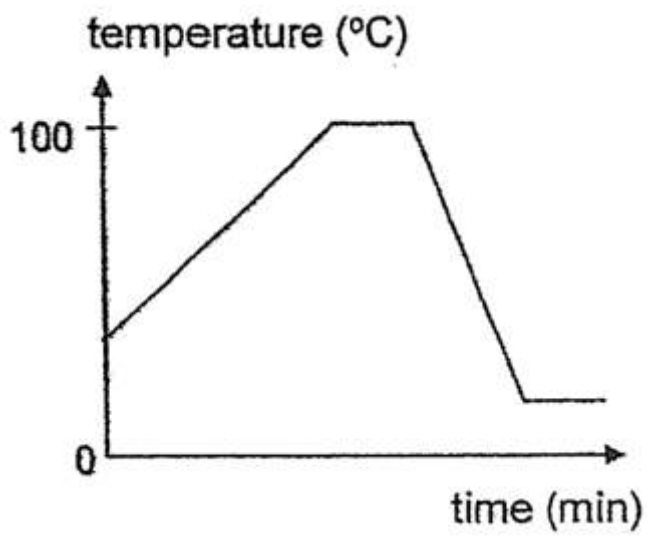
B)



C)



D)



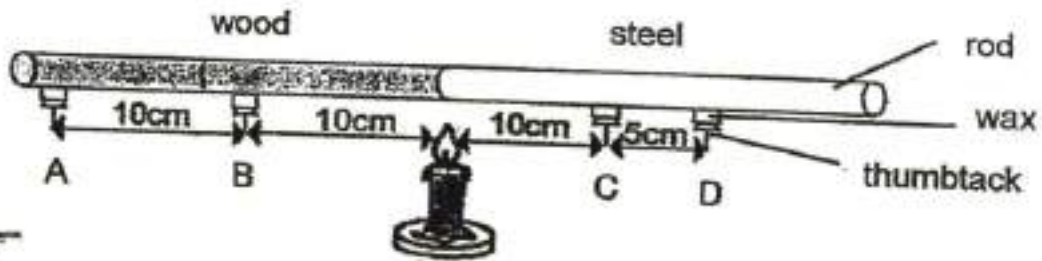
Rahima had four similar cups P, Q, R and S made of different materials. She poured an equal amount of hot water into each cup. She measured the temperature of the water after ten minutes and recorded her observations in the table below.

Cup	P	Q	R	S
Temperature of water at the start of experiment (°C)	55	55	55	55
Temperature of water after 10 minutes (°C)	21	30	43	19

Based on the table, which one of the cups is made of a material that is the best conductor of heat?

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

The diagram below shows four similar thumbtacks A, B, C and D attached to a rod made of equal lengths of wood and steel. Each thumbtack was attached to the rods using equal amounts of wax.



Arrange the time taken for each thumbtack to drop off the rods from the fastest to the slowest.

	Fastest → Slowest			
(1)	A	B	C	D
(2)	B	C	D	A
(3)	C	B	D	A
(4)	C	D	B	A

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

Which of the following objects is not made of waterproof material?

A)



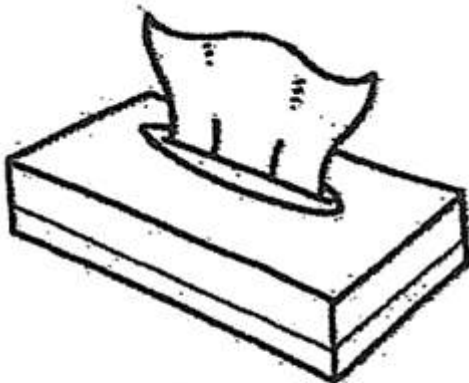
metal pot

B)



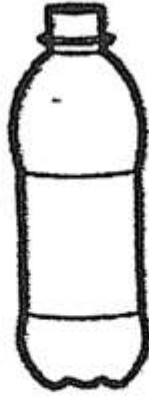
rubber boots

C)



tissue paper

D)



plastic bottle

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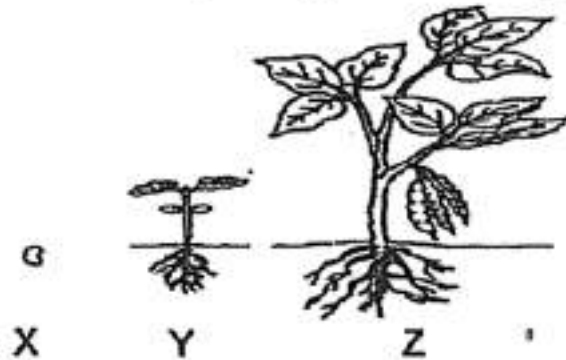
Primary 4 Science (Term 4) 2 pts

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.

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



Choose the correct words from the box to answer the question below.

Stage X: _____

- A) fruit
- B) seed
- C) young plant
- D) flower
- E) adult plant

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Primary 4 Science (Term 4) 2 pts

Stage Y: _____

- A) fruit
- B) seed
- C) young plant
- D) flower
- E) adult plant

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Primary 4 Science (Term 4) 0 pts

Ivan carried out an experiment with three similar pots of plants of height 7 cm. He measured the height of each plant at the end of ten days and recorded the results in the table below.

Pot	Amount water given daily (ml)	Amount of fertiliser given (g)	Height of plant after 10 days (cm)
A	10	5	10
B	15	5	12
C	20	5	15

) What was he trying to find out from his experiment?

Study the diagram below.



bird's nest fern



moss



sunflower

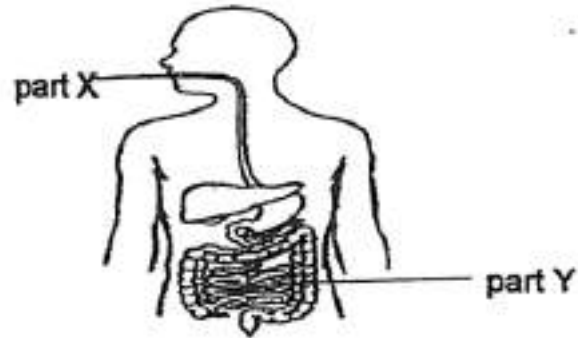
How does the moss obtain its food?

State two differences between the bird's nest fern and the sunflower in terms of their method of reproduction and their plant parts.

Method of reproduction:

Plant parts:

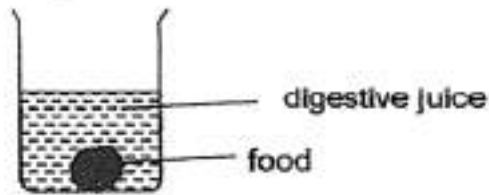
The diagram below shows the human digestive system. Substance P found in part X of the human digestive system helps in the digestion process.



Other than breaking down some food into simpler substances, state another function of substance P.

Explain what happens to the digested food at part Y of the human digestive system

Hannah conducted an experiment as shown below. She wanted to find out if the amount of digestive juices affects the time taken for food to be digested.



Set-ups	Amount of digestive juices (ml)	Amount of food (g)
X	200	50
Y	200	100
Z	150	50

Based on the table above, which two set-ups should she use to conduct a fair test?

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

Study the diagram below.



animal A



animal B



animal C



animal D

State one similarity between animals A, B, C and D.

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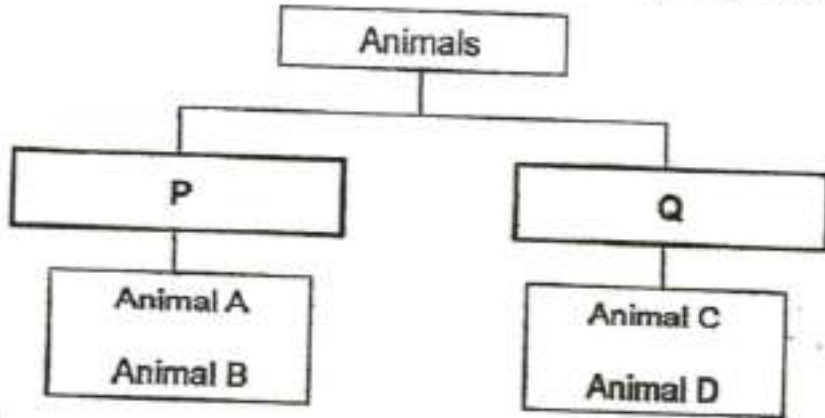
Primary 4 Science (Term 4) 0 pts

State one difference between animals A, B, C and D

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Primary 4 Science (Term 4) 0 pts

Angeline classified the animals A, B, C and D into two groups shown below.

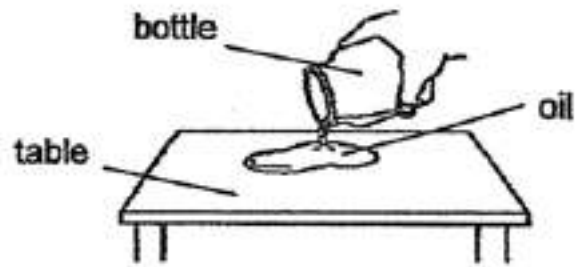


Write suitable headings for P and Q in the blanks below.

P: _____

Q: _____

Adam accidentally spills the oil from a bottle onto a table shown below.

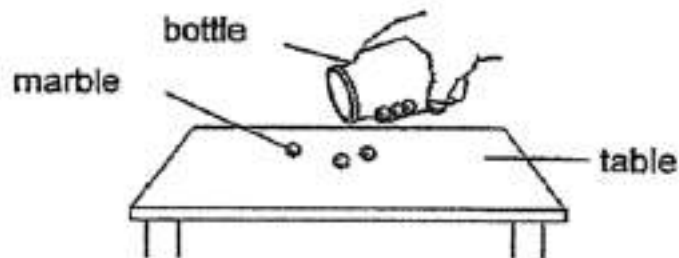


The volume of oil remains the same but its shape changes.

i) This shows that oil is a _____.

- A) gas
- B) solid
- C) liquid

Adam pours some marbles from a bottle onto a table shown below.



The shape and volume of the marbles remain the same.

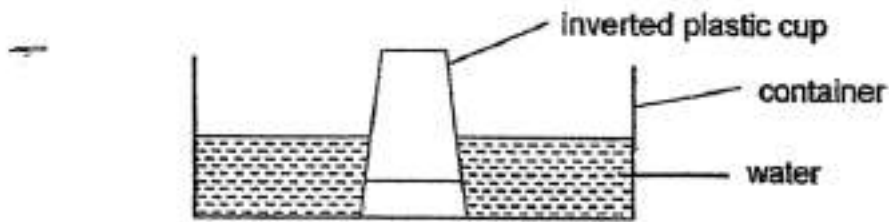
) This shows that a marble is a _____.

- A) gas
- B) solid
- C) liquid

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Primary 4 Science (Term 4) 0 pts

Adam inverted a plastic cup shown below.
In the diagram, draw a line to indicate the water level in the inverted cup as he slowly pushed it straight into the container of water.



Please type "done" to proceed to the next question

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Primary 4 Science (Term 4) 0 pts

Give a reason for the water level you have drawn in (c)

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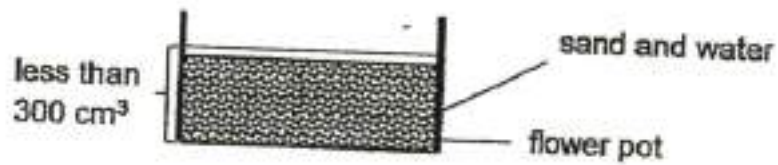
Primary 4 Science (Term 4) 0 pts

Mrs Tan filled a flower pot with sand as shown in the diagram below.



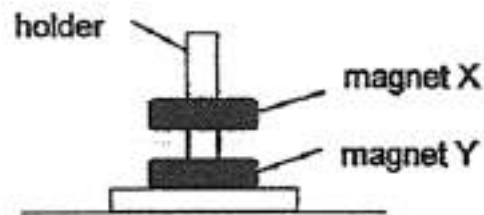
She observed that the sand took the shape of the flower pot so she concluded that sand is a liquid. Do you agree with her? Give a reason for your answer.

She observed that after adding 100 cm^3 of water into the flower pot, the total volume of water and sand in the flower pot was less than 300 cm^3 .



Explain why the total volume of sand and water is less than 300 cm^3 .

Jing Jing placed two ring magnets X and Y through a holder shown below.



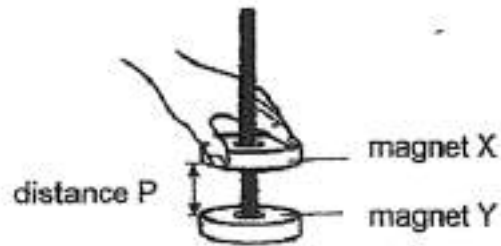
The holder was made of wood and did not attract the magnets.

Wood is a _____ material.

Why was magnet X above magnet Y?

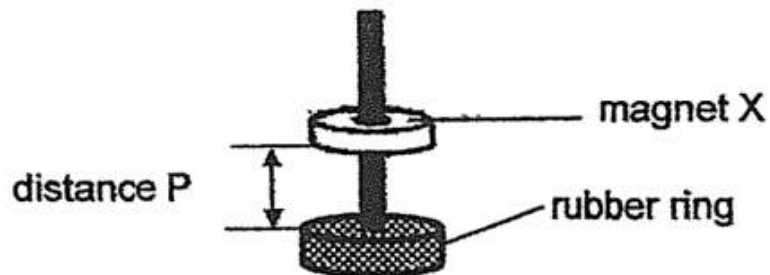
Magnet Y was _____ magnet X.

Jing Jing tried to push magnet X towards magnet Y as shown below.



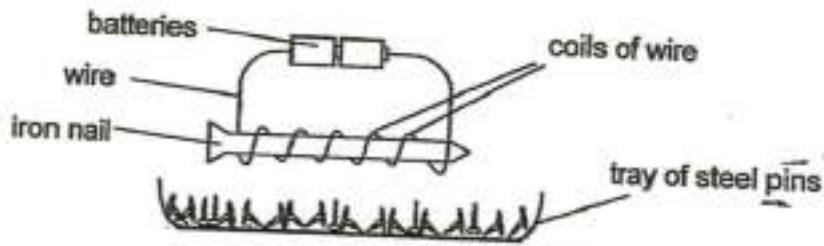
She observed that she had to push harder as distance P decreased. Give a reason for her observation.

Jing Jing replaced magnet Y with a rubber ring shown below.

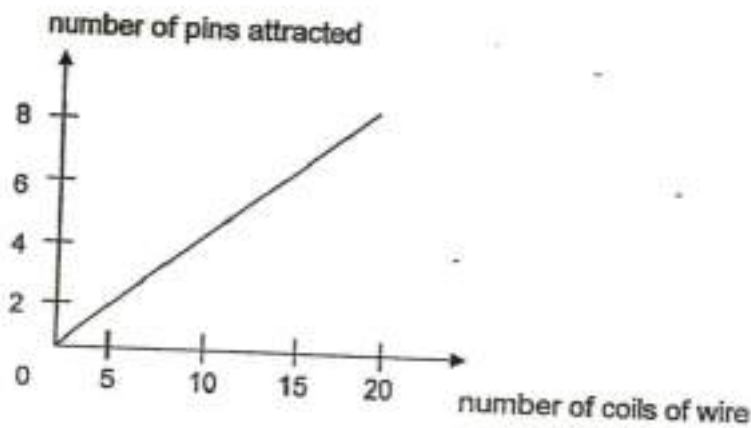


What will happen to distance P? Give a reason for your answer.

- Yvonne carried out an experiment to investigate how the number of coils of wire around an iron nail affects the number of steel pins attracted by it.



She recorded her results in the graph below.



Based on Yvonne's graph, what can she conclude about the number of coils of wire and the number of pins attracted by the electromagnet?

[1]

Question 51 of 63

Primary 4 Science (Term 4) 0 pts

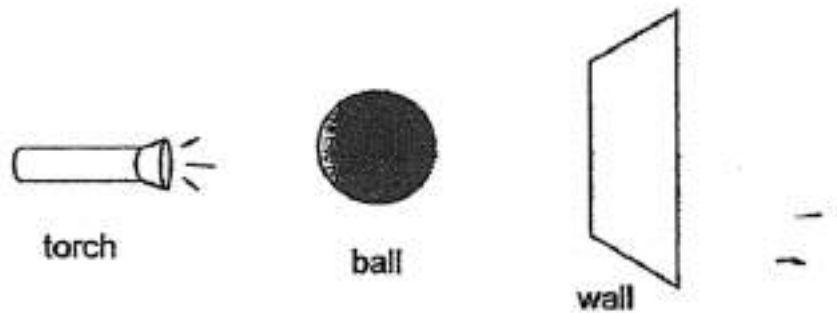
State one other variable that should be kept unchanged for Yvonne's experiment to be fair.

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Primary 4 Science (Term 4) 0 pts

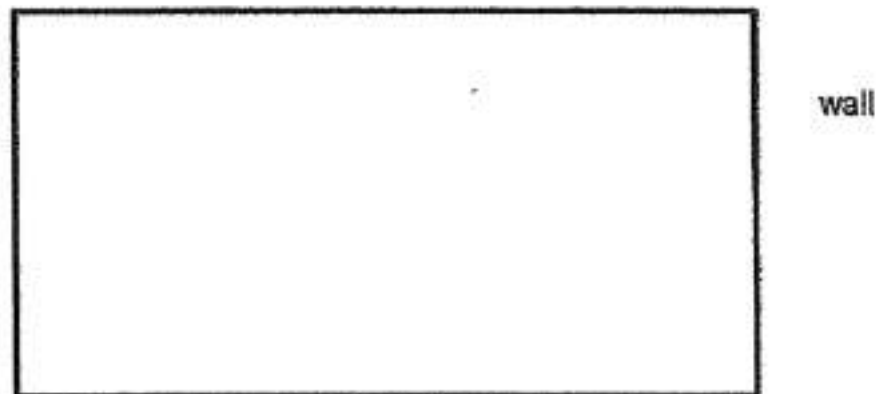
Yvonne changed the iron nail to a copper nail for her electro magnet. What would she observe? Give a reason for your answer.

Zoey shines a torch on a ball and a shadow is formed on a smooth wall.



A shadow is formed when path of light is _____ by an object.

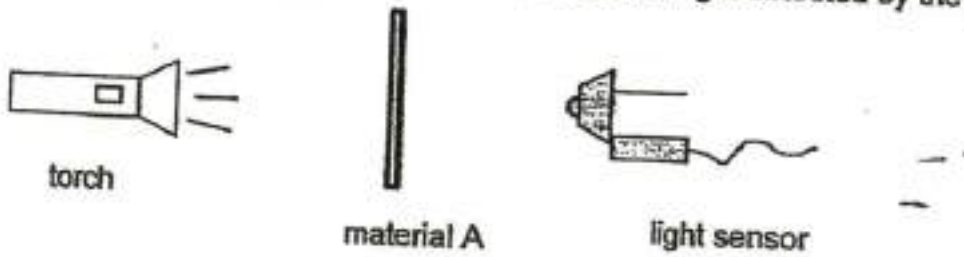
Draw the shadow of the ball that is formed on the wall in the box below.



Please type "done" to proceed to the next question

Zoey conducted another experiment by replacing the ball with object X. She observed that there was no shadow formed by object X on the wall.

- Nina conducted an experiment as shown below. She wanted to find out the amount of light that is able to pass through four different materials A, B, C and D. She shone the torch at material A and recorded the amount of light detected by the light sensor.



She repeated the experiment with materials B, C and D and recorded her results in the table below.

Material	Amount of light detected by the light sensor (lux)
A	235
B	0
C	433
D	796

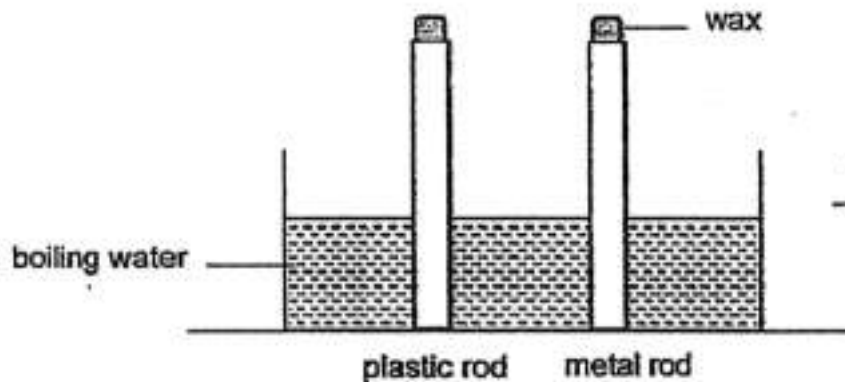
The diagram below shows a windscreen of a car.



Which material A, B, C or D is most suitable for making a windscreen of a car? Give a reason for your answer.

Other than the torch and the light sensor, state two variables that should remain the same for the experiment to be fair.

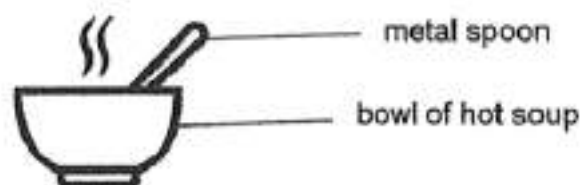
Zuffri placed a plastic rod and a metal rod into a tank of boiling water shown below. Equal amounts of wax were placed on both rods.



What would he observe and why?

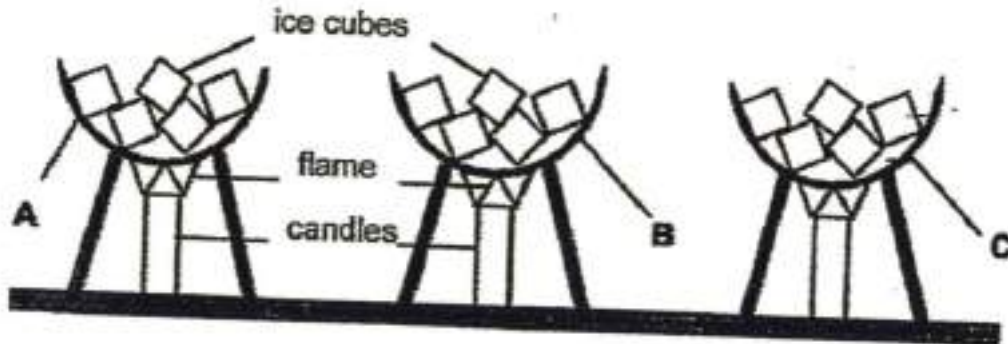
The wax on the plastic rod melted _____ than the wax on the metal rod, as plastic is a _____ conductor of heat than metal.

Zuffri placed a metal spoon in a bowl of hot soup shown below. Zuffri observed that the spoon became hot after a while.



Explain why the spoon became hot after a while.

- Liza heated an equal number of similar-sized ice cubes in three containers A, B and C shown below. The containers were of the same shape and size but they were made of different materials.



She recorded the results of her experiment in the table below.

Container	Time taken for all the ice cubes to melt completely (min)
A	2
B	4
C	3

From the results, which container A, B or C is the best conductor of heat? Explain why.

Liza wanted to pack some ice cream in a container to bring to her friend's house.

Based on the results shown above which container A, B or C should she use to pack the ice cream? Give a reason for your answer

- Sandra conducted an experiment using three rods made of materials S, T and U. She measured the distance bent by the rods when the same weight was hung on the rods and recorded the results in the table below.

Material	Distance bent (cm)
S	12
T	3
U	6

-) State the property of the material that is being tested in this experiment.
-

Sandra wanted to make part A of a fishing rod shown below.



-) Based on her results, which material S, T or U is most suitable for making part A of the fishing rod? Explain your answer.
-